



APPENDIX A: COMMUNITY ENGAGEMENT

Summary of Input

Eric Lusher, Consultant Team member, presented information on the process and schedule, noting that there would be a phased approach, including an existing conditions inventory, needs assessment, evaluation and recommendations, and prioritization of the recommendations. He indicated the study will continue through the spring of 2018.

Mr. Lusher then discussed the overall planning process (see Attachment A) with focus on the outreach component, including five events with the Stakeholder Committee (SAC) at appropriate technical milestones (beginning with this Listening Session), and public outreach including traditional meetings and pop up events. He further noted that the role of the SAC will be to vet ideas and processes and to build consensus. He then asked the group if there were other people/organizations that need to be included on the SAC. Responses from the group indicated that GDOT representation would be helpful, specifically from planning, the area office, and bike/ped coordinator. Other suggestions included MARTA, Fulton County, and the Mayor of the City of South Fulton.

The group decided that the SAC should be agency/jurisdictional focused. Outreach to owners of adjacent properties and those that are ready for development that might have an interest in the study would best be handled through the general community engagement or by the local jurisdictions.

Mr. Lusher then reviewed information contrasting access and mobility (see Attachment B), noting that mobility related to faster speeds (getting people through the corridor) contrasted with accessibility meant slower speeds with more access to adjacent properties. Mr. Lusher then asked Pat Smeeton, Consultant Team member, to discuss the project vision and goals. Mr. Smeeton stated that the team was looking for input on the overarching vision for the corridor and to understand desired outcomes for the planning effort. He stated that the vision will drive project goals and objectives for the long term vision of the corridor. Mr. Smeeton invited SAC members to go around the room to provide their input.

The following items were mentioned as vision input for the corridor:

- Safe and secure
- Aesthetically pleasing
- Adds value
- An economic development corridor
- Not to the detriment of the community or businesses
- Access management
- Multi-use trails
- Early deliverables/successes
- Projects ready for ARC's schedule for quick implementation
- Protect Level of Service – Maintain or enhance
- Recognize the entrance into Fayette County, notice how nice it is
- Enhance the entire corridor from I-85 to Peachtree City
- Incorporate previously planned intersection improvements:
 - SR 54 @ SR 74
 - I-85 @ SR 74



SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Gateway Coalition Listening Session
June 20, 2017

- Overlay zoning to control development
- Mobility – 70% of workforce leaves Fayette County for employment
- Accessibility – perhaps access road for development
- Development of a blueprint for aesthetics and development areas along the corridor and intersections
- Bike paths
- Connectivity and pedestrian compatibility from I-85 to SR 54
- Consistent signage and aesthetics throughout corridor
- Transit
- Access points to pocket parks, library, trails, etc. via trails
- Balanced use of corridor for everyone/all modes
- Access management for locals – in Fairburn, Peachtree City commuters are mixed with Fairburn residents
- Controlled development in Fairburn area – don't let development get out of hand, at least until the City can support the growth with appropriate infrastructure
- Opportunities to reduce single occupancy vehicles
- Shuttles to Park and Ride Lots, Van Pools, Ride Sharing
- Access management to keep the corridor moving
- Look into untapped funding sources to add value
 - Is GRTA shuttle eligible for 5307 funding?
- Gateway project for Fayette County
- Interparcel access management in Tyrone
- Quality growth, with the overlay in place
- Economic development factors
 - Working with developers on how we can handle the impact to traffic/transportation
 - Developers need to handle traffic internally to keep traffic off of the corridor
- Architectural and landscape standards in the overlay to preserve and maintain an aesthetically pleasing corridor
- Mobility
- Aesthetically pleasing – keep it green
- Coordinated signage
- Improve traffic flow on 74
- Half diamond interchange at SR92 and I-85
- Might be able to use analysis from this project to help justify new/alternative corridors/ways to access I-85
- Smart corridor as much as possible – benefits of intelligent signals, etc.
- Car flow from Coweta into Fayette County pressures Peachtree City and Tyrone
- Interchange with I-85 would be great near Gullatt or Johnson Road. There is a long stretch between interchanges.
- Truck only access
- Freight is an issue near the interchange with I-85 but not elsewhere along the corridor
- Frontage roads/access roads/new interchange will help limit curb cuts but add mobility and accessibility



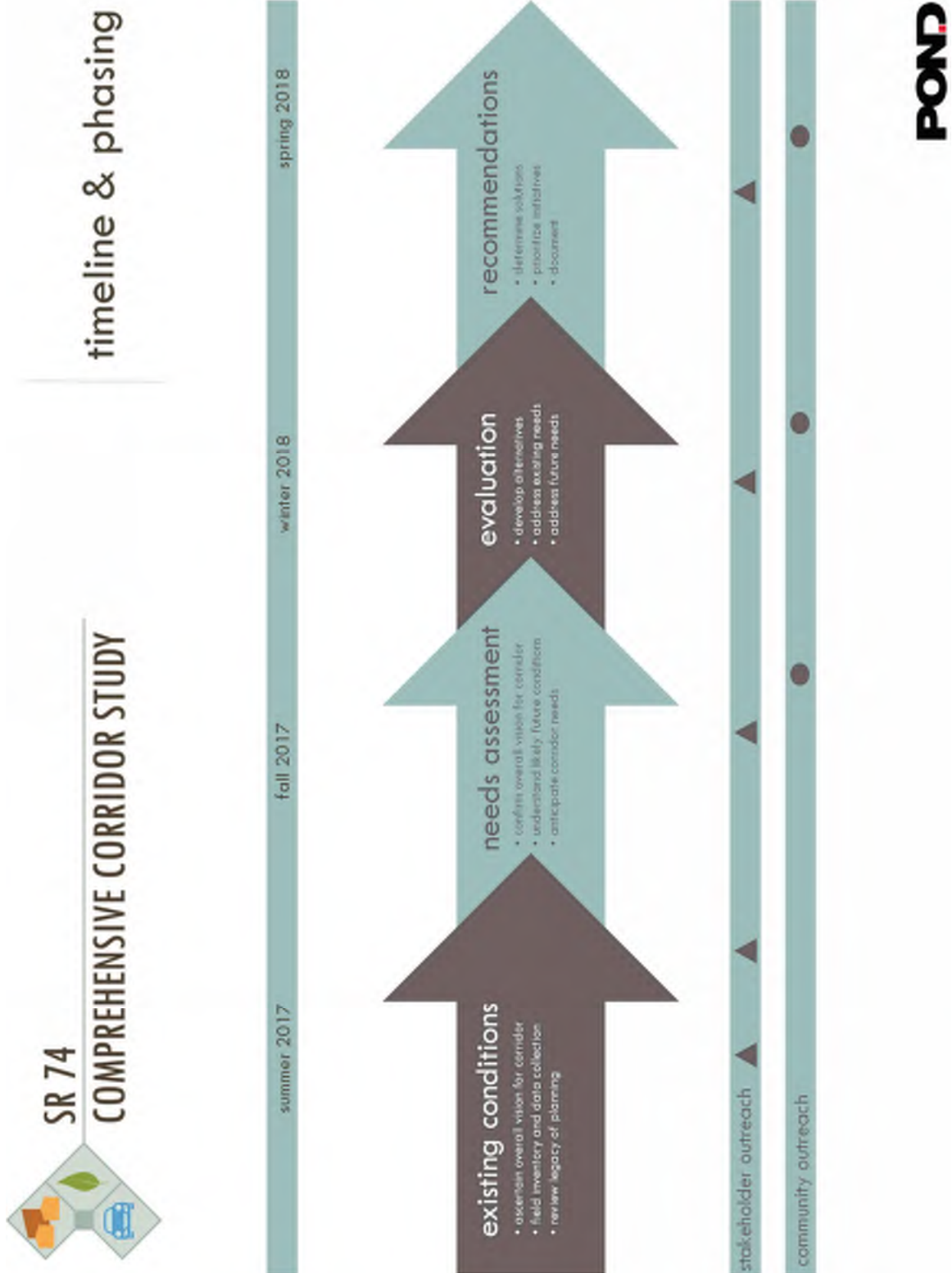
ATTACHMENT A

GENERALIZED PROJECT SCHEDULE



SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Gateway Coalition Listening Session
June 20, 2017





SR 74
COMPREHENSIVE CORRIDOR STUDY

SR 74 Gateway Coalition Listening Session
June 20, 2017

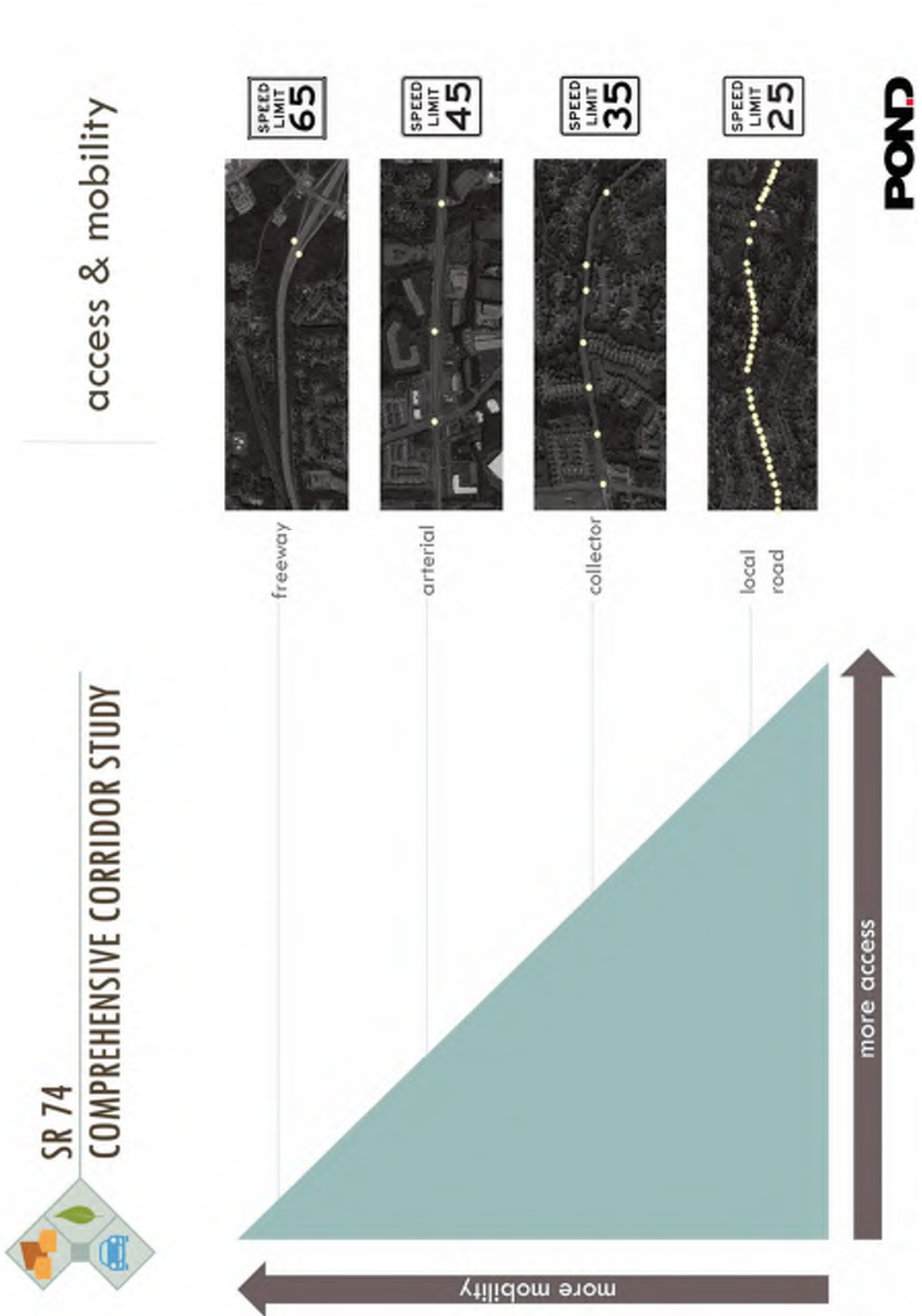
ATTACHMENT B

ACCESS & MOBILITY



SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Gateway Coalition Listening Session
June 20, 2017



Location

Town of Tyrone Chambers
881 Senoia Road
Tyrone, GA 30290

Attendees

Carlotta Ungaro, Fayette County Chamber of Commerce
Daniel Studdard, Atlanta Regional Commission
Edlin Regis, GDOT
Ellis Still, City of Union City
Mayor Eric Dial, Town of Tyrone
Harland Smith, GDOT
Hattie Portis-Jones, City of Fairburn
Joddie Gray, AICP, South Fulton CID
Jonathan Rorie, City of Peachtree City
Lester Thompson, City of Fairburn
Mark Sanders, South Fulton CID
Mike Warrix, City of Peachtree City
Pete Frisina, Fayette County
Phil Mallon, Fayette County
Phillip Trocquet, Town of Tyrone
Roshni Lawrence, GDOT
Ryan Sager, MARTA
Stanford Taylor, GDOT
Steve Rapson, Fayette County
Tarika Peeks, City of Fairburn
Mayor Vanessa Fleisch, City of Peachtree City

Summary

The meeting format included a brief presentation which allowed for questions and comments throughout. After the presentation, the Committee was engaged in an activity to gain feedback on the vision for the corridor before adjourning.

A welcome was issued by Town of Tyrone Mayor Dial who thanked everyone for coming and being involved. Phil Mallon, Fayette County Engineer, also thanked the group for coming and informed the Committee that he is acting as the point of contact for the project team. Mr. Mallon emphasized that this is everyone's project and belongs to all municipalities. The group will make sure the finished project meets the needs of all.

Presentation

Eric Lusher, from Pond began the presentation, which is provided in **Attachment A**. He stated that this meeting will focus on a review of some of the work completed to date and a discussion with

the Committee on goals and objectives. Mr. Lusher gave some history on the SR 74 Gateway Coalition and what occurred at the last meeting, which was a listening session with the Coalition members. This is the first official meeting of the Stakeholder Advisory Committee, which goes beyond the Gateway Coalition to get broader input. Mr. Lusher mentioned that there will be additional opportunities to give input into the process throughout the study timeline.

Mr. Lusher presented the schedule and general timeline of the project. Currently, the study is identifying and establishing existing conditions, land use, transportation, and access management. A Needs Assessment will begin in the fall when the Team will begin thinking about current and future needs. In the winter the Team will enter the evaluation phase when alternatives that have incorporated the public's ideas will be presented. During this phase, the Team will be evaluating and prioritizing ideas. In the spring, the Team will present final recommendations and will complete the final report. Mr. Lusher also talked about the public engagement process such as meetings and other outreach throughout the process. He invited the Committee to give feedback on opportunities to interact with the public.

Next, Mr. Lusher talked about current and projected population and employment. In 2014, the data shows growth in employment and some densification of population. There is an expectation of growth along the corridor. Commuter patterns show commute times for Fairburn, Tyrone and Peachtree City. Mr. Lusher mentioned that commuter patterns show a big pull in the direction of Atlanta/central Atlanta, which puts a strain on SR 74 for those commuting out.

Mr. Lusher then discussed the Traffic Demand Model outputs to date. Traffic flows show traffic demands along SR 74. The model predicts a fairly significant amount of additional traffic in the corridor. The Team will dig into this data more during the Needs Assessment. Mr. Lusher stated that this tool is a pretty modest estimation. He also presented a graphic that shows future and existing truck travel, per the ARC travel demand model.

Mr. Lusher then discussed historical and projected traffic using GDOT traffic counts. The Team examined four locations and looked at the correlation between time of day and traffic patterns. This data differs some from model. There are a variety of assumptions built into using both the model and the GDOT traffic counts as a mechanism for projecting future travel demand. Mr. Lusher stated that the Team is looking at this from a variety of different angles. As the Team thinks about land use it will have an impact on what is considered reasonable traffic growth.

Next, Mr. Lusher presented information on Level of Service (LOS). He stated that a LOS D at peak times is acceptable, however, we want to avoid LOS E and F. The Model prediction shows the interchange with I-85 as a hot spot. Mr. Lusher reminded the group that the information presented gives us a general idea of LOS from a "30,000 foot view". When the Team examines LOS at an intersection level, it is expected that we will find more congestion.

Next, Mr. Lusher discussed Access Management. Thus far, the study has given the Team a good understanding of where access points are concentrated, as well as where there is a lack of density in access points. The Team will dig deeper into this more during the Needs Assessment phase and will offer alternative solutions to deal with access along the SR 74 corridor. Likewise, the Team will form a greater understanding of Land Use along SR 74 as more information is

compiled and evaluated through GIS. The focus now is on the Character Areas. For the cities that actually touch the corridor, Mr. Lusher and Team highlighted the future development maps and character areas for each and mapped them to see if there were any thematic similarities and/or differences from one to the next. This analysis indicated that there are differences in how each community treats the corridor. Mr. Lusher encouraged the Committee to think about how all of these differences can work together.

Vision Exercise

Pat Smeeton of Pond provided the Committee with an overview of what we heard during the June listening session with the Coalition. This information will be used to help develop a cohesive vision. The information collected during the listening session was presented as a word cloud that the Team then organized into six categories, which will be used as to help draft the Vision for the corridor.

- Access Management – curb cuts, etc.
- Accessibility – how easy it is to get from point A to B. Includes new access.
- Aesthetics & Signage – cohesion and consistency of theme.
- Alternative Travel Modes – transit, shuttles, bike and ped facilities, etc.
- Development Patterns – controlled development and balancing growth with capacity.
- Mobility – your ability to move along corridor at a decent LOS (enhance or maintain) more capacity and operational improvements.
- Other

After creating the corridor vision, these categories will eventually evaluation criteria for measuring transportation and policy recommendations. Mr. Smeeton explained that the exercise and feedback today will help the Team prioritize and understand what is most important. The Team will use quantifiable and qualifiable criteria to judge and measure the projects against.

Before soliciting feedback, the Committee reviewed the Goals & Objectives and offered some additional ideas:

- Please consider including freight specific design and accommodating truck traffic
 - This will fit into the “Mobility” goal
- Please encourage greenspace along corridor as well as green vehicles and charging stations.
 - Greenspace will be included in the “Aesthetics & Signage” goal.
 - Green vehicles and charging stations will be included in the “Alternative Travel Modes” goal
- Include smart corridors and autonomous/connected vehicles
 - This can be included in the “Mobility” goal.

Committee members were given 10 dots to select the categories most important to them. The raw results are included in **Attachment B** and indicated in the table on the following page.

Vision Exercise Results

Category	Number of Dots	Relative Weighting
Access Management	42	20%
Mobility	42	20%
Accessibility	40	19%
Development Patterns	34	16%
Aesthetics and Signage	31	15%
Alternative Travel Models	22	10%

Mr. Smeeton wrapped up the discussion by stating that the Team will craft a vision statement based on this feedback, and will get back to group for consensus. Mr. Lusher added that the Committee will be invited to help wordsmith the vision. The goal is to act as one group and from a consensus perspective. The Vision will also be presented at the first public meeting for their input as well.

The next meeting of the Stakeholder Advisory Committee has not yet been scheduled but will occur at the next project milestone, likely in the fall.



Stakeholder Advisory Committee

Meeting #1 – Visioning

July 25, 2017 | 1:00 – 3:00 PM

Attachment A

Presentation Materials



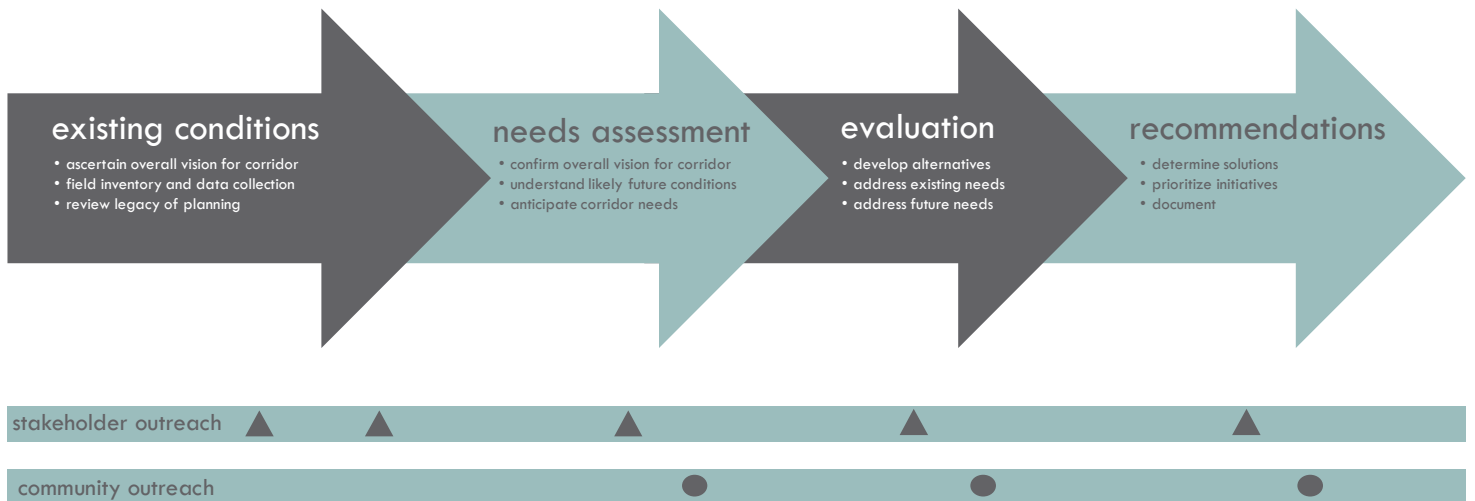
timeline & phasing

summer 2017

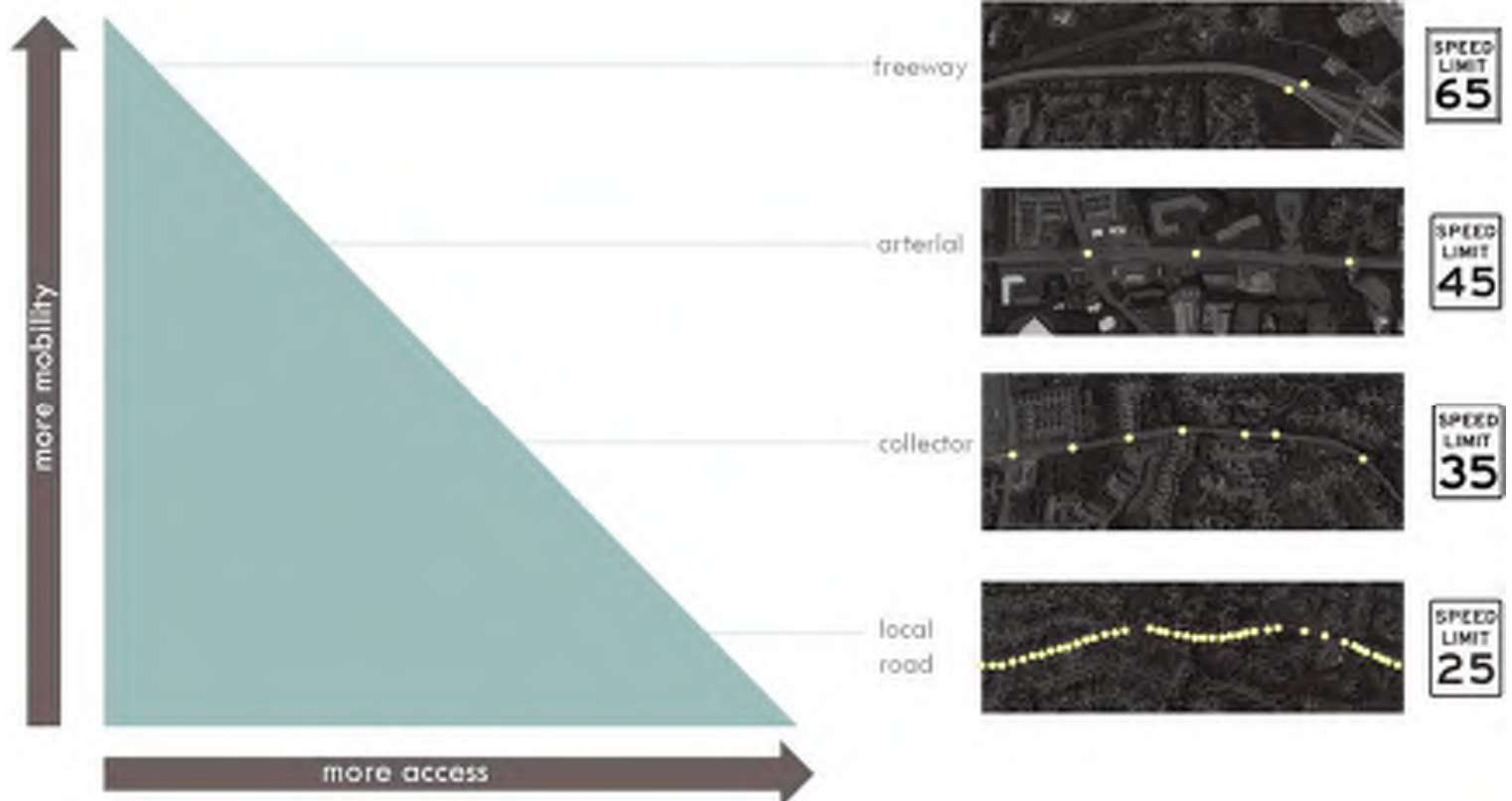
fall 2017

winter 2018

spring 2018



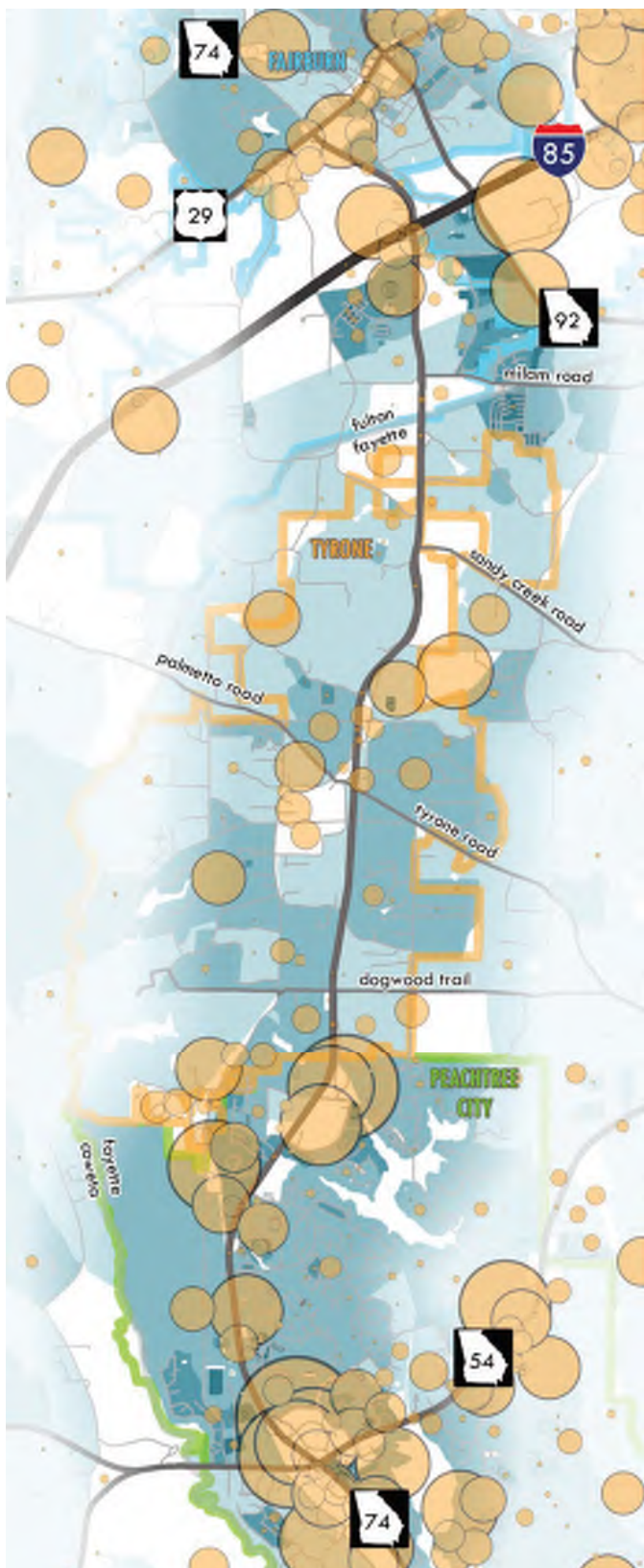
access & mobility





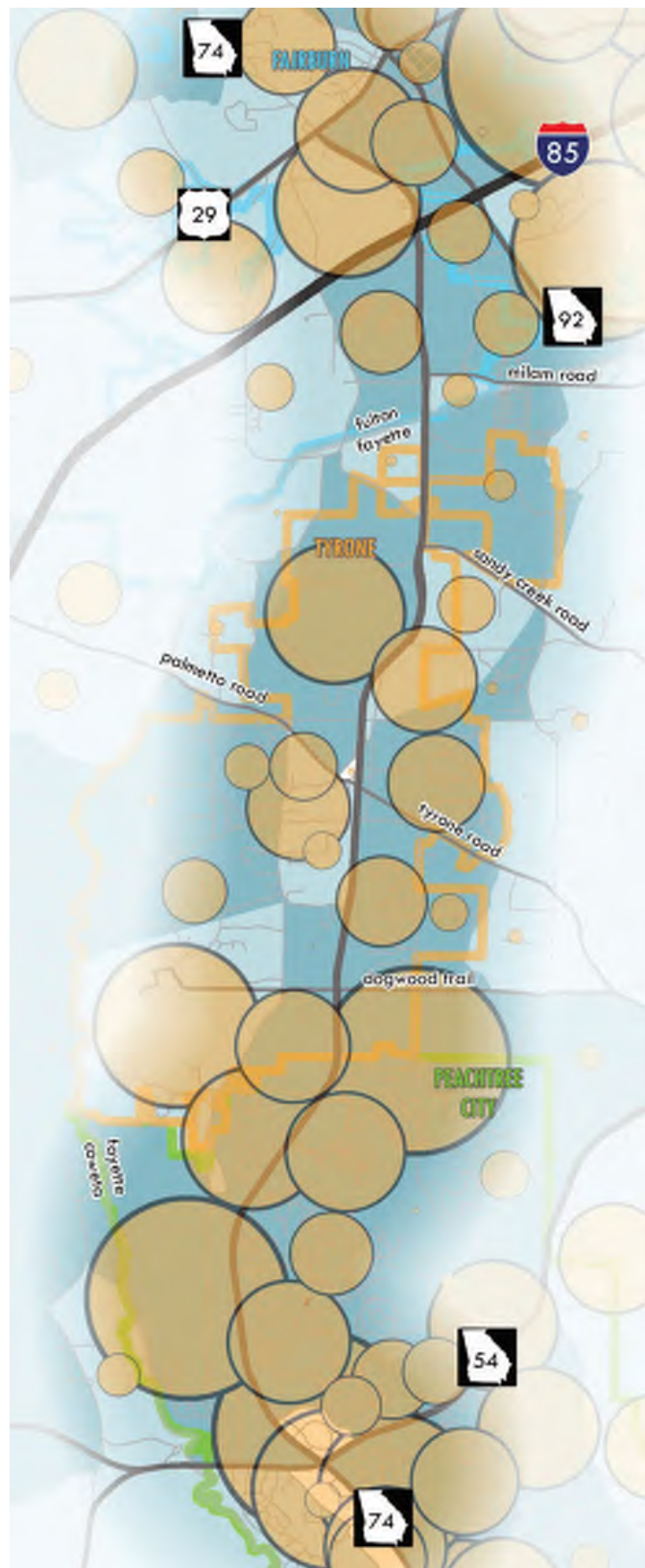
SR 74 COMPREHENSIVE CORRIDOR STUDY

existing (2010)



population &
employment

future (2040)





commuter patterns

residents who work outside
of their home city

employees who live
out of the city

people who live
and work in the
same city

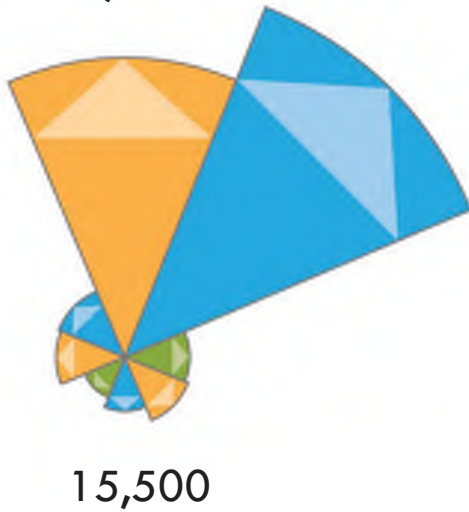
FAIRBURN



TYRONE



PEACHTREE
CITY





SR 74

COMPREHENSIVE CORRIDOR STUDY

travel demand model traffic flows

existing (2015) & future (2040)
traffic demand



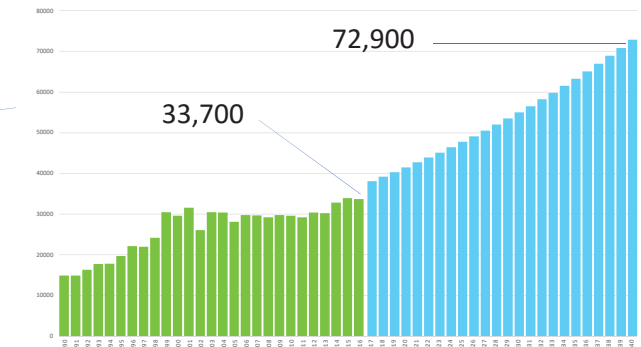
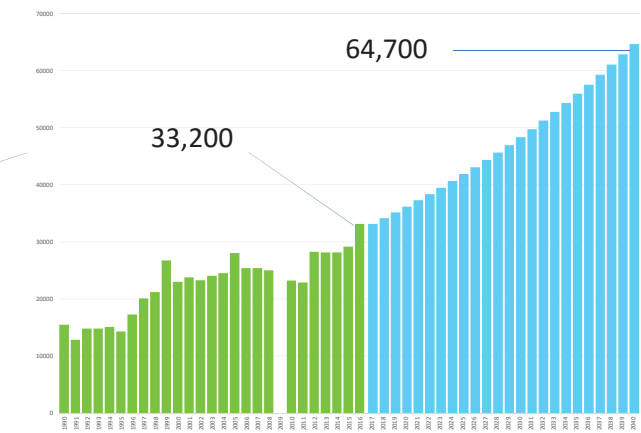
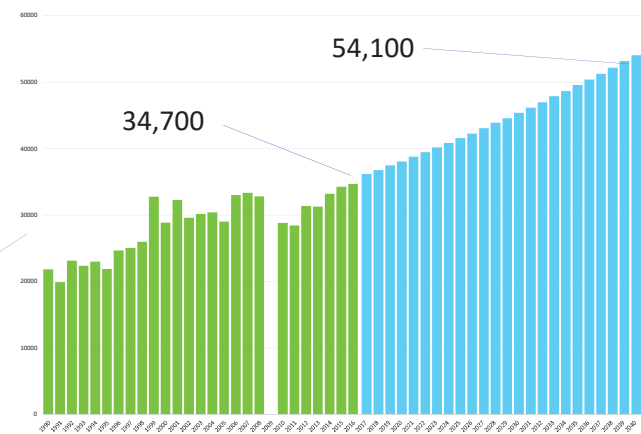
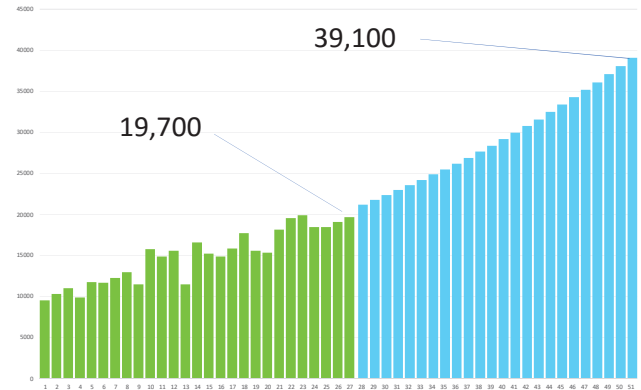
existing (2015) & future (2040)
truck demand





SR 74 COMPREHENSIVE CORRIDOR STUDY

historical and projected traffic



■ = historical volumes ■ = projected volumes



SR 74 COMPREHENSIVE CORRIDOR STUDY

level of service

existing (2015) PM peak period

future (2040) PM peak period



LOS A/B



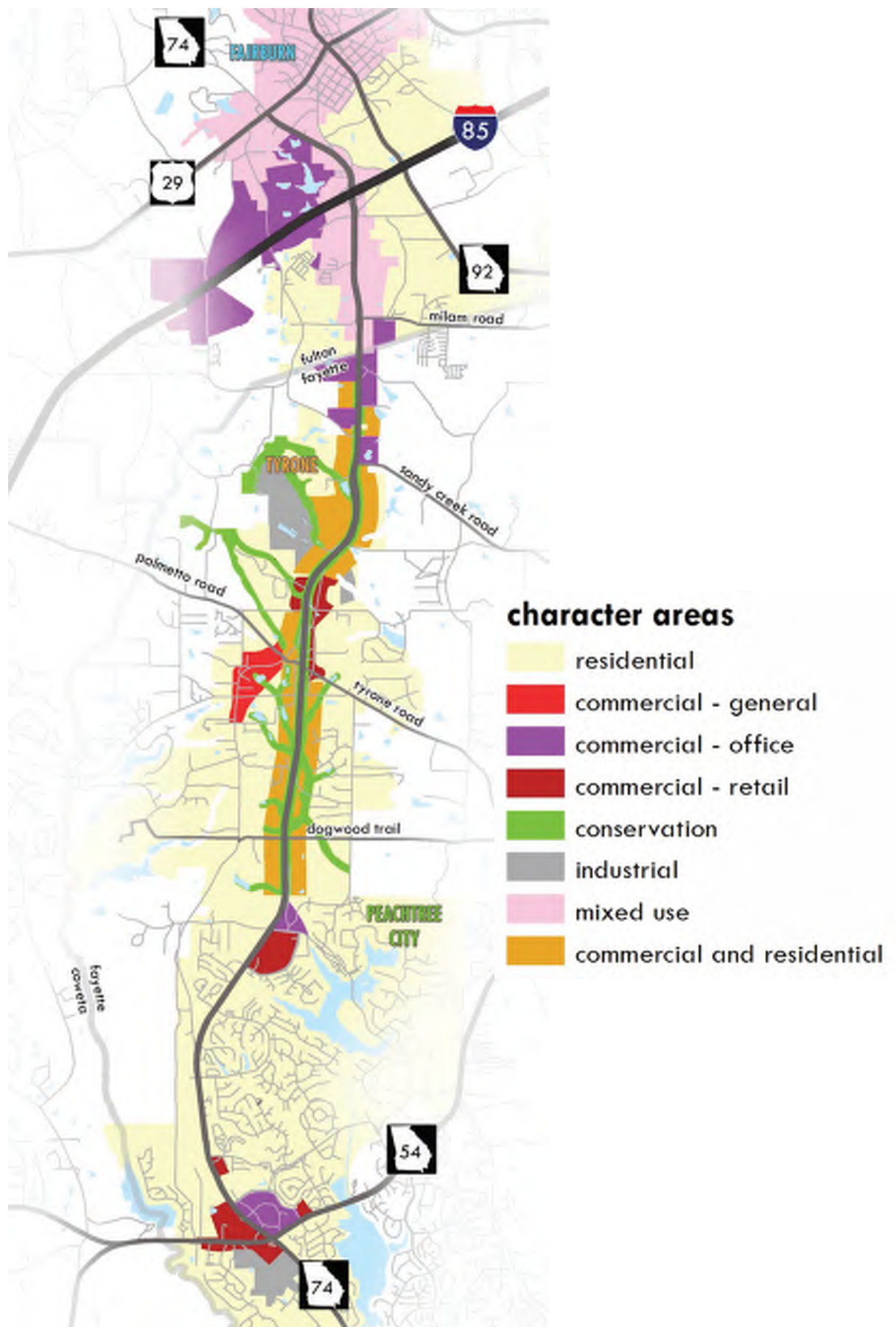
LOS C/D

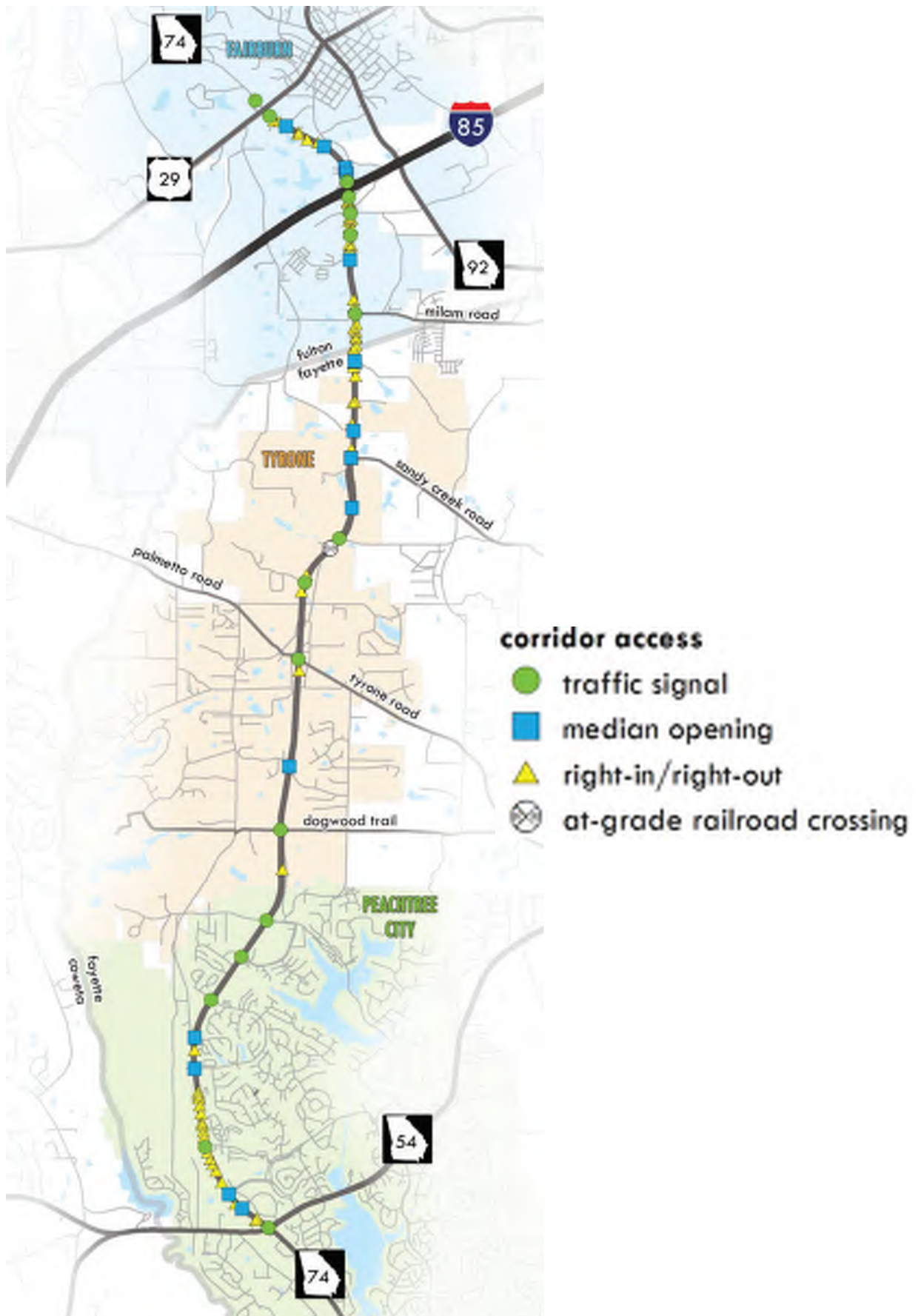


LOS E



LOS F









access management

- Implement corridor-wide access management policies to help maintain mobility.
- Implement access management practices such as frontage/backage/access roads and inter-parcel access to limit curb cuts on SR 74 while maintaining accessibility for residents and businesses.

accessibility

- Maintain or enhance accessibility/connectivity for residents and businesses without negatively affecting mobility.
- Identify new corridors and access points to I-85 to improve accessibility and mobility. Possible new I-85 interchange at SR 92, Gullatt Road, or Johnson Road.
- Improve pedestrian and bicycle access to corridor destinations and amenities (retail, downtowns, parks, libraries, etc.)

aesthetics and signage

- Implement corridor-wide design guidelines for both private development and transportation investments to ensure a cohesive, aesthetically pleasing corridor.
- Develop and implement consistent signage standards throughout corridor.
- Identify and install decorative treatments throughout the corridor to highlight SR 74 as a 'Gateway Corridor'.

alternative travel modes

- Identify and implement transportation projects that encourage alternative modes of travel including pedestrian, bicycle, and transit.
- Identify potential funding opportunities to fund shuttles, park and ride lots, van pools, and ride sharing.

development patterns

- Identify and adopt zoning and development standards that balance growth with roadway network capacity in order to maintain mobility.
- Encourage development patterns that help reduce automobile trips (mixed-use, transit oriented, etc).
- Accommodate anticipated economic development without jeopardizing corridor mobility.

mobility

- Identify and implement transportation improvements that preserve or enhance traffic operations and travel times along the SR 74 corridor.
- Implement operational and capacity improvements to accommodate planned growth within the corridor.
- Implement 'Smart Corridor' technologies such as adaptive signal control, queue detection, intelligent transportation systems (ITS) to improve traffic operations and safety within the SR 74 corridor.

other

- Please identify any additional goals and objectives you feel should be included on your comment form and return to the planning team

Attachment B

Vision Exercise Raw Results



access management

- Implement corridor-wide access management policies to help maintain mobility.
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other

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SR 74 COMPREHENSIVE CORRIDOR STUDY

Round #1 Community Meetings March 2018

Location

March 1, 2018
Fayette County Council Chambers
140 Stonewall Avenue West
Fayetteville, GA 30214

March 6, 2018
Sandy Creek High School
360 Jenkins Road
Tyrone, GA 30290

Summary

In March 2018, two open house meetings were held in conjunction with meetings for the Fayette County Comprehensive Transportation Plan Update. These meetings were open houses, with a series of boards on display (included in **Attachment A**), explaining the context of the study and giving attendees an opportunity to provide input through three activities.

In the first activity, participants were presented with the vision (goals and objectives) that were crafted based on input received at the listening session and during the earlier stakeholder meetings. They were provided dots and asked to place a dot next to each statement that they agreed with. Results of this activity are shown in the table to the right, with raw scans of the results in **Attachment B**.

The second activity was used to identify where the community perceived congestion to be worst. Participants were given three dots and presented with a map of the study area. They were asked to place the dots of the three areas where they experienced the most traffic congestion on the SR 74 corridor. At the meeting, participants were also advised that GDOT was working on projects to improve both the I-85 interchange and the intersection of SR 74 with SR 54. They were advised that because of these projects, their input would be most helpful if they placed their dots on the top three congested places other than those two locations. A map of dots placed at these

	Mar 1	Mar 6
Access Management		
1) Implement corridor-wide access management policies to help maintain mobility	5	6
2) Implement access management practices such as frontage/backage/access roads and inter-parcel access to limit curb cuts on SR 74 while maintaining accessibility for residents and businesses	15	36
Accessibility/Connectivity		
1) Maintain or enhance accessibility/connectivity for residents and businesses without negatively affecting mobility	6	7
2) Identify new corridors and access points to I-85 to improve accessibility and mobility. Possible new I-85 interchange at SR 92/Gullatt/Johnson Road	13	43
3) Improve pedestrian and bicycle access to corridor destinations and amenities (retail, downtowns, parks, libraries, etc.)	6	20
Maintain and Improve Corridor Aesthetics		
1) Implement corridor-wide design guidelines for private development and transportation investments to ensure a cohesive, aesthetically pleasing corridor	2	17
2) Develop and implement consistent signage standards throughout corridor	11	27
3) Identify and install decorative treatments throughout corridor to highlight SR 74 as a 'Gateway Corridor'	5	14
Seek Opportunities to Encourage and Facilitate Alternative Travel Modes		
1) Identify and implement transportation projects that encourage alternatives modes of travel including pedestrian, bicycle, and transit	8	13
2) Identify potential funding opportunities to fund shuttles, park and ride lots, van pools, and ride sharing	7	15
Land Use/Development Patterns		
1) Identify and adopt zoning and development standards that balance growth with roadway network capacities in order to maintain mobility	3	8
2) Encourage development patterns that help reduce automobile trips (mixed-use, transit-oriented, etc.)	7	10
3) Accommodate anticipated economic development without jeopardizing corridor mobility	12	25
Mobility		
1) Identify and implement transportation improvements that preserve or enhance traffic operations and travel times along the SR 74 corridor	4	18
2) Implement operational and capacity improvements to accommodate planned growth within the corridor	10	10
3) Implement 'Smart Corridor' technologies such as adaptive signal control, queue detection, intelligent transportation systems (ITS) to improve traffic operations and safety within the SR 74 corridor	10	28



SR 74 COMPREHENSIVE CORRIDOR STUDY

Round #1 Community Meetings March 2018

meetings is shown to the right, and raw maps are shown as part of Attachment C. Some participants chose to place their dots at I-85 and SR 54, but many also placed them at the intersections of Sandy Creek Road and Palmetto Road/Tyrone Road, amongst others.

In the third and final activity, attendees were given a map of the study corridor, broken into segments in which either access or mobility would be prioritized. Participants were asked if they agreed with the access or mobility designation assigned to each. The results of this activity are shown below, with raw results included in Attachment C. The results generally agree with areas of prioritizing mobility, but disagree with prioritizing access, seeming to reflect an overall preference for mobility over accessibility along the corridor.

	March 1		March 6	
	Yes	No	Yes	No
Prioritize Access [from US 29 to Thompson Road]?	10	6	18	26
Prioritize Mobility [from Thompson Road to south of Sandy Creek Road]?	4	1	27	15
Prioritize Access [from south of Sandy creek Road to Palmetto Road/Tyrone Road]?	9	1	22	23
Prioritize Mobility [from Palmetto Road/Tyrone Road to south of Dogwood Trail]?	4	1	26	10
Prioritize Access [from south of Dogwood Trail to south of Crabapple Lane/Peachtree Parkway]?	12	0	7	22
Prioritize Mobility [from south of Crabapple Lane/Peachtree Parkway to Wisdom Road]?	7	2	30	3
Prioritize Access [from Wisdom Road through SR 54]?	11	4	13	20





SR 74
COMPREHENSIVE CORRIDOR STUDY

Round #1 Community Meetings
March 2018

Attachment A

Presentation Boards

STATION: background



SR 74 COMPREHENSIVE CORRIDOR STUDY

schedule & process



study purpose

The Fayette County Department of Public Works is embarking upon a comprehensive corridor study of State Route (SR) 74 from US Route 29 on the north end to SR 54 in Peachtree City. Serving as a primary commuting corridor in Fayette County, SR 74 carries over 36,600 vehicles per day. It is a heavily used corridor that traverses Fairburn, Tyrone, Peachtree City, and unincorporated Fayette County. SR 74 has been identified by previous planning efforts and studies as a corridor that is ripe for change. This Comprehensive Corridor Study will examine a 12 mile stretch of SR 74 from US Route 29 to SR 54 in Peachtree City. The study will establish a corridor vision that is supported by stakeholders and will set forth a plan for bringing the vision to reality.



2010 population & employment



anticipated
2040 population & employment



The corridor is anticipated to continue to attract population and employment growth. In the images to the left, which compare 2010 population and employment with anticipated year 2040 conditions, the areas of blue represent population, with the intensity of the color indicating the relative amount of population anticipated in those areas. Likewise, the orange dots represent employment, with the size of each dot indicating the relative amount of employment in each location.



STATION:

SR 74 vision



SR 74

COMPREHENSIVE CORRIDOR STUDY

access management

do you agree?

- Implement corridor-wide access management policies to help maintain mobility
- Implement access management practices such as frontage/backage/access roads and inter-parcel access to limit curb cuts on SR 74 while maintaining accessibility for residents and businesses

accessibility/connectivity

- Maintain or enhance accessibility/connectivity for residents and businesses without negatively affecting mobility
- Identify new corridors and access points to I-85 to improve accessibility and mobility. Possible new I-85 interchange at SR 92/Gullatt/Johnson Road.
- Improve pedestrian and bicycle access to corridor destinations and amenities (retail, downtowns, parks, libraries, etc.)

maintain and improve corridor aesthetics

- Implement corridor-wide design guidelines for both private development and transportation investments to ensure a cohesive, aesthetically pleasing corridor
- Develop and implement consistent signage standards throughout corridor
- Identify and install decorative treatments throughout the corridor to highlight SR 74 as a 'Gateway Corridor'

seek opportunities to encourage and facilitate alternative travel modes

- Identify and implement transportation projects that encourage alternative modes of travel including pedestrian, bicycle, and transit
- Identify potential funding opportunities to fund shuttles, park and ride lots, van pools, and ride sharing

land use/development patterns

- Identify and adopt zoning and development standards that balance growth with roadway network capacities in order to maintain mobility.
- Encourage development patterns that help reduce automobile trips (mixed-use, transit oriented, etc)
- Accommodate anticipated economic development without jeopardizing corridor mobility.

mobility

- Identify and implement transportation improvements that preserve or enhance traffic operations and travel times along the SR 74 corridor
- Implement operational and capacity improvements to accommodate planned growth within the corridor.
- Implement 'Smart Corridor' technologies such as adaptive signal control, queue detection, intelligent transportation systems (ITS) to improve traffic operations and safety within the SR 74 corridor.

SR 74 congestion



COMPREHENSIVE CORRIDOR STUDY

Note: There are numerous proposed projects from the South Fulton CID Multimodal Study

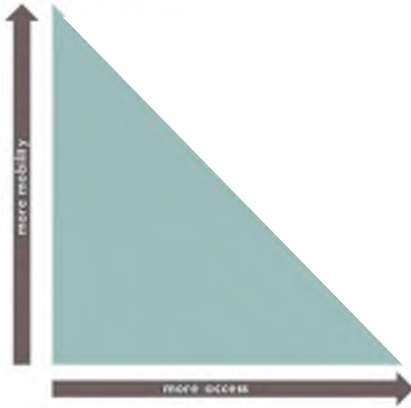


STATION: mobility & access



SR 74

COMPREHENSIVE CORRIDOR STUDY



Corridor planning is often thought of in terms of mobility or access, two inversely related corridor treatments. For instance, freeways maximize mobility with access limited to only interchanges. In contrast, local streets maximize access with driveways and curb cuts to residential homes and businesses at the expense of mobility.

Initial discussions with area stakeholders suggest there are parts of the SR 74 corridor that we should implement design treatments that maximize for access and other areas we should maximize for mobility.

Prioritize Access?

easier to get in and out of businesses, but slower driving along SR 74

YES!

NO!

Prioritize Mobility?

harder to get in and out of businesses, but faster driving along SR 74

YES!

NO!

Prioritize Access?

easier to get in and out of businesses, but slower driving along SR 74

YES!

NO!

Prioritize Mobility?

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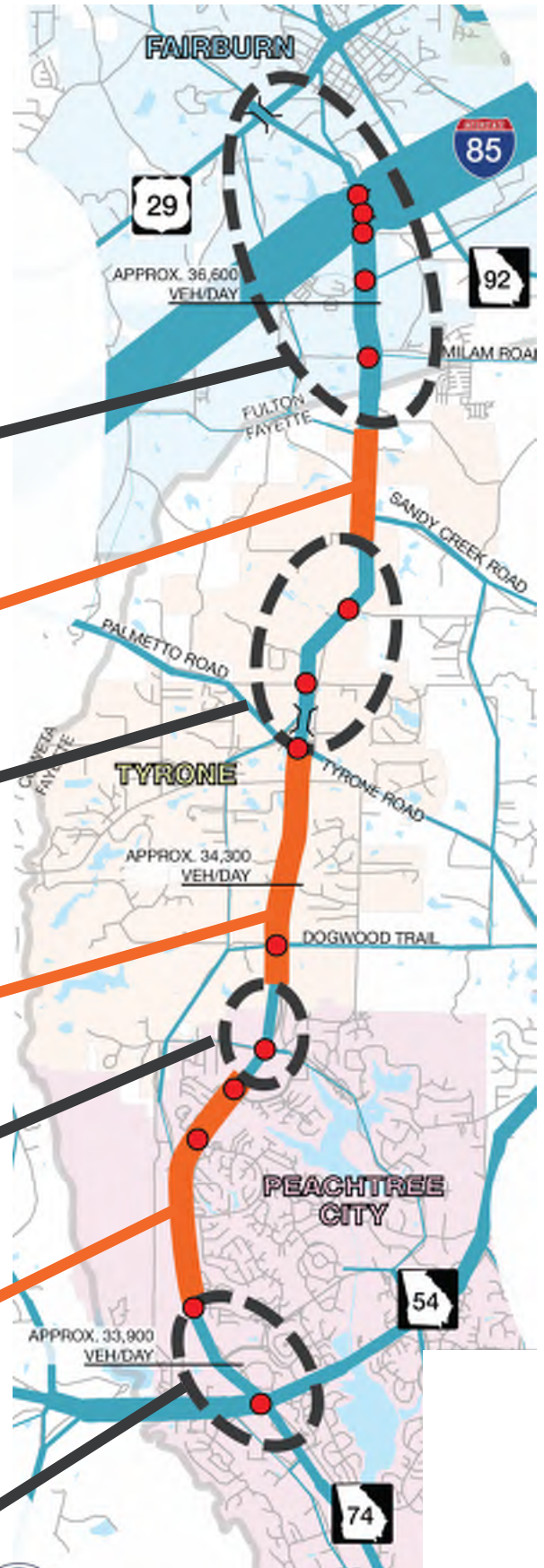
NO!

Prioritize Access?

easier to get in and out of businesses, but slower driving along SR 74

YES!

NO!





SR 74
COMPREHENSIVE CORRIDOR STUDY

Round #1 Community Meetings
March 2018

Attachment B

Exercise Raw Results

STATION: SR 74 vision



SR 74
COMPREHENSIVE CORRIDOR STUDY

access management

do you agree?

- Implement corridor-wide access management policies to help maintain mobility



- Implement access management practices such as frontage/backage/access roads and inter-parcel access to limit curb cuts on SR 74 while maintaining accessibility for residents and businesses



accessibility/connectivity

- Maintain or enhance accessibility/connectivity for residents and businesses without negatively affecting mobility



- Identify new corridors and access points to I-85 to improve accessibility and mobility. Possible new I-85 interchange at SR 92/Gullatt/Johnson Road.



- Improve pedestrian and bicycle access to corridor destinations and amenities (retail, downtowns, parks, libraries, etc.)



maintain and improve corridor aesthetics

- Implement corridor-wide design guidelines for both private development and transportation investments to ensure a cohesive, aesthetically pleasing corridor



- Develop and implement consistent signage standards throughout corridor



- Identify and install decorative treatments throughout the corridor to highlight SR 74 as a 'Gateway Corridor'



seek opportunities to encourage and facilitate alternative travel modes

- Identify and implement transportation projects that encourage alternative modes of travel including pedestrian, bicycle, and transit



- Identify potential funding opportunities to fund shuttles, park and ride lots, van pools, and ride sharing



land use/development patterns

- Identify and adopt zoning and development standards that balance growth with roadway network capacities in order to maintain mobility.



- Encourage development patterns that help reduce automobile trips (mixed-use, transit oriented, etc)



- Accommodate anticipated economic development without jeopardizing corridor mobility.



mobility

- Identify and implement transportation improvements that preserve or enhance traffic operations and travel times along the SR 74 corridor



- Implement operational and capacity improvements to accommodate planned growth within the corridor.



- Implement 'Smart Corridor' technologies such as adaptive signal control, queue detection, intelligent transportation systems (ITS) to improve traffic operations and safety within the SR 74 corridor.



STATION: SR 74 vision



SR 74

COMPREHENSIVE CORRIDOR STUDY

access management

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STATION:

SR 74 congestion



SR 74

COMPREHENSIVE CORRIDOR STUDY

use either map below to tell us your top 3 locations to address traffic congestion on the SR 74 corridor...

Note: There are numerous proposed projects from the South Fulton CDD Multimodal Study



STATION:

SR 74 congestion



SR 74

COMPREHENSIVE CORRIDOR STUDY

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STATION:
SR 74 vision



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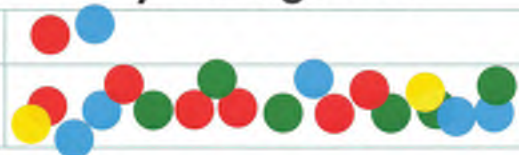


SR 74 COMPREHENSIVE CORRIDOR STUDY

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STATION:

SR 74 congestion



SR 74

COMPREHENSIVE CORRIDOR STUDY

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STATION:

SR 74 congestion



SR 74

COMPREHENSIVE CORRIDOR STUDY

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SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Stakeholder Meeting #3
June 21, 2017

Location

Tyrone Public Library
143 Commerce Drive
Tyrone, GA 30290
1:00 pm – 2:30 pm

Attendees

Vivian Canizares, Georgia DOT Planning
Aileen Daney, Atlanta Regional Commission
Mayor Vanessa Fleisch, City of Peachtree City
Pete Frisina, Fayette County
Joddie Gray, AICP, South Fulton CID
Steven Gulas, South-Tree
Keith Larson, Bike Fayette
Jonathan Lynn, Town of Tyrone
Phil Mallon, Fayette County
Joe Robison, Fayette County
Mark Sanders, South Fulton CID
Kim Schnoes, Fayette Chamber
Mark Shugart, South Fulton CID; Saben
Andrew Spiliotis, Atlanta Regional Commission
Lester Thompson, City of Fairburn
Phillip Trocquet, Town of Tyrone
Mike Warrix, City of Peachtree City

Summary

The third stakeholder committee meeting of the SR 74 Comprehensive Corridor Study was held on **Thursday, June 21st, 2018** at the Tyrone Public Library from 1:00 pm -2:30 pm. Facilitated by members of the consultant team (Pond and Sycamore), the meeting included an introduction by Fayette County Public Works Division Director, Phil Mallon, presentation by project manager Eric Lusher, as well as an activity geared at examining additional opportunities along the corridor. A sign-in from the meeting is provided in **Attachment A**, and materials from the meeting are included in **Attachment B**.

Presentation

The meeting began with a formal presentation by Pond Project Manager, Eric Lusher, to the stakeholder committee. The presentation included a status update of the SR 74 Corridor Study, a review of initial findings from the technical analyses and community outreach, as well as potential treatments and other improvements along the corridor.



Since the stakeholder committee meeting and first round of public meetings, much of the data collected has remained consistent. Access management, accessibility, and mobility are the most important types of improvements desired along the SR 74 corridor. Given these concerns and the level of growth expected along the corridor, the project team utilized GDOT's Intersections Control Evaluation (ICE) tool to evaluate potential improvements along the corridor. The emerging concept presented to the stakeholder committee is a Restricted Crossing U-Turn Intersection (RCUT), also referred to as a Superstreet. Through the technical analyses conducted, Mr. Lusher underscored that having a combination of R-Cut, J-Turn and Median U-Turn intersections will enhance and control flow on SR 74; provide an opportunity for safer pedestrian and bicycle crossings; and will work best as a corridor wide treatment. Several animations and case studies of RCUTs were shown to provide the Stakeholder Committee with more context on the effect superstreets can have in reducing conflict points and facilitating mobility.

Interactive Exercise

Following the presentation, the stakeholder committee was asked to break out into groups at three tables, each of which presented an aerial showing a segment of the corridor. For each segment, attendees were encouraged to provide any additional feedback or concerns they had for the corridor directly on the corridor aeriels. The project team will take these comments into consideration when developing recommendations. Scans of the segments along with comments from the committee are shown in **Attachment C**. Following the exercise, the group reconvened to discuss any additional concerns and questions on either the emerging concept and/or corridor in general. The concerns raised were:

- How would the concept impact the flow of truck traffic?
- How would dual left or dual right turn lanes impact drivers trying to access the interstate?
- How will this plan impact the bike plan for the intersection?
- Is it possible to re-route trucks in the opposite direction on Oakley Industrial?
- Could we push the turn lane back to allow more stacking for trucks approaching this intersection?
- How would not implementing this treatment at the intersection impact the corridor?

Next Steps

The project team will conduct further analysis to adequately address the feedback provided by the stakeholder committee. The last round of community meetings will be held on **Tuesday, July 10th, 2018** and **Thursday, July 19th, 2018**. A final stakeholder meeting has been tentatively scheduled for **August 2018** to present and finalize recommendations before the draft report is submitted in late August.



Attachment A

Sign-In Sheet



SIGN IN SHEET

Date:

6/21/18

NAME	ORGANIZATION/REPRESENTING	EMAIL ADDRESS	PHONE
Aileen Dancy	AIC	ADancy@transagency.com	
Mark Shugart	SFCB/sida	markshugart@sida.org	
Vanessa Flans	PTC	Vanessa.Flans@conrail.com	
Shun Gils	PTC South-tree	stevensglas@south-tree.com	770-722-6789
Vision Carriers	GOOT Planning	mcanitzers@dot.ga.gov	
Jim Saunders	Fayette Chamber	Jim@fayettechamber.org	770-461-5946
Pete Fyvisine	Fayette Chamber	Pfyrivind@fayettechamber.org	770-305-5160
MARK SANDERS	SFCID	mark@sandersga.com	404-456-7078



SR 74

COMPREHENSIVE CORRIDOR STUDY

SIGN IN SHEET

Date: 6/21/18

NAME	ORGANIZATION/REPRESENTING	EMAIL ADDRESS	PHONE
Andrew Spiliotis	ARC	aspiliotis@atlanta-regional.org	
Jadea Gray	SecurID		
Phillip Jacquard	Town of Tyrone		
Phil Mallon	Fayette Co.		
Oliver Wheeler	RTC	mwarner@pectrum-cb.org	
Lester Thompson	Fairburn	lthompson@fairburn.ga.gov	
Joe Robison	Fayette County	jrobison@fayettecountyga.gov	
KEITH LARSON	BIKE FAYETTE	KEITH-LARSON@BESOUTHA1ST	678-525-7713
Jonathan Lynn	Tyrone	jlynn@tyrone.org	

NAME
DATE



Attachment B

Presentation Materials

Stakeholder Meeting June 21, 2018



SR 74

COMPREHENSIVE CORRIDOR STUDY



POND

Purpose

- Update on status of SR 74 Corridor Study
- Present initial findings and potential improvements
- Next Steps



Update

Study Purpose

- Establish a unified stakeholder vision
- Understand long term transportation needs
- Address congestion and future growth needs
- Provide capacity to maintain corridor mobility



Update



Summer 2017

Fall 2017

Winter 2018

Spring 2018

Summer 2018

WE ARE HERE!



existing conditions

- ascertain overall vision for corridor
- field inventory and data collection
- review legacy of planning

needs assessment

- confirm overall vision for corridor
- understand likely future conditions
- anticipate corridor needs

evaluation

- develop alternatives
- address existing needs
- address future needs

recommendations

- determine solutions
- prioritize initiatives
- document



SR 74

COMPREHENSIVE CORRIDOR STUDY

POND

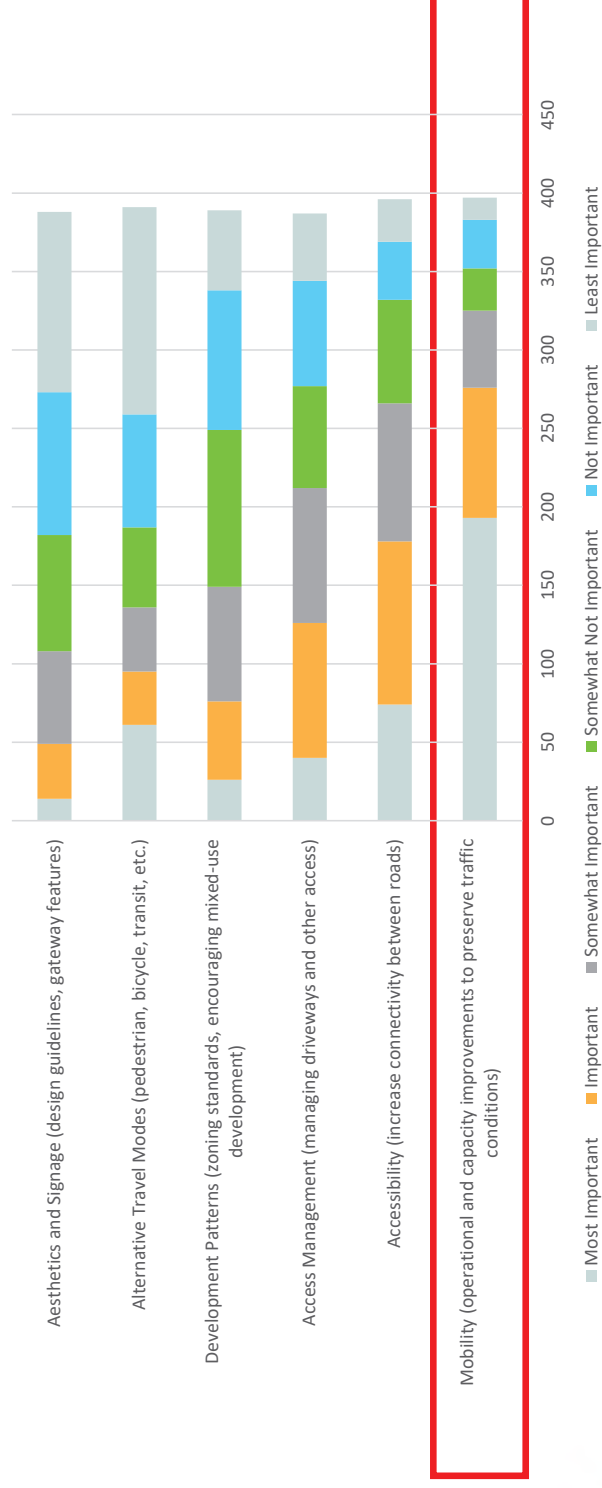
Update

What are the most important types
of improvements that can be made
along SR 74?



Online Survey Results (As of 6/13/18)

What are the most important types of improvements that can be made along SR 74?



SR 74
COMPREHENSIVE CORRIDOR STUDY



Update

Stakeholder Group Results

Category	Number of Dots	Relative Weighting
Access Management	42	20%
Mobility	42	20%
Accessibility	40	19%
Development Patterns	34	16%
Aesthetics and Signage	31	15%
Alternative Travel Models	22	10%

Update (Vision)



Highest ranking policy for Stakeholder Group and Community Meetings **bolded** (will reformat table)

Policy	% Agree (Stakeholder)	% Agree (Community)
Access Management		
Implement corridor-wide access management policies to help maintain mobility	7.5	2.6
Implement access management practices such as frontage/backage/access roads and inter-parcel access to limit curb cuts on SR 74 while maintaining accessibility for residents and businesses	7.5	12.1
Accessibility/Connectivity		
Maintain or enhance accessibility/connectivity for residents and businesses without negatively affecting mobility	4.7	3.1
Identify new corridors and access points to I-85 to improve accessibility and mobility. Possible new I-85 interchange at SR 92/Gullatt/Johnson Road	3.7	13.3
Improve pedestrian and bicycle access to corridor destinations and amenities (retail, downtowns, parks, libraries, etc.)	6.5	6.2
Maintain and Improve Aesthetics		
Implement corridor-wide design guidelines for private development and transportation investments to ensure a cohesive, aesthetically pleasing corridor	6.5	4.5
Develop and implement consistent signage standards throughout corridor	4.7	9.0
Identify and install decorative treatments throughout corridor to highlight SR 74 as a 'Gateway Corridor'	4.7	4.5
Seek Opportunities to Encourage and Facilitate Alternative Travel Modes		
Identify and implement transportation projects that encourage alternatives modes of travel including pedestrian, bicycle, and transit	7.5	5.0
Identify potential funding opportunities to fund shuttles, park and ride lots, van pools, and ride sharing	7.5	5.5
Land Use/Development Patterns		
Identify and adopt zoning and development standards that balance growth with roadway network capacities in order to maintain mobility	9.3	2.6
Encourage development patterns that help reduce automobile trips (mixed-use, transit-oriented, etc.)	4.7	4.0
Accommodate anticipated economic development without jeopardizing corridor mobility	6.5	8.8
Mobility		
Identify and implement transportation improvements that preserve or enhance traffic operations and travel times along the SR 74 corridor	9.3	5.2
Implement operational and capacity improvements to accommodate planned growth within the corridor	2.8	4.8
Implement 'Smart Corridor' technologies such as adaptive signal control, queue detection, intelligent transportation systems (ITS) to improve traffic operations and safety within the SR 74 corridor	6.5	9.0



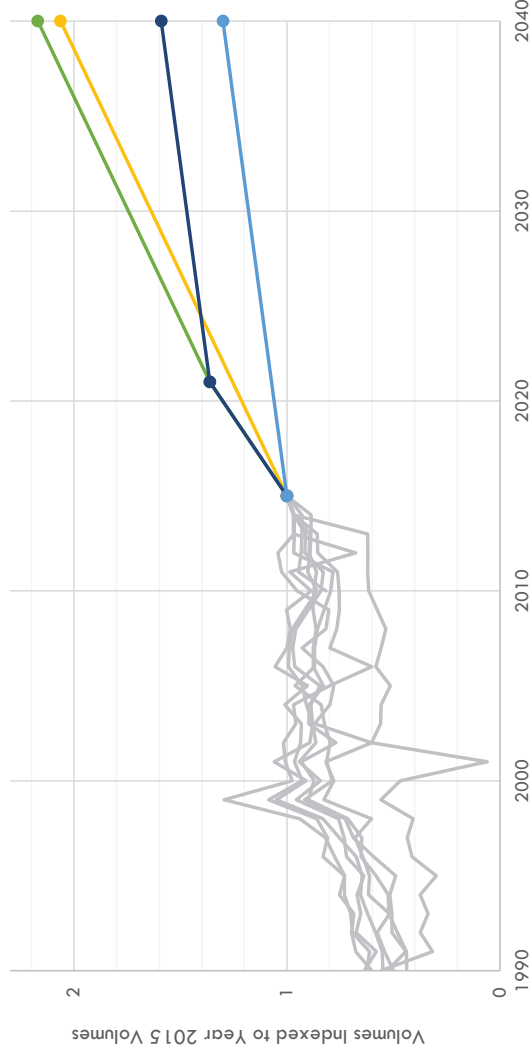
SR 74

COMPREHENSIVE CORRIDOR STUDY



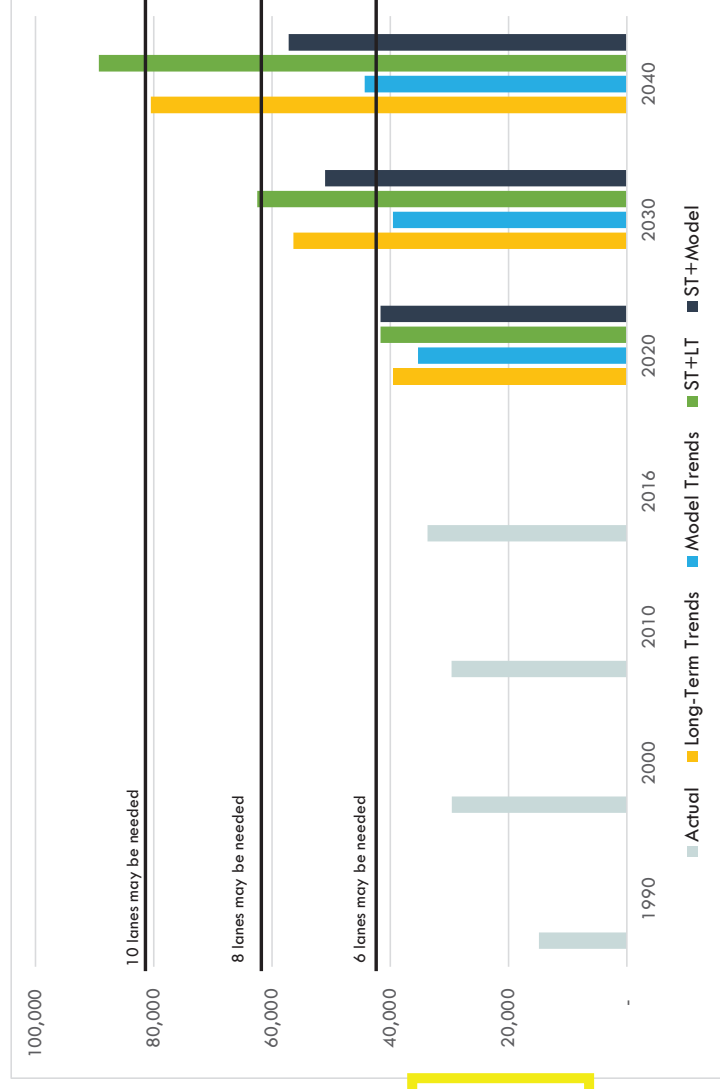
Update

- **Long-Term Trends:** 4.28% per year growth applied consistently
- **Model Trends:** 1.20% per year growth applied consistently
- **Short-Term + Long-Term:** 5.90% per year growth applied for 6 years, followed by 4.28% per year applied afterwards
- **Short-Term + Model:** 5.90% per year growth applied for 6 years, followed by 1.20% per year applied afterwards.



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Level of Service



2020 AM



2020 PM



2040 AM



2040 PM



SR 74

COMPREHENSIVE CORRIDOR STUDY

Intersection	Control	2020 AM	2020 PM	2040 AM	2040 PM
US 29/Broad Street	SideStop	C	C	F	F
Broad Street/Bohannon	SideStop	E	C	F	D
Senola Road	SideStop	F	F	F	F
I-85 SB	Signal	E	F	F	F
I-85 NB	Signal	E	E	F	F
Oakley Industrial Boulevard	Signal	F	F	F	F
Harris Road	Signal	B	F	E	F
Meadow Glen Parkway	SideStop	F	F	F	F
Milam Road/Landrum Road	SideStop	C	F	F	F
Kirkley Road/Westbourne Drive	Signal	F	F	F	F
Sandy Creek Road	SideStop	F	F	F	F
Peggy Lane/Jenkins Road	Signal	F	E	F	F
Carriage Oaks Drive	Signal	B	F	F	F
Tyrone Road/Palmetto Road	Signal	C	F	F	F
East Crestwood	SideStop	F	F	F	F
Dogwood Trail	Signal	B	B	D	F
Crabapple Lane/N Peachtree Parkway	Signal	D	D	F	F
Georgian Park/Ardenlee Parkway	Signal	B	D	F	F
Kedron Drive	Signal	B	D	F	F
Senola Road/Lexington Pass	SideStop	F	F	F	F
Kedron Drive	SideStop	F	F	F	F
Wisdom Road	Signal	B	D	D	F
Aberdeen Parkway	SideStop	F	F	F	F
US 54	Signal	F	F	F	F



Crash Data

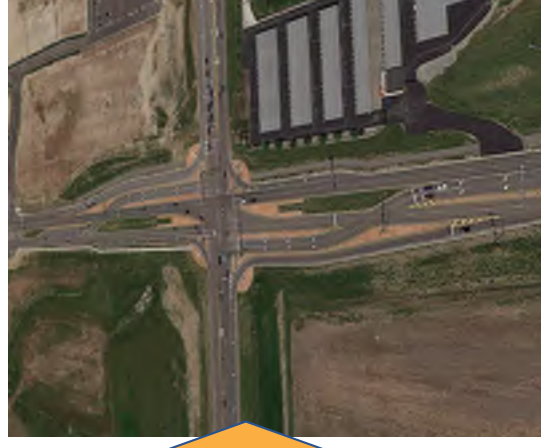
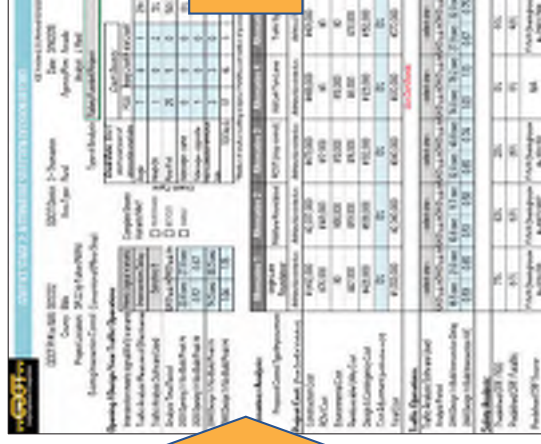


- Pulled 5-years of crash data from CARES database for 24 corridor intersections

1- SR 74 at US-29 WB Ramp				2- SR 74 at US-29 EB Ramp				9- SR 74 at Landrum Rd. Miami				10- SR 74 at Johnson Westbour				17- SR 74 at Crabapple Ln				18- SR 74 at Ardennes Pkwy, Gec			
Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities
Head On	1	3	0	Head On	0	1	2	Head On	8	7	0	Head On	0	0	0	Head On	2	5	0	Head On	1	4	0
Rear End	6	1	0	Rear End	4	0	0	Rear End	3	1	0	Rear End	0	0	0	Rear End	42	10	0	Rear End	36	14	0
Sideswipe-Same Direction	1	0	0	Sideswipe-Same Direction	4	0	0	Sideswipe-Same Direction	48	8	0	Sideswipe-Same Direction	5	1	0	Sideswipe-Same Direction	8	0	0	Sideswipe-Same Direction	1	0	0
Sideswipe-Opposite Direction	0	0	0	Sideswipe-Opposite Direction	1	0	0	Sideswipe-Opposite Direction	5	0	0	Sideswipe-Opposite Direction	3	0	0	Sideswipe-Opposite Direction	2	0	0	Sideswipe-Opposite Direction	0	0	0
Not A Collision w/Motor Vehicle	0	0	0	Not A Collision w/Motor Vehicle	2	1	0	Not A Collision w/Motor Vehicle	1	0	0	Not A Collision w/Motor Vehicle	1	0	0	Not A Collision w/Motor Vehicle	13	0	0	Not A Collision w/Motor Vehicle	0	0	0
TOTALS	8	4	0	TOTALS	8	2	0	TOTALS	67	17	0	TOTALS	14	2	0	TOTALS	67	15	0	TOTALS	52	19	0
3- SR 74 at Senola Rd				4- SR 74 at I-85 SB Ramps				11- SR 74 at Sandy Creek Rd				12- SR 74 at Peggy Ln Jenkins Rr				19- SR 74 at Kedron Dr				20- SR 74 at Senola Rd Lexington			
Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities
Head On	3	2	0	Head On	16	5	0	Head On	3	3	0	Head On	0	0	0	Head On	1	2	0	Head On	6	2	1
Rear End	0	0	0	Rear End	4	0	0	Rear End	0	0	0	Rear End	0	0	0	Rear End	41	3	0	Rear End	1	0	0
Sideswipe-Same Direction	1	0	0	Sideswipe-Same Direction	142	24	0	Sideswipe-Same Direction	27	0	0	Sideswipe-Same Direction	19	2	0	Sideswipe-Same Direction	3	0	0	Sideswipe-Same Direction	6	3	0
Sideswipe-Opposite Direction	3	1	0	Sideswipe-Opposite Direction	53	3	0	Sideswipe-Opposite Direction	3	0	0	Sideswipe-Opposite Direction	5	0	0	Sideswipe-Opposite Direction	0	0	0	Sideswipe-Opposite Direction	2	0	0
Not A Collision w/Motor Vehicle	0	0	0	Not A Collision w/Motor Vehicle	0	0	0	Not A Collision w/Motor Vehicle	0	0	0	Not A Collision w/Motor Vehicle	0	0	0	Not A Collision w/Motor Vehicle	0	0	0	Not A Collision w/Motor Vehicle	0	1	0
TOTALS	8	3	0	TOTALS	239	36	0	TOTALS	37	5	0	TOTALS	32	4	0	TOTALS	52	6	0	TOTALS	25	6	1
5- SR 74 at I-85 NB Ramps				6- SR 74 at Oakley Industrial Blw				13- SR 74 at Carriage Oaks Dr				14- SR 74 at Palmetto Rd Tyrom				21- SR 74 at Kedron Dr				22- SR 74 at Wisdom Rd			
Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities
Head On	10	1	0	Head On	56	17	0	Head On	3	2	1	Head On	0	1	0	Head On	8	11	0	Head On	12	11	0
Rear End	1	0	0	Rear End	6	1	1	Rear End	1	0	0	Rear End	0	0	0	Rear End	0	0	0	Rear End	0	0	0
Sideswipe-Same Direction	80	10	0	Sideswipe-Same Direction	220	33	0	Sideswipe-Same Direction	16	1	0	Sideswipe-Same Direction	21	3	0	Sideswipe-Same Direction	11	3	0	Sideswipe-Same Direction	29	11	0
Sideswipe-Opposite Direction	58	4	0	Sideswipe-Opposite Direction	63	3	0	Sideswipe-Opposite Direction	1	0	0	Sideswipe-Opposite Direction	2	0	0	Sideswipe-Opposite Direction	1	1	0	Sideswipe-Opposite Direction	8	1	0
Not A Collision with Motor Vehic	6	1	0	Not A Collision with Motor Vehic	7	1	0	Not A Collision with Motor Vehic	2	0	0	Not A Collision with Motor Vehic	0	0	0	Not A Collision with Motor Vehic	0	0	0	Not A Collision with Motor Vehic	0	0	0
TOTALS	155	16	0	TOTALS	356	57	1	TOTALS	26	3	1	TOTALS	30	8	0	TOTALS	23	17	0	TOTALS	54	24	0
7- SR 74 at Harris Rd				8- SR 74 at Meadow Glen Way				15- SR 74 at Crestwood Rd				16- SR 74 at Dogwood Tr				23- SR 74 at Aberdeen Pkwy				24- SR 74 at Westpark Dr			
Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities	Angle	PDO	Injuries	Fatalities
Head On	14	6	0	Head On	7	5	0	Head On	0	1	0	Head On	2	3	0	Head On	8	4	0	Head On	10	11	0
Rear End	1	1	0	Rear End	0	0	0	Rear End	0	0	0	Rear End	0	0	0	Rear End	2	0	0	Rear End	0	0	0
Sideswipe-Same Direction	112	24	0	Sideswipe-Same Direction	17	1	0	Sideswipe-Same Direction	5	1	0	Sideswipe-Same Direction	10	1	0	Sideswipe-Same Direction	27	4	0	Sideswipe-Same Direction	11	7	0
Sideswipe-Opposite Direction	25	0	0	Sideswipe-Opposite Direction	5	0	0	Sideswipe-Opposite Direction	0	0	0	Sideswipe-Opposite Direction	1	0	0	Sideswipe-Opposite Direction	3	0	0	Sideswipe-Opposite Direction	4	1	0
Not A Collision with Motor Vehic	4	1	0	Not A Collision with Motor Vehic	3	1	0	Not A Collision with Motor Vehic	3	0	0	Not A Collision with Motor Vehic	2	0	0	Not A Collision with Motor Vehic	3	0	0	Not A Collision with Motor Vehic	0	0	0
TOTALS	158	32	0	TOTALS	38	7	0	TOTALS	8	2	0	TOTALS	15	4	0	TOTALS	43	8	0	TOTALS	31	23	0

-

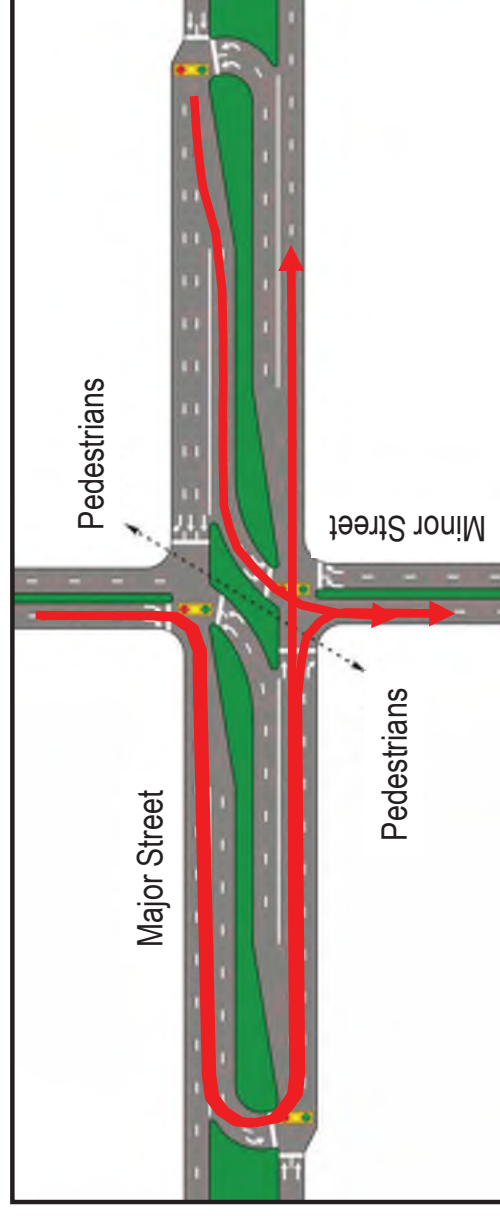
COMPREHENSIVE CORRIDOR STUDY

[illegible]

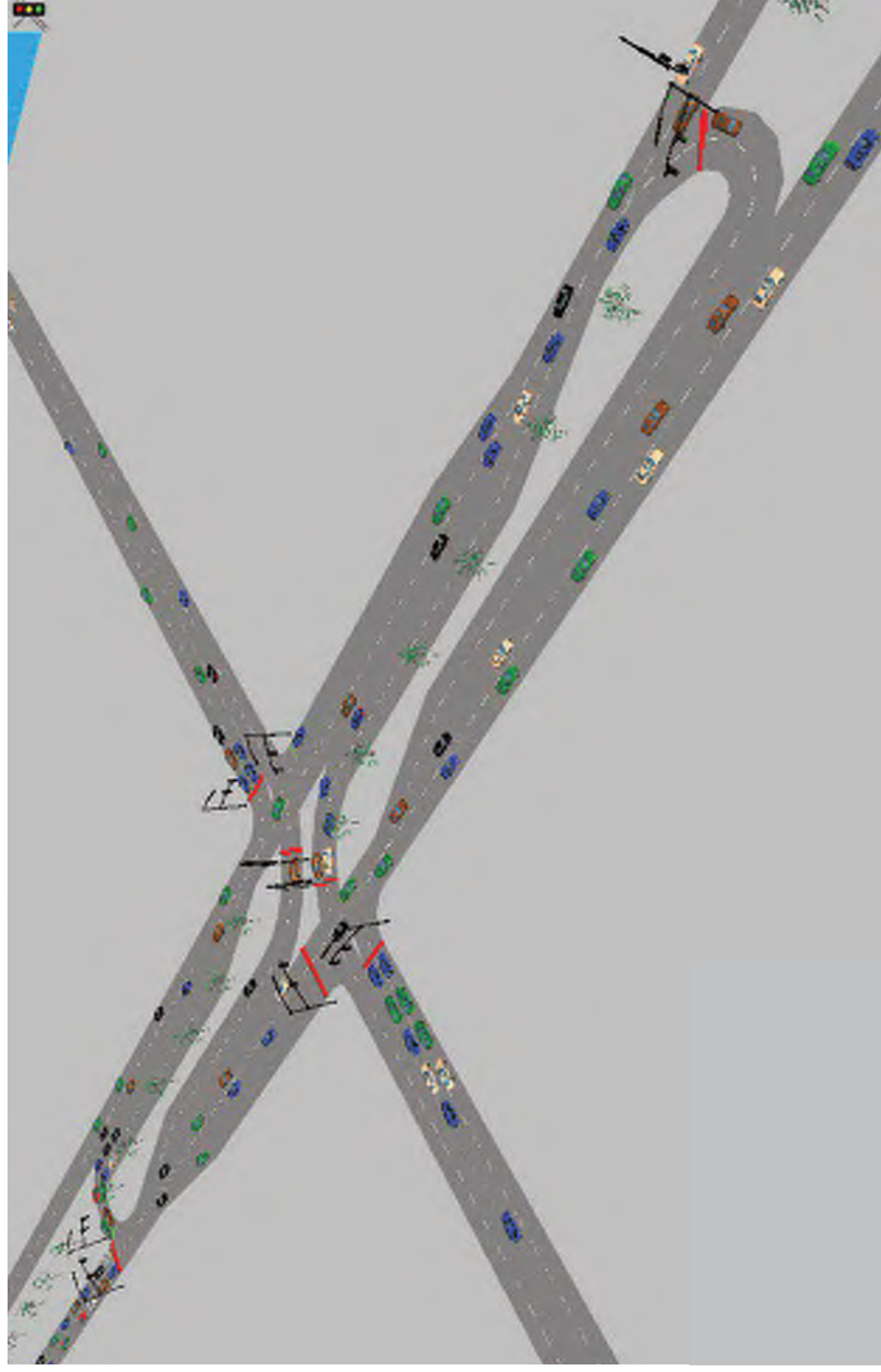
RCUT/Superstreet



- U-turns in wide median serve Major ST thru/left movements
- Independent signals in each direction on Major ST allows perfect progression
- Two-phase signal means more Major Street thru/left green time
- Greater minor street thru/lefts travel time using median U-turns
- Similar to widely used mid-block “leftover” concept



RCUT / Superstreet



An aerial photograph of a suburban neighborhood. A wide, multi-lane road runs horizontally across the middle of the frame. To the left of the road, there are several houses with large lawns and some commercial buildings. To the right, there's a dense line of trees and more residential properties. In the bottom right corner, a small blue circle is visible.

POND

US 196 Westbound

Holland, Michigan

Wednesday, 5/30/18 4:30

RCUT / Superstreet



- Best when made corridor-wide treatment
- U-turn design can accommodate large vehicles

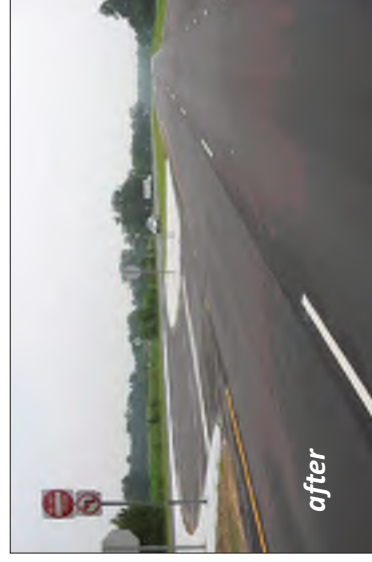
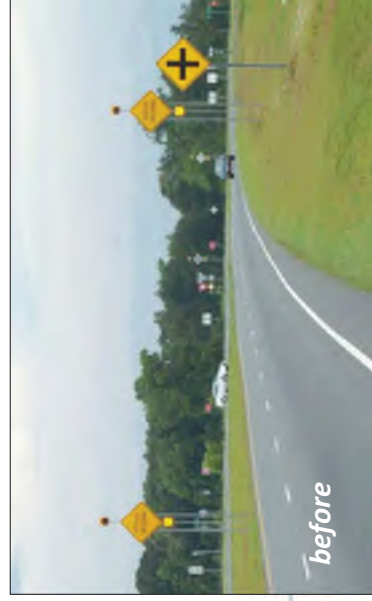
NC-17 in Wilmington NC



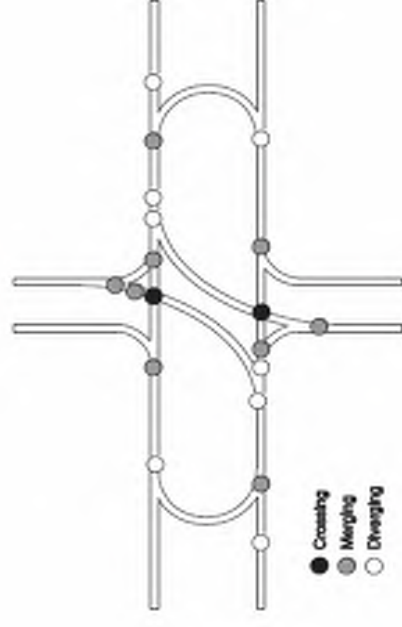
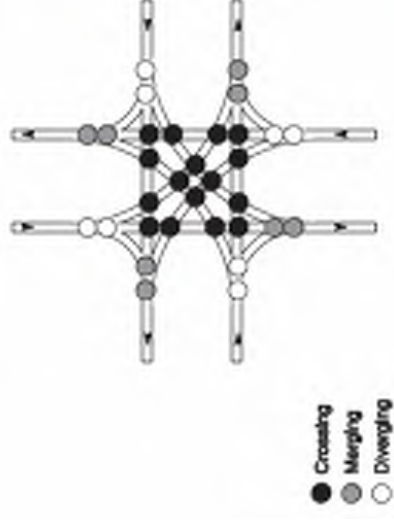
RCUT / J-Turns

- J-Turns are proven to be very good safety countermeasure for unsignalized intersections

NC 187 at Peanut Plant Road Elizabethtown, NC	Total Crashes	Injury Crashes	Front Impact Inj Crashes	Fatalities
3 Years Before Project (3/03-3/06)	24 (8.0/yr)	21 (7.0/yr)	19 (6.3/yr)	1 (0.33/yr)
1.5 Years After Project (9/06-2/08)	2 (1.3/yr)	0 (0/yr)	0 (0/yr)	0 (0/yr)



Reduced intersection conflict points (from 32 to 14)



RCUT / J-Turns



SR 74
COMPREHENSIVE CORRIDOR STUDY

SR 74 at Sandy Creek Road



RCUT / Superstreet

6 - SR 74 at Oakley Industrial Blvd					PDO	Injuries	Fatalities
Angle					56	17	0
Head On					6	1	1
Rear End					220	33	0
Sideswipe-Same Direction					63	3	0
Sideswipe-Opposite Direction					7	1	0
Not A Collision with Motor Vehicle					4	2	0
TOTALS:					356	57	1

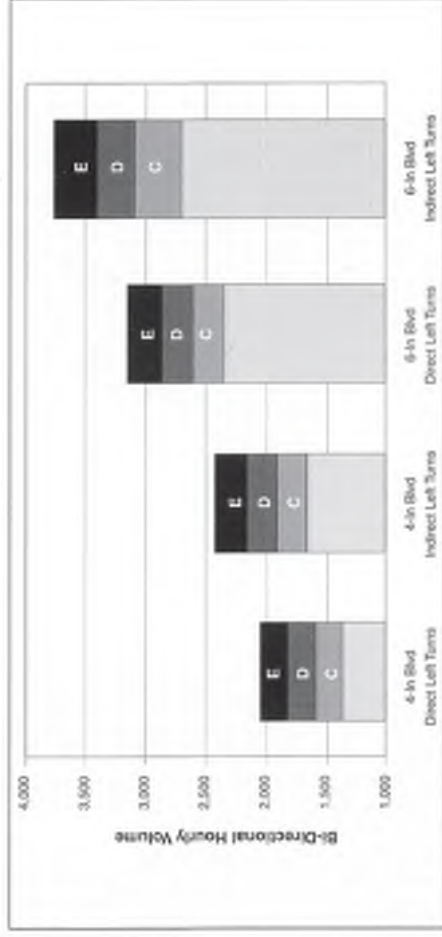


SR 74 at Oakley Industrial Blvd



Median U-Turn

- Left-turns via one-way U-turn crossovers in wide median
- Major and Minor ST vehicles “turn right to go left”
- 2-phase signals at all Main and U-turn intersections
- Main and crossover signals coordinated
- Great corridor access management; widely used in MI

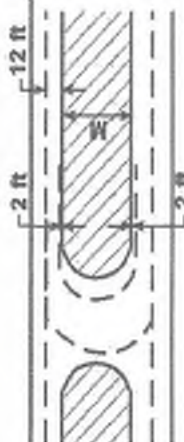
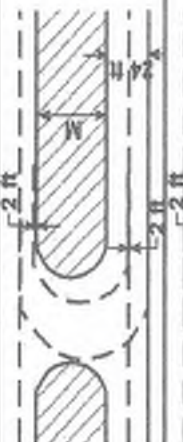


Source: Directional Crossovers: Michigan's Preferred Left Turn Strategy. MDOT



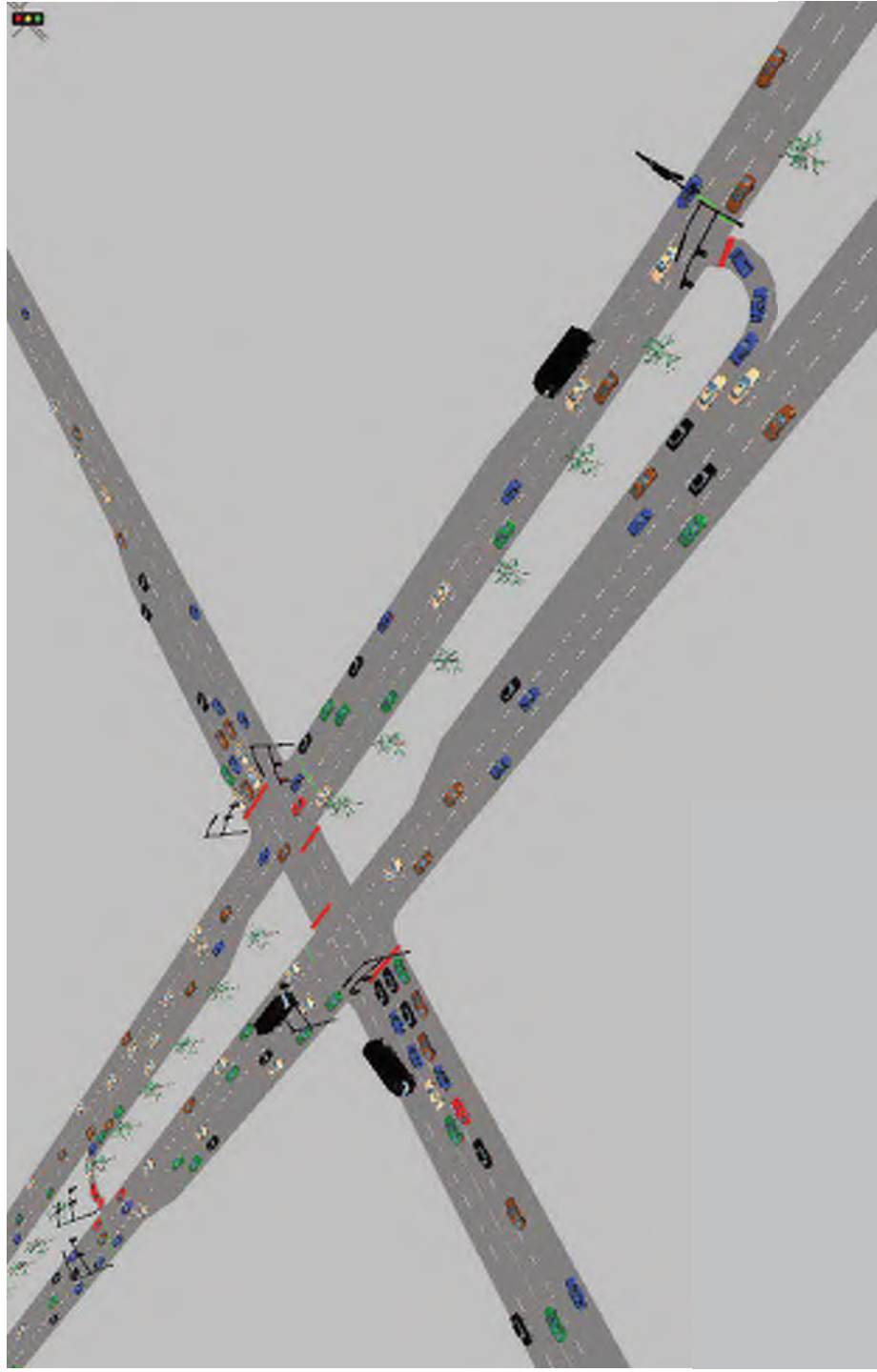
Median U-Turn



TYPE OF MANEUVER		M - MIN. WIDTH OF MEDIAN (ft) FOR DESIGN VEHICLE									
		P	WB-40	SU	BUS	WB-50	WB-60	TDT			
		LENGTH OF DESIGN VEHICLE (ft)									
		19	50	30	40	55	65	118			
INNER LANE TO INNER LANE		30	61	63	63	71	71	101			
INNER LANE TO OUTER LANE		18	49	51	51	59	59	89			
INNER LANE TO SHOULDER		8	39	41	41	49	49	79			

Source: A Policy on Geometric Design of Highways and Streets, 4th Edition, Copyright 2001, AASHTO, Washington, DC. Used by permission.

Median U-Turn



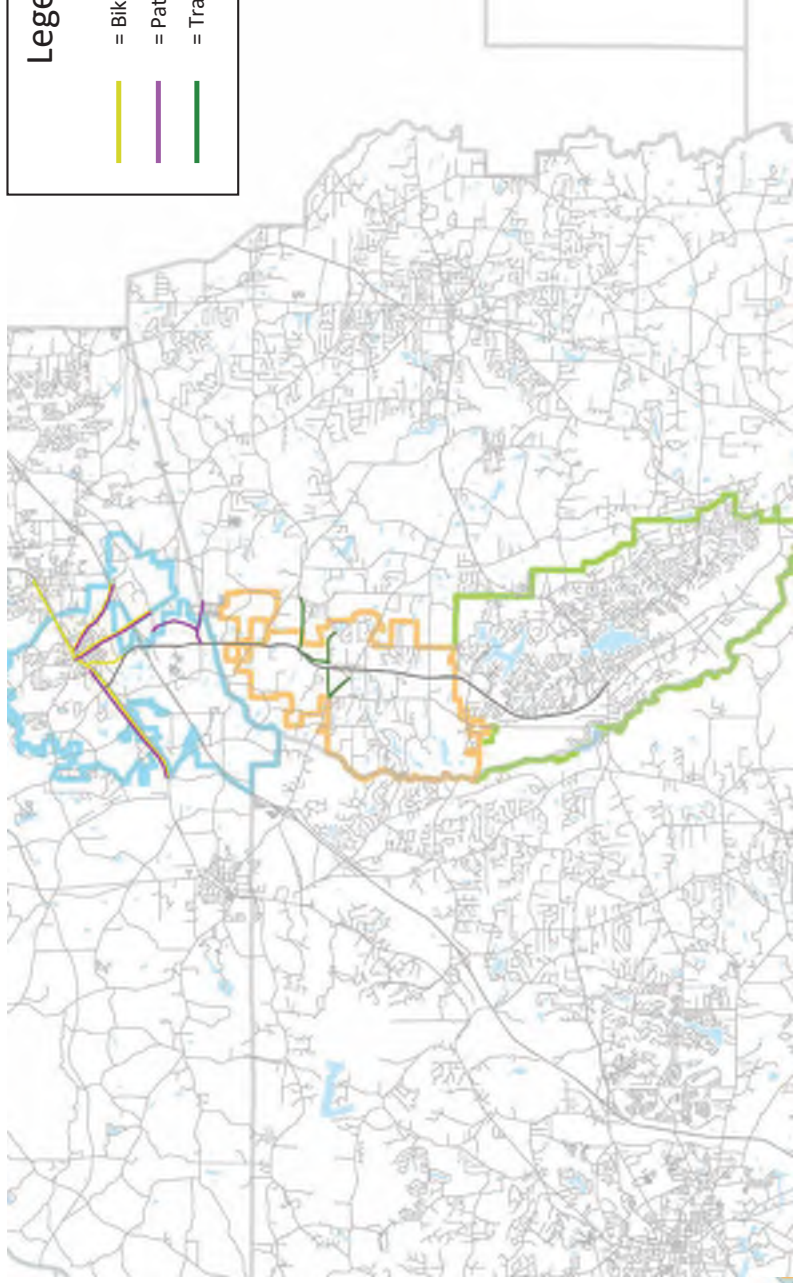
Median U-Turn

SR 74 at Peachtree Pkwy / Crabapple



17 - SR 74 at Crabapple Ln				
	PDO	Injuries	Fatalities	
Angle	2	5	0	
Head On	0	0	0	
Rear End	42	10	0	
Sideswipe-Same Direction	8	0	0	
Sideswipe-Opposite Direction	2	0	0	
Not A Collision with Motor Vehic	13	0	0	
TOTALS:	67	15	0	

Bike/Ped



Legend

- = Bike Lane
- = Path/Sidewalk
- = Trail

- Will update formatting/look of map
- Question: Are we only including his "needs assessment" or also existing conditions?**

Next Steps

- Further analysis of Superstreet / J-Turn / Median U-Turn intersections
 - Corridor has some hallmark characteristics
 - Potential alternative to more expensive / widening projects
 - Could be phased / development driven
- Conduct full ICE study & determine feasible alternatives
- Evaluate safety / operational benefits at all corridor intersections (24)



Next Steps

- Brief stakeholder committee
May 22, 2018
2 – 4 PM
153 Willowbend Road Peachtree City
- Draft initial recommendations and priorities based on feedback
- Community meetings (tentative dates: July 10 – Fairburn, July 12 – Peachtree City)
- Refine recommendations based on feedback
- Submit draft report end of July/early August





Attachment C

Corridor Segment Exercise Scans





1910 - 1911 - 1912

Compare: 2005 report is misleading! But the 2005 report is misleading!





SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Community Meetings #3 and #4
July 12 & 19, 2017

Location (Meeting #3)

Peachtree City Library
151 Willowbend Road
Peachtree City, GA 30269
5:00 pm – 7:30 pm

Location (Meeting #4)

Fairburn City Hall
56 SW Malone Street
Fairburn, GA 30213
5:00-7:00 PM

Summary

The final round of community meetings for the SR 74 Corridor Study were held in July 2017. The third meeting was held on **Thursday, July 12th, 2018** at Peachtree City Hall from 5:00 pm -7:30 pm. The fourth meeting was held on **Thursday, July 19th, 2018** from 5:00 pm to 7:00 pm at the Fairburn City Hall. The first meeting was hosted in conjunction with the ongoing Fayette CTP project team, while the fourth meeting was focused only on the SR 74 Corridor Study. Hosted by members of the consultant team (Pond and Sycamore), the main purpose of the meetings was to present the emerging alternatives and concepts for intersections along the corridor. Meeting materials are available in **Attachment A**, and photos from the meeting are in **Attachment B**.

Open House

In lieu of a formal presentation, both meetings were held in an “open-house” – style format, where attendees were free to visit several stations of boards presenting various information as indicated below:

- The first station was comprised of general information regarding the corridor study, including a project description and timeline.
- The second station included information collected as part of the study’s community engagement process – particularly results from the community survey and vision corridor vision developed from both the public and stakeholder committee.
- The third station included information on GDOT’s intersection control evaluation (ICE) tool, which was used to assess the potential corridor improvements and arrive at the preferred alternative – the superstreet - which was presented.
- The fourth station provided information on the components of superstreets: Restricted Crossing U-Turns (RCUTS), J-Turns, and Median U-Turns.
- The fifth station presented the suggested vehicular and bicycle/pedestrian improvements, specifically what types of improvements are recommended at intersections along the corridor. The improvements include those associated with superstreets, traffic signal adjustments, access management, and bicycle/pedestrian improvements.

In addition to the information pertinent to the SR 74 Corridor Study, a preliminary design of the proposed GDOT interchange improvement at I-85 and SR 74 in Fairburn was also available for attendees to view.



SR 74
COMPREHENSIVE CORRIDOR STUDY

SR 74 Community Meetings #3 and #4
July 12 & 19, 2017

Attachment A

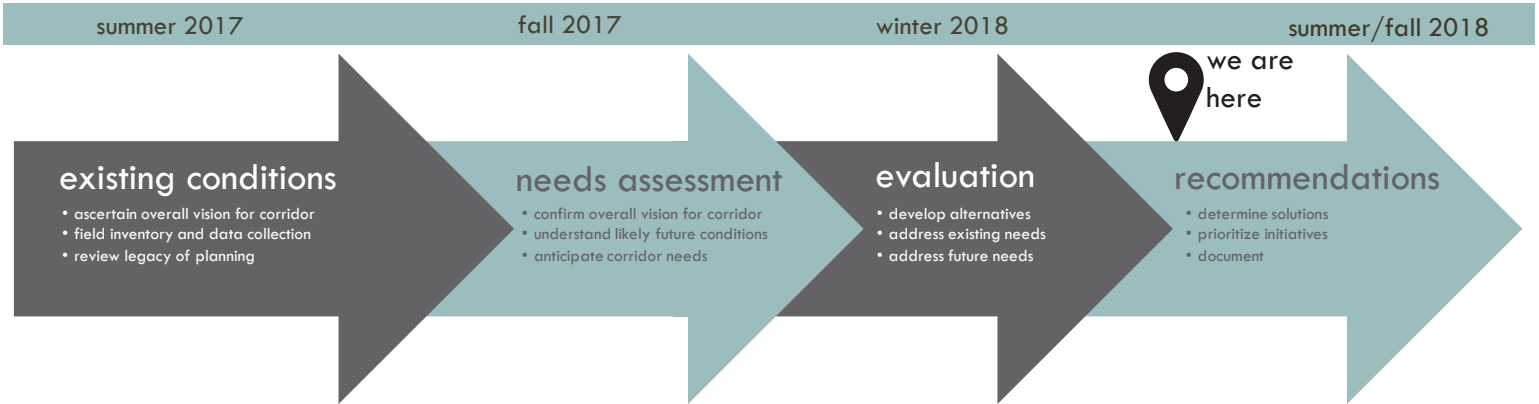
Meeting Materials

STATION: background



SR 74 COMPREHENSIVE CORRIDOR STUDY

schedule & process



study purpose

The Fayette County Department of Public Works is embarking upon a comprehensive corridor study of State Route (SR) 74 from US Route 29 on the north end to SR 54 in Peachtree City. Serving as a primary commuting corridor in Fayette County, SR 74 carries over 36,600 vehicles per day. It is a heavily used corridor that traverses Fairburn, Tyrone, Peachtree City, and unincorporated Fayette County. SR 74 has been identified by previous planning efforts and studies as a corridor that is ripe for change. This Comprehensive Corridor Study will examine a 12 mile stretch of SR 74 from US Route 29 to SR 54 in Peachtree City. The study will establish a corridor vision that is supported by stakeholders and will set forth a plan for bringing the vision to reality.

2010 population & employment



anticipated
2040 population & employment



The corridor is anticipated to continue to attract population and employment growth. In the images to the left, which compare 2010 population and employment with anticipated year 2040 conditions, the areas of blue represent population, with the intensity of the color indicating the relative amount of population anticipated in those areas. Likewise, the orange dots represent employment, with the size of each dot indicating the relative amount of employment in each location.



- corridor access
- traffic signal
 - median opening
 - right-in/right-out
 - on-grade railroad crossing



STATION:

community input



SR 74

COMPREHENSIVE CORRIDOR STUDY

corridor vision

Policy

Access Management

Implement corridor-wide access management policies to help maintain mobility

Implement access management practices such as frontage/backage/access roads and inter-parcel access to limit curb cuts on SR 74 while maintaining accessibility for residents and businesses

Accessibility/Connectivity

Maintain or enhance accessibility/connectivity for residents and businesses without negatively affecting mobility

Identify new corridors and access points to I-85 to improve accessibility and mobility. Possible new I-85 interchange at SR 92/Gullatt/Johnson Road

Improve pedestrian and bicycle access to corridor destinations and amenities (retail, downtowns, parks, libraries, etc.)

Maintain and Improve Aesthetics

Implement corridor-wide design guidelines for private development and transportation investments to ensure a cohesive and aesthetically pleasing corridor

Develop and implement consistent signage standards throughout corridor

Identify and install decorative treatments throughout corridor to highlight SR 74 as a 'Gateway Corridor'

Seek Opportunities to Encourage and Facilitate Alternative Travel Modes

Identify and implement transportation projects that encourage alternatives modes of travel including pedestrian, bicycle, and transit

Identify potential funding opportunities to fund shuttles, park and ride lots, van pools, and ride sharing

Land Use/Development Patterns

Identify and adopt zoning and development standards that balance growth with roadway network capacities in order to maintain mobility

Encourage development patterns that help reduce automobile trips (mixed-use, transit-oriented, etc.)

Accommodate anticipated economic development without jeopardizing corridor mobility

Mobility

Identify and implement transportation improvements that preserve or enhance traffic operations and travel times along the SR 74 corridor

Implement operational and capacity improvements to accommodate planned growth within the corridor

Implement 'Smart Corridor' technologies such as adaptive signal control, queue detection, intelligent transportation systems (ITS) to improve traffic operations and safety within the SR 74 corridor



STATION: community input



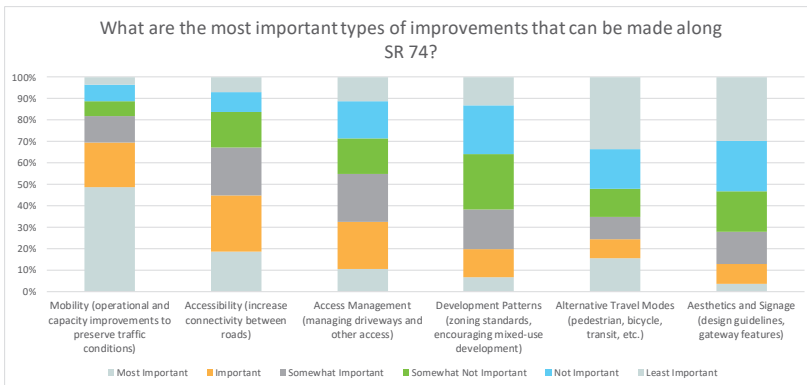
SR 74

COMPREHENSIVE CORRIDOR STUDY

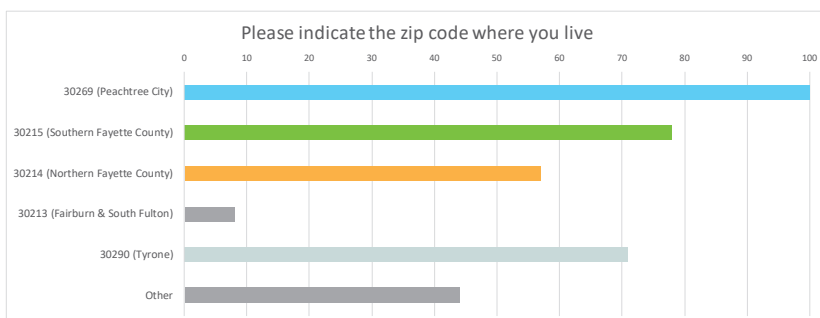
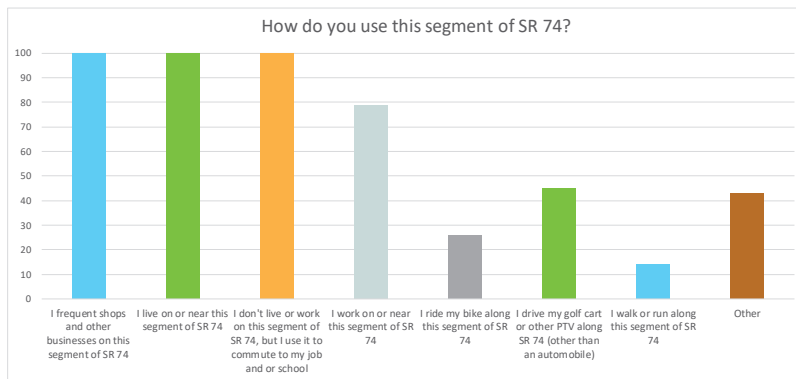
stakeholder group

Category	Number of Dots	Relative Weighting
Access Management	42	20%
Mobility	42	20%
Accessibility	40	19%
Development Patterns	34	16%
Aesthetics and Signage	31	15%
Alternative Travel Models	22	10%

online survey

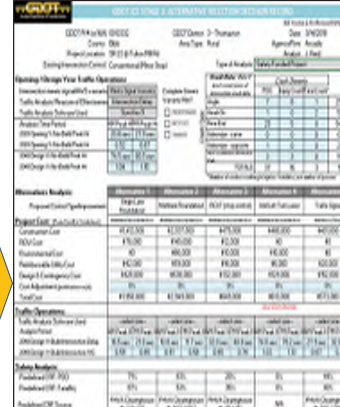
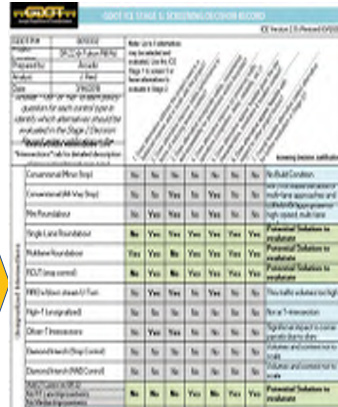


465
total responses



COMPREHENSIVE CORRIDOR STUDY

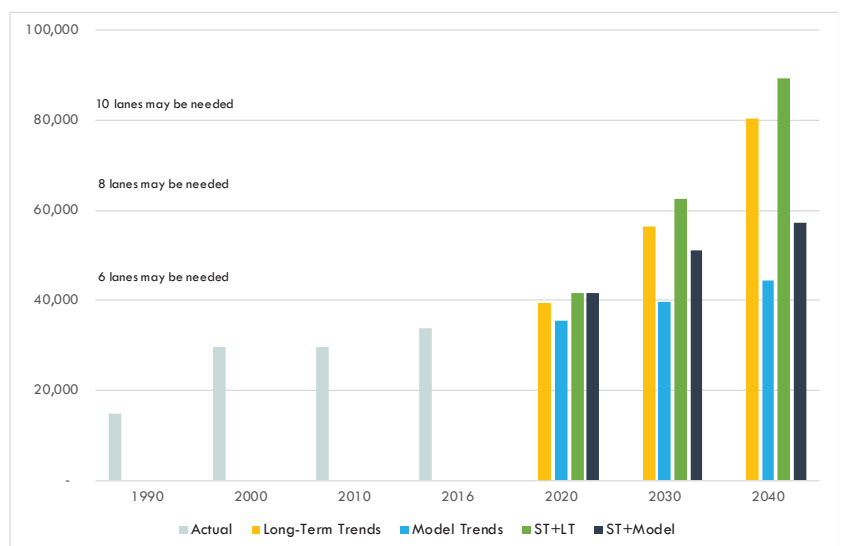
- Team utilizing GDOT Intersection Control Evaluation (ICE) tool to evaluate proper control, safety and innovative intersection concepts for corridor
- Corridor wide: Superstreet using RCUT/J-Turn/Median U-Turn intersections emerge as best corridor wide option



Improvement Screening

Alternative Selection

- **Long-Term Trends:** 4.28% per year growth applied consistently
- **Model Trends:** 1.20% per year growth applied consistently
- **Short-Term + Long-Term:** 5.90% per year growth applied for 6 years, followed by 4.28% per year applied afterwards
- **Short-Term + Model:** 5.90% per year growth applied for 6 years, followed by 1.20% per year applied afterwards



STATION: superstreet concept



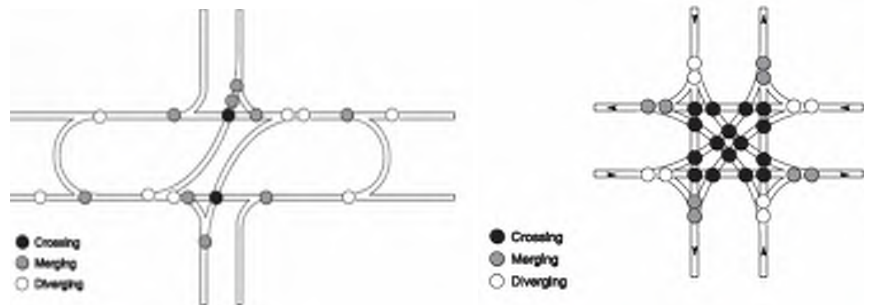
SR 74 COMPREHENSIVE CORRIDOR STUDY

RCUTS

- U-turns in wide median serve major street lefts, minor street thru/left movements
- Independent signals in each direction on major street allows perfect progression
- Two-phase signal means more major street thru/left green time Similar to widely used mid-block “leftover” concept
- Greater minor street thru/lefts travel time using median U-turns
- Similar to widely used mid-block “leftover” concept



Example of RCUT configuration



Reduced intersection conflict points (from 32 to 14)

NC 187 at Peanut Plant Road Elizabethtown, NC	Total Crashes	Injury Crashes	Front Impact Inj Crashes	Fatalities
3 Years Before Project (3/03-3/06)	24 (8.0/yr)	21 (7.0/yr)	19 (6.3/yr)	1 (0.33/yr)
1.5 Years After Project (9/06-2/08)	2 (1.3/yr)	0 (0/yr)	0 (0/yr)	0 (0/yr)

J-Turns (unsignalized)

- Similar to RCUTs but without signals
- J-turns are excellent safety countermeasure for unsignalized intersections

Median U-Turn (MUT)

- Left-turns via one-way U-turn cross-overs in wide median
- Major and Minor ST vehicles “turn right to go left”
- 2-phase signals at all Main and U-turn intersections
- Main and crossover signals coordinated
- Great corridor access management; widely used in MI



Example of Median U-Turn Intersection





Vehicular Improvements

- Restricted Crossing U-Turn (RCUT) (signalized) Intersection Projects
- J-Turn (unsignalized) Intersection Projects
- Median U-Turn (signalized) Intersection Projects
- New Sidestreet Traffic Pattern
- New Traffic Signal
- Existing Traffic Signal (may need modifications to accomodate new traffic pattern)
- Access Management Area Improvements/Regulations
- Interparcel Connections
- New Roadway
- Other Improvements being made as part of regional transportation improvements

Bicycle and Pedestrian Improvements

- Bicycle Routes (specific improvement type to be determined)
- Multi-Use Paths
- Pedestrian Crossing Facilities
- Grade-Separated Crossing





SR 74 COMPREHENSIVE CORRIDOR STUDY



Vehicular Improvements

- Restricted Crossing U-Turn (RCUT) (signalized) Intersection Projects
- J-Turn (unsignalized) Intersection Projects
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- Multi-Use Paths
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SR 74
COMPREHENSIVE CORRIDOR STUDY

SR 74 Community Meetings #3 and #4
July 12 & 19, 2017

Attachment B

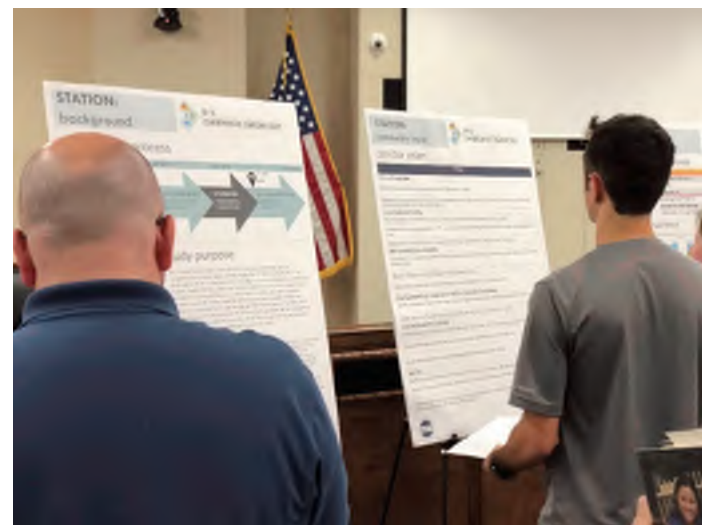
Photos



SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Community Meetings #3 and #4
July 12 & 19, 2017

July 12 Peachtree City

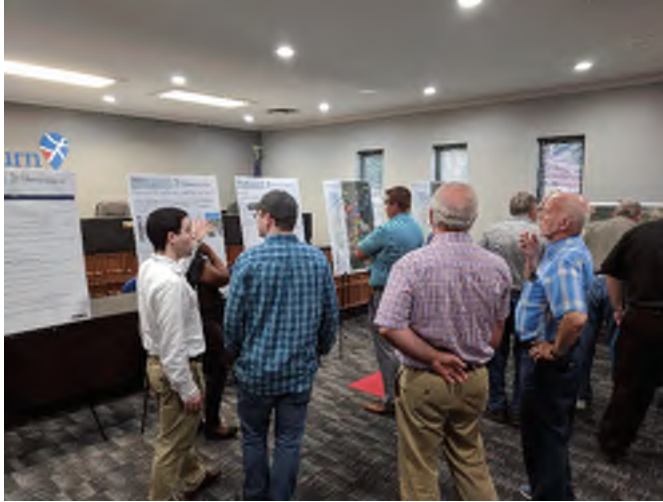




SR 74 COMPREHENSIVE CORRIDOR STUDY

SR 74 Community Meetings #3 and #4
July 12 & 19, 2017

July 19 Fairburn



Location

Tyrone Public Library
143 Commerce Drive
Tyrone, GA 30290
1:00 pm – 2:30 pm

Attendees

Robin Cailloux, City of Peachtree City
Vivian Canizares, Georgia DOT Planning
Eric Dial, Town of Tyrone
Pete Frisina, Fayette County
Joddie Gray, AICP, South Fulton CID
Steven Gulas, South-Tree
Mike Kinco, City of Peachtree City
Keith Larson, Bike Fayette
Jonathan Lynn, Town of Tyrone
Phil Mallon, Fayette County
Marty Ross, South Fulton CID
Mark Sanders, South Fulton CID
Andrew Spiliotis, Atlanta Regional Commission
Lester Thompson, City of Fairburn
Phillip Trocquet, Town of Tyrone

Summary

The fourth stakeholder committee meeting of the SR 74 Comprehensive Corridor Study was held on **Thursday, September 20th, 2018** at the Tyrone Public Library from 1:00 pm -2:30 pm. Facilitated by members of the consultant team (Pond and Sycamore), the meeting included a formal presentation by project manager Eric Lusher, as well as an open-house where updated recommendations for the corridor were shown. A sign-in from the meeting is provided in **Attachment A**, and materials from the meeting are included in **Attachment B**.

Presentation

The meeting began with a formal presentation by Pond Project Manager, Eric Lusher, to the stakeholder committee. The presentation included a brief status update of the SR 74 Corridor Study. This overview included information on initial findings from the technical analyses and community outreach.

The second part of the presentation included information on the various vehicular, bicycle and pedestrian recommendations for the corridor. While much of the information presented was shown

during the last stakeholder meeting and open houses, several new recommendations were added. Several of these recommendations relate to projects identified in previous studies.

In addition to the updated corridor recommendations, Eric also presented a 'Framework for Corridor Consistency', which included suggestions for development guidelines related to Greenfield Development and New Development for six categories (Access Management, Block Area and Length, Front Setback/Greenspace, Parking, Sidewalk Standards, and Signage).

Next Steps

With these finalized recommendations, the project team will work on finalizing a draft report to distribute to the stakeholder committee and other entities by mid-October.



Attachment A

Sign-In Sheet



SR 74
COMPREHENSIVE CORRIDOR STUDY

Date: 9-20-18

SIGN IN SHEET

NAME	ORGANIZATION/REPRESENTING	EMAIL ADDRESS	PHONE
Phillip Trocquet	Town of Tyone	ptrocquet@tyone.org	(404) 247-2186
Jonathan Lyon	Town of Tyone	jlyon@tyone.org	(404) 487-4038
Mike Kinde	POC	mk_kinde@tyone.org	678 873 1845
Eric Diaz	Tyone	ERICDIAZ@GMAIL.COM	404 391 1020
Phil Mallon	Fayette Co.		
Pete Trivette	Fayette Co.		
Robin Carlow	PTC	planner@peachtree-city.org	
Steven Gular	landowner	stevengular@comcast.net	770-722-6789
KEITH LARSON	BIKE FANETTE	KEITH_LARSON@BELLSOUTH.NET	678-525-7713
Lester Thompson	Fairburn	lthompson@fairburn.com	770 964-2244 ext. 306



SIGN IN SHEET

Date: 9-20-18

NAME	ORGANIZATION/REPRESENTING	EMAIL ADDRESS	PHONE
Joddie Gray	SFCID		
Nancy Ross	SFCID		
MARK SANDERS	SFCID	✓	✓
Vivian Canizares	GOVT	mcanizares@dot-jar.gov	4
Andrew Spiliotis	ARC	aspiliotis@atlantaregional.org	



Attachment B

Presentation Materials

SR 74 COMPREHENSIVE CORRIDOR STUDY

VEHICULAR IMPROVEMENTS



Vehicular Improvements

- Restricted Crossing U-Turn (RCUT) (signalized) Intersection Projects
- J-Turn (unsignalized) Intersection Projects
- Median U-Turn (signalized) Intersection Projects
- New Sidestreet Traffic Pattern
- New Traffic Signal
- Existing Traffic Signal (may need modifications to accommodate new traffic pattern)
- Other Vehicular Intersection Improvements
- Access Management Area Improvements/Regulations
- Interparcel Connections
- New Roadway
- Other Roadway Projects
- Other improvements being made as part of regional transportation improvements





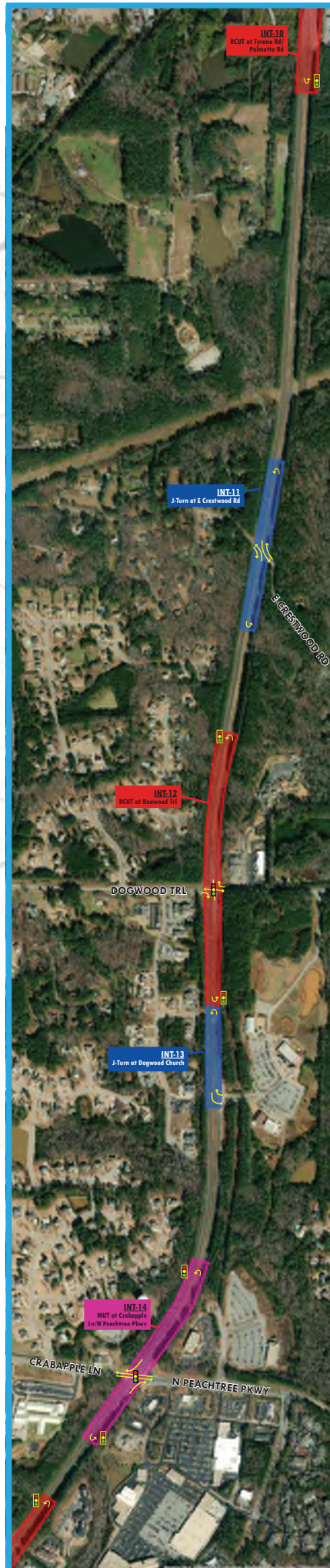
SR 74 COMPREHENSIVE CORRIDOR STUDY

VEHICULAR IMPROVEMENTS

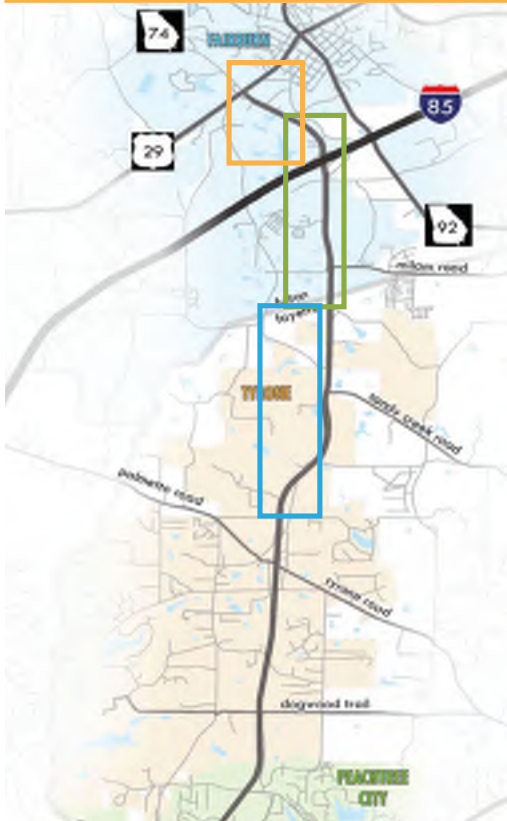


Vehicular Improvements

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- J-Turn (unsignalized) Intersection Projects
- Median U-Turn (signalized) Intersection Projects
- New Sidestreet Traffic Pattern
- New Traffic Signal
- Existing Traffic Signal (may need modifications to accommodate new traffic pattern)
- Other Vehicular Intersection Improvements
- Access Management Area Improvements/Regulations
- Interparcel Connections
- New Roadway
- Other Roadway Projects
- Other improvements being made as part of regional transportation improvements



BICYCLE AND PEDESTRIAN IMPROVEMENTS



Bicycle and Pedestrian Improvements

- Bicycle Routes (specific improvement type to be determined)
- Multi-Use Paths
- Multi-Use Path Alternatives
- Other Pedestrian Upgrades
- Pedestrian Crossing Facilities
- Grade-Separated Crossing
- Peachtree City PTV Network



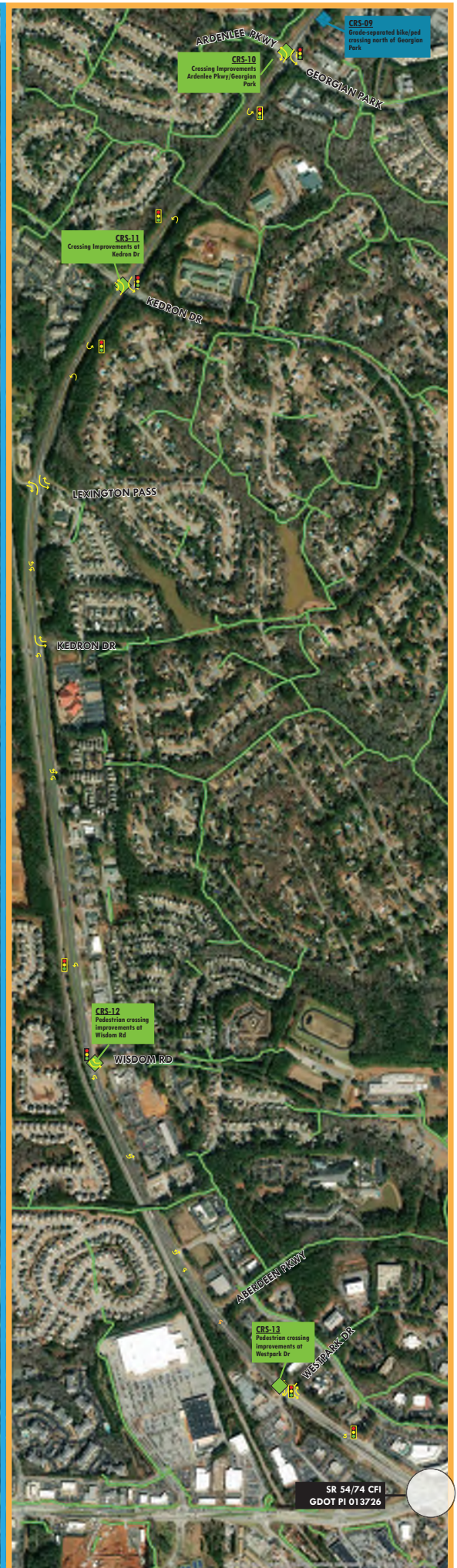
SR 74
COMPREHENSIVE CORRIDOR STUDY

BICYCLE AND PEDESTRIAN IMPROVEMENTS



Bicycle and Pedestrian Improvements

- Bicycle Routes (specific improvement type to be determined)
- Multi-Use Paths
- Multi-Use Path Alternatives
- Other Pedestrian Upgrades
- Pedestrian Crossing Facilities
- Grade-Separated Crossing
- Peachtree City PTV Network



Framework for Consistency



SR 74

COMPREHENSIVE CORRIDOR STUDY

Identified Category	Greenfield Development	Redevelopment
Access Management	Reduce/require interparcel connectivity. Require shared access driveways with uniform signage. Secondary roadway network (i.e. backage roads) should enhance access	Discourage construction of additional driveways if there is access to the roadway network via an existing driveway on parcel. Encourage closing of redundant driveway access.
Block Area and Length	Suggested minimum block length of 600 feet.	
Front Setback/ Greenspace	Require undisturbed tree buffer area. 30 feet for nonresidential development and 50 feet for residential development - along SR 74. Buffer/setback area can include multi-use trail	Retain undisturbed/tree buffer area as close to new development standards as permissible. In lieu of/addition to tree offer, allow for minimum landscaped buffer of 15 feet with berm/screen. Buffer/setback area can include multi-use trail
Parking	Encourage placement of minimum of 50% of parking on side of rear of new developments	New parking in excess of 50% of total is encouraged to be placed to the side of rear of developments
Sidewalk Standards	Require placement of 5 foot wide sidewalk on west side of corridor and connecting roads and 10 foot wide trail on east side. Include minimum 2 foot grass strip/other buffer between sidewalk/trail and roadway. In areas where sidewalk can connect to multi-use trail, provide wider sidewalk to accommodate bicyclists and pedestrians (~10 feet)	
Signage	Require use of ground signs with consistent and uniform aesthetic among municipalities to promote uniform placemaking and business promotion along the corridor.	



Promote the New Park and Ride Lot and Carpooling Options

Peachtree City, Tyrone, Fairburn, Fayette County, and the South Fulton CID should coordinate and collaborate through the SR 74 Coalition to promote the park and ride on SR 74. Initially, this includes promoting the upcoming grand opening in official communications such as social media, newsletters, and websites. This promotion should include encouragement for carpools to register through Georgia Commute Options for rewards, guaranteed rides home, and other programming.

Promote and Incentivize the Use of Vanpool Services

Working through the SR 74 Coalition, Peachtree City, Tyrone, Fairburn, Fayette County, and the South Fulton CID should promote and encourage vanpool formation. This includes promotion through official communication channels and consideration of subsidy assistance for private vanpool service to include incentive offers for interested participants, such as “one month free/try it” and/or applicable reimbursements.

Implement Workplace Commute Options

Working through the SR 74 Coalition, Peachtree City, Tyrone, Fairburn, Fayette County, and the South Fulton CID should promote and encourage workplace commute options through coordination with the Georgia Commute Options program to assist area employers with creating programs and policies. Benefits are broad and include such factors as reductions in vehicular traffic demand and better employee retention and job satisfaction. Consideration for these programs and policies include potential collaboration and incentive packages with Transportation Network Companies (TNC) such as Lyft and Uber, promotion of walking and biking (that should be coordinated with physical investments in active transportation mode infrastructure), and broad promotion of previously cited initiatives such as carpools, vanpools, and the promotion of the Park and Ride Lot.

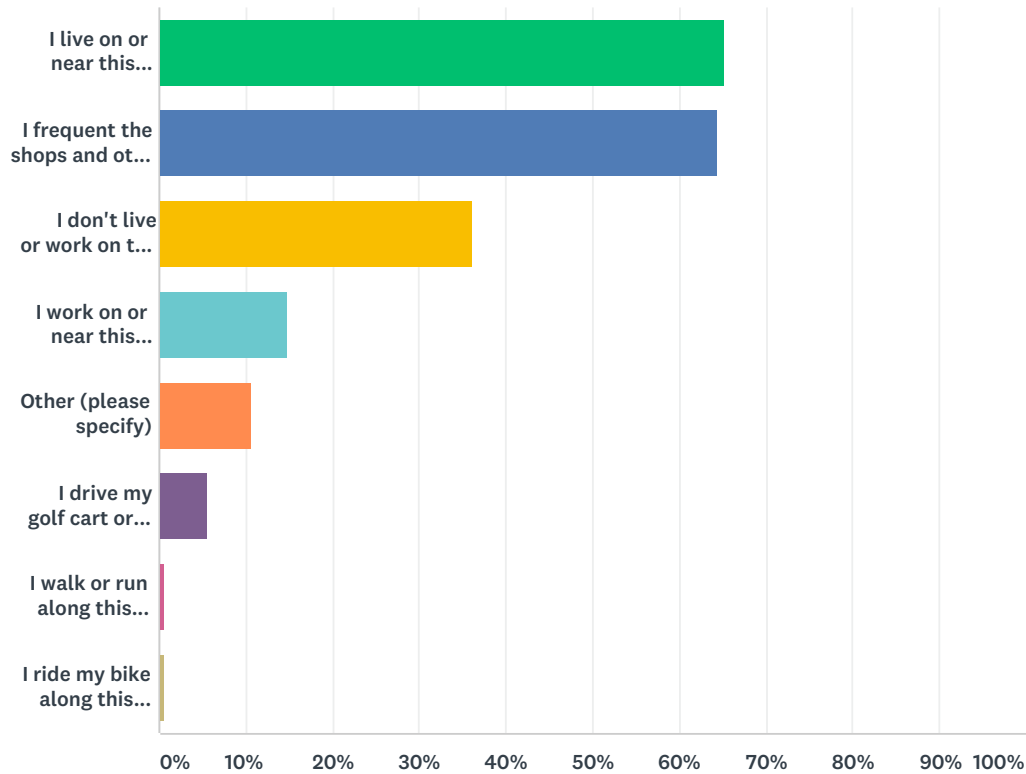
Connect MARTA to the New Park and Ride Lot

Extend and modify MARTA routes as identified in the South Fulton CID Multi Modal Plan:

- CID-20 which extends MARTA Route 181 to SR 74 including a turnaround at the park and ride lot.
- CID-21A which extends MARTA Route 89 to SR 74 including a turnaround at the park and ride lot.
- CID -21B which modifies Route 889 to use Oakley Industrial Boulevard instead of Oakley Road and includes a turnaround at the park and ride lot.

Q1 How do you use this segment of SR 74? Please check all that apply.

Answered: 141 Skipped: 0



ANSWER CHOICES		RESPONSES	
I live on or near this segment of SR 74		65.25%	92
I frequent the shops and other businesses on this segment of SR 74		64.54%	91
I don't live or work on this segment of SR 74, but I use it to commute to my job and/or school		36.17%	51
I work on or near this segment of SR 74		14.89%	21
Other (please specify)		10.64%	15
I drive my golf cart or other Personal Transportation Vehicle (PTV) along SR 74 (other than an automobile)		5.67%	8
I walk or run along this segment of SR 74		0.71%	1
I ride my bike along this segment of SR 74		0.71%	1
Total Respondents: 141			

#	OTHER (PLEASE SPECIFY)	DATE
1	I commute to College Park, GA daily using SR 74.	11/1/2017 9:37 PM
2	I commute to my office on this segment.	11/1/2017 7:05 AM
3	We use this segment to get to I85	10/31/2017 11:32 AM
4	Drive to I-85 on this stretch everyday	10/30/2017 7:58 PM
5	I use SR 74 to access ATL and recreation in Atlanta	10/30/2017 5:12 PM
6	To go to Atlanta or the airport	10/28/2017 12:38 PM

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7	Commute to work	10/27/2017 12:50 PM
8	I live near this segment of SR 74 and I use it to commute to my job.	10/27/2017 5:20 AM
9	For access to hospital, medical facilities & movie theaters in Fayetteville and Peachtree City.	10/26/2017 10:39 PM
10	Drive to work on this segment of SR74	10/26/2017 8:44 PM
11	I go without or only f desperate to I shop in this area. And the city made a fuss over the big box Home Depot!	10/25/2017 2:29 PM
12	I work from home, but work with businesses in this area	10/24/2017 7:14 AM
13	I use it to commute daily to my job	10/23/2017 11:53 AM
14	I commute along this segment of SR 74 daily	10/23/2017 11:20 AM
15	We frequently use this corridor to get from Peachtree City to the Atlanta airport and to downtown Atlanta	10/23/2017 10:45 AM

Q2 Please indicate the zip code where you live

Answered: 140 Skipped: 1

#	RESPONSES	DATE
1	30290	11/7/2017 2:58 PM
2	30269	11/5/2017 10:38 AM
3	30269	11/3/2017 2:00 PM
4	30263	11/3/2017 12:49 PM
5	30269	11/1/2017 11:11 PM
6	30269	11/1/2017 9:37 PM
7	30291	11/1/2017 9:28 PM
8	30269	11/1/2017 8:00 PM
9	30290	11/1/2017 6:49 PM
10	30215	11/1/2017 6:30 PM
11	30269	11/1/2017 6:02 PM
12	30269	11/1/2017 7:05 AM
13	30215	11/1/2017 7:00 AM
14	30214	11/1/2017 6:21 AM
15	30215	10/31/2017 8:59 PM
16	30269	10/31/2017 8:41 PM
17	30269	10/31/2017 8:25 PM
18	30269	10/31/2017 6:02 PM
19	30268	10/31/2017 5:22 PM
20	30269	10/31/2017 5:05 PM
21	30269	10/31/2017 4:15 PM
22	30269	10/31/2017 4:04 PM
23	30276	10/31/2017 3:37 PM
24	30276	10/31/2017 2:27 PM
25	30269	10/31/2017 11:59 AM
26	30269	10/31/2017 11:32 AM
27	30269	10/31/2017 11:25 AM
28	30269	10/31/2017 11:19 AM
29	30214	10/31/2017 10:57 AM
30	30269	10/31/2017 10:57 AM
31	30269	10/31/2017 10:33 AM
32	30269	10/31/2017 10:07 AM
33	30269	10/31/2017 9:27 AM
34	30269	10/31/2017 7:27 AM
35	30269	10/31/2017 7:27 AM

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36	30269	10/31/2017 6:46 AM
37	30269	10/31/2017 5:54 AM
38	30269	10/30/2017 8:52 PM
39	30269	10/30/2017 8:36 PM
40	30269	10/30/2017 8:33 PM
41	30269	10/30/2017 8:31 PM
42	30269	10/30/2017 7:58 PM
43	30269	10/30/2017 7:58 PM
44	30269	10/30/2017 7:30 PM
45	30269	10/30/2017 6:54 PM
46	30269	10/30/2017 5:12 PM
47	30269	10/30/2017 3:53 PM
48	30269	10/30/2017 3:30 PM
49	Peachtree City	10/30/2017 3:24 PM
50	30214	10/30/2017 12:41 PM
51	15216 but parents in 30214.	10/30/2017 11:26 AM
52	30269	10/30/2017 8:07 AM
53	30277	10/30/2017 5:40 AM
54	30269	10/29/2017 9:42 AM
55	30215	10/29/2017 9:33 AM
56	30290	10/29/2017 8:37 AM
57	30290	10/29/2017 7:22 AM
58	30269	10/29/2017 7:14 AM
59	30269	10/28/2017 9:42 PM
60	30214	10/28/2017 8:03 PM
61	30269	10/28/2017 7:58 PM
62	30214	10/28/2017 7:21 PM
63	30269	10/28/2017 6:06 PM
64	30269	10/28/2017 12:38 PM
65	30214	10/28/2017 10:58 AM
66	30269	10/28/2017 5:31 AM
67	30269	10/27/2017 10:41 PM
68	30269	10/27/2017 10:19 PM
69	30269	10/27/2017 9:22 PM
70	30213	10/27/2017 9:00 PM
71	30290	10/27/2017 8:20 PM
72	30214	10/27/2017 6:25 PM
73	30268	10/27/2017 5:41 PM
74	30269	10/27/2017 5:02 PM
75	30290	10/27/2017 4:07 PM
76	30269	10/27/2017 4:01 PM

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77	30269	10/27/2017 3:49 PM
78	30269	10/27/2017 3:32 PM
79	30215	10/27/2017 2:12 PM
80	30269	10/27/2017 1:56 PM
81	30269	10/27/2017 1:51 PM
82	30269	10/27/2017 1:40 PM
83	30290	10/27/2017 1:21 PM
84	30263	10/27/2017 1:18 PM
85	30269	10/27/2017 1:13 PM
86	30269	10/27/2017 12:50 PM
87	30269	10/27/2017 12:42 PM
88	30290	10/27/2017 12:23 PM
89	30290	10/27/2017 12:19 PM
90	30269	10/27/2017 12:05 PM
91	30290	10/27/2017 12:05 PM
92	30290	10/27/2017 12:02 PM
93	30215	10/27/2017 10:32 AM
94	30213	10/27/2017 10:20 AM
95	30265	10/27/2017 8:46 AM
96	30269	10/27/2017 6:58 AM
97	30269	10/27/2017 6:26 AM
98	30276	10/27/2017 5:36 AM
99	30269	10/27/2017 5:20 AM
100	30213	10/26/2017 10:39 PM
101	30214	10/26/2017 9:16 PM
102	30290	10/26/2017 8:44 PM
103	30213	10/26/2017 7:31 PM
104	30349	10/26/2017 11:58 AM
105	30213	10/26/2017 11:28 AM
106	30277	10/26/2017 11:07 AM
107	30214	10/25/2017 3:18 PM
108	30269	10/25/2017 2:35 PM
109	30269	10/25/2017 2:29 PM
110	30269	10/24/2017 6:32 PM
111	30269	10/24/2017 12:04 PM
112	30269	10/24/2017 9:38 AM
113	30214	10/24/2017 7:14 AM
114	30269	10/24/2017 6:41 AM
115	30290	10/23/2017 9:01 PM
116	30269	10/23/2017 8:41 PM
117	30269	10/23/2017 8:16 PM

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118	30269	10/23/2017 8:11 PM
119	30269	10/23/2017 7:29 PM
120	30269	10/23/2017 5:31 PM
121	30269	10/23/2017 5:21 PM
122	30269	10/23/2017 4:59 PM
123	30269	10/23/2017 4:43 PM
124	30269	10/23/2017 3:27 PM
125	30269	10/23/2017 2:14 PM
126	30269	10/23/2017 1:00 PM
127	30269	10/23/2017 12:09 PM
128	30269	10/23/2017 11:53 AM
129	30269	10/23/2017 11:27 AM
130	30269	10/23/2017 11:20 AM
131	30269	10/23/2017 11:16 AM
132	30269	10/23/2017 10:45 AM
133	30269	10/23/2017 10:44 AM
134	30269	10/23/2017 10:29 AM
135	30213	10/20/2017 8:06 AM
136	30214	10/7/2017 1:42 PM
137	30269	10/6/2017 7:59 PM
138	30269	10/6/2017 3:10 PM
139	30269	10/6/2017 9:03 AM
140	30265	10/6/2017 7:36 AM

Q3 If you work or attend school, please indicate the zip code where you work or attend school.

Answered: 103 Skipped: 38

#	RESPONSES	DATE
1	30354	11/7/2017 2:58 PM
2	30349	11/3/2017 2:00 PM
3	N/A	11/3/2017 12:49 PM
4	30303	11/1/2017 11:11 PM
5	30297	11/1/2017 8:00 PM
6	30097	11/1/2017 6:49 PM
7	30303	11/1/2017 6:30 PM
8	Hartsfield airport 30328	11/1/2017 6:02 PM
9	30337	11/1/2017 7:05 AM
10	30318	11/1/2017 7:00 AM
11	30249	11/1/2017 6:21 AM
12	30269	10/31/2017 8:41 PM
13	30309	10/31/2017 6:02 PM
14	ATL Airport	10/31/2017 5:22 PM
15	30349	10/31/2017 5:05 PM
16	N/A	10/31/2017 4:15 PM
17	30269	10/31/2017 4:04 PM
18	30349	10/31/2017 2:27 PM
19	30269	10/31/2017 11:59 AM
20	30354	10/31/2017 11:25 AM
21	30269	10/31/2017 11:19 AM
22	30334	10/31/2017 10:57 AM
23	30269	10/31/2017 10:07 AM
24	30349	10/31/2017 9:27 AM
25	30063	10/31/2017 7:27 AM
26	30290	10/31/2017 6:46 AM
27	30332	10/31/2017 5:54 AM
28	30310	10/30/2017 8:52 PM
29	30310	10/30/2017 8:36 PM
30	30269	10/30/2017 8:33 PM
31	30269	10/30/2017 7:58 PM
32	30339	10/30/2017 7:58 PM
33	30303	10/30/2017 5:12 PM
34	30269	10/30/2017 3:30 PM

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35	30354	10/30/2017 12:41 PM
36	15219 but mom works in 30269	10/30/2017 11:26 AM
37	30054	10/30/2017 8:07 AM
38	30354	10/30/2017 5:40 AM
39	30342	10/29/2017 9:42 AM
40	30213 (one person in household)	10/29/2017 9:33 AM
41	30214	10/29/2017 8:37 AM
42	30349	10/29/2017 7:22 AM
43	30076	10/28/2017 9:42 PM
44	30354	10/28/2017 7:58 PM
45	30214 - Work from home	10/28/2017 7:21 PM
46	30320	10/28/2017 6:06 PM
47	I do business in and around Tyrone and Peachtree City	10/28/2017 10:58 AM
48	30336	10/28/2017 5:31 AM
49	30084	10/27/2017 10:41 PM
50	30354	10/27/2017 10:19 PM
51	Smyrna	10/27/2017 9:22 PM
52	30214 30269	10/27/2017 6:25 PM
53	30354	10/27/2017 5:02 PM
54	30290	10/27/2017 4:07 PM
55	30350	10/27/2017 4:01 PM
56	30269	10/27/2017 3:49 PM
57	30269, 30214, 30215, 30290	10/27/2017 2:12 PM
58	30322	10/27/2017 1:56 PM
59	30339	10/27/2017 1:40 PM
60	30354	10/27/2017 1:21 PM
61	30269	10/27/2017 1:18 PM
62	30269	10/27/2017 1:13 PM
63	30309	10/27/2017 12:50 PM
64	30309	10/27/2017 12:42 PM
65	30303	10/27/2017 12:23 PM
66	30328	10/27/2017 12:19 PM
67	30309	10/27/2017 12:05 PM
68	30329	10/27/2017 12:05 PM
69	30290	10/27/2017 12:02 PM
70	30319	10/27/2017 10:32 AM
71	30213	10/27/2017 8:46 AM
72	30349	10/27/2017 5:36 AM
73	30303	10/27/2017 5:20 AM
74	Delta Air Lines	10/26/2017 8:44 PM
75	30263	10/26/2017 7:31 PM

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76	30303	10/26/2017 11:07 AM
77	30290	10/25/2017 2:35 PM
78	30269	10/25/2017 2:29 PM
79	30269	10/24/2017 6:32 PM
80	30339	10/24/2017 12:04 PM
81	30320	10/24/2017 9:38 AM
82	30214, work from home but frequent businesses in this area	10/24/2017 7:14 AM
83	30096	10/24/2017 6:41 AM
84	30290	10/23/2017 9:01 PM
85	30269	10/23/2017 8:41 PM
86	30336	10/23/2017 8:16 PM
87	30082	10/23/2017 7:29 PM
88	30305	10/23/2017 5:31 PM
89	30213	10/23/2017 5:21 PM
90	30320	10/23/2017 4:59 PM
91	30320	10/23/2017 3:27 PM
92	30354	10/23/2017 2:14 PM
93	30303	10/23/2017 12:09 PM
94	30354	10/23/2017 11:53 AM
95	30337	10/23/2017 11:20 AM
96	30354	10/23/2017 11:16 AM
97	Children attend school at Peeple's Elementary. I work in Atlanta.	10/23/2017 10:44 AM
98	30269	10/23/2017 10:38 AM
99	30354	10/23/2017 10:29 AM
100	30269	10/6/2017 7:59 PM
101	30308	10/6/2017 3:10 PM
102	30349	10/6/2017 9:03 AM
103	30214	10/6/2017 7:36 AM

Q4 What is the best aspect of this segment of SR 74 today?

Answered: 124 Skipped: 17

#	RESPONSES	DATE
1	It is a straight shot to Peachtree City and 85 but you need more lanes and access routes to 85.	11/7/2017 2:58 PM
2	Convenience	11/3/2017 2:00 PM
3	Access to large volume of commercial businesses/enterprises	11/3/2017 12:49 PM
4	Multiple Lanes and Coordinated Lights during commute time.	11/1/2017 11:11 PM
5	Nothing. The unrestricted growth of businesses in South Fulton County with no increase in SR 74 lanes has made driving this section a nightmare.	11/1/2017 9:37 PM
6	Between Tyron and Peachtree Pkwy.	11/1/2017 9:28 PM
7	It leads to I-85.	11/1/2017 8:00 PM
8	Access of i85	11/1/2017 6:49 PM
9	love the rural drive feeling as you enter tyrone and points south	11/1/2017 6:30 PM
10	Scenic areas make the ride enjoyable...Tyrone bridge and intersection, Tyrone road and SR74... still not congested... Peachtree City 74/54 is already a nightmare between 2:30pm-6:00pm	11/1/2017 6:02 PM
11	The convent access to 85.	11/1/2017 7:05 AM
12	It's beauty in parts. The wide median.	11/1/2017 7:00 AM
13	The area between 54 and 85 is nice.	10/31/2017 8:59 PM
14	Nothing. Over built, slow traffic, non-sequential traffic signals.	10/31/2017 8:41 PM
15	I can still be navigated occasionally, but not often, to the expressway.	10/31/2017 8:25 PM
16	Nothing. This highway has become too dangerous. Especially the exit on 85 southbound.	10/31/2017 6:02 PM
17	I was the lack of red lights, but that has changed near 74/85 interchange.	10/31/2017 5:22 PM
18	None	10/31/2017 5:05 PM
19	Traffic flows smoothly except for the 54 intersection	10/31/2017 4:15 PM
20	sidewalks	10/31/2017 4:04 PM
21	Good traffic flow, with the exception of 74/54.	10/31/2017 3:37 PM
22	nothing	10/31/2017 2:27 PM
23	4 years ago, it was sufficient.	10/31/2017 11:59 AM
24	4 lanes	10/31/2017 11:32 AM
25	It's not a single lane	10/31/2017 11:25 AM
26	None - not since the DOT widened it years ago. Used to be pretty and tree lined. Now just another ugly north/south highway.	10/31/2017 11:19 AM
27	Other than the i85 exit and entrance traffic it flows well and there is good access to shops and stores in both direction. For example long turn lane to Starbucks and Taco Bell area	10/31/2017 10:57 AM
28	The best aspect is the short distance to the interstate from PTC. Although the nightmare starts with the congestion with numerous restaurants and trucking outlets at Hwy 74 & I-85 interchange. The constant damage to the asphalt is also a nightmare.	10/31/2017 10:33 AM
29	Not too many traffic lights.	10/31/2017 10:07 AM
30	NOTHING	10/31/2017 9:27 AM
31	Still somewhat limited access.	10/31/2017 7:27 AM

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32	It's the best way to get to Interstate 85.	10/31/2017 7:27 AM
33	There is nothing good about it. Even the distances between stop lights have too few lanes to make traffic flow easily and comfortably. 74 is very bad in all aspects.	10/31/2017 6:46 AM
34	The farms and natural areas, not overbuilt	10/31/2017 5:54 AM
35	smooth road until one reaches the Fulton County line	10/30/2017 8:52 PM
36	smooth road until one reaches Fulton County line	10/30/2017 8:36 PM
37	4 lanes	10/30/2017 8:33 PM
38	The Fayetteville county line! Don't zone more businesses or housing on 74. Require green space.	10/30/2017 8:31 PM
39	None	10/30/2017 7:58 PM
40	Smooth pavement	10/30/2017 7:58 PM
41	It is 4 lane	10/30/2017 6:54 PM
42	Traffic flow due to good visibility except at Tyrone RR overpass light southbound and relatively few traffic signals south of Milam Road.	10/30/2017 5:12 PM
43	In Peachtree City	10/30/2017 3:53 PM
44	55mph speed limit	10/30/2017 3:30 PM
45	Only way out of town to I-85	10/30/2017 3:24 PM
46	The higher speed limit and new businesses	10/30/2017 12:41 PM
47	Long and empty with few breaks/stops.	10/30/2017 11:26 AM
48	uhhh...not much other than the fact that it is a 4-lane divided hwy. It is usually kept clean...that's about it.	10/30/2017 8:07 AM
49	Direct path to PTC.	10/30/2017 5:40 AM
50	Speed limit 55. Use of turning lanes.	10/29/2017 9:33 AM
51	No potholes	10/29/2017 8:37 AM
52	Easy, straight drive with no more traffic lights than necessary	10/29/2017 7:22 AM
53	The fact that you can get on the interstate	10/28/2017 9:42 PM
54	Businesses	10/28/2017 8:03 PM
55	Long stretches with no traffic lights and nice wooded areas.	10/28/2017 7:58 PM
56	There are not a lot of strip malls. It still looks like the country.	10/28/2017 7:21 PM
57	Nothing	10/28/2017 6:06 PM
58	There really is none - for me it is mostly a pass thru to Fairburn or I-85. However, I have used the cheap gas stations and liquor store on occasion.	10/28/2017 12:38 PM
59	It flows well from Wisdom Road north to Tyrone	10/28/2017 10:58 AM
60	Well maintained up to I85. North of freeway needs work	10/28/2017 5:31 AM
61	4 lanes	10/27/2017 10:41 PM
62	Being Four lanes b	10/27/2017 10:19 PM
63	Easy to get to businesses on 74.	10/27/2017 9:22 PM
64	4 lane with turn lanes	10/27/2017 9:00 PM
65	It's generally not very crowded unless you are at 74/85 or 74/54. The lights also seem to be timed well.	10/27/2017 8:20 PM
66	Visibility except curve heading North near Sandy Creek and over bridge heading South after Tyrone Publix.	10/27/2017 6:25 PM
67	No pot holes. Enough lanes for side traffic to exit. Extra turn lane for Oakley is maxes out.	10/27/2017 5:41 PM
68	Nothing anymore! It used to be a great road, now traffic has made it awful.	10/27/2017 5:02 PM

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69	The acreages of land that is available for 5-star restaurants, townhouses and hi-tech businesses.	10/27/2017 4:07 PM
70	There's nothing good about it, but the least congestion is from Peachtree parkway to Aberdeen parkway.	10/27/2017 4:01 PM
71	Convenient access to most of PTC	10/27/2017 3:49 PM
72	Generally you can move down 74 fast and can get to Tyrone quickly	10/27/2017 3:32 PM
73	Convenient	10/27/2017 2:12 PM
74	There's not too much traffic most of the time (other than rush hours)	10/27/2017 1:56 PM
75	north Fayette and south Fulton County- between Peachtree Parkway and Milam Road	10/27/2017 1:51 PM
76	Has access to 85	10/27/2017 1:40 PM
77	There really aren't any good points to this intersection. It is terribly congested during rush hours, the lights don't appear to be timed properly and the back up from the exit onto 85 (heading southbound) during the afternoon rush is getting progressively worse.	10/27/2017 1:21 PM
78	Connects to I85, still some stretches of green instead of retail all the way.	10/27/2017 1:13 PM
79	NOTHING!!!!	10/27/2017 12:42 PM
80	The natural corridor in Tyrone. They have successfully avoided the Riverdaleization of 74 where Riverdale ruined GA 85.	10/27/2017 12:23 PM
81	Vegetation buffer between buildings and roads, minus the fast food establishments close to 85	10/27/2017 12:19 PM
82	55mph and 2 lanes. target plaza shopping.	10/27/2017 12:05 PM
83	N/a gotten too busy, lights are not timed well, entrance to 85 causes delays	10/27/2017 12:05 PM
84	Limited traffic lights south of Fairburn to Tyrone allowing nearly uninterrupted travel.	10/27/2017 10:32 AM
85	Ample shopping and dining opportunities.	10/27/2017 8:46 AM
86	Relatively few traffic signals and well-maintained medians and shoulders along the Fayette County section.	10/27/2017 6:58 AM
87	Peachtree City segment and undeveloped segment between Tyrone and Fairburn. Best because of limited or controlled access and little development.	10/27/2017 6:26 AM
88	Pretty land in some areas Smooth traffic flow north of 54	10/27/2017 5:36 AM
89	For the moment traffic on this segment of SR 74 is only terrible near exit 61 trying to get onto I-85 and near the intersection of 54 and 74. Other than that traffic is not that bad on this segment of SR 74.	10/27/2017 5:20 AM
90	Access to hospital/medical facilities, shops, movie theaters & restaurants in Peachtree City and Fayetteville without driving the Interstate.	10/26/2017 10:39 PM
91	the rate of speed - not too slow	10/26/2017 9:16 PM
92	is straight route for me to go i-85N	10/26/2017 8:44 PM
93	There is a lot of land for future development.	10/26/2017 7:31 PM
94	The location and access to good shopping	10/26/2017 11:58 AM
95	It's getting worse. Clogged with industrial trucks and semi-vehicles and poor traffic flow and bad light timing.	10/26/2017 11:28 AM
96	The landscaping in Peachtree City	10/26/2017 11:07 AM
97	Nothing	10/25/2017 3:18 PM
98	Except for Fulton County, the stretch is pretty. Fulton County no planning on "sights."	10/25/2017 2:35 PM
99	It gets you places.	10/24/2017 6:32 PM
100	Nothing. The county approved the big studios, gave them tax incentives and has done nothing to account for all the extra traffic that has accumulated to man the studios. Then they tell us we have to tax ourselves with a splost to fix thier problem.	10/24/2017 12:04 PM
101	four lanes	10/24/2017 9:38 AM

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102	in Fayette, the best aspect is drivers do not enter businesses from the highway (unlike the northern part of the corridor).	10/24/2017 7:14 AM
103	I like that the median has greenery so it feels less like a freeway still road. I like there's a grass divide, but some areas could use more trees	10/23/2017 9:01 PM
104	Not as congested	10/23/2017 8:41 PM
105	It's smooth	10/23/2017 8:16 PM
106	Tyrone so far has limited access directly onto 74 and traffic flow is much smoother there.	10/23/2017 8:11 PM
107	In Peachtree city traffic ok. Heading west from expressway traffic is bad	10/23/2017 7:29 PM
108	Most of it is clean and efficient. It is not so wonderful when you go from north of Tyrone up through the 74/85 intersection.	10/23/2017 5:31 PM
109	Crabapple to Kirkley rd	10/23/2017 5:21 PM
110	Reasonable speed limit and 2 lanes in each direction also traffic lights seem to work well on timers and don't always catch each red light	10/23/2017 4:59 PM
111	Businesses along this segment have opened up.	10/23/2017 3:27 PM
112	Fast / few lights	10/23/2017 2:14 PM
113	The unbuilt up areas it runs through.	10/23/2017 1:00 PM
114	Plenty of restaurants and businesses to frequent	10/23/2017 12:09 PM
115	new payment in the fayette county section of the roadway	10/23/2017 11:53 AM
116	Few traffic lights-divided highway with grasses median and beautiful trees lining a good portion of the sides of the roadway. Most businesses except in ugly Fairburn area are set back from the road. Note: the area at Milam Rd intersection is NOT what we want to see. No ugly movie studio buildings , either, as is the view at Pinewood Studio.	10/23/2017 11:27 AM
117	Direct access to Interstate 85	10/23/2017 11:20 AM
118	as of now none	10/23/2017 11:16 AM
119	Recently repaved, so it is a smooth ride	10/23/2017 10:45 AM
120	Quality of the road is very good (no potholes, bad spots, etc).	10/23/2017 10:44 AM
121	Minimal direct commercial/retail business access has maintained this thoroughfare's good traffic flow	10/23/2017 10:38 AM
122	Much of the area between Fairburn and Peachtree City is open, 55-speed limit highway that moves efficiently	10/23/2017 10:29 AM
123	congested/crowded	10/20/2017 8:06 AM
124	Ease of interstate access	10/7/2017 1:42 PM

Q5 If you could make one change to a portion of SR 74, what would it be and where? Please be as specific as possible.

Answered: 137 Skipped: 4

#	RESPONSES	DATE
1	The lights need to be synchronize. More lanes in and out.	11/7/2017 2:58 PM
2	need a flyover of SR 54 to avoid traffic congestion at the 74/54 intersection	11/5/2017 10:38 AM
3	More lanes on off ramp from 85s onto 74. Something also needs to be done about the intersection of 54 and 74, more turning lanes, possibly fly away lanes or exit ramps instead of lights??	11/3/2017 2:00 PM
4	Alleviate congestion on 54 / 74 intersection with a possible flyover. Find a way to move traffic on 54 SB Faster to avoid intersection blocks.	11/1/2017 11:11 PM
5	Close the entrances to SR 74 from the McDonalds, Chick-fil-a, Dunkin Donuts, and Waffle House.	11/1/2017 9:37 PM
6	From QT to the entrance ramp of Hwy 85 North or South.	11/1/2017 9:28 PM
7	Improve the 74/I-85 interchange	11/1/2017 8:00 PM
8	Ramp for large trucks at hwy 92. Too many large trucks exit I85 south and then have to get over in left lane to turn left on Oakley Road . Very dangerous!! Another option is to add exit ramp lane to I85 south.	11/1/2017 6:49 PM
9	I85 interchange bridge make it wider and additional lane	11/1/2017 6:30 PM
10	Interstate 85 /SR 74 is a nightmare!!... Let's begin with the onramp 85N (Waffle House)... One lane to get on the interstate... And the offramp 85S is worse... Drivers are nervy enough to cross the "gor" after the SR92 bridge instead of waiting their turn...Fulton County Police could make a fortune if placed a cop there to hand out tickets between 3:30pm-5:30pm... The bridge is a bumpy mess, especially for low profile tires... There his no enough room on the bridge to run the traffic through smoothly if cars are also waiting to enter 85N on the bridge... The whole idea of a truck exit has made someone rich but, is a commuter nightmare!! Use eminent domain to buy out Waffle House and make an extra on ramp... or a separate trucker ramp... or look at alternate clover leaf options... PLEASE	11/1/2017 6:02 PM
11	I'm not sure any change would help the volume of traffic at 74/54 intersection.	11/1/2017 7:05 AM
12	Continued improvements at the I-85 interchange. Create lanes that allow traffic to keep moving in the left lanes but allow traffic to enter the highway in the right lanes. More intersection like the one at Sandy Creek that improves safety.	11/1/2017 7:00 AM
13	Portion between Sandy Creek Road and I-85 and closer to interstate entrance. It's too congested to get on I-85. What should be a 20 minute commute to work can take an hour just trying to get onto I-85. Additionally, to get off I-85 at Exit 61 is extremely dangerous and backs up onto the interstate. It's an accident waiting to happen area. Something needs to change there also!!	11/1/2017 6:21 AM
14	Build a flyover bridge at 54/74 so Newnan traffic does not have to get caught in traffic there.	10/31/2017 8:59 PM
15	Take out half of the traffic signals, get rid of islands and pave for turn lanes.	10/31/2017 8:41 PM
16	Freeze building projects until traffic congestion is relieved. Not planned, actually built.	10/31/2017 8:25 PM
17	Exit from I-85 southbound is a major hazard. Vehicles always back up onto the interstate. Mainly due to semi traffic entering and exiting I-85. Commuting to Peachtree City traffic is fast and heavy. Widening of 74 and possible other exits from I-85 are desperately needed	10/31/2017 6:02 PM
18	Thru traffic lanes near 74/85 interchange	10/31/2017 5:22 PM
19	The lights need to be set to be the most efficient at 0645. Not have long cross street greens, etc. Create a new 85nb exit off 74	10/31/2017 5:05 PM
20	The intersection of 54 needs to flow better the transition from S 74 onto W 54 is poorly designed and backs up as well as poorly timed signals on 54 W past the Avenue and the TJ Max signal	10/31/2017 4:15 PM

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21	There needs to be a bypass from 74 in Peachtree City going to Hwy 34 in Coweta. Ideally from somewhere around the Ball Fields(Athletic Complex) and coming out somewhere several miles away from Fischer Rd.	10/31/2017 4:04 PM
22	Fix the SR74/54 intersection. Design a non-stop route for thru traffic on both 54 & 74.	10/31/2017 3:37 PM
23	dedicated lanes where you can't change lanes at the last minute once you pass Bojangles (getting onto I-85)	10/31/2017 2:27 PM
24	n/a	10/31/2017 11:59 AM
25	Add an additional lane	10/31/2017 11:25 AM
26	Bring back the trees, especially in the center medians. And add alternative roads, both north/south and east/west, to ease congestion on 74. That's really the only solution at this point.	10/31/2017 11:19 AM
27	Entrance to i 85 North and exit from i85 south Those just don't work with the short bridge and traffic light set up. Need another entrance exit/entrance south of senoia road. This might handle some truck traffic as well	10/31/2017 10:57 AM
28	Change flow of traffic near Interstate 85-- the number of lights and resulting congestion are concerning	10/31/2017 10:57 AM
29	Install additional exit/entrance ramps to/from I-85 at Hwy 92 for Oakley Industrial Blvd and install another exit/entrance ramp for Hwy 29 Fairburn. This collective area has residential traffic, business traffic and combined with industrial traffic makes it a nightmare. Widen the existing Hwy 74 and repair all potholes. Unless there are additional exits/entrances to the interstate installed, the problem will only grow.	10/31/2017 10:33 AM
30	The intersection at SR 74 & SR 54. SR 54 should be raised at the intersection, and traffic managed better along SR 54 directly to the West of SR 74 - coordinated lights, etc.	10/31/2017 10:07 AM
31	A different route for 18-wheelers to get them out of this area. Trying to get on/off the exit is a congested disaster at most times of the day (not just rush hours/commute times). This has become a major truck stop exit and it has caused so much congestion, accidents. I sit through each stop light at least 3 times. It took me 45 minutes to get off the exit yesterday morning onto I-85 Northbound. THAT IS RIDICULOUS.	10/31/2017 9:27 AM
32	Upgrade 74 I85 intersection. Limit commercial trucks at this intersection.	10/31/2017 7:27 AM
33	The intersection of 74/54 in Peachtree City. It's too congested, so we need to build up as there is no more land available in that area to grow.	10/31/2017 7:27 AM
34	Add more freeway entries to I-85. This intersection is poorly designed, lacks adequate signage, and is poorly maintained.	10/31/2017 6:46 AM
35	Intersection of 74 and I85 is horrendous. It is crowded, dangerous, accident prone and built out with no plan. I avoid this area as much as possible and take Palmetto Road to intersect with I85 as much as possible.	10/31/2017 5:54 AM
36	Marta bus service lot in Tyrone/Fairburn with transfer at College Park Marta transit...service every 10' during peak travel times	10/30/2017 8:52 PM
37	I'm at a lost	10/30/2017 8:36 PM
38	Make it a limited access road with exits and no stop lights. As long as there are stop lights, traffic movement will continue to be a mess!	10/30/2017 8:33 PM
39	Tyrone has more businesses open to 74. Fulton should stop development at 85/74 until roads are useable.	10/30/2017 8:31 PM
40	Timing of lights, makes it stop and go at certain times when it should be the priority to keep traffic moving.	10/30/2017 7:58 PM
41	Improve traffic flow south from around Cracker Barrel to I- 85 intersection. Too many lights and not timed properly	10/30/2017 7:30 PM
42	Eliminate the problem at the SR 74 and I-85 interchange.	10/30/2017 6:54 PM
43	Remove the traffic lights/intersections with Oakley Industrial and Harris Roads or find a different way for the Oakley Industrial traffic to access I-85.	10/30/2017 5:12 PM
44	Where you get on and off of Hwy 85. The whole area is a mess, congested	10/30/2017 3:53 PM

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45	74/54 intersection congestion	10/30/2017 3:30 PM
46	Interchange with I-85	10/30/2017 3:24 PM
47	Restrict truck stops to ease the congestion of semi trucks on both sides of I-85 entering and leaving the highway	10/30/2017 12:41 PM
48	Red light at Sandy Creek Rd. I hate always going out of my way to turn left there.	10/30/2017 11:26 AM
49	one change isn't enough. 1 - I-85/Hwy-74 entrance & exit ramps: Possibly go to partial clover style to keep traffic moving on I-85 south exit; Also need to keep I-85 North entrance moving. 2 - Hwy 54/74 intersection: Need an overpass or something similar along with no lights/flowing traffic in from of Plantera/Wal-Mart area.	10/30/2017 8:07 AM
50	The interchange at 74 and 85 is congested often causing dangerous backups on 85 for over a mile. This interchange needs a major structural overall or relieved of congestion with an additional exit from 85 into the community. This is imperative in the interest of safety.	10/30/2017 5:40 AM
51	54/74 intersection. Must be an alternate (or 2 or 3) to move west toward Newnan. No way to improve the existing intersection so must add east/west connectors. TDK, Tyrone Rd.. TDK would be a nice extension because the south end of PTC could use some restaurants, shopping, gas stations, Coffee... sorely underserved for the number of people on the south side.	10/29/2017 9:33 AM
52	The approach and interchange to/from I-85. In the morning it can back up 2-4 miles and at night the exit is incredibly dangerous. The semi traffic is horrible.	10/29/2017 8:37 AM
53	No changes	10/29/2017 7:22 AM
54	need stoplight at 74 and senolia rd	10/29/2017 7:14 AM
55	Restrict trucks to one lane getting off the interstate	10/28/2017 9:42 PM
56	Additional lanes to exit I-85 onto hwy 74.	10/28/2017 8:03 PM
57	No more development from Cracker Barrel toward the interstate. The traffic there is awful.	10/28/2017 7:58 PM
58	I wish the Fairburn portion near I85 would make the area more attractive. Too many gas stations & ugly fast food places.	10/28/2017 7:21 PM
59	Add two lanes from Milam Rd to enter I-85 from Hwy 74	10/28/2017 6:06 PM
60	I would have a grocery store convenient to the subdivisions but NOT near the entrance to I-85.	10/28/2017 12:38 PM
61	74 intersection at 54 in Peachtree City is not efficient to get around, specifically from Aberdeen Pky down to Paschall Rd. Route 54 from McDuff east to Willowbend Rd helps to create this mess.	10/28/2017 10:58 AM
62	Route truck traffic to 92 to a new exit for 92 on I85 S	10/28/2017 5:31 AM
63	Improve the intersection with I 85. Better on and off ramps. Clear an exit and entrance at GA highway 92 for truck traffic.	10/27/2017 10:41 PM
64	Make certain the traffic signals are all synchronized.	10/27/2017 10:19 PM
65	"Slower traffic stay right" signs. People police the road driving under the speed limit in the left lane all the time.	10/27/2017 9:22 PM
66	I would like to see enhanced landscaping and continuous sidewalks,	10/27/2017 9:00 PM
67	The 74/85 interchange needs improvement. It's dangerous both ways. Southbound off 85, regular commuters have to be wary of tractor trailers who are trying to get over quickly into the truck stops. Northbound to get onto 85 needs more capacity as the area between Oakley and the exit is not enough space for the one lane that feeds it. Three lanes would be nice from the Bojangles all the way to the exit. I've only been commuting this way for 4 years but definitely notice much heavier volume.	10/27/2017 8:20 PM
68	Redesign Sandy Creek with a signalized full cross walk and full size much larger median with both right and left turn capability while creating a traffic hazard signal which flashes while heading North to notify drivers the intersection is either backed up OR heavy activity or light is red.	10/27/2017 6:25 PM
69	Turning from I85 to go away from Peachtree city. Trucks need to use hwy 29 to get to CSX, and Gullet Rd to relieve exit of trucks.	10/27/2017 5:41 PM

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70	The truck traffic needs to be rerouted to Oakley Industrial with interstate access at that point. There is also a HUGE problem with cars pulling out of traffic and into the turning lane for the 74 exit heading south so they don't have to wait in the line like the rest of us. Frankly, this commute has become the worst part of my job.	10/27/2017 5:02 PM
71	There's a stretch of SR74 that requires side walk / multi-pathway to enable citizens the ability to walk, jog, and have golf cart usage.	10/27/2017 4:07 PM
72	Relieve congestion at i85	10/27/2017 4:01 PM
73	Improvements to 54/74 intersection	10/27/2017 3:49 PM
74	The on and off ramps where 74 hits I85 are woefully under built for the amount of cars and trucks that are getting on and off. There should be on and off ramps that don't require traffic lights to get on 74.	10/27/2017 3:32 PM
75	Somehow lighten the traffic by the interstate. Dare to dream.	10/27/2017 2:12 PM
76	intersection with I85 - add another right turn lane further back. Also find a way to manage truck traffic better	10/27/2017 1:56 PM
77	Just before and after Oakley Blvd. Too many trucks!	10/27/2017 1:51 PM
78	Put another lane to exit and enter 85. Traffic is terrible everyday trying to get on the interstate and off	10/27/2017 1:40 PM
79	i think it would have to be a cloverleaf of some variety - a very small version of spaghetti junction, so that traffic could continue to flow onto 85N in the morning and flow onto 74 in the afternoon. Also, there needs to be a traffic study to determine the best timing of the lights for specific periods of the day	10/27/2017 1:21 PM
80	Figure out how to alleviate the traffic at 54/74.	10/27/2017 1:18 PM
81	Bridge over GA 54 in Peachtree City.	10/27/2017 1:13 PM
82	I don't want the over building of fast food places and misc. stores, gas stations creeping into peachtree city.	10/27/2017 12:50 PM
83	Needs more than one change so here they are (to me). Too many lights on 74 that are useless at 6am. Make the turn arrows flashing lights,especially at Sandy Creek and Milam Rd, and allow traffic to proceed N/S without a delay. Nothing coming or leaving the quarry at that hour. Too many businesses clumped together in Fairburn and poorly timed lights. Build a separate access road for 85 for the businesses on 74N at the intersection so they have an easy access to the highway. Two lanes that are continual flow to get on 85 North. Make the on ramp to 85 two lanes continuing that on to the highway.... there is plenty of room to do this.	10/27/2017 12:42 PM
84	synchronize the lights in Fairburn remove at least 1 light in Fairburn Make traffic move better in Fairburn	10/27/2017 12:23 PM
85	Easier entrance/exit from I-85, maybe a clover leaf design or something	10/27/2017 12:19 PM
86	Interstate 85 entrance/exit is terrible!!!!	10/27/2017 12:05 PM
87	Entrance (& exit from 85--need to be 2 lane exit or better marked that it's exit only ahead of time) ramp to 85, no turn on red causes people to try to get over. Exiting from chick fil a etc causes back up.	10/27/2017 12:05 PM
88	The off-ramp from the freeway is horrible from 2ish until well after 6 in the evening	10/27/2017 12:02 PM
89	The interchange coming from SR 74 south to I-85 north needs two right turn lanes to the on-ramp where turn on red is allowed in both lanes.	10/27/2017 10:32 AM
90	Open another exit and entrance ramp for all the trucks!	10/27/2017 10:20 AM
91	Interchange of Hwy. 74 and I-85. Traffic is regularly backed up due to high volume.	10/27/2017 8:46 AM
92	Somehow alleviate the horrible traffic congestion that occurs on the Fulton/Fairburn section close to I-85. The truck stops have created a mess and the strip commercial that is being added will only make the situation worse.	10/27/2017 6:58 AM
93	Make the I-85 interchange flow better and stop any further commercial development south of the interchange. Traffic is horrible in that section!	10/27/2017 6:26 AM
94	Better traffic flow at 54	10/27/2017 5:36 AM

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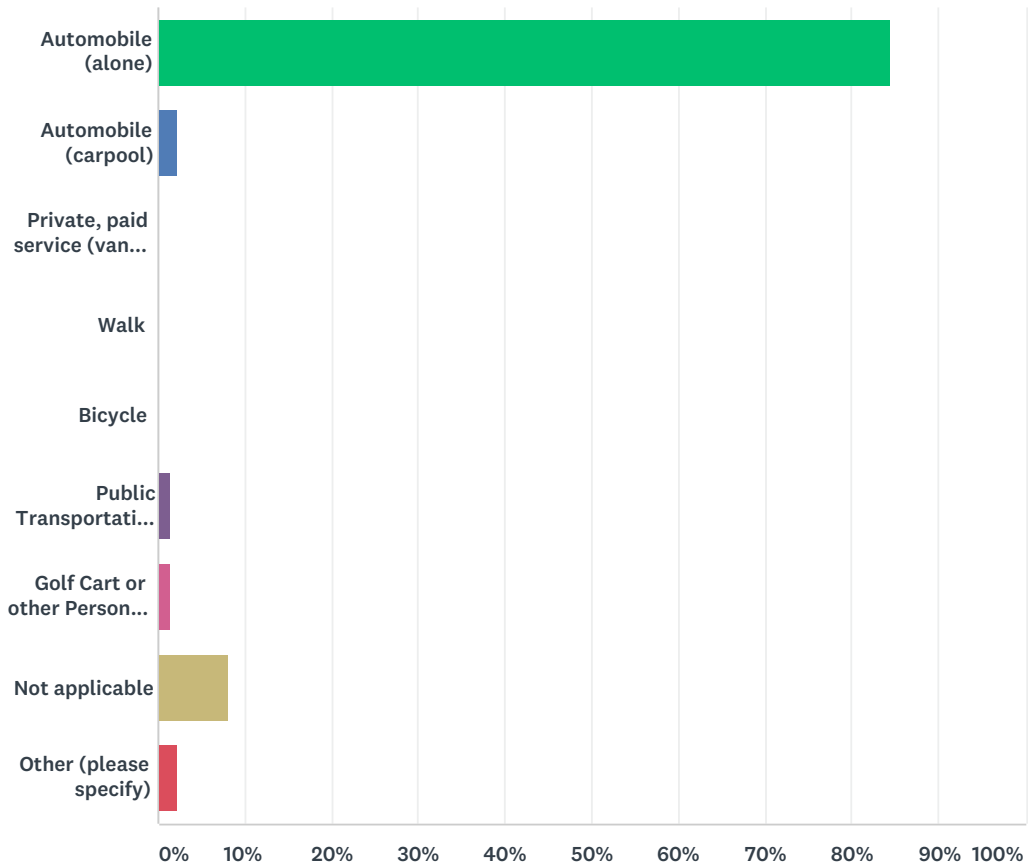
95	I would change the light timing along this entire portion. The lights are not timed properly for morning rush hour.	10/27/2017 5:20 AM
96	Put a YMCA and more upscale dine-in restaurants near the west end of the corridor (near Oakly Industrial Blvd intersection). Note upscale dine-in restaurants versus an abundance of fast food restaurants.	10/26/2017 10:39 PM
97	this road is busy because of its easy access to 85--create another way to get on interstate that is close by so there is a choice. union city exit too far away.	10/26/2017 9:16 PM
98	Traffic lights are not use tripped, most time are timer operatered and back up traffic flow, clausing some times not to get thru traffic light. or stopping and going thru timing period in early morning 4/6 am m/f adding more time for commute , some days both problems add 10 min to commute a day, adds up to 50min a week to my commute	10/26/2017 8:44 PM
99	Re-do the bridge to I-85 and make more lanes. Have entrance to I-85 north bound on right so that you don't have to stop at a light. Synchronize lights.	10/26/2017 7:31 PM
100	Bring more businesses closer to Fairburn/Tyrone. Love the businesses along 74	10/26/2017 11:58 AM
101	Intersection of 74 and Milam. Light timing favors heavily for Milam motorists and not those on the busier 74.	10/26/2017 11:28 AM
102	The light to get to turn off the exit to get to 74 takes too long and backs up on the interstate	10/26/2017 11:07 AM
103	The Fayette County portion is fine. The problem is that the City of Fairburn decided to allow runaway development. The ideal (totally unrealistic) solution would some type of bypass that started in Fayette County leading to I-85.	10/25/2017 3:18 PM
104	approach to Interstate 85	10/25/2017 2:35 PM
105	Having the other counties connect to Interstate 85 and not come t through SR 74.	10/25/2017 2:29 PM
106	Fix traffic at the SR 54 intersection.	10/24/2017 6:32 PM
107	It needs to add multiple lanes, long turning lanes, and find another path for the tractor trailers that slow entry onto the interstate	10/24/2017 12:04 PM
108	I would build an elevated express lane from Milam Rd to I-85N bypassing the lights and semis clogging traffic. Also a lane off I-85S to Milam Rd.	10/24/2017 9:38 AM
109	Two intersections desperately need work - I85 and 74 along with 54 and 74.	10/24/2017 7:14 AM
110	Eliminate trucks at 74 and 85. Better sequence lights at 74 and 54	10/24/2017 6:41 AM
111	Speed is a huge issue and it feels like freeway speeds. The on and off ramps onto 85. It's not marked well (no road strips or easily seen signs). Both areas need some reflective stripes. It's so hard to see at night which lane is which. It's a dangerous intersection and it's not well maintained. The entire ramp style needs to be refigured. Too much traffic coming in and out.	10/23/2017 9:01 PM
112	54/74 intersection needs to be functional and less congested	10/23/2017 8:41 PM
113	Construct a dedicated truck ramp south of 74 on I 85 for access to the intermodal transfer station and warehouses. This would greatly reduce the amount of truck traffic at 74 and I 85.	10/23/2017 8:16 PM
114	Enlarge the 74/I-85 interchange like they did on intersections with I-85 north of 285. Create side access roads that parallel 74 with limited signal intersections. Very limited direct curb cuts from 74 into businesses- for example McDonalds, Chick-fil-a, Dunkin Donuts & Waffle House area is horrific. While those existing business entrances can't be altered - don't allow any more like that!	10/23/2017 8:11 PM
115	More lanes less tractors trailers.	10/23/2017 7:29 PM
116	Move the large trucks off of this intersection. Plan and Build a truck ramp just north on 85 and just south to more easily access the truck areas.	10/23/2017 5:31 PM
117	Interstate intersection ---both exit & entrance to interstate 85 are too congested & need another route, possibly add easy access thru Oakley blvd to interstate might alleviate some congestion.	10/23/2017 5:21 PM
118	Improve the hwy 54/74 intersection so that more cars can get through turning from 74 onto 54. Current light only lets about 10 cars through and the light cycle is about 3 minutes. Sometimes during heavy rush hour it takes 3 cycles of the turn lane light to get through the intersection.	10/23/2017 4:59 PM
119	Freeway on/off ramps should be cloverleafed. Approaches widened if possible	10/23/2017 4:43 PM

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120	Improved traffic flow to I-85 in the am. Perhaps a dedicated branch of the road (SR-74) straight to I-85.	10/23/2017 3:27 PM
121	Need a full cloverleaf intersection at I-85 to eliminate the backups on I-85 south, to speed access to 74 South coming off of I-85, and to speed access to I-85 coming off of 74 north	10/23/2017 2:14 PM
122	Junction of Interstate 85 and Hwy 74 and area just to the south of that. Too many traffic lights and too many large trucks turning into the commercial areas make it slow and dangerous to drive through.	10/23/2017 1:00 PM
123	The section of Hwy 74 beginning with the light at Harper Funeral Home in Fairburn and continuing to the Hwy 74 entrances onto I-85 is extremely congested. There are too many cars to manage with this many lights.	10/23/2017 12:09 PM
124	traffic approaching I85 in the morning rush hour backs up for those getting onto 85. so northbound 74 as you approach 85 in the morning commute	10/23/2017 11:53 AM
125	See above. Also, fix the mess of turning in and out of the area at Westpark and just north of Westpark in PTC. Too dangerous too much traffic.	10/23/2017 11:27 AM
126	Add an additional entrance/exit ramp to/from Interstate 85 between the Union City Exit and Fairburn Exit at Fayetteville Road	10/23/2017 11:20 AM
127	removing a majority of the truck traffic around 74 and I85	10/23/2017 11:16 AM
128	Too many stoplights	10/23/2017 10:45 AM
129	For commuting purposes, bypass the SR74/54 interchange	10/23/2017 10:44 AM
130	Add traffic signal to intersection of SR74 and Old Senoia RD/Lexington Pass. Increased traffic congestion in this area has impact on safety.	10/23/2017 10:38 AM
131	The stretch from the Fulton County line to the I-85 onramps is unbearable, particularly on weekday mornings. The intersections with I-85 and Oakley Industrial need major overhaul!	10/23/2017 10:29 AM
132	add a Interstate Exit/Entrance Ramp in Peachtree City to relieve some of the congestion at Fairburn Hwy 85 exit.	10/20/2017 8:06 AM
133	Top of 74, near 85/Oakley, add lanes, adjust to reduce traffic	10/7/2017 1:42 PM
134	Have a frontage road for the business north of Milam Rd and have dedicated turn lane onto I-85 north starting at Milam Rd.	10/6/2017 7:59 PM
135	light timings to keep 74 flowing at i-85 intersection from milam through onramp	10/6/2017 3:10 PM
136	Improvement of the SR54/SR74 Intersection is desperately needed. Ideally SR 74 would be reconstructed to overpass SR54, allowing for improved traffic flow. There is currently space for the access roads to be built adjacent to the would be overpass if SR74 were to have a bridge built over SR54	10/6/2017 9:03 AM
137	Intersection of SR 54 and SR 74, morning and evening but especially around 5 pm commute time.	10/6/2017 7:36 AM

Q6 What is your primary mode of transportation to work or school?

Answered: 135 Skipped: 6



ANSWER CHOICES		RESPONSES	
Automobile (alone)		84.44%	114
Automobile (carpool)		2.22%	3
Private, paid service (van, taxi)		0.00%	0
Walk		0.00%	0
Bicycle		0.00%	0
Public Transportation (GRTA, MARTA, etc.)		1.48%	2
Golf Cart or other Personal Transportation Vehicle (PTV) (does not include automobile)		1.48%	2
Not applicable		8.15%	11
Other (please specify)		2.22%	3
TOTAL			135

#	OTHER (PLEASE SPECIFY)	DATE
1	Fedex Step Vans	10/28/2017 11:01 AM
2	I am retired but often travel on 74.	10/27/2017 1:54 PM

SR 74 Comprehensive Corridor Study Online Survey

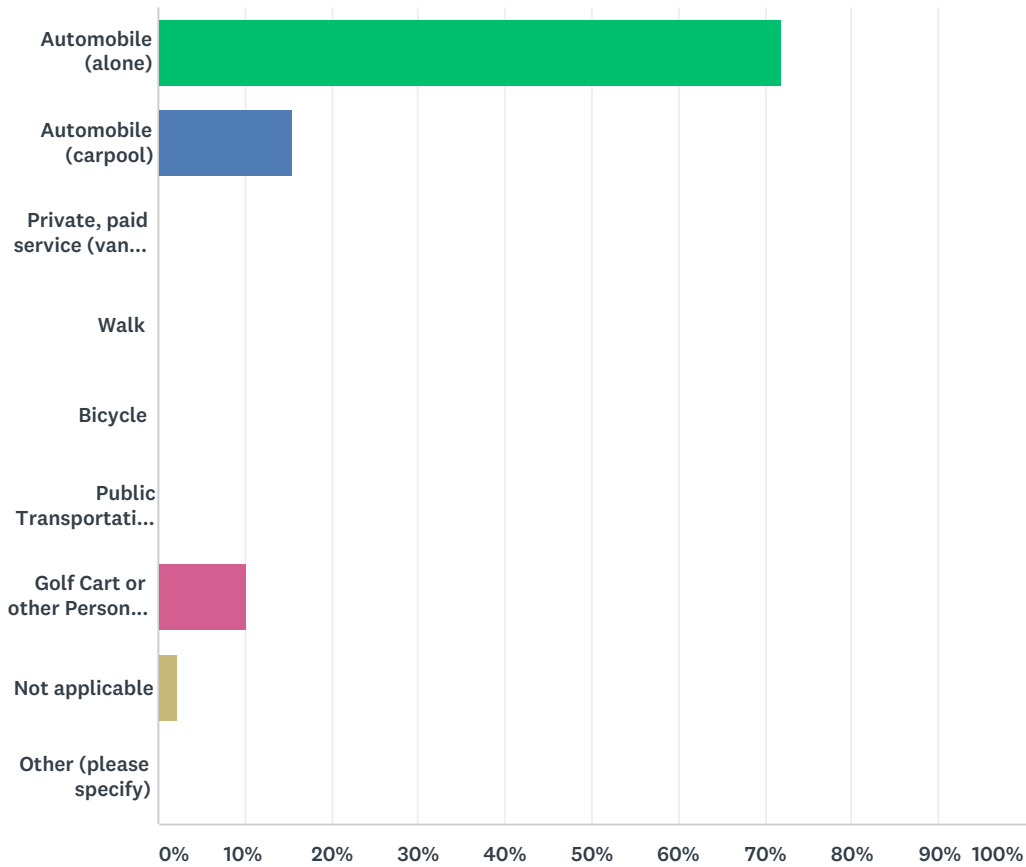
3

I am 50% carpool and 50% car alone

10/27/2017 12:10 PM

Q7 For other trips, what is your primary mode of transportation?

Answered: 136 Skipped: 5

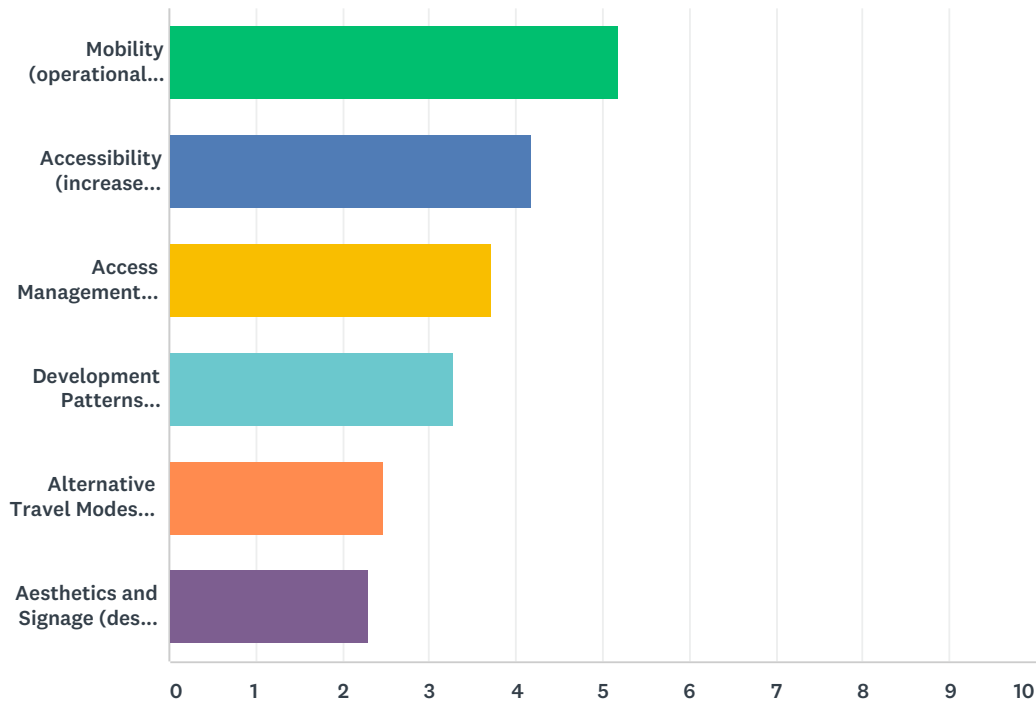


ANSWER CHOICES		RESPONSES	
Automobile (alone)		72.06%	98
Automobile (carpool)		15.44%	21
Private, paid service (van, taxi)		0.00%	0
Walk		0.00%	0
Bicycle		0.00%	0
Public Transportation (GRTA, use MARTA outside county, etc.)		0.00%	0
Golf Cart or other Personal Transportation Vehicle (PTV) (does not include automobiles)		10.29%	14
Not applicable		2.21%	3
Other (please specify)		0.00%	0
TOTAL			136

#	OTHER (PLEASE SPECIFY)	DATE
	There are no responses.	

Q8 Which of the following kinds of improvements do you think would most benefit this segment of SR 74? Sort the following types of transportation projects from the most important to you at the top (#1) to the least important to you at the bottom (#6)

Answered: 133 Skipped: 8



	1	2	3	4	5	6	TOTAL	SCORE
Mobility (operational and capacity improvement to preserve traffic conditions)	58.02% 76	20.61% 27	9.92% 13	4.58% 6	6.11% 8	0.76% 1	131	5.18
Accessibility (increase connectivity between roads)	17.83% 23	33.33% 43	17.83% 23	17.05% 22	8.53% 11	5.43% 7	129	4.19
Access Management (managing driveways and other access)	9.45% 12	22.05% 28	29.13% 37	18.90% 24	11.81% 15	8.66% 11	127	3.72
Development Patterns (zoning standards, encouraging mixed-use development)	7.75% 10	12.40% 16	21.71% 28	24.81% 32	24.81% 32	8.53% 11	129	3.28
Alternative Travel Modes (pedestrian, bicycle, transit, etc.)	7.81% 10	8.59% 11	8.59% 11	14.84% 19	17.19% 22	42.97% 55	128	2.46
Aesthetics and Signage (design guidelines, gateway features)	1.56% 2	3.91% 5	14.06% 18	17.19% 22	31.25% 40	32.03% 41	128	2.31

Q9 Please indicate any other comments you may have here.

Answered: 61 Skipped: 80

#	RESPONSES	DATE
1	SR74 should be a flyover of SR 54 to alleviate congestion at the 74/54 intersection	11/5/2017 10:42 AM
2	Based on the poor planning that Fulton County and the State DOT has done with SR 74 in South Fulton County I expect any new work will involve large amounts of corruption and pay-offs. Nothing changes.	11/1/2017 9:40 PM
3	Please do something for the traffic in this area. Hwy 92 should be considered.	11/1/2017 6:53 PM
4	Please limit adding future red lights on 74. Really focus on limited access to 74 from sides	11/1/2017 6:32 PM
5	Let's no dilly-dally on this, and get it done!	11/1/2017 6:07 PM
6	I would really support regional rail from points in Newnan to along 74 to pickup PTC, Tyrone, and Fayetteville residents. Then maybe Fairburn up through there somehow and link up with Marta at the airport. Take the leap and expand rail service!	10/31/2017 9:06 PM
7	Educate people on how to drive the posted speed limit, do not allow yield only lanes to disrupt traffic flow, cease any new development around or that feed this intersection, plan and install new alternate routes around this intersection.	10/31/2017 8:46 PM
8	Stop forming committees and actually do something.	10/31/2017 8:26 PM
9	To maintain property values in Fayette county, something has to be done with regard to the I-85 exit. Semi traffic must be rerouted. Additional roads for entry onto I-85 need to exist. One way in/out is becoming a bottleneck and unsafe. People will stop moving here for that reason alone. Thus leaving Fayette county with nothing but OLD and RETIRED people (no families/children) who realistically have to go north toward Atlanta for work	10/31/2017 6:07 PM
10	Question does not address what's really needed: alternative roads and public transportation options. Why not buck the trend and be the first to build an elevated monorail system between Newnan, PTC and Fayetteville? Think out of the box people!	10/31/2017 11:23 AM
11	The largest issue I see is exiting I 85 from the north. The ramp and light pattern creat a large back up in the actual interstate lane for a good bit. Accidents are frequent and some very severe.	10/31/2017 11:00 AM
12	The I85 exit and entrance has to be addressed. It has become a bottleneck, backing up and blocking multiple lanes of highway, causing multiple accidents. There need to be more ways to enter/exit the highway to get into Fayette County.	10/31/2017 5:58 AM
13	Unless you solve the traffic congestion at the I85 interchange and the number of red lights in that vicinity you wasting time and money! That is the single most problem on SR 74!	10/30/2017 6:59 PM
14	The segment through Peachtree City would benefit if traffic were diverted via well connected roads to bypass the city to Coweta County. Significant reduction of congestion by I-85 would require more direct connections for either truck or automobile traffic to another entrance/exit (I use Palmetto as alternate). Minor improvements would require any additional development between I-85 and Milan Road to use rear exits to feeder roads leading to Milam/Landrum, Harris or Oakley Industrial Blvd to use those traffic lights to enter 74.	10/30/2017 5:18 PM
15	Something as to be done. It is so jammed up in morning and evening	10/30/2017 3:56 PM
16	The traffic lights need to be timed to allow continuous flow on 74	10/30/2017 3:32 PM
17	Please don't turn it into 138.	10/30/2017 11:27 AM
18	Another entrance to I-85 North should be installed at hwy 92. This could be an entrance only. This would help move some of the semi-truck traffic away from the 74 entrance ramp and provide another outlet to 85N.	10/30/2017 8:10 AM
19	Need to better manage the build up of traffic 74N to get on I-85 and the exit 61 offramp to get back to 74S	10/29/2017 9:44 AM

SR 74 Comprehensive Corridor Study Online Survey

20	Any improvements can be made while keeping aesthetics, which is very important. But relieving traffic congestion is imperative. There are other areas of PTC that could be utilized for beautification and shopping on the cart paths.	10/29/2017 9:39 AM
21	Please study morning and evening from Sandy Creek to and from the interstate for several days to gauge the crazy patterns and how semis affect Everything!	10/29/2017 8:39 AM
22	Please find another way of managing the mess of traffic at 74 and 85!!!! Too many trucks that affect traffic but it appears that Fairburn or the county was looking for revenue by allowing the truck stops and associated businesses to develop unbridled.. I now find other routes to avoid that intersection which is very inconvenient. Please find a way to allow truck traffic other access. Being caught in the middle of a sea of trailer trucks on top of the bridge exiting 85 to 74 is unnerving and the road and paving is in bad condition. This survey and resultant planning should have been done years ago, but am glad it is now being looked at.	10/29/2017 7:29 AM
23	I wish that highway 92 could get I85 access. That would take a lot of the burden off the i85/hwy 74 interchange. It would at least be helpful for the big trucks going to Oakley Industrial.	10/28/2017 7:26 PM
24	Widen bridge over I-85 From four to 6 lanes. Add additional turn lane to entrance of I85. Put no parking signs on entrance ramp to I-85. Add no right turn on red from Oakley Blvd to Hwy 74 at Mcdonalds	10/28/2017 6:16 PM
25	Park and Ride lot to encourage car pooling and supported by frequent bus to Atlanta / airport. Widen I-85 exit lane heading to Fairburn Make another exit for PTC and / or Fairburn just south of the current I-85 exit.	10/28/2017 12:51 PM
26	Would love to see Marta extend to fairburn and big parking lot! Down 74 to PTC would be even better.	10/27/2017 9:26 PM
27	NO WAREHOUSES	10/27/2017 9:05 PM
28	I think an exit between 61 and 64 should also be explored. This is badly needed. Redevelopment of the 74/54 exchange should also be a top priority.	10/27/2017 8:24 PM
29	Flashing warning light before bridge heading South in front of Tyrone Publix to notify oncoming traffic the light is red...	10/27/2017 6:28 PM
30	Express bus between shopping areas. Wide side walks and street lights. Benches. Preserve some green space.	10/27/2017 5:44 PM
31	I've lived in PTC since 1988 and this traffic congestion needs to be addressed to relieve the truck traffic. Fayette and Fairburn have done a terrible job in traffic mitigation along with the 54/74 intersection in PTC. Is it just time to move somewhere else?	10/27/2017 5:06 PM
32	Keep the citizens involved and engaged throughout the development process.	10/27/2017 4:11 PM
33	In addition to the 54/74 intersection, capacity especially as it relates to 18 wheelers at the 74/I 85 interchange must be addressed before someone is killed.	10/27/2017 3:52 PM
34	alternate route for trucks	10/27/2017 1:54 PM
35	in order to continue to attract business to towns that are accessed via Highway 74, we must fix this bottleneck. Otherwise, potential employers will choose another location. Also, the ever increasing traffic issue on 74 has a waterfall effect - there are now backups at Collinsworth/Palmetto exit #56 - because people are simply avoiding 74 altogether. Exit 56 definitely does not have the infrastructure to support additional traffic.	10/27/2017 1:28 PM
36	The exit is a nightmare. Poor planning in Fairburn has led to more traffic than the road can manage. What used to be a pleasant ride is now worse than my ride from Buckhead to the exit.	10/27/2017 12:52 PM
37	Please keep the fayette county portion of SR 74 beautiful. Miles of fast food restaurants is not aesthetically pleasing	10/27/2017 12:23 PM
38	The traffic lights in peachtree city from Target plaza to 54/74 interchange are terribly timed. If you hit one you hit them all. More cops patrolling distracted drivers. It is egricious what I see people doing in their cars on a daily basis. Too much semi traffic in Fairburn!!	10/27/2017 12:10 PM
39	Any changes to SR74 in Fairburn should be considered in light of the potential proposal to add a MARTA heavy rail stop at the I-85/SR-74 interchange. How should SR 74 be configured if a rail station and large parking deck was added and many commuters decide to use this instead of taking I-85?	10/27/2017 10:36 AM

SR 74 Comprehensive Corridor Study Online Survey

40	Hopefully, Fayette County will continue to maintain the aesthetics along its section of this road and not allow hodge-podge development to occur such as that along the Fulton/Fairburn section. It is congested as well as being terribly unsightly.	10/27/2017 7:06 AM
41	In addition to I-85 interchange the Hwy74 / Hwy 54 intersection in PTC needs to be redesigned to accomodate the heavy traffic. Also, consideration should be given to additional routes to avoid the intersection (ie. like McDuff Parkway or another bypass road).	10/27/2017 6:30 AM
42	The lights are not timed properly on the exit ramp to exit 61 coming from I-85 South. The specific light that is not timed properly is the light for left turns from 74S to I-85 N. This light gets backed up with tractor trailers which then backs up the left lane on 74S which then back up the ramp on exit 61. I would recommend having a signal timing engineer study this entire corridor. I understand that a continuous flow intersection is being recommended to help alleviate traffic congestion at the intersection of 74 and 54. However, I don't this alone will alleviate the traffic issue. I suggest a flyover on 54 and a re-timing all of the lights on 54W. I understand that funding would be an issue for a flyover on 54 but I think a tolled flyover would be feasible based on the traffic conditions and the socioeconomic background of residents.	10/27/2017 5:37 AM
43	Please ensure that safety, road repairs, sanitation and community policing are a priority for the development of the west end of the corridor. Please do not over develop the area, which leads to congested roads, vacant shops/restaurants and often higher crime rates. Thank you.	10/26/2017 10:51 PM
44	Hope there is improvement in businesses and service in the Fairburn Tyrone end of 74 that families can utilize shopping and services much needed in the Fairburn area.	10/26/2017 12:01 PM
45	The road is terrible there at the exit with potholes because the semi-trucks weigh so much	10/26/2017 11:09 AM
46	Unfortunately, in my opinion, the Fulton County portion of the 74 corridor is a lost cause and nothing can be done to correct the damage.	10/25/2017 3:21 PM
47	Fayette County Commissioners need to communicate with Coweta, Clayton, Fulton that they are part of problem and help to resolve it. 74 and 54 has become a choke hold as is 74 and Interstate 85. How about some clove leafs off of the interstate vs. lights. How about the distribution centers having their own ramp onto the Interstate 85. How about stop rezoning AG to residential. People moved here not to urbanized.	10/25/2017 2:37 PM
48	Please fix the I-85 exit to SR 74.	10/24/2017 6:35 PM
49	54/74 intersection is also terrible, especially when cars try to sneak through on yellow/red clogging the intersection causing gridlock.	10/24/2017 9:41 AM
50	Serious concern for Sandy Creek Road and the constant usage with truck traffic to Pinewood Studios. This two lane road was not designed for this type of truck or high speed that is currently being used. How do we utilize the highways through the County to accommodate the trucks? (Especially with the anticipated development of another movie studio in Tyrone and the proposed office park on 54 (accessible via Veterans Pkwy or Tyrone Rd). I do not share the spoken concerns of traffic coming from Clayton (54 widening) because Fayette citizens also use that route to gain access to other counties and highways, but I am concerned for commercial traffic as it does not appear we are being forward thinking in accommodating this type of traffic - just look at Veterans Parkway and the anticipated growth there on a two lane road.	10/24/2017 7:24 AM
51	Time to step it up. The area is falling behind and solutions need to be real.	10/23/2017 9:04 PM
52	The intersection of 54/74 is terrible. There are improvements that could be made immediately: Eliminate right turn on red & yield signs. Right turn lanes need to have a red/yellow/green turn arrows-utilizing red arrows to allow for opposite traffic who have green left turn arrow. And no U-turns allowed at 54/74. No U-turns at 54/Market Place Blvd signal or at 74/Kelly Drive signal as the elevation for approaching traffic makes it unsafe to judge on-coming traffic.	10/23/2017 8:23 PM
53	The 74 corridor desperately needs public transportation. Perhaps with limited stops but terminating at the airport MARTA station. This is not a popular idea because it is felt that it would bring "them" into our area. How horrible in this day in age. We are cutting ourselves off from becoming a modern, progressive successful area. No one likes the traffic problems when they commute every day. It would be lovely and safer to ride a commuter train and do the emails/texts in comfort.	10/23/2017 5:38 PM
54	Dont believe alternative travel modes like pedestrian, bicycle will even work on this segment of 74. Mass transit may but I doubt I would use mass transit to get to the airport because it probably will take me the same amount of time if not more to ride mass transit from Peachtree City to the Atlanta Airport.	10/23/2017 5:02 PM

SR 74 Comprehensive Corridor Study Online Survey

55	It's fairly obvious something needs to be done in the long run at the intersection of 54 and 74. Perhaps 74 should be dropped to pass under 54?	10/23/2017 2:16 PM
56	Don't encourage more development along the road. That would destroy it's character and create even more traffic. Especially don't enable more truck stops or warehouses to be built unless alternative access roads off the interstate are built.	10/23/2017 1:16 PM
57	There is simply too much traffic getting into 74 to reach I-85. Providing alternative entries onto the interstate and changing the traffic patterns at the interstate are needed and soon!	10/23/2017 12:12 PM
58	NO PUBLIC TRANSIT ALONG 74, UNDERSTAND? NONE. EVER. Fast track fixes at 54/74 intersection. It cannot wait till 2020 and beyond to start construction. Find a new east west solution to Fayette County traffic congestion. An east/west bypass is needed to lessen the load on 54. Do NOT consider Crosstown Dr. in Peachtree City as an option for cross county traffic solutions. Start by encouraging retail in Fairburn/Fulton County just south of I-85 along 74. That alone would eliminate thousands of vehicles from driving south on 74 into Peachtree City to shop on 54 west and would localize those shoppers to the area where they live.	10/23/2017 11:37 AM
59	Speed limits are not being enforced properly.	10/23/2017 11:23 AM
60	stop allowing more busnisess and housing devolpments. More churches (they are mostly used one dat a week	10/23/2017 11:20 AM
61	Commuter train to airport and downtown Atlanta?	10/23/2017 10:40 AM



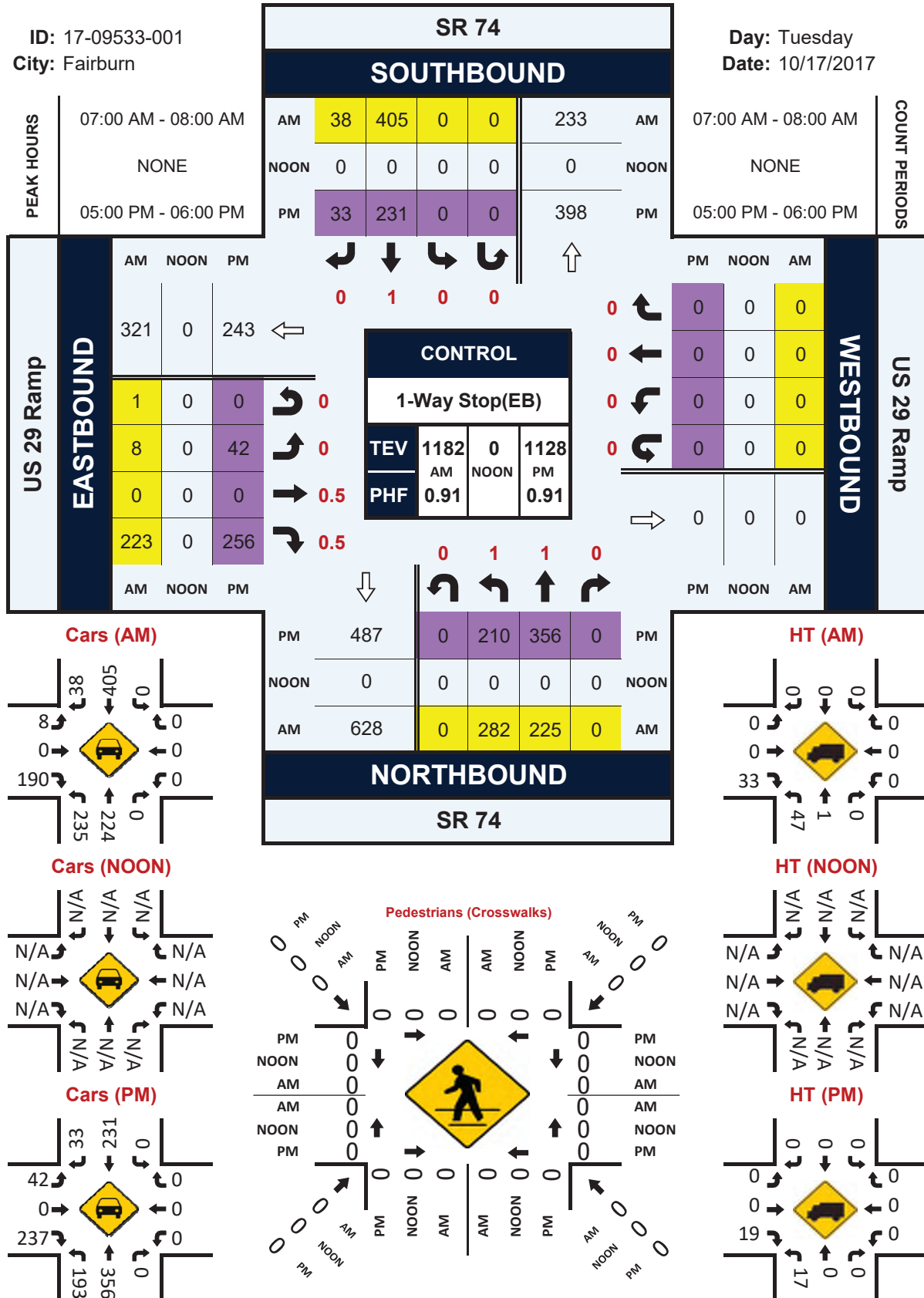
APPENDIX B: TRAFFIC COUNT DATA

SR 74 & US 29 Ramp

Peak Hour Turning Movement Count

ID: 17-09533-001
City: Fairburn

Day: Tuesday
Date: 10/17/2017

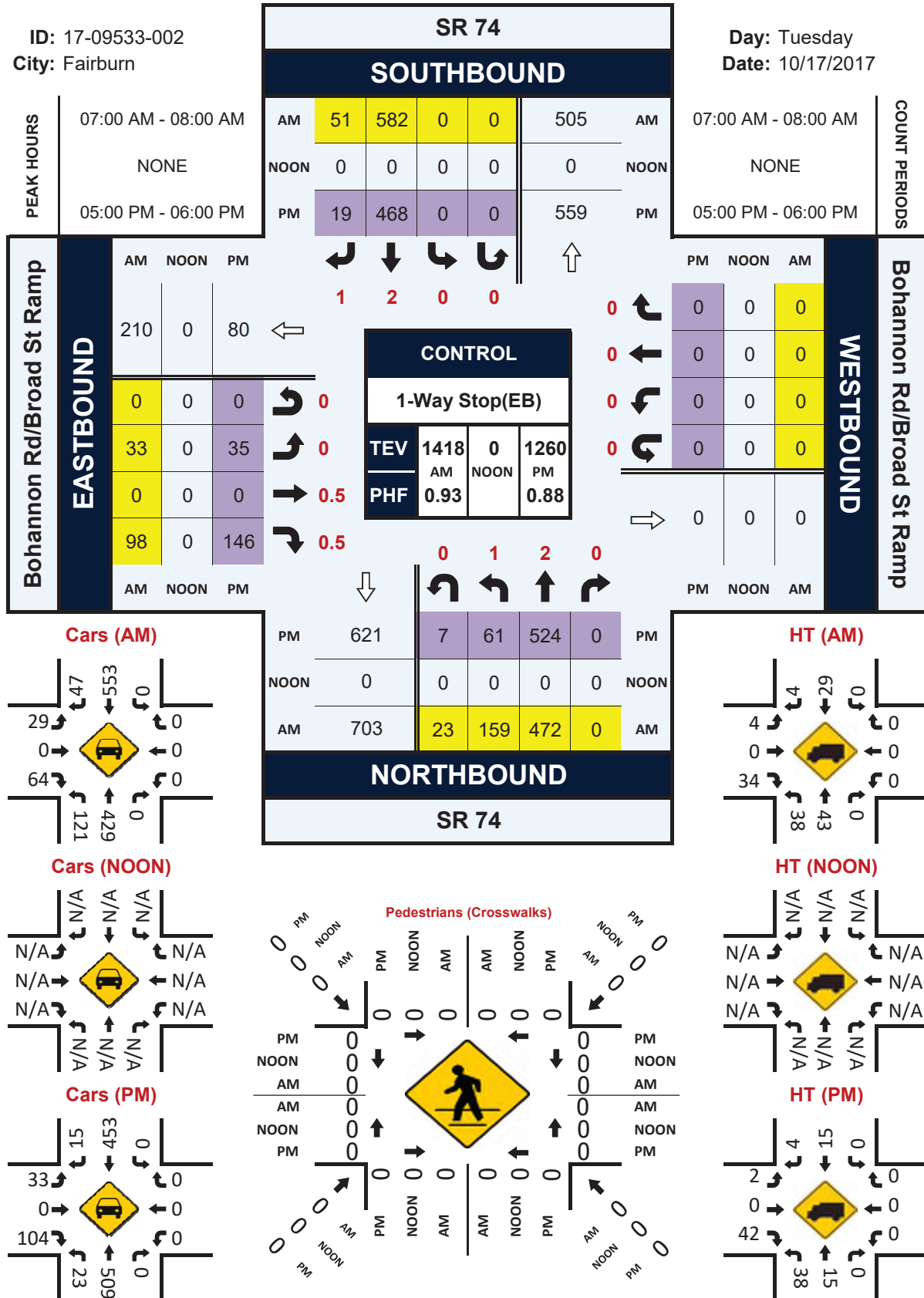


SR 74 & Bohannon Rd/Broad St Ramp

Peak Hour Turning Movement Count

ID: 17-09533-002
City: Fairburn

Day: Tuesday
Date: 10/17/2017

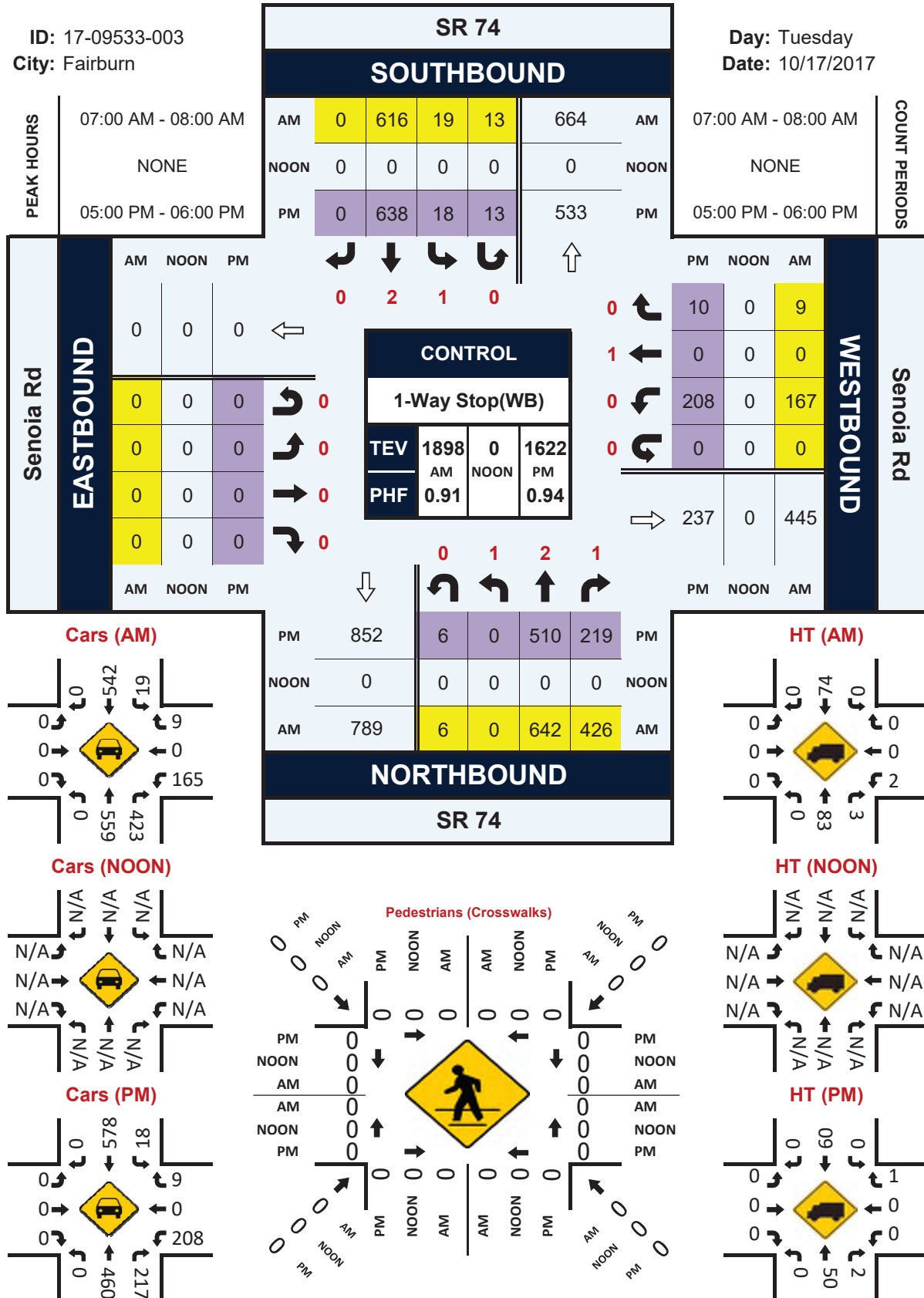


SR 74 & Senoia Rd

Peak Hour Turning Movement Count

ID: 17-09533-003
City: Fairburn

Day: Tuesday
Date: 10/17/2017

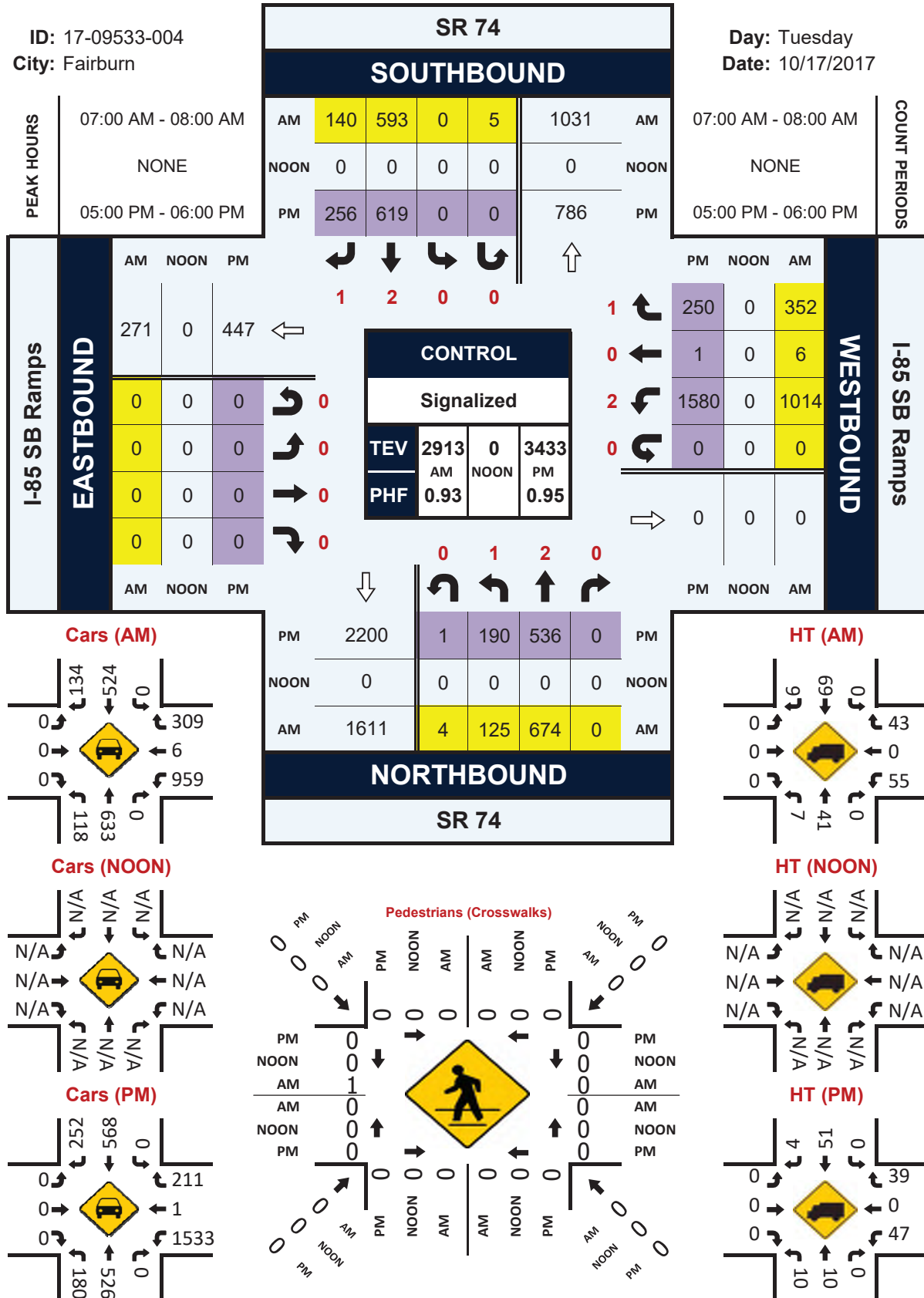


SR 74 & I-85 SB Ramps

Peak Hour Turning Movement Count

ID: 17-09533-004
City: Fairburn

Day: Tuesday
Date: 10/17/2017

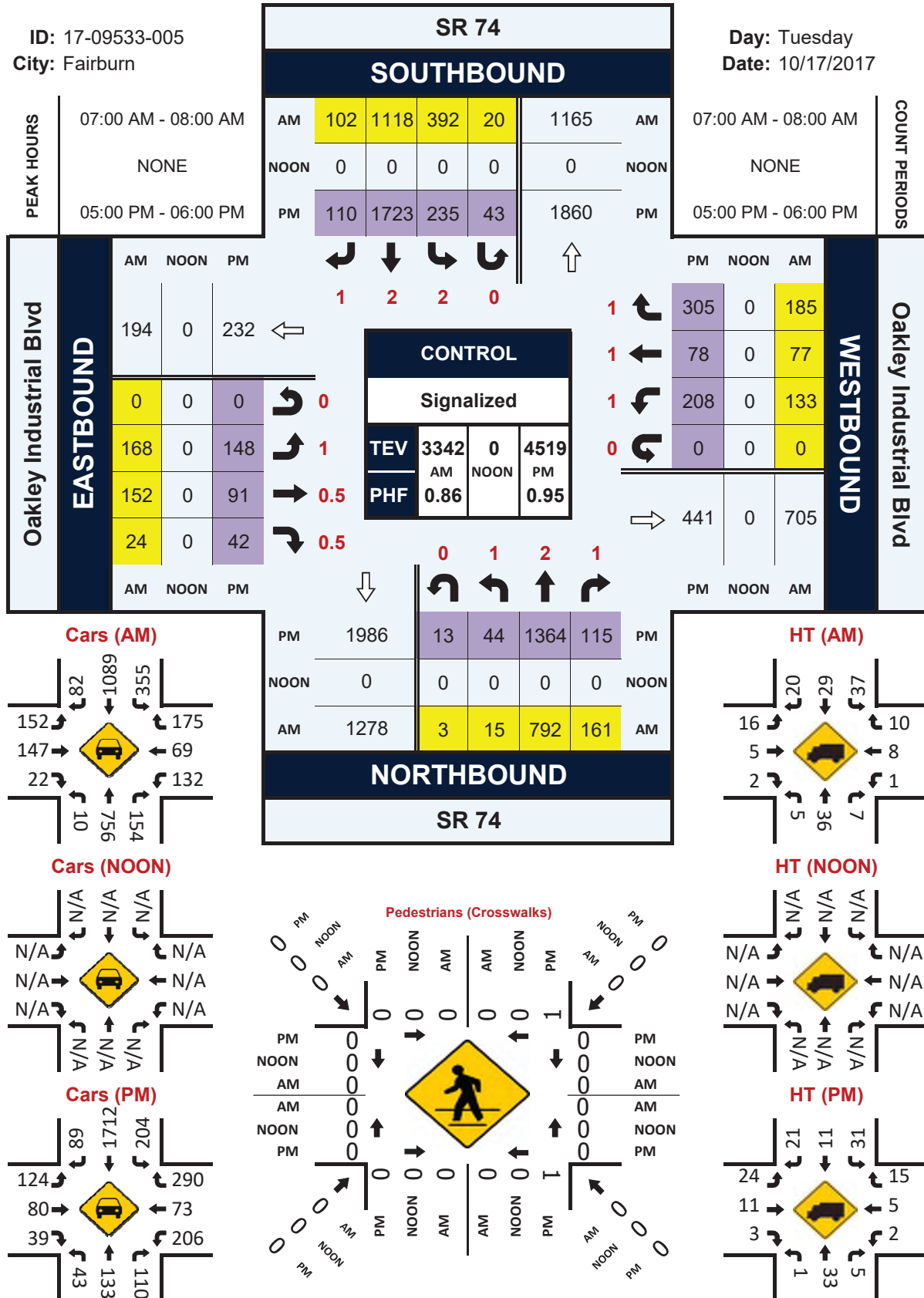


SR 74 & Oakley Industrial Blvd

Peak Hour Turning Movement Count

ID: 17-09533-005
City: Fairburn

Day: Tuesday
Date: 10/17/2017

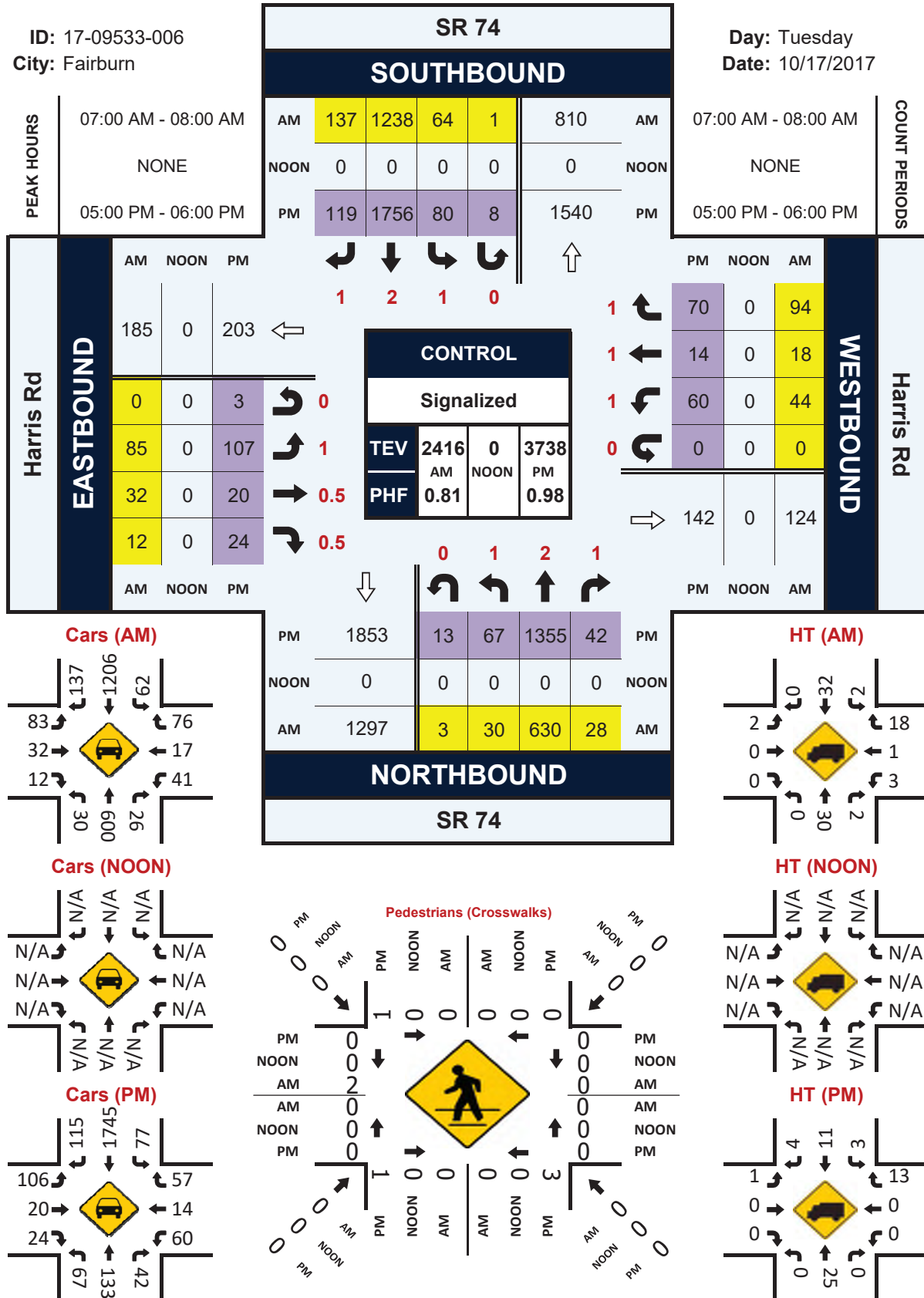


SR 74 & Harris Rd

Peak Hour Turning Movement Count

ID: 17-09533-006
City: Fairburn

Day: Tuesday
Date: 10/17/2017

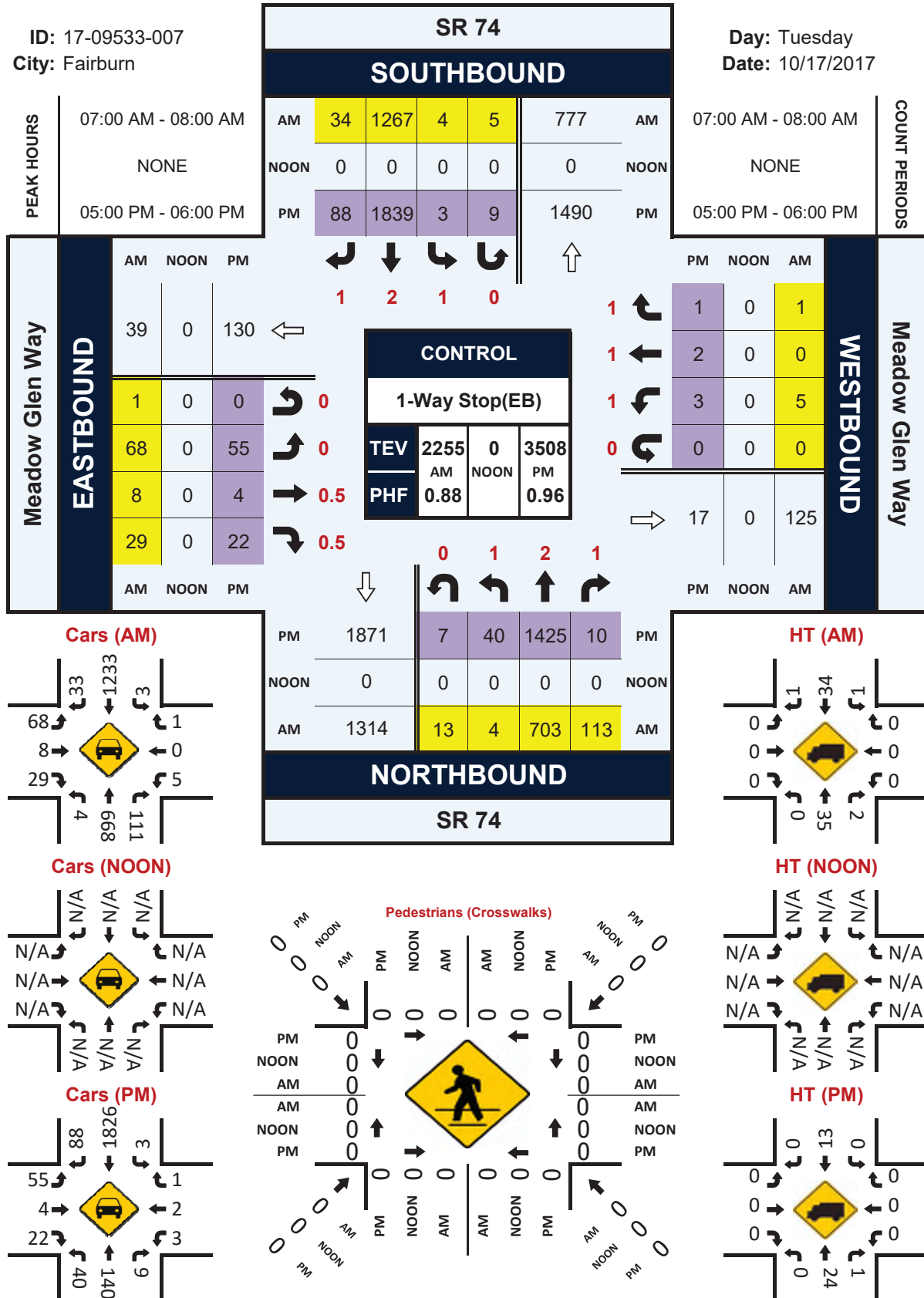


SR 74 & Meadow Glen Way

Peak Hour Turning Movement Count

ID: 17-09533-007
City: Fairburn

Day: Tuesday
Date: 10/17/2017

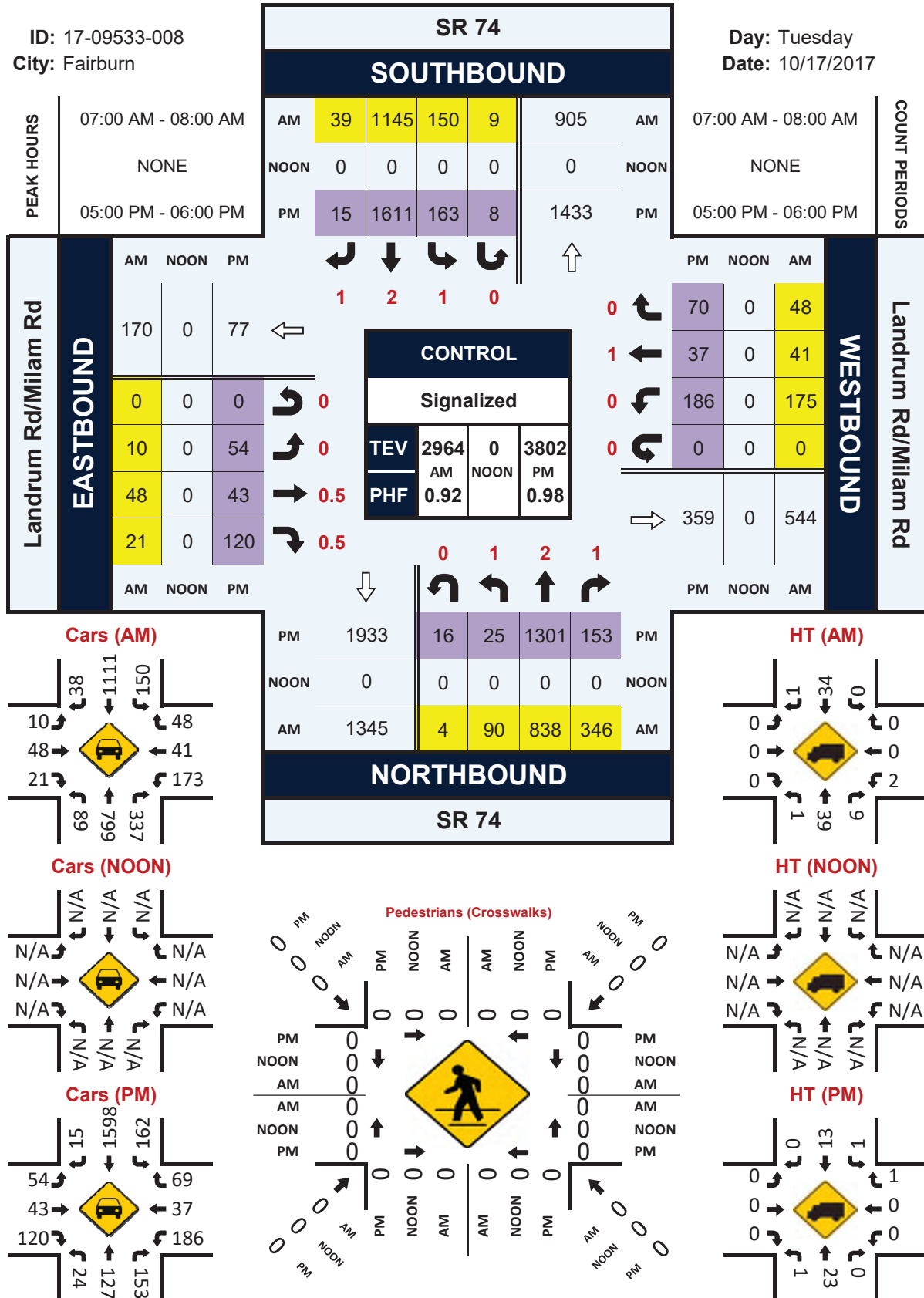


SR 74 & Landrum Rd/Milam Rd

Peak Hour Turning Movement Count

ID: 17-09533-008
City: Fairburn

Day: Tuesday
Date: 10/17/2017

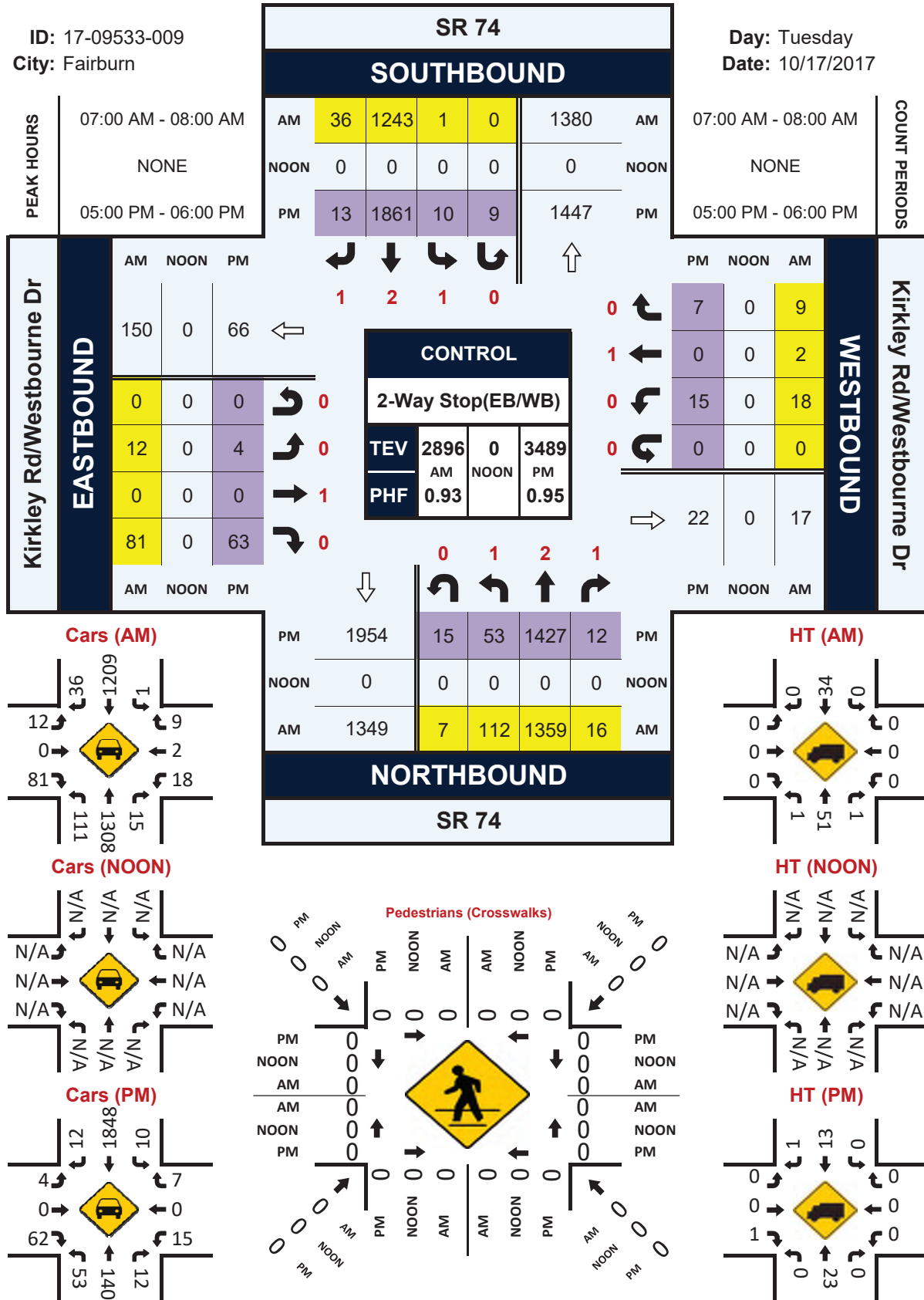


SR 74 & Kirkley Rd/Westbourne Dr

Peak Hour Turning Movement Count

ID: 17-09533-009
City: Fairburn

Day: Tuesday
Date: 10/17/2017

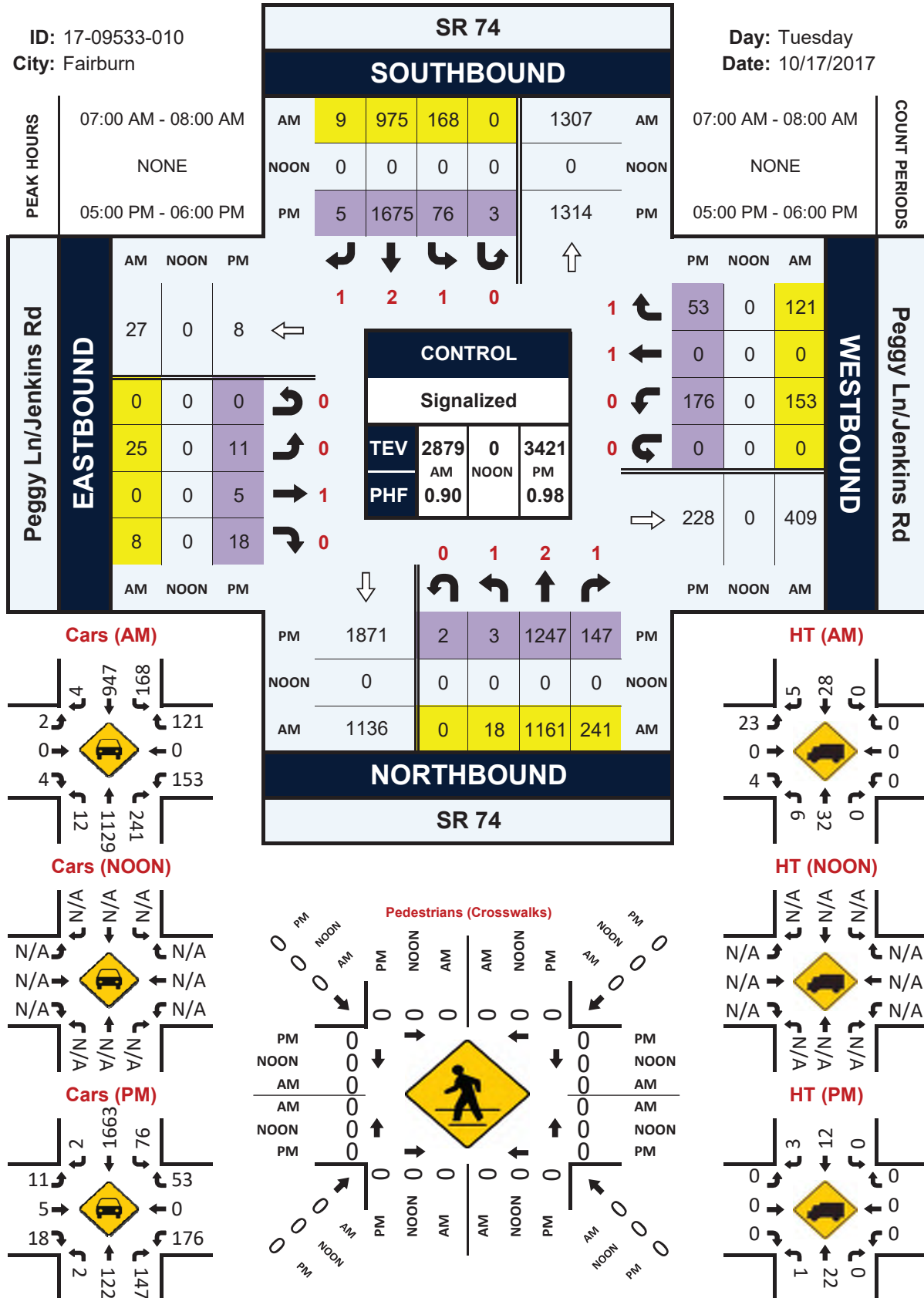


SR 74 & Peggy Ln/Jenkins Rd

Peak Hour Turning Movement Count

ID: 17-09533-010
City: Fairburn

Day: Tuesday
Date: 10/17/2017

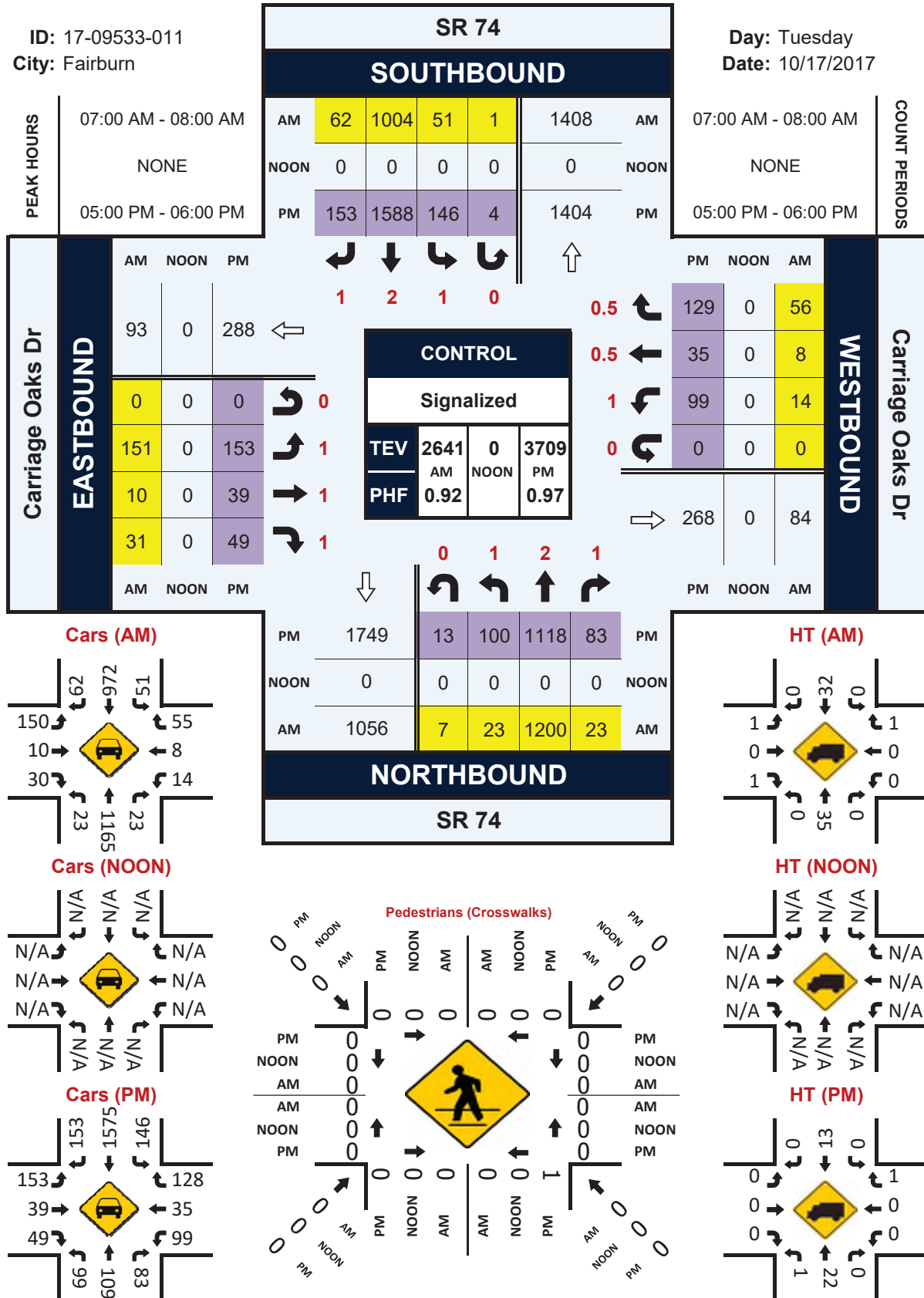


SR 74 & Carriage Oaks Dr

Peak Hour Turning Movement Count

ID: 17-09533-011
City: Fairburn

Day: Tuesday
Date: 10/17/2017

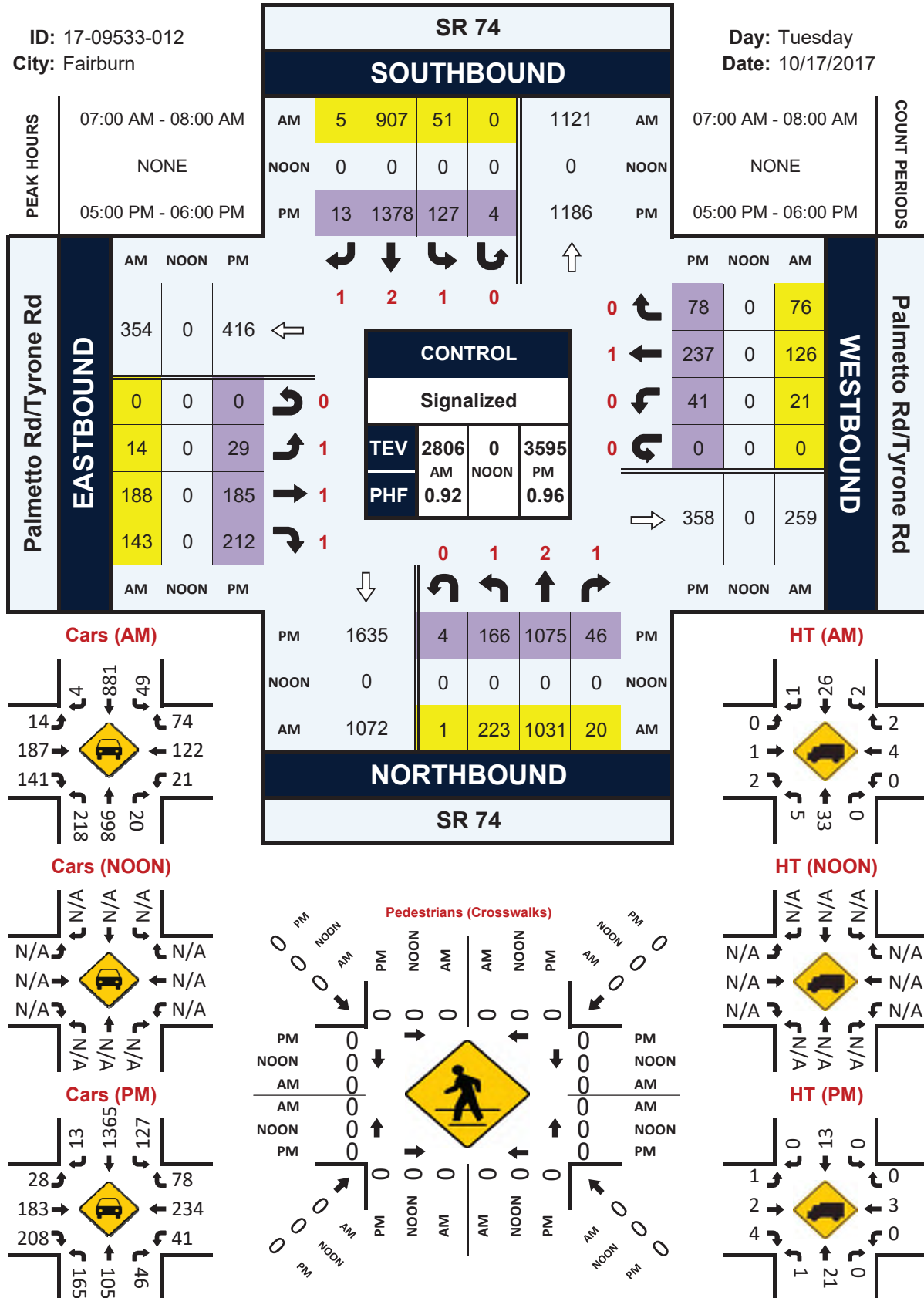


SR 74 & Palmetto Rd/Tyrone Rd

Peak Hour Turning Movement Count

ID: 17-09533-012
City: Fairburn

Day: Tuesday
Date: 10/17/2017

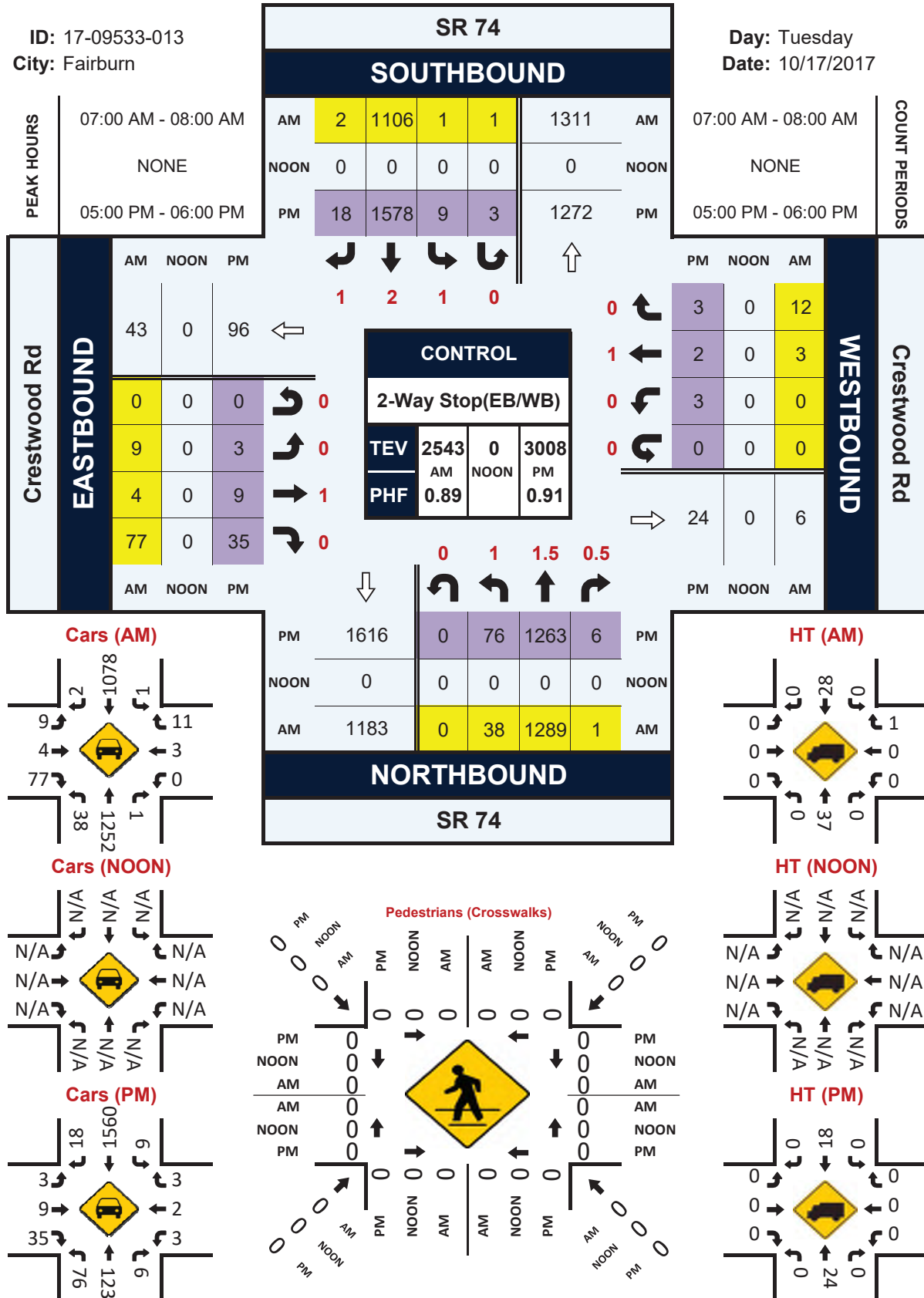


SR 74 & Crestwood Rd

Peak Hour Turning Movement Count

ID: 17-09533-013
City: Fairburn

Day: Tuesday
Date: 10/17/2017

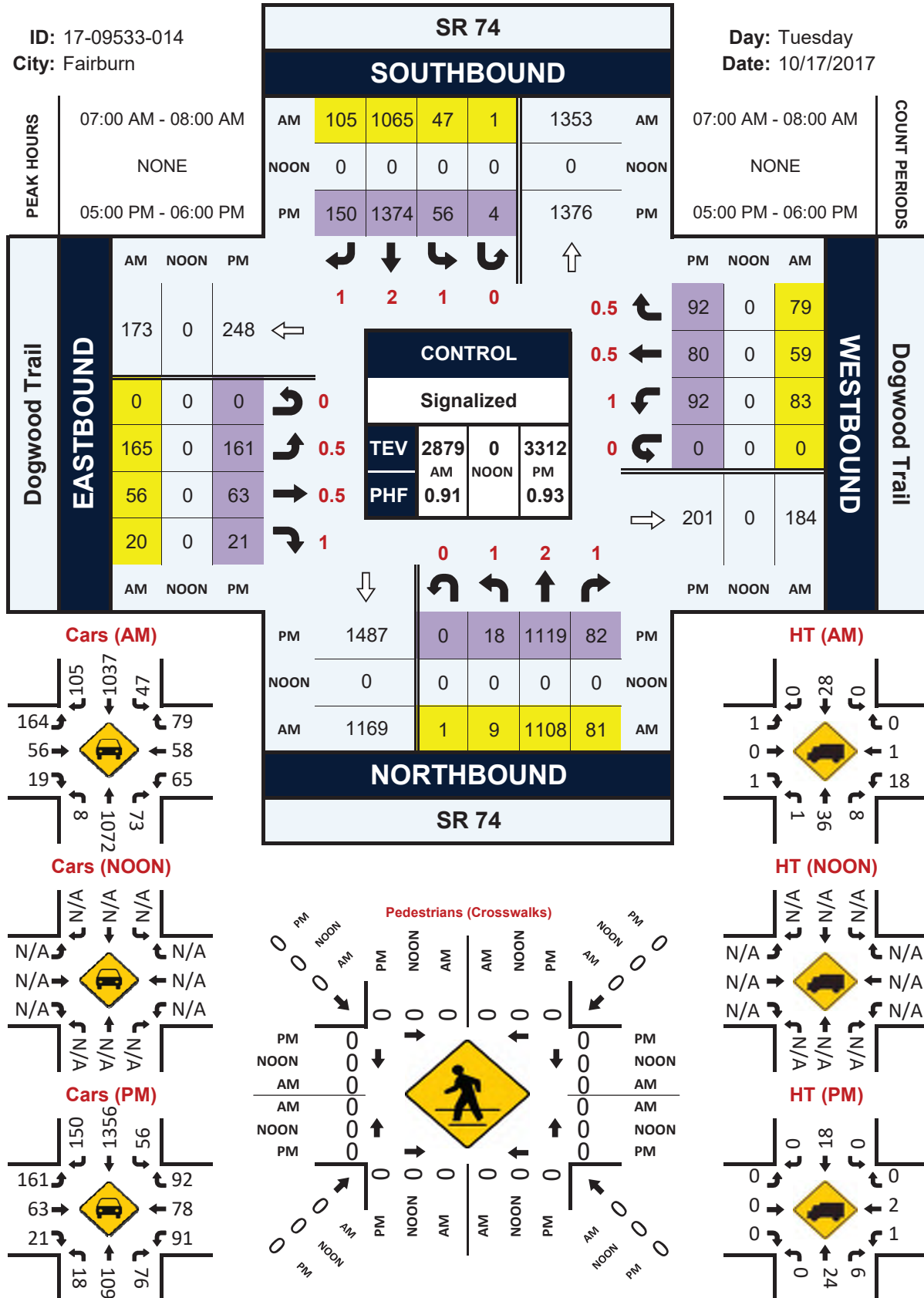


SR 74 & Dogwood Trail

Peak Hour Turning Movement Count

ID: 17-09533-014
City: Fairburn

Day: Tuesday
Date: 10/17/2017



SR 74

SOUTHBOUND

AM	53	1023	28	1	1189	AM
NOON	0	0	0	0	0	NOON
PM	31	1175	57	1	1177	PM

1

2

1

0

CONTROL

Signalized

TEV	2714	0	3160
PHF	0.89	NOON	0.94

0

1

2

1

PM	1529	2	21	1063	300	PM
NOON	0	0	0	0	0	NOON
AM	1192	1	52	1081	151	AM

NORTHBOUND

SR 74

Day: Tuesday

Date: 10/17/2017

COUNT PERIODS

07:00 AM - 08:00 AM	NONE	07:00 AM - 08:00 AM
NONE	NONE	NONE
05:00 PM - 06:00 PM	05:00 PM - 06:00 PM	05:00 PM - 06:00 PM

Ardenlee Pkwy/Georgian Park

EASTBOUND

AM	NOON	PM
128	0	79
0	0	0
63	0	15
26	0	17
39	0	34

CONTROL

Signalized

TEV	2714	0	3160
PHF	0.89	NOON	0.94

WESTBOUND

Ardenlee Pkwy/Georgian Park

PM	NOON	AM
98	0	44
27	0	23
318	0	129
1	0	0

CONTROL

Signalized

TEV	2714	0	3160
PHF	0.89	NOON	0.94

PM

NOON

AM

375

0

205

Cars (AM)

Cars (NOON)

Cars (PM)

Pedestrians (Crosswalks)

HT (AM)

HT (NOON)

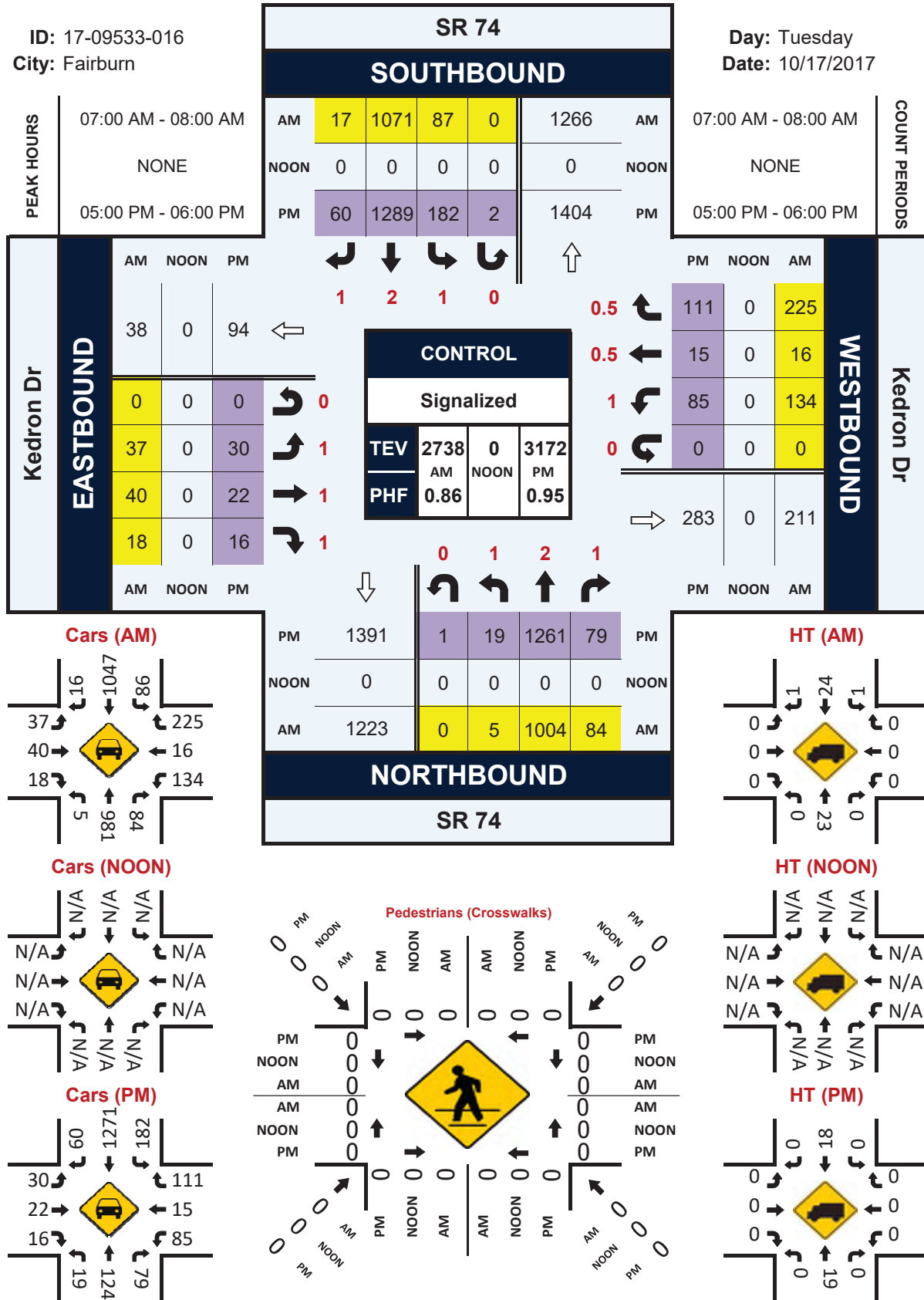
HT (PM)

SR 74 & Kedron Dr

Peak Hour Turning Movement Count

ID: 17-09533-016
City: Fairburn

Day: Tuesday
Date: 10/17/2017

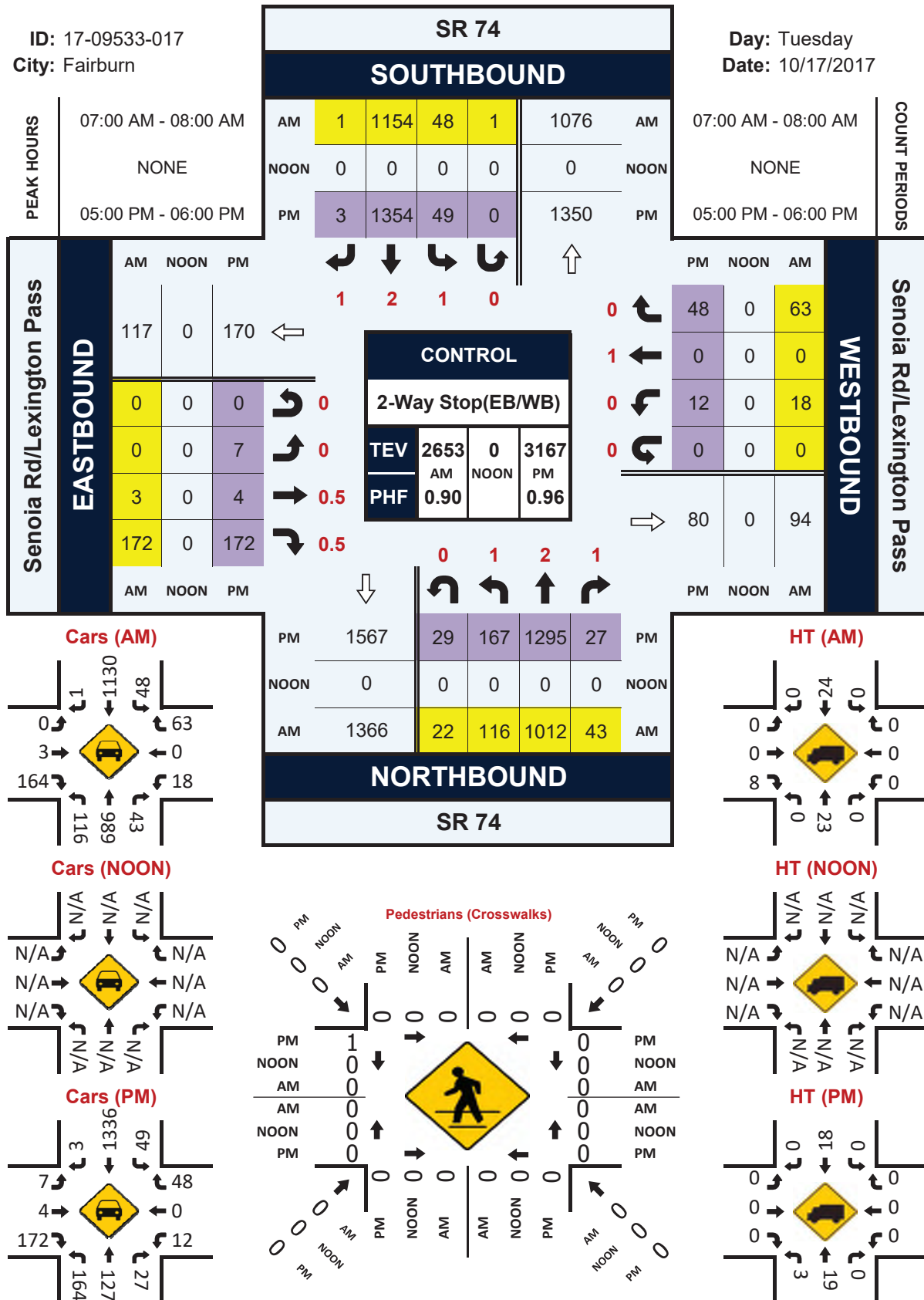


SR 74 & Senoia Rd/Lexington Pass

Peak Hour Turning Movement Count

ID: 17-09533-017
City: Fairburn

Day: Tuesday
Date: 10/17/2017

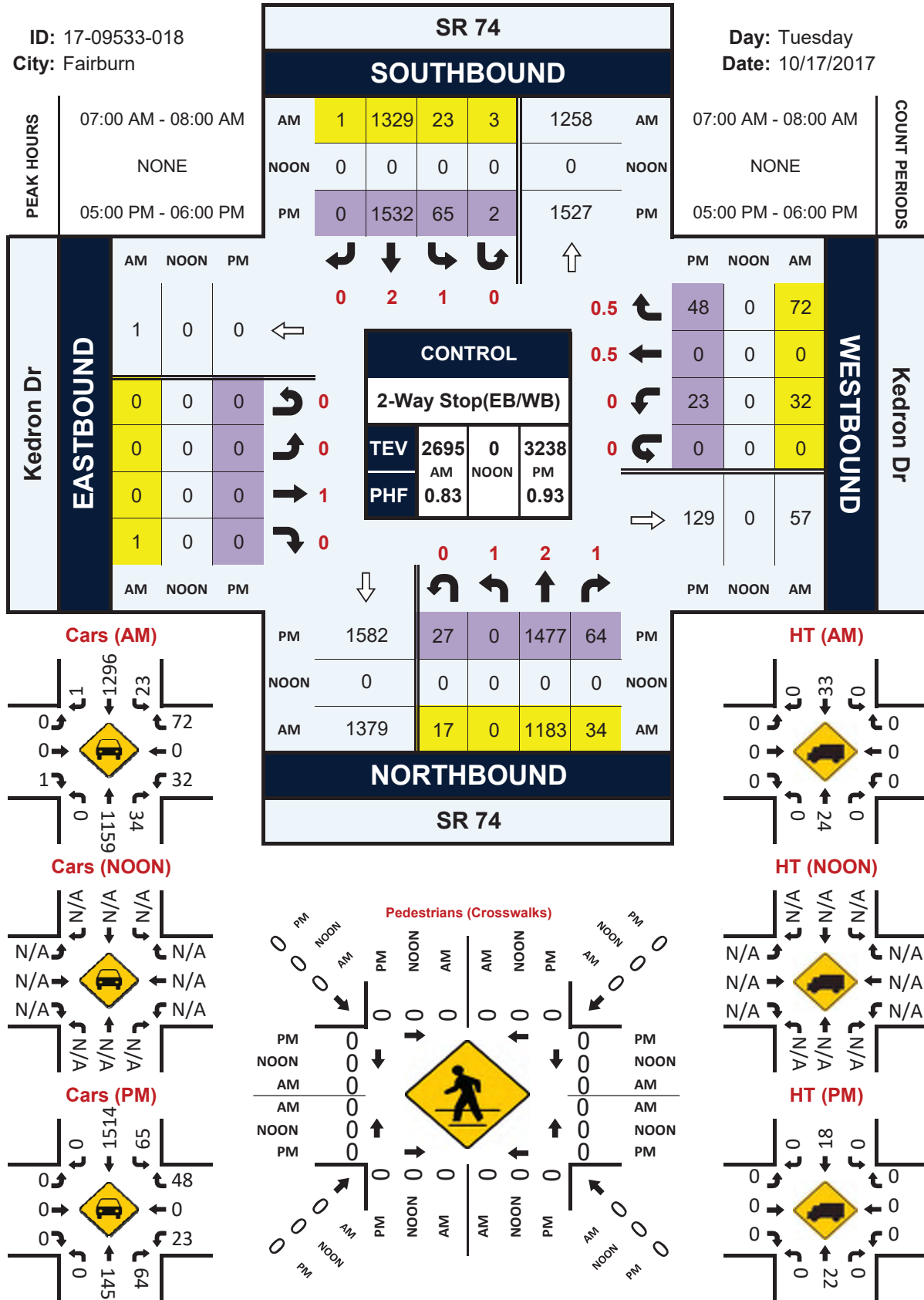


SR 74 & Kedron Dr

Peak Hour Turning Movement Count

ID: 17-09533-018
City: Fairburn

Day: Tuesday
Date: 10/17/2017

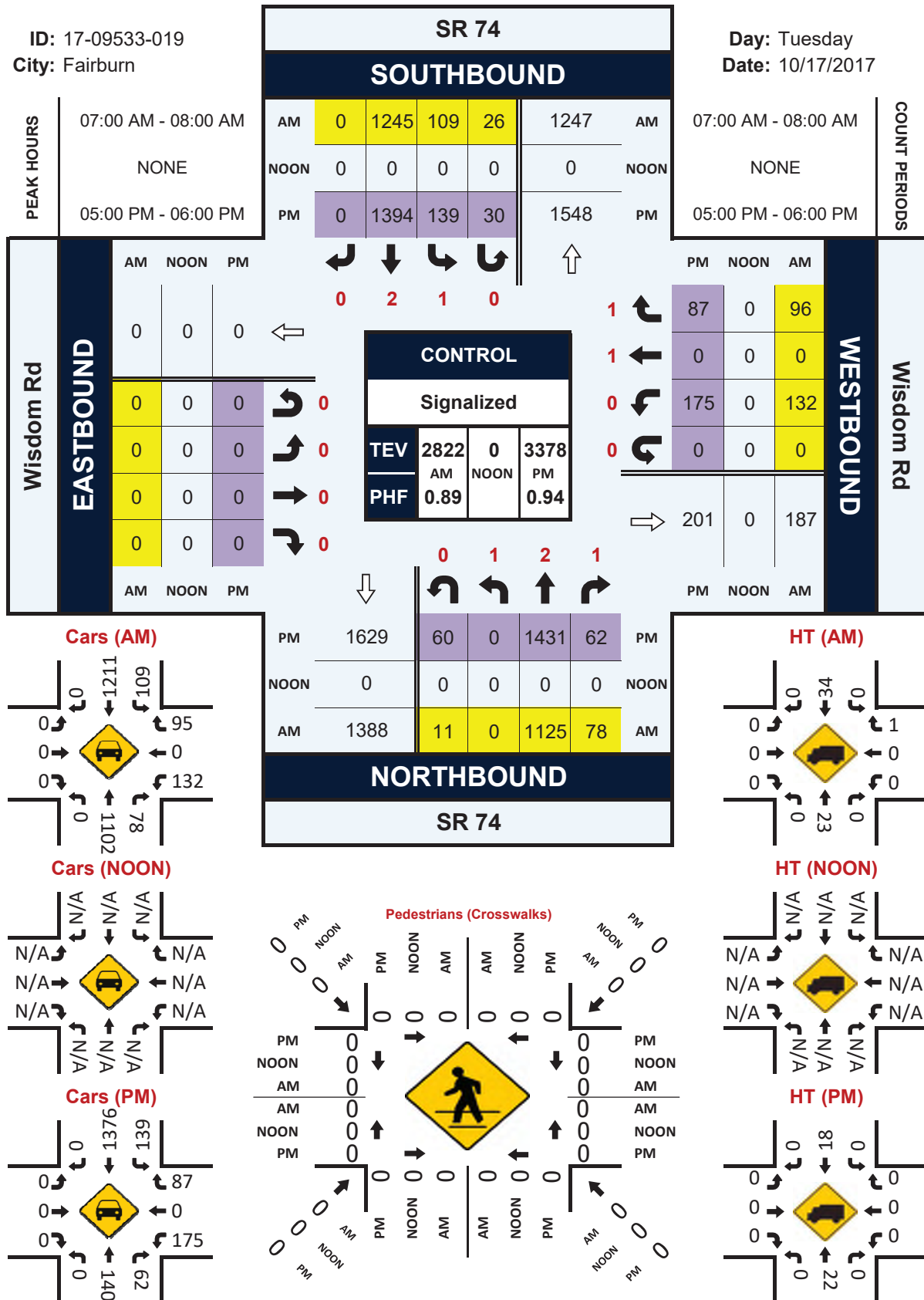


SR 74 & Wisdom Rd

Peak Hour Turning Movement Count

ID: 17-09533-019
City: Fairburn

Day: Tuesday
Date: 10/17/2017

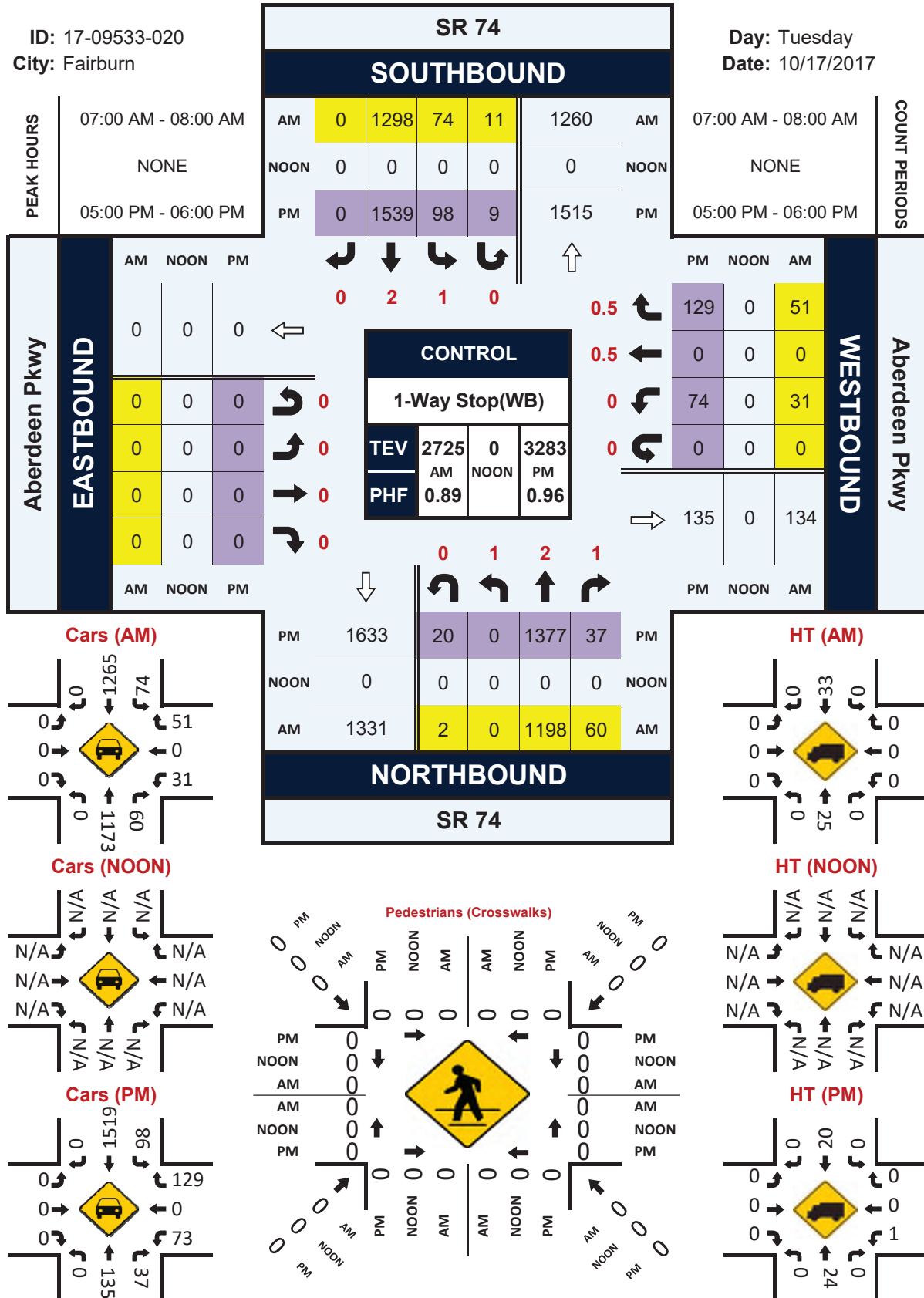


SR 74 & Aberdeen Pkwy

Peak Hour Turning Movement Count

ID: 17-09533-020
City: Fairburn

Day: Tuesday
Date: 10/17/2017



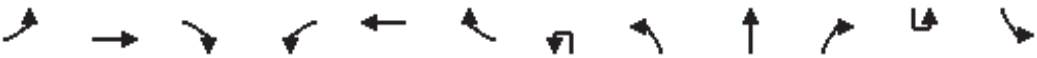


APPENDIX C: INTERSECTION ANALYSIS SYNCHRO OUTPUT

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	0	0	0	1014	6	352	4	125	674	0	5	0
Future Volume (vph)	0	0	0	1014	6	352	4	125	674	0	5	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0		5.0	5.0			
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			
Frt				1.00	1.00	0.85		1.00	1.00			
Flt Protected				0.95	0.95	1.00		0.95	1.00			
Satd. Flow (prot)				1681	1686	1583		1770	3539			
Flt Permitted				0.95	0.95	1.00		0.80	1.00			
Satd. Flow (perm)				1681	1686	1583		1490	3539			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1102	7	383	4	136	733	0	5	0
RTOR Reduction (vph)	0	0	0	0	0	104	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	551	558	279	0	140	733	0	0	0
Turn Type				Prot	NA	custom	custom	Prot	NA		Perm	
Protected Phases				3	8	3		5	2			
Permitted Phases							5				6	
Actuated Green, G (s)				20.0	20.0	20.0		5.0	30.0			
Effective Green, g (s)				20.0	20.0	20.0		5.0	30.0			
Actuated g/C Ratio				0.33	0.33	0.33		0.08	0.50			
Clearance Time (s)				5.0	5.0	5.0		5.0	5.0			
Vehicle Extension (s)				3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)				560	562	527		124	1769			
v/s Ratio Prot				0.33	c0.33	0.18			0.21			
v/s Ratio Perm								c0.09				
v/c Ratio				0.98	0.99	0.53		1.13	0.41			
Uniform Delay, d1				19.8	19.9	16.2		27.5	9.5			
Progression Factor				1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2				33.7	36.0	1.0		119.7	0.7			
Delay (s)				53.5	55.9	17.2		147.2	10.2			
Level of Service				D	E	B		F	B			
Approach Delay (s)		0.0			45.1				32.1			
Approach LOS		A			D				C			
Intersection Summary												
HCM 2000 Control Delay			34.6									
HCM 2000 Level of Service									C			
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			60.0									
Sum of lost time (s)									15.0			
Intersection Capacity Utilization			169.5%									
ICU Level of Service									H			
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	593	140
Future Volume (vph)	593	140
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3538	1583
Flt Permitted	0.95	1.00
Satd. Flow (perm)	3359	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	645	152
RTOR Reduction (vph)	0	101
Lane Group Flow (vph)	650	51
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	20.0	20.0
Effective Green, g (s)	20.0	20.0
Actuated g/C Ratio	0.33	0.33
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1119	527
v/s Ratio Prot		
v/s Ratio Perm	c0.19	0.03
v/c Ratio	0.58	0.10
Uniform Delay, d1	16.5	13.8
Progression Factor	0.99	0.98
Incremental Delay, d2	2.2	0.4
Delay (s)	18.6	13.8
Level of Service	B	B
Approach Delay (s)	17.7	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	143	0	248	0	0	0	0	539	2049	400	1539	0
Future Volume (vph)	143	0	248	0	0	0	0	539	2049	400	1539	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00					0.95	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					3539	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	155	0	270	0	0	0	0	586	2227	435	1673	0
RTOR Reduction (vph)	0	0	69	0	0	0	0	0	150	0	0	0
Lane Group Flow (vph)	155	0	201	0	0	0	0	586	2077	435	1673	0
Turn Type	Prot		Prot					NA	Perm	Prot	NA	
Protected Phases	7		7					2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	13.0		13.0					89.0	89.0	23.0	117.0	
Effective Green, g (s)	13.0		13.0					89.0	89.0	23.0	117.0	
Actuated g/C Ratio	0.09		0.09					0.64	0.64	0.16	0.84	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	164		146					2249	1006	290	2957	
v/s Ratio Prot	0.09		c0.13					0.17		c0.25	0.47	
v/s Ratio Perm									c1.31			
v/c Ratio	0.95		1.38					0.26	2.06	1.50	0.57	
Uniform Delay, d1	63.1		63.5					11.1	25.5	58.5	3.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	53.8		206.7					0.3	482.3	242.3	0.8	
Delay (s)	116.9		270.2					11.4	507.8	300.8	4.4	
Level of Service	F		F					B	F	F	A	
Approach Delay (s)		214.3			0.0			404.4			65.5	
Approach LOS		F			A			F			E	
Intersection Summary												
HCM 2000 Control Delay			255.7									
HCM 2000 Volume to Capacity ratio			1.89									
Actuated Cycle Length (s)			140.0									
Intersection Capacity Utilization			169.5%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	168	152	24	133	77	185	3	15	792	161	20	392
Future Volume (vph)	168	152	24	133	77	185	3	15	792	161	20	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.97
Frt	1.00	0.98		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1825		1770	1863	1583		1770	3539	1583		3433
Flt Permitted	0.65	1.00		0.59	1.00	1.00		0.20	1.00	1.00		0.29
Satd. Flow (perm)	1204	1825		1091	1863	1583		369	3539	1583		1032
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	183	165	26	145	84	201	3	16	861	175	22	426
RTOR Reduction (vph)	0	8	0	0	0	166	0	0	0	122	0	0
Lane Group Flow (vph)	183	183	0	145	84	35	0	19	861	53	0	448
Turn Type	pm+pt	NA		pm+pt	NA	Prot	custom	pm+pt	NA	Perm	custom	Prot
Protected Phases	7	4		3	8	8		5	2			1
Permitted Phases	4			8			5	2		2	1	
Actuated Green, G (s)	18.8	13.8		16.6	12.7	12.7		23.1	22.2	22.2		14.0
Effective Green, g (s)	18.8	13.8		16.6	12.7	12.7		23.1	22.2	22.2		14.0
Actuated g/C Ratio	0.25	0.19		0.22	0.17	0.17		0.31	0.30	0.30		0.19
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	344	340		280	320	272		132	1063	475		195
v/s Ratio Prot	c0.04	c0.10		0.03	0.05	0.02		0.00	c0.24			
v/s Ratio Perm	0.10			0.09				0.04		0.03		c0.43
v/c Ratio	0.53	0.54		0.52	0.26	0.13		0.14	0.81	0.11		2.30
Uniform Delay, d1	23.2	27.2		24.5	26.5	25.9		17.7	23.9	18.7		30.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	1.6	1.6		1.6	0.4	0.2		0.5	6.7	0.5		599.8
Delay (s)	24.7	28.8		26.1	27.0	26.1		18.2	30.6	19.2		629.7
Level of Service	C	C		C	C	C		B	C	B		F
Approach Delay (s)		26.8			26.3				28.5			
Approach LOS		C			C				C			
Intersection Summary												
HCM 2000 Control Delay	98.1			HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio	1.12											
Actuated Cycle Length (s)	73.9			Sum of lost time (s)			20.0					
Intersection Capacity Utilization	71.1%			ICU Level of Service			C					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1118	102
Future Volume (vph)	1118	102
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1215	111
RTOR Reduction (vph)	0	58
Lane Group Flow (vph)	1215	53
Turn Type	NA	Prot
Protected Phases	6	6
Permitted Phases		
Actuated Green, G (s)	35.3	35.3
Effective Green, g (s)	35.3	35.3
Actuated g/C Ratio	0.48	0.48
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1690	756
v/s Ratio Prot	0.34	0.03
v/s Ratio Perm		
v/c Ratio	0.72	0.07
Uniform Delay, d1	15.4	10.4
Progression Factor	1.00	1.00
Incremental Delay, d2	2.7	0.2
Delay (s)	18.0	10.6
Level of Service	B	B
Approach Delay (s)	172.0	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	85	32	12	44	18	94	3	30	630	28	1	64
Future Volume (vph)	85	32	12	44	18	94	3	30	630	28	1	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	0.96		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1787		1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00		0.73	1.00	1.00		0.15	1.00	1.00		0.36
Satd. Flow (perm)	1386	1787		1352	1863	1583		277	3539	1583		672
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	35	13	48	20	102	3	33	685	30	1	70
RTOR Reduction (vph)	0	11	0	0	0	88	0	0	0	14	0	0
Lane Group Flow (vph)	92	37	0	48	20	14	0	36	685	16	0	71
Turn Type	Perm	NA		Perm	NA	Perm	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		8	2	2		2	1	6
Actuated Green, G (s)	7.3	7.3		7.3	7.3	7.3		28.7	26.9	26.9		30.5
Effective Green, g (s)	7.3	7.3		7.3	7.3	7.3		28.7	26.9	26.9		30.5
Actuated g/C Ratio	0.14	0.14		0.14	0.14	0.14		0.55	0.52	0.52		0.59
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	194	251		190	262	222		204	1834	820		452
v/s Ratio Prot		0.02			0.01			0.01	0.19			c0.01
v/s Ratio Perm	c0.07			0.04		0.01		0.09		0.01		0.08
v/c Ratio	0.47	0.15		0.25	0.08	0.06		0.18	0.37	0.02		0.16
Uniform Delay, d1	20.5	19.6		19.9	19.4	19.3		6.3	7.5	6.1		4.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	1.8	0.3		0.7	0.1	0.1		0.4	0.6	0.0		0.2
Delay (s)	22.4	19.8		20.6	19.5	19.5		6.7	8.1	6.1		4.8
Level of Service	C	B		C	B	B		A	A	A		A
Approach Delay (s)		21.5			19.8				7.9			
Approach LOS		C			B				A			
Intersection Summary												
HCM 2000 Control Delay			11.0				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			51.9				Sum of lost time (s)		15.0			
Intersection Capacity Utilization			62.3%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1238	137
Future Volume (vph)	1238	137
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1346	149
RTOR Reduction (vph)	0	59
Lane Group Flow (vph)	1346	90
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	27.8	27.8
Effective Green, g (s)	27.8	27.8
Actuated g/C Ratio	0.54	0.54
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1895	847
v/s Ratio Prot	c0.38	
v/s Ratio Perm		0.06
v/c Ratio	0.71	0.11
Uniform Delay, d1	9.0	5.9
Progression Factor	1.00	1.00
Incremental Delay, d2	2.3	0.3
Delay (s)	11.3	6.2
Level of Service	B	A
Approach Delay (s)	10.5	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	10	48	21	175	41	48	4	90	838	346	9	150
Future Volume (vph)	10	48	21	175	41	48	4	90	838	346	9	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.98			1.00	1.00	0.85		1.00
Flt Protected		0.99	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1847	1583		1759			1770	3539	1583		1770
Flt Permitted		0.93	1.00		0.76			0.17	1.00	1.00		0.21
Satd. Flow (perm)		1725	1583		1385			324	3539	1583		400
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	52	23	190	45	52	4	98	911	376	10	163
RTOR Reduction (vph)	0	0	17	0	14	0	0	0	0	223	0	0
Lane Group Flow (vph)	0	63	6	0	273	0	0	102	911	153	0	173
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)		14.9	14.9		14.9			26.8	23.0	23.0		26.8
Effective Green, g (s)		14.9	14.9		14.9			26.8	23.0	23.0		26.8
Actuated g/C Ratio		0.26	0.26		0.26			0.47	0.41	0.41		0.47
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		453	415		363			250	1435	642		280
v/s Ratio Prot								0.03	0.26			c0.04
v/s Ratio Perm		0.04	0.00		c0.20			0.17		0.10		0.25
v/c Ratio		0.14	0.01		0.75			0.41	0.63	0.24		0.62
Uniform Delay, d1		16.0	15.5		19.2			10.4	13.5	11.1		9.4
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.1	0.0		8.5			1.1	2.2	0.9		4.0
Delay (s)		16.1	15.5		27.7			11.5	15.6	12.0		13.4
Level of Service		B	B		C			B	B	B		B
Approach Delay (s)		16.0			27.7				14.3			
Approach LOS		B			C				B			
Intersection Summary												
HCM 2000 Control Delay			18.7			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.80									
Actuated Cycle Length (s)			56.7			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			72.5%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1145	39
Future Volume (vph)	1145	39
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1245	42
RTOR Reduction (vph)	0	25
Lane Group Flow (vph)	1245	17
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	23.0	23.0
Effective Green, g (s)	23.0	23.0
Actuated g/C Ratio	0.41	0.41
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1435	642
v/s Ratio Prot	c0.35	
v/s Ratio Perm		0.01
v/c Ratio	0.87	0.03
Uniform Delay, d1	15.5	10.1
Progression Factor	1.00	1.00
Incremental Delay, d2	7.3	0.1
Delay (s)	22.8	10.2
Level of Service	C	B
Approach Delay (s)	21.3	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↔			↔	↔	↔	↕	↔	↔	↕	↔
Traffic Volume (vph)	25	0	8	153	0	121	18	1161	241	168	975	9
Future Volume (vph)	25	0	8	153	0	121	18	1161	241	168	975	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.97			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.96			0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1735			1770	1583	1770	3539	1583	1770	3539	1583
Flt Permitted		0.73			0.73	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1317			1367	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	27	0	9	166	0	132	20	1262	262	183	1060	10
RTOR Reduction (vph)	0	29	0	0	0	107	0	0	141	0	0	4
Lane Group Flow (vph)	0	7	0	0	166	25	20	1262	121	183	1060	6
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)		12.2			12.2	12.2	0.9	29.4	29.4	7.0	35.5	35.5
Effective Green, g (s)		12.2			12.2	12.2	0.9	29.4	29.4	7.0	35.5	35.5
Actuated g/C Ratio		0.19			0.19	0.19	0.01	0.46	0.46	0.11	0.56	0.56
Clearance Time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		252			262	303	25	1635	731	194	1975	883
v/s Ratio Prot							0.01	c0.36		c0.10	0.30	
v/s Ratio Perm		0.01			c0.12	0.02			0.08			0.00
v/c Ratio		0.03			0.63	0.08	0.80	0.77	0.17	0.94	0.54	0.01
Uniform Delay, d1		20.9			23.6	21.1	31.3	14.3	10.0	28.1	8.9	6.2
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.0			4.9	0.1	95.2	3.6	0.5	48.3	1.1	0.0
Delay (s)		20.9			28.6	21.2	126.4	17.9	10.4	76.4	9.9	6.2
Level of Service		C			C	C	F	B	B	E	A	A
Approach Delay (s)		20.9			25.3			18.0			19.6	
Approach LOS		C			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			19.4									
HCM 2000 Level of Service										B		
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			63.6							15.0		
Intersection Capacity Utilization			64.2%							C		
ICU Level of Service												
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	151	10	31	14	8	56	7	23	1200	23	1	51
Future Volume (vph)	151	10	31	14	8	56	7	23	1200	23	1	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	0.87			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1619			1770	3539	1583		1770
Flt Permitted	0.71	1.00	1.00	0.75	1.00			0.20	1.00	1.00		0.14
Satd. Flow (perm)	1325	1863	1583	1398	1619			372	3539	1583		264
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	164	11	34	15	9	61	8	25	1304	25	1	55
RTOR Reduction (vph)	0	0	28	0	50	0	0	0	0	13	0	0
Lane Group Flow (vph)	164	11	6	15	20	0	0	33	1304	12	0	56
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	9.9	9.9	9.9	9.9	9.9			28.9	27.2	27.2		30.9
Effective Green, g (s)	9.9	9.9	9.9	9.9	9.9			28.9	27.2	27.2		30.9
Actuated g/C Ratio	0.18	0.18	0.18	0.18	0.18			0.53	0.50	0.50		0.56
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	239	336	285	252	292			239	1756	785		223
v/s Ratio Prot		0.01			0.01			0.00	c0.37			c0.01
v/s Ratio Perm	c0.12		0.00	0.01				0.07		0.01		0.13
v/c Ratio	0.69	0.03	0.02	0.06	0.07			0.14	0.74	0.02		0.25
Uniform Delay, d1	21.0	18.5	18.5	18.6	18.6			6.6	11.0	7.0		7.1
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	7.9	0.0	0.0	0.1	0.1			0.3	2.9	0.0		0.6
Delay (s)	28.9	18.5	18.5	18.7	18.7			6.9	13.9	7.0		7.7
Level of Service	C	B	B	B	B			A	B	A		A
Approach Delay (s)		26.7			18.7				13.6			
Approach LOS		C			B				B			
Intersection Summary												
HCM 2000 Control Delay			13.4			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			54.8			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			64.9%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1004	62
Future Volume (vph)	1004	62
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1091	67
RTOR Reduction (vph)	0	33
Lane Group Flow (vph)	1091	34
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	28.2	28.2
Effective Green, g (s)	28.2	28.2
Actuated g/C Ratio	0.51	0.51
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1821	814
v/s Ratio Prot	0.31	
v/s Ratio Perm		0.02
v/c Ratio	0.60	0.04
Uniform Delay, d1	9.3	6.6
Progression Factor	1.00	1.00
Incremental Delay, d2	1.5	0.1
Delay (s)	10.8	6.7
Level of Service	B	A
Approach Delay (s)	10.4	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	14	188	43	21	126	76	1	223	1031	20	51	907
Future Volume (vph)	14	188	43	21	126	76	1	223	1031	20	51	907
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00		1.00			1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		0.95			1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1583		1768			1770	3539	1583	1770	3539
Flt Permitted	0.34	1.00	1.00		0.95			0.16	1.00	1.00	0.17	1.00
Satd. Flow (perm)	636	1863	1583		1688			293	3539	1583	323	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	204	47	23	137	83	1	242	1121	22	55	986
RTOR Reduction (vph)	0	0	33	0	29	0	0	0	0	13	0	0
Lane Group Flow (vph)	15	204	14	0	214	0	0	243	1121	9	55	986
Turn Type	pm+pt	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4			8			5	2		1	6
Permitted Phases	4		4	8			5	2		2	6	
Actuated Green, G (s)	17.7	17.7	17.7		11.9			30.5	25.4	25.4	25.9	23.1
Effective Green, g (s)	17.7	17.7	17.7		11.9			30.5	25.4	25.4	25.9	23.1
Actuated g/C Ratio	0.29	0.29	0.29		0.20			0.50	0.42	0.42	0.43	0.38
Clearance Time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	199	541	460		329			270	1476	660	203	1342
v/s Ratio Prot	0.00	c0.11						c0.08	0.32		0.01	0.28
v/s Ratio Perm	0.02		0.01		c0.13			c0.37		0.01	0.10	
v/c Ratio	0.08	0.38	0.03		0.65			0.90	0.76	0.01	0.27	0.73
Uniform Delay, d1	16.6	17.2	15.5		22.6			11.0	15.1	10.4	11.3	16.3
Progression Factor	1.00	1.00	1.00		1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.4	0.0		4.6			30.2	2.3	0.0	0.7	2.1
Delay (s)	16.7	17.7	15.5		27.1			41.2	17.4	10.4	12.0	18.4
Level of Service	B	B	B		C			D	B	B	B	B
Approach Delay (s)		17.2			27.1				21.5			18.0
Approach LOS		B			C				C			B
Intersection Summary												
HCM 2000 Control Delay	20.3			HCM 2000 Level of Service			C					
HCM 2000 Volume to Capacity ratio	0.89											
Actuated Cycle Length (s)	60.9			Sum of lost time (s)			20.0					
Intersection Capacity Utilization	76.5%			ICU Level of Service			D					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	5
Future Volume (vph)	5
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	5
RTOR Reduction (vph)	3
Lane Group Flow (vph)	2
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	23.1
Effective Green, g (s)	23.1
Actuated g/C Ratio	0.38
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	600
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.00
Uniform Delay, d1	11.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	11.7
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	165	56	20	83	59	79	1	9	1108	81	1	47
Future Volume (vph)	165	56	20	83	59	79	1	9	1108	81	1	47
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85	1.00	0.91			1.00	1.00	0.85		1.00
Flt Protected		0.96	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1796	1583	1770	1703			1770	3539	1583		1770
Flt Permitted		0.69	1.00	0.55	1.00			0.19	1.00	1.00		0.17
Satd. Flow (perm)		1279	1583	1018	1703			347	3539	1583		321
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	179	61	22	90	64	86	1	10	1204	88	1	51
RTOR Reduction (vph)	0	0	16	0	36	0	0	0	0	38	0	0
Lane Group Flow (vph)	0	240	6	90	114	0	0	11	1204	50	0	52
Turn Type	Perm	NA	Perm	Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		4			8				2			
Permitted Phases	4		4	8			2	2		2	6	6
Actuated Green, G (s)		14.9	14.9	14.9	14.9			32.5	32.5	32.5		32.5
Effective Green, g (s)		14.9	14.9	14.9	14.9			32.5	32.5	32.5		32.5
Actuated g/C Ratio		0.26	0.26	0.26	0.26			0.57	0.57	0.57		0.57
Clearance Time (s)		5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		332	410	264	442			196	2003	896		181
v/s Ratio Prot					0.07				c0.34			
v/s Ratio Perm		c0.19	0.00	0.09				0.03		0.03		0.16
v/c Ratio		0.72	0.01	0.34	0.26			0.06	0.60	0.06		0.29
Uniform Delay, d1		19.4	15.8	17.3	16.9			5.6	8.2	5.6		6.4
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		7.6	0.0	0.8	0.3			0.5	1.3	0.1		4.0
Delay (s)		26.9	15.8	18.0	17.2			6.1	9.5	5.7		10.4
Level of Service		C	B	B	B			A	A	A		B
Approach Delay (s)		26.0			17.5				9.2			
Approach LOS		C			B				A			
Intersection Summary												
HCM 2000 Control Delay			11.2			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			57.4			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			71.5%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1065	105
Future Volume (vph)	1065	105
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1158	114
RTOR Reduction (vph)	0	49
Lane Group Flow (vph)	1158	65
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	32.5	32.5
Effective Green, g (s)	32.5	32.5
Actuated g/C Ratio	0.57	0.57
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2003	896
v/s Ratio Prot	0.33	
v/s Ratio Perm		0.04
v/c Ratio	0.58	0.07
Uniform Delay, d1	8.0	5.6
Progression Factor	1.00	1.00
Incremental Delay, d2	1.2	0.2
Delay (s)	9.3	5.8
Level of Service	A	A
Approach Delay (s)	9.0	
Approach LOS	A	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	139	58	73	107	356	22	1121	164	310	834	70
Future Volume (vph)	82	139	58	73	107	356	22	1121	164	310	834	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1780		1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.68	1.00		0.56	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1271	1780		1046	1863	1583	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	151	63	79	116	387	24	1218	178	337	907	76
RTOR Reduction (vph)	0	29	0	0	0	190	0	0	110	0	0	37
Lane Group Flow (vph)	89	185	0	79	116	197	24	1218	68	337	907	39
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1		6
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)	12.0	12.0		12.0	12.0	12.0	0.9	22.3	22.3	8.7	30.1	30.1
Effective Green, g (s)	12.0	12.0		12.0	12.0	12.0	0.9	22.3	22.3	8.7	30.1	30.1
Actuated g/C Ratio	0.21	0.21		0.21	0.21	0.21	0.02	0.38	0.38	0.15	0.52	0.52
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	262	368		216	385	327	27	1360	608	514	1836	821
v/s Ratio Prot		0.10			0.06		0.01	c0.34		c0.10	0.26	
v/s Ratio Perm	0.07			0.08		c0.12			0.04			0.02
v/c Ratio	0.34	0.50		0.37	0.30	0.60	0.89	0.90	0.11	0.66	0.49	0.05
Uniform Delay, d1	19.6	20.4		19.7	19.5	20.8	28.5	16.8	11.5	23.2	9.0	6.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.1		1.1	0.4	3.1	123.9	9.5	0.4	3.0	1.0	0.1
Delay (s)	20.4	21.5		20.8	19.9	23.9	152.4	26.2	11.9	26.2	10.0	7.0
Level of Service	C	C		C	B	C	F	C	B	C	A	A
Approach Delay (s)		21.1			22.7			26.5			14.0	
Approach LOS		C			C			C			B	
Intersection Summary												
HCM 2000 Control Delay	20.9			HCM 2000 Level of Service			C					
HCM 2000 Volume to Capacity ratio	0.76											
Actuated Cycle Length (s)	58.0			Sum of lost time (s)			15.0					
Intersection Capacity Utilization	71.5%			ICU Level of Service			C					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	63	26	39	129	23	44	1	52	1081	151	1	28
Future Volume (vph)	63	26	39	129	23	44	1	52	1081	151	1	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00	1.00	0.43	1.00	1.00		0.16	1.00	1.00		0.16
Satd. Flow (perm)	1380	1863	1583	808	1863	1583		304	3539	1583		293
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	68	28	42	140	25	48	1	57	1175	164	1	30
RTOR Reduction (vph)	0	0	37	0	0	36	0	0	0	81	0	0
Lane Group Flow (vph)	68	28	5	140	25	12	0	58	1175	83	0	31
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4		3	8			5	2			1
Permitted Phases	4		4	8		8	5	2		2	1	6
Actuated Green, G (s)	7.1	7.1	7.1	15.9	15.9	15.9		36.0	33.3	33.3		34.2
Effective Green, g (s)	7.1	7.1	7.1	15.9	15.9	15.9		36.0	33.3	33.3		34.2
Actuated g/C Ratio	0.11	0.11	0.11	0.24	0.24	0.24		0.55	0.50	0.50		0.52
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	148	200	170	250	448	381		225	1785	798		192
v/s Ratio Prot		0.02		c0.03	0.01			c0.01	c0.33			0.00
v/s Ratio Perm	0.05		0.00	c0.10		0.01		0.13		0.05		0.08
v/c Ratio	0.46	0.14	0.03	0.56	0.06	0.03		0.26	0.66	0.10		0.16
Uniform Delay, d1	27.6	26.7	26.4	21.4	19.3	19.2		8.3	12.1	8.5		8.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	2.3	0.3	0.1	2.9	0.1	0.0		0.6	1.9	0.3		0.4
Delay (s)	29.9	27.0	26.4	24.2	19.3	19.2		8.9	14.0	8.8		9.2
Level of Service	C	C	C	C	B	B		A	B	A		A
Approach Delay (s)		28.3			22.5				13.2			
Approach LOS		C			C				B			
Intersection Summary												
HCM 2000 Control Delay			14.9				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.67									
Actuated Cycle Length (s)			66.0				Sum of lost time (s)		20.0			
Intersection Capacity Utilization			60.4%				ICU Level of Service		B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1023	53
Future Volume (vph)	1023	53
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1112	58
RTOR Reduction (vph)	0	30
Lane Group Flow (vph)	1112	28
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	32.4	32.4
Effective Green, g (s)	32.4	32.4
Actuated g/C Ratio	0.49	0.49
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1737	777
v/s Ratio Prot	0.31	
v/s Ratio Perm		0.02
v/c Ratio	0.64	0.04
Uniform Delay, d1	12.5	8.7
Progression Factor	1.00	1.00
Incremental Delay, d2	1.8	0.1
Delay (s)	14.3	8.8
Level of Service	B	A
Approach Delay (s)	13.9	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	40	18	134	16	225	5	1004	84	87	1071	17
Future Volume (vph)	37	40	18	134	16	225	5	1004	84	87	1071	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.75	1.00	1.00	0.73	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1390	1863	1583	1358	1863	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	40	43	20	146	17	245	5	1091	91	95	1164	18
RTOR Reduction (vph)	0	0	16	0	0	174	0	0	48	0	0	9
Lane Group Flow (vph)	40	43	4	146	17	71	5	1091	43	95	1164	9
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Actuated Green, G (s)	11.3	11.3	11.3	11.3	11.3	11.3	0.9	27.2	27.2	3.9	30.2	30.2
Effective Green, g (s)	11.3	11.3	11.3	11.3	11.3	11.3	0.9	27.2	27.2	3.9	30.2	30.2
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.47	0.47	0.07	0.53	0.53
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	273	366	311	267	366	311	27	1677	750	120	1861	832
v/s Ratio Prot		0.02			0.01		0.00	0.31		c0.05	c0.33	
v/s Ratio Perm	0.03		0.00	c0.11		0.04			0.03			0.01
v/c Ratio	0.15	0.12	0.01	0.55	0.05	0.23	0.19	0.65	0.06	0.79	0.63	0.01
Uniform Delay, d1	19.1	19.0	18.6	20.7	18.7	19.4	27.9	11.5	8.2	26.3	9.6	6.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.1	0.0	2.3	0.1	0.4	3.3	2.0	0.1	29.0	1.6	0.0
Delay (s)	19.3	19.1	18.6	23.0	18.7	19.8	31.2	13.5	8.3	55.3	11.2	6.5
Level of Service	B	B	B	C	B	B	C	B	A	E	B	A
Approach Delay (s)		19.1			20.9			13.1			14.4	
Approach LOS		B			C			B			B	
Intersection Summary												
HCM 2000 Control Delay			15.0									
HCM 2000 Volume to Capacity ratio			0.65									
Actuated Cycle Length (s)			57.4									
Intersection Capacity Utilization			60.4%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	132	96	11	1125	78	26	109	1245
Future Volume (vph)	132	96	11	1125	78	26	109	1245
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.20	1.00	1.00		0.13	1.00
Satd. Flow (perm)	1770	1583	375	3539	1583		248	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	143	104	12	1223	85	28	118	1353
RTOR Reduction (vph)	0	93	0	0	40	0	0	0
Lane Group Flow (vph)	143	11	12	1223	45	0	146	1353
Turn Type	Prot	Prot	Perm	NA	Perm	custom	pm+pt	NA
Protected Phases	3	3		2			1	6
Permitted Phases			2		2	1	6	
Actuated Green, G (s)	5.7	5.7	27.8	27.8	27.8		36.8	36.8
Effective Green, g (s)	5.7	5.7	27.8	27.8	27.8		36.8	36.8
Actuated g/C Ratio	0.11	0.11	0.53	0.53	0.53		0.70	0.70
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	192	171	198	1873	838		289	2480
v/s Ratio Prot	c0.08	0.01		c0.35			0.04	c0.38
v/s Ratio Perm			0.03		0.03		0.31	
v/c Ratio	0.74	0.07	0.06	0.65	0.05		0.51	0.55
Uniform Delay, d1	22.7	21.0	6.0	8.9	6.0		5.3	3.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	0.99
Incremental Delay, d2	14.5	0.2	0.6	1.8	0.1		1.4	0.9
Delay (s)	37.2	21.2	6.6	10.7	6.1		6.7	4.6
Level of Service	D	C	A	B	A		A	A
Approach Delay (s)	30.4			10.3				4.8
Approach LOS	C			B				A
Intersection Summary								
HCM 2000 Control Delay			9.3		HCM 2000 Level of Service			A
HCM 2000 Volume to Capacity ratio			0.69					
Actuated Cycle Length (s)			52.5		Sum of lost time (s)		15.0	
Intersection Capacity Utilization			58.4%		ICU Level of Service		B	
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	722	1023	541	206	747	132	459	707	102	106	821	414
Future Volume (vph)	722	1023	541	206	747	132	459	707	102	106	821	414
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	785	1112	588	224	812	143	499	768	111	115	892	450
RTOR Reduction (vph)	0	0	196	0	0	109	0	0	81	0	0	185
Lane Group Flow (vph)	785	1112	392	224	812	34	499	768	30	115	892	265
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	20.6	20.6	6.4	19.0	19.0
Effective Green, g (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	20.6	20.6	6.4	19.0	19.0
Actuated g/C Ratio	0.14	0.32	0.32	0.07	0.24	0.24	0.11	0.27	0.27	0.08	0.25	0.25
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	496	1117	499	225	838	374	361	1378	429	149	1271	395
v/s Ratio Prot	c0.23	c0.31		0.07	0.23		c0.15	0.15		0.06	c0.18	
v/s Ratio Perm			0.25			0.02			0.02			0.17
v/c Ratio	1.58	1.00	0.78	1.00	0.97	0.09	1.38	0.56	0.07	0.77	0.70	0.67
Uniform Delay, d1	32.5	25.9	23.7	35.5	28.7	22.6	34.0	23.8	20.6	34.1	25.9	25.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	271.7	25.7	7.9	58.4	23.4	0.1	188.5	1.6	0.3	21.5	3.3	8.7
Delay (s)	304.2	51.6	31.6	93.9	52.2	22.7	222.5	25.4	20.9	55.6	29.2	34.4
Level of Service	F	D	C	F	D	C	F	C	C	E	C	C
Approach Delay (s)		126.7			56.5			96.4			32.9	
Approach LOS		F			E			F			C	
Intersection Summary												
HCM 2000 Control Delay			86.5				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.11									
Actuated Cycle Length (s)			76.0				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			86.9%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018



Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	1	8	223	282	225	405	38
Future Volume (Veh/h)	1	8	223	282	225	405	38
Sign Control		Stop			Free	Free	
Grade		0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	9	242	307	245	440	41
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None	None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked	0.00						
vC, conflicting volume	0	1320	460	481			
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	0	1320	460	481			
tC, single (s)	0.0	6.4	6.2	4.1			
tC, 2 stage (s)							
tF (s)	0.0	3.5	3.3	2.2			
p0 queue free %	0	93	60	72			
cM capacity (veh/h)	0	124	601	1082			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1		
Volume Total	9	242	307	245	481		
Volume Left	9	0	307	0	0		
Volume Right	0	242	0	0	41		
cSH	124	601	1082	1700	1700		
Volume to Capacity	0.07	0.40	0.28	0.14	0.28		
Queue Length 95th (ft)	6	48	29	0	0		
Control Delay (s)	36.3	15.0	9.6	0.0	0.0		
Lane LOS	E	B	A				
Approach Delay (s)	15.7		5.4		0.0		
Approach LOS	C						
Intersection Summary							
Average Delay			5.4				
Intersection Capacity Utilization			52.6%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018

								
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR	
Lane Configurations								
Traffic Volume (veh/h)	33	98	23	159	472	582	51	
Future Volume (Veh/h)	33	98	23	159	472	582	51	
Sign Control	Stop				Free	Free		
Grade	0%				0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	36	107	0	173	513	633	55	
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None	None		
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00					
vC, conflicting volume	1236	316	0	688				
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1236	316	0	688				
tC, single (s)	6.8	6.9	0.0	4.1				
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0	2.2				
p0 queue free %	74	84	0	81				
cM capacity (veh/h)	136	679	0	902				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	36	107	173	256	256	316	316	55
Volume Left	36	0	173	0	0	0	0	0
Volume Right	0	107	0	0	0	0	0	55
cSH	136	679	902	1700	1700	1700	1700	1700
Volume to Capacity	0.26	0.16	0.19	0.15	0.15	0.19	0.19	0.03
Queue Length 95th (ft)	25	14	18	0	0	0	0	0
Control Delay (s)	40.7	11.3	9.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	E	B	A					
Approach Delay (s)	18.7		2.5			0.0		
Approach LOS	C							
Intersection Summary								
Average Delay			2.9					
Intersection Capacity Utilization			42.2%		ICU Level of Service			A
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	167	9	6	642	426	13	19	616
Future Volume (Veh/h)	167	9	6	642	426	13	19	616
Sign Control	Stop			Free			Free	
Grade	0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	182	10	0	698	463	0	21	670
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	None				None			
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00			0.00		
vC, conflicting volume	1075	349	0			0	698	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1075	349	0			0	698	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	13	98	0			0	98	
cM capacity (veh/h)	209	647	0			0	894	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	192	349	349	463	0	21	335	335
Volume Left	182	0	0	0	0	21	0	0
Volume Right	10	0	0	463	0	0	0	0
cSH	217	1700	1700	1700	1700	894	1700	1700
Volume to Capacity	0.88	0.21	0.21	0.27	0.00	0.02	0.20	0.20
Queue Length 95th (ft)	177	0	0	0	0	2	0	0
Control Delay (s)	81.0	0.0	0.0	0.0	0.0	9.1	0.0	0.0
Lane LOS	F					A		
Approach Delay (s)	81.0	0.0				0.3		
Approach LOS	F							
Intersection Summary								
Average Delay			7.7					
Intersection Capacity Utilization			40.9%		ICU Level of Service		A	
Analysis Period (min)			15					
Description: m								

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	1	68	8	29	5	0	1	13	4	703	113	5
Future Volume (Veh/h)	1	68	8	29	5	0	1	13	4	703	113	5
Sign Control			Stop			Stop				Free		
Grade			0%			0%				0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	74	9	32	5	0	1	0	4	764	123	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)							12					
Median type										None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00	0.72	0.72	0.72	0.72	0.72		0.00	0.72			0.00
vC, conflicting volume	0	1775	2280	688	1505	2157	382	0	1377			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1306	2004	0	932	1834	382	0	755			0
tC, single (s)	0.0	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0
tC, 2 stage (s)												
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	0	12	79	96	96	100	100	0	99			0
cM capacity (veh/h)	0	84	42	784	127	54	616	0	615			0
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	115	5	1	4	382	382	123	4	688	688	37	
Volume Left	74	5	0	4	0	0	0	4	0	0	0	
Volume Right	32	0	1	0	0	0	123	0	0	0	37	
cSH	101	127	0	615	1700	1700	1700	759	1700	1700	1700	
Volume to Capacity	1.13	0.04	Err	0.01	0.22	0.22	0.07	0.01	0.41	0.41	0.02	
Queue Length 95th (ft)	187	3	Err	0	0	0	0	0	0	0	0	
Control Delay (s)	208.9	34.5	Err	10.9	0.0	0.0	0.0	9.8	0.0	0.0	0.0	
Lane LOS	F	D	F	B				A				
Approach Delay (s)	208.9	Err		0.0				0.0				
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			54.4%		ICU Level of Service				A			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 8: SR 74 & Meadow Glen Parkway

10/17/2018

					
Movement	SBL	SBT	SBR		
Lane Configurations		 			
Traffic Volume (veh/h)	4	1267	34		
Future Volume (Veh/h)	4	1267	34		
Sign Control	Free				
Grade	0%				
Peak Hour Factor	0.92	0.92	0.92		
Hourly flow rate (vph)	4	1377	37		
Pedestrians					
Lane Width (ft)					
Walking Speed (ft/s)					
Percent Blockage					
Right turn flare (veh)					
Median type	None				
Median storage veh					
Upstream signal (ft)	1262				
pX, platoon unblocked					
vC, conflicting volume	887				
vC1, stage 1 conf vol					
vC2, stage 2 conf vol					
vCu, unblocked vol	887				
tC, single (s)	4.1				
tC, 2 stage (s)					
tF (s)	2.2				
p0 queue free %	99				
cM capacity (veh/h)	759				
Direction, Lane #					

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	12	0	81	18	2	9	19	112	1359	16	1	1243
Future Volume (Veh/h)	12	0	81	18	2	9	19	112	1359	16	1	1243
Sign Control		Stop			Stop				Free			Free
Grade		0%			0%				0%			0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	0	88	20	2	10	0	122	1477	17	1	1351
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None			None
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	2346	3074	676	2486	3074	738	0	1351			1477	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2346	3074	676	2486	3074	738	0	1351			1477	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	0	100	78	0	78	97	0	76			100	
cM capacity (veh/h)	13	9	396	9	9	360	0	505			452	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	101	32	122	738	738	17	1	676	676	39		
Volume Left	13	20	122	0	0	0	1	0	0	0		
Volume Right	88	10	0	0	0	17	0	0	0	39		
cSH	81	14	505	1700	1700	1700	452	1700	1700	1700		
Volume to Capacity	1.25	2.37	0.24	0.43	0.43	0.01	0.00	0.40	0.40	0.02		
Queue Length 95th (ft)	189	120	23	0	0	0	0	0	0	0		
Control Delay (s)	273.7	1195.7	14.4	0.0	0.0	0.0	13.0	0.0	0.0	0.0		
Lane LOS	F	F	B				B					
Approach Delay (s)	273.7	1195.7	1.1				0.0					
Approach LOS	F	F										
Intersection Summary												
Average Delay			21.6									
Intersection Capacity Utilization			57.2%			ICU Level of Service			B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	36
Future Volume (Veh/h)	36
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	39
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

																					
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR									
Lane Configurations																					
Traffic Volume (veh/h)	0	0	40	0	0	305	11	1818	37	233	1354	15									
Future Volume (Veh/h)	0	0	40	0	0	305	11	1818	37	233	1354	15									
Sign Control	Stop			Stop			Free			Free											
Grade	0%			0%			0%			0%											
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92									
Hourly flow rate (vph)	0	0	43	0	0	332	12	1976	40	253	1472	16									
Pedestrians																					
Lane Width (ft)																					
Walking Speed (ft/s)																					
Percent Blockage																					
Right turn flare (veh)																					
Median type							None			None											
Median storage (veh)																					
Upstream signal (ft)																					
pX, platoon unblocked																					
vC, conflicting volume	2990	3978	736	3242	3978	988	1472				1976										
vC1, stage 1 conf vol																					
vC2, stage 2 conf vol																					
vCu, unblocked vol	2990	3978	736	3242	3978	988	1472				1976										
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1										
tC, 2 stage (s)																					
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2										
p0 queue free %	0	100	88	100	100	0	97				13										
cM capacity (veh/h)	0	0	361	1	0	246	454				289										
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4											
Volume Total	43	332	12	988	988	40	253	736	736	16											
Volume Left	0	0	12	0	0	0	253	0	0	0											
Volume Right	43	332	0	0	0	40	0	0	0	16											
cSH	361	246	454	1700	1700	1700	289	1700	1700	1700											
Volume to Capacity	0.12	1.35	0.03	0.58	0.58	0.02	0.87	0.43	0.43	0.01											
Queue Length 95th (ft)	10	444	2	0	0	0	193	0	0	0											
Control Delay (s)	16.3	221.1	13.1	0.0	0.0	0.0	64.8	0.0	0.0	0.0											
Lane LOS	C	F	B				F														
Approach Delay (s)	16.3	221.1	0.1				9.4														
Approach LOS	C	F																			
Intersection Summary																					
Average Delay			21.9																		
Intersection Capacity Utilization			75.8%	ICU Level of Service					D												
Analysis Period (min)			15																		

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	9	4	77	0	3	12	38	1289	1	1	1	1106
Future Volume (Veh/h)	9	4	77	0	3	12	38	1289	1	1	1	1106
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	10	4	84	0	3	13	41	1401	1	0	1	1202
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None				None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	1988	2687	601	2172	2688	701	1202	0				1401
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1988	2687	601	2172	2688	701	1202	0				1401
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	0.0				4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	0.0				2.2
p0 queue free %	66	80	81	100	85	97	93	0				100
cM capacity (veh/h)	29	20	443	17	20	381	576	0				484
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	98	16	41	934	468	1	601	601	2			
Volume Left	10	0	41	0	0	1	0	0	0			
Volume Right	84	13	0	0	1	0	0	0	2			
cSH	134	86	576	1700	1700	484	1700	1700	1700			
Volume to Capacity	0.73	0.19	0.07	0.55	0.28	0.00	0.35	0.35	0.00			
Queue Length 95th (ft)	106	16	6	0	0	0	0	0	0			
Control Delay (s)	83.8	55.9	11.7	0.0	0.0	12.5	0.0	0.0	0.0			
Lane LOS	F	F	B				B					
Approach Delay (s)	83.8	55.9	0.3	0.0								
Approach LOS	F	F										
Intersection Summary												
Average Delay	3.5											
Intersection Capacity Utilization	54.5%			ICU Level of Service				A				
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	2
Future Volume (Veh/h)	2
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	2
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	3	172	18	0	63	22	116	1012	43	1	48		
Future Volume (Veh/h)	0	3	172	18	0	63	22	116	1012	43	1	48		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	3	187	20	0	68	0	126	1100	47	0	52		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage veh														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	2160	2710	627	2084	2710	550	0	1254					0	1100
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	2160	2710	627	2084	2710	550	0	1254					0	1100
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	80	56	0	100	86	0	77					0	92
cM capacity (veh/h)	18	15	426	11	15	479	0	551					0	630
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4			
Volume Total	3	187	88	126	550	550	47	52	627	627	1			
Volume Left	0	0	20	126	0	0	0	52	0	0	0			
Volume Right	0	187	68	0	0	0	47	0	0	0	1			
cSH	15	426	46	551	1700	1700	1700	630	1700	1700	1700			
Volume to Capacity	0.20	0.44	1.92	0.23	0.32	0.32	0.03	0.08	0.37	0.37	0.00			
Queue Length 95th (ft)	14	55	224	22	0	0	0	7	0	0	0			
Control Delay (s)	305.3	19.9	623.5	13.5	0.0	0.0	0.0	11.2	0.0	0.0	0.0			
Lane LOS	F	C	F	B	B									
Approach Delay (s)	24.4		623.5	1.3	0.4									
Approach LOS	C		F											
Intersection Summary														
Average Delay	21.6													
Intersection Capacity Utilization	68.4%			ICU Level of Service					C					
Analysis Period (min)	15													

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1154	1
Future Volume (Veh/h)	1154	1
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1254	1
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	0	1	32	0	72	17	0	1183	34	3	23		
Future Volume (Veh/h)	0	0	1	32	0	72	17	0	1183	34	3	23		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	0	1	35	0	78	0	0	1286	37	0	25		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage (veh)														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	2138	2782	723	2060	2782	643	0	1446					0	1286
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	2138	2782	723	2060	2782	643	0	1446					0	1286
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	100	100	0	100	81	0	100					0	95
cM capacity (veh/h)	22	18	369	31	18	416	0	465					0	535
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3				
Volume Total	1	35	78	0	643	643	37	25	963	483				
Volume Left	0	35	0	0	0	0	0	25	0	0				
Volume Right	1	0	78	0	0	0	37	0	0	1				
cSH	369	31	416	1700	1700	1700	1700	535	1700	1700				
Volume to Capacity	0.00	1.14	0.19	0.00	0.38	0.38	0.02	0.05	0.57	0.28				
Queue Length 95th (ft)	0	98	17	0	0	0	0	4	0	0				
Control Delay (s)	14.8	403.2	15.6	0.0	0.0	0.0	0.0	12.1	0.0	0.0				
Lane LOS	B	F	C					B						
Approach Delay (s)	14.8	135.7	0.0				0.2							
Approach LOS	B	F												
Intersection Summary														
Average Delay	5.4													
Intersection Capacity Utilization	54.6%			ICU Level of Service					A					
Analysis Period (min)	15													

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	1329	1
Future Volume (Veh/h)	1329	1
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1445	1
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

									
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Lane Configurations									
Traffic Volume (veh/h)	31	51	2	1198	60	11	74	1298	
Future Volume (Veh/h)	31	51	2	1198	60	11	74	1298	
Sign Control	Stop			Free			Free		
Grade	0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	34	55	0	1302	65	0	80	1411	
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None				None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked			0.00			0.00			
vC, conflicting volume	2168	651	0			0	1302		
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2168	651	0			0	1302		
tC, single (s)	6.8	6.9	0.0			0.0	4.1		
tC, 2 stage (s)									
tF (s)	3.5	3.3	0.0			0.0	2.2		
p0 queue free %	0	87	0			0	85		
cM capacity (veh/h)	34	411	0			0	528		
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	34	55	651	651	65	0	80	706	706
Volume Left	34	0	0	0	0	0	80	0	0
Volume Right	0	55	0	0	65	0	0	0	0
cSH	34	411	1700	1700	1700	1700	528	1700	1700
Volume to Capacity	1.00	0.13	0.38	0.38	0.04	0.00	0.15	0.41	0.41
Queue Length 95th (ft)	89	11	0	0	0	0	13	0	0
Control Delay (s)	329.0	15.1	0.0	0.0	0.0	0.0	13.0	0.0	0.0
Lane LOS	F	C	B						
Approach Delay (s)	135.0	0.0		0.7					
Approach LOS									
Intersection Summary									
Average Delay			4.4						
Intersection Capacity Utilization			52.5%		ICU Level of Service			A	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	1580	1	250	1	190	536	0	0	619
Future Volume (vph)	0	0	0	1580	1	250	1	190	536	0	0	619
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0		5.0	5.0			5.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.95
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1681	1685	1583		1770	3539			3539
Flt Permitted				0.95	0.95	1.00		0.57	1.00			1.00
Satd. Flow (perm)				1681	1685	1583		1064	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1717	1	272	1	207	583	0	0	673
RTOR Reduction (vph)	0	0	0	0	0	172	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	858	860	100	0	208	583	0	0	673
Turn Type				Prot	NA	custom	custom	Prot	NA			NA
Protected Phases				3	8	3		5	2			6
Permitted Phases							5					
Actuated Green, G (s)				19.0	19.0	19.0		7.0	31.0			19.0
Effective Green, g (s)				19.0	19.0	19.0		7.0	31.0			19.0
Actuated g/C Ratio				0.32	0.32	0.32		0.12	0.52			0.32
Clearance Time (s)				5.0	5.0	5.0		5.0	5.0			5.0
Vehicle Extension (s)				3.0	3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)				532	533	501		124	1828			1120
v/s Ratio Prot				c0.51	0.51	0.06			0.16			c0.19
v/s Ratio Perm								c0.20				
v/c Ratio				1.61	1.61	0.20		1.68	0.32			0.60
Uniform Delay, d1				20.5	20.5	15.0		26.5	8.4			17.3
Progression Factor				1.00	1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2				284.4	284.7	0.2		337.3	0.5			2.4
Delay (s)				304.9	305.2	15.2		363.8	8.9			19.7
Level of Service				F	F	B		F	A			B
Approach Delay (s)		0.0			265.4				102.2			18.5
Approach LOS		A			F				F			B
Intersection Summary												
HCM 2000 Control Delay			167.9				HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio			1.19									
Actuated Cycle Length (s)			60.0				Sum of lost time (s)		15.0			
Intersection Capacity Utilization			156.3%				ICU Level of Service		H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	256
Future Volume (vph)	256
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	278
RTOR Reduction (vph)	190
Lane Group Flow (vph)	88
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	19.0
Effective Green, g (s)	19.0
Actuated g/C Ratio	0.32
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	501
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.18
Uniform Delay, d1	14.8
Progression Factor	1.00
Incremental Delay, d2	0.8
Delay (s)	15.6
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	114	0	211	0	0	0	0	588	1338	325	2380	0
Future Volume (vph)	114	0	211	0	0	0	0	588	1338	325	2380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00					0.95	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					3539	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	124	0	229	0	0	0	0	639	1454	353	2587	0
RTOR Reduction (vph)	0	0	44	0	0	0	0	0	219	0	0	0
Lane Group Flow (vph)	124	0	185	0	0	0	0	639	1235	353	2587	0
Turn Type	Prot		Prot					NA	Perm	Prot	NA	
Protected Phases	7		7					2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	19.2		19.2					82.8	82.8	32.2	120.0	
Effective Green, g (s)	19.2		19.2					82.8	82.8	32.2	120.0	
Actuated g/C Ratio	0.13		0.13					0.55	0.55	0.22	0.80	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	227		203					1964	878	381	2846	
v/s Ratio Prot	0.07		c0.12					0.18		0.20	c0.73	
v/s Ratio Perm									c0.78			
v/c Ratio	0.55		0.91					0.33	1.41	0.93	0.91	
Uniform Delay, d1	60.9		64.1					18.0	33.2	57.3	10.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.7		38.4					0.4	189.8	28.1	5.6	
Delay (s)	63.6		102.6					18.5	223.0	85.4	16.2	
Level of Service	E		F					B	F	F	B	
Approach Delay (s)		88.9			0.0			160.6			24.5	
Approach LOS		F			A			F			C	
Intersection Summary												
HCM 2000 Control Delay			81.6									
HCM 2000 Volume to Capacity ratio			1.23									
Actuated Cycle Length (s)			149.2									
Intersection Capacity Utilization			156.3%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	148	91	42	208	78	305	13	44	1364	115	43	235
Future Volume (vph)	148	91	42	208	78	305	13	44	1364	115	43	235
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.97
Frt	1.00	0.95		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1774		1770	1863	1583		1770	3539	1583		3433
Flt Permitted	0.70	1.00		0.50	1.00	1.00		0.12	1.00	1.00		0.17
Satd. Flow (perm)	1307	1774		928	1863	1583		219	3539	1583		628
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	161	99	46	226	85	332	14	48	1483	125	47	255
RTOR Reduction (vph)	0	17	0	0	0	260	0	0	0	80	0	0
Lane Group Flow (vph)	161	128	0	226	85	72	0	62	1483	45	0	302
Turn Type	pm+pt	NA		pm+pt	NA	Prot	custom	pm+pt	NA	Perm	custom	Prot
Protected Phases	7	4		3	8	8		5	2			1
Permitted Phases	4			8			5	2		2	1	
Actuated Green, G (s)	17.1	12.1		19.1	13.1	13.1		38.0	34.1	34.1		23.0
Effective Green, g (s)	17.1	12.1		19.1	13.1	13.1		38.0	34.1	34.1		23.0
Actuated g/C Ratio	0.18	0.13		0.20	0.14	0.14		0.40	0.36	0.36		0.24
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	259	225		239	256	217		150	1267	567		151
v/s Ratio Prot	0.03	0.07		c0.06	0.05	0.05		0.02	c0.42			
v/s Ratio Perm	0.08			c0.13				0.15		0.03		c0.48
v/c Ratio	0.62	0.57		0.95	0.33	0.33		0.41	1.17	0.08		2.00
Uniform Delay, d1	35.4	39.1		36.9	37.1	37.1		21.8	30.6	20.2		36.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	4.6	3.3		43.0	0.8	0.9		1.8	85.5	0.3		472.7
Delay (s)	40.0	42.3		79.9	37.9	38.0		23.7	116.0	20.4		508.8
Level of Service	D	D		E	D	D		C	F	C		F
Approach Delay (s)		41.1			52.7				105.4			
Approach LOS		D			D				F			
Intersection Summary												
HCM 2000 Control Delay			88.5				HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio			1.38									
Actuated Cycle Length (s)			95.2				Sum of lost time (s)		20.0			
Intersection Capacity Utilization			89.4%				ICU Level of Service		E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1723	110
Future Volume (vph)	1723	110
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1873	120
RTOR Reduction (vph)	0	53
Lane Group Flow (vph)	1873	67
Turn Type	NA	Prot
Protected Phases	6	6
Permitted Phases		
Actuated Green, G (s)	53.2	53.2
Effective Green, g (s)	53.2	53.2
Actuated g/C Ratio	0.56	0.56
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1977	884
v/s Ratio Prot	0.53	0.04
v/s Ratio Perm		
v/c Ratio	0.95	0.08
Uniform Delay, d1	19.7	9.7
Progression Factor	1.00	1.00
Incremental Delay, d2	11.1	0.2
Delay (s)	30.8	9.8
Level of Service	C	A
Approach Delay (s)	92.6	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	3	107	20	24	60	14	70	13	67	1355	42	8
Future Volume (vph)	3	107	20	24	60	14	70	13	67	1355	42	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00	
Frt		1.00	0.92		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1770	1711		1770	1863	1583		1770	3539	1583	
Flt Permitted		0.75	1.00		0.73	1.00	1.00		0.09	1.00	1.00	
Satd. Flow (perm)		1393	1711		1352	1863	1583		163	3539	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	3	116	22	26	65	15	76	14	73	1473	46	9
RTOR Reduction (vph)	0	0	23	0	0	0	66	0	0	0	18	0
Lane Group Flow (vph)	0	119	25	0	65	15	10	0	87	1473	28	0
Turn Type	Perm	Perm	NA		Perm	NA	Perm	Perm	pm+pt	NA	Perm	custom
Protected Phases			4			8			5	2		
Permitted Phases	4	4			8		8	2	2		2	1
Actuated Green, G (s)		9.9	9.9		9.9	9.9	9.9		49.7	45.8	45.8	
Effective Green, g (s)		9.9	9.9		9.9	9.9	9.9		49.7	45.8	45.8	
Actuated g/C Ratio		0.13	0.13		0.13	0.13	0.13		0.67	0.61	0.61	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)		184	227		179	247	210		192	2172	971	
v/s Ratio Prot			0.01			0.01			c0.02	0.42		
v/s Ratio Perm		c0.09			0.05		0.01		0.28		0.02	
v/c Ratio		0.65	0.11		0.36	0.06	0.05		0.45	0.68	0.03	
Uniform Delay, d1		30.7	28.5		29.5	28.3	28.2		12.3	9.5	5.7	
Progression Factor		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		7.6	0.2		1.3	0.1	0.1		1.7	1.7	0.1	
Delay (s)		38.3	28.7		30.7	28.4	28.3		14.0	11.3	5.7	
Level of Service		D	C		C	C	C		B	B	A	
Approach Delay (s)			35.5			29.3				11.2		
Approach LOS			D			C				B		
Intersection Summary												
HCM 2000 Control Delay			15.7									
HCM 2000 Volume to Capacity ratio			0.81									
Actuated Cycle Length (s)			74.6									
Intersection Capacity Utilization			78.2%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	80	1756	119
Future Volume (vph)	80	1756	119
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.11	1.00	1.00
Satd. Flow (perm)	210	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	87	1909	129
RTOR Reduction (vph)	0	0	37
Lane Group Flow (vph)	96	1909	92
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	49.7	45.8	45.8
Effective Green, g (s)	49.7	45.8	45.8
Actuated g/C Ratio	0.67	0.61	0.61
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	221	2172	971
v/s Ratio Prot	0.02	c0.54	
v/s Ratio Perm	0.27		0.06
v/c Ratio	0.43	0.88	0.10
Uniform Delay, d1	7.1	12.1	5.9
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	1.4	5.5	0.2
Delay (s)	8.4	17.5	6.1
Level of Service	A	B	A
Approach Delay (s)		16.4	
Approach LOS		B	
Intersection Summary			

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	54	43	120	186	37	70	16	25	1301	153	8	163
Future Volume (vph)	54	43	120	186	37	70	16	25	1301	153	8	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected		0.97	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1812	1583		1747			1770	3539	1583		1770
Flt Permitted		0.74	1.00		0.74			0.09	1.00	1.00		0.09
Satd. Flow (perm)		1385	1583		1343			172	3539	1583		160
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	59	47	130	202	40	76	17	27	1414	166	9	177
RTOR Reduction (vph)	0	0	74	0	13	0	0	0	0	84	0	0
Lane Group Flow (vph)	0	106	56	0	305	0	0	44	1414	82	0	186
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)		23.0	23.0		23.0			46.3	43.4	43.4		52.5
Effective Green, g (s)		23.0	23.0		23.0			46.3	43.4	43.4		52.5
Actuated g/C Ratio		0.26	0.26		0.26			0.53	0.50	0.50		0.60
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		364	416		353			144	1757	786		206
v/s Ratio Prot								0.01	0.40			c0.06
v/s Ratio Perm		0.08	0.04		c0.23			0.15		0.05		0.48
v/c Ratio		0.29	0.13		0.86			0.31	0.80	0.10		0.90
Uniform Delay, d1		25.7	24.6		30.7			17.2	18.4	11.7		19.1
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.4	0.1		19.1			1.2	4.0	0.3		37.0
Delay (s)		26.1	24.7		49.8			18.4	22.5	12.0		56.0
Level of Service		C	C		D			B	C	B		E
Approach Delay (s)		25.4			49.8				21.3			
Approach LOS		C			D				C			
Intersection Summary												
HCM 2000 Control Delay			28.4			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.94									
Actuated Cycle Length (s)			87.4			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			89.3%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1611	15
Future Volume (vph)	1611	15
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1751	16
RTOR Reduction (vph)	0	7
Lane Group Flow (vph)	1751	9
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	46.5	46.5
Effective Green, g (s)	46.5	46.5
Actuated g/C Ratio	0.53	0.53
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1882	842
v/s Ratio Prot	c0.49	
v/s Ratio Perm		0.01
v/c Ratio	0.93	0.01
Uniform Delay, d1	19.0	9.6
Progression Factor	1.00	1.00
Incremental Delay, d2	9.7	0.0
Delay (s)	28.7	9.6
Level of Service	C	A
Approach Delay (s)	31.1	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	11	5	18	176	0	53	2	3	1247	147	3	76
Future Volume (vph)	11	5	18	176	0	53	2	3	1247	147	3	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor		1.00			1.00	1.00		1.00	0.95	1.00		1.00
Frt		0.93			1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected		0.98			0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		1699			1770	1583		1770	3539	1583		1770
Flt Permitted		0.88			0.73	1.00		1.00	1.00	1.00		0.36
Satd. Flow (perm)		1522			1365	1583		1863	3539	1583		677
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	12	5	20	191	0	58	2	3	1355	160	3	83
RTOR Reduction (vph)	0	16	0	0	0	47	0	0	0	80	0	0
Lane Group Flow (vph)	0	21	0	0	191	11	0	5	1355	80	0	86
Turn Type	Perm	NA		Perm	NA	Perm	custom	Prot	NA	Perm	custom	Prot
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		8	5			2	1	
Actuated Green, G (s)		14.8			14.8	14.8		1.0	40.7	40.7		11.0
Effective Green, g (s)		14.8			14.8	14.8		1.0	40.7	40.7		11.0
Actuated g/C Ratio		0.18			0.18	0.18		0.01	0.50	0.50		0.13
Clearance Time (s)		5.0			5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		276			247	287		22	1767	790		91
v/s Ratio Prot								0.38				
v/s Ratio Perm		0.01			c0.14	0.01		0.00		0.05		c0.13
v/c Ratio		0.07			0.77	0.04		0.23	0.77	0.10		0.95
Uniform Delay, d1		27.7			31.8	27.5		39.9	16.6	10.8		35.0
Progression Factor		1.00			1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2		0.1			14.0	0.1		5.2	3.2	0.3		75.7
Delay (s)		27.8			45.7	27.5		45.1	19.8	11.0		110.7
Level of Service		C			D	C		D	B	B		F
Approach Delay (s)		27.8			41.5				19.0			
Approach LOS		C			D				B			
Intersection Summary												
HCM 2000 Control Delay		21.1										
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		81.5										
Intersection Capacity Utilization		79.4%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis 12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1675	5
Future Volume (vph)	1675	5
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1821	5
RTOR Reduction (vph)	0	2
Lane Group Flow (vph)	1821	3
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	50.7	50.7
Effective Green, g (s)	50.7	50.7
Actuated g/C Ratio	0.62	0.62
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2201	984
v/s Ratio Prot	c0.51	
v/s Ratio Perm		0.00
v/c Ratio	0.83	0.00
Uniform Delay, d1	12.0	5.8
Progression Factor	1.00	1.00
Incremental Delay, d2	3.7	0.0
Delay (s)	15.7	5.8
Level of Service	B	A
Approach Delay (s)	20.0	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	153	39	49	99	35	129	13	100	1118	83	4	146
Future Volume (vph)	153	39	49	99	35	129	13	100	1118	83	4	146
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	0.88			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1643			1770	3539	1583		1770
Flt Permitted	0.61	1.00	1.00	0.73	1.00			0.12	1.00	1.00		0.13
Satd. Flow (perm)	1132	1863	1583	1359	1643			224	3539	1583		240
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	166	42	53	108	38	140	14	109	1215	90	4	159
RTOR Reduction (vph)	0	0	42	0	110	0	0	0	0	46	0	0
Lane Group Flow (vph)	166	42	11	108	68	0	0	123	1215	44	0	163
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	14.7	14.7	14.7	14.7	14.7			37.2	33.3	33.3		39.4
Effective Green, g (s)	14.7	14.7	14.7	14.7	14.7			37.2	33.3	33.3		39.4
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22			0.55	0.49	0.49		0.58
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	244	402	342	293	355			211	1733	775		251
v/s Ratio Prot		0.02			0.04			0.03	0.34			c0.05
v/s Ratio Perm	c0.15		0.01	0.08				0.29		0.03		0.33
v/c Ratio	0.68	0.10	0.03	0.37	0.19			0.58	0.70	0.06		0.65
Uniform Delay, d1	24.5	21.4	21.0	22.7	21.8			13.9	13.5	9.1		9.4
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	7.6	0.1	0.0	0.8	0.3			4.1	2.4	0.1		5.7
Delay (s)	32.1	21.5	21.1	23.5	22.1			17.9	15.9	9.2		15.1
Level of Service	C	C	C	C	C			B	B	A		B
Approach Delay (s)		28.1			22.6				15.6			
Approach LOS		C			C				B			
Intersection Summary												
HCM 2000 Control Delay			23.0			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			68.0			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			85.1%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1588	153
Future Volume (vph)	1588	153
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1726	166
RTOR Reduction (vph)	0	60
Lane Group Flow (vph)	1726	106
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	34.4	34.4
Effective Green, g (s)	34.4	34.4
Actuated g/C Ratio	0.51	0.51
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1790	800
v/s Ratio Prot	c0.49	
v/s Ratio Perm		0.07
v/c Ratio	0.96	0.13
Uniform Delay, d1	16.2	8.9
Progression Factor	1.00	1.00
Incremental Delay, d2	14.3	0.3
Delay (s)	30.5	9.2
Level of Service	C	A
Approach Delay (s)	27.6	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	29	185	212	41	237	78	4	166	1075	46	4	127
Future Volume (vph)	29	185	212	41	237	78	4	166	1075	46	4	127
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.99			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583		1797			1770	3539	1583		1770
Flt Permitted	0.26	1.00	1.00		0.94			0.11	1.00	1.00		0.12
Satd. Flow (perm)	489	1863	1583		1696			210	3539	1583		217
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	32	201	230	45	258	85	4	180	1168	50	4	138
RTOR Reduction (vph)	0	0	90	0	12	0	0	0	0	29	0	0
Lane Group Flow (vph)	32	201	140	0	376	0	0	184	1168	21	0	142
Turn Type	pm+pt	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases	7	4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	29.4	29.4	29.4		21.6			41.5	35.4	35.4		39.5
Effective Green, g (s)	29.4	29.4	29.4		21.6			41.5	35.4	35.4		39.5
Actuated g/C Ratio	0.35	0.35	0.35		0.25			0.49	0.42	0.42		0.47
Clearance Time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	211	645	548		431			214	1475	660		194
v/s Ratio Prot	0.00	c0.11						c0.06	0.33			0.04
v/s Ratio Perm	0.05		0.09		c0.22			0.36		0.01		0.30
v/c Ratio	0.15	0.31	0.26		0.87			0.86	0.79	0.03		0.73
Uniform Delay, d1	20.8	20.3	19.9		30.3			18.8	21.5	14.6		16.4
Progression Factor	1.00	1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.2		17.4			27.3	3.0	0.0		13.3
Delay (s)	21.1	20.6	20.2		47.7			46.2	24.5	14.6		29.6
Level of Service	C	C	C		D			D	C	B		C
Approach Delay (s)		20.4			47.7				27.0			
Approach LOS		C			D				C			
Intersection Summary												
HCM 2000 Control Delay			41.7			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			84.9			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			96.8%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1378	13
Future Volume (vph)	1378	13
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1498	14
RTOR Reduction (vph)	0	8
Lane Group Flow (vph)	1498	6
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	34.4	34.4
Effective Green, g (s)	34.4	34.4
Actuated g/C Ratio	0.41	0.41
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1433	641
v/s Ratio Prot	c0.42	
v/s Ratio Perm		0.00
v/c Ratio	1.05	0.01
Uniform Delay, d1	25.3	15.1
Progression Factor	1.00	1.00
Incremental Delay, d2	36.6	0.0
Delay (s)	61.8	15.1
Level of Service	E	B
Approach Delay (s)	58.7	
Approach LOS	E	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	161	63	21	92	80	92	18	1119	82	4	56	1374
Future Volume (vph)	161	63	21	92	80	92	18	1119	82	4	56	1374
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00	0.95
Frt		1.00	0.85	1.00	0.92		1.00	1.00	0.85		1.00	1.00
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1798	1583	1770	1713		1770	3539	1583		1770	3539
Flt Permitted		0.67	1.00	0.56	1.00		0.14	1.00	1.00		0.16	1.00
Satd. Flow (perm)		1253	1583	1052	1713		258	3539	1583		299	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	175	68	23	100	87	100	20	1216	89	4	61	1493
RTOR Reduction (vph)	0	0	17	0	23	0	0	0	41	0	0	0
Lane Group Flow (vph)	0	243	6	100	164	0	20	1216	48	0	65	1493
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	Perm	NA
Protected Phases		4			8			2				6
Permitted Phases	4		4	8			2		2	6	6	
Actuated Green, G (s)		15.1	15.1	15.1	15.1		28.9	28.9	28.9		28.9	28.9
Effective Green, g (s)		15.1	15.1	15.1	15.1		28.9	28.9	28.9		28.9	28.9
Actuated g/C Ratio		0.28	0.28	0.28	0.28		0.54	0.54	0.54		0.54	0.54
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		350	442	294	479		138	1894	847		160	1894
v/s Ratio Prot					0.10			0.34				c0.42
v/s Ratio Perm		c0.19	0.00	0.10			0.08		0.03		0.22	
v/c Ratio		0.69	0.01	0.34	0.34		0.14	0.64	0.06		0.41	0.79
Uniform Delay, d1		17.4	14.1	15.5	15.5		6.3	8.9	6.0		7.5	10.1
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		5.9	0.0	0.7	0.4		2.2	1.7	0.1		7.5	3.4
Delay (s)		23.3	14.1	16.2	15.9		8.5	10.6	6.1		14.9	13.5
Level of Service		C	B	B	B		A	B	A		B	B
Approach Delay (s)		22.5			16.0			10.2				12.9
Approach LOS		C			B			B				B
Intersection Summary												
HCM 2000 Control Delay			12.9			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			54.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			80.9%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	150
Future Volume (vph)	150
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	163
RTOR Reduction (vph)	68
Lane Group Flow (vph)	95
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	28.9
Effective Green, g (s)	28.9
Actuated g/C Ratio	0.54
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	847
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.11
Uniform Delay, d1	6.2
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	6.5
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	19	117	26	127	100	268	20	894	124	538	1131	39
Future Volume (vph)	19	117	26	127	100	268	20	894	124	538	1131	39
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1812		1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.69	1.00		0.66	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1279	1812		1227	1863	1583	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	127	28	138	109	291	22	972	135	585	1229	42
RTOR Reduction (vph)	0	15	0	0	0	196	0	0	84	0	0	20
Lane Group Flow (vph)	21	140	0	138	109	95	22	972	51	585	1229	22
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)	11.9	11.9		11.9	11.9	11.9	0.9	22.2	22.2	9.1	30.4	30.4
Effective Green, g (s)	11.9	11.9		11.9	11.9	11.9	0.9	22.2	22.2	9.1	30.4	30.4
Actuated g/C Ratio	0.20	0.20		0.20	0.20	0.20	0.02	0.38	0.38	0.16	0.52	0.52
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	261	370		250	380	323	27	1349	603	536	1848	826
v/s Ratio Prot		0.08			0.06		0.01	0.27		c0.17	c0.35	
v/s Ratio Perm	0.02			c0.11		0.06			0.03			0.01
v/c Ratio	0.08	0.38		0.55	0.29	0.29	0.81	0.72	0.09	1.09	0.67	0.03
Uniform Delay, d1	18.7	20.0		20.8	19.6	19.6	28.6	15.4	11.5	24.6	10.2	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.6		2.6	0.4	0.5	95.3	3.4	0.3	66.1	1.9	0.1
Delay (s)	18.9	20.6		23.4	20.0	20.1	123.8	18.7	11.8	90.6	12.1	6.8
Level of Service	B	C		C	B	C	F	B	B	F	B	A
Approach Delay (s)		20.4			20.9			19.9			36.7	
Approach LOS		C			C			B			D	
Intersection Summary												
HCM 2000 Control Delay	28.5			HCM 2000 Level of Service			C					
HCM 2000 Volume to Capacity ratio	0.76											
Actuated Cycle Length (s)	58.2			Sum of lost time (s)			15.0					
Intersection Capacity Utilization	71.5%			ICU Level of Service			C					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	15	17	34	1	318	27	98	2	21	1063	300	1
Future Volume (vph)	15	17	34	1	318	27	98	2	21	1063	300	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00	
Frt	1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)	1770	1863	1583		1770	1863	1583		1770	3539	1583	
Flt Permitted	1.00	1.00	1.00		0.47	1.00	1.00		0.14	1.00	1.00	
Satd. Flow (perm)	1863	1863	1583		866	1863	1583		257	3539	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	16	18	37	1	346	29	107	2	23	1155	326	1
RTOR Reduction (vph)	0	0	35	0	0	0	83	0	0	0	169	0
Lane Group Flow (vph)	16	18	2	0	347	29	24	0	25	1155	157	0
Turn Type	Perm	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom
Protected Phases		4			3	8			5	2		
Permitted Phases	4		4	3	8		8	5	2		2	1
Actuated Green, G (s)	3.6	3.6	3.6		13.8	13.8	13.8		30.7	29.0	29.0	
Effective Green, g (s)	3.6	3.6	3.6		13.8	13.8	13.8		30.7	29.0	29.0	
Actuated g/C Ratio	0.06	0.06	0.06		0.23	0.23	0.23		0.51	0.48	0.48	
Clearance Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	111	111	94		275	425	361		173	1699	760	
v/s Ratio Prot		0.01			c0.11	0.02			0.00	0.33		
v/s Ratio Perm	0.01		0.00		c0.18		0.02		0.07		0.10	
v/c Ratio	0.14	0.16	0.02		1.26	0.07	0.07		0.14	0.68	0.21	
Uniform Delay, d1	26.9	27.0	26.7		23.1	18.3	18.3		8.7	12.1	9.1	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.6	0.7	0.1		143.7	0.1	0.1		0.4	2.2	0.6	
Delay (s)	27.5	27.7	26.8		166.8	18.3	18.3		9.1	14.3	9.7	
Level of Service	C	C	C		F	B	B		A	B	A	
Approach Delay (s)		27.2				125.0				13.2		
Approach LOS		C				F				B		
Intersection Summary												
HCM 2000 Control Delay			29.7			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			60.4			Sum of lost time (s)				20.0		
Intersection Capacity Utilization			75.2%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis 18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	57	1175	31
Future Volume (vph)	57	1175	31
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.15	1.00	1.00
Satd. Flow (perm)	275	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	62	1277	34
RTOR Reduction (vph)	0	0	17
Lane Group Flow (vph)	63	1277	17
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	32.5	29.9	29.9
Effective Green, g (s)	32.5	29.9	29.9
Actuated g/C Ratio	0.54	0.50	0.50
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	212	1751	783
v/s Ratio Prot	c0.01	c0.36	
v/s Ratio Perm	0.15		0.01
v/c Ratio	0.30	0.73	0.02
Uniform Delay, d1	8.0	12.1	7.8
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	0.8	2.7	0.1
Delay (s)	8.8	14.8	7.8
Level of Service	A	B	A
Approach Delay (s)		14.3	
Approach LOS		B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	30	22	16	85	15	111	1	19	1261	79	2	182
Future Volume (vph)	30	22	16	85	15	111	1	19	1261	79	2	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.75	1.00	1.00	0.74	1.00	1.00		1.00	1.00	1.00		0.67
Satd. Flow (perm)	1392	1863	1583	1381	1863	1583		1863	3539	1583		1242
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	24	17	92	16	121	1	21	1371	86	2	198
RTOR Reduction (vph)	0	0	15	0	0	104	0	0	0	44	0	0
Lane Group Flow (vph)	33	24	2	92	16	17	0	22	1371	42	0	200
Turn Type	Perm	NA	Perm	Perm	NA	Perm	custom	Prot	NA	Perm	custom	Prot
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8		8	5			2	1	
Actuated Green, G (s)	7.8	7.8	7.8	7.8	7.8	7.8		0.9	28.1	28.1		6.0
Effective Green, g (s)	7.8	7.8	7.8	7.8	7.8	7.8		0.9	28.1	28.1		6.0
Actuated g/C Ratio	0.14	0.14	0.14	0.14	0.14	0.14		0.02	0.49	0.49		0.11
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	190	255	217	189	255	217		29	1747	781		130
v/s Ratio Prot		0.01			0.01				c0.39			
v/s Ratio Perm	0.02		0.00	c0.07		0.01		0.01		0.03		c0.16
v/c Ratio	0.17	0.09	0.01	0.49	0.06	0.08		0.76	0.78	0.05		1.54
Uniform Delay, d1	21.7	21.5	21.2	22.7	21.4	21.4		27.9	11.9	7.5		25.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.2	0.0	2.0	0.1	0.2		71.7	3.6	0.1		276.9
Delay (s)	22.1	21.6	21.2	24.7	21.5	21.6		99.6	15.5	7.6		302.4
Level of Service	C	C	C	C	C	C		F	B	A		F
Approach Delay (s)		21.8			22.8				16.3			
Approach LOS		C			C				B			
Intersection Summary												
HCM 2000 Control Delay			30.7				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			56.9				Sum of lost time (s)		15.0			
Intersection Capacity Utilization			72.8%				ICU Level of Service		C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1289	60
Future Volume (vph)	1289	60
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1401	65
RTOR Reduction (vph)	0	27
Lane Group Flow (vph)	1401	38
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	33.2	33.2
Effective Green, g (s)	33.2	33.2
Actuated g/C Ratio	0.58	0.58
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2064	923
v/s Ratio Prot	0.40	
v/s Ratio Perm		0.02
v/c Ratio	0.68	0.04
Uniform Delay, d1	8.2	5.1
Progression Factor	1.00	1.00
Incremental Delay, d2	1.8	0.1
Delay (s)	10.0	5.1
Level of Service	A	A
Approach Delay (s)	44.9	
Approach LOS	D	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	175	87	60	1431	62	30	139	1394
Future Volume (vph)	175	87	60	1431	62	30	139	1394
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.17	1.00	1.00		0.10	1.00
Satd. Flow (perm)	1770	1583	318	3539	1583		190	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	190	95	65	1555	67	33	151	1515
RTOR Reduction (vph)	0	84	0	0	30	0	0	0
Lane Group Flow (vph)	190	11	65	1555	37	0	184	1515
Turn Type	Prot	Prot	Perm	NA	Perm	custom	pm+pt	NA
Protected Phases	3	3		2			1	6
Permitted Phases			2		2	1	6	
Actuated Green, G (s)	7.0	7.0	34.3	34.3	34.3		44.3	44.3
Effective Green, g (s)	7.0	7.0	34.3	34.3	34.3		44.3	44.3
Actuated g/C Ratio	0.11	0.11	0.56	0.56	0.56		0.72	0.72
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	202	180	177	1980	885		266	2557
v/s Ratio Prot	c0.11	0.01		c0.44			0.06	c0.43
v/s Ratio Perm			0.20		0.02		0.44	
v/c Ratio	0.94	0.06	0.37	0.79	0.04		0.69	0.59
Uniform Delay, d1	26.9	24.2	7.5	10.6	6.1		9.7	4.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	46.5	0.1	5.8	3.2	0.1		7.5	1.0
Delay (s)	73.5	24.4	13.3	13.8	6.2		17.2	5.1
Level of Service	E	C	B	B	A		B	A
Approach Delay (s)	57.1			13.5				6.4
Approach LOS	E			B				A
Intersection Summary								
HCM 2000 Control Delay			13.6			HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.82					
Actuated Cycle Length (s)			61.3			Sum of lost time (s)		15.0
Intersection Capacity Utilization			71.1%			ICU Level of Service		C
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	679	993	467	119	1131	104	650	1038	159	174	978	490
Future Volume (vph)	679	993	467	119	1131	104	650	1038	159	174	978	490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	738	1079	508	129	1229	113	707	1128	173	189	1063	533
RTOR Reduction (vph)	0	0	138	0	0	77	0	0	110	0	0	124
Lane Group Flow (vph)	738	1079	370	129	1229	36	707	1128	63	189	1063	409
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	15.0	48.1	48.1	7.9	41.0	41.0	14.0	43.0	43.0	11.0	40.0	40.0
Effective Green, g (s)	15.0	48.1	48.1	7.9	41.0	41.0	14.0	43.0	43.0	11.0	40.0	40.0
Actuated g/C Ratio	0.12	0.37	0.37	0.06	0.32	0.32	0.11	0.33	0.33	0.08	0.31	0.31
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	396	1309	585	208	1116	499	369	1681	523	149	1564	487
v/s Ratio Prot	c0.21	0.30		0.04	c0.35		c0.21	c0.22		0.11	0.21	
v/s Ratio Perm			0.23			0.02			0.04			c0.26
v/c Ratio	1.86	0.82	0.63	0.62	1.10	0.07	1.92	0.67	0.12	1.27	0.68	0.84
Uniform Delay, d1	57.5	37.1	33.7	59.6	44.5	31.2	58.0	37.4	30.3	59.5	39.4	42.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	398.2	4.4	2.2	5.6	59.1	0.1	422.2	2.2	0.5	163.1	2.4	15.9
Delay (s)	455.7	41.5	35.9	65.2	103.6	31.2	480.2	39.6	30.8	222.6	41.8	57.9
Level of Service	F	D	D	E	F	C	F	D	C	F	D	E
Approach Delay (s)		171.7			94.7			193.9			65.7	
Approach LOS		F			F			F			E	
Intersection Summary												
HCM 2000 Control Delay	137.7			HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio	1.21											
Actuated Cycle Length (s)	130.0			Sum of lost time (s)			20.0					
Intersection Capacity Utilization	104.7%			ICU Level of Service			G					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	42	256	210	356	231	33
Future Volume (Veh/h)	42	256	210	356	231	33
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	46	278	228	387	251	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1112	269	287			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1112	269	287			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	64	82			
cM capacity (veh/h)	190	770	1275			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	
Volume Total	46	278	228	387	287	
Volume Left	46	0	228	0	0	
Volume Right	0	278	0	0	36	
cSH	190	770	1275	1700	1700	
Volume to Capacity	0.24	0.36	0.18	0.23	0.17	
Queue Length 95th (ft)	23	41	16	0	0	
Control Delay (s)	30.0	12.3	8.4	0.0	0.0	
Lane LOS	D	B	A			
Approach Delay (s)	14.8		3.1		0.0	
Approach LOS	B					
Intersection Summary						
Average Delay			5.5			
Intersection Capacity Utilization			39.1%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018

								
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR	
Lane Configurations								
Traffic Volume (veh/h)	35	146	7	61	524	468	19	
Future Volume (Veh/h)	35	146	7	61	524	468	19	
Sign Control	Stop				Free	Free		
Grade	0%				0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	38	159	0	66	570	509	21	
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None	None		
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00					
vC, conflicting volume	926	254	0	530				
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	926	254	0	530				
tC, single (s)	6.8	6.9	0.0	4.1				
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0	2.2				
p0 queue free %	85	79	0	94				
cM capacity (veh/h)	251	745	0	1033				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	38	159	66	285	285	254	254	21
Volume Left	38	0	66	0	0	0	0	0
Volume Right	0	159	0	0	0	0	0	21
cSH	251	745	1033	1700	1700	1700	1700	1700
Volume to Capacity	0.15	0.21	0.06	0.17	0.17	0.15	0.15	0.01
Queue Length 95th (ft)	13	20	5	0	0	0	0	0
Control Delay (s)	21.9	11.1	8.7	0.0	0.0	0.0	0.0	0.0
Lane LOS	C	B	A					
Approach Delay (s)	13.2		0.9			0.0		
Approach LOS	B							
Intersection Summary								
Average Delay			2.3					
Intersection Capacity Utilization			35.7%		ICU Level of Service			A
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	208	10	6	510	219	13	18	638
Future Volume (Veh/h)	208	10	6	510	219	13	18	638
Sign Control	Stop			Free			Free	
Grade	0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	226	11	0	554	238	0	20	693
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type								
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00			0.00		
vC, conflicting volume	940	277	0			0	554	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	940	277	0			0	554	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	12	98	0			0	98	
cM capacity (veh/h)	257	720	0			0	1012	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	237	277	277	238	0	20	346	346
Volume Left	226	0	0	0	0	20	0	0
Volume Right	11	0	0	238	0	0	0	0
cSH	265	1700	1700	1700	1700	1012	1700	1700
Volume to Capacity	0.90	0.16	0.16	0.14	0.00	0.02	0.20	0.20
Queue Length 95th (ft)	196	0	0	0	0	2	0	0
Control Delay (s)	72.8	0.0	0.0	0.0	0.0	8.6	0.0	0.0
Lane LOS	F					A		
Approach Delay (s)	72.8	0.0				0.2		
Approach LOS	F							
Intersection Summary								
Average Delay		10.0						
Intersection Capacity Utilization		43.1%		ICU Level of Service			A	
Analysis Period (min)		15						
Description: m								

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	55	4	22	3	2	1	7	40	1425	10	9	3
Future Volume (Veh/h)	55	4	22	3	2	1	7	40	1425	10	9	3
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	60	4	24	3	2	1	0	43	1549	11	0	3
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)	12											
Median type	None											
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked	0.48	0.48	0.48	0.48	0.48		0.00	0.48			0.00	
vC, conflicting volume	2866	3651	1000	2666	3640	774	0	1999			0	1560
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2719	4370	0	2298	4346	774	0	894			0	1560
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	0	0	95	0	0	100	0	88			0	99
cM capacity (veh/h)	0	1	515	0	1	341	0	359			0	420
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	88	3	3	43	774	774	11	3	1000	1000	96	
Volume Left	60	3	0	43	0	0	0	3	0	0	0	
Volume Right	24	0	1	0	0	0	11	0	0	0	96	
cSH	0	0	1	359	1700	1700	1700	420	1700	1700	1700	
Volume to Capacity	Err	Err	2.95	0.12	0.46	0.46	0.01	0.01	0.59	0.59	0.06	
Queue Length 95th (ft)	Err	Err	30	10	0	0	0	1	0	0	0	
Control Delay (s)	Err	Err	5641.0	16.4	0.0	0.0	0.0	13.6	0.0	0.0	0.0	
Lane LOS	F	F	F	C	B							
Approach Delay (s)	Err	Err	0.4		0.0							
Approach LOS	F	F										
Intersection Summary												
Average Delay	Err											
Intersection Capacity Utilization	68.8%			ICU Level of Service					C			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 8: SR 74 & Meadow Glen Parkway

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1839	88
Future Volume (Veh/h)	1839	88
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1999	96
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)	1262	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	
Lane Configurations													
Traffic Volume (veh/h)	4	0	63	15	0	7	15	53	1427	12	9	10	
Future Volume (Veh/h)	4	0	63	15	0	7	15	53	1427	12	9	10	
Sign Control	Stop				Stop				Free				
Grade	0%				0%				0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	4	0	68	16	0	8	0	58	1551	13	0	11	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None												
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked							0.00	0.00					
vC, conflicting volume	2944	3712	1012	2768	3712	776	0	2023	0				1551
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	2944	3712	1012	2768	3712	776	0	2023	0				1551
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1	0.0				4.1
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2	0.0				2.2
p0 queue free %	24	100	71	0	100	98	0	79	0				97
cM capacity (veh/h)	5	3	237	5	3	340	0	277	0				423
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4			
Volume Total	72	24	58	776	776	13	11	1012	1012	14			
Volume Left	4	16	58	0	0	0	11	0	0	0			
Volume Right	68	8	0	0	0	13	0	0	0	14			
cSH	69	8	277	1700	1700	1700	423	1700	1700	1700			
Volume to Capacity	1.05	3.05	0.21	0.46	0.46	0.01	0.03	0.59	0.59	0.01			
Queue Length 95th (ft)	135	Err	19	0	0	0	2	0	0	0			
Control Delay (s)	225.5	Err	21.4	0.0	0.0	0.0	13.7	0.0	0.0	0.0			
Lane LOS	F	F	C	B									
Approach Delay (s)	225.5	Err	0.8	0.1									
Approach LOS	F	F											
Intersection Summary													
Average Delay			68.4										
Intersection Capacity Utilization			70.3%	ICU Level of Service					C				
Analysis Period (min)			15										

HCM Unsignalized Intersection Capacity Analysis 10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1861	13
Future Volume (Veh/h)	1861	13
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	2023	14
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	0	0	39	0	0	211	23	1320	45	296	2017	16
Future Volume (Veh/h)	0	0	39	0	0	211	23	1320	45	296	2017	16
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	42	0	0	229	25	1435	49	322	2192	17
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3604	4321	1096	3225	4321	718	2192				1435	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3604	4321	1096	3225	4321	718	2192				1435	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	100	100	80	100	100	38	89				31	
cM capacity (veh/h)	0	0	208	1	0	372	238				469	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	42	229	25	718	718	49	322	1096	1096	17		
Volume Left	0	0	25	0	0	0	322	0	0	0		
Volume Right	42	229	0	0	0	49	0	0	0	17		
cSH	208	372	238	1700	1700	1700	469	1700	1700	1700		
Volume to Capacity	0.20	0.62	0.11	0.42	0.42	0.03	0.69	0.64	0.64	0.01		
Queue Length 95th (ft)	18	99	9	0	0	0	128	0	0	0		
Control Delay (s)	26.6	29.0	21.9	0.0	0.0	0.0	27.8	0.0	0.0	0.0		
Lane LOS	D	D	C									
Approach Delay (s)	26.6	29.0	0.4									
Approach LOS	D	D										
Intersection Summary												
Average Delay			4.0									
Intersection Capacity Utilization			65.8%	ICU Level of Service				C				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	3	9	35	3	2	3	76	1263	6	3	9	1578
Future Volume (Veh/h)	3	9	35	3	2	3	76	1263	6	3	9	1578
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	3	10	38	3	2	3	83	1373	7	0	10	1715
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked											0.00	
vC, conflicting volume	2588	3274	858	2463	3278	690	1715			0	1373	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2588	3274	858	2463	3278	690	1715			0	1373	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	61	0	87	0	70	99	77			0	98	
cM capacity (veh/h)	8	7	300	0	7	388	366			0	496	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	51	8	83	915	465	10	858	858	20			
Volume Left	3	3	83	0	0	10	0	0	0			
Volume Right	38	3	0	0	7	0	0	0	20			
cSH	25	0	366	1700	1700	496	1700	1700	1700			
Volume to Capacity	2.02	Err	0.23	0.54	0.27	0.02	0.50	0.50	0.01			
Queue Length 95th (ft)	157	Err	22	0	0	2	0	0	0			
Control Delay (s)	802.3	Err	17.7	0.0	0.0	12.4	0.0	0.0	0.0			
Lane LOS	F	F	C	B								
Approach Delay (s)	802.3	Err	1.0	0.1								
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			61.2%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	18
Future Volume (Veh/h)	18
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	20
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	7	4	172	12	0	48	29	167	1295	27	49	1354
Future Volume (Veh/h)	7	4	172	12	0	48	29	167	1295	27	49	1354
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	8	4	187	13	0	52	0	182	1408	29	53	1472
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None		None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	2646	3350	736	2616	3350	704	0	1472			1408	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2646	3350	736	2616	3350	704	0	1472			1408	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	0	4	48	0	100	86	0	60			89	
cM capacity (veh/h)	6	4	361	1	4	379	0	454			481	
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	12	187	65	182	704	704	29	53	736	736	3	
Volume Left	8	0	13	182	0	0	0	53	0	0	0	
Volume Right	0	187	52	0	0	0	29	0	0	0	3	
cSH	5	361	3	454	1700	1700	1700	481	1700	1700	1700	
Volume to Capacity	2.27	0.52	24.67	0.40	0.41	0.41	0.02	0.11	0.43	0.43	0.00	
Queue Length 95th (ft)	65	71	Err	48	0	0	0	9	0	0	0	
Control Delay (s)	1849.6	25.2	Err	18.1	0.0	0.0	0.0	13.4	0.0	0.0	0.0	
Lane LOS	F	D	F	C	B							
Approach Delay (s)	135.2		Err	2.0	0.5							
Approach LOS	F		F									
Intersection Summary												
Average Delay	199.6											
Intersection Capacity Utilization	75.9%			ICU Level of Service					D			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 20: SR 74 & Senoia Road/Lexington Pass

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	3
Future Volume (Veh/h)	3
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	3
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	1	0	23	0	48	27	0	1477	64	2	65		
Future Volume (Veh/h)	0	1	0	23	0	48	27	0	1477	64	2	65		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	1	0	25	0	52	0	0	1605	70	0	71		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage (veh)														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	2610	3412	832	2580	3412	802	0	1665					0	1605
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	2610	3412	832	2580	3412	802	0	1665					0	1605
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	83	100	0	100	84	0	100					0	82
cM capacity (veh/h)	9	6	312	10	6	327	0	382					0	403
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3				
Volume Total	1	25	52	0	802	802	70	71	1110	555				
Volume Left	0	25	0	0	0	0	0	71	0	0				
Volume Right	0	0	52	0	0	0	70	0	0	0				
cSH	6	10	327	1700	1700	1700	1700	403	1700	1700				
Volume to Capacity	0.17	2.63	0.16	0.00	0.47	0.47	0.04	0.18	0.65	0.33				
Queue Length 95th (ft)	10	104	14	0	0	0	0	16	0	0				
Control Delay (s)	721.3	1510.6	18.1	0.0	0.0	0.0	0.0	15.8	0.0	0.0				
Lane LOS	F	F	C					C						
Approach Delay (s)	721.3	502.7	0.0					0.6						
Approach LOS	F	F												
Intersection Summary														
Average Delay	11.6													
Intersection Capacity Utilization	64.5%			ICU Level of Service				C						
Analysis Period (min)	15													

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	1532	0
Future Volume (Veh/h)	1532	0
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1665	0
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

									
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Lane Configurations									
Traffic Volume (veh/h)	74	129	20	1377	37	9	98	1539	
Future Volume (Veh/h)	74	129	20	1377	37	9	98	1539	
Sign Control	Stop			Free			Free		
Grade	0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	80	140	0	1497	40	0	107	1673	
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None				None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked			0.00			0.00			
vC, conflicting volume	2548	748	0			0	1497		
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2548	748	0			0	1497		
tC, single (s)	6.8	6.9	0.0			0.0	4.1		
tC, 2 stage (s)									
tF (s)	3.5	3.3	0.0			0.0	2.2		
p0 queue free %	0	61	0			0	76		
cM capacity (veh/h)	17	355	0			0	444		
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	80	140	748	748	40	0	107	836	836
Volume Left	80	0	0	0	0	0	107	0	0
Volume Right	0	140	0	0	40	0	0	0	0
cSH	17	355	1700	1700	1700	1700	444	1700	1700
Volume to Capacity	4.80	0.39	0.44	0.44	0.02	0.00	0.24	0.49	0.49
Queue Length 95th (ft)	Err	46	0	0	0	0	23	0	0
Control Delay (s)	Err	21.6	0.0	0.0	0.0	0.0	15.7	0.0	0.0
Lane LOS	F	C					C		
Approach Delay (s)	3649.8	0.0		0.9					
Approach LOS									
F									
Intersection Summary									
Average Delay									
227.5									
Intersection Capacity Utilization			62.0%	ICU Level of Service				B	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	0	0	0	1193	7	414	5	147	793	0	6	0
Future Volume (vph)	0	0	0	1193	7	414	5	147	793	0	6	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0		5.0	5.0			
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			
Frt				1.00	1.00	0.85		1.00	1.00			
Flt Protected				0.95	0.95	1.00		0.95	1.00			
Satd. Flow (prot)				1681	1686	1583		1770	3539			
Flt Permitted				0.95	0.95	1.00		0.50	1.00			
Satd. Flow (perm)				1681	1686	1583		931	3539			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1297	8	450	5	160	862	0	7	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	648	657	363	0	165	862	0	0	0
Turn Type				Prot	NA	custom	custom	Prot	NA		Perm	
Protected Phases				3	8	3		5	2			
Permitted Phases							5				6	
Actuated Green, G (s)				19.0	19.0	19.0		8.0	31.0			
Effective Green, g (s)				19.0	19.0	19.0		8.0	31.0			
Actuated g/C Ratio				0.32	0.32	0.32		0.13	0.52			
Clearance Time (s)				5.0	5.0	5.0		5.0	5.0			
Vehicle Extension (s)				3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)				532	533	501		124	1828			
v/s Ratio Prot				0.39	c0.39	0.23			0.24			
v/s Ratio Perm								c0.18				
v/c Ratio				1.22	1.23	0.72		1.33	0.47			
Uniform Delay, d1				20.5	20.5	18.2		26.0	9.3			
Progression Factor				1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2				114.3	120.3	5.2		193.7	0.9			
Delay (s)				134.8	140.8	23.3		219.7	10.1			
Level of Service				F	F	C		F	B			
Approach Delay (s)		0.0			108.5				43.8			
Approach LOS		A			F				D			
Intersection Summary												
HCM 2000 Control Delay			68.9									
HCM 2000 Level of Service									E			
HCM 2000 Volume to Capacity ratio			1.06									
Actuated Cycle Length (s)			60.0									
Sum of lost time (s)									15.0			
Intersection Capacity Utilization			197.3%									
ICU Level of Service									H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	698	165
Future Volume (vph)	698	165
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3538	1583
Flt Permitted	0.95	1.00
Satd. Flow (perm)	3345	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	759	179
RTOR Reduction (vph)	0	125
Lane Group Flow (vph)	766	54
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	18.0	18.0
Effective Green, g (s)	18.0	18.0
Actuated g/C Ratio	0.30	0.30
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1003	474
v/s Ratio Prot		
v/s Ratio Perm	c0.23	0.03
v/c Ratio	0.76	0.11
Uniform Delay, d1	19.1	15.2
Progression Factor	0.99	0.98
Incremental Delay, d2	5.5	0.5
Delay (s)	24.5	15.4
Level of Service	C	B
Approach Delay (s)	22.8	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	168	0	292	0	0	0	0	634	2412	471	1811	0
Future Volume (vph)	168	0	292	0	0	0	0	634	2412	471	1811	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00					0.95	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					3539	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	183	0	317	0	0	0	0	689	2622	512	1968	0
RTOR Reduction (vph)	0	0	50	0	0	0	0	0	138	0	0	0
Lane Group Flow (vph)	183	0	267	0	0	0	0	689	2484	512	1968	0
Turn Type	Prot		Prot					NA	Perm	Prot	NA	
Protected Phases	7		7					2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Effective Green, g (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Actuated g/C Ratio	0.09		0.09					0.65	0.65	0.16	0.84	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	151		135					2300	1028	278	2982	
v/s Ratio Prot	0.10		c0.17					0.19		c0.29	0.56	
v/s Ratio Perm									c1.57			
v/c Ratio	1.21		1.98					0.30	2.42	1.84	0.66	
Uniform Delay, d1	64.0		64.0					10.6	24.5	59.0	3.9	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	141.4		464.6					0.3	640.5	392.5	1.2	
Delay (s)	205.4		528.6					11.0	665.0	451.5	5.1	
Level of Service	F		F					B	F	F	A	
Approach Delay (s)		410.3			0.0			528.9			97.2	
Approach LOS		F			A			F			F	
Intersection Summary												
HCM 2000 Control Delay			349.3		HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio			2.27									
Actuated Cycle Length (s)			140.0		Sum of lost time (s)				15.0			
Intersection Capacity Utilization			197.3%		ICU Level of Service				H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	198	179	28	157	91	218	4	18	932	189	24	461
Future Volume (vph)	198	179	28	157	91	218	4	18	932	189	24	461
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.97
Frt	1.00	0.98		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1825		1770	1863	1583		1770	3539	1583		3433
Flt Permitted	0.69	1.00		0.45	1.00	1.00		0.19	1.00	1.00		0.29
Satd. Flow (perm)	1291	1825		837	1863	1583		351	3539	1583		1032
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	215	195	30	171	99	237	4	20	1013	205	26	501
RTOR Reduction (vph)	0	8	0	0	0	194	0	0	0	146	0	0
Lane Group Flow (vph)	215	217	0	171	99	43	0	24	1013	59	0	527
Turn Type	pm+pt	NA		pm+pt	NA	Prot	custom	pm+pt	NA	Perm	custom	Prot
Protected Phases	7	4		3	8	8		5	2			1
Permitted Phases	4			8			5	2		2	1	
Actuated Green, G (s)	18.2	13.2		18.2	13.2	13.2		23.1	21.2	21.2		14.0
Effective Green, g (s)	18.2	13.2		18.2	13.2	13.2		23.1	21.2	21.2		14.0
Actuated g/C Ratio	0.25	0.18		0.25	0.18	0.18		0.31	0.29	0.29		0.19
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	352	328		271	335	284		147	1022	457		196
v/s Ratio Prot	0.04	c0.12		c0.04	0.05	0.03		0.00	0.29			
v/s Ratio Perm	0.11			0.11				0.05		0.04		c0.51
v/c Ratio	0.61	0.66		0.63	0.30	0.15		0.16	0.99	0.13		2.69
Uniform Delay, d1	23.8	28.0		23.6	26.1	25.4		18.4	26.0	19.3		29.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	3.1	4.9		4.7	0.5	0.2		0.5	26.1	0.6		774.3
Delay (s)	26.9	33.0		28.3	26.6	25.6		19.0	52.1	19.9		804.0
Level of Service	C	C		C	C	C		B	D	B		F
Approach Delay (s)		30.0			26.7				46.2			
Approach LOS		C			C				D			
Intersection Summary												
HCM 2000 Control Delay	127.9			HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio	1.32											
Actuated Cycle Length (s)	73.4			Sum of lost time (s)			20.0					
Intersection Capacity Utilization	80.7%			ICU Level of Service			D					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1316	120
Future Volume (vph)	1316	120
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1430	130
RTOR Reduction (vph)	0	71
Lane Group Flow (vph)	1430	59
Turn Type	NA	Prot
Protected Phases	6	6
Permitted Phases		
Actuated Green, G (s)	33.3	33.3
Effective Green, g (s)	33.3	33.3
Actuated g/C Ratio	0.45	0.45
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1605	718
v/s Ratio Prot	c0.40	0.04
v/s Ratio Perm		
v/c Ratio	0.89	0.08
Uniform Delay, d1	18.4	11.4
Progression Factor	1.00	1.00
Incremental Delay, d2	7.9	0.2
Delay (s)	26.3	11.6
Level of Service	C	B
Approach Delay (s)	221.8	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	100	38	14	52	21	111	4	35	742	33	1	75
Future Volume (vph)	100	38	14	52	21	111	4	35	742	33	1	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	0.96		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1788		1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00		0.72	1.00	1.00		0.15	1.00	1.00		0.30
Satd. Flow (perm)	1383	1788		1342	1863	1583		278	3539	1583		557
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	41	15	57	23	121	4	38	807	36	1	82
RTOR Reduction (vph)	0	13	0	0	0	103	0	0	0	18	0	0
Lane Group Flow (vph)	109	43	0	57	23	18	0	42	807	18	0	83
Turn Type	Perm	NA		Perm	NA	Perm	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		8	2	2		2	1	6
Actuated Green, G (s)	8.0	8.0		8.0	8.0	8.0		28.6	26.8	26.8		30.4
Effective Green, g (s)	8.0	8.0		8.0	8.0	8.0		28.6	26.8	26.8		30.4
Actuated g/C Ratio	0.15	0.15		0.15	0.15	0.15		0.54	0.51	0.51		0.58
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	210	272		204	283	241		202	1806	808		384
v/s Ratio Prot		0.02			0.01			0.01	0.23			c0.01
v/s Ratio Perm	c0.08			0.04		0.01		0.11		0.01		0.11
v/c Ratio	0.52	0.16		0.28	0.08	0.08		0.21	0.45	0.02		0.22
Uniform Delay, d1	20.5	19.3		19.7	19.1	19.1		8.0	8.1	6.4		5.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	2.2	0.3		0.8	0.1	0.1		0.5	0.8	0.1		0.3
Delay (s)	22.6	19.6		20.4	19.2	19.2		8.5	9.0	6.4		5.3
Level of Service	C	B		C	B	B		A	A	A		A
Approach Delay (s)		21.6			19.6				8.8			
Approach LOS		C			B				A			
Intersection Summary												
HCM 2000 Control Delay			13.5				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.75									
Actuated Cycle Length (s)			52.5				Sum of lost time (s)			15.0		
Intersection Capacity Utilization			69.1%				ICU Level of Service			C		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1457	161
Future Volume (vph)	1457	161
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1584	175
RTOR Reduction (vph)	0	60
Lane Group Flow (vph)	1584	115
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	27.7	27.7
Effective Green, g (s)	27.7	27.7
Actuated g/C Ratio	0.53	0.53
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1867	835
v/s Ratio Prot	c0.45	
v/s Ratio Perm		0.07
v/c Ratio	0.85	0.14
Uniform Delay, d1	10.6	6.3
Progression Factor	1.00	1.00
Incremental Delay, d2	5.0	0.3
Delay (s)	15.6	6.7
Level of Service	B	A
Approach Delay (s)	14.3	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	12	56	25	206	48	56	5	106	986	407	11	177
Future Volume (vph)	12	56	25	206	48	56	5	106	986	407	11	177
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.98			1.00	1.00	0.85		1.00
Flt Protected		0.99	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1847	1583		1759			1770	3539	1583		1770
Flt Permitted		0.93	1.00		0.75			0.17	1.00	1.00		0.17
Satd. Flow (perm)		1733	1583		1372			323	3539	1583		308
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	61	27	224	52	61	5	115	1072	442	12	192
RTOR Reduction (vph)	0	0	20	0	14	0	0	0	0	270	0	0
Lane Group Flow (vph)	0	74	7	0	323	0	0	120	1072	172	0	204
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)		16.4	16.4		16.4			27.0	23.1	23.1		29.2
Effective Green, g (s)		16.4	16.4		16.4			27.0	23.1	23.1		29.2
Actuated g/C Ratio		0.28	0.28		0.28			0.45	0.39	0.39		0.49
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		477	436		378			241	1373	614		274
v/s Ratio Prot								0.03	0.30			c0.06
v/s Ratio Perm		0.04	0.00		c0.24			0.19		0.11		0.30
v/c Ratio		0.16	0.02		0.86			0.50	0.78	0.28		0.74
Uniform Delay, d1		16.3	15.7		20.4			12.8	16.0	12.5		10.7
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.2	0.0		17.0			1.6	4.5	1.1		10.5
Delay (s)		16.5	15.7		37.4			14.4	20.4	13.6		21.2
Level of Service		B	B		D			B	C	B		C
Approach Delay (s)		16.3			37.4				18.2			
Approach LOS		B			D				B			
Intersection Summary												
HCM 2000 Control Delay			30.6									
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			59.5									
Intersection Capacity Utilization			81.6%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1348	46
Future Volume (vph)	1348	46
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1465	50
RTOR Reduction (vph)	0	30
Lane Group Flow (vph)	1465	20
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	24.2	24.2
Effective Green, g (s)	24.2	24.2
Actuated g/C Ratio	0.41	0.41
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1439	643
v/s Ratio Prot	c0.41	
v/s Ratio Perm		0.01
v/c Ratio	1.02	0.03
Uniform Delay, d1	17.7	10.6
Progression Factor	1.00	1.00
Incremental Delay, d2	28.3	0.1
Delay (s)	46.0	10.7
Level of Service	D	B
Approach Delay (s)	42.0	
Approach LOS	D	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	0	25	15	0	344	13	2117	44	274	1577	18
Future Volume (vph)	22	0	25	15	0	344	13	2117	44	274	1577	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.93			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1690			1770	1583	1770	3539	1583	1770	3539	1583
Flt Permitted		0.86			0.74	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1495			1370	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	0	27	16	0	374	14	2301	48	298	1714	20
RTOR Reduction (vph)	0	45	0	0	0	168	0	0	18	0	0	5
Lane Group Flow (vph)	0	6	0	0	16	206	14	2301	30	298	1714	15
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)		18.0			18.0	18.0	2.0	96.0	96.0	24.0	118.0	118.0
Effective Green, g (s)		18.0			18.0	18.0	2.0	96.0	96.0	24.0	118.0	118.0
Actuated g/C Ratio		0.12			0.12	0.12	0.01	0.63	0.63	0.16	0.77	0.77
Clearance Time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		175			161	186	23	2220	993	277	2729	1220
v/s Ratio Prot							0.01	c0.65		c0.17	0.48	
v/s Ratio Perm		0.00			0.01	c0.13			0.02			0.01
v/c Ratio		0.03			0.10	1.11	0.61	1.04	0.03	1.08	0.63	0.01
Uniform Delay, d1		59.8			60.3	67.5	75.1	28.5	10.8	64.5	7.8	4.0
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1			0.3	98.4	38.0	29.3	0.1	75.7	1.1	0.0
Delay (s)		59.9			60.5	165.9	113.2	57.8	10.9	140.2	8.9	4.1
Level of Service		E			E	F	F	E	B	F	A	A
Approach Delay (s)		59.9			161.5			57.2			28.1	
Approach LOS		E			F			E			C	
Intersection Summary												
HCM 2000 Control Delay			53.4				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			1.05									
Actuated Cycle Length (s)			153.0				Sum of lost time (s)			15.0		
Intersection Capacity Utilization			96.5%				ICU Level of Service			F		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	178	12	36	16	9	66	8	27	1412	27	1	60
Future Volume (vph)	178	12	36	16	9	66	8	27	1412	27	1	60
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	0.87			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1617			1770	3539	1583		1770
Flt Permitted	0.70	1.00	1.00	0.75	1.00			0.15	1.00	1.00		0.14
Satd. Flow (perm)	1311	1863	1583	1395	1617			275	3539	1583		265
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	193	13	39	17	10	72	9	29	1535	29	1	65
RTOR Reduction (vph)	0	0	31	0	58	0	0	0	0	15	0	0
Lane Group Flow (vph)	193	13	8	17	24	0	0	38	1535	14	0	66
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	10.7	10.7	10.7	10.7	10.7			28.8	27.1	27.1		30.8
Effective Green, g (s)	10.7	10.7	10.7	10.7	10.7			28.8	27.1	27.1		30.8
Actuated g/C Ratio	0.19	0.19	0.19	0.19	0.19			0.52	0.49	0.49		0.55
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	252	359	305	268	311			188	1728	772		220
v/s Ratio Prot		0.01			0.01			0.01	c0.43			c0.01
v/s Ratio Perm	c0.15		0.00	0.01				0.10		0.01		0.15
v/c Ratio	0.77	0.04	0.02	0.06	0.08			0.20	0.89	0.02		0.30
Uniform Delay, d1	21.2	18.2	18.2	18.3	18.4			7.6	12.8	7.3		9.3
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	13.0	0.0	0.0	0.1	0.1			0.5	7.2	0.0		0.8
Delay (s)	34.2	18.3	18.2	18.4	18.5			8.2	20.1	7.4		10.1
Level of Service	C	B	B	B	B			A	C	A		B
Approach Delay (s)		30.8			18.4				19.6			
Approach LOS		C			B				B			
Intersection Summary												
HCM 2000 Control Delay			17.4			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.82									
Actuated Cycle Length (s)			55.5			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			72.2%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1182	73
Future Volume (vph)	1182	73
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1285	79
RTOR Reduction (vph)	0	39
Lane Group Flow (vph)	1285	40
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	28.1	28.1
Effective Green, g (s)	28.1	28.1
Actuated g/C Ratio	0.51	0.51
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1791	801
v/s Ratio Prot	0.36	
v/s Ratio Perm		0.03
v/c Ratio	0.72	0.05
Uniform Delay, d1	10.6	6.9
Progression Factor	1.00	1.00
Incremental Delay, d2	2.5	0.1
Delay (s)	13.1	7.1
Level of Service	B	A
Approach Delay (s)	12.6	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	16	221	51	25	148	89	1	262	1213	24	60	1068
Future Volume (vph)	16	221	51	25	148	89	1	262	1213	24	60	1068
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00		1.00			1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		0.95			1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1583		1769			1770	3539	1583	1770	3539
Flt Permitted	0.30	1.00	1.00		0.95			0.15	1.00	1.00	0.17	1.00
Satd. Flow (perm)	561	1863	1583		1681			279	3539	1583	318	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	17	240	55	27	161	97	1	285	1318	26	65	1161
RTOR Reduction (vph)	0	0	39	0	29	0	0	0	0	15	0	0
Lane Group Flow (vph)	17	240	16	0	256	0	0	286	1318	11	65	1161
Turn Type	pm+pt	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4			8			5	2		1	6
Permitted Phases	4		4	8			5	2		2	6	
Actuated Green, G (s)	18.9	18.9	18.9		13.1			32.8	26.7	26.7	26.2	23.4
Effective Green, g (s)	18.9	18.9	18.9		13.1			32.8	26.7	26.7	26.2	23.4
Actuated g/C Ratio	0.30	0.30	0.30		0.21			0.52	0.42	0.42	0.41	0.37
Clearance Time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	182	555	471		347			287	1490	666	195	1306
v/s Ratio Prot	0.00	c0.13						c0.10	0.37		0.01	0.33
v/s Ratio Perm	0.03		0.01		c0.15			c0.42		0.01	0.12	
v/c Ratio	0.09	0.43	0.03		0.74			1.00	0.88	0.02	0.33	0.89
Uniform Delay, d1	17.2	17.9	15.8		23.5			13.2	16.9	10.7	13.2	18.8
Progression Factor	1.00	1.00	1.00		1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.5	0.0		8.0			51.8	6.6	0.0	1.0	7.7
Delay (s)	17.4	18.5	15.8		31.6			65.0	23.6	10.7	14.2	26.5
Level of Service	B	B	B		C			E	C	B	B	C
Approach Delay (s)		17.9			31.6				30.6			25.8
Approach LOS		B			C				C			C
Intersection Summary												
HCM 2000 Control Delay			27.8			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.99									
Actuated Cycle Length (s)			63.4			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			87.0%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	6
Future Volume (vph)	6
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	7
RTOR Reduction (vph)	4
Lane Group Flow (vph)	3
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	23.4
Effective Green, g (s)	23.4
Actuated g/C Ratio	0.37
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	584
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.00
Uniform Delay, d1	12.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	12.6
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	194	66	24	98	69	93	1	11	1304	95	1	55
Future Volume (vph)	194	66	24	98	69	93	1	11	1304	95	1	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85	1.00	0.91			1.00	1.00	0.85		1.00
Flt Protected		0.96	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1796	1583	1770	1702			1770	3539	1583		1770
Flt Permitted		0.67	1.00	0.48	1.00			0.12	1.00	1.00		0.12
Satd. Flow (perm)		1251	1583	897	1702			231	3539	1583		231
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	72	26	107	75	101	1	12	1417	103	1	60
RTOR Reduction (vph)	0	0	19	0	22	0	0	0	0	44	0	0
Lane Group Flow (vph)	0	283	7	107	154	0	0	13	1417	59	0	61
Turn Type	Perm	NA	Perm	Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		4			8				2			
Permitted Phases	4		4	8			2	2		2	6	6
Actuated Green, G (s)		16.1	16.1	16.1	16.1			32.2	32.2	32.2		32.2
Effective Green, g (s)		16.1	16.1	16.1	16.1			32.2	32.2	32.2		32.2
Actuated g/C Ratio		0.28	0.28	0.28	0.28			0.55	0.55	0.55		0.55
Clearance Time (s)		5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		345	437	247	470			127	1954	874		127
v/s Ratio Prot					0.09				c0.40			
v/s Ratio Perm		c0.23	0.00	0.12				0.06		0.04		0.26
v/c Ratio		0.82	0.02	0.43	0.33			0.10	0.73	0.07		0.48
Uniform Delay, d1		19.7	15.3	17.3	16.8			6.2	9.7	6.1		8.0
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		14.4	0.0	1.2	0.4			1.6	2.4	0.1		12.4
Delay (s)		34.1	15.4	18.6	17.2			7.8	12.1	6.2		20.4
Level of Service		C	B	B	B			A	B	A		C
Approach Delay (s)		32.6			17.7				11.7			
Approach LOS		C			B				B			
Intersection Summary												
HCM 2000 Control Delay			13.8			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.76									
Actuated Cycle Length (s)			58.3			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			80.4%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1254	124
Future Volume (vph)	1254	124
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1363	135
RTOR Reduction (vph)	0	60
Lane Group Flow (vph)	1363	75
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	32.2	32.2
Effective Green, g (s)	32.2	32.2
Actuated g/C Ratio	0.55	0.55
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1954	874
v/s Ratio Prot	0.39	
v/s Ratio Perm		0.05
v/c Ratio	0.70	0.09
Uniform Delay, d1	9.5	6.1
Progression Factor	1.00	1.00
Incremental Delay, d2	2.1	0.2
Delay (s)	11.6	6.3
Level of Service	B	A
Approach Delay (s)	11.5	
Approach LOS	B	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	97	164	68	86	126	419	26	1319	193	365	982	82
Future Volume (vph)	97	164	68	86	126	419	26	1319	193	365	982	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1781		1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.67	1.00		0.50	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1247	1781		933	1863	1583	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	105	178	74	93	137	455	28	1434	210	397	1067	89
RTOR Reduction (vph)	0	28	0	0	0	182	0	0	134	0	0	46
Lane Group Flow (vph)	105	224	0	93	137	273	28	1434	76	397	1067	43
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)	13.9	13.9		13.9	13.9	13.9	1.9	21.3	21.3	8.9	28.3	28.3
Effective Green, g (s)	13.9	13.9		13.9	13.9	13.9	1.9	21.3	21.3	8.9	28.3	28.3
Actuated g/C Ratio	0.24	0.24		0.24	0.24	0.24	0.03	0.36	0.36	0.15	0.48	0.48
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	293	418		219	438	372	56	1275	570	516	1694	758
v/s Ratio Prot		0.13			0.07		0.02	c0.41		c0.12	0.30	
v/s Ratio Perm	0.08			0.10		c0.17			0.05			0.03
v/c Ratio	0.36	0.54		0.42	0.31	0.73	0.50	1.12	0.13	0.77	0.63	0.06
Uniform Delay, d1	18.9	19.8		19.2	18.7	20.9	28.1	18.9	12.7	24.1	11.5	8.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.3		1.3	0.4	7.3	6.9	66.8	0.5	6.8	1.8	0.1
Delay (s)	19.6	21.1		20.5	19.1	28.2	35.0	85.7	13.2	30.9	13.3	8.4
Level of Service	B	C		C	B	C	C	F	B	C	B	A
Approach Delay (s)		20.7			25.3			75.8			17.5	
Approach LOS		C			C			E			B	
Intersection Summary												
HCM 2000 Control Delay			41.9				HCM 2000 Level of Service			D		
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			59.1				Sum of lost time (s)			15.0		
Intersection Capacity Utilization			81.1%				ICU Level of Service			D		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	74	31	46	152	27	52	1	61	1272	178	1	33
Future Volume (vph)	74	31	46	152	27	52	1	61	1272	178	1	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00	1.00	0.45	1.00	1.00		0.12	1.00	1.00		0.13
Satd. Flow (perm)	1375	1863	1583	838	1863	1583		229	3539	1583		237
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	80	34	50	165	29	57	1	66	1383	193	1	36
RTOR Reduction (vph)	0	0	44	0	0	42	0	0	0	98	0	0
Lane Group Flow (vph)	80	34	6	165	29	15	0	67	1383	95	0	37
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4		3	8			5	2			1
Permitted Phases	4		4	8		8	5	2		2	1	6
Actuated Green, G (s)	7.9	7.9	7.9	18.0	18.0	18.0		35.3	32.5	32.5		33.3
Effective Green, g (s)	7.9	7.9	7.9	18.0	18.0	18.0		35.3	32.5	32.5		33.3
Actuated g/C Ratio	0.12	0.12	0.12	0.27	0.27	0.27		0.52	0.48	0.48		0.49
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	161	218	185	294	498	423		184	1709	764		158
v/s Ratio Prot		0.02		c0.04	0.02			c0.02	c0.39			0.01
v/s Ratio Perm	0.06		0.00	c0.11		0.01		0.18		0.06		0.11
v/c Ratio	0.50	0.16	0.03	0.56	0.06	0.04		0.36	0.81	0.12		0.23
Uniform Delay, d1	27.8	26.7	26.3	20.1	18.3	18.2		10.7	14.8	9.6		11.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	2.4	0.3	0.1	2.4	0.0	0.0		1.2	4.3	0.3		0.8
Delay (s)	30.2	27.0	26.4	22.6	18.4	18.3		12.0	19.0	9.9		12.0
Level of Service	C	C	C	C	B	B		B	B	A		B
Approach Delay (s)		28.4			21.1				17.7			
Approach LOS		C			C				B			
Intersection Summary												
HCM 2000 Control Delay			18.7				HCM 2000 Level of Service		B			
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			67.3				Sum of lost time (s)		20.0			
Intersection Capacity Utilization			66.9%				ICU Level of Service		C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1204	62
Future Volume (vph)	1204	62
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1309	67
RTOR Reduction (vph)	0	36
Lane Group Flow (vph)	1309	31
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	31.5	31.5
Effective Green, g (s)	31.5	31.5
Actuated g/C Ratio	0.47	0.47
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1656	740
v/s Ratio Prot	0.37	
v/s Ratio Perm		0.02
v/c Ratio	0.79	0.04
Uniform Delay, d1	15.1	9.7
Progression Factor	1.00	1.00
Incremental Delay, d2	3.9	0.1
Delay (s)	19.0	9.8
Level of Service	B	A
Approach Delay (s)	18.4	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	44	47	21	158	19	265	6	1182	99	102	1261	20
Future Volume (vph)	44	47	21	158	19	265	6	1182	99	102	1261	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.72	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1385	1863	1583	1348	1863	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	48	51	23	172	21	288	7	1285	108	111	1371	22
RTOR Reduction (vph)	0	0	18	0	0	164	0	0	59	0	0	11
Lane Group Flow (vph)	48	51	5	172	21	124	7	1285	49	111	1371	11
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Actuated Green, G (s)	12.3	12.3	12.3	12.3	12.3	12.3	0.9	26.0	26.0	3.8	28.9	28.9
Effective Green, g (s)	12.3	12.3	12.3	12.3	12.3	12.3	0.9	26.0	26.0	3.8	28.9	28.9
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.46	0.46	0.07	0.51	0.51
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	298	401	340	290	401	340	27	1611	720	117	1791	801
v/s Ratio Prot		0.03			0.01		0.00	0.36		c0.06	c0.39	
v/s Ratio Perm	0.03		0.00	c0.13		0.08			0.03			0.01
v/c Ratio	0.16	0.13	0.01	0.59	0.05	0.36	0.26	0.80	0.07	0.95	0.77	0.01
Uniform Delay, d1	18.2	18.1	17.6	20.1	17.8	19.1	27.8	13.3	8.7	26.6	11.4	7.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.1	0.0	3.2	0.1	0.7	5.1	4.2	0.2	66.4	3.2	0.0
Delay (s)	18.5	18.2	17.6	23.4	17.8	19.7	32.8	17.5	8.9	92.9	14.6	7.0
Level of Service	B	B	B	C	B	B	C	B	A	F	B	A
Approach Delay (s)		18.2			21.0			16.9			20.2	
Approach LOS		B			C			B			C	
Intersection Summary												
HCM 2000 Control Delay			18.9									
HCM 2000 Level of Service										B		
HCM 2000 Volume to Capacity ratio			0.77									
Actuated Cycle Length (s)			57.1							15.0		
Intersection Capacity Utilization			66.9%							C		
ICU Level of Service												
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	155	113	13	1324	92	31	128	1465
Future Volume (vph)	155	113	13	1324	92	31	128	1465
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.16	1.00	1.00		0.12	1.00
Satd. Flow (perm)	1770	1583	294	3539	1583		227	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	168	123	14	1439	100	34	139	1592
RTOR Reduction (vph)	0	110	0	0	47	0	0	0
Lane Group Flow (vph)	168	13	14	1439	53	0	173	1592
Turn Type	Prot	Prot	Perm	NA	Perm	custom	pm+pt	NA
Protected Phases	3	3		2			1	6
Permitted Phases			2		2	1	6	
Actuated Green, G (s)	5.7	5.7	27.8	27.8	27.8		36.8	36.8
Effective Green, g (s)	5.7	5.7	27.8	27.8	27.8		36.8	36.8
Actuated g/C Ratio	0.11	0.11	0.53	0.53	0.53		0.70	0.70
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	192	171	155	1873	838		276	2480
v/s Ratio Prot	c0.09	0.01		c0.41			0.05	c0.45
v/s Ratio Perm			0.05		0.03		0.39	
v/c Ratio	0.88	0.08	0.09	0.77	0.06		0.63	0.64
Uniform Delay, d1	23.0	21.0	6.1	9.8	6.0		7.3	4.3
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.01	1.00
Incremental Delay, d2	32.8	0.2	1.1	3.1	0.1		4.4	1.3
Delay (s)	55.9	21.2	7.3	12.9	6.2		11.8	5.5
Level of Service	E	C	A	B	A		B	A
Approach Delay (s)	41.2			12.4				6.2
Approach LOS	D			B				A
Intersection Summary								
HCM 2000 Control Delay			11.7			HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.81					
Actuated Cycle Length (s)			52.5			Sum of lost time (s)		15.0
Intersection Capacity Utilization			66.5%			ICU Level of Service		C
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	850	1204	637	242	879	155	540	832	120	125	966	487
Future Volume (vph)	850	1204	637	242	879	155	540	832	120	125	966	487
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	924	1309	692	263	955	168	587	904	130	136	1050	529
RTOR Reduction (vph)	0	0	193	0	0	128	0	0	99	0	0	188
Lane Group Flow (vph)	924	1309	499	263	955	40	587	904	31	136	1050	341
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.1	18.1	7.9	18.0	18.0
Effective Green, g (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.1	18.1	7.9	18.0	18.0
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.24	0.24	0.11	0.24	0.24	0.11	0.24	0.24
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	503	1132	506	228	849	379	366	1227	382	186	1220	379
v/s Ratio Prot	c0.27	c0.37		0.08	0.27		c0.17	0.18		0.08	0.21	
v/s Ratio Perm			0.32			0.03			0.02			c0.22
v/c Ratio	1.84	1.16	0.99	1.15	1.12	0.11	1.60	0.74	0.08	0.73	0.86	0.90
Uniform Delay, d1	32.0	25.5	25.3	35.0	28.5	22.2	33.5	26.3	22.0	32.5	27.3	27.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	384.3	80.6	36.0	107.3	71.2	0.1	284.2	4.0	0.4	13.8	8.1	26.9
Delay (s)	416.3	106.1	61.4	142.3	99.7	22.4	317.7	30.2	22.4	46.3	35.4	54.5
Level of Service	F	F	E	F	F	C	F	C	C	D	D	D
Approach Delay (s)		193.5			98.4			133.7			42.1	
Approach LOS		F			F			F			D	
Intersection Summary												
HCM 2000 Control Delay	129.7			HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio	1.33											
Actuated Cycle Length (s)	75.0			Sum of lost time (s)					20.0			
Intersection Capacity Utilization	99.3%			ICU Level of Service					F			
Analysis Period (min)	15											
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018



Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	1	9	262	332	265	477	45
Future Volume (Veh/h)	1	9	262	332	265	477	45
Sign Control		Stop			Free	Free	
Grade		0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	10	285	361	288	518	49
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None	None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked	0.00						
vC, conflicting volume	0	1552	542	567			
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	0	1552	542	567			
tC, single (s)	0.0	6.4	6.2	4.1			
tC, 2 stage (s)							
tF (s)	0.0	3.5	3.3	2.2			
p0 queue free %	0	87	47	64			
cM capacity (veh/h)	0	80	540	1005			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1		
Volume Total	10	285	361	288	567		
Volume Left	10	0	361	0	0		
Volume Right	0	285	0	0	49		
cSH	80	540	1005	1700	1700		
Volume to Capacity	0.13	0.53	0.36	0.17	0.33		
Queue Length 95th (ft)	10	76	41	0	0		
Control Delay (s)	56.4	18.9	10.6	0.0	0.0		
Lane LOS	F	C	B				
Approach Delay (s)	20.1		5.9		0.0		
Approach LOS	C						
Intersection Summary							
Average Delay			6.5				
Intersection Capacity Utilization			59.6%		ICU Level of Service		B
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018

								
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR	
Lane Configurations								
Traffic Volume (veh/h)	39	115	27	187	556	685	60	
Future Volume (Veh/h)	39	115	27	187	556	685	60	
Sign Control	Stop				Free	Free		
Grade	0%				0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	42	125	0	203	604	745	65	
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None	None		
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00					
vC, conflicting volume	1453	372	0	810				
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1453	372	0	810				
tC, single (s)	6.8	6.9	0.0	4.1				
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0	2.2				
p0 queue free %	54	80	0	75				
cM capacity (veh/h)	91	625	0	812				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	42	125	203	302	302	372	372	65
Volume Left	42	0	203	0	0	0	0	0
Volume Right	0	125	0	0	0	0	0	65
cSH	91	625	812	1700	1700	1700	1700	1700
Volume to Capacity	0.46	0.20	0.25	0.18	0.18	0.22	0.22	0.04
Queue Length 95th (ft)	49	19	25	0	0	0	0	0
Control Delay (s)	74.9	12.2	10.9	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B	B					
Approach Delay (s)	28.0		2.7			0.0		
Approach LOS	D							
Intersection Summary								
Average Delay			3.9					
Intersection Capacity Utilization			47.9%		ICU Level of Service			A
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	197	11	7	756	501	15	22	725
Future Volume (Veh/h)	197	11	7	756	501	15	22	725
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	214	12	0	822	545	0	24	788
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	None				None			
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00			0.00		
vC, conflicting volume	1264	411	0			0	822	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1264	411	0			0	822	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	0	98	0			0	97	
cM capacity (veh/h)	157	590	0			0	803	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	226	411	411	545	0	24	394	394
Volume Left	214	0	0	0	0	24	0	0
Volume Right	12	0	0	545	0	0	0	0
cSH	163	1700	1700	1700	1700	803	1700	1700
Volume to Capacity	1.39	0.24	0.24	0.32	0.00	0.03	0.23	0.23
Queue Length 95th (ft)	349	0	0	0	0	2	0	0
Control Delay (s)	260.5	0.0	0.0	0.0	0.0	9.6	0.0	0.0
Lane LOS	F					A		
Approach Delay (s)	260.5	0.0	0.3					
Approach LOS	F							
Intersection Summary								
Average Delay			24.6					
Intersection Capacity Utilization			45.8%		ICU Level of Service		A	
Analysis Period (min)			15					
Description: m								

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	1	80	9	34	6	0	1	15	5	827	133	6
Future Volume (Veh/h)	1	80	9	34	6	0	1	15	5	827	133	6
Sign Control			Stop			Stop				Free		
Grade			0%			0%				0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	87	10	37	7	0	1	0	5	899	145	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)							12					
Median type										None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00	0.59	0.59	0.59	0.59	0.59		0.00	0.59			0.00
vC, conflicting volume	0	2090	2685	810	1772	2540	450	0	1621			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1468	2470	0	931	2225	450	0	678			0
tC, single (s)	0.0	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0
tC, 2 stage (s)												
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	0	0	42	94	89	100	100	0	99			0
cM capacity (veh/h)	0	52	17	644	66	25	557	0	540			0
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	134	7	1	5	450	450	145	5	810	810	43	
Volume Left	87	7	0	5	0	0	0	5	0	0	0	
Volume Right	37	0	1	0	0	0	145	0	0	0	43	
cSH	58	66	0	540	1700	1700	1700	662	1700	1700	1700	
Volume to Capacity	2.31	0.11	Err	0.01	0.26	0.26	0.09	0.01	0.48	0.48	0.03	
Queue Length 95th (ft)	332	8	Err	1	0	0	0	1	0	0	0	
Control Delay (s)	748.7	65.5	Err	11.7	0.0	0.0	0.0	10.5	0.0	0.0	0.0	
Lane LOS	F	F	F	B				B				
Approach Delay (s)	748.7	Err		0.1				0.0				
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			61.6%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

					
Movement	SBL	SBT	SBR		
Lane Configurations		 			
Traffic Volume (veh/h)	5	1491	40		
Future Volume (Veh/h)	5	1491	40		
Sign Control	Free				
Grade	0%				
Peak Hour Factor	0.92	0.92	0.92		
Hourly flow rate (vph)	5	1621	43		
Pedestrians					
Lane Width (ft)					
Walking Speed (ft/s)					
Percent Blockage					
Right turn flare (veh)					
Median type	None				
Median storage veh					
Upstream signal (ft)	1262				
pX, platoon unblocked					
vC, conflicting volume	1044				
vC1, stage 1 conf vol					
vC2, stage 2 conf vol					
vCu, unblocked vol	1044				
tC, single (s)	4.1				
tC, 2 stage (s)					
tF (s)	2.2				
p0 queue free %	99				
cM capacity (veh/h)	662				
Direction, Lane #					

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	14	0	95	21	2	11	22	132	1600	19	1	1463
Future Volume (Veh/h)	14	0	95	21	2	11	22	132	1600	19	1	1463
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	15	0	103	23	2	12	0	143	1739	21	1	1590
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None										None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked	0.00											
vC, conflicting volume	2760	3617	795	2925	3617	870	0	1590			1739	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2760	3617	795	2925	3617	870	0	1590			1739	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	0	100	69	0	40	96	0	65			100	
cM capacity (veh/h)	3	3	330	3	3	295	0	409			358	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	118	37	143	870	870	21	1	795	795	46		
Volume Left	15	23	143	0	0	0	1	0	0	0		
Volume Right	103	12	0	0	0	21	0	0	0	46		
cSH	25	5	409	1700	1700	1700	358	1700	1700	1700		
Volume to Capacity	4.64	7.42	0.35	0.51	0.51	0.01	0.00	0.47	0.47	0.03		
Queue Length 95th (ft)	Err	Err	39	0	0	0	0	0	0	0		
Control Delay (s)	Err	Err	18.5	0.0	0.0	0.0	15.1	0.0	0.0	0.0		
Lane LOS	F	F	C	C								
Approach Delay (s)	Err	Err	1.4	0.0								
Approach LOS	F	F										
Intersection Summary												
Average Delay			420.2									
Intersection Capacity Utilization			65.5%		ICU Level of Service					C		
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	42
Future Volume (Veh/h)	42
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	46
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	47	0	0	359	13	2140	44	274	1594	18
Future Volume (Veh/h)	0	0	47	0	0	359	13	2140	44	274	1594	18
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	51	0	0	390	14	2326	48	298	1733	20
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3520	4683	866	3816	4683	1163	1733				2326	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3520	4683	866	3816	4683	1163	1733				2326	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	0	83	0	0	0	96				0	
cM capacity (veh/h)	0	0	296	0	0	188	360				210	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	51	390	14	1163	1163	48	298	866	866	20		
Volume Left	0	0	14	0	0	0	298	0	0	0		
Volume Right	51	390	0	0	0	48	0	0	0	20		
cSH	296	188	360	1700	1700	1700	210	1700	1700	1700		
Volume to Capacity	0.17	2.08	0.04	0.68	0.68	0.03	1.42	0.51	0.51	0.01		
Queue Length 95th (ft)	15	753	3	0	0	0	434	0	0	0		
Control Delay (s)	19.7	543.1	15.4	0.0	0.0	0.0	256.0	0.0	0.0	0.0		
Lane LOS	C	F	C	F								
Approach Delay (s)	19.7	543.1	0.1					37.2				
Approach LOS	C	F										
Intersection Summary												
Average Delay			59.3									
Intersection Capacity Utilization			88.1%	ICU Level of Service					E			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	11	5	91	0	4	14	45	1517	1	1	1	1302
Future Volume (Veh/h)	11	5	91	0	4	14	45	1517	1	1	1	1302
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	5	99	0	4	15	49	1649	1	0	1	1415
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None				None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked										0.00		
vC, conflicting volume	2342	3164	708	2558	3164	825	1415				0	1649
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2342	3164	708	2558	3164	825	1415				0	1649
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				0.0	2.2
p0 queue free %	0	46	74	100	57	95	90				0	100
cM capacity (veh/h)	11	9	377	5	9	316	478				0	388
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	116	19	49	1099	551	1	708	708	2			
Volume Left	12	0	49	0	0	1	0	0	0			
Volume Right	99	15	0	0	1	0	0	0	2			
cSH	62	40	478	1700	1700	388	1700	1700	1700			
Volume to Capacity	1.86	0.48	0.10	0.65	0.32	0.00	0.42	0.42	0.00			
Queue Length 95th (ft)	269	42	9	0	0	0	0	0	0			
Control Delay (s)	549.3	160.4	13.4	0.0	0.0	14.3	0.0	0.0	0.0			
Lane LOS	F	F	B				B					
Approach Delay (s)	549.3	160.4	0.4				0.0					
Approach LOS	F	F										
Intersection Summary												
Average Delay				20.7								
Intersection Capacity Utilization				61.8%			ICU Level of Service			B		
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	2
Future Volume (Veh/h)	2
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	2
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	4	202	21	0	74	26	137	1191	51	1	56		
Future Volume (Veh/h)	0	4	202	21	0	74	26	137	1191	51	1	56		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	4	220	23	0	80	0	149	1295	55	0	61		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage veh														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	2544	3191	738	2455	3191	648	0	1476					0	1295
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	2544	3191	738	2455	3191	648	0	1476					0	1295
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	32	39	0	100	81	0	67					0	89
cM capacity (veh/h)	7	6	360	2	6	413	0	452					0	531
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4			
Volume Total	4	220	103	149	648	648	55	61	738	738	1			
Volume Left	0	0	23	149	0	0	0	61	0	0	0			
Volume Right	0	220	80	0	0	0	55	0	0	0	1			
cSH	6	360	9	452	1700	1700	1700	531	1700	1700	1700			
Volume to Capacity	0.68	0.61	11.60	0.33	0.38	0.38	0.03	0.11	0.43	0.43	0.00			
Queue Length 95th (ft)	28	96	Err	36	0	0	0	10	0	0	0			
Control Delay (s)	976.3	29.5	Err	16.8	0.0	0.0	0.0	12.7	0.0	0.0	0.0			
Lane LOS	F	D	F	C	B									
Approach Delay (s)	46.4		Err	1.7	0.5									
Approach LOS	E		F											
Intersection Summary														
Average Delay	310.2													
Intersection Capacity Utilization	78.1%			ICU Level of Service					D					
Analysis Period (min)	15													

HCM Unsignalized Intersection Capacity Analysis 20: SR 74 & Senoia Road/Lexington Pass

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1358	1
Future Volume (Veh/h)	1358	1
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1476	1
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

															
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL			
Lane Configurations															
Traffic Volume (veh/h)	0	0	1	38	0	85	20	0	1392	40	4	27			
Future Volume (Veh/h)	0	0	1	38	0	85	20	0	1392	40	4	27			
Sign Control	Stop			Stop			Free								
Grade	0%			0%			0%								
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Hourly flow rate (vph)	0	0	1	41	0	92	0	0	1513	43	0	29			
Pedestrians															
Lane Width (ft)															
Walking Speed (ft/s)															
Percent Blockage															
Right turn flare (veh)															
Median type	None														
Median storage (veh)															
Upstream signal (ft)															
pX, platoon unblocked							0.00						0.00		
vC, conflicting volume	2515	3272	850	2422	3272	756	0	1701					0	1513	
vC1, stage 1 conf vol															
vC2, stage 2 conf vol															
vCu, unblocked vol	2515	3272	850	2422	3272	756	0	1701					0	1513	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1	
tC, 2 stage (s)															
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2	
p0 queue free %	100	100	100	0	100	74	0	100					0	93	
cM capacity (veh/h)	10	8	304	16	8	350	0	370					0	438	
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3					
Volume Total	1	41	92	0	756	756	43	29	1133	568					
Volume Left	0	41	0	0	0	0	0	29	0	0					
Volume Right	1	0	92	0	0	0	43	0	0	1					
cSH	304	16	350	1700	1700	1700	1700	438	1700	1700					
Volume to Capacity	0.00	2.59	0.26	0.00	0.45	0.45	0.03	0.07	0.67	0.33					
Queue Length 95th (ft)	0	145	26	0	0	0	0	5	0	0					
Control Delay (s)	16.9	1215.9	18.9	0.0	0.0	0.0	0.0	13.8	0.0	0.0					
Lane LOS	C	F	C					B							
Approach Delay (s)	16.9	387.9	0.0					0.2							
Approach LOS	C	F													
Intersection Summary															
Average Delay	15.2														
Intersection Capacity Utilization	61.9%			ICU Level of Service					B						
Analysis Period (min)	15														

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	1564	1
Future Volume (Veh/h)	1564	1
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1700	1
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

									
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Lane Configurations									
Traffic Volume (veh/h)	36	60	2	1410	71	13	87	1528	
Future Volume (Veh/h)	36	60	2	1410	71	13	87	1528	
Sign Control	Stop			Free			Free		
Grade	0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	39	65	0	1533	77	0	95	1661	
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None				None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked			0.00			0.00			
vC, conflicting volume	2554	766	0			0	1533		
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2554	766	0			0	1533		
tC, single (s)	6.8	6.9	0.0			0.0	4.1		
tC, 2 stage (s)									
tF (s)	3.5	3.3	0.0			0.0	2.2		
p0 queue free %	0	81	0			0	78		
cM capacity (veh/h)	17	345	0			0	430		
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	39	65	766	766	77	0	95	830	830
Volume Left	39	0	0	0	0	0	95	0	0
Volume Right	0	65	0	0	77	0	0	0	0
cSH	17	345	1700	1700	1700	1700	430	1700	1700
Volume to Capacity	2.30	0.19	0.45	0.45	0.05	0.00	0.22	0.49	0.49
Queue Length 95th (ft)	136	17	0	0	0	0	21	0	0
Control Delay (s)	1063.4	17.8	0.0	0.0	0.0	0.0	15.7	0.0	0.0
Lane LOS	F	C					C		
Approach Delay (s)	409.9	0.0					0.9		
Approach LOS									
F									
Intersection Summary									
Average Delay			12.7						
Intersection Capacity Utilization			58.9%		ICU Level of Service			B	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations									 			 
Traffic Volume (vph)	0	0	0	1860	1	294	1	224	631	0	0	729
Future Volume (vph)	0	0	0	1860	1	294	1	224	631	0	0	729
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0		5.0	5.0			5.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.95
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1681	1685	1583		1770	3539			3539
Flt Permitted				0.95	0.95	1.00		0.50	1.00			1.00
Satd. Flow (perm)				1681	1685	1583		931	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2022	1	320	1	243	686	0	0	792
RTOR Reduction (vph)	0	0	0	0	0	131	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	1011	1012	189	0	244	686	0	0	792
Turn Type				Prot	NA	custom	custom	Prot	NA			NA
Protected Phases				3	8	3		5	2			6
Permitted Phases							5					
Actuated Green, G (s)				19.0	19.0	19.0		8.0	31.0			18.0
Effective Green, g (s)				19.0	19.0	19.0		8.0	31.0			18.0
Actuated g/C Ratio				0.32	0.32	0.32		0.13	0.52			0.30
Clearance Time (s)				5.0	5.0	5.0		5.0	5.0			5.0
Vehicle Extension (s)				3.0	3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)				532	533	501		124	1828			1061
v/s Ratio Prot				c0.60	0.60	0.12			0.19			c0.22
v/s Ratio Perm								c0.26				
v/c Ratio				1.90	1.90	0.38		1.97	0.38			0.75
Uniform Delay, d1				20.5	20.5	15.9		26.0	8.7			18.9
Progression Factor				1.00	1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2				412.2	411.4	0.5		463.2	0.6			4.8
Delay (s)				432.7	431.9	16.4		489.2	9.3			23.7
Level of Service				F	F	B		F	A			C
Approach Delay (s)		0.0			375.5				135.2			21.7
Approach LOS		A			F				F			C
Intersection Summary												
HCM 2000 Control Delay		234.5										
HCM 2000 Volume to Capacity ratio		1.45										
Actuated Cycle Length (s)		60.0										
Intersection Capacity Utilization		181.7%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	301
Future Volume (vph)	301
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	327
RTOR Reduction (vph)	229
Lane Group Flow (vph)	98
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	18.0
Effective Green, g (s)	18.0
Actuated g/C Ratio	0.30
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	474
v/s Ratio Prot	
v/s Ratio Perm	0.06
v/c Ratio	0.21
Uniform Delay, d1	15.7
Progression Factor	1.00
Incremental Delay, d2	1.0
Delay (s)	16.7
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	134	0	248	0	0	0	0	692	1575	383	2801	0
Future Volume (vph)	134	0	248	0	0	0	0	692	1575	383	2801	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00					0.95	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					3539	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	146	0	270	0	0	0	0	752	1712	416	3045	0
RTOR Reduction (vph)	0	0	50	0	0	0	0	0	142	0	0	0
Lane Group Flow (vph)	146	0	220	0	0	0	0	752	1570	416	3045	0
Turn Type	Prot		Prot					NA	Perm	Prot	NA	
Protected Phases	7		7					2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Effective Green, g (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Actuated g/C Ratio	0.09		0.09					0.65	0.65	0.16	0.84	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	151		135					2300	1028	278	2982	
v/s Ratio Prot	0.08		c0.14					0.21		c0.24	0.86	
v/s Ratio Perm									c0.99			
v/c Ratio	0.97		1.63					0.33	1.53	1.50	1.02	
Uniform Delay, d1	63.8		64.0					10.9	24.5	59.0	11.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	62.6		313.5					0.4	242.3	241.4	22.1	
Delay (s)	126.4		377.5					11.3	266.8	300.4	33.1	
Level of Service	F		F					B	F	F	C	
Approach Delay (s)		289.4			0.0			188.8			65.2	
Approach LOS		F			A			F			E	
Intersection Summary												
HCM 2000 Control Delay			128.0									
HCM 2000 Volume to Capacity ratio			1.53									
Actuated Cycle Length (s)			140.0									
Intersection Capacity Utilization			181.7%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	174	107	49	245	92	359	15	52	1605	135	51	277
Future Volume (vph)	174	107	49	245	92	359	15	52	1605	135	51	277
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.97
Frt	1.00	0.95		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1775		1770	1863	1583		1770	3539	1583		3433
Flt Permitted	0.69	1.00		0.59	1.00	1.00		0.21	1.00	1.00		0.28
Satd. Flow (perm)	1290	1775		1108	1863	1583		390	3539	1583		1025
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	189	116	53	266	100	390	16	57	1745	147	55	301
RTOR Reduction (vph)	0	24	0	0	0	226	0	0	0	107	0	0
Lane Group Flow (vph)	189	145	0	266	100	164	0	73	1745	40	0	356
Turn Type	pm+pt	NA		pm+pt	NA	Prot	custom	pm+pt	NA	Perm	custom	Prot
Protected Phases	7	4		3	8	8		5	2			1
Permitted Phases	4			8			5	2		2	1	
Actuated Green, G (s)	17.1	12.1		17.1	12.1	12.1		23.0	19.1	19.1		14.1
Effective Green, g (s)	17.1	12.1		17.1	12.1	12.1		23.0	19.1	19.1		14.1
Actuated g/C Ratio	0.24	0.17		0.24	0.17	0.17		0.33	0.27	0.27		0.20
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	347	305		316	320	272		204	961	430		205
v/s Ratio Prot	0.04	0.08		c0.06	0.05	0.10		0.02	c0.49			
v/s Ratio Perm	0.09			c0.14				0.10		0.03		c0.35
v/c Ratio	0.54	0.48		0.84	0.31	0.60		0.36	1.82	0.09		1.74
Uniform Delay, d1	22.6	26.2		24.6	25.5	26.9		18.3	25.6	19.1		28.1
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	1.7	1.2		18.0	0.6	3.7		1.1	371.2	0.4		351.0
Delay (s)	24.3	27.4		42.6	26.0	30.6		19.4	396.8	19.6		379.1
Level of Service	C	C		D	C	C		B	F	B		F
Approach Delay (s)		25.8			34.2				354.6			
Approach LOS		C			C				F			
Intersection Summary												
HCM 2000 Control Delay		244.3										
HCM 2000 Volume to Capacity ratio		1.46										
Actuated Cycle Length (s)		70.3										
Intersection Capacity Utilization		102.3%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2028	129
Future Volume (vph)	2028	129
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2204	140
RTOR Reduction (vph)	0	82
Lane Group Flow (vph)	2204	58
Turn Type	NA	Prot
Protected Phases	6	6
Permitted Phases		
Actuated Green, G (s)	29.3	29.3
Effective Green, g (s)	29.3	29.3
Actuated g/C Ratio	0.42	0.42
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1475	659
v/s Ratio Prot	0.62	0.04
v/s Ratio Perm		
v/c Ratio	1.49	0.09
Uniform Delay, d1	20.5	12.4
Progression Factor	1.00	1.00
Incremental Delay, d2	226.0	0.3
Delay (s)	246.5	12.7
Level of Service	F	B
Approach Delay (s)	251.9	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	4	126	24	28	71	16	82	15	79	1595	49	9
Future Volume (vph)	4	126	24	28	71	16	82	15	79	1595	49	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00	
Frt		1.00	0.92		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1770	1713		1770	1863	1583		1770	3539	1583	
Flt Permitted		0.75	1.00		0.72	1.00	1.00		0.06	1.00	1.00	
Satd. Flow (perm)		1390	1713		1342	1863	1583		120	3539	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	4	137	26	30	77	17	89	16	86	1734	53	10
RTOR Reduction (vph)	0	0	26	0	0	0	76	0	0	0	19	0
Lane Group Flow (vph)	0	141	30	0	77	17	13	0	102	1734	34	0
Turn Type	Perm	Perm	NA		Perm	NA	Perm	Perm	pm+pt	NA	Perm	custom
Protected Phases			4			8			5	2		
Permitted Phases	4	4			8		8	2	2		2	1
Actuated Green, G (s)		14.3	14.3		14.3	14.3	14.3		67.2	62.2	62.2	
Effective Green, g (s)		14.3	14.3		14.3	14.3	14.3		67.2	62.2	62.2	
Actuated g/C Ratio		0.15	0.15		0.15	0.15	0.15		0.70	0.64	0.64	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)		205	253		198	276	234		169	2281	1020	
v/s Ratio Prot			0.02			0.01			0.03	0.49		
v/s Ratio Perm		c0.10			0.06		0.01		0.39		0.02	
v/c Ratio		0.69	0.12		0.39	0.06	0.06		0.60	0.76	0.03	
Uniform Delay, d1		39.0	35.6		37.2	35.3	35.3		23.3	12.0	6.2	
Progression Factor		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		9.2	0.2		1.3	0.1	0.1		6.0	2.4	0.1	
Delay (s)		48.2	35.9		38.4	35.4	35.4		29.2	14.4	6.3	
Level of Service		D	D		D	D	D		C	B	A	
Approach Delay (s)			44.7			36.7				15.0		
Approach LOS			D			D				B		
Intersection Summary												
HCM 2000 Control Delay			25.1									
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			96.5							15.0		
Intersection Capacity Utilization			88.7%							E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	94	2067	140
Future Volume (vph)	94	2067	140
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.07	1.00	1.00
Satd. Flow (perm)	131	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	102	2247	152
RTOR Reduction (vph)	0	0	27
Lane Group Flow (vph)	112	2247	125
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	67.2	62.2	62.2
Effective Green, g (s)	67.2	62.2	62.2
Actuated g/C Ratio	0.70	0.64	0.64
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	176	2281	1020
v/s Ratio Prot	c0.03	c0.63	
v/s Ratio Perm	0.41		0.08
v/c Ratio	0.64	0.99	0.12
Uniform Delay, d1	13.2	16.7	6.6
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	7.3	15.6	0.2
Delay (s)	20.6	32.3	6.9
Level of Service	C	C	A
Approach Delay (s)		30.3	
Approach LOS		C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	64	51	141	219	44	82	19	29	1531	180	9	192
Future Volume (vph)	64	51	141	219	44	82	19	29	1531	180	9	192
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected		0.97	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1812	1583		1748			1770	3539	1583		1770
Flt Permitted		0.73	1.00		0.73			0.17	1.00	1.00		0.15
Satd. Flow (perm)		1355	1583		1324			309	3539	1583		285
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	70	55	153	238	48	89	21	32	1664	196	10	209
RTOR Reduction (vph)	0	0	110	0	19	0	0	0	0	119	0	0
Lane Group Flow (vph)	0	125	43	0	356	0	0	53	1664	77	0	219
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)		17.5	17.5		17.5			27.1	24.1	24.1		31.1
Effective Green, g (s)		17.5	17.5		17.5			27.1	24.1	24.1		31.1
Actuated g/C Ratio		0.28	0.28		0.28			0.44	0.39	0.39		0.50
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		384	449		376			207	1384	619		264
v/s Ratio Prot								0.01	0.47			c0.07
v/s Ratio Perm		0.09	0.03		c0.27			0.10		0.05		0.35
v/c Ratio		0.33	0.10		0.95			0.26	1.20	0.12		0.83
Uniform Delay, d1		17.4	16.2		21.6			13.3	18.8	12.0		13.1
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.5	0.1		32.4			0.7	98.2	0.4		18.9
Delay (s)		17.9	16.3		54.0			14.0	117.0	12.4		32.1
Level of Service		B	B		D			B	F	B		C
Approach Delay (s)		17.0			54.0				103.4			
Approach LOS		B			D				F			
Intersection Summary												
HCM 2000 Control Delay		128.1										
HCM 2000 Volume to Capacity ratio		1.21										
Actuated Cycle Length (s)		61.6										
Intersection Capacity Utilization		101.4%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1896	18
Future Volume (vph)	1896	18
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2061	20
RTOR Reduction (vph)	0	12
Lane Group Flow (vph)	2061	8
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	26.1	26.1
Effective Green, g (s)	26.1	26.1
Actuated g/C Ratio	0.42	0.42
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1499	670
v/s Ratio Prot	c0.58	
v/s Ratio Perm		0.01
v/c Ratio	1.37	0.01
Uniform Delay, d1	17.8	10.3
Progression Factor	1.00	1.00
Incremental Delay, d2	173.0	0.0
Delay (s)	190.8	10.3
Level of Service	F	B
Approach Delay (s)	174.1	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	13	6	21	207	0	62	2	4	1468	173	4	89
Future Volume (vph)	13	6	21	207	0	62	2	4	1468	173	4	89
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor		1.00			1.00	1.00		1.00	0.95	1.00		1.00
Frt		0.93			1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected		0.98			0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		1704			1770	1583		1770	3539	1583		1770
Flt Permitted		0.88			0.73	1.00		1.00	1.00	1.00		0.57
Satd. Flow (perm)		1515			1357	1583		1863	3539	1583		1064
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	14	7	23	225	0	67	2	4	1596	188	4	97
RTOR Reduction (vph)	0	18	0	0	0	52	0	0	0	89	0	0
Lane Group Flow (vph)	0	26	0	0	225	15	0	6	1596	99	0	101
Turn Type	Perm	NA		Perm	NA	Perm	custom	Prot	NA	Perm	custom	Prot
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		8	5			2	1	
Actuated Green, G (s)		14.4			14.4	14.4		1.0	29.8	29.8		7.0
Effective Green, g (s)		14.4			14.4	14.4		1.0	29.8	29.8		7.0
Actuated g/C Ratio		0.22			0.22	0.22		0.02	0.45	0.45		0.11
Clearance Time (s)		5.0			5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		329			295	344		28	1593	712		112
v/s Ratio Prot								0.45				
v/s Ratio Perm		0.02			0.17	0.01		0.00		0.06		0.09
v/c Ratio		0.08			0.76	0.04		0.21	1.00	0.14		0.90
Uniform Delay, d1		20.6			24.3	20.5		32.2	18.2	10.7		29.3
Progression Factor		1.00			1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2		0.1			11.1	0.1		3.8	23.0	0.4		55.1
Delay (s)		20.7			35.4	20.5		36.0	41.2	11.1		84.4
Level of Service		C			D	C		D	D	B		F
Approach Delay (s)		20.7			32.0				38.0			
Approach LOS		C			C				D			
Intersection Summary												
HCM 2000 Control Delay		57.4										
HCM 2000 Volume to Capacity ratio		1.06										
Actuated Cycle Length (s)		66.2										
Intersection Capacity Utilization		89.3%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis 12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1971	6
Future Volume (vph)	1971	6
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2142	7
RTOR Reduction (vph)	0	3
Lane Group Flow (vph)	2142	4
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	35.8	35.8
Effective Green, g (s)	35.8	35.8
Actuated g/C Ratio	0.54	0.54
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1913	856
v/s Ratio Prot	c0.61	
v/s Ratio Perm		0.00
v/c Ratio	1.12	0.00
Uniform Delay, d1	15.2	7.0
Progression Factor	1.00	1.00
Incremental Delay, d2	61.6	0.0
Delay (s)	76.8	7.0
Level of Service	E	A
Approach Delay (s)	76.9	
Approach LOS	E	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	180	46	58	117	41	152	15	118	1316	98	5	172
Future Volume (vph)	180	46	58	117	41	152	15	118	1316	98	5	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	0.88			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1643			1770	3539	1583		1770
Flt Permitted	0.59	1.00	1.00	0.72	1.00			0.17	1.00	1.00		0.16
Satd. Flow (perm)	1106	1863	1583	1349	1643			320	3539	1583		305
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	50	63	127	45	165	16	128	1430	107	5	187
RTOR Reduction (vph)	0	0	48	0	125	0	0	0	0	63	0	0
Lane Group Flow (vph)	196	50	15	127	85	0	0	144	1430	44	0	192
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	13.8	13.8	13.8	13.8	13.8			27.2	23.3	23.3		29.4
Effective Green, g (s)	13.8	13.8	13.8	13.8	13.8			27.2	23.3	23.3		29.4
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24			0.48	0.41	0.41		0.51
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	267	450	382	326	397			251	1444	645		285
v/s Ratio Prot		0.03			0.05			0.04	0.40			c0.06
v/s Ratio Perm	c0.18		0.01	0.09				0.23		0.03		0.29
v/c Ratio	0.73	0.11	0.04	0.39	0.21			0.57	0.99	0.07		0.67
Uniform Delay, d1	20.0	16.9	16.6	18.1	17.3			12.1	16.8	10.3		11.6
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	10.0	0.1	0.0	0.8	0.3			3.2	21.5	0.2		6.2
Delay (s)	30.0	17.0	16.6	18.9	17.6			15.2	38.3	10.5		17.8
Level of Service	C	B	B	B	B			B	D	B		B
Approach Delay (s)		25.1			18.1				34.5			
Approach LOS		C			B				C			
Intersection Summary												
HCM 2000 Control Delay			91.5			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.10									
Actuated Cycle Length (s)			57.1			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			97.2%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1869	180
Future Volume (vph)	1869	180
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2032	196
RTOR Reduction (vph)	0	80
Lane Group Flow (vph)	2032	116
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	24.4	24.4
Effective Green, g (s)	24.4	24.4
Actuated g/C Ratio	0.43	0.43
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1512	676
v/s Ratio Prot	c0.57	
v/s Ratio Perm		0.07
v/c Ratio	1.34	0.17
Uniform Delay, d1	16.4	10.1
Progression Factor	1.00	1.00
Incremental Delay, d2	159.3	0.6
Delay (s)	175.6	10.7
Level of Service	F	B
Approach Delay (s)	149.7	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	34	218	250	48	279	92	5	195	1265	54	5	149
Future Volume (vph)	34	218	250	48	279	92	5	195	1265	54	5	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.99			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583		1797			1770	3539	1583		1770
Flt Permitted	0.24	1.00	1.00		0.93			0.18	1.00	1.00		0.19
Satd. Flow (perm)	455	1863	1583		1685			337	3539	1583		353
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	37	237	272	52	303	100	5	212	1375	59	5	162
RTOR Reduction (vph)	0	0	126	0	15	0	0	0	0	40	0	0
Lane Group Flow (vph)	37	237	146	0	440	0	0	217	1375	19	0	167
Turn Type	pm+pt	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases	7	4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	24.9	24.9	24.9		18.1			28.1	22.1	22.1		26.1
Effective Green, g (s)	24.9	24.9	24.9		18.1			28.1	22.1	22.1		26.1
Actuated g/C Ratio	0.37	0.37	0.37		0.27			0.42	0.33	0.33		0.39
Clearance Time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	204	692	588		455			269	1167	522		243
v/s Ratio Prot	0.00	c0.13						c0.07	0.39			0.05
v/s Ratio Perm	0.06		0.09		c0.26			0.27		0.01		0.22
v/c Ratio	0.18	0.34	0.25		0.97			0.81	1.18	0.04		0.69
Uniform Delay, d1	16.0	15.2	14.6		24.2			15.6	22.4	15.2		16.2
Progression Factor	1.00	1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.2		33.6			16.0	89.4	0.0		7.8
Delay (s)	16.4	15.5	14.8		57.7			31.7	111.8	15.3		24.0
Level of Service	B	B	B		E			C	F	B		C
Approach Delay (s)		15.2			57.7				97.8			
Approach LOS		B			E				F			
Intersection Summary												
HCM 2000 Control Delay	154.5			HCM 2000 Level of Service			F					
HCM 2000 Volume to Capacity ratio	1.22											
Actuated Cycle Length (s)	67.0			Sum of lost time (s)			20.0					
Intersection Capacity Utilization	111.0%			ICU Level of Service			H					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1622	15
Future Volume (vph)	1622	15
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1763	16
RTOR Reduction (vph)	0	11
Lane Group Flow (vph)	1763	5
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	21.1	21.1
Effective Green, g (s)	21.1	21.1
Actuated g/C Ratio	0.31	0.31
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1114	498
v/s Ratio Prot	c0.50	
v/s Ratio Perm		0.00
v/c Ratio	1.58	0.01
Uniform Delay, d1	22.9	15.8
Progression Factor	1.00	1.00
Incremental Delay, d2	266.5	0.0
Delay (s)	289.4	15.8
Level of Service	F	B
Approach Delay (s)	264.4	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	189	74	25	108	94	108	21	1317	97	5	66	1617
Future Volume (vph)	189	74	25	108	94	108	21	1317	97	5	66	1617
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00	0.95
Frt		1.00	0.85	1.00	0.92		1.00	1.00	0.85		1.00	1.00
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1798	1583	1770	1713		1770	3539	1583		1770	3539
Flt Permitted		0.62	1.00	0.48	1.00		0.12	1.00	1.00		0.12	1.00
Satd. Flow (perm)		1161	1583	902	1713		233	3539	1583		233	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	205	80	27	117	102	117	23	1432	105	5	72	1758
RTOR Reduction (vph)	0	0	19	0	20	0	0	0	46	0	0	0
Lane Group Flow (vph)	0	285	8	117	199	0	23	1432	59	0	77	1758
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	Perm	NA
Protected Phases		4			8			2				6
Permitted Phases	4		4	8			2		2	6	6	
Actuated Green, G (s)		16.8	16.8	16.8	16.8		32.0	32.0	32.0		32.0	32.0
Effective Green, g (s)		16.8	16.8	16.8	16.8		32.0	32.0	32.0		32.0	32.0
Actuated g/C Ratio		0.29	0.29	0.29	0.29		0.54	0.54	0.54		0.54	0.54
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		331	452	257	489		126	1925	861		126	1925
v/s Ratio Prot					0.12			0.40				c0.50
v/s Ratio Perm		c0.25	0.00	0.13			0.10		0.04		0.33	
v/c Ratio		0.86	0.02	0.46	0.41		0.18	0.74	0.07		0.61	0.91
Uniform Delay, d1		19.9	15.1	17.2	17.0		6.8	10.3	6.3		9.2	12.1
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		19.8	0.0	1.3	0.6		3.2	2.7	0.2		20.1	8.1
Delay (s)		39.7	15.1	18.5	17.5		9.9	12.9	6.5		29.3	20.3
Level of Service		D	B	B	B		A	B	A		C	C
Approach Delay (s)		37.6			17.9			12.4				19.4
Approach LOS		D			B			B				B
Intersection Summary												
HCM 2000 Control Delay			18.0			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.89									
Actuated Cycle Length (s)			58.8			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			91.4%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	177
Future Volume (vph)	177
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	192
RTOR Reduction (vph)	77
Lane Group Flow (vph)	115
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	32.0
Effective Green, g (s)	32.0
Actuated g/C Ratio	0.54
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	861
v/s Ratio Prot	
v/s Ratio Perm	0.07
v/c Ratio	0.13
Uniform Delay, d1	6.6
Progression Factor	1.00
Incremental Delay, d2	0.3
Delay (s)	6.9
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	138	31	149	118	315	24	1052	146	633	1331	46
Future Volume (vph)	22	138	31	149	118	315	24	1052	146	633	1331	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1811		1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.67	1.00		0.63	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1257	1811		1180	1863	1583	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	24	150	34	162	128	342	26	1143	159	688	1447	50
RTOR Reduction (vph)	0	15	0	0	0	187	0	0	101	0	0	26
Lane Group Flow (vph)	24	169	0	162	128	155	26	1143	58	688	1447	24
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)	13.0	13.0		13.0	13.0	13.0	1.8	21.2	21.2	9.1	28.5	28.5
Effective Green, g (s)	13.0	13.0		13.0	13.0	13.0	1.8	21.2	21.2	9.1	28.5	28.5
Actuated g/C Ratio	0.22	0.22		0.22	0.22	0.22	0.03	0.36	0.36	0.16	0.49	0.49
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	280	403		263	415	352	54	1286	575	535	1730	773
v/s Ratio Prot		0.09			0.07		0.01	0.32		c0.20	c0.41	
v/s Ratio Perm	0.02			c0.14		0.10			0.04			0.02
v/c Ratio	0.09	0.42		0.62	0.31	0.44	0.48	0.89	0.10	1.29	0.84	0.03
Uniform Delay, d1	17.9	19.4		20.4	18.9	19.5	27.8	17.4	12.3	24.6	12.9	7.7
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.1	0.7		4.2	0.4	0.9	6.6	9.4	0.3	142.4	5.0	0.1
Delay (s)	18.1	20.1		24.6	19.3	20.4	34.4	26.9	12.6	167.0	17.9	7.8
Level of Service	B	C		C	B	C	C	C	B	F	B	A
Approach Delay (s)		19.9			21.3			25.3			64.6	
Approach LOS		B			C			C			E	
Intersection Summary												
HCM 2000 Control Delay			44.2									
HCM 2000 Level of Service											D	
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			58.3									
Sum of lost time (s)											15.0	
Intersection Capacity Utilization			81.2%									
ICU Level of Service											D	
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	18	20	40	1	374	32	115	2	25	1251	353	1
Future Volume (vph)	18	20	40	1	374	32	115	2	25	1251	353	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00	
Frt	1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)	1770	1863	1583		1770	1863	1583		1770	3539	1583	
Flt Permitted	1.00	1.00	1.00		0.46	1.00	1.00		0.14	1.00	1.00	
Satd. Flow (perm)	1863	1863	1583		856	1863	1583		257	3539	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	22	43	1	407	35	125	2	27	1360	384	1
RTOR Reduction (vph)	0	0	40	0	0	0	96	0	0	0	199	0
Lane Group Flow (vph)	20	22	3	0	408	35	29	0	29	1360	185	0
Turn Type	Perm	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom
Protected Phases		4			3	8			5	2		
Permitted Phases	4		4	3	8		8	5	2		2	1
Actuated Green, G (s)	3.7	3.7	3.7		13.9	13.9	13.9		30.7	29.0	29.0	
Effective Green, g (s)	3.7	3.7	3.7		13.9	13.9	13.9		30.7	29.0	29.0	
Actuated g/C Ratio	0.06	0.06	0.06		0.23	0.23	0.23		0.51	0.48	0.48	
Clearance Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	113	113	96		275	428	363		172	1696	758	
v/s Ratio Prot		0.01			0.13	0.02			0.00	0.38		
v/s Ratio Perm	0.01		0.00		0.21		0.02		0.08		0.12	
v/c Ratio	0.18	0.19	0.03		1.48	0.08	0.08		0.17	0.80	0.24	
Uniform Delay, d1	27.0	27.0	26.7		23.1	18.3	18.3		10.3	13.3	9.3	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	0.8	0.8	0.1		236.1	0.1	0.1		0.5	4.1	0.8	
Delay (s)	27.7	27.8	26.8		259.2	18.4	18.4		10.8	17.4	10.0	
Level of Service	C	C	C		F	B	B		B	B	B	
Approach Delay (s)		27.3				191.4				15.7		
Approach LOS		C				F				B		
Intersection Summary												
HCM 2000 Control Delay			41.8			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.12									
Actuated Cycle Length (s)			60.5			Sum of lost time (s)				20.0		
Intersection Capacity Utilization			84.0%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	67	1383	36
Future Volume (vph)	67	1383	36
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.13	1.00	1.00
Satd. Flow (perm)	249	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	73	1503	39
RTOR Reduction (vph)	0	0	20
Lane Group Flow (vph)	74	1503	19
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	32.5	29.9	29.9
Effective Green, g (s)	32.5	29.9	29.9
Actuated g/C Ratio	0.54	0.49	0.49
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	199	1749	782
v/s Ratio Prot	c0.02	c0.42	
v/s Ratio Perm	0.18		0.01
v/c Ratio	0.37	0.86	0.02
Uniform Delay, d1	9.4	13.5	7.8
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	1.2	5.8	0.1
Delay (s)	10.6	19.2	7.9
Level of Service	B	B	A
Approach Delay (s)		18.5	
Approach LOS		B	
Intersection Summary			

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	35	26	19	100	18	131	1	22	1484	93	2	214
Future Volume (vph)	35	26	19	100	18	131	1	22	1484	93	2	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00	1.00	0.74	1.00	1.00		1.00	1.00	1.00		0.80
Satd. Flow (perm)	1386	1863	1583	1377	1863	1583		1863	3539	1583		1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	38	28	21	109	20	142	1	24	1613	101	2	233
RTOR Reduction (vph)	0	0	18	0	0	121	0	0	0	51	0	0
Lane Group Flow (vph)	38	28	3	109	20	21	0	25	1613	50	0	235
Turn Type	Perm	NA	Perm	Perm	NA	Perm	custom	Prot	NA	Perm	custom	Prot
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8		8	5			2	1	
Actuated Green, G (s)	8.2	8.2	8.2	8.2	8.2	8.2		0.9	28.1	28.1		5.0
Effective Green, g (s)	8.2	8.2	8.2	8.2	8.2	8.2		0.9	28.1	28.1		5.0
Actuated g/C Ratio	0.15	0.15	0.15	0.15	0.15	0.15		0.02	0.50	0.50		0.09
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	201	271	230	200	271	230		29	1766	790		132
v/s Ratio Prot		0.02			0.01				c0.46			
v/s Ratio Perm	0.03		0.00	c0.08		0.01		0.01		0.03		c0.16
v/c Ratio	0.19	0.10	0.01	0.55	0.07	0.09		0.86	0.91	0.06		1.78
Uniform Delay, d1	21.1	20.9	20.6	22.3	20.8	20.8		27.6	13.0	7.3		25.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	0.5	0.2	0.0	3.0	0.1	0.2		109.1	8.8	0.2		379.9
Delay (s)	21.6	21.0	20.6	25.3	20.9	21.0		136.8	21.8	7.5		405.5
Level of Service	C	C	C	C	C	C		F	C	A		F
Approach Delay (s)		21.2			22.7				22.6			
Approach LOS		C			C				C			
Intersection Summary												
HCM 2000 Control Delay			40.7				HCM 2000 Level of Service		D			
HCM 2000 Volume to Capacity ratio			0.91									
Actuated Cycle Length (s)			56.3				Sum of lost time (s)		15.0			
Intersection Capacity Utilization			81.9%				ICU Level of Service		D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1517	71
Future Volume (vph)	1517	71
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1649	77
RTOR Reduction (vph)	0	33
Lane Group Flow (vph)	1649	44
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	32.2	32.2
Effective Green, g (s)	32.2	32.2
Actuated g/C Ratio	0.57	0.57
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2024	905
v/s Ratio Prot	c0.47	
v/s Ratio Perm		0.03
v/c Ratio	0.81	0.05
Uniform Delay, d1	9.7	5.3
Progression Factor	1.00	1.00
Incremental Delay, d2	3.7	0.1
Delay (s)	13.4	5.4
Level of Service	B	A
Approach Delay (s)	60.1	
Approach LOS	E	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	206	102	71	1684	73	35	164	1641
Future Volume (vph)	206	102	71	1684	73	35	164	1641
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.17	1.00	1.00		0.14	1.00
Satd. Flow (perm)	1770	1583	314	3539	1583		260	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	224	111	77	1830	79	38	178	1784
RTOR Reduction (vph)	0	96	0	0	42	0	0	0
Lane Group Flow (vph)	224	15	77	1830	37	0	216	1784
Turn Type	Prot	Prot	Perm	NA	Perm	custom	pm+pt	NA
Protected Phases	3	3		2			1	6
Permitted Phases			2		2	1	6	
Actuated Green, G (s)	7.0	7.0	23.7	23.7	23.7		33.7	33.7
Effective Green, g (s)	7.0	7.0	23.7	23.7	23.7		33.7	33.7
Actuated g/C Ratio	0.14	0.14	0.47	0.47	0.47		0.66	0.66
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	244	218	146	1654	739		321	2352
v/s Ratio Prot	c0.13	0.01		c0.52			0.07	c0.50
v/s Ratio Perm			0.24		0.02		0.38	
v/c Ratio	0.92	0.07	0.53	1.11	0.05		0.67	0.76
Uniform Delay, d1	21.6	19.0	9.5	13.5	7.4		10.1	5.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.01	1.00
Incremental Delay, d2	35.9	0.1	13.0	57.3	0.1		5.5	2.4
Delay (s)	57.4	19.2	22.5	70.8	7.5		15.7	8.1
Level of Service	E	B	C	E	A		B	A
Approach Delay (s)	44.7			66.4				8.9
Approach LOS	D			E				A
Intersection Summary								
HCM 2000 Control Delay			38.1			HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio			1.07					
Actuated Cycle Length (s)			50.7			Sum of lost time (s)		15.0
Intersection Capacity Utilization			81.5%			ICU Level of Service		D
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	799	1169	550	140	1331	122	765	1222	187	205	1151	577
Future Volume (vph)	799	1169	550	140	1331	122	765	1222	187	205	1151	577
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	868	1271	598	152	1447	133	832	1328	203	223	1251	627
RTOR Reduction (vph)	0	0	197	0	0	101	0	0	154	0	0	188
Lane Group Flow (vph)	868	1271	401	152	1447	32	832	1328	49	223	1251	439
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.0	18.0	8.0	18.0	18.0
Effective Green, g (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.0	18.0	8.0	18.0	18.0
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.24	0.24	0.11	0.24	0.24	0.11	0.24	0.24
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	503	1132	506	228	849	379	366	1220	379	188	1220	379
v/s Ratio Prot	c0.25	0.36		0.04	c0.41		c0.24	0.26		0.13	0.25	
v/s Ratio Perm			0.25			0.02			0.03			c0.28
v/c Ratio	1.73	1.12	0.79	0.67	1.70	0.08	2.27	1.09	0.13	1.19	1.03	1.16
Uniform Delay, d1	32.0	25.5	23.2	34.2	28.5	22.1	33.5	28.5	22.3	33.5	28.5	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	334.8	67.2	8.3	7.2	322.0	0.1	581.6	53.4	0.7	124.7	32.4	97.1
Delay (s)	366.8	92.7	31.5	41.4	350.5	22.2	615.1	81.9	23.0	158.2	60.9	125.6
Level of Service	F	F	C	D	F	C	F	F	C	F	E	F
Approach Delay (s)		166.3			298.2			264.6			90.6	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			200.0				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.61									
Actuated Cycle Length (s)			75.0				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			120.3%				ICU Level of Service			H		
Analysis Period (min)			15									

c Critical Lane Group

HCM Unsignalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	49	301	247	419	272	39
Future Volume (Veh/h)	49	301	247	419	272	39
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	53	327	268	455	296	42
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1308	317	338			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1308	317	338			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	61	55	78			
cM capacity (veh/h)	137	724	1221			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	
Volume Total	53	327	268	455	338	
Volume Left	53	0	268	0	0	
Volume Right	0	327	0	0	42	
cSH	137	724	1221	1700	1700	
Volume to Capacity	0.39	0.45	0.22	0.27	0.20	
Queue Length 95th (ft)	41	59	21	0	0	
Control Delay (s)	46.8	14.0	8.8	0.0	0.0	
Lane LOS	E	B	A			
Approach Delay (s)	18.6		3.3		0.0	
Approach LOS	C					
Intersection Summary						
Average Delay			6.5			
Intersection Capacity Utilization			43.7%	ICU Level of Service		A
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018

								
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR	
Lane Configurations								
Traffic Volume (veh/h)	41	172	8	72	617	551	22	
Future Volume (Veh/h)	41	172	8	72	617	551	22	
Sign Control	Stop				Free	Free		
Grade	0%				0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	45	187	0	78	671	599	24	
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None	None		
Median storage veh								
Upstream signal (ft)								
pX, platoon unblocked			0.00					
vC, conflicting volume	1090	300	0	623				
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1090	300	0	623				
tC, single (s)	6.8	6.9	0.0	4.1				
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0	2.2				
p0 queue free %	77	73	0	92				
cM capacity (veh/h)	192	697	0	954				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	45	187	78	336	336	300	300	24
Volume Left	45	0	78	0	0	0	0	0
Volume Right	0	187	0	0	0	0	0	24
cSH	192	697	954	1700	1700	1700	1700	1700
Volume to Capacity	0.23	0.27	0.08	0.20	0.20	0.18	0.18	0.01
Queue Length 95th (ft)	22	27	7	0	0	0	0	0
Control Delay (s)	29.3	12.1	9.1	0.0	0.0	0.0	0.0	0.0
Lane LOS	D	B	A					
Approach Delay (s)	15.4		0.9			0.0		
Approach LOS	C							
Intersection Summary								
Average Delay			2.7					
Intersection Capacity Utilization			40.3%		ICU Level of Service			A
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	245	12	7	600	258	15	21	751
Future Volume (Veh/h)	245	12	7	600	258	15	21	751
Sign Control	Stop			Free			Free	
Grade	0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	266	13	0	652	280	0	23	816
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	None				None			
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00				0.00	
vC, conflicting volume	1106	326	0				0	652
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1106	326	0				0	652
tC, single (s)	6.8	6.9	0.0				0.0	4.1
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0				0.0	2.2
p0 queue free %	0	98	0				0	98
cM capacity (veh/h)	200	670	0				0	930
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	279	326	326	280	0	23	408	408
Volume Left	266	0	0	0	0	23	0	0
Volume Right	13	0	0	280	0	0	0	0
cSH	206	1700	1700	1700	1700	930	1700	1700
Volume to Capacity	1.35	0.19	0.19	0.16	0.00	0.02	0.24	0.24
Queue Length 95th (ft)	393	0	0	0	0	2	0	0
Control Delay (s)	231.7	0.0	0.0	0.0	0.0	9.0	0.0	0.0
Lane LOS	F					A		
Approach Delay (s)	231.7	0.0				0.2		
Approach LOS	F							
Intersection Summary								
Average Delay			31.6					
Intersection Capacity Utilization			48.4%		ICU Level of Service		A	
Analysis Period (min)			15					
Description: m								

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	5	26	4	2	1	55	1677	12	14	2165	104
Future Volume (Veh/h)	65	5	26	4	2	1	55	1677	12	14	2165	104
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	71	5	28	4	2	1	60	1823	13	15	2353	113
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)	12											
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)	1262											
pX, platoon unblocked	0.40	0.40	0.40	0.40	0.40		0.40					
vC, conflicting volume	3416	4339	1176	3180	4326	912	2353				1836	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4049	6381	0	3454	6348	912	1366				1836	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	0	93	0	0	100	70				95	
cM capacity (veh/h)	0	0	429	0	0	277	197				328	
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	104	4	3	60	912	912	13	15	1176	1176	113	
Volume Left	71	4	0	60	0	0	0	15	0	0	0	
Volume Right	28	0	1	0	0	0	13	0	0	0	113	
cSH	0	0	0	197	1700	1700	1700	328	1700	1700	1700	
Volume to Capacity	Err	Err	121.96	0.30	0.54	0.54	0.01	0.05	0.69	0.69	0.07	
Queue Length 95th (ft)	Err	Err	Err	31	0	0	0	4	0	0	0	
Control Delay (s)	Err	Err	Err	31.0	0.0	0.0	0.0	16.5	0.0	0.0	0.0	
Lane LOS	F	F	F	D	C							
Approach Delay (s)	Err	Err		1.0	0.1							
Approach LOS	F	F										
Intersection Summary												
Average Delay	Err											
Intersection Capacity Utilization	78.6%			ICU Level of Service					D			
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	
Lane Configurations													
Traffic Volume (veh/h)	5	0	74	18	0	8	18	62	1680	14	11	12	
Future Volume (Veh/h)	5	0	74	18	0	8	18	62	1680	14	11	12	
Sign Control	Stop				Stop				Free				
Grade	0%				0%				0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	5	0	80	20	0	9	0	67	1826	15	0	13	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None												
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked							0.00	0.00					
vC, conflicting volume	3462	4366	1190	3256	4366	913	0	2380	0				1826
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	3462	4366	1190	3256	4366	913	0	2380	0				1826
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1	0.0				4.1
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2	0.0				2.2
p0 queue free %	0	100	56	0	100	97	0	67	0				96
cM capacity (veh/h)	2	1	180	1	1	276	0	200	0				331
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4			
Volume Total	85	29	67	913	913	15	13	1190	1190	16			
Volume Left	5	20	67	0	0	0	13	0	0	0			
Volume Right	80	9	0	0	0	15	0	0	0	16			
cSH	26	2	200	1700	1700	1700	331	1700	1700	1700			
Volume to Capacity	3.27	13.51	0.33	0.54	0.54	0.01	0.04	0.70	0.70	0.01			
Queue Length 95th (ft)	Err	Err	35	0	0	0	3	0	0	0			
Control Delay (s)	Err	Err	31.7	0.0	0.0	0.0	16.3	0.0	0.0	0.0			
Lane LOS	F	F	D	C									
Approach Delay (s)	Err	Err	1.1	0.1									
Approach LOS	F	F											
Intersection Summary													
Average Delay			257.8										
Intersection Capacity Utilization			81.3%		ICU Level of Service				D				
Analysis Period (min)			15										

HCM Unsignalized Intersection Capacity Analysis 10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	2190	15
Future Volume (Veh/h)	2190	15
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	2380	16
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	46	0	0	248	27	1554	53	348	2374	19
Future Volume (Veh/h)	0	0	46	0	0	248	27	1554	53	348	2374	19
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	50	0	0	270	29	1689	58	378	2580	21
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4238	5083	1290	3793	5083	844	2580				1689	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4238	5083	1290	3793	5083	844	2580				1689	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	0	68	0	0	12	83				0	
cM capacity (veh/h)	0	0	154	0	0	306	167				374	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	50	270	29	844	844	58	378	1290	1290	21		
Volume Left	0	0	29	0	0	0	378	0	0	0		
Volume Right	50	270	0	0	0	58	0	0	0	21		
cSH	154	306	167	1700	1700	1700	374	1700	1700	1700		
Volume to Capacity	0.32	0.88	0.17	0.50	0.50	0.03	1.01	0.76	0.76	0.01		
Queue Length 95th (ft)	33	201	15	0	0	0	304	0	0	0		
Control Delay (s)	39.2	63.3	31.1	0.0	0.0	0.0	83.1	0.0	0.0	0.0		
Lane LOS	E	F	D				F					
Approach Delay (s)	39.2	63.3	0.5				10.5					
Approach LOS	E	F										
Intersection Summary												
Average Delay			10.1									
Intersection Capacity Utilization			75.6%	ICU Level of Service					D			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	4	11	41	4	2	4	89	1487	7	4	11	1857
Future Volume (Veh/h)	4	11	41	4	2	4	89	1487	7	4	11	1857
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	4	12	45	4	2	4	97	1616	8	0	12	2018
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked											0.00	
vC, conflicting volume	3045	3852	1009	2898	3856	812	2018				0	1616
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3045	3852	1009	2898	3856	812	2018				0	1616
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				0.0	2.2
p0 queue free %	0	0	81	0	11	99	65				0	97
cM capacity (veh/h)	1	2	238	0	2	322	278				0	399
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	61	10	97	1077	547	12	1009	1009	23			
Volume Left	4	4	97	0	0	12	0	0	0			
Volume Right	45	4	0	0	8	0	0	0	23			
cSH	6	0	278	1700	1700	399	1700	1700	1700			
Volume to Capacity	9.67	Err	0.35	0.63	0.32	0.03	0.59	0.59	0.01			
Queue Length 95th (ft)	Err	Err	38	0	0	2	0	0	0			
Control Delay (s)	Err	Err	24.7	0.0	0.0	14.3	0.0	0.0	0.0			
Lane LOS	F	F	C	B								
Approach Delay (s)	Err	Err	1.4	0.1								
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			69.7%		ICU Level of Service				C			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	21
Future Volume (Veh/h)	21
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	23
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	8	5	202	14	0	56	34	197	1524	32	58	1594
Future Volume (Veh/h)	8	5	202	14	0	56	34	197	1524	32	58	1594
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	9	5	220	15	0	61	0	214	1657	35	63	1733
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	3116	3944	866	3080	3944	828	0	1733				1657
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3116	3944	866	3080	3944	828	0	1733				1657
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1				4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2				2.2
p0 queue free %	0	0	26	0	100	81	0	41				84
cM capacity (veh/h)	2	1	296	0	1	314	0	360				385
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	14	220	76	214	828	828	35	63	866	866	4	
Volume Left	9	0	15	214	0	0	0	63	0	0	0	
Volume Right	0	220	61	0	0	0	35	0	0	0	4	
cSH	1	296	0	360	1700	1700	1700	385	1700	1700	1700	
Volume to Capacity	9.76	0.74	Err	0.59	0.49	0.49	0.02	0.16	0.51	0.51	0.00	
Queue Length 95th (ft)	Err	137	Err	92	0	0	0	14	0	0	0	
Control Delay (s)	Err	45.3	Err	28.7	0.0	0.0	0.0	16.2	0.0	0.0	0.0	
Lane LOS	F	E	F	D				C				
Approach Delay (s)	640.8			Err	3.2				0.6			
Approach LOS	F			F								
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				86.9%		ICU Level of Service			E			
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis 20: SR 74 & Senoia Road/Lexington Pass

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	4
Future Volume (Veh/h)	4
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	4
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	1	0	27	0	56	32	0	1738	75	2	77		
Future Volume (Veh/h)	0	1	0	27	0	56	32	0	1738	75	2	77		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	1	0	29	0	61	0	0	1889	82	0	84		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage (veh)														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	3072	4017	980	3038	4017	944	0	1960					0	1889
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	3072	4017	980	3038	4017	944	0	1960					0	1889
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	50	100	0	100	77	0	100					0	73
cM capacity (veh/h)	3	2	249	3	2	263	0	293					0	313
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3				
Volume Total	1	29	61	0	944	944	82	84	1307	653				
Volume Left	0	29	0	0	0	0	0	84	0	0				
Volume Right	0	0	61	0	0	0	82	0	0	0				
cSH	2	3	263	1700	1700	1700	1700	313	1700	1700				
Volume to Capacity	0.50	10.63	0.23	0.00	0.56	0.56	0.05	0.27	0.77	0.38				
Queue Length 95th (ft)	14	Err	22	0	0	0	0	27	0	0				
Control Delay (s)	2323.4	Err	22.8	0.0	0.0	0.0	0.0	20.7	0.0	0.0				
Lane LOS	F	F	C					C						
Approach Delay (s)	2323.4	3237.3	0.0				0.9							
Approach LOS	F	F												
Intersection Summary														
Average Delay	71.9													
Intersection Capacity Utilization	72.6%			ICU Level of Service					C					
Analysis Period (min)	15													

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

	↓	↙
Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	1803	0
Future Volume (Veh/h)	1803	0
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1960	0
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

									
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Lane Configurations									
Traffic Volume (veh/h)	87	152	24	1621	44	11	115	1811	
Future Volume (Veh/h)	87	152	24	1621	44	11	115	1811	
Sign Control	Stop			Free			Free		
Grade	0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	95	165	0	1762	48	0	125	1968	
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None				None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked			0.00			0.00			
vC, conflicting volume	2996	881	0			0	1762		
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2996	881	0			0	1762		
tC, single (s)	6.8	6.9	0.0			0.0	4.1		
tC, 2 stage (s)									
tF (s)	3.5	3.3	0.0			0.0	2.2		
p0 queue free %	0	43	0			0	64		
cM capacity (veh/h)	7	290	0			0	351		
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	95	165	881	881	48	0	125	984	984
Volume Left	95	0	0	0	0	0	125	0	0
Volume Right	0	165	0	0	48	0	0	0	0
cSH	7	290	1700	1700	1700	1700	351	1700	1700
Volume to Capacity	13.84	0.57	0.52	0.52	0.03	0.00	0.36	0.58	0.58
Queue Length 95th (ft)	Err	82	0	0	0	0	39	0	0
Control Delay (s)	Err	32.6	0.0	0.0	0.0	0.0	20.9	0.0	0.0
Lane LOS	F	D					C		
Approach Delay (s)	3674.2	0.0						1.2	
Approach LOS									
F									
Intersection Summary									
Average Delay			230.1						
Intersection Capacity Utilization			71.2%		ICU Level of Service			C	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	0	0	0	1373	8	477	5	169	913	0	7	0
Future Volume (vph)	0	0	0	1373	8	477	5	169	913	0	7	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0		5.0	5.0			
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			
Frt				1.00	1.00	0.85		1.00	1.00			
Flt Protected				0.95	0.95	1.00		0.95	1.00			
Satd. Flow (prot)				1681	1686	1583		1770	3539			
Flt Permitted				0.95	0.95	1.00		0.50	1.00			
Satd. Flow (perm)				1681	1686	1583		931	3539			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	1492	9	518	5	184	992	0	8	0
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	746	755	431	0	189	992	0	0	0
Turn Type				Prot	NA	custom	custom	Prot	NA		Perm	
Protected Phases				3	8	3		5	2			
Permitted Phases							5				6	
Actuated Green, G (s)				19.0	19.0	19.0		8.0	31.0			
Effective Green, g (s)				19.0	19.0	19.0		8.0	31.0			
Actuated g/C Ratio				0.32	0.32	0.32		0.13	0.52			
Clearance Time (s)				5.0	5.0	5.0		5.0	5.0			
Vehicle Extension (s)				3.0	3.0	3.0		3.0	3.0			
Lane Grp Cap (vph)				532	533	501		124	1828			
v/s Ratio Prot				0.44	c0.45	0.27			0.28			
v/s Ratio Perm								c0.20				
v/c Ratio				1.40	1.42	0.86		1.52	0.54			
Uniform Delay, d1				20.5	20.5	19.3		26.0	9.7			
Progression Factor				1.00	1.00	1.00		1.00	1.00			
Incremental Delay, d2				192.1	198.3	14.1		272.4	1.2			
Delay (s)				212.6	218.8	33.3		298.4	10.9			
Level of Service				F	F	C		F	B			
Approach Delay (s)		0.0			168.9				56.9			
Approach LOS		A			F				E			
Intersection Summary												
HCM 2000 Control Delay			102.3				HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio			1.22									
Actuated Cycle Length (s)			60.0				Sum of lost time (s)		15.0			
Intersection Capacity Utilization			227.3%				ICU Level of Service		H			
Analysis Period (min)			15									

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↗
Traffic Volume (vph)	803	190
Future Volume (vph)	803	190
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3538	1583
Flt Permitted	0.94	1.00
Satd. Flow (perm)	3336	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	873	207
RTOR Reduction (vph)	0	145
Lane Group Flow (vph)	881	62
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	18.0	18.0
Effective Green, g (s)	18.0	18.0
Actuated g/C Ratio	0.30	0.30
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1000	474
v/s Ratio Prot		
v/s Ratio Perm	c0.26	0.04
v/c Ratio	0.88	0.13
Uniform Delay, d1	20.0	15.3
Progression Factor	0.99	0.98
Incremental Delay, d2	11.0	0.6
Delay (s)	30.9	15.5
Level of Service	C	B
Approach Delay (s)	28.0	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	194	0	336	0	0	0	0	730	2774	582	2084	0
Future Volume (vph)	194	0	336	0	0	0	0	730	2774	582	2084	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00					0.95	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					3539	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	211	0	365	0	0	0	0	793	3015	633	2265	0
RTOR Reduction (vph)	0	0	50	0	0	0	0	0	136	0	0	0
Lane Group Flow (vph)	211	0	315	0	0	0	0	793	2879	633	2265	0
Turn Type	Prot		Prot					NA	Perm	Prot	NA	
Protected Phases	7		7					2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Effective Green, g (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Actuated g/C Ratio	0.09		0.09					0.65	0.65	0.16	0.84	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	151		135					2300	1028	278	2982	
v/s Ratio Prot	0.12		c0.20					0.22		c0.36	0.64	
v/s Ratio Perm									c1.82			
v/c Ratio	1.40		2.33					0.34	2.80	2.28	0.76	
Uniform Delay, d1	64.0		64.0					11.1	24.5	59.0	4.8	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	213.9		621.6					0.4	813.1	586.0	1.9	
Delay (s)	277.9		685.6					11.5	837.6	645.0	6.7	
Level of Service	F		F					B	F	F	A	
Approach Delay (s)		536.2			0.0			665.5			146.1	
Approach LOS		F			A			F			F	
Intersection Summary												
HCM 2000 Control Delay			448.6									
HCM 2000 Volume to Capacity ratio			2.66									
Actuated Cycle Length (s)			140.0									
Intersection Capacity Utilization			227.3%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	227	206	32	180	104	250	4	20	1072	218	27	531
Future Volume (vph)	227	206	32	180	104	250	4	20	1072	218	27	531
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.97
Frt	1.00	0.98		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1825		1770	1863	1583		1770	3539	1583		3433
Flt Permitted	0.68	1.00		0.38	1.00	1.00		0.19	1.00	1.00		0.29
Satd. Flow (perm)	1275	1825		717	1863	1583		351	3539	1583		1032
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	247	224	35	196	113	272	4	22	1165	237	29	577
RTOR Reduction (vph)	0	8	0	0	0	220	0	0	0	170	0	0
Lane Group Flow (vph)	247	251	0	196	113	52	0	26	1165	67	0	606
Turn Type	pm+pt	NA		pm+pt	NA	Prot	custom	pm+pt	NA	Perm	custom	Prot
Protected Phases	7	4		3	8	8		5	2			1
Permitted Phases	4			8			5	2		2	1	
Actuated Green, G (s)	19.3	14.3		19.3	14.3	14.3		23.1	21.2	21.2		14.0
Effective Green, g (s)	19.3	14.3		19.3	14.3	14.3		23.1	21.2	21.2		14.0
Actuated g/C Ratio	0.26	0.19		0.26	0.19	0.19		0.31	0.28	0.28		0.19
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	363	350		256	357	303		145	1007	450		193
v/s Ratio Prot	0.05	0.14		c0.05	0.06	0.03		0.00	0.33			
v/s Ratio Perm	0.13			c0.15				0.05		0.04		c0.59
v/c Ratio	0.68	0.72		0.77	0.32	0.17		0.18	1.16	0.15		3.14
Uniform Delay, d1	24.1	28.2		24.6	25.9	25.2		20.0	26.6	19.9		30.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	5.2	6.8		12.8	0.5	0.3		0.6	82.0	0.7		976.4
Delay (s)	29.3	35.1		37.4	26.4	25.4		20.6	108.6	20.6		1006.7
Level of Service	C	D		D	C	C		C	F	C		F
Approach Delay (s)		32.2			29.7				92.4			
Approach LOS		C			C				F			
Intersection Summary												
HCM 2000 Control Delay			176.4				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.53									
Actuated Cycle Length (s)			74.5				Sum of lost time (s)		20.0			
Intersection Capacity Utilization			90.3%				ICU Level of Service		E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1514	138
Future Volume (vph)	1514	138
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1646	150
RTOR Reduction (vph)	0	83
Lane Group Flow (vph)	1646	67
Turn Type	NA	Prot
Protected Phases	6	6
Permitted Phases		
Actuated Green, G (s)	33.3	33.3
Effective Green, g (s)	33.3	33.3
Actuated g/C Ratio	0.45	0.45
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1581	707
v/s Ratio Prot	c0.47	0.04
v/s Ratio Perm		
v/c Ratio	1.04	0.09
Uniform Delay, d1	20.6	11.9
Progression Factor	1.00	1.00
Incremental Delay, d2	34.1	0.3
Delay (s)	54.7	12.2
Level of Service	D	B
Approach Delay (s)	292.2	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	115	43	16	60	24	127	4	41	853	38	1	87
Future Volume (vph)	115	43	16	60	24	127	4	41	853	38	1	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	0.96		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1789		1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00		0.72	1.00	1.00		0.14	1.00	1.00		0.23
Satd. Flow (perm)	1379	1789		1332	1863	1583		268	3539	1583		437
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	125	47	17	65	26	138	4	45	927	41	1	95
RTOR Reduction (vph)	0	14	0	0	0	117	0	0	0	20	0	0
Lane Group Flow (vph)	125	50	0	65	26	21	0	49	927	21	0	96
Turn Type	Perm	NA		Perm	NA	Perm	Perm	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		8	2	2		2	1	6
Actuated Green, G (s)	8.4	8.4		8.4	8.4	8.4		29.6	27.8	27.8		33.6
Effective Green, g (s)	8.4	8.4		8.4	8.4	8.4		29.6	27.8	27.8		33.6
Actuated g/C Ratio	0.15	0.15		0.15	0.15	0.15		0.54	0.51	0.51		0.61
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	210	273		203	284	241		193	1788	800		359
v/s Ratio Prot		0.03			0.01			0.01	0.26			c0.02
v/s Ratio Perm	c0.09			0.05		0.01		0.13		0.01		0.14
v/c Ratio	0.60	0.18		0.32	0.09	0.09		0.25	0.52	0.03		0.27
Uniform Delay, d1	21.7	20.3		20.8	20.0	20.0		10.5	9.1	6.8		5.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	4.5	0.3		0.9	0.1	0.2		0.7	1.1	0.1		0.4
Delay (s)	26.2	20.6		21.7	20.2	20.2		11.2	10.2	6.9		5.4
Level of Service	C	C		C	C	C		B	B	A		A
Approach Delay (s)		24.3			20.6				10.1			
Approach LOS		C			C				B			
Intersection Summary												
HCM 2000 Control Delay		18.2										
HCM 2000 Volume to Capacity ratio		0.86										
Actuated Cycle Length (s)		55.0										
Intersection Capacity Utilization		76.0%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1676	185
Future Volume (vph)	1676	185
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1822	201
RTOR Reduction (vph)	0	58
Lane Group Flow (vph)	1822	143
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	29.8	29.8
Effective Green, g (s)	29.8	29.8
Actuated g/C Ratio	0.54	0.54
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1917	857
v/s Ratio Prot	c0.51	
v/s Ratio Perm		0.09
v/c Ratio	0.95	0.17
Uniform Delay, d1	11.9	6.3
Progression Factor	1.00	1.00
Incremental Delay, d2	11.8	0.4
Delay (s)	23.7	6.8
Level of Service	C	A
Approach Delay (s)	21.2	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	14	65	28	237	56	65	5	122	1135	468	12	203
Future Volume (vph)	14	65	28	237	56	65	5	122	1135	468	12	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.98			1.00	1.00	0.85		1.00
Flt Protected		0.99	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1847	1583		1759			1770	3539	1583		1770
Flt Permitted		0.93	1.00		0.75			0.17	1.00	1.00		0.17
Satd. Flow (perm)		1725	1583		1360			324	3539	1583		310
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	71	30	258	61	71	5	133	1234	509	13	221
RTOR Reduction (vph)	0	0	21	0	13	0	0	0	0	316	0	0
Lane Group Flow (vph)	0	86	9	0	377	0	0	138	1234	193	0	234
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)		17.8	17.8		17.8			27.0	23.0	23.0		29.0
Effective Green, g (s)		17.8	17.8		17.8			27.0	23.0	23.0		29.0
Actuated g/C Ratio		0.29	0.29		0.29			0.44	0.38	0.38		0.48
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		505	463		398			239	1338	598		267
v/s Ratio Prot								0.04	0.35			c0.07
v/s Ratio Perm		0.05	0.01		c0.28			0.22		0.12		0.34
v/c Ratio		0.17	0.02		0.95			0.58	0.92	0.32		0.88
Uniform Delay, d1		16.0	15.3		21.0			13.4	18.0	13.4		12.7
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.2	0.0		31.3			3.4	11.9	1.4		25.8
Delay (s)		16.2	15.3		52.4			16.8	30.0	14.8		38.6
Level of Service		B	B		D			B	C	B		D
Approach Delay (s)		15.9			52.4				24.9			
Approach LOS		B			D				C			
Intersection Summary												
HCM 2000 Control Delay			63.8			HCM 2000 Level of Service			E			
HCM 2000 Volume to Capacity ratio			1.09									
Actuated Cycle Length (s)			60.8			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			90.7%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1550	53
Future Volume (vph)	1550	53
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1685	58
RTOR Reduction (vph)	0	35
Lane Group Flow (vph)	1685	23
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	24.0	24.0
Effective Green, g (s)	24.0	24.0
Actuated g/C Ratio	0.39	0.39
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1396	624
v/s Ratio Prot	c0.48	
v/s Ratio Perm		0.01
v/c Ratio	1.21	0.04
Uniform Delay, d1	18.4	11.3
Progression Factor	1.00	1.00
Incremental Delay, d2	100.2	0.1
Delay (s)	118.6	11.4
Level of Service	F	B
Approach Delay (s)	105.9	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	0	28	18	0	395	15	2436	50	315	1814	20
Future Volume (vph)	26	0	28	18	0	395	15	2436	50	315	1814	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor		1.00			1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt		0.93			1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected		0.98			0.95	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)		1692			1770	1583	1770	3539	1583	1770	3539	1583
Flt Permitted		0.85			0.71	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)		1479			1330	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	28	0	30	20	0	429	16	2648	54	342	1972	22
RTOR Reduction (vph)	0	51	0	0	0	157	0	0	20	0	0	5
Lane Group Flow (vph)	0	7	0	0	20	272	16	2648	34	342	1972	17
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)		18.0			18.0	18.0	2.0	97.0	97.0	23.0	118.0	118.0
Effective Green, g (s)		18.0			18.0	18.0	2.0	97.0	97.0	23.0	118.0	118.0
Actuated g/C Ratio		0.12			0.12	0.12	0.01	0.63	0.63	0.15	0.77	0.77
Clearance Time (s)		5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)		3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)		174			156	186	23	2243	1003	266	2729	1220
v/s Ratio Prot							0.01	c0.75		c0.19	0.56	
v/s Ratio Perm		0.00			0.02	c0.17			0.02			0.01
v/c Ratio		0.04			0.13	1.46	0.70	1.18	0.03	1.29	0.72	0.01
Uniform Delay, d1		59.8			60.5	67.5	75.2	28.0	10.5	65.0	9.0	4.0
Progression Factor		1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2		0.1			0.4	235.0	63.9	86.2	0.1	154.0	1.7	0.0
Delay (s)		59.9			60.8	302.5	139.1	114.2	10.5	219.0	10.7	4.1
Level of Service		E			E	F	F	F	B	F	B	A
Approach Delay (s)		59.9			291.7			112.3			41.2	
Approach LOS		E			F			F			D	
Intersection Summary												
HCM 2000 Control Delay			96.4		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.23									
Actuated Cycle Length (s)			153.0		Sum of lost time (s)					15.0		
Intersection Capacity Utilization			108.5%		ICU Level of Service					G		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	204	14	42	19	11	76	9	31	1625	31	1	69
Future Volume (vph)	204	14	42	19	11	76	9	31	1625	31	1	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	0.87			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1619			1770	3539	1583		1770
Flt Permitted	0.70	1.00	1.00	0.75	1.00			0.15	1.00	1.00		0.15
Satd. Flow (perm)	1295	1863	1583	1393	1619			283	3539	1583		273
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	222	15	46	21	12	83	10	34	1766	34	1	75
RTOR Reduction (vph)	0	0	35	0	63	0	0	0	0	19	0	0
Lane Group Flow (vph)	222	15	11	21	32	0	0	44	1766	15	0	76
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	13.8	13.8	13.8	13.8	13.8			28.1	26.3	26.3		30.1
Effective Green, g (s)	13.8	13.8	13.8	13.8	13.8			28.1	26.3	26.3		30.1
Actuated g/C Ratio	0.24	0.24	0.24	0.24	0.24			0.49	0.45	0.45		0.52
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	308	444	377	332	385			183	1607	719		214
v/s Ratio Prot		0.01			0.02			0.01	c0.50			c0.02
v/s Ratio Perm	c0.17		0.01	0.02				0.11		0.01		0.17
v/c Ratio	0.72	0.03	0.03	0.06	0.08			0.24	1.10	0.02		0.36
Uniform Delay, d1	20.3	16.9	16.9	17.1	17.1			10.6	15.8	8.7		11.9
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	8.1	0.0	0.0	0.1	0.1			0.7	54.7	0.1		1.0
Delay (s)	28.3	17.0	16.9	17.1	17.2			11.3	70.5	8.8		12.9
Level of Service	C	B	B	B	B			B	E	A		B
Approach Delay (s)		25.9			17.2				67.9			
Approach LOS		C			B				E			
Intersection Summary												
HCM 2000 Control Delay			43.1			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			0.93									
Actuated Cycle Length (s)			57.9			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			79.6%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1359	84
Future Volume (vph)	1359	84
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1477	91
RTOR Reduction (vph)	0	48
Lane Group Flow (vph)	1477	43
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	27.3	27.3
Effective Green, g (s)	27.3	27.3
Actuated g/C Ratio	0.47	0.47
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1668	746
v/s Ratio Prot	0.42	
v/s Ratio Perm		0.03
v/c Ratio	0.89	0.06
Uniform Delay, d1	13.9	8.3
Progression Factor	1.00	1.00
Incremental Delay, d2	7.3	0.1
Delay (s)	21.2	8.5
Level of Service	C	A
Approach Delay (s)	20.1	
Approach LOS	C	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	19	255	58	28	171	103	1	302	1396	27	69	1228
Future Volume (vph)	19	255	58	28	171	103	1	302	1396	27	69	1228
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00		1.00			1.00	0.95	1.00	1.00	0.95
Frt	1.00	1.00	0.85		0.95			1.00	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00		1.00			0.95	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1863	1583		1769			1770	3539	1583	1770	3539
Flt Permitted	0.27	1.00	1.00		0.94			0.15	1.00	1.00	0.17	1.00
Satd. Flow (perm)	506	1863	1583		1677			277	3539	1583	316	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	21	277	63	30	186	112	1	328	1517	29	75	1335
RTOR Reduction (vph)	0	0	43	0	28	0	0	0	0	17	0	0
Lane Group Flow (vph)	21	277	20	0	300	0	0	329	1517	12	75	1335
Turn Type	pm+pt	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	pm+pt	NA
Protected Phases	7	4			8			5	2		1	6
Permitted Phases	4		4	8			5	2		2	6	
Actuated Green, G (s)	21.3	21.3	21.3		14.6			33.0	26.9	26.9	26.4	23.6
Effective Green, g (s)	21.3	21.3	21.3		14.6			33.0	26.9	26.9	26.4	23.6
Actuated g/C Ratio	0.32	0.32	0.32		0.22			0.50	0.41	0.41	0.40	0.36
Clearance Time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	195	601	510		370			276	1442	645	188	1265
v/s Ratio Prot	0.00	c0.15						c0.11	0.43		0.02	0.38
v/s Ratio Perm	0.03		0.01		c0.18			c0.49		0.01	0.14	
v/c Ratio	0.11	0.46	0.04		0.81			1.19	1.05	0.02	0.40	1.06
Uniform Delay, d1	17.0	17.8	15.3		24.4			14.4	19.6	11.7	15.4	21.2
Progression Factor	1.00	1.00	1.00		1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	0.6	0.0		12.6			116.5	38.7	0.0	1.4	41.3
Delay (s)	17.3	18.3	15.4		37.0			130.9	58.2	11.7	16.8	62.5
Level of Service	B	B	B		D			F	E	B	B	E
Approach Delay (s)		17.8			37.0				70.3			59.8
Approach LOS		B			D				E			E
Intersection Summary												
HCM 2000 Control Delay			59.0			HCM 2000 Level of Service			E			
HCM 2000 Volume to Capacity ratio			1.13									
Actuated Cycle Length (s)			66.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			97.6%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	7
Future Volume (vph)	7
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	8
RTOR Reduction (vph)	5
Lane Group Flow (vph)	3
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	23.6
Effective Green, g (s)	23.6
Actuated g/C Ratio	0.36
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	566
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	13.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	13.6
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	223	76	27	112	80	107	1	12	1500	110	1	64
Future Volume (vph)	223	76	27	112	80	107	1	12	1500	110	1	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85	1.00	0.91			1.00	1.00	0.85		1.00
Flt Protected		0.96	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1796	1583	1770	1703			1770	3539	1583		1770
Flt Permitted		0.64	1.00	0.43	1.00			0.12	1.00	1.00		0.12
Satd. Flow (perm)		1199	1583	797	1703			233	3539	1583		233
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	242	83	29	122	87	116	1	13	1630	120	1	70
RTOR Reduction (vph)	0	0	20	0	12	0	0	0	0	47	0	0
Lane Group Flow (vph)	0	325	9	122	191	0	0	14	1630	73	0	71
Turn Type	Perm	NA	Perm	Perm	NA		Perm	Perm	NA	Perm	Perm	Perm
Protected Phases		4			8				2			
Permitted Phases	4		4	8			2	2		2	6	6
Actuated Green, G (s)		17.6	17.6	17.6	17.6			32.0	32.0	32.0		32.0
Effective Green, g (s)		17.6	17.6	17.6	17.6			32.0	32.0	32.0		32.0
Actuated g/C Ratio		0.30	0.30	0.30	0.30			0.54	0.54	0.54		0.54
Clearance Time (s)		5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		354	467	235	502			125	1900	849		125
v/s Ratio Prot					0.11				c0.46			
v/s Ratio Perm		c0.27	0.01	0.15				0.06		0.05		0.30
v/c Ratio		0.92	0.02	0.52	0.38			0.11	0.86	0.09		0.57
Uniform Delay, d1		20.3	14.9	17.5	16.7			6.8	11.8	6.7		9.2
Progression Factor		1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		27.8	0.0	1.9	0.5			1.8	5.3	0.2		17.4
Delay (s)		48.1	14.9	19.4	17.2			8.6	17.1	6.9		26.6
Level of Service		D	B	B	B			A	B	A		C
Approach Delay (s)		45.4			18.0				16.4			
Approach LOS		D			B				B			
Intersection Summary												
HCM 2000 Control Delay			18.5			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.88									
Actuated Cycle Length (s)			59.6			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			89.4%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1442	142
Future Volume (vph)	1442	142
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1567	154
RTOR Reduction (vph)	0	70
Lane Group Flow (vph)	1567	84
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	32.0	32.0
Effective Green, g (s)	32.0	32.0
Actuated g/C Ratio	0.54	0.54
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1900	849
v/s Ratio Prot	0.44	
v/s Ratio Perm		0.05
v/c Ratio	0.82	0.10
Uniform Delay, d1	11.5	6.7
Progression Factor	1.00	1.00
Incremental Delay, d2	4.2	0.2
Delay (s)	15.7	7.0
Level of Service	B	A
Approach Delay (s)	15.4	
Approach LOS	B	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	188	79	99	145	482	30	1518	222	420	1129	95
Future Volume (vph)	111	188	79	99	145	482	30	1518	222	420	1129	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.96		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1780		1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.66	1.00		0.44	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1223	1780		827	1863	1583	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	121	204	86	108	158	524	33	1650	241	457	1227	103
RTOR Reduction (vph)	0	27	0	0	0	176	0	0	139	0	0	55
Lane Group Flow (vph)	121	263	0	108	158	348	33	1650	102	457	1227	48
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)	15.5	15.5		15.5	15.5	15.5	1.9	21.2	21.2	9.0	28.3	28.3
Effective Green, g (s)	15.5	15.5		15.5	15.5	15.5	1.9	21.2	21.2	9.0	28.3	28.3
Actuated g/C Ratio	0.26	0.26		0.26	0.26	0.26	0.03	0.35	0.35	0.15	0.47	0.47
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	312	454		211	475	404	55	1236	552	509	1649	738
v/s Ratio Prot		0.15			0.08		0.02	c0.47		c0.13	0.35	
v/s Ratio Perm	0.10			0.13		c0.22			0.06			0.03
v/c Ratio	0.39	0.58		0.51	0.33	0.86	0.60	1.33	0.18	0.90	0.74	0.07
Uniform Delay, d1	18.7	19.8		19.4	18.4	21.6	29.0	19.8	13.7	25.4	13.2	8.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	1.8		2.1	0.4	16.8	16.4	156.3	0.7	18.3	3.1	0.2
Delay (s)	19.5	21.6		21.5	18.8	38.4	45.4	176.1	14.5	43.7	16.3	9.1
Level of Service	B	C		C	B	D	D	F	B	D	B	A
Approach Delay (s)		20.9			32.1			153.6			22.9	
Approach LOS		C			C			F			C	
Intersection Summary												
HCM 2000 Control Delay			75.4				HCM 2000 Level of Service			E		
HCM 2000 Volume to Capacity ratio			1.09									
Actuated Cycle Length (s)			60.7				Sum of lost time (s)			15.0		
Intersection Capacity Utilization			90.8%				ICU Level of Service			E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	85	35	53	175	31	60	1	70	1464	204	1	38
Future Volume (vph)	85	35	53	175	31	60	1	70	1464	204	1	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.73	1.00	1.00	0.46	1.00	1.00		0.12	1.00	1.00		0.13
Satd. Flow (perm)	1369	1863	1583	855	1863	1583		229	3539	1583		236
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	92	38	58	190	34	65	1	76	1591	222	1	41
RTOR Reduction (vph)	0	0	51	0	0	48	0	0	0	100	0	0
Lane Group Flow (vph)	92	38	7	190	34	17	0	77	1591	122	0	42
Turn Type	Perm	NA	Perm	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4		3	8			5	2			1
Permitted Phases	4		4	8		8	5	2		2	1	6
Actuated Green, G (s)	8.4	8.4	8.4	18.4	18.4	18.4		36.5	32.6	32.6		34.5
Effective Green, g (s)	8.4	8.4	8.4	18.4	18.4	18.4		36.5	32.6	32.6		34.5
Actuated g/C Ratio	0.12	0.12	0.12	0.27	0.27	0.27		0.53	0.47	0.47		0.50
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	166	227	192	294	497	422		208	1674	748		182
v/s Ratio Prot		0.02		c0.05	0.02			c0.02	c0.45			0.01
v/s Ratio Perm	0.07		0.00	c0.13		0.01		0.18		0.08		0.11
v/c Ratio	0.55	0.17	0.04	0.65	0.07	0.04		0.37	0.95	0.16		0.23
Uniform Delay, d1	28.5	27.1	26.7	21.7	18.9	18.7		13.0	17.4	10.4		13.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	4.0	0.4	0.1	4.8	0.1	0.0		1.1	13.0	0.5		0.7
Delay (s)	32.5	27.5	26.8	26.5	18.9	18.8		14.1	30.4	10.8		14.4
Level of Service	C	C	C	C	B	B		B	C	B		B
Approach Delay (s)		29.7			23.9				27.4			
Approach LOS		C			C				C			
Intersection Summary												
HCM 2000 Control Delay			27.1				HCM 2000 Level of Service		C			
HCM 2000 Volume to Capacity ratio			0.89									
Actuated Cycle Length (s)			68.9				Sum of lost time (s)		20.0			
Intersection Capacity Utilization			73.5%				ICU Level of Service		D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1385	72
Future Volume (vph)	1385	72
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1505	78
RTOR Reduction (vph)	0	42
Lane Group Flow (vph)	1505	36
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	31.6	31.6
Effective Green, g (s)	31.6	31.6
Actuated g/C Ratio	0.46	0.46
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1623	726
v/s Ratio Prot	0.43	
v/s Ratio Perm		0.02
v/c Ratio	0.93	0.05
Uniform Delay, d1	17.6	10.3
Progression Factor	1.00	1.00
Incremental Delay, d2	10.7	0.1
Delay (s)	28.2	10.5
Level of Service	C	B
Approach Delay (s)	27.0	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	54	24	181	22	305	7	1359	114	118	1450	23
Future Volume (vph)	50	54	24	181	22	305	7	1359	114	118	1450	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.72	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1381	1863	1583	1338	1863	1583	1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	59	26	197	24	332	8	1477	124	128	1576	25
RTOR Reduction (vph)	0	0	20	0	0	159	0	0	69	0	0	12
Lane Group Flow (vph)	54	59	6	197	24	173	8	1477	55	128	1576	13
Turn Type	Perm	NA	Perm	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4		4	8		8			2			6
Actuated Green, G (s)	13.4	13.4	13.4	13.4	13.4	13.4	0.9	26.2	26.2	5.0	30.3	30.3
Effective Green, g (s)	13.4	13.4	13.4	13.4	13.4	13.4	0.9	26.2	26.2	5.0	30.3	30.3
Actuated g/C Ratio	0.22	0.22	0.22	0.22	0.22	0.22	0.02	0.44	0.44	0.08	0.51	0.51
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	310	418	355	300	418	355	26	1555	695	148	1799	804
v/s Ratio Prot		0.03			0.01		0.00	0.42		c0.07	c0.45	
v/s Ratio Perm	0.04		0.00	c0.15		0.11			0.03			0.01
v/c Ratio	0.17	0.14	0.02	0.66	0.06	0.49	0.31	0.95	0.08	0.86	0.88	0.02
Uniform Delay, d1	18.6	18.5	18.0	21.0	18.1	20.1	29.0	16.1	9.7	27.0	13.0	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.2	0.0	5.1	0.1	1.1	6.6	13.7	0.2	37.4	6.3	0.0
Delay (s)	18.9	18.6	18.0	26.1	18.2	21.2	35.7	29.7	9.9	64.4	19.3	7.3
Level of Service	B	B	B	C	B	C	D	C	A	E	B	A
Approach Delay (s)		18.6			22.8			28.2			22.5	
Approach LOS		B			C			C			C	
Intersection Summary												
HCM 2000 Control Delay	24.7			HCM 2000 Level of Service					C			
HCM 2000 Volume to Capacity ratio	0.86											
Actuated Cycle Length (s)	59.6			Sum of lost time (s)					15.0			
Intersection Capacity Utilization	73.4%			ICU Level of Service					D			
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	179	130	15	1523	106	35	148	1686
Future Volume (vph)	179	130	15	1523	106	35	148	1686
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.16	1.00	1.00		0.14	1.00
Satd. Flow (perm)	1770	1583	307	3539	1583		254	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	141	16	1655	115	38	161	1833
RTOR Reduction (vph)	0	122	0	0	61	0	0	0
Lane Group Flow (vph)	195	19	16	1655	54	0	199	1833
Turn Type	Prot	Prot	Perm	NA	Perm	custom	pm+pt	NA
Protected Phases	3	3		2			1	6
Permitted Phases			2		2	1	6	
Actuated Green, G (s)	7.0	7.0	24.3	24.3	24.3		34.3	34.3
Effective Green, g (s)	7.0	7.0	24.3	24.3	24.3		34.3	34.3
Actuated g/C Ratio	0.14	0.14	0.47	0.47	0.47		0.67	0.67
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	241	216	145	1676	749		317	2366
v/s Ratio Prot	c0.11	0.01		c0.47			0.06	c0.52
v/s Ratio Perm			0.05		0.03		0.36	
v/c Ratio	0.81	0.09	0.11	0.99	0.07		0.63	0.77
Uniform Delay, d1	21.5	19.4	7.5	13.3	7.4		10.2	5.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.01	1.00
Incremental Delay, d2	17.8	0.2	1.5	19.2	0.2		3.9	2.6
Delay (s)	39.3	19.5	9.0	32.6	7.5		14.1	8.4
Level of Service	D	B	A	C	A		B	A
Approach Delay (s)	31.0			30.7				9.0
Approach LOS	C			C				A
Intersection Summary								
HCM 2000 Control Delay			20.1			HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			0.98					
Actuated Cycle Length (s)			51.3			Sum of lost time (s)		15.0
Intersection Capacity Utilization			74.7%			ICU Level of Service		D
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	978	1385	733	279	1011	179	621	957	138	144	1112	561
Future Volume (vph)	978	1385	733	279	1011	179	621	957	138	144	1112	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1063	1505	797	303	1099	195	675	1040	150	157	1209	610
RTOR Reduction (vph)	0	0	192	0	0	148	0	0	114	0	0	188
Lane Group Flow (vph)	1063	1505	605	303	1099	47	675	1040	36	157	1209	422
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.0	18.0	8.0	18.0	18.0
Effective Green, g (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.0	18.0	8.0	18.0	18.0
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.24	0.24	0.11	0.24	0.24	0.11	0.24	0.24
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	503	1132	506	228	849	379	366	1220	379	188	1220	379
v/s Ratio Prot	c0.31	c0.43		0.09	0.31		c0.20	0.20		0.09	0.24	
v/s Ratio Perm			0.38			0.03			0.02			c0.27
v/c Ratio	2.11	1.33	1.20	1.33	1.29	0.12	1.84	0.85	0.09	0.84	0.99	1.11
Uniform Delay, d1	32.0	25.5	25.5	35.0	28.5	22.3	33.5	27.2	22.2	32.9	28.4	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	507.7	154.4	106.3	175.0	141.3	0.1	390.4	7.6	0.5	26.1	23.7	80.8
Delay (s)	539.7	179.9	131.8	210.0	169.8	22.5	423.9	34.9	22.7	59.0	52.1	109.3
Level of Service	F	F	F	F	F	C	F	C	C	E	D	F
Approach Delay (s)		282.2			159.4			174.7			70.3	
Approach LOS		F			F			F			E	
Intersection Summary												
HCM 2000 Control Delay	189.6			HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio	1.55											
Actuated Cycle Length (s)	75.0			Sum of lost time (s)					20.0			
Intersection Capacity Utilization	111.7%			ICU Level of Service					H			
Analysis Period (min)	15											
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018



Movement	EBU	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	1	11	302	382	305	548	51
Future Volume (Veh/h)	1	11	302	382	305	548	51
Sign Control		Stop			Free	Free	
Grade		0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	12	328	415	332	596	55
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					None	None	
Median storage (veh)							
Upstream signal (ft)							
pX, platoon unblocked	0.00						
vC, conflicting volume	0	1786	624	651			
vC1, stage 1 conf vol							
vC2, stage 2 conf vol							
vCu, unblocked vol	0	1786	624	651			
tC, single (s)	0.0	6.4	6.2	4.1			
tC, 2 stage (s)							
tF (s)	0.0	3.5	3.3	2.2			
p0 queue free %	0	76	32	56			
cM capacity (veh/h)	0	50	486	935			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1		
Volume Total	12	328	415	332	651		
Volume Left	12	0	415	0	0		
Volume Right	0	328	0	0	55		
cSH	50	486	935	1700	1700		
Volume to Capacity	0.24	0.68	0.44	0.20	0.38		
Queue Length 95th (ft)	20	125	58	0	0		
Control Delay (s)	98.8	26.5	11.9	0.0	0.0		
Lane LOS	F	D	B				
Approach Delay (s)	29.0		6.6		0.0		
Approach LOS	D						
Intersection Summary							
Average Delay			8.5				
Intersection Capacity Utilization			66.4%		ICU Level of Service		C
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018

								
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR	
Lane Configurations								
Traffic Volume (veh/h)	45	133	31	215	639	788	69	
Future Volume (Veh/h)	45	133	31	215	639	788	69	
Sign Control	Stop				Free	Free		
Grade	0%				0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	49	145	0	234	695	857	75	
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None	None		
Median storage veh								
Upstream signal (ft)								
pX, platoon unblocked			0.00					
vC, conflicting volume	1672	428	0	932				
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1672	428	0	932				
tC, single (s)	6.8	6.9	0.0	4.1				
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0	2.2				
p0 queue free %	17	75	0	68				
cM capacity (veh/h)	59	575	0	730				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	49	145	234	348	348	428	428	75
Volume Left	49	0	234	0	0	0	0	0
Volume Right	0	145	0	0	0	0	0	75
cSH	59	575	730	1700	1700	1700	1700	1700
Volume to Capacity	0.83	0.25	0.32	0.20	0.20	0.25	0.25	0.04
Queue Length 95th (ft)	93	25	35	0	0	0	0	0
Control Delay (s)	184.7	13.4	12.2	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	B	B					
Approach Delay (s)	56.6		3.1			0.0		
Approach LOS	F							
Intersection Summary								
Average Delay			6.7					
Intersection Capacity Utilization			53.6%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	226	12	8	869	577	18	26	834
Future Volume (Veh/h)	226	12	8	869	577	18	26	834
Sign Control	Stop			Free			Free	
Grade	0%			0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	246	13	0	945	627	0	28	907
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type	None				None			
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00			0.00		
vC, conflicting volume	1454	472	0			0	945	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1454	472	0			0	945	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	0	98	0			0	96	
cM capacity (veh/h)	116	538	0			0	722	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	259	472	472	627	0	28	454	454
Volume Left	246	0	0	0	0	28	0	0
Volume Right	13	0	0	627	0	0	0	0
cSH	121	1700	1700	1700	1700	722	1700	1700
Volume to Capacity	2.14	0.28	0.28	0.37	0.00	0.04	0.27	0.27
Queue Length 95th (ft)	543	0	0	0	0	3	0	0
Control Delay (s)	599.1	0.0	0.0	0.0	0.0	10.2	0.0	0.0
Lane LOS	F					B		
Approach Delay (s)	599.1	0.0	0.3					
Approach LOS	F							
Intersection Summary								
Average Delay			56.2					
Intersection Capacity Utilization			50.6%		ICU Level of Service		A	
Analysis Period (min)			15					
Description: m								

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	1	92	11	39	7	0	1	18	5	952	153	7
Future Volume (Veh/h)	1	92	11	39	7	0	1	18	5	952	153	7
Sign Control			Stop			Stop				Free		
Grade			0%			0%				0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	100	12	42	8	0	1	0	5	1035	166	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)							12					
Median type										None		
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.00	0.54	0.54	0.54	0.54	0.54		0.00	0.54			0.00
vC, conflicting volume	0	2402	3086	932	2036	2920	518	0	1865			0
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	0	1884	3161	0	1199	2851	518	0	881			0
tC, single (s)	0.0	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0
tC, 2 stage (s)												
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	0	0	0	93	0	100	100	0	99			0
cM capacity (veh/h)	0	23	5	581	0	9	503	0	409			0
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	154	8	1	5	518	518	166	5	932	932	50	
Volume Left	100	8	0	5	0	0	0	5	0	0	0	
Volume Right	42	0	1	0	0	0	166	0	0	0	50	
cSH	23	0	0	409	1700	1700	1700	577	1700	1700	1700	
Volume to Capacity	6.66	Err	Err	0.01	0.30	0.30	0.10	0.01	0.55	0.55	0.03	
Queue Length 95th (ft)	Err	Err	Err	1	0	0	0	1	0	0	0	
Control Delay (s)	Err	Err	Err	13.9	0.0	0.0	0.0	11.3	0.0	0.0	0.0	
Lane LOS	F	F	F	B				B				
Approach Delay (s)	Err	Err		0.1				0.0				
Approach LOS	F	F										
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization			68.9%		ICU Level of Service				C			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis 8: SR 74 & Meadow Glen Parkway

10/17/2018

					
Movement	SBL	SBT	SBR		
Lane Configurations		 			
Traffic Volume (veh/h)	5	1716	46		
Future Volume (Veh/h)	5	1716	46		
Sign Control	Free				
Grade	0%				
Peak Hour Factor	0.92	0.92	0.92		
Hourly flow rate (vph)	5	1865	50		
Pedestrians					
Lane Width (ft)					
Walking Speed (ft/s)					
Percent Blockage					
Right turn flare (veh)					
Median type	None				
Median storage veh)					
Upstream signal (ft)	1262				
pX, platoon unblocked					
vC, conflicting volume	1201				
vC1, stage 1 conf vol					
vC2, stage 2 conf vol					
vCu, unblocked vol	1201				
tC, single (s)	4.1				
tC, 2 stage (s)					
tF (s)	2.2				
p0 queue free %	99				
cM capacity (veh/h)	577				
Direction, Lane #					

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	16	0	110	24	3	12	26	152	1840	22	1	1683
Future Volume (Veh/h)	16	0	110	24	3	12	26	152	1840	22	1	1683
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	17	0	120	26	3	13	0	165	2000	24	1	1829
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type									None		None	
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	3176	4161	914	3366	4161	1000	0	1829			2000	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3176	4161	914	3366	4161	1000	0	1829			2000	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			2.2	
p0 queue free %	0	100	56	0	0	95	0	50			100	
cM capacity (veh/h)	0	1	275	1	1	241	0	330			283	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	137	42	165	1000	1000	24	1	914	914	53		
Volume Left	17	26	165	0	0	0	1	0	0	0		
Volume Right	120	13	0	0	0	24	0	0	0	53		
cSH	0	2	330	1700	1700	1700	283	1700	1700	1700		
Volume to Capacity	Err	27.94	0.50	0.59	0.59	0.01	0.00	0.54	0.54	0.03		
Queue Length 95th (ft)	Err	Err	66	0	0	0	0	0	0	0		
Control Delay (s)	Err	Err	26.3	0.0	0.0	0.0	17.8	0.0	0.0	0.0		
Lane LOS	F	F	D	C								
Approach Delay (s)	Err	Err	2.0	0.0								
Approach LOS	F	F										
Intersection Summary												
Average Delay			Err									
Intersection Capacity Utilization			74.0%		ICU Level of Service				D			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	49
Future Volume (Veh/h)	49
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	53
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	49	0	0	370	14	2215	45	282	1623	34
Future Volume (Veh/h)	0	0	49	0	0	370	14	2215	45	282	1623	34
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	53	0	0	402	15	2408	49	307	1764	37
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3612	4816	882	3934	4816	1204	1764				2408	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	3612	4816	882	3934	4816	1204	1764				2408	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	0	82	0	0	0	96				0	
cM capacity (veh/h)	0	0	289	0	0	176	350				195	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	53	402	15	1204	1204	49	307	882	882	37		
Volume Left	0	0	15	0	0	0	307	0	0	0		
Volume Right	53	402	0	0	0	49	0	0	0	37		
cSH	289	176	350	1700	1700	1700	195	1700	1700	1700		
Volume to Capacity	0.18	2.28	0.04	0.71	0.71	0.03	1.57	0.52	0.52	0.02		
Queue Length 95th (ft)	16	820	3	0	0	0	495	0	0	0		
Control Delay (s)	20.2	636.0	15.7	0.0	0.0	0.0	324.4	0.0	0.0	0.0		
Lane LOS	C	F	C				F					
Approach Delay (s)	20.2	636.0	0.1				47.2					
Approach LOS	C	F										
Intersection Summary												
Average Delay			70.8									
Intersection Capacity Utilization			90.8%	ICU Level of Service					E			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	12	5	104	0	4	16	51	1745	1	1	1	1498
Future Volume (Veh/h)	12	5	104	0	4	16	51	1745	1	1	1	1498
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	13	5	113	0	4	17	55	1897	1	0	1	1628
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None								None			
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked											0.00	
vC, conflicting volume	2690	3637	814	2939	3638	949	1628			0	1897	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	2690	3637	814	2939	3638	949	1628			0	1897	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			0.0	4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			0.0	2.2	
p0 queue free %	0	0	65	0	7	93	86			0	100	
cM capacity (veh/h)	2	4	321	0	4	261	395			0	310	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	131	21	55	1265	633	1	814	814	3			
Volume Left	13	0	55	0	0	1	0	0	0			
Volume Right	113	17	0	0	1	0	0	0	3			
cSH	13	21	395	1700	1700	310	1700	1700	1700			
Volume to Capacity	9.82	1.00	0.14	0.74	0.37	0.00	0.48	0.48	0.00			
Queue Length 95th (ft)	Err	70	12	0	0	0	0	0	0			
Control Delay (s)	Err	453.2	15.6	0.0	0.0	16.6	0.0	0.0	0.0			
Lane LOS	F	F	C				C					
Approach Delay (s)	Err	453.2	0.4				0.0					
Approach LOS	F	F										
Intersection Summary												
Average Delay			353.3									
Intersection Capacity Utilization			68.9%	ICU Level of Service					C			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	3
Future Volume (Veh/h)	3
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	3
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	4	233	24	0	85	30	157	1370	58	1	65		
Future Volume (Veh/h)	0	4	233	24	0	85	30	157	1370	58	1	65		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	4	253	26	0	92	0	171	1489	63	0	71		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage veh														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	2928	3672	850	2824	3672	744	0	1699					0	1489
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	2928	3672	850	2824	3672	744	0	1699					0	1489
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	0	17	0	100	74	0	54					0	84
cM capacity (veh/h)	3	2	304	0	2	357	0	371					0	447
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4			
Volume Total	4	253	118	171	744	744	63	71	850	850	1			
Volume Left	0	0	26	171	0	0	0	71	0	0	0			
Volume Right	0	253	92	0	0	0	63	0	0	0	1			
cSH	2	304	0	371	1700	1700	1700	447	1700	1700	1700			
Volume to Capacity	1.86	0.83	Err	0.46	0.44	0.44	0.04	0.16	0.50	0.50	0.00			
Queue Length 95th (ft)	34	176	Err	59	0	0	0	14	0	0	0			
Control Delay (s)	3079.8	55.6	Err	22.7	0.0	0.0	0.0	14.6	0.0	0.0	0.0			
Lane LOS	F	F	F	C	B									
Approach Delay (s)	102.7		Err	2.3	0.6									
Approach LOS	F		F											
Intersection Summary														
Average Delay	Err													
Intersection Capacity Utilization	87.9%			ICU Level of Service					E					
Analysis Period (min)	15													

HCM Unsignalized Intersection Capacity Analysis 20: SR 74 & Senoia Road/Lexington Pass

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	1563	1
Future Volume (Veh/h)	1563	1
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1699	1
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	
Lane Configurations													
Traffic Volume (veh/h)	0	0	1	43	0	97	23	0	1602	46	4	31	
Future Volume (Veh/h)	0	0	1	43	0	97	23	0	1602	46	4	31	
Sign Control	Stop				Stop				Free				
Grade	0%				0%				0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	0	0	1	47	0	105	0	0	1741	50	0	34	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None												
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked							0.00	0.00					
vC, conflicting volume	2894	3764	978	2788	3765	870	0	1956	0				1741
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	2894	3764	978	2788	3765	870	0	1956	0				1741
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1	0.0				4.1
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2	0.0				2.2
p0 queue free %	100	100	100	0	100	64	0	100	0				90
cM capacity (veh/h)	4	4	250	8	4	295	0	294	0				357
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3			
Volume Total	1	47	105	0	870	870	50	34	1303	653			
Volume Left	0	47	0	0	0	0	0	34	0	0			
Volume Right	1	0	105	0	0	0	50	0	0	1			
cSH	250	8	295	1700	1700	1700	1700	357	1700	1700			
Volume to Capacity	0.00	5.86	0.36	0.00	0.51	0.51	0.03	0.10	0.77	0.38			
Queue Length 95th (ft)	0	Err	39	0	0	0	0	8	0	0			
Control Delay (s)	19.5	Err	23.8	0.0	0.0	0.0	0.0	16.1	0.0	0.0			
Lane LOS	C	F	C					C					
Approach Delay (s)	19.5	3108.3	0.0				0.3						
Approach LOS	C	F											
Intersection Summary													
Average Delay			120.2										
Intersection Capacity Utilization			69.1%		ICU Level of Service					C			
Analysis Period (min)			15										

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	1799	1
Future Volume (Veh/h)	1799	1
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	1955	1
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

									
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Lane Configurations									
Traffic Volume (veh/h)	42	69	3	1622	81	15	100	1757	
Future Volume (Veh/h)	42	69	3	1622	81	15	100	1757	
Sign Control	Stop			Free			Free		
Grade	0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	46	75	0	1763	88	0	109	1910	
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None				None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked	0.00			0.00					
vC, conflicting volume	2936	882	0	0					
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	2936	882	0	0					
tC, single (s)	6.8	6.9	0.0	0.0					
tC, 2 stage (s)									
tF (s)	3.5	3.3	0.0	0.0					
p0 queue free %	0	74	0	0					
cM capacity (veh/h)	8	290	0	0					
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	46	75	882	882	88	0	109	955	955
Volume Left	46	0	0	0	0	0	109	0	0
Volume Right	0	75	0	0	88	0	0	0	0
cSH	8	290	1700	1700	1700	1700	350	1700	1700
Volume to Capacity	5.68	0.26	0.52	0.52	0.05	0.00	0.31	0.56	0.56
Queue Length 95th (ft)	Err	25	0	0	0	0	32	0	0
Control Delay (s)	Err	21.7	0.0	0.0	0.0	0.0	19.9	0.0	0.0
Lane LOS	F	C					C		
Approach Delay (s)	3814.7	0.0		1.1					
Approach LOS	F								
Intersection Summary									
Average Delay			116.2						
Intersection Capacity Utilization			65.5%		ICU Level of Service			C	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	0	2576	2	408	2	310	874	0	0	1009
Future Volume (vph)	0	0	0	2576	2	408	2	310	874	0	0	1009
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				5.0	5.0	5.0		5.0	5.0			5.0
Lane Util. Factor				0.95	0.95	1.00		1.00	0.95			0.95
Frt				1.00	1.00	0.85		1.00	1.00			1.00
Flt Protected				0.95	0.95	1.00		0.95	1.00			1.00
Satd. Flow (prot)				1681	1685	1583		1770	3539			3539
Flt Permitted				0.95	0.95	1.00		0.50	1.00			1.00
Satd. Flow (perm)				1681	1685	1583		931	3539			3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	2800	2	443	2	337	950	0	0	1097
RTOR Reduction (vph)	0	0	0	0	0	87	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	1400	1402	356	0	339	950	0	0	1097
Turn Type				Prot	NA	custom	custom	Prot	NA			NA
Protected Phases				3	8	3		5	2			6
Permitted Phases							5					
Actuated Green, G (s)				19.0	19.0	19.0		8.0	31.0			18.0
Effective Green, g (s)				19.0	19.0	19.0		8.0	31.0			18.0
Actuated g/C Ratio				0.32	0.32	0.32		0.13	0.52			0.30
Clearance Time (s)				5.0	5.0	5.0		5.0	5.0			5.0
Vehicle Extension (s)				3.0	3.0	3.0		3.0	3.0			3.0
Lane Grp Cap (vph)				532	533	501		124	1828			1061
v/s Ratio Prot				c0.83	0.83	0.22			0.27			c0.31
v/s Ratio Perm								c0.36				
v/c Ratio				2.63	2.63	0.71		2.73	0.52			1.03
Uniform Delay, d1				20.5	20.5	18.1		26.0	9.6			21.0
Progression Factor				1.00	1.00	1.00		1.00	1.00			1.00
Incremental Delay, d2				739.6	739.1	4.7		802.5	1.1			36.7
Delay (s)				760.1	759.6	22.8		828.5	10.6			57.7
Level of Service				F	F	C		F	B			E
Approach Delay (s)		0.0			659.2				225.7			46.3
Approach LOS		A			F				F			D
Intersection Summary												
HCM 2000 Control Delay			411.2		HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio			2.01									
Actuated Cycle Length (s)			60.0		Sum of lost time (s)				15.0			
Intersection Capacity Utilization			246.8%		ICU Level of Service				H			
Analysis Period (min)			15									
c Critical Lane Group												

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	417
Future Volume (vph)	417
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	453
RTOR Reduction (vph)	283
Lane Group Flow (vph)	170
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	18.0
Effective Green, g (s)	18.0
Actuated g/C Ratio	0.30
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	474
v/s Ratio Prot	
v/s Ratio Perm	0.11
v/c Ratio	0.36
Uniform Delay, d1	16.5
Progression Factor	1.00
Incremental Delay, d2	2.1
Delay (s)	18.6
Level of Service	B
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (vph)	186	0	344	0	0	0	0	959	2181	530	3880	0
Future Volume (vph)	186	0	344	0	0	0	0	959	2181	530	3880	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00		1.00					0.95	1.00	1.00	0.95	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		1583					3539	1583	1770	3539	
Flt Permitted	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1770		1583					3539	1583	1770	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	202	0	374	0	0	0	0	1042	2371	576	4217	0
RTOR Reduction (vph)	0	0	50	0	0	0	0	0	136	0	0	0
Lane Group Flow (vph)	202	0	324	0	0	0	0	1042	2235	576	4217	0
Turn Type	Prot		Prot					NA	Perm	Prot	NA	
Protected Phases	7		7					2		1	6	
Permitted Phases									2			
Actuated Green, G (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Effective Green, g (s)	12.0		12.0					91.0	91.0	22.0	118.0	
Actuated g/C Ratio	0.09		0.09					0.65	0.65	0.16	0.84	
Clearance Time (s)	5.0		5.0					5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	151		135					2300	1028	278	2982	
v/s Ratio Prot	0.11		c0.20					0.29		c0.33	1.19	
v/s Ratio Perm									c1.41			
v/c Ratio	1.34		2.40					0.45	2.17	2.07	1.41	
Uniform Delay, d1	64.0		64.0					12.2	24.5	59.0	11.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	189.8		651.1					0.6	531.5	494.6	188.4	
Delay (s)	253.8		715.1					12.8	556.0	553.6	199.4	
Level of Service	F		F					B	F	F	F	
Approach Delay (s)		553.4			0.0			390.2			242.0	
Approach LOS		F			A			F			F	
Intersection Summary												
HCM 2000 Control Delay			320.0									
HCM 2000 Volume to Capacity ratio			2.17									
Actuated Cycle Length (s)			140.0									
Intersection Capacity Utilization			246.8%									
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	241	148	68	339	127	497	21	72	2224	187	70	383
Future Volume (vph)	241	148	68	339	127	497	21	72	2224	187	70	383
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00		0.97
Frt	1.00	0.95		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1775		1770	1863	1583		1770	3539	1583		3433
Flt Permitted	0.67	1.00		0.48	1.00	1.00		0.21	1.00	1.00		0.29
Satd. Flow (perm)	1246	1775		900	1863	1583		392	3539	1583		1032
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	262	161	74	368	138	540	23	78	2417	203	76	416
RTOR Reduction (vph)	0	22	0	0	0	189	0	0	0	152	0	0
Lane Group Flow (vph)	262	213	0	368	138	351	0	101	2417	51	0	492
Turn Type	pm+pt	NA		pm+pt	NA	Prot	custom	pm+pt	NA	Perm	custom	Prot
Protected Phases	7	4		3	8	8		5	2			1
Permitted Phases	4			8			5	2		2	1	
Actuated Green, G (s)	22.6	17.6		22.6	17.6	17.6		23.0	19.0	19.0		14.0
Effective Green, g (s)	22.6	17.6		22.6	17.6	17.6		23.0	19.0	19.0		14.0
Actuated g/C Ratio	0.30	0.23		0.30	0.23	0.23		0.30	0.25	0.25		0.19
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	407	413		326	433	368		192	889	397		191
v/s Ratio Prot	0.04	0.12		c0.07	0.07	0.22		0.03	c0.68			
v/s Ratio Perm	0.15			c0.26				0.13		0.03		c0.48
v/c Ratio	0.64	0.52		1.13	0.32	0.95		0.53	2.72	0.13		2.58
Uniform Delay, d1	22.2	25.3		26.1	24.0	28.6		21.0	28.3	21.9		30.8
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	3.5	1.1		89.4	0.4	34.5		2.6	776.6	0.7		724.2
Delay (s)	25.6	26.4		115.5	24.5	63.1		23.6	804.9	22.6		755.0
Level of Service	C	C		F	C	E		C	F	C		F
Approach Delay (s)		26.0			76.4				717.6			
Approach LOS		C			E				F			
Intersection Summary												
HCM 2000 Control Delay		526.7				HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio		2.03										
Actuated Cycle Length (s)		75.6				Sum of lost time (s)			20.0			
Intersection Capacity Utilization		135.2%				ICU Level of Service			H			
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2809	179
Future Volume (vph)	2809	179
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	3053	195
RTOR Reduction (vph)	0	108
Lane Group Flow (vph)	3053	87
Turn Type	NA	Prot
Protected Phases	6	6
Permitted Phases		
Actuated Green, G (s)	29.0	29.0
Effective Green, g (s)	29.0	29.0
Actuated g/C Ratio	0.38	0.38
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1357	607
v/s Ratio Prot	0.86	0.06
v/s Ratio Perm		
v/c Ratio	2.25	0.14
Uniform Delay, d1	23.3	15.2
Progression Factor	1.00	1.00
Incremental Delay, d2	564.8	0.5
Delay (s)	588.1	15.7
Level of Service	F	B
Approach Delay (s)	580.2	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	5	174	33	39	98	23	114	21	109	2209	68	13
Future Volume (vph)	5	174	33	39	98	23	114	21	109	2209	68	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00	
Frt		1.00	0.92		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1770	1712		1770	1863	1583		1770	3539	1583	
Flt Permitted		0.74	1.00		0.67	1.00	1.00		0.04	1.00	1.00	
Satd. Flow (perm)		1380	1712		1244	1863	1583		68	3539	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	189	36	42	107	25	124	23	118	2401	74	14
RTOR Reduction (vph)	0	0	28	0	0	0	45	0	0	0	19	0
Lane Group Flow (vph)	0	194	50	0	107	25	79	0	141	2401	55	0
Turn Type	Perm	Perm	NA		Perm	NA	Perm	Perm	pm+pt	NA	Perm	custom
Protected Phases			4			8			5	2		
Permitted Phases	4	4			8		8	2	2		2	1
Actuated Green, G (s)		18.0	18.0		18.0	18.0	18.0		114.0	109.0	109.0	
Effective Green, g (s)		18.0	18.0		18.0	18.0	18.0		114.0	109.0	109.0	
Actuated g/C Ratio		0.12	0.12		0.12	0.12	0.12		0.76	0.73	0.73	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)		165	205		149	223	189		108	2571	1150	
v/s Ratio Prot			0.03			0.01			0.04	0.68		
v/s Ratio Perm		c0.14			0.09		0.05		c0.94		0.03	
v/c Ratio		1.18	0.24		0.72	0.11	0.42		1.31	0.93	0.05	
Uniform Delay, d1		66.0	59.8		63.6	58.9	61.2		53.9	17.4	5.8	
Progression Factor		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		125.2	0.6		15.2	0.2	1.5		189.2	7.8	0.1	
Delay (s)		191.2	60.4		78.8	59.1	62.7		243.1	25.3	5.9	
Level of Service		F	E		E	E	E		F	C	A	
Approach Delay (s)			153.7			69.0				36.5		
Approach LOS			F			E				D		
Intersection Summary												
HCM 2000 Control Delay			75.7		HCM 2000 Level of Service					E		
HCM 2000 Volume to Capacity ratio			1.27									
Actuated Cycle Length (s)			150.0		Sum of lost time (s)					15.0		
Intersection Capacity Utilization			115.4%		ICU Level of Service					H		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	130	2863	194
Future Volume (vph)	130	2863	194
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.04	1.00	1.00
Satd. Flow (perm)	67	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	141	3112	211
RTOR Reduction (vph)	0	0	13
Lane Group Flow (vph)	155	3112	198
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	120.0	112.0	112.0
Effective Green, g (s)	120.0	112.0	112.0
Actuated g/C Ratio	0.80	0.75	0.75
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	144	2642	1181
v/s Ratio Prot	c0.06	c0.88	
v/s Ratio Perm	0.81		0.13
v/c Ratio	1.08	1.18	0.17
Uniform Delay, d1	56.3	19.0	5.5
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	96.9	84.3	0.3
Delay (s)	153.1	103.3	5.8
Level of Service	F	F	A
Approach Delay (s)		99.6	
Approach LOS		F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	88	70	196	303	60	114	26	41	2121	249	13	266
Future Volume (vph)	88	70	196	303	60	114	26	41	2121	249	13	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected		0.97	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1812	1583		1747			1770	3539	1583		1770
Flt Permitted		0.72	1.00		0.71			0.17	1.00	1.00		0.15
Satd. Flow (perm)		1333	1583		1276			310	3539	1583		287
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	76	213	329	65	124	28	45	2305	271	14	289
RTOR Reduction (vph)	0	0	113	0	19	0	0	0	0	137	0	0
Lane Group Flow (vph)	0	172	100	0	499	0	0	73	2305	134	0	303
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)		18.0	18.0		18.0			27.0	24.0	24.0		31.0
Effective Green, g (s)		18.0	18.0		18.0			27.0	24.0	24.0		31.0
Actuated g/C Ratio		0.29	0.29		0.29			0.44	0.39	0.39		0.50
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		387	459		370			205	1369	612		263
v/s Ratio Prot								0.02	0.65			c0.09
v/s Ratio Perm		0.13	0.06		c0.39			0.14		0.08		0.48
v/c Ratio		0.44	0.22		1.35			0.36	1.68	0.22		1.15
Uniform Delay, d1		17.9	16.7		22.0			13.7	19.0	12.7		14.6
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.8	0.2		173.7			1.1	310.9	0.8		102.9
Delay (s)		18.7	16.9		195.7			14.7	329.9	13.5		117.5
Level of Service		B	B		F			B	F	B		F
Approach Delay (s)		17.7			195.7				288.8			
Approach LOS		B			F				F			
Intersection Summary												
HCM 2000 Control Delay			319.7			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.70									
Actuated Cycle Length (s)			62.0			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			132.5%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2626	24
Future Volume (vph)	2626	24
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2854	26
RTOR Reduction (vph)	0	15
Lane Group Flow (vph)	2854	11
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	26.0	26.0
Effective Green, g (s)	26.0	26.0
Actuated g/C Ratio	0.42	0.42
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1484	663
v/s Ratio Prot	c0.81	
v/s Ratio Perm		0.01
v/c Ratio	1.92	0.02
Uniform Delay, d1	18.0	10.5
Progression Factor	1.00	1.00
Incremental Delay, d2	417.9	0.0
Delay (s)	435.9	10.6
Level of Service	F	B
Approach Delay (s)	402.2	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	18	8	29	287	0	86	3	5	2033	240	5	124
Future Volume (vph)	18	8	29	287	0	86	3	5	2033	240	5	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0			5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor		1.00			1.00	1.00		1.00	0.95	1.00		1.00
Frt		0.93			1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected		0.98			0.95	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)		1703			1770	1583		1770	3539	1583		1770
Flt Permitted		0.85			0.72	1.00		1.00	1.00	1.00		0.57
Satd. Flow (perm)		1467			1336	1583		1863	3539	1583		1064
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	20	9	32	312	0	93	3	5	2210	261	5	135
RTOR Reduction (vph)	0	24	0	0	0	70	0	0	0	93	0	0
Lane Group Flow (vph)	0	37	0	0	312	23	0	8	2210	168	0	140
Turn Type	Perm	NA		Perm	NA	Perm	custom	Prot	NA	Perm	custom	Prot
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		8	5			2	1	
Actuated Green, G (s)		17.1			17.1	17.1		1.0	29.1	29.1		7.0
Effective Green, g (s)		17.1			17.1	17.1		1.0	29.1	29.1		7.0
Actuated g/C Ratio		0.25			0.25	0.25		0.01	0.43	0.43		0.10
Clearance Time (s)		5.0			5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0			3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		367			334	396		27	1510	675		109
v/s Ratio Prot								0.62				
v/s Ratio Perm		0.03			0.23	0.01		0.00		0.11		0.13
v/c Ratio		0.10			0.93	0.06		0.30	1.46	0.25		1.28
Uniform Delay, d1		19.6			25.0	19.4		33.3	19.6	12.5		30.6
Progression Factor		1.00			1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2		0.1			32.4	0.1		6.1	212.3	0.9		180.8
Delay (s)		19.8			57.4	19.5		39.3	231.9	13.4		211.4
Level of Service		B			E	B		D	F	B		F
Approach Delay (s)		19.8			48.7				208.2			
Approach LOS		B			D				F			
Intersection Summary												
HCM 2000 Control Delay		241.6										
HCM 2000 Volume to Capacity ratio		1.46										
Actuated Cycle Length (s)		68.2										
Intersection Capacity Utilization		114.7%										
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2731	8
Future Volume (vph)	2731	8
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2968	9
RTOR Reduction (vph)	0	4
Lane Group Flow (vph)	2968	5
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	35.1	35.1
Effective Green, g (s)	35.1	35.1
Actuated g/C Ratio	0.51	0.51
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1821	814
v/s Ratio Prot	c0.84	
v/s Ratio Perm		0.00
v/c Ratio	1.63	0.01
Uniform Delay, d1	16.6	8.1
Progression Factor	1.00	1.00
Incremental Delay, d2	286.0	0.0
Delay (s)	302.5	8.1
Level of Service	F	A
Approach Delay (s)	297.6	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	249	64	80	161	57	210	21	163	1823	135	7	238
Future Volume (vph)	249	64	80	161	57	210	21	163	1823	135	7	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	0.88			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1643			1770	3539	1583		1770
Flt Permitted	0.48	1.00	1.00	0.71	1.00			0.18	1.00	1.00		0.18
Satd. Flow (perm)	900	1863	1583	1325	1643			339	3539	1583		339
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	271	70	87	175	62	228	23	177	1982	147	8	259
RTOR Reduction (vph)	0	0	61	0	133	0	0	0	0	93	0	0
Lane Group Flow (vph)	271	70	26	175	157	0	0	200	1982	54	0	267
Turn Type	Perm	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	18.0	18.0	18.0	18.0	18.0			27.0	22.0	22.0		27.0
Effective Green, g (s)	18.0	18.0	18.0	18.0	18.0			27.0	22.0	22.0		27.0
Actuated g/C Ratio	0.30	0.30	0.30	0.30	0.30			0.45	0.37	0.37		0.45
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	270	558	474	397	492			271	1297	580		271
v/s Ratio Prot		0.04			0.10			0.06	0.56			c0.08
v/s Ratio Perm	c0.30		0.02	0.13				0.27		0.03		0.36
v/c Ratio	1.00	0.13	0.06	0.44	0.32			0.74	1.53	0.09		0.99
Uniform Delay, d1	21.0	15.3	14.9	16.9	16.3			13.3	19.0	12.5		15.5
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	55.7	0.1	0.0	0.8	0.4			10.0	241.6	0.3		50.2
Delay (s)	76.7	15.4	15.0	17.7	16.6			23.3	260.6	12.8		65.7
Level of Service	E	B	B	B	B			C	F	B		E
Approach Delay (s)		54.1			17.0				224.6			
Approach LOS		D			B				F			
Intersection Summary												
HCM 2000 Control Delay	322.1			HCM 2000 Level of Service					F			
HCM 2000 Volume to Capacity ratio	1.57											
Actuated Cycle Length (s)	60.0			Sum of lost time (s)					15.0			
Intersection Capacity Utilization	128.2%			ICU Level of Service					H			
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2589	249
Future Volume (vph)	2589	249
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2814	271
RTOR Reduction (vph)	0	88
Lane Group Flow (vph)	2814	183
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	22.0	22.0
Effective Green, g (s)	22.0	22.0
Actuated g/C Ratio	0.37	0.37
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1297	580
v/s Ratio Prot	c0.80	
v/s Ratio Perm		0.12
v/c Ratio	2.17	0.32
Uniform Delay, d1	19.0	13.6
Progression Factor	1.00	1.00
Incremental Delay, d2	528.9	1.4
Delay (s)	547.9	15.0
Level of Service	F	B
Approach Delay (s)	466.4	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	47	302	346	67	386	127	7	271	1752	75	7	207
Future Volume (vph)	47	302	346	67	386	127	7	271	1752	75	7	207
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00		0.99			0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583		1797			1770	3539	1583		1770
Flt Permitted	0.17	1.00	1.00		0.91			0.18	1.00	1.00		0.19
Satd. Flow (perm)	323	1863	1583		1644			337	3539	1583		353
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	51	328	376	73	420	138	8	295	1904	82	8	225
RTOR Reduction (vph)	0	0	121	0	14	0	0	0	0	55	0	0
Lane Group Flow (vph)	51	328	255	0	617	0	0	303	1904	27	0	233
Turn Type	pm+pt	NA	Perm	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases	7	4			8			5	2			1
Permitted Phases	4		4	8			5	2		2	1	6
Actuated Green, G (s)	25.9	25.9	25.9		18.1			28.1	22.1	22.1		26.1
Effective Green, g (s)	25.9	25.9	25.9		18.1			28.1	22.1	22.1		26.1
Actuated g/C Ratio	0.38	0.38	0.38		0.27			0.41	0.33	0.33		0.38
Clearance Time (s)	5.0	5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	182	709	602		437			265	1150	514		239
v/s Ratio Prot	0.01	c0.18						c0.10	0.54			0.07
v/s Ratio Perm	0.10		0.16		c0.38			0.37		0.02		0.30
v/c Ratio	0.28	0.46	0.42		1.41			1.14	1.66	0.05		0.97
Uniform Delay, d1	16.2	15.8	15.5		24.9			18.4	22.9	15.8		19.9
Progression Factor	1.00	1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2	0.8	0.5	0.5		198.6			99.6	298.9	0.0		50.7
Delay (s)	17.0	16.3	16.0		223.5			118.0	321.9	15.8		70.6
Level of Service	B	B	B		F			F	F	B		E
Approach Delay (s)		16.2			223.5				283.9			
Approach LOS		B			F				F			
Intersection Summary												
HCM 2000 Control Delay			349.7			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.70									
Actuated Cycle Length (s)			68.0			Sum of lost time (s)			20.0			
Intersection Capacity Utilization			147.3%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2246	21
Future Volume (vph)	2246	21
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2441	23
RTOR Reduction (vph)	0	16
Lane Group Flow (vph)	2441	7
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	21.1	21.1
Effective Green, g (s)	21.1	21.1
Actuated g/C Ratio	0.31	0.31
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1098	491
v/s Ratio Prot	c0.69	
v/s Ratio Perm		0.00
v/c Ratio	2.22	0.01
Uniform Delay, d1	23.4	16.2
Progression Factor	1.00	1.00
Incremental Delay, d2	553.4	0.0
Delay (s)	576.8	16.3
Level of Service	F	B
Approach Delay (s)	528.3	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	262	103	34	150	130	150	29	1824	134	7	91	2240
Future Volume (vph)	262	103	34	150	130	150	29	1824	134	7	91	2240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0
Lane Util. Factor		1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00	0.95
Frt		1.00	0.85	1.00	0.92		1.00	1.00	0.85		1.00	1.00
Flt Protected		0.97	1.00	0.95	1.00		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)		1798	1583	1770	1713		1770	3539	1583		1770	3539
Flt Permitted		0.49	1.00	0.33	1.00		0.12	1.00	1.00		0.12	1.00
Satd. Flow (perm)		914	1583	607	1713		233	3539	1583		233	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	285	112	37	163	141	163	32	1983	146	8	99	2435
RTOR Reduction (vph)	0	0	25	0	4	0	0	0	47	0	0	0
Lane Group Flow (vph)	0	397	12	163	300	0	32	1983	99	0	107	2435
Turn Type	Perm	NA	Perm	Perm	NA		Perm	NA	Perm	Perm	Perm	NA
Protected Phases		4			8			2				6
Permitted Phases	4		4	8			2		2	6	6	
Actuated Green, G (s)		18.0	18.0	18.0	18.0		32.0	32.0	32.0		32.0	32.0
Effective Green, g (s)		18.0	18.0	18.0	18.0		32.0	32.0	32.0		32.0	32.0
Actuated g/C Ratio		0.30	0.30	0.30	0.30		0.53	0.53	0.53		0.53	0.53
Clearance Time (s)		5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		274	474	182	513		124	1887	844		124	1887
v/s Ratio Prot					0.18			0.56				c0.69
v/s Ratio Perm		c0.43	0.01	0.27			0.14		0.06		0.46	
v/c Ratio		1.45	0.02	0.90	0.58		0.26	1.05	0.12		0.86	1.29
Uniform Delay, d1		21.0	14.8	20.1	17.8		7.6	14.0	7.0		12.1	14.0
Progression Factor		1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2		221.4	0.0	38.4	1.7		5.0	35.6	0.3		50.3	134.8
Delay (s)		242.4	14.8	58.5	19.5		12.6	49.6	7.3		62.4	148.8
Level of Service		F	B	E	B		B	D	A		E	F
Approach Delay (s)		223.0			33.1			46.2				132.2
Approach LOS		F			C			D				F
Intersection Summary												
HCM 2000 Control Delay			99.3			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.35									
Actuated Cycle Length (s)			60.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			118.7%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (vph)	245
Future Volume (vph)	245
Ideal Flow (vphpl)	1900
Total Lost time (s)	5.0
Lane Util. Factor	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1583
Flt Permitted	1.00
Satd. Flow (perm)	1583
Peak-hour factor, PHF	0.92
Adj. Flow (vph)	266
RTOR Reduction (vph)	79
Lane Group Flow (vph)	187
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	32.0
Effective Green, g (s)	32.0
Actuated g/C Ratio	0.53
Clearance Time (s)	5.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	844
v/s Ratio Prot	
v/s Ratio Perm	0.12
v/c Ratio	0.22
Uniform Delay, d1	7.4
Progression Factor	1.00
Incremental Delay, d2	0.6
Delay (s)	8.0
Level of Service	A
Approach Delay (s)	
Approach LOS	
Intersection Summary	

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	31	191	42	207	163	437	33	1457	202	877	1844	64
Future Volume (vph)	31	191	42	207	163	437	33	1457	202	877	1844	64
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00	1.00	0.95	1.00	0.97	0.95	1.00
Frt	1.00	0.97		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1812		1770	1863	1583	1770	3539	1583	3433	3539	1583
Flt Permitted	0.53	1.00		0.40	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	987	1812		740	1863	1583	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	34	208	46	225	177	475	36	1584	220	953	2004	70
RTOR Reduction (vph)	0	6	0	0	0	273	0	0	61	0	0	21
Lane Group Flow (vph)	34	248	0	225	177	202	36	1584	159	953	2004	49
Turn Type	Perm	NA		Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4			8		5	2		1	6	
Permitted Phases	4			8		8			2			6
Actuated Green, G (s)	36.0	36.0		36.0	36.0	36.0	4.0	57.0	57.0	33.0	86.0	86.0
Effective Green, g (s)	36.0	36.0		36.0	36.0	36.0	4.0	57.0	57.0	33.0	86.0	86.0
Actuated g/C Ratio	0.26	0.26		0.26	0.26	0.26	0.03	0.40	0.40	0.23	0.61	0.61
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	252	462		188	475	404	50	1430	639	803	2158	965
v/s Ratio Prot		0.14			0.10		0.02	c0.45		c0.28	0.57	
v/s Ratio Perm	0.03			c0.30		0.13			0.10			0.03
v/c Ratio	0.13	0.54		1.20	0.37	0.50	0.72	1.11	0.25	1.19	0.93	0.05
Uniform Delay, d1	40.5	45.3		52.5	43.2	44.8	67.9	42.0	27.8	54.0	24.7	11.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.2		128.6	0.5	1.0	39.1	59.1	0.9	96.5	8.6	0.1
Delay (s)	40.7	46.5		181.1	43.7	45.8	107.1	101.1	28.8	150.5	33.3	11.2
Level of Service	D	D		F	D	D	F	F	C	F	C	B
Approach Delay (s)		45.8			80.1			92.6			69.7	
Approach LOS		D			F			F			E	
Intersection Summary												
HCM 2000 Control Delay	77.0			HCM 2000 Level of Service			E					
HCM 2000 Volume to Capacity ratio	1.15											
Actuated Cycle Length (s)	141.0			Sum of lost time (s)			15.0					
Intersection Capacity Utilization	106.0%			ICU Level of Service			G					
Analysis Period (min)	15											
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	24	28	55	2	518	44	160	3	34	1733	489	2
Future Volume (vph)	24	28	55	2	518	44	160	3	34	1733	489	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	0.95	1.00	
Frt	1.00	1.00	0.85		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)	1770	1863	1583		1770	1863	1583		1770	3539	1583	
Flt Permitted	0.75	1.00	1.00		0.39	1.00	1.00		0.13	1.00	1.00	
Satd. Flow (perm)	1406	1863	1583		723	1863	1583		251	3539	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	26	30	60	2	563	48	174	3	37	1884	532	2
RTOR Reduction (vph)	0	0	55	0	0	0	127	0	0	0	205	0
Lane Group Flow (vph)	26	30	5	0	565	48	47	0	40	1884	327	0
Turn Type	Perm	NA	Perm	custom	pm+pt	NA	Perm	custom	pm+pt	NA	Perm	custom
Protected Phases		4			3	8			5	2		
Permitted Phases	4		4	3	8		8	5	2		2	1
Actuated Green, G (s)	5.3	5.3	5.3		15.4	15.4	15.4		31.5	29.7	29.7	
Effective Green, g (s)	5.3	5.3	5.3		15.4	15.4	15.4		31.5	29.7	29.7	
Actuated g/C Ratio	0.08	0.08	0.08		0.24	0.24	0.24		0.49	0.47	0.47	
Clearance Time (s)	5.0	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)	116	154	131		258	449	382		166	1647	736	
v/s Ratio Prot		0.02			c0.17	0.03			0.01	0.53		
v/s Ratio Perm	0.02		0.00		c0.35		0.03		0.11		0.21	
v/c Ratio	0.22	0.19	0.04		2.19	0.11	0.12		0.24	1.14	0.44	
Uniform Delay, d1	27.3	27.3	26.9		23.7	18.8	18.9		13.7	17.0	11.5	
Progression Factor	1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2	1.0	0.6	0.1		548.0	0.1	0.1		0.8	72.5	1.9	
Delay (s)	28.3	27.9	27.0		571.7	19.0	19.1		14.4	89.6	13.4	
Level of Service	C	C	C		F	B	B		B	F	B	
Approach Delay (s)		27.5				415.8				71.8		
Approach LOS		C				F				E		
Intersection Summary												
HCM 2000 Control Delay			130.7		HCM 2000 Level of Service					F		
HCM 2000 Volume to Capacity ratio			1.59									
Actuated Cycle Length (s)			63.8		Sum of lost time (s)					20.0		
Intersection Capacity Utilization			106.8%		ICU Level of Service					G		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	93	1916	51
Future Volume (vph)	93	1916	51
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.95	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583
Flt Permitted	0.13	1.00	1.00
Satd. Flow (perm)	236	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	101	2083	55
RTOR Reduction (vph)	0	0	28
Lane Group Flow (vph)	103	2083	27
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	35.3	31.6	31.6
Effective Green, g (s)	35.3	31.6	31.6
Actuated g/C Ratio	0.55	0.50	0.50
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	219	1752	784
v/s Ratio Prot	c0.03	c0.59	
v/s Ratio Perm	0.23		0.02
v/c Ratio	0.47	1.19	0.03
Uniform Delay, d1	13.1	16.1	8.3
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	1.6	91.1	0.1
Delay (s)	14.7	107.2	8.4
Level of Service	B	F	A
Approach Delay (s)		100.5	
Approach LOS		F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	49	36	26	139	24	181	2	31	2056	129	3	297
Future Volume (vph)	49	36	26	139	24	181	2	31	2056	129	3	297
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	0.95	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583		1770	3539	1583		1770
Flt Permitted	0.74	1.00	1.00	0.73	1.00	1.00		1.00	1.00	1.00		0.80
Satd. Flow (perm)	1379	1863	1583	1363	1863	1583		1863	3539	1583		1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	53	39	28	151	26	197	2	34	2235	140	3	323
RTOR Reduction (vph)	0	0	22	0	0	154	0	0	0	70	0	0
Lane Group Flow (vph)	53	39	6	151	26	43	0	36	2235	70	0	326
Turn Type	Perm	NA	Perm	Perm	NA	Perm	custom	Prot	NA	Perm	custom	Prot
Protected Phases		4			8			5	2			1
Permitted Phases	4		4	8		8	5			2	1	
Actuated Green, G (s)	11.5	11.5	11.5	11.5	11.5	11.5		1.9	25.4	25.4		5.0
Effective Green, g (s)	11.5	11.5	11.5	11.5	11.5	11.5		1.9	25.4	25.4		5.0
Actuated g/C Ratio	0.20	0.20	0.20	0.20	0.20	0.20		0.03	0.45	0.45		0.09
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	278	376	319	275	376	319		62	1579	706		130
v/s Ratio Prot		0.02			0.01				0.63			
v/s Ratio Perm	0.04		0.00	c0.11		0.03		0.02		0.04		c0.22
v/c Ratio	0.19	0.10	0.02	0.55	0.07	0.13		0.58	1.42	0.10		2.51
Uniform Delay, d1	18.8	18.5	18.2	20.4	18.4	18.6		27.1	15.8	9.1		25.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.1	0.0	2.2	0.1	0.2		13.1	190.8	0.3		700.8
Delay (s)	19.2	18.6	18.2	22.6	18.4	18.8		40.2	206.5	9.4		726.7
Level of Service	B	B	B	C	B	B		D	F	A		F
Approach Delay (s)		18.8			20.3				192.6			
Approach LOS		B			C				F			
Intersection Summary												
HCM 2000 Control Delay			187.0				HCM 2000 Level of Service		F			
HCM 2000 Volume to Capacity ratio			1.29									
Actuated Cycle Length (s)			56.9				Sum of lost time (s)		15.0			
Intersection Capacity Utilization			105.5%				ICU Level of Service		G			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2101	98
Future Volume (vph)	2101	98
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2284	107
RTOR Reduction (vph)	0	53
Lane Group Flow (vph)	2284	54
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	28.5	28.5
Effective Green, g (s)	28.5	28.5
Actuated g/C Ratio	0.50	0.50
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1772	792
v/s Ratio Prot	c0.65	
v/s Ratio Perm		0.03
v/c Ratio	1.29	0.07
Uniform Delay, d1	14.2	7.3
Progression Factor	1.00	1.00
Incremental Delay, d2	134.4	0.2
Delay (s)	148.6	7.5
Level of Service	F	A
Approach Delay (s)	212.4	
Approach LOS	F	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	285	142	98	2333	101	49	227	2273
Future Volume (vph)	285	142	98	2333	101	49	227	2273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.17	1.00	1.00		0.14	1.00
Satd. Flow (perm)	1770	1583	324	3539	1583		266	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	310	154	107	2536	110	53	247	2471
RTOR Reduction (vph)	0	116	0	0	50	0	0	0
Lane Group Flow (vph)	310	38	107	2536	60	0	300	2471
Turn Type	Prot	Prot	Perm	NA	Perm	custom	pm+pt	NA
Protected Phases	3	3		2			1	6
Permitted Phases			2		2	1	6	
Actuated Green, G (s)	7.0	7.0	23.0	23.0	23.0		33.0	33.0
Effective Green, g (s)	7.0	7.0	23.0	23.0	23.0		33.0	33.0
Actuated g/C Ratio	0.14	0.14	0.46	0.46	0.46		0.66	0.66
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	247	221	149	1627	728		325	2335
v/s Ratio Prot	c0.18	0.02		c0.72			0.09	c0.70
v/s Ratio Perm			0.33		0.04		0.52	
v/c Ratio	1.26	0.17	0.72	1.56	0.08		0.92	1.06
Uniform Delay, d1	21.5	18.9	10.9	13.5	7.6		11.6	8.5
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.01	1.00
Incremental Delay, d2	143.5	0.4	25.6	254.5	0.2		30.7	36.3
Delay (s)	165.0	19.3	36.5	268.0	7.8		42.5	44.8
Level of Service	F	B	D	F	A		D	D
Approach Delay (s)	116.6			248.6				44.5
Approach LOS	F			F				D
Intersection Summary								
HCM 2000 Control Delay	143.9			HCM 2000 Level of Service			F	
HCM 2000 Volume to Capacity ratio	1.50							
Actuated Cycle Length (s)	50.0			Sum of lost time (s)			15.0	
Intersection Capacity Utilization	108.1%			ICU Level of Service			G	
Analysis Period (min)	15							
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1107	1619	761	194	1844	170	1060	1692	259	284	1594	799
Future Volume (vph)	1107	1619	761	194	1844	170	1060	1692	259	284	1594	799
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1203	1760	827	211	2004	185	1152	1839	282	309	1733	868
RTOR Reduction (vph)	0	0	193	0	0	141	0	0	188	0	0	188
Lane Group Flow (vph)	1203	1760	634	211	2004	44	1152	1839	94	309	1733	680
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.0	18.0	8.0	18.0	18.0
Effective Green, g (s)	11.0	24.0	24.0	5.0	18.0	18.0	8.0	18.0	18.0	8.0	18.0	18.0
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.24	0.24	0.11	0.24	0.24	0.11	0.24	0.24
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	503	1132	506	228	849	379	366	1220	379	188	1220	379
v/s Ratio Prot	c0.35	0.50		0.06	c0.57		c0.34	0.36		0.17	0.34	
v/s Ratio Perm			0.40			0.03			0.06			c0.43
v/c Ratio	2.39	1.55	1.25	0.93	2.36	0.12	3.15	1.51	0.25	1.64	1.42	1.79
Uniform Delay, d1	32.0	25.5	25.5	34.8	28.5	22.3	33.5	28.5	23.0	33.5	28.5	28.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	632.3	254.0	129.2	39.3	615.8	0.1	973.5	232.6	1.6	312.3	194.1	368.1
Delay (s)	664.3	279.5	154.7	74.1	644.3	22.4	1007.0	261.1	24.6	345.8	222.6	396.6
Level of Service	F	F	F	E	F	C	F	F	C	F	F	F
Approach Delay (s)		374.4			546.3			503.3			287.6	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			421.4				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			2.29									
Actuated Cycle Length (s)			75.0				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			160.3%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Unsignalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018

						
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	68	417	342	580	377	54
Future Volume (Veh/h)	68	417	342	580	377	54
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	74	453	372	630	410	59
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type				None	None	
Median storage veh						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1814	440	469			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1814	440	469			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	0	27	66			
cM capacity (veh/h)	57	617	1093			
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	SB 1	
Volume Total	74	453	372	630	469	
Volume Left	74	0	372	0	0	
Volume Right	0	453	0	0	59	
cSH	57	617	1093	1700	1700	
Volume to Capacity	1.30	0.73	0.34	0.37	0.28	
Queue Length 95th (ft)	161	158	38	0	0	
Control Delay (s)	341.3	25.2	10.0	0.0	0.0	
Lane LOS	F	D	A			
Approach Delay (s)	69.6		3.7		0.0	
Approach LOS	F					
Intersection Summary						
Average Delay			20.2			
Intersection Capacity Utilization			55.8%		ICU Level of Service	B
Analysis Period (min)			15			

HCM Unsignalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR	
Lane Configurations								
Traffic Volume (veh/h)	57	238	11	99	854	763	31	
Future Volume (Veh/h)	57	238	11	99	854	763	31	
Sign Control	Stop				Free	Free		
Grade	0%				0%	0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	62	259	0	108	928	829	34	
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type					None	None		
Median storage veh								
Upstream signal (ft)								
pX, platoon unblocked			0.00					
vC, conflicting volume	1509	414	0	863				
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1509	414	0	863				
tC, single (s)	6.8	6.9	0.0	4.1				
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0	2.2				
p0 queue free %	35	56	0	86				
cM capacity (veh/h)	96	587	0	775				
Direction, Lane #	EB 1	EB 2	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	62	259	108	464	464	414	414	34
Volume Left	62	0	108	0	0	0	0	0
Volume Right	0	259	0	0	0	0	0	34
cSH	96	587	775	1700	1700	1700	1700	1700
Volume to Capacity	0.65	0.44	0.14	0.27	0.27	0.24	0.24	0.02
Queue Length 95th (ft)	79	56	12	0	0	0	0	0
Control Delay (s)	94.6	15.9	10.4	0.0	0.0	0.0	0.0	0.0
Lane LOS	F	C	B					
Approach Delay (s)	31.1		1.1	0.0				
Approach LOS	D							
Intersection Summary								
Average Delay			5.0					
Intersection Capacity Utilization			51.9%		ICU Level of Service		A	
Analysis Period (min)			15					

HCM Unsignalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (veh/h)	339	16	10	831	357	21	29	1040
Future Volume (Veh/h)	339	16	10	831	357	21	29	1040
Sign Control	Stop			Free				Free
Grade	0%			0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	368	17	0	903	388	0	32	1130
Pedestrians								
Lane Width (ft)								
Walking Speed (ft/s)								
Percent Blockage								
Right turn flare (veh)								
Median type				None				None
Median storage (veh)								
Upstream signal (ft)								
pX, platoon unblocked			0.00			0.00		
vC, conflicting volume	1532	452	0			0	903	
vC1, stage 1 conf vol								
vC2, stage 2 conf vol								
vCu, unblocked vol	1532	452	0			0	903	
tC, single (s)	6.8	6.9	0.0			0.0	4.1	
tC, 2 stage (s)								
tF (s)	3.5	3.3	0.0			0.0	2.2	
p0 queue free %	0	97	0			0	96	
cM capacity (veh/h)	103	555	0			0	749	
Direction, Lane #	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	385	452	452	388	0	32	565	565
Volume Left	368	0	0	0	0	32	0	0
Volume Right	17	0	0	388	0	0	0	0
cSH	107	1700	1700	1700	1700	749	1700	1700
Volume to Capacity	3.61	0.27	0.27	0.23	0.00	0.04	0.33	0.33
Queue Length 95th (ft)	Err	0	0	0	0	3	0	0
Control Delay (s)	Err	0.0	0.0	0.0	0.0	10.0	0.0	0.0
Lane LOS	F					B		
Approach Delay (s)	Err	0.0				0.3		
Approach LOS	F							
Intersection Summary								
Average Delay		1356.6						
Intersection Capacity Utilization		61.8%		ICU Level of Service			B	
Analysis Period (min)		15						
Description: m								

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	90	7	36	5	3	2	11	65	2323	16	15	5
Future Volume (Veh/h)	90	7	36	5	3	2	11	65	2323	16	15	5
Sign Control	Stop			Stop			Free					
Grade	0%			0%			0%					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	8	39	5	3	2	0	71	2525	17	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)	12											
Median type	None											
Median storage (veh)												
Upstream signal (ft)												
pX, platoon unblocked	0.27	0.27	0.27	0.27	0.27		0.00	0.27			0.00	
vC, conflicting volume	4675	5953	1630	4350	5936	1262	0	3259			0	2542
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	9269	14052	0	8051	13989	1262	0	3969			0	2542
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	0	0	87	0	0	99	0	0			0	97
cM capacity (veh/h)	0	0	290	0	0	161	0	12			0	173
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	145	5	5	71	1262	1262	17	5	1630	1630	155	
Volume Left	98	5	0	71	0	0	0	5	0	0	0	
Volume Right	39	0	2	0	0	0	17	0	0	0	155	
cSH	0	0	0	12	1700	1700	1700	173	1700	1700	1700	
Volume to Capacity	Err	Err	Err	5.87	0.74	0.74	0.01	0.03	0.96	0.96	0.09	
Queue Length 95th (ft)	Err	Err	Err	Err	0	0	0	2	0	0	0	
Control Delay (s)	Err	Err	Err	2809.8	0.0	0.0	0.0	26.5	0.0	0.0	0.0	
Lane LOS	F	F	F	F				D				
Approach Delay (s)	Err	Err		76.3				0.0				
Approach LOS	F	F										
Intersection Summary												
Average Delay	Err											
Intersection Capacity Utilization	103.8%			ICU Level of Service				G				
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis 8: SR 74 & Meadow Glen Parkway

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	2998	143
Future Volume (Veh/h)	2998	143
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	3259	155
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)	1262	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	
Lane Configurations													
Traffic Volume (veh/h)	7	0	103	24	0	11	24	86	2326	20	15	16	
Future Volume (Veh/h)	7	0	103	24	0	11	24	86	2326	20	15	16	
Sign Control	Stop				Stop				Free				
Grade	0%				0%				0%				
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	8	0	112	26	0	12	0	93	2528	22	0	17	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type	None												
Median storage (veh)													
Upstream signal (ft)													
pX, platoon unblocked							0.00	0.00					
vC, conflicting volume	4794	6046	1649	4509	6046	1264	0	3298	0				2528
vC1, stage 1 conf vol													
vC2, stage 2 conf vol													
vCu, unblocked vol	4794	6046	1649	4509	6046	1264	0	3298	0				2528
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1	0.0				4.1
tC, 2 stage (s)													
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2	0.0				2.2
p0 queue free %	0	0	0	0	0	93	0	0	0				90
cM capacity (veh/h)	0	0	88	0	0	161	0	86	0				175
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4			
Volume Total	120	38	93	1264	1264	22	17	1649	1649	23			
Volume Left	8	26	93	0	0	0	17	0	0	0			
Volume Right	112	12	0	0	0	22	0	0	0	23			
cSH	0	0	86	1700	1700	1700	175	1700	1700	1700			
Volume to Capacity	Err	Err	1.09	0.74	0.74	0.01	0.10	0.97	0.97	0.01			
Queue Length 95th (ft)	Err	Err	160	0	0	0	8	0	0	0			
Control Delay (s)	Err	Err	211.7	0.0	0.0	0.0	27.8	0.0	0.0	0.0			
Lane LOS	F	F	F	D									
Approach Delay (s)	Err	Err	7.4	0.1									
Approach LOS	F	F											
Intersection Summary													
Average Delay			Err										
Intersection Capacity Utilization			106.7%		ICU Level of Service				G				
Analysis Period (min)			15										

HCM Unsignalized Intersection Capacity Analysis 10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (veh/h)	3034	21
Future Volume (Veh/h)	3034	21
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	3298	23
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	64	0	0	344	37	2152	73	483	3288	26
Future Volume (Veh/h)	0	0	64	0	0	344	37	2152	73	483	3288	26
Sign Control	Stop			Stop				Free			Free	
Grade	0%			0%				0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	70	0	0	374	40	2339	79	525	3574	28
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh)												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	5874	7043	1787	5256	7043	1170	3574				2339	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	5874	7043	1787	5256	7043	1170	3574				2339	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1				4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2				2.2	
p0 queue free %	0	0	1	0	0	0	39				0	
cM capacity (veh/h)	0	0	71	0	0	186	66				208	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	70	374	40	1170	1170	79	525	1787	1787	28		
Volume Left	0	0	40	0	0	0	525	0	0	0		
Volume Right	70	374	0	0	0	79	0	0	0	28		
cSH	71	186	66	1700	1700	1700	208	1700	1700	1700		
Volume to Capacity	0.99	2.01	0.61	0.69	0.69	0.05	2.52	1.05	1.05	0.02		
Queue Length 95th (ft)	127	711	64	0	0	0	1102	0	0	0		
Control Delay (s)	204.9	515.2	122.0	0.0	0.0	0.0	736.0	0.0	0.0	0.0		
Lane LOS	F	F	F									
Approach Delay (s)	204.9	515.2	2.0					93.6				
Approach LOS	F	F										
Intersection Summary												
Average Delay			85.1									
Intersection Capacity Utilization			101.5%	ICU Level of Service				G				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBU	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	5	15	57	5	3	5	124	2059	10	5	15	2572
Future Volume (Veh/h)	5	15	57	5	3	5	124	2059	10	5	15	2572
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	5	16	62	5	3	5	135	2238	11	0	16	2796
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	4218	5336	1398	4014	5342	1124	2796	0			2238	
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4218	5336	1398	4014	5342	1124	2796	0			2238	
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	0.0			4.1	
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	0.0			2.2	
p0 queue free %	0	0	52	0	0	97	1	0			93	
cM capacity (veh/h)	0	0	130	0	0	199	137	0			228	
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	83	13	135	1492	757	16	1398	1398	32			
Volume Left	5	5	135	0	0	16	0	0	0			
Volume Right	62	5	0	0	11	0	0	0	32			
cSH	0	0	137	1700	1700	228	1700	1700	1700			
Volume to Capacity	Err	Err	0.99	0.88	0.45	0.07	0.82	0.82	0.02			
Queue Length 95th (ft)	Err	Err	175	0	0	6	0	0	0			
Control Delay (s)	Err	Err	137.1	0.0	0.0	22.0	0.0	0.0	0.0			
Lane LOS	F	F	F	C								
Approach Delay (s)	Err	Err	7.8	0.1								
Approach LOS	F	F										
Intersection Summary												
Average Delay	Err											
Intersection Capacity Utilization	92.6%			ICU Level of Service			F					
Analysis Period (min)	15											

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	29
Future Volume (Veh/h)	29
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	32
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage (veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (veh/h)	11	7	280	20	0	78	47	272	2111	44	80	2207
Future Volume (Veh/h)	11	7	280	20	0	78	47	272	2111	44	80	2207
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	12	8	304	22	0	85	0	296	2295	48	87	2399
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							None			None		
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked							0.00					
vC, conflicting volume	4312	5460	1200	4264	5460	1148	0	2399				2295
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	4312	5460	1200	4264	5460	1148	0	2399				2295
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1				4.1
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2				2.2
p0 queue free %	0	0	0	0	0	56	0	0				60
cM capacity (veh/h)	0	0	178	0	0	192	0	197				216
Direction, Lane #	EB 1	EB 2	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4	
Volume Total	20	304	107	296	1148	1148	48	87	1200	1200	5	
Volume Left	12	0	22	296	0	0	0	87	0	0	0	
Volume Right	0	304	85	0	0	0	48	0	0	0	5	
cSH	0	178	0	197	1700	1700	1700	216	1700	1700	1700	
Volume to Capacity	Err	1.71	Err	1.50	0.68	0.68	0.03	0.40	0.71	0.71	0.00	
Queue Length 95th (ft)	Err	530	Err	460	0	0	0	45	0	0	0	
Control Delay (s)	Err	389.0	Err	295.4	0.0	0.0	0.0	32.4	0.0	0.0	0.0	
Lane LOS	F	F	F	F	D							
Approach Delay (s)	Err		Err	33.1	1.1							
Approach LOS	F		F									
Intersection Summary												
Average Delay				Err								
Intersection Capacity Utilization				115.3%			ICU Level of Service			H		
Analysis Period (min)				15								

HCM Unsignalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

Movement	SBR
Lane Configurations	
Traffic Volume (veh/h)	5
Future Volume (Veh/h)	5
Sign Control	
Grade	
Peak Hour Factor	0.92
Hourly flow rate (vph)	5
Pedestrians	
Lane Width (ft)	
Walking Speed (ft/s)	
Percent Blockage	
Right turn flare (veh)	
Median type	
Median storage veh)	
Upstream signal (ft)	
pX, platoon unblocked	
vC, conflicting volume	
vC1, stage 1 conf vol	
vC2, stage 2 conf vol	
vCu, unblocked vol	
tC, single (s)	
tC, 2 stage (s)	
tF (s)	
p0 queue free %	
cM capacity (veh/h)	
Direction, Lane #	

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

														
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL		
Lane Configurations														
Traffic Volume (veh/h)	0	1	0	37	0	78	44	0	2408	104	3	106		
Future Volume (Veh/h)	0	1	0	37	0	78	44	0	2408	104	3	106		
Sign Control	Stop			Stop			Free							
Grade	0%			0%			0%							
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92		
Hourly flow rate (vph)	0	1	0	40	0	85	0	0	2617	113	0	115		
Pedestrians														
Lane Width (ft)														
Walking Speed (ft/s)														
Percent Blockage														
Right turn flare (veh)														
Median type	None													
Median storage (veh)														
Upstream signal (ft)														
pX, platoon unblocked							0.00						0.00	
vC, conflicting volume	4252	5561	1357	4204	5561	1308	0	2714					0	2617
vC1, stage 1 conf vol														
vC2, stage 2 conf vol														
vCu, unblocked vol	4252	5561	1357	4204	5561	1308	0	2714					0	2617
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1					0.0	4.1
tC, 2 stage (s)														
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2					0.0	2.2
p0 queue free %	100	0	100	0	100	43	0	100					0	29
cM capacity (veh/h)	0	0	139	0	0	150	0	147					0	161
Direction, Lane #	EB 1	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3				
Volume Total	1	40	85	0	1308	1308	113	115	1809	905				
Volume Left	0	40	0	0	0	0	0	115	0	0				
Volume Right	0	0	85	0	0	0	113	0	0	0				
cSH	0	0	150	1700	1700	1700	1700	161	1700	1700				
Volume to Capacity	15.29	Err	0.57	0.00	0.77	0.77	0.07	0.71	1.06	0.53				
Queue Length 95th (ft)	Err	Err	72	0	0	0	0	107	0	0				
Control Delay (s)	Err	Err	56.6	0.0	0.0	0.0	0.0	69.3	0.0	0.0				
Lane LOS	F	F	F					F						
Approach Delay (s)	Err	Err	0.0				2.8							
Approach LOS	F	F												
Intersection Summary														
Average Delay				Err										
Intersection Capacity Utilization				94.1%	ICU Level of Service				F					
Analysis Period (min)				15										

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	
Traffic Volume (veh/h)	2497	0
Future Volume (Veh/h)	2497	0
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	2714	0
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	None	
Median storage (veh)		
Upstream signal (ft)		
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

									
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT	
Lane Configurations									
Traffic Volume (veh/h)	121	210	33	2245	60	15	160	2509	
Future Volume (Veh/h)	121	210	33	2245	60	15	160	2509	
Sign Control	Stop			Free			Free		
Grade	0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	132	228	0	2440	65	0	174	2727	
Pedestrians									
Lane Width (ft)									
Walking Speed (ft/s)									
Percent Blockage									
Right turn flare (veh)									
Median type	None				None				
Median storage (veh)									
Upstream signal (ft)									
pX, platoon unblocked			0.00				0.00		
vC, conflicting volume	4152	1220	0				0	2440	
vC1, stage 1 conf vol									
vC2, stage 2 conf vol									
vCu, unblocked vol	4152	1220	0				0	2440	
tC, single (s)	6.8	6.9	0.0				0.0	4.1	
tC, 2 stage (s)									
tF (s)	3.5	3.3	0.0				0.0	2.2	
p0 queue free %	0	0	0				0	8	
cM capacity (veh/h)	0	172	0				0	190	
Direction, Lane #	WB 1	WB 2	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	132	228	1220	1220	65	0	174	1364	1364
Volume Left	132	0	0	0	0	0	174	0	0
Volume Right	0	228	0	0	65	0	0	0	0
cSH	0	172	1700	1700	1700	1700	190	1700	1700
Volume to Capacity	1012.17	1.33	0.72	0.72	0.04	0.00	0.92	0.80	0.80
Queue Length 95th (ft)	Err	335	0	0	0	0	179	0	0
Control Delay (s)	Err	233.0	0.0	0.0	0.0	0.0	95.9	0.0	0.0
Lane LOS	F	F					F		
Approach Delay (s)	3813.8		0.0				5.8		
Approach LOS	F								
Intersection Summary									
Average Delay			241.0						
Intersection Capacity Utilization			94.8%		ICU Level of Service			F	
Analysis Period (min)			15						

HCM Signalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	12	302	382	305	548	51
Future Volume (vph)	12	302	382	305	548	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	1863	1841	
Flt Permitted	0.95	1.00	0.13	1.00	1.00	
Satd. Flow (perm)	1770	1583	238	1863	1841	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	13	328	415	332	596	55
RTOR Reduction (vph)	0	288	0	0	4	0
Lane Group Flow (vph)	13	40	415	332	647	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Actuated Green, G (s)	7.9	7.9	47.4	47.4	26.6	
Effective Green, g (s)	7.9	7.9	47.4	47.4	26.6	
Actuated g/C Ratio	0.12	0.12	0.73	0.73	0.41	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	214	191	543	1352	749	
v/s Ratio Prot	0.01		c0.18	0.18	c0.35	
v/s Ratio Perm		c0.03	0.37			
v/c Ratio	0.06	0.21	0.76	0.25	0.86	
Uniform Delay, d1	25.4	25.9	14.8	3.0	17.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	0.5	6.3	0.1	10.1	
Delay (s)	25.5	26.4	21.1	3.1	27.8	
Level of Service	C	C	C	A	C	
Approach Delay (s)	26.4			13.1	27.8	
Approach LOS	C			B	C	

Intersection Summary

HCM 2000 Control Delay	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	65.3	Sum of lost time (s)	15.0
Intersection Capacity Utilization	69.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	45	133	31	315	639	788	69
Future Volume (vph)	45	133	31	315	639	788	69
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	0.95	0.95	1.00
Frt	1.00	0.85		1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583		1770	3539	3539	1583
Flt Permitted	0.95	1.00		0.18	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583		339	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	49	145	34	342	695	857	75
RTOR Reduction (vph)	0	129	0	0	0	0	49
Lane Group Flow (vph)	49	16	0	376	695	857	26
Turn Type	Prot	Perm	pm+pt	pm+pt	NA	NA	Perm
Protected Phases	4		5	5	2	6	
Permitted Phases		4	2	2			6
Actuated Green, G (s)	5.5	5.5		33.8	33.8	17.0	17.0
Effective Green, g (s)	5.5	5.5		33.8	33.8	17.0	17.0
Actuated g/C Ratio	0.11	0.11		0.69	0.69	0.34	0.34
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	197	176		574	2426	1220	545
v/s Ratio Prot	c0.03			c0.16	0.20	0.24	
v/s Ratio Perm		0.01		c0.29			0.02
v/c Ratio	0.25	0.09		0.66	0.29	0.70	0.05
Uniform Delay, d1	20.0	19.7		6.6	3.0	14.0	10.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	0.2		2.7	0.1	1.9	0.0
Delay (s)	20.7	19.9		9.3	3.1	15.8	10.8
Level of Service	C	B		A	A	B	B
Approach Delay (s)	20.1				5.3	15.4	
Approach LOS	C				A	B	

Intersection Summary

HCM 2000 Control Delay	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	49.3	Sum of lost time (s)	15.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	226	12	8	869	557	18	26	834
Future Volume (vph)	226	12	8	869	557	18	26	834
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00		1.00	0.95	1.00		1.00	0.95
Frt	0.99		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1766		1770	3539	1583		1770	3539
Flt Permitted	0.95		0.25	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1766		469	3539	1583		389	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	246	13	9	945	605	20	28	907
RTOR Reduction (vph)	4	0	0	0	352	0	0	0
Lane Group Flow (vph)	255	0	9	945	253	0	48	907
Turn Type	Prot		pm+pt	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	6		3	8		7	7	4
Permitted Phases			8		8	4	4	
Actuated Green, G (s)	11.3		20.8	20.0	20.0		22.4	20.8
Effective Green, g (s)	11.3		20.8	20.0	20.0		22.4	20.8
Actuated g/C Ratio	0.24		0.43	0.42	0.42		0.47	0.43
Clearance Time (s)	5.0		5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	416		225	1477	660		228	1536
v/s Ratio Prot	c0.14		0.00	c0.27			c0.01	0.26
v/s Ratio Perm			0.02		0.16		0.09	
v/c Ratio	0.61		0.04	0.64	0.38		0.21	0.59
Uniform Delay, d1	16.3		7.9	11.1	9.7		7.5	10.3
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.7		0.1	0.9	0.4		0.5	0.6
Delay (s)	19.0		7.9	12.0	10.0		7.9	10.9
Level of Service	B		A	B	B		A	B
Approach Delay (s)	19.0			11.2				10.8
Approach LOS	B			B				B
Intersection Summary								
HCM 2000 Control Delay			11.8		HCM 2000 Level of Service			B
HCM 2000 Volume to Capacity ratio			0.61					
Actuated Cycle Length (s)			47.9		Sum of lost time (s)		15.0	
Intersection Capacity Utilization			53.9%		ICU Level of Service		A	
Analysis Period (min)			15					

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	1373	0	0	477	174	913	0	0	810	190
Future Volume (vph)	0	0	1373	0	0	477	174	913	0	0	810	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			5.0	5.0	5.0			5.0	4.0
Lane Util. Factor			*0.95			1.00	0.97	0.95			0.95	1.00
Frt			0.85			0.86	1.00	1.00			1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			3008			1611	3433	3539			3539	1583
Flt Permitted			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)			3008			1611	3433	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1492	0	0	518	189	992	0	0	880	207
RTOR Reduction (vph)	0	0	0	0	0	206	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1492	0	0	312	189	992	0	0	880	207
Turn Type			Free			Perm	Prot	NA			NA	Free
Protected Phases							5	2			6	
Permitted Phases			Free			8						Free
Actuated Green, G (s)			60.0			19.0	5.0	60.0			21.0	60.0
Effective Green, g (s)			60.0			19.0	5.0	60.0			21.0	60.0
Actuated g/C Ratio			1.00			0.32	0.08	1.00			0.35	1.00
Clearance Time (s)						5.0	5.0	5.0			5.0	
Vehicle Extension (s)						3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)			3008			510	286	3539			1238	1583
v/s Ratio Prot							0.06	0.28			c0.25	
v/s Ratio Perm			c0.50			0.19						0.13
v/c Ratio			0.50			0.61	0.66	0.28			0.71	0.13
Uniform Delay, d1			0.0			17.4	26.7	0.0			16.9	0.0
Progression Factor			1.00			1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			0.6			2.2	5.6	0.2			3.5	0.2
Delay (s)			0.6			19.6	32.3	0.2			20.4	0.2
Level of Service			A			B	C	A			C	A
Approach Delay (s)		0.6			19.6			5.3			16.5	
Approach LOS		A			B			A			B	
Intersection Summary												
HCM 2000 Control Delay			8.2		HCM 2000 Level of Service		A					
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			60.0		Sum of lost time (s)		15.0					
Intersection Capacity Utilization			63.1%		ICU Level of Service		B					
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	344	0	0	194	0	730	2774	582	2084	0
Future Volume (vph)	0	0	344	0	0	194	0	730	2774	582	2084	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			5.0		5.0	5.0	5.0	5.0	
Lane Util. Factor			1.00			1.00		0.95	0.88	0.97	0.86	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1611			1611		3539	2787	3433	6408	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1611			1611		3539	2787	3433	6408	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	374	0	0	211	0	793	3015	633	2265	0
RTOR Reduction (vph)	0	0	0	0	0	106	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	374	0	0	106	0	793	3011	633	2265	0
Turn Type			Free			Perm		NA	Perm	Prot	NA	
Protected Phases								2		1	6	
Permitted Phases			Free			8			2			
Actuated Green, G (s)			140.0			70.0		108.0	108.0	22.0	60.0	
Effective Green, g (s)			140.0			70.0		108.0	108.0	22.0	60.0	
Actuated g/C Ratio			1.00			0.50		0.77	0.77	0.16	0.43	
Clearance Time (s)						5.0		5.0	5.0	5.0	5.0	
Vehicle Extension (s)						3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)			1611			805		2730	2149	539	2746	
v/s Ratio Prot								0.22		c0.18	0.35	
v/s Ratio Perm			0.23			0.07			c1.08			
v/c Ratio			0.23			0.13		0.29	1.40	1.17	0.82	
Uniform Delay, d1			0.0			18.7		4.7	16.0	59.0	35.4	
Progression Factor			1.00			1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2			0.3			0.1		0.3	183.5	96.7	3.0	
Delay (s)			0.3			18.8		5.0	199.5	155.7	38.3	
Level of Service			A			B		A	F	F	D	
Approach Delay (s)		0.3			18.8			159.0			64.0	
Approach LOS		A			B			F			E	
Intersection Summary												
HCM 2000 Control Delay			109.0			HCM 2000 Level of Service			F			
HCM 2000 Volume to Capacity ratio			1.36									
Actuated Cycle Length (s)			140.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			122.0%			ICU Level of Service			H			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	227	206	32	180	104	250	24	1072	218	558	1514	138
Future Volume (vph)	227	206	32	180	104	250	24	1072	218	558	1514	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	1.00		0.97	1.00	1.00	1.00	0.86	1.00	0.97	0.86	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1825		3433	1863	1583	1770	6408	1583	3433	6408	1583
Flt Permitted	0.55	1.00		0.50	1.00	1.00	0.19	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1975	1825		1810	1863	1583	351	6408	1583	3433	6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	247	224	35	196	113	272	26	1165	237	607	1646	150
RTOR Reduction (vph)	0	8	0	0	0	67	0	0	144	0	0	58
Lane Group Flow (vph)	247	251	0	196	113	205	26	1165	93	607	1646	92
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov	Prot	NA	pt+ov
Protected Phases	7	4		3	8	1	5	2	3	1	6	6 7
Permitted Phases	4			8		8	2		2			
Actuated Green, G (s)	23.5	15.4		17.3	12.3	26.3	23.1	21.2	26.2	14.0	33.3	46.4
Effective Green, g (s)	23.5	15.4		17.3	12.3	26.3	23.1	21.2	26.2	14.0	33.3	46.4
Actuated g/C Ratio	0.31	0.20		0.23	0.16	0.35	0.31	0.28	0.35	0.19	0.44	0.61
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	770	371		521	303	655	142	1796	653	635	2822	971
v/s Ratio Prot	c0.03	c0.14		0.02	0.06	0.06	0.00	0.18	0.01	c0.18	c0.26	0.06
v/s Ratio Perm	0.07			0.06		0.07	0.05		0.05			
v/c Ratio	0.32	0.68		0.38	0.37	0.31	0.18	0.65	0.14	0.96	0.58	0.09
Uniform Delay, d1	19.4	27.8		23.9	28.2	18.0	18.5	23.9	17.0	30.5	15.9	6.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	4.8		0.5	0.8	0.3	0.6	1.8	0.1	25.0	0.9	0.0
Delay (s)	19.7	32.6		24.3	29.0	18.3	19.1	25.8	17.1	55.5	16.8	6.0
Level of Service	B	C		C	C	B	B	C	B	E	B	A
Approach Delay (s)		26.3			22.4			24.2			25.9	
Approach LOS		C			C			C			C	
Intersection Summary												
HCM 2000 Control Delay		25.0			HCM 2000 Level of Service			C				
HCM 2000 Volume to Capacity ratio		0.72										
Actuated Cycle Length (s)		75.6			Sum of lost time (s)			20.0				
Intersection Capacity Utilization		66.0%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	115	43	16	60	24	127	4	41	853	38	1	87
Future Volume (vph)	115	43	16	60	24	127	4	41	853	38	1	87
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Lane Util. Factor	1.00	1.00		1.00	1.00	1.00		1.00	0.91	1.00		1.00
Frt	1.00	0.96		1.00	1.00	0.85		1.00	1.00	0.85		1.00
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00		0.95
Satd. Flow (prot)	1770	1789		1770	1863	1583		1770	5085	1583		1770
Flt Permitted	0.74	1.00		0.72	1.00	1.00		0.14	1.00	1.00		0.26
Satd. Flow (perm)	1379	1789		1332	1863	1583		262	5085	1583		479
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	125	47	17	65	26	138	4	45	927	41	1	95
RTOR Reduction (vph)	0	14	0	0	0	126	0	0	0	21	0	0
Lane Group Flow (vph)	125	50	0	65	26	12	0	49	927	20	0	96
Turn Type	Perm	NA		Perm	NA	custom	custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4			8		1	5	2		2	1	6
Actuated Green, G (s)	8.7	8.7		8.7	8.7	5.1		31.2	28.4	28.4		35.8
Effective Green, g (s)	8.7	8.7		8.7	8.7	5.1		31.2	28.4	28.4		35.8
Actuated g/C Ratio	0.15	0.15		0.15	0.15	0.09		0.55	0.50	0.50		0.63
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0		5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	209	272		202	283	141		216	2524	785		414
v/s Ratio Prot		0.03			0.01			0.01	0.18			c0.02
v/s Ratio Perm	c0.09			0.05		0.01		0.11		0.01		0.12
v/c Ratio	0.60	0.18		0.32	0.09	0.09		0.23	0.37	0.03		0.23
Uniform Delay, d1	22.6	21.1		21.6	20.9	23.9		6.8	8.9	7.3		4.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00		1.00
Incremental Delay, d2	4.6	0.3		0.9	0.1	0.3		0.5	0.4	0.1		0.3
Delay (s)	27.2	21.5		22.5	21.0	24.2		7.3	9.3	7.4		4.7
Level of Service	C	C		C	C	C		A	A	A		A
Approach Delay (s)		25.2			23.4				9.1			
Approach LOS		C			C				A			
Intersection Summary												
HCM 2000 Control Delay			11.5				HCM 2000 Level of Service			B		
HCM 2000 Volume to Capacity ratio			0.64									
Actuated Cycle Length (s)			57.2				Sum of lost time (s)			15.0		
Intersection Capacity Utilization			62.1%				ICU Level of Service			B		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑↑	↑
Traffic Volume (vph)	1676	185
Future Volume (vph)	1676	185
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.91	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	5085	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	5085	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1822	201
RTOR Reduction (vph)	0	93
Lane Group Flow (vph)	1822	108
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	30.7	30.7
Effective Green, g (s)	30.7	30.7
Actuated g/C Ratio	0.54	0.54
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	2729	849
v/s Ratio Prot	c0.36	
v/s Ratio Perm		0.07
v/c Ratio	0.67	0.13
Uniform Delay, d1	9.6	6.6
Progression Factor	1.00	1.00
Incremental Delay, d2	1.3	0.3
Delay (s)	10.9	6.9
Level of Service	B	A
Approach Delay (s)	10.2	
Approach LOS	B	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	14	65	28	237	56	65	5	122	1135	468	12	203
Future Volume (vph)	14	65	28	237	56	65	5	122	1135	468	12	203
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.98			1.00	1.00	0.85		1.00
Flt Protected		0.99	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1847	1583		1759			1770	3539	1583		1770
Flt Permitted		0.93	1.00		0.75			0.10	1.00	1.00		0.09
Satd. Flow (perm)		1727	1583		1360			189	3539	1583		167
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	71	30	258	61	71	5	133	1234	509	13	221
RTOR Reduction (vph)	0	0	28	0	9	0	0	0	0	286	0	0
Lane Group Flow (vph)	0	86	2	0	381	0	0	138	1234	223	0	234
Turn Type	Perm	NA	custom	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		5	8			5	2		2	1	6
Actuated Green, G (s)		25.0	5.0		25.0			44.5	39.5	39.5		55.0
Effective Green, g (s)		25.0	5.0		25.0			44.5	39.5	39.5		55.0
Actuated g/C Ratio		0.28	0.06		0.28			0.49	0.44	0.44		0.61
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		479	87		377			181	1553	694		289
v/s Ratio Prot								0.04	0.35			c0.09
v/s Ratio Perm		0.05	0.00		c0.28			0.33		0.14		0.40
v/c Ratio		0.18	0.02		1.01			0.76	0.79	0.32		0.81
Uniform Delay, d1		24.7	40.2		32.5			19.4	21.8	16.5		21.8
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.2	0.1		49.3			17.2	4.3	1.2		15.3
Delay (s)		24.9	40.3		81.8			36.6	26.0	17.7		37.1
Level of Service		C	D		F			D	C	B		D
Approach Delay (s)		28.9			81.8				24.6			
Approach LOS		C			F				C			
Intersection Summary												
HCM 2000 Control Delay			34.0			HCM 2000 Level of Service			C			
HCM 2000 Volume to Capacity ratio			0.99									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			15.0			
Intersection Capacity Utilization			90.7%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	1550	53
Future Volume (vph)	1550	53
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	1685	58
RTOR Reduction (vph)	0	29
Lane Group Flow (vph)	1685	29
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	45.0	45.0
Effective Green, g (s)	45.0	45.0
Actuated g/C Ratio	0.50	0.50
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1769	791
v/s Ratio Prot	c0.48	
v/s Ratio Perm		0.02
v/c Ratio	0.95	0.04
Uniform Delay, d1	21.5	11.5
Progression Factor	1.00	1.00
Incremental Delay, d2	12.8	0.1
Delay (s)	34.3	11.5
Level of Service	C	B
Approach Delay (s)	33.9	
Approach LOS	C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 		 	 	
Traffic Volume (vph)	0	0	49	0	0	370	14	2215	45	282	1683	34
Future Volume (vph)	0	0	49	0	0	370	14	2215	45	282	1683	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	3433	3539	1583
Flt Permitted			1.00			1.00	0.12	1.00	1.00	0.06	1.00	1.00
Satd. Flow (perm)			1611			2787	220	3539	1583	201	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	53	0	0	402	15	2408	49	307	1829	37
RTOR Reduction (vph)	0	0	50	0	0	21	0	0	13	0	0	6
Lane Group Flow (vph)	0	0	3	0	0	381	15	2408	36	307	1829	31
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			4.5			13.0	71.5	67.0	67.0	85.0	75.5	75.5
Effective Green, g (s)			4.5			13.0	71.5	67.0	67.0	85.0	75.5	75.5
Actuated g/C Ratio			0.05			0.14	0.79	0.74	0.74	0.94	0.84	0.84
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			80			402	252	2634	1178	656	2968	1327
v/s Ratio Prot							0.00	c0.68		0.07	0.52	
v/s Ratio Perm			0.00			c0.14	0.04		0.02	0.37		0.02
v/c Ratio			0.03			0.95	0.06	0.91	0.03	0.47	0.62	0.02
Uniform Delay, d1			40.7			38.2	2.8	9.2	3.0	26.3	2.4	1.2
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			0.2			31.6	0.1	6.3	0.0	0.5	1.0	0.0
Delay (s)			40.8			69.8	2.9	15.5	3.1	26.8	3.4	1.2
Level of Service			D			E	A	B	A	C	A	A
Approach Delay (s)		40.8			69.8			15.1			6.7	
Approach LOS		D			E			B			A	
Intersection Summary												
HCM 2000 Control Delay			16.1			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			90.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			82.5%			ICU Level of Service			E			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 			 	
Traffic Volume (vph)	0	0	54	0	0	413	15	2462	50	315	1832	20
Future Volume (vph)	0	0	54	0	0	413	15	2462	50	315	1832	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.10	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)			1611			2787	191	3539	1583	76	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	59	0	0	449	16	2676	54	342	1991	22
RTOR Reduction (vph)	0	0	57	0	0	15	0	0	12	0	0	3
Lane Group Flow (vph)	0	0	2	0	0	434	16	2676	42	342	1991	19
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			4.6			18.0	97.6	93.0	93.0	116.0	106.4	106.4
Effective Green, g (s)			4.6			18.0	97.6	93.0	93.0	116.0	106.4	106.4
Actuated g/C Ratio			0.04			0.15	0.81	0.77	0.77	0.96	0.88	0.88
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			61			414	214	2720	1216	324	3111	1391
v/s Ratio Prot							0.00	0.76		c0.16	0.56	
v/s Ratio Perm			0.00			0.16	0.06		0.03	c0.85		0.01
v/c Ratio			0.04			1.05	0.07	0.98	0.03	1.06	0.64	0.01
Uniform Delay, d1			56.1			51.5	2.9	13.3	3.3	48.4	2.0	0.9
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			0.2			57.2	0.1	13.9	0.1	65.4	1.0	0.0
Delay (s)			56.3			108.7	3.0	27.1	3.4	113.8	3.0	0.9
Level of Service			E			F	A	C	A	F	A	A
Approach Delay (s)		56.3			108.7			26.5			19.1	
Approach LOS		E			F			C			B	
Intersection Summary												
HCM 2000 Control Delay			30.3			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			1.08									
Actuated Cycle Length (s)			121.0			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			93.8%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	260	0	0	106	31	1829	45	69	1378	95
Future Volume (vph)	0	0	260	0	0	106	31	1829	45	69	1378	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			0.88			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.85			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			2787			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.15	1.00	1.00	0.09	1.00	1.00
Satd. Flow (perm)			2787			2787	272	3539	1583	167	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	283	0	0	115	34	1988	49	75	1498	103
RTOR Reduction (vph)	0	0	129	0	0	75	0	0	7	0	0	19
Lane Group Flow (vph)	0	0	154	0	0	40	34	1988	42	75	1498	84
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			11.5			7.0	112.5	101.0	101.0	103.5	96.5	96.5
Effective Green, g (s)			11.5			7.0	112.5	101.0	101.0	103.5	96.5	96.5
Actuated g/C Ratio			0.10			0.06	0.95	0.86	0.86	0.88	0.82	0.82
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			271			165	405	3029	1354	241	2894	1294
v/s Ratio Prot							0.01	c0.56		0.02	0.42	
v/s Ratio Perm			c0.06			0.01	0.07		0.03	0.25		0.05
v/c Ratio			0.57			0.24	0.08	0.66	0.03	0.31	0.52	0.07
Uniform Delay, d1			50.9			53.0	1.4	2.8	1.3	5.6	3.4	2.1
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			2.7			0.8	0.1	1.1	0.0	0.7	0.7	0.1
Delay (s)			53.6			53.7	1.5	3.9	1.3	6.4	4.1	2.2
Level of Service			D			D	A	A	A	A	A	A
Approach Delay (s)		53.6			53.7			3.8			4.0	
Approach LOS		D			D			A			A	
Intersection Summary												
HCM 2000 Control Delay			8.7		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.66									
Actuated Cycle Length (s)			118.0		Sum of lost time (s)				10.0			
Intersection Capacity Utilization			63.1%		ICU Level of Service				B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑	↗		↑	↗		↑↑	↗		↑↑	↗
Traffic Volume (vph)	0	255	77	0	171	131	0	1661	27	0	1325	7
Future Volume (vph)	0	255	77	0	171	131	0	1661	27	0	1325	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95	1.00		0.95	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)		1863	1583		1863	1583		3539	1583		3539	1583
Flt Permitted		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)		1863	1583		1863	1583		3539	1583		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	277	84	0	186	142	0	1805	29	0	1440	8
RTOR Reduction (vph)	0	0	48	0	0	22	0	0	10	0	0	3
Lane Group Flow (vph)	0	277	36	0	186	120	0	1805	19	0	1440	5
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)		20.0	20.0		20.0	20.0		60.9	60.9		60.9	60.9
Effective Green, g (s)		20.0	20.0		20.0	20.0		60.9	60.9		60.9	60.9
Actuated g/C Ratio		0.22	0.22		0.22	0.22		0.67	0.67		0.67	0.67
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		409	348		409	348		2371	1060		2371	1060
v/s Ratio Prot		c0.15			0.10			c0.51			0.41	
v/s Ratio Perm			0.02			0.08			0.01			0.00
v/c Ratio		0.68	0.10		0.45	0.35		0.76	0.02		0.61	0.01
Uniform Delay, d1		32.5	28.3		30.7	29.9		10.1	5.0		8.3	5.0
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2		4.4	0.1		0.8	0.6		1.5	0.0		0.4	0.0
Delay (s)		36.9	28.4		31.5	30.5		11.6	5.0		8.8	5.0
Level of Service		D	C		C	C		B	A		A	A
Approach Delay (s)		34.9			31.1			11.5			8.8	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay		14.2			HCM 2000 Level of Service			B				
HCM 2000 Volume to Capacity ratio		0.74										
Actuated Cycle Length (s)		90.9			Sum of lost time (s)			10.0				
Intersection Capacity Utilization		67.7%			ICU Level of Service			C				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	326	0	0	299	12	1724	186	64	1555	202
Future Volume (vph)	0	0	326	0	0	299	12	1724	186	64	1555	202
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			0.88			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.85			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			2787			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.11	1.00	1.00	0.11	1.00	1.00
Satd. Flow (perm)			2787			2787	198	3539	1583	201	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	354	0	0	325	13	1874	202	70	1690	220
RTOR Reduction (vph)	0	0	27	0	0	27	0	0	54	0	0	75
Lane Group Flow (vph)	0	0	327	0	0	298	13	1874	148	70	1690	145
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			12.0			11.4	49.7	37.7	37.7	48.5	37.1	37.1
Effective Green, g (s)			12.0			11.4	49.7	37.7	37.7	48.5	37.1	37.1
Actuated g/C Ratio			0.20			0.19	0.84	0.64	0.64	0.82	0.63	0.63
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			565			537	485	2257	1009	467	2221	993
v/s Ratio Prot							0.01	c0.53		0.03	0.48	
v/s Ratio Perm			c0.12			0.11	0.02		0.09	0.09		0.09
v/c Ratio			0.58			0.55	0.03	0.83	0.15	0.15	0.76	0.15
Uniform Delay, d1			21.3			21.6	3.3	8.2	4.3	9.6	7.8	4.5
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			1.4			1.2	0.0	3.7	0.3	0.1	2.5	0.3
Delay (s)			22.7			22.8	3.3	12.0	4.6	9.8	10.4	4.8
Level of Service			C			C	A	B	A	A	B	A
Approach Delay (s)		22.7			22.8			11.2			9.7	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay			12.2			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.78									
Actuated Cycle Length (s)			59.1			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			66.4%			ICU Level of Service				C		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			LT			LT	LT	TH	TH	LT	TH	TH
Traffic Volume (vph)	0	0	378	0	0	729	30	1629	403	420	1228	240
Future Volume (vph)	0	0	378	0	0	729	30	1629	403	420	1228	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			0.88			0.88	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.85			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			2787			2787	1770	3539	1583	3433	3539	1583
Flt Permitted			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)			2787			2787	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	411	0	0	792	33	1771	438	457	1335	261
RTOR Reduction (vph)	0	0	119	0	0	20	0	0	67	0	0	77
Lane Group Flow (vph)	0	0	292	0	0	772	33	1771	371	457	1335	184
Turn Type			Perm			Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1			2			6
Actuated Green, G (s)			11.9			22.6	11.9	42.0	42.0	22.6	52.7	52.7
Effective Green, g (s)			11.9			22.6	11.9	42.0	42.0	22.6	52.7	52.7
Actuated g/C Ratio			0.16			0.30	0.16	0.56	0.56	0.30	0.71	0.71
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			444			844	282	1992	891	1040	2500	1118
v/s Ratio Prot							0.02	0.50		0.13	0.38	
v/s Ratio Perm			0.10			0.28			0.23			0.12
v/c Ratio			0.66			0.91	0.12	0.89	0.42	0.44	0.53	0.16
Uniform Delay, d1			29.4			25.1	26.9	14.3	9.3	20.9	5.2	3.6
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			3.5			14.2	0.2	6.4	1.4	0.3	0.8	0.3
Delay (s)			33.0			39.3	27.0	20.7	10.7	21.2	6.0	4.0
Level of Service			C			D	C	C	B	C	A	A
Approach Delay (s)		33.0			39.3			18.8			9.1	
Approach LOS		C			D			B			A	
Intersection Summary												
HCM 2000 Control Delay			19.2			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.90									
Actuated Cycle Length (s)			74.6			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			78.9%			ICU Level of Service			D			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 			 	
Traffic Volume (vph)	0	0	173	0	0	266	70	1549	239	38	1560	103
Future Volume (vph)	0	0	173	0	0	266	70	1549	239	38	1560	103
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.11	1.00	1.00	0.12	1.00	1.00
Satd. Flow (perm)			1611			2787	212	3539	1583	216	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	188	0	0	289	76	1684	260	41	1696	112
RTOR Reduction (vph)	0	0	38	0	0	60	0	0	80	0	0	36
Lane Group Flow (vph)	0	0	150	0	0	229	76	1684	180	41	1696	76
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			6.4			5.7	41.6	35.2	35.2	40.2	34.5	34.5
Effective Green, g (s)			6.4			5.7	41.6	35.2	35.2	40.2	34.5	34.5
Actuated g/C Ratio			0.13			0.11	0.82	0.69	0.69	0.79	0.68	0.68
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			202			312	369	2447	1094	344	2398	1072
v/s Ratio Prot							0.03	0.48		0.01	c0.48	
v/s Ratio Perm			c0.09			0.08	0.14		0.11	0.08		0.05
v/c Ratio			0.74			0.73	0.21	0.69	0.16	0.12	0.71	0.07
Uniform Delay, d1			21.4			21.9	2.7	4.6	2.7	4.7	5.1	2.8
Progression Factor			1.00			1.00	1.10	1.06	1.20	1.00	1.00	1.00
Incremental Delay, d2			13.6			8.6	0.3	1.6	0.3	0.2	1.8	0.1
Delay (s)			35.0			30.5	3.2	6.5	3.6	4.8	6.9	2.9
Level of Service			D			C	A	A	A	A	A	A
Approach Delay (s)		35.0			30.5			6.0			6.6	
Approach LOS		D			C			A			A	
Intersection Summary												
HCM 2000 Control Delay			9.1		HCM 2000 Level of Service				A			
HCM 2000 Volume to Capacity ratio			0.71									
Actuated Cycle Length (s)			50.9		Sum of lost time (s)				10.0			
Intersection Capacity Utilization			62.2%		ICU Level of Service				B			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 			 	
Traffic Volume (vph)	0	0	128	0	0	508	7	1409	168	118	1531	43
Future Volume (vph)	0	0	128	0	0	508	7	1409	168	118	1531	43
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.14	1.00	1.00	0.10	1.00	1.00
Satd. Flow (perm)			1611			2787	265	3539	1583	181	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	139	0	0	552	8	1532	183	128	1664	47
RTOR Reduction (vph)	0	0	116	0	0	42	0	0	73	0	0	12
Lane Group Flow (vph)	0	0	23	0	0	510	8	1532	110	128	1664	35
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			5.4			13.9	41.5	36.1	36.1	55.0	44.6	44.6
Effective Green, g (s)			5.4			13.9	41.5	36.1	36.1	55.0	44.6	44.6
Actuated g/C Ratio			0.09			0.23	0.69	0.60	0.60	0.92	0.74	0.74
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			144			645	318	2129	952	534	2630	1176
v/s Ratio Prot							0.00	c0.43		0.06	0.47	
v/s Ratio Perm			0.01			c0.18	0.02		0.07	0.16		0.02
v/c Ratio			0.16			0.79	0.03	0.72	0.12	0.24	0.63	0.03
Uniform Delay, d1			25.2			21.7	3.3	8.4	5.1	5.2	3.7	2.0
Progression Factor			1.00			1.00	1.04	1.02	1.14	0.93	1.07	1.14
Incremental Delay, d2			0.5			6.5	0.0	2.1	0.2	0.2	1.2	0.0
Delay (s)			25.7			28.2	3.5	10.7	6.1	5.1	5.2	2.4
Level of Service			C			C	A	B	A	A	A	A
Approach Delay (s)		25.7			28.2			10.2			5.1	
Approach LOS		C			C			B			A	
Intersection Summary												
HCM 2000 Control Delay			10.8			HCM 2000 Level of Service			B			
HCM 2000 Volume to Capacity ratio			0.74									
Actuated Cycle Length (s)			60.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			65.1%			ICU Level of Service			C			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	237	0	0	109	157	1370	62	65	1587	1
Future Volume (vph)	0	0	237	0	0	109	157	1370	62	65	1587	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.86	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			1611	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.09	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)			1611			1611	166	3539	1583	327	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	258	0	0	118	171	1489	67	71	1725	1
RTOR Reduction (vph)	0	0	27	0	0	84	0	0	10	0	0	0
Lane Group Flow (vph)	0	0	231	0	0	34	171	1489	57	71	1725	1
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			22.2			8.4	115.0	101.6	101.6	96.2	87.8	87.8
Effective Green, g (s)			22.2			8.4	115.0	101.6	101.6	96.2	87.8	87.8
Actuated g/C Ratio			0.18			0.07	0.96	0.85	0.85	0.80	0.73	0.73
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			298			112	455	2996	1340	363	2589	1158
v/s Ratio Prot							0.07	0.42		0.01	c0.49	
v/s Ratio Perm			c0.14			0.02	0.29		0.04	0.14		0.00
v/c Ratio			0.78			0.31	0.38	0.50	0.04	0.20	0.67	0.00
Uniform Delay, d1			46.5			53.0	13.6	2.4	1.5	3.0	8.4	4.3
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			11.9			1.6	0.5	0.6	0.1	0.3	1.4	0.0
Delay (s)			58.4			54.6	14.1	3.0	1.5	3.3	9.8	4.3
Level of Service			E			D	B	A	A	A	A	A
Approach Delay (s)		58.4			54.6			4.1			9.5	
Approach LOS		E			D			A			A	
Intersection Summary												
HCM 2000 Control Delay			11.7			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.69									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			66.9%			ICU Level of Service				C		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	179	130	15	1523	106	35	148	1686
Future Volume (vph)	179	130	15	1523	106	35	148	1686
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.10	1.00	1.00		0.09	1.00
Satd. Flow (perm)	3433	1583	178	3539	1583		159	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	195	141	16	1655	115	38	161	1833
RTOR Reduction (vph)	0	127	0	0	29	0	0	0
Lane Group Flow (vph)	195	14	16	1655	86	0	199	1833
Turn Type	Prot	Perm	pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases	3		5	2			1	6
Permitted Phases		3	2		2	1	6	
Actuated Green, G (s)	11.2	11.2	80.7	78.8	78.8		95.5	88.6
Effective Green, g (s)	11.2	11.2	80.7	78.8	78.8		95.5	88.6
Actuated g/C Ratio	0.10	0.10	0.69	0.68	0.68		0.82	0.76
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	329	151	149	2389	1068		291	2686
v/s Ratio Prot	c0.06		0.00	0.47			c0.07	0.52
v/s Ratio Perm		0.01	0.07		0.05		c0.49	
v/c Ratio	0.59	0.09	0.11	0.69	0.08		0.68	0.68
Uniform Delay, d1	50.6	48.1	7.0	11.6	6.5		22.0	7.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.02	0.99
Incremental Delay, d2	2.9	0.3	0.3	1.7	0.1		6.5	1.4
Delay (s)	53.4	48.4	7.4	13.2	6.7		28.9	8.4
Level of Service	D	D	A	B	A		C	A
Approach Delay (s)	51.3			12.8				10.4
Approach LOS	D			B				B
Intersection Summary								
HCM 2000 Control Delay			14.7			HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.69					
Actuated Cycle Length (s)			116.7			Sum of lost time (s)		15.0
Intersection Capacity Utilization			72.8%			ICU Level of Service		C
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	42	69	3	1622	81	15	100	1757
Future Volume (vph)	42	69	3	1622	81	15	100	1757
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.09	1.00	1.00		0.09	1.00
Satd. Flow (perm)	1770	1583	171	3539	1583		161	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	46	75	3	1763	88	16	109	1910
RTOR Reduction (vph)	0	70	0	0	23	0	0	0
Lane Group Flow (vph)	46	5	3	1763	65	0	125	1910
Turn Type	Prot	Perm	pm+pt	NA	Perm	Perm	pm+pt	NA
Protected Phases	8		5	2			1	6
Permitted Phases		8	2		2	6	6	
Actuated Green, G (s)	7.4	7.4	90.4	89.3	89.3		102.6	96.5
Effective Green, g (s)	7.4	7.4	90.4	89.3	89.3		102.6	96.5
Actuated g/C Ratio	0.06	0.06	0.75	0.74	0.74		0.85	0.80
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	109	97	143	2633	1178		248	2845
v/s Ratio Prot	c0.03		0.00	0.50			c0.03	c0.54
v/s Ratio Perm		0.00	0.02		0.04		0.39	
v/c Ratio	0.42	0.05	0.02	0.67	0.06		0.50	0.67
Uniform Delay, d1	54.2	53.0	5.0	7.8	4.1		10.4	5.0
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	2.6	0.2	0.1	1.4	0.1		1.6	1.3
Delay (s)	56.9	53.2	5.0	9.2	4.2		12.0	6.3
Level of Service	E	D	A	A	A		B	A
Approach Delay (s)	54.6			9.0				6.6
Approach LOS	D			A				A
Intersection Summary								
HCM 2000 Control Delay			9.2			HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.66					
Actuated Cycle Length (s)			120.0			Sum of lost time (s)		15.0
Intersection Capacity Utilization			69.4%			ICU Level of Service		C
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	978	1385	733	279	1011	179	621	957	138	144	1112	561
Future Volume (vph)	978	1385	733	279	1011	179	621	957	138	144	1112	561
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1063	1505	797	303	1099	195	675	1040	150	157	1209	610
RTOR Reduction (vph)	0	0	183	0	0	119	0	0	110	0	0	304
Lane Group Flow (vph)	1063	1505	614	303	1099	76	675	1040	40	157	1209	306
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	36.0	61.0	61.0	13.0	38.0	38.0	23.0	39.9	39.9	16.1	33.0	33.0
Effective Green, g (s)	36.0	61.0	61.0	13.0	38.0	38.0	23.0	39.9	39.9	16.1	33.0	33.0
Actuated g/C Ratio	0.24	0.41	0.41	0.09	0.25	0.25	0.15	0.27	0.27	0.11	0.22	0.22
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	823	1439	643	297	896	401	526	1352	421	189	1118	348
v/s Ratio Prot	c0.31	0.43		0.09	c0.31		c0.20	0.20		0.09	c0.24	
v/s Ratio Perm			0.39			0.05			0.03			0.19
v/c Ratio	1.29	1.05	0.95	1.02	1.23	0.19	1.28	0.77	0.09	0.83	1.08	0.88
Uniform Delay, d1	57.0	44.5	43.2	68.5	56.0	43.9	63.5	50.8	41.5	65.6	58.5	56.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	140.3	36.7	24.5	57.5	111.9	0.2	141.4	4.3	0.4	25.5	51.8	25.5
Delay (s)	197.3	81.2	67.7	126.0	167.9	44.1	204.9	55.1	41.9	91.1	110.3	82.1
Level of Service	F	F	E	F	F	D	F	E	D	F	F	F
Approach Delay (s)		114.7			144.8			108.3			100.0	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			115.5				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.22									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			111.7%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

90: SR 74

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			RL		↑↑	↑↑	
Traffic Volume (vph)	0	0	18	0	2857	2149	0
Future Volume (vph)	0	0	18	0	2857	2149	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.06		1.00	1.00	
Satd. Flow (perm)			104		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	20	0	3105	2336	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	20	0	3105	2336	0
Turn Type			pm+pt		NA	NA	
Protected Phases			5		2	6	
Permitted Phases			2				
Actuated Green, G (s)			115.0		120.0	107.8	
Effective Green, g (s)			115.0		120.0	107.8	
Actuated g/C Ratio			0.96		1.00	0.90	
Clearance Time (s)			5.0		5.0	5.0	
Vehicle Extension (s)			3.0		3.0	3.0	
Lane Grp Cap (vph)			130		3539	3179	
v/s Ratio Prot			0.00		0.88	0.66	
v/s Ratio Perm			0.14				
v/c Ratio			0.15		0.88	0.73	
Uniform Delay, d1			3.5		0.0	1.8	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			0.6		3.4	1.5	
Delay (s)			4.0		3.4	3.4	
Level of Service			A		A	A	
Approach Delay (s)	0.0				3.4	3.4	
Approach LOS	A				A	A	

Intersection Summary

HCM 2000 Control Delay	3.4	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

94: SR 74

10/17/2018



Movement	SEL	SER	NEU	NEL	NET	SWT	SWR
Lane Configurations			⬅		➡➡	➡➡	
Traffic Volume (vph)	0	0	39	0	1896	1503	0
Future Volume (vph)	0	0	39	0	1896	1503	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.13		1.00	1.00	
Satd. Flow (perm)			241		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	42	0	2061	1634	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	42	0	2061	1634	0
Turn Type			pm+pt		NA	NA	
Protected Phases			7		4	8	
Permitted Phases			4				
Actuated Green, G (s)			115.0		120.0	103.0	
Effective Green, g (s)			115.0		120.0	103.0	
Actuated g/C Ratio			0.96		1.00	0.86	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			320		3539	3037	
v/s Ratio Prot			0.01		0.58	0.46	
v/s Ratio Perm			0.12				
v/c Ratio			0.13		0.58	0.54	
Uniform Delay, d1			1.3		0.0	2.2	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			0.8		0.7	0.7	
Delay (s)			2.1		0.7	2.9	
Level of Service			A		A	A	
Approach Delay (s)	0.0				0.7	2.9	
Approach LOS	A				A	A	
Intersection Summary							
HCM 2000 Control Delay			1.7		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.64				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			72.5%		ICU Level of Service		C
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

95: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	1686	0	219	0	1419
Future Volume (vph)	0	0	1686	0	219	0	1419
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.08		1.00
Satd. Flow (perm)			3539		142		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1833	0	238	0	1542
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1833	0	238	0	1542
Turn Type			NA		pm+pt		NA
Protected Phases			2		1		6
Permitted Phases					6		
Actuated Green, G (s)			89.0		115.0		120.0
Effective Green, g (s)			89.0		115.0		120.0
Actuated g/C Ratio			0.74		0.96		1.00
Clearance Time (s)			5.0		5.0		5.0
Lane Grp Cap (vph)			2624		420		3539
v/s Ratio Prot			c0.52		c0.10		0.44
v/s Ratio Perm					0.44		
v/c Ratio			0.70		0.57		0.44
Uniform Delay, d1			8.3		26.1		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			1.5		5.5		0.4
Delay (s)			9.8		31.5		0.4
Level of Service			A		C		A
Approach Delay (s)	0.0		9.8				4.6
Approach LOS	A		A				A
Intersection Summary							
HCM 2000 Control Delay			7.2		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.67				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			50.8%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

98: SR 74

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			RL		↑↑	↑↑	
Traffic Volume (vph)	0	0	331	0	1461	1001	0
Future Volume (vph)	0	0	331	0	1461	1001	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.18		1.00	1.00	
Satd. Flow (perm)			337		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	360	0	1588	1088	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	360	0	1588	1088	0
Turn Type			pm+pt		NA	NA	
Protected Phases			5		2	6	
Permitted Phases			2				
Actuated Green, G (s)			115.0		120.0	70.0	
Effective Green, g (s)			115.0		120.0	70.0	
Actuated g/C Ratio			0.96		1.00	0.58	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			800		3539	2064	
v/s Ratio Prot			0.15		c0.45	c0.31	
v/s Ratio Perm			0.28				
v/c Ratio			0.45		0.45	0.53	
Uniform Delay, d1			8.7		0.0	15.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			1.8		0.4	0.9	
Delay (s)			10.6		0.4	15.9	
Level of Service			B		A	B	
Approach Delay (s)	0.0				2.3	15.9	
Approach LOS	A				A	B	

Intersection Summary			
HCM 2000 Control Delay	7.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	10.0
Intersection Capacity Utilization	50.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

100: SR 74

10/17/2018



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	1600	0	88	0	1314
Future Volume (vph)	0	0	1600	0	88	0	1314
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.11		1.00
Satd. Flow (perm)			3539		197		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1739	0	96	0	1428
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1739	0	96	0	1428
Turn Type			NA		pm+pt		NA
Protected Phases			2		1		6
Permitted Phases					6		
Actuated Green, G (s)			98.0		115.0		120.0
Effective Green, g (s)			98.0		115.0		120.0
Actuated g/C Ratio			0.82		0.96		1.00
Clearance Time (s)			5.0		5.0		5.0
Lane Grp Cap (vph)			2890		346		3539
v/s Ratio Prot			c0.49		0.03		c0.40
v/s Ratio Perm					0.24		
v/c Ratio			0.60		0.28		0.40
Uniform Delay, d1			4.0		3.6		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			0.8		2.0		0.3
Delay (s)			4.8		5.6		0.3
Level of Service			A		A		A
Approach Delay (s)	0.0		4.8				0.7
Approach LOS	A		A				A
Intersection Summary							
HCM 2000 Control Delay			2.8		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.60				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			52.3%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

106: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			LT	RT	TT	TT	LT
Traffic Volume (vph)	0	0	193	0	1830	1628	0
Future Volume (vph)	0	0	193	0	1830	1628	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.13		1.00	1.00	
Satd. Flow (perm)			245		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	210	0	1989	1770	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	210	0	1989	1770	0
Turn Type			Perm		NA	NA	
Protected Phases					2	6	
Permitted Phases			2				
Actuated Green, G (s)			120.0		120.0	120.0	
Effective Green, g (s)			120.0		120.0	120.0	
Actuated g/C Ratio			1.00		1.00	1.00	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			245		3539	3539	
v/s Ratio Prot					0.56	0.50	
v/s Ratio Perm			c0.86				
v/c Ratio			0.86		0.56	0.50	
Uniform Delay, d1			0.0		0.0	0.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			30.0		0.7	0.5	
Delay (s)			30.0		0.7	0.5	
Level of Service			C		A	A	
Approach Delay (s)	0.0				3.5	0.5	
Approach LOS	A				A	A	
Intersection Summary							
HCM 2000 Control Delay			2.1		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.89				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			54.8%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

108: SR 74

10/17/2018

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	1622	0	300	0	1581
Future Volume (vph)	0	0	1622	0	300	0	1581
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.13		1.00
Satd. Flow (perm)			3539		247		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1763	0	326	0	1718
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1763	0	326	0	1718
Turn Type			NA		Perm		NA
Protected Phases			2				6
Permitted Phases					6		
Actuated Green, G (s)			120.0		120.0		120.0
Effective Green, g (s)			120.0		120.0		120.0
Actuated g/C Ratio			1.00		1.00		1.00
Clearance Time (s)			5.0		5.0		5.0
Lane Grp Cap (vph)			3539		247		3539
v/s Ratio Prot			0.50				0.49
v/s Ratio Perm					c1.32		
v/c Ratio			0.50		1.32		0.49
Uniform Delay, d1			0.0		60.0		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			0.4		169.5		0.5
Delay (s)			0.4		229.5		0.5
Level of Service			A		F		A
Approach Delay (s)	0.0		0.4				37.0
Approach LOS	A		A				D
Intersection Summary							
HCM 2000 Control Delay			20.0		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			1.38				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			62.6%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

110: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			LT		TH	TH	
Traffic Volume (vph)	0	0	244	0	2114	1644	0
Future Volume (vph)	0	0	244	0	2114	1644	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.13		1.00	1.00	
Satd. Flow (perm)			241		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	265	0	2298	1787	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	265	0	2298	1787	0
Turn Type			Perm		NA	NA	
Protected Phases					2	6	
Permitted Phases			2				
Actuated Green, G (s)			120.0		120.0	120.0	
Effective Green, g (s)			120.0		120.0	120.0	
Actuated g/C Ratio			1.00		1.00	1.00	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			241		3539	3539	
v/s Ratio Prot					0.65	0.50	
v/s Ratio Perm			c1.10				
v/c Ratio			1.10		0.65	0.50	
Uniform Delay, d1			60.0		0.0	0.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			87.2		0.9	0.5	
Delay (s)			147.2		0.9	0.5	
Level of Service			F		A	A	
Approach Delay (s)	0.0				16.1	0.5	
Approach LOS	A				B	A	
Intersection Summary							
HCM 2000 Control Delay			9.7		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			1.15				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			62.6%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

112: SR 74

10/17/2018

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	1763	0	299	0	1307
Future Volume (vph)	0	0	1763	0	299	0	1307
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.11		1.00
Satd. Flow (perm)			3539		211		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1916	0	325	0	1421
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1916	0	325	0	1421
Turn Type			NA		Perm		NA
Protected Phases			2				6
Permitted Phases					6		
Actuated Green, G (s)			120.0		120.0		120.0
Effective Green, g (s)			120.0		120.0		120.0
Actuated g/C Ratio			1.00		1.00		1.00
Clearance Time (s)			5.0		5.0		5.0
Vehicle Extension (s)			3.0		3.0		3.0
Lane Grp Cap (vph)			3539		211		3539
v/s Ratio Prot			0.54				0.40
v/s Ratio Perm					c1.54		
v/c Ratio			0.54		1.54		0.40
Uniform Delay, d1			0.0		60.0		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			0.5		265.4		0.3
Delay (s)			0.5		325.4		0.3
Level of Service			A		F		A
Approach Delay (s)	0.0		0.5				60.8
Approach LOS	A		A				E
Intersection Summary							
HCM 2000 Control Delay			29.3		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			1.61				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			52.9%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

114: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			AA		↑↑	↑↑	
Traffic Volume (vph)	0	0	206	0	1609	1495	0
Future Volume (vph)	0	0	206	0	1609	1495	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			0.97		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			3433		3539	3539	
Flt Permitted			0.15		1.00	1.00	
Satd. Flow (perm)			552		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	224	0	1749	1625	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	224	0	1749	1625	0
Turn Type			Perm		NA	NA	
Protected Phases					2	6	
Permitted Phases			2				
Actuated Green, G (s)			120.0		120.0	120.0	
Effective Green, g (s)			120.0		120.0	120.0	
Actuated g/C Ratio			1.00		1.00	1.00	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			552		3539	3539	
v/s Ratio Prot					0.49	0.46	
v/s Ratio Perm			0.41				
v/c Ratio			0.41		0.49	0.46	
Uniform Delay, d1			0.0		0.0	0.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			2.2		0.5	0.4	
Delay (s)			2.2		0.5	0.4	
Level of Service			A		A	A	
Approach Delay (s)	0.0				0.7	0.4	
Approach LOS	A				A	A	
Intersection Summary							
HCM 2000 Control Delay			0.6		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			0.52				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			52.9%		ICU Level of Service		A
Analysis Period (min)			15				
c Critical Lane Group							

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (veh/h)	1	92	11	39	7	0	1	18	5	952	153	7
Future Volume (Veh/h)	1	92	11	39	7	0	1	18	5	952	153	7
Sign Control			Stop			Stop				Free		
Grade			0%			0%				0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	100	12	42	8	0	1	0	5	1035	166	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type										Raised		
Median storage (veh)										1		
Upstream signal (ft)												
pX, platoon unblocked	0.00	0.77	0.77	0.77	0.77	0.77		0.00	0.77			0.00
vC, conflicting volume	0	2255	3111	647	1808	3053	428	0	1915			0
vC1, stage 1 conf vol		1900	1900		1128	1128						
vC2, stage 2 conf vol		355	1211		680	1925						
vCu, unblocked vol	0	1568	2686	0	984	2610	428	0	1124			0
tC, single (s)	0.0	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0
tC, 2 stage (s)		6.5	5.5		6.5	5.5						
tF (s)	0.0	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0
p0 queue free %	0	28	89	95	96	100	100	0	99			0
cM capacity (veh/h)	0	138	112	830	187	115	575	0	473			0
Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	154	8	0	1	5	414	414	373	5	746	746	423
Volume Left	100	8	0	0	5	0	0	0	5	0	0	0
Volume Right	42	0	0	1	0	0	0	166	0	0	0	50
cSH	175	187	1700	575	473	1700	1700	1700	577	1700	1700	1700
Volume to Capacity	0.88	0.04	0.00	0.00	0.01	0.24	0.24	0.22	0.01	0.44	0.44	0.25
Queue Length 95th (ft)	160	3	0	0	1	0	0	0	1	0	0	0
Control Delay (s)	92.9	25.1	0.0	11.3	12.7	0.0	0.0	0.0	11.3	0.0	0.0	0.0
Lane LOS	F	D	A	B	B				B			
Approach Delay (s)	92.9	23.6			0.1				0.0			
Approach LOS	F	C										
Intersection Summary												
Average Delay			4.5									
Intersection Capacity Utilization			55.6%		ICU Level of Service				B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis8: SR 74 & Meadow Glen Parkway

10/17/2018

			
Movement	SBL	SBT	SBR
Lane Configurations		  	
Traffic Volume (veh/h)	5	1716	46
Future Volume (Veh/h)	5	1716	46
Sign Control		Free	
Grade		0%	
Peak Hour Factor	0.92	0.92	0.92
Hourly flow rate (vph)	5	1865	50
Pedestrians			
Lane Width (ft)			
Walking Speed (ft/s)			
Percent Blockage			
Right turn flare (veh)			
Median type		Raised	
Median storage (veh)		1	
Upstream signal (ft)		1262	
pX, platoon unblocked			
vC, conflicting volume	1201		
vC1, stage 1 conf vol			
vC2, stage 2 conf vol			
vCu, unblocked vol	1201		
tC, single (s)	4.1		
tC, 2 stage (s)			
tF (s)	2.2		
p0 queue free %	99		
cM capacity (veh/h)	577		
Direction, Lane #			

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	126	0	0	39	152	1856	22	1	1707	51
Future Volume (Veh/h)	0	0	126	0	0	39	152	1856	22	1	1707	51
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	137	0	0	42	165	2017	24	1	1855	55
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type							Raised		Raised			
Median storage (veh)							1		1			
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	3196	4204	928	3276	4204	1008	1855			2017		
vC1, stage 1 conf vol	1857	1857		2347	2347							
vC2, stage 2 conf vol	1338	2347		930	1857							
vCu, unblocked vol	3196	4204	928	3276	4204	1008	1855			2017		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	49	100	100	82	49			100		
cM capacity (veh/h)	33	24	270	1	1	238	322			279		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	137	42	165	1008	1008	24	1	928	928	55		
Volume Left	0	0	165	0	0	0	1	0	0	0		
Volume Right	137	42	0	0	0	24	0	0	0	55		
cSH	270	238	322	1700	1700	1700	279	1700	1700	1700		
Volume to Capacity	0.51	0.18	0.51	0.59	0.59	0.01	0.00	0.55	0.55	0.03		
Queue Length 95th (ft)	67	16	69	0	0	0	0	0	0	0		
Control Delay (s)	31.3	23.3	27.3	0.0	0.0	0.0	18.0	0.0	0.0	0.0		
Lane LOS	D	C	D	C								
Approach Delay (s)	31.3	23.3	2.0	0.0								
Approach LOS	D	C										
Intersection Summary												
Average Delay			2.3									
Intersection Capacity Utilization			62.3%	ICU Level of Service		B						
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	121	0	0	20	51	1757	6	1	1499	7
Future Volume (Veh/h)	0	0	121	0	0	20	51	1757	6	1	1499	7
Sign Control	Stop			Stop			Free			Free		
Grade	0%			0%			0%			0%		
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	132	0	0	22	55	1910	7	1	1629	8
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised	Raised			
Median storage veh								1	1			
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	2696	3651	814	2840	3654	958	1629	1910				
vC1, stage 1 conf vol	1631	1631		2024	2024							
vC2, stage 2 conf vol	1065	2020		816	1631							
vCu, unblocked vol	2696	3651	814	2840	3654	958	1629	1910				
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1	4.1				
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2	2.2				
p0 queue free %	100	100	59	100	100	91	86	100				
cM capacity (veh/h)	65	52	321	36	45	257	395	307				
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	132	22	55	1273	644	1	814	814	8			
Volume Left	0	0	55	0	0	1	0	0	0			
Volume Right	132	22	0	0	7	0	0	0	8			
cSH	321	257	395	1700	1700	307	1700	1700	1700			
Volume to Capacity	0.41	0.09	0.14	0.75	0.38	0.00	0.48	0.48	0.00			
Queue Length 95th (ft)	48	7	12	0	0	0	0	0	0			
Control Delay (s)	23.9	20.3	15.6	0.0	0.0	16.8	0.0	0.0	0.0			
Lane LOS	C	C	C			C						
Approach Delay (s)	23.9	20.3	0.4			0.0						
Approach LOS	C	C										
Intersection Summary												
Average Delay			1.2									
Intersection Capacity Utilization			58.8%	ICU Level of Service					B			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

													
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Volume (veh/h)	0	0	1	0	0	141	0	1625	81	0	1834	0	
Future Volume (Veh/h)	0	0	1	0	0	141	0	1625	81	0	1834	0	
Sign Control	Stop			Stop			Free			Free			
Grade	0%			0%			0%			0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
Hourly flow rate (vph)	0	0	1	0	0	153	0	1766	88	0	1993	0	
Pedestrians													
Lane Width (ft)													
Walking Speed (ft/s)													
Percent Blockage													
Right turn flare (veh)													
Median type							Raised		Raised				
Median storage veh							1		1				
Upstream signal (ft)													
pX, platoon unblocked													
vC, conflicting volume	2876	3759	996	2764	3759	883	1993						1766
vC1, stage 1 conf vol	1993	1993		1766	1766								
vC2, stage 2 conf vol	883	1766		998	1993								
vCu, unblocked vol	2876	3759	996	2764	3759	883	1993						1766
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1						4.1
tC, 2 stage (s)	6.5	5.5		6.5	5.5								
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2						2.2
p0 queue free %	100	100	100	100	100	47	100						100
cM capacity (veh/h)	41	56	243	62	56	289	285						349
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2						
Volume Total	1	153	883	883	88	1329	664						
Volume Left	0	0	0	0	0	0	0						
Volume Right	1	153	0	0	88	0	0						
cSH	243	289	1700	1700	1700	1700	1700						
Volume to Capacity	0.00	0.53	0.52	0.52	0.05	0.78	0.39						
Queue Length 95th (ft)	0	72	0	0	0	0	0						
Control Delay (s)	19.9	30.7	0.0	0.0	0.0	0.0	0.0						
Lane LOS	C	D											
Approach Delay (s)	19.9	30.7	0.0					0.0					
Approach LOS	C	D											
Intersection Summary													
Average Delay			1.2										
Intersection Capacity Utilization			60.7%	ICU Level of Service				B					
Analysis Period (min)			15										

HCM Unsignalized Intersection Capacity Analysis

76: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	53	0	1842	1706	0
Future Volume (Veh/h)	0	0	53	0	1842	1706	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2002	1854	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage (veh)					1	1	
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	2855	927	0	1854			
vC1, stage 1 conf vol	1854						
vC2, stage 2 conf vol	1001						
vCu, unblocked vol	2855	927	0	1854			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	79	270	0	323			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1001	1001	0	927	927		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.59	0.59	0.00	0.55	0.55		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			54.3%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

84: R 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2013	0	17	0	1816
Future Volume (Veh/h)	0	0	2013	0	17	0	1816
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2188	0	0	0	1974
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)			777				
pX, platoon unblocked	0.42	0.42			0.00	0.42	
vC, conflicting volume	3175	1094			0	2188	
vC1, stage 1 conf vol	2188						
vC2, stage 2 conf vol	987						
vCu, unblocked vol	3418	0			0	1061	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	82	454			0	273	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1094	1094	987	987	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.64	0.64	0.58	0.58	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			74.8%		ICU Level of Service		D
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

86: R 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	0	0	2585	1999	0
Future Volume (Veh/h)	0	0	0	0	2585	1999	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2810	2173	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh					1	1	
Upstream signal (ft)					646		
pX, platoon unblocked	0.29		0.00				
vC, conflicting volume	3578	1086	0	2173			
vC1, stage 1 conf vol	2173						
vC2, stage 2 conf vol	1405						
vCu, unblocked vol	5020	1086	0	2173			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	53	211	0	242			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1405	1405	0	1086	1086		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.83	0.83	0.00	0.64	0.64		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			74.8%		ICU Level of Service		D
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

88: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2274	0	0	0	1732
Future Volume (Veh/h)	0	0	2274	0	0	0	1732
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2472	0	0	0	1883
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh)			1				1
Upstream signal (ft)							663
pX, platoon unblocked	0.76				0.00		
vC, conflicting volume	3414	1236			0	2472	
vC1, stage 1 conf vol	2472						
vC2, stage 2 conf vol	942						
vCu, unblocked vol	3545	1236			0	2472	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	42	168			0	184	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1236	1236	942	942	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.73	0.73	0.55	0.55	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			83.1%		ICU Level of Service		E
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

92: SR 74

10/17/2018

							
Movement	NWL	NWR	NET	NER	SWU	SWL	SWT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2501	0	26	0	1860
Future Volume (Veh/h)	0	0	2501	0	26	0	1860
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2718	0	0	0	2022
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)			1006				1089
pX, platoon unblocked	0.30	0.14			0.00	0.14	
vC, conflicting volume	3729	1359			0	2718	
vC1, stage 1 conf vol	2718						
vC2, stage 2 conf vol	1011						
vCu, unblocked vol	760	0			0	1040	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	33	156			0	96	
Direction, Lane #	NE 1	NE 2	SW 1	SW 2	SW 3		
Volume Total	1359	1359	1011	1011	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.80	0.80	0.59	0.59	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			72.5%		ICU Level of Service		C
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

102: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	4	0	1773	1503	0
Future Volume (Veh/h)	0	0	4	0	1773	1503	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	1927	1634	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage (veh)					1	1	
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	2598	817	0	1634			
vC1, stage 1 conf vol	1634						
vC2, stage 2 conf vol	964						
vCu, unblocked vol	2598	817	0	1634			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	100	320	0	393			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	964	964	0	817	817		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.57	0.57	0.00	0.48	0.48		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			52.3%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

104: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	1797	0	17	0	1603
Future Volume (Veh/h)	0	0	1797	0	17	0	1603
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1953	0	0	0	1742
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2824	976			0	1953	
vC1, stage 1 conf vol	1953						
vC2, stage 2 conf vol	871						
vCu, unblocked vol	2824	976			0	1953	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	74	250			0	295	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	976	976	871	871	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.57	0.57	0.51	0.51	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			54.8%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

116: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	1737	0	121	0	1612
Future Volume (Veh/h)	0	0	1737	0	121	0	1612
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1888	0	0	0	1752
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)							588
pX, platoon unblocked	0.67				0.00		
vC, conflicting volume	2764	944			0	1888	
vC1, stage 1 conf vol	1888						
vC2, stage 2 conf vol	876						
vCu, unblocked vol	2648	944			0	1888	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	86	263			0	313	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	944	944	876	876	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.56	0.56	0.52	0.52	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			51.3%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

118: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations					 	 	
Traffic Volume (veh/h)	0	0	203	0	1714	1489	0
Future Volume (Veh/h)	0	0	203	0	1714	1489	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	1863	1618	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh					1	1	
Upstream signal (ft)					630		
pX, platoon unblocked	0.69		0.00				
vC, conflicting volume	2550	809	0	1618			
vC1, stage 1 conf vol	1618						
vC2, stage 2 conf vol	932						
vCu, unblocked vol	2351	809	0	1618			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	116	323	0	399			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	932	932	0	809	809		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.55	0.55	0.00	0.48	0.48		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			51.3%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

120:

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	1480	0	104	0	1555
Future Volume (Veh/h)	0	0	1480	0	104	0	1555
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1609	0	0	0	1690
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh)			1				1
Upstream signal (ft)							722
pX, platoon unblocked	0.74				0.00		
vC, conflicting volume	2454	804			0	1609	
vC1, stage 1 conf vol	1609						
vC2, stage 2 conf vol	845						
vCu, unblocked vol	2267	804			0	1609	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	118	326			0	402	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	804	804	845	845	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.47	0.47	0.50	0.50	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			48.2%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

122:

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	30	0	1449	1623	0
Future Volume (Veh/h)	0	0	30	0	1449	1623	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	1575	1764	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh					1	1	
Upstream signal (ft)					619		
pX, platoon unblocked	0.88		0.00				
vC, conflicting volume	2552	882	0	1764			
vC1, stage 1 conf vol	1764						
vC2, stage 2 conf vol	788						
vCu, unblocked vol	2488	882	0	1764			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	96	289	0	350			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	788	788	0	882	882		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.46	0.46	0.00	0.52	0.52		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			48.2%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

124: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	1588	0	1	0	1823
Future Volume (Veh/h)	0	0	1588	0	1	0	1823
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1726	0	0	0	1982
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage (veh)			1				1
Upstream signal (ft)							576
pX, platoon unblocked	0.71				0.00		
vC, conflicting volume	2717	863			0	1726	
vC1, stage 1 conf vol	1726						
vC2, stage 2 conf vol	991						
vCu, unblocked vol	2602	863			0	1726	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	100	298			0	362	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	863	863	991	991	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.51	0.51	0.58	0.58	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			53.7%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

126: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations					 	 	
Traffic Volume (veh/h)	0	0	66	0	1700	1768	0
Future Volume (Veh/h)	0	0	66	0	1700	1768	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	1848	1922	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh					1	1	
Upstream signal (ft)						1037	
pX, platoon unblocked	0.70	0.70	0.00	0.70			
vC, conflicting volume	2846	961	0	1922			
vC1, stage 1 conf vol	1922						
vC2, stage 2 conf vol	924						
vCu, unblocked vol	2781	94	0	1464			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	88	663	0	321			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	924	924	0	961	961		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.54	0.54	0.00	0.57	0.57		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			53.7%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

128: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	1670	0	36	0	1799
Future Volume (Veh/h)	0	0	1670	0	36	0	1799
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1815	0	0	0	1955
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				Raised
Median storage (veh)							1
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	2792	908			0	1815	
vC1, stage 1 conf vol	1815						
vC2, stage 2 conf vol	978						
vCu, unblocked vol	2792	908			0	1815	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	83	278			0	334	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	908	908	978	978	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.53	0.53	0.57	0.57	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			53.1%		ICU Level of Service		A
Analysis Period (min)			15				

HCM Signalized Intersection Capacity Analysis

1: SR 74 & 29 Ramp

10/17/2018



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	68	417	342	580	377	54
Future Volume (vph)	68	417	342	580	377	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	0.85	1.00	1.00	0.98	
Flt Protected	0.95	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1770	1583	1770	1863	1831	
Flt Permitted	0.95	1.00	0.23	1.00	1.00	
Satd. Flow (perm)	1770	1583	422	1863	1831	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	74	453	372	630	410	59
RTOR Reduction (vph)	0	372	0	0	8	0
Lane Group Flow (vph)	74	81	372	630	461	0
Turn Type	Prot	Perm	pm+pt	NA	NA	
Protected Phases	4		5	2	6	
Permitted Phases		4	2			
Actuated Green, G (s)	8.8	8.8	30.5	30.5	16.4	
Effective Green, g (s)	8.8	8.8	30.5	30.5	16.4	
Actuated g/C Ratio	0.18	0.18	0.62	0.62	0.33	
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	315	282	509	1152	609	
v/s Ratio Prot	0.04		c0.13	0.34	0.25	
v/s Ratio Perm		c0.05	c0.32			
v/c Ratio	0.23	0.29	0.73	0.55	0.76	
Uniform Delay, d1	17.4	17.5	6.8	5.4	14.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.4	0.6	5.4	0.5	5.4	
Delay (s)	17.7	18.1	12.2	6.0	20.0	
Level of Service	B	B	B	A	C	
Approach Delay (s)	18.0			8.3	20.0	
Approach LOS	B			A	C	

Intersection Summary

HCM 2000 Control Delay	13.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	49.3	Sum of lost time (s)	15.0
Intersection Capacity Utilization	58.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

2: SR 74 & Bohannon Road/Broad Street Ramp

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (vph)	57	238	11	99	854	763	31
Future Volume (vph)	57	238	11	99	854	763	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0
Lane Util. Factor	1.00	1.00		1.00	0.95	0.95	1.00
Frt	1.00	0.85		1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583		1770	3539	3539	1583
Flt Permitted	0.95	1.00		0.22	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583		411	3539	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	62	259	12	108	928	829	34
RTOR Reduction (vph)	0	218	0	0	0	0	20
Lane Group Flow (vph)	62	41	0	120	928	829	14
Turn Type	Prot	Perm	pm+pt	pm+pt	NA	NA	Perm
Protected Phases	4		5	5	2	6	
Permitted Phases		4	2	2			6
Actuated Green, G (s)	7.5	7.5		29.4	29.4	19.8	19.8
Effective Green, g (s)	7.5	7.5		29.4	29.4	19.8	19.8
Actuated g/C Ratio	0.16	0.16		0.63	0.63	0.42	0.42
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	283	253		390	2218	1494	668
v/s Ratio Prot	c0.04			0.03	c0.26	c0.23	
v/s Ratio Perm		0.03		0.16			0.01
v/c Ratio	0.22	0.16		0.31	0.42	0.55	0.02
Uniform Delay, d1	17.2	17.0		4.5	4.4	10.2	7.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	0.3		0.5	0.1	0.4	0.0
Delay (s)	17.5	17.3		4.9	4.6	10.7	7.9
Level of Service	B	B		A	A	B	A
Approach Delay (s)	17.3				4.6	10.6	
Approach LOS	B				A	B	

Intersection Summary

HCM 2000 Control Delay	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	46.9	Sum of lost time (s)	15.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

3: SR 74 & Senoia Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	339	16	10	831	357	21	29	1040
Future Volume (vph)	339	16	10	831	357	21	29	1040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0		5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00		1.00	0.95	1.00		1.00	0.95
Frt	0.99		1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95		0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1767		1770	3539	1583		1770	3539
Flt Permitted	0.95		0.17	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1767		325	3539	1583		385	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	368	17	11	903	388	23	32	1130
RTOR Reduction (vph)	3	0	0	0	229	0	0	0
Lane Group Flow (vph)	382	0	11	903	159	0	55	1130
Turn Type	Prot		pm+pt	NA	Perm	pm+pt	pm+pt	NA
Protected Phases	6		3	8		7	7	4
Permitted Phases			8		8	4	4	
Actuated Green, G (s)	15.3		23.8	22.9	22.9		27.2	24.6
Effective Green, g (s)	15.3		23.8	22.9	22.9		27.2	24.6
Actuated g/C Ratio	0.27		0.43	0.41	0.41		0.49	0.44
Clearance Time (s)	5.0		5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	484		161	1452	649		252	1560
v/s Ratio Prot	c0.22		0.00	0.26			c0.01	c0.32
v/s Ratio Perm			0.03		0.10		0.10	
v/c Ratio	0.79		0.07	0.62	0.25		0.22	0.72
Uniform Delay, d1	18.8		9.9	13.0	10.8		8.3	12.8
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	8.4		0.2	0.8	0.2		0.4	1.7
Delay (s)	27.1		10.1	13.9	11.0		8.7	14.5
Level of Service	C		B	B	B		A	B
Approach Delay (s)	27.1			13.0				14.2
Approach LOS	C			B				B
Intersection Summary								
HCM 2000 Control Delay			15.4		HCM 2000 Level of Service			B
HCM 2000 Volume to Capacity ratio			0.75					
Actuated Cycle Length (s)			55.8		Sum of lost time (s)			15.0
Intersection Capacity Utilization			65.2%		ICU Level of Service			C
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

4: SR 74 & 85 On Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			 			 	 	 			 	
Traffic Volume (vph)	0	0	2576	0	0	408	310	874	0	0	1009	417
Future Volume (vph)	0	0	2576	0	0	408	310	874	0	0	1009	417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			5.0	5.0	5.0			5.0	4.0
Lane Util. Factor			*0.95			1.00	0.97	0.95			0.95	1.00
Frt			0.85			0.86	1.00	1.00			1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)			3008			1611	3433	3539			3539	1583
Flt Permitted			1.00			1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)			3008			1611	3433	3539			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2800	0	0	443	337	950	0	0	1097	453
RTOR Reduction (vph)	0	0	0	0	0	223	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2800	0	0	220	337	950	0	0	1097	453
Turn Type			Free			Perm	Prot	NA			NA	Free
Protected Phases							5	2			6	
Permitted Phases			Free			8						Free
Actuated Green, G (s)			60.0			18.0	6.0	60.0			21.0	60.0
Effective Green, g (s)			60.0			18.0	6.0	60.0			21.0	60.0
Actuated g/C Ratio			1.00			0.30	0.10	1.00			0.35	1.00
Clearance Time (s)						5.0	5.0	5.0			5.0	
Vehicle Extension (s)						3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)			3008			483	343	3539			1238	1583
v/s Ratio Prot							0.10	0.27			0.31	
v/s Ratio Perm			c0.93			0.14						0.29
v/c Ratio			0.93			0.46	0.98	0.27			0.89	0.29
Uniform Delay, d1			0.0			17.0	26.9	0.0			18.4	0.0
Progression Factor			1.00			1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2			6.6			0.7	43.6	0.2			9.5	0.5
Delay (s)			6.6			17.7	70.6	0.2			27.9	0.5
Level of Service			A			B	E	A			C	A
Approach Delay (s)		6.6			17.7			18.6			19.9	
Approach LOS		A			B			B			B	
Intersection Summary												
HCM 2000 Control Delay			13.4			HCM 2000 Level of Service					B	
HCM 2000 Volume to Capacity ratio			1.24									
Actuated Cycle Length (s)			60.0			Sum of lost time (s)				15.0		
Intersection Capacity Utilization			57.8%			ICU Level of Service				B		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

5: SR 74 & 85 Off Ramp

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 	 	 	  	
Traffic Volume (vph)	0	0	344	0	0	186	0	959	2181	530	3880	0
Future Volume (vph)	0	0	344	0	0	186	0	959	2181	530	3880	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0			5.0		5.0	5.0	5.0	5.0	
Lane Util. Factor			1.00			1.00		0.95	0.88	0.97	0.86	
Frt			0.86			0.86		1.00	0.85	1.00	1.00	
Flt Protected			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)			1611			1611		3539	2787	3433	6408	
Flt Permitted			1.00			1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)			1611			1611		3539	2787	3433	6408	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	374	0	0	202	0	1042	2371	576	4217	0
RTOR Reduction (vph)	0	0	0	0	0	168	0	0	4	0	0	0
Lane Group Flow (vph)	0	0	374	0	0	34	0	1042	2367	576	4217	0
Turn Type			Free			Perm		NA	Perm	Prot	NA	
Protected Phases								2		1	6	
Permitted Phases			Free			8			2			
Actuated Green, G (s)			130.0			22.0		100.0	100.0	20.0	98.0	
Effective Green, g (s)			130.0			22.0		100.0	100.0	20.0	98.0	
Actuated g/C Ratio			1.00			0.17		0.77	0.77	0.15	0.75	
Clearance Time (s)						5.0		5.0	5.0	5.0	5.0	
Vehicle Extension (s)						3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)			1611			272		2722	2143	528	4830	
v/s Ratio Prot								0.29		c0.17	0.66	
v/s Ratio Perm			0.23			0.02			c0.85			
v/c Ratio			0.23			0.13		0.38	1.10	1.09	0.87	
Uniform Delay, d1			0.0			45.8		4.9	15.0	55.0	11.5	
Progression Factor			1.00			1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2			0.3			0.2		0.4	54.7	66.2	2.5	
Delay (s)			0.3			46.0		5.3	69.7	121.2	14.0	
Level of Service			A			D		A	E	F	B	
Approach Delay (s)		0.3			46.0			50.0			26.9	
Approach LOS		A			D			D			C	
Intersection Summary												
HCM 2000 Control Delay			35.2			HCM 2000 Level of Service			D			
HCM 2000 Volume to Capacity ratio			1.10									
Actuated Cycle Length (s)			130.0			Sum of lost time (s)			10.0			
Intersection Capacity Utilization			99.8%			ICU Level of Service			F			
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

6: SR 74 & Oakley Industrial Boulevard

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	241	148	68	339	127	497	93	2224	187	453	2809	179
Future Volume (vph)	241	148	68	339	127	497	93	2224	187	453	2809	179
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lane Util. Factor	0.97	1.00		0.97	1.00	1.00	1.00	0.86		0.97	0.86	1.00
Frt	1.00	0.95		1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	3433	1775		3433	1863	1583	1770	6333		3433	6408	1583
Flt Permitted	0.62	1.00		0.36	1.00	1.00	0.11	1.00		0.95	1.00	1.00
Satd. Flow (perm)	2241	1775		1313	1863	1583	206	6333		3433	6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	262	161	74	368	138	540	101	2417	203	492	3053	195
RTOR Reduction (vph)	0	19	0	0	0	59	0	14	0	0	0	75
Lane Group Flow (vph)	262	216	0	368	138	481	101	2606	0	492	3053	120
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pt+ov
Protected Phases	7	4		3	8	1	5	2		1	6	6 7
Permitted Phases	4			8		8	2					
Actuated Green, G (s)	19.7	14.7		19.7	14.7	26.7	40.0	36.1		12.0	44.2	54.2
Effective Green, g (s)	19.7	14.7		19.7	14.7	26.7	40.0	36.1		12.0	44.2	54.2
Actuated g/C Ratio	0.22	0.17		0.22	0.17	0.30	0.46	0.41		0.14	0.50	0.62
Clearance Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	570	297		415	311	571	163	2603		469	3225	977
v/s Ratio Prot	0.03	0.12		c0.05	0.07	c0.11	0.03	0.41		c0.14	c0.48	0.08
v/s Ratio Perm	0.08			0.15		0.19	0.25					
v/c Ratio	0.46	0.73		0.89	0.44	0.84	0.62	1.00		1.05	0.95	0.12
Uniform Delay, d1	28.7	34.6		32.3	32.9	28.6	19.2	25.8		37.9	20.7	7.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	0.6	8.6		19.8	1.0	10.9	6.8	17.9		55.0	7.5	0.1
Delay (s)	29.3	43.2		52.1	33.9	39.4	26.0	43.7		92.9	28.2	7.0
Level of Service	C	D		D	C	D	C	D		F	C	A
Approach Delay (s)		35.9			43.1			43.1			35.6	
Approach LOS		D			D			D			D	
Intersection Summary												
HCM 2000 Control Delay			39.2			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.01									
Actuated Cycle Length (s)			87.8			Sum of lost time (s)				20.0		
Intersection Capacity Utilization			86.5%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018

												
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations										  		
Traffic Volume (vph)	5	174	33	39	98	23	114	21	109	2209	68	13
Future Volume (vph)	5	174	33	39	98	23	114	21	109	2209	68	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Lane Util. Factor		1.00	1.00		1.00	1.00	1.00		1.00	0.91	1.00	
Frt		1.00	0.92		1.00	1.00	0.85		1.00	1.00	0.85	
Flt Protected		0.95	1.00		0.95	1.00	1.00		0.95	1.00	1.00	
Satd. Flow (prot)		1770	1712		1770	1863	1583		1770	5085	1583	
Flt Permitted		0.74	1.00		0.71	1.00	1.00		0.07	1.00	1.00	
Satd. Flow (perm)		1380	1712		1316	1863	1583		138	5085	1583	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	189	36	42	107	25	124	23	118	2401	74	14
RTOR Reduction (vph)	0	0	35	0	0	0	79	0	0	0	29	0
Lane Group Flow (vph)	0	194	43	0	107	25	45	0	141	2401	45	0
Turn Type	Perm	Perm	NA		Perm	NA	custom	custom	pm+pt	NA	Perm	custom
Protected Phases			4			8			5	2		
Permitted Phases	4	4			8		1	5	2		2	1
Actuated Green, G (s)		14.4	14.4		14.4	14.4	6.0		59.0	54.0	54.0	
Effective Green, g (s)		14.4	14.4		14.4	14.4	6.0		59.0	54.0	54.0	
Actuated g/C Ratio		0.16	0.16		0.16	0.16	0.07		0.66	0.60	0.60	
Clearance Time (s)		5.0	5.0		5.0	5.0	5.0		5.0	5.0	5.0	
Vehicle Extension (s)		3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	
Lane Grp Cap (vph)		222	275		211	300	106		182	3071	956	
v/s Ratio Prot			0.02			0.01			0.04	0.47		
v/s Ratio Perm		c0.14			0.08		0.03		0.47		0.03	
v/c Ratio		0.87	0.16		0.51	0.08	0.42		0.77	0.78	0.05	
Uniform Delay, d1		36.6	32.3		34.3	31.9	40.0		21.2	13.3	7.2	
Progression Factor		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	
Incremental Delay, d2		29.3	0.3		1.9	0.1	2.7		18.4	2.1	0.1	
Delay (s)		65.9	32.5		36.2	32.0	42.7		39.5	15.3	7.3	
Level of Service		E	C		D	C	D		D	B	A	
Approach Delay (s)			56.4			38.9				16.4		
Approach LOS			E			D				B		
Intersection Summary												
HCM 2000 Control Delay			26.4									
HCM 2000 Volume to Capacity ratio			0.97									
Actuated Cycle Length (s)			89.4							15.0		
Intersection Capacity Utilization			91.6%							F		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

7: SR 74 & Harris Road

10/17/2018



Movement	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	130	2863	194
Future Volume (vph)	130	2863	194
Ideal Flow (vphpl)	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0
Lane Util. Factor	1.00	0.91	1.00
Frt	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00
Satd. Flow (prot)	1770	5085	1583
Flt Permitted	0.07	1.00	1.00
Satd. Flow (perm)	135	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92
Adj. Flow (vph)	141	3112	211
RTOR Reduction (vph)	0	0	80
Lane Group Flow (vph)	155	3112	131
Turn Type	pm+pt	NA	Perm
Protected Phases	1	6	
Permitted Phases	6		6
Actuated Green, G (s)	61.0	55.0	55.0
Effective Green, g (s)	61.0	55.0	55.0
Actuated g/C Ratio	0.68	0.62	0.62
Clearance Time (s)	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0
Lane Grp Cap (vph)	201	3128	973
v/s Ratio Prot	c0.05	c0.61	
v/s Ratio Perm	0.47		0.08
v/c Ratio	0.77	0.99	0.13
Uniform Delay, d1	17.5	17.1	7.2
Progression Factor	1.00	1.00	1.00
Incremental Delay, d2	16.6	14.9	0.3
Delay (s)	34.1	32.0	7.5
Level of Service	C	C	A
Approach Delay (s)		30.6	
Approach LOS		C	

Intersection Summary

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (vph)	88	70	196	303	60	114	26	41	2121	249	13	266
Future Volume (vph)	88	70	196	303	60	114	26	41	2121	249	13	266
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Lane Util. Factor		1.00	1.00		1.00			1.00	0.95	1.00		1.00
Frt		1.00	0.85		0.97			1.00	1.00	0.85		1.00
Flt Protected		0.97	1.00		0.97			0.95	1.00	1.00		0.95
Satd. Flow (prot)		1812	1583		1747			1770	3539	1583		1770
Flt Permitted		0.70	1.00		0.62			0.05	1.00	1.00		0.05
Satd. Flow (perm)		1298	1583		1110			98	3539	1583		92
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	96	76	213	329	65	124	28	45	2305	271	14	289
RTOR Reduction (vph)	0	0	96	0	8	0	0	0	0	57	0	0
Lane Group Flow (vph)	0	172	117	0	510	0	0	73	2305	214	0	303
Turn Type	Perm	NA	custom	Perm	NA		custom	pm+pt	NA	Perm	custom	pm+pt
Protected Phases		4			8			5	2			1
Permitted Phases	4		5	8			5	2		2	1	6
Actuated Green, G (s)		46.0	6.0		46.0			82.0	76.0	76.0		94.0
Effective Green, g (s)		46.0	6.0		46.0			82.0	76.0	76.0		94.0
Actuated g/C Ratio		0.31	0.04		0.31			0.55	0.51	0.51		0.63
Clearance Time (s)		5.0	5.0		5.0			5.0	5.0	5.0		5.0
Vehicle Extension (s)		3.0	3.0		3.0			3.0	3.0	3.0		3.0
Lane Grp Cap (vph)		398	63		340			120	1793	802		203
v/s Ratio Prot								0.02	0.65			c0.13
v/s Ratio Perm		0.13	0.07		c0.46			0.31		0.14		c0.81
v/c Ratio		0.43	1.86		1.50			0.61	1.29	0.27		1.49
Uniform Delay, d1		41.6	72.0		52.0			34.1	37.0	21.1		52.7
Progression Factor		1.00	1.00		1.00			1.00	1.00	1.00		1.00
Incremental Delay, d2		0.8	440.0		240.4			8.4	132.9	0.8		245.9
Delay (s)		42.3	512.0		292.4			42.5	169.9	21.9		298.6
Level of Service		D	F		F			D	F	C		F
Approach Delay (s)		302.2			292.4				151.2			
Approach LOS		F			F				F			
Intersection Summary												
HCM 2000 Control Delay		215.4			HCM 2000 Level of Service				F			
HCM 2000 Volume to Capacity ratio		1.52										
Actuated Cycle Length (s)		150.0			Sum of lost time (s)			15.0				
Intersection Capacity Utilization		132.5%			ICU Level of Service			H				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

9: SR 74 & Landrum Road/Milam Road

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑	↑
Traffic Volume (vph)	2626	24
Future Volume (vph)	2626	24
Ideal Flow (vphpl)	1900	1900
Total Lost time (s)	5.0	5.0
Lane Util. Factor	0.95	1.00
Frt	1.00	0.85
Flt Protected	1.00	1.00
Satd. Flow (prot)	3539	1583
Flt Permitted	1.00	1.00
Satd. Flow (perm)	3539	1583
Peak-hour factor, PHF	0.92	0.92
Adj. Flow (vph)	2854	26
RTOR Reduction (vph)	0	12
Lane Group Flow (vph)	2854	14
Turn Type	NA	Perm
Protected Phases	6	
Permitted Phases		6
Actuated Green, G (s)	83.0	83.0
Effective Green, g (s)	83.0	83.0
Actuated g/C Ratio	0.55	0.55
Clearance Time (s)	5.0	5.0
Vehicle Extension (s)	3.0	3.0
Lane Grp Cap (vph)	1958	875
v/s Ratio Prot	0.81	
v/s Ratio Perm		0.01
v/c Ratio	1.46	0.02
Uniform Delay, d1	33.5	15.1
Progression Factor	1.00	1.00
Incremental Delay, d2	208.8	0.0
Delay (s)	242.3	15.1
Level of Service	F	B
Approach Delay (s)	245.8	
Approach LOS	F	
Intersection Summary		

HCM Signalized Intersection Capacity Analysis

11: SR 74/R 74 & Laurelmont Drive/Sandy Creek Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 		 	 	
Traffic Volume (vph)	0	0	64	0	0	344	37	2152	73	483	3288	26
Future Volume (vph)	0	0	64	0	0	344	37	2152	73	483	3288	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	3433	3539	1583
Flt Permitted			1.00			1.00	0.03	1.00	1.00	0.03	1.00	1.00
Satd. Flow (perm)			1611			2787	62	3539	1583	124	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	70	0	0	374	40	2339	79	525	3574	28
RTOR Reduction (vph)	0	0	49	0	0	30	0	0	10	0	0	3
Lane Group Flow (vph)	0	0	21	0	0	344	40	2339	69	525	3574	25
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			5.0			20.5	124.5	119.5	119.5	145.0	135.0	135.0
Effective Green, g (s)			5.0			20.5	124.5	119.5	119.5	145.0	135.0	135.0
Actuated g/C Ratio			0.03			0.14	0.83	0.80	0.80	0.97	0.90	0.90
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			53			380	108	2819	1261	572	3185	1424
v/s Ratio Prot							0.01	0.66		c0.13	c1.01	
v/s Ratio Perm			0.01			0.12	0.29		0.04	0.76		0.02
v/c Ratio			0.39			0.90	0.37	0.83	0.05	0.92	1.12	0.02
Uniform Delay, d1			71.0			63.8	67.7	9.1	3.2	55.2	7.5	0.8
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			4.7			24.2	2.1	3.0	0.1	19.6	59.7	0.0
Delay (s)			75.7			87.9	69.9	12.1	3.3	74.9	67.2	0.8
Level of Service			E			F	E	B	A	E	E	A
Approach Delay (s)		75.7			87.9			12.8			67.8	
Approach LOS		E			F			B			E	
Intersection Summary												
HCM 2000 Control Delay			49.7			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.13									
Actuated Cycle Length (s)			150.0			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			103.4%			ICU Level of Service				G		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

12: SR 74 & Peggy Lane/Jenkins Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 			 	
Traffic Volume (vph)	0	0	55	0	0	373	5	2051	248	124	3018	8
Future Volume (vph)	0	0	55	0	0	373	5	2051	248	124	3018	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.03	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)			1611			2787	65	3539	1583	71	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	60	0	0	405	5	2229	270	135	3280	9
RTOR Reduction (vph)	0	0	50	0	0	28	0	0	40	0	0	1
Lane Group Flow (vph)	0	0	10	0	0	377	5	2229	230	135	3280	8
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			3.9			24.3	118.6	114.7	114.7	144.0	135.1	135.1
Effective Green, g (s)			3.9			24.3	118.6	114.7	114.7	144.0	135.1	135.1
Actuated g/C Ratio			0.03			0.16	0.80	0.77	0.77	0.97	0.91	0.91
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			42			454	96	2724	1218	345	3208	1435
v/s Ratio Prot							0.00	0.63		0.06	c0.93	
v/s Ratio Perm			0.01			c0.14	0.04		0.15	0.32		0.01
v/c Ratio			0.25			0.83	0.05	0.82	0.19	0.39	1.02	0.01
Uniform Delay, d1			71.1			60.4	67.0	10.7	4.6	39.5	7.0	0.7
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			3.0			12.2	0.2	2.9	0.3	0.7	21.9	0.0
Delay (s)			74.2			72.6	67.2	13.5	5.0	40.2	28.8	0.7
Level of Service			E			E	E	B	A	D	C	A
Approach Delay (s)		74.2			72.6			12.7			29.2	
Approach LOS		E			E			B			C	
Intersection Summary												
HCM 2000 Control Delay			25.9			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			1.03									
Actuated Cycle Length (s)			149.0			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			95.9%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

13: SR 74 & Carriage Oaks Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			TT			TT	T	TT	T	T	TT	T
Traffic Volume (vph)	0	0	409	0	0	428	163	2072	199	238	2750	306
Future Volume (vph)	0	0	409	0	0	428	163	2072	199	238	2750	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			0.88			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.85			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			2787			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.05	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)			2787			2787	84	3539	1583	80	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	445	0	0	465	177	2252	216	259	2989	333
RTOR Reduction (vph)	0	0	57	0	0	24	0	0	56	0	0	47
Lane Group Flow (vph)	0	0	388	0	0	441	177	2252	160	259	2989	286
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			14.0			21.3	102.7	88.7	88.7	115.0	96.0	96.0
Effective Green, g (s)			14.0			21.3	102.7	88.7	88.7	115.0	96.0	96.0
Actuated g/C Ratio			0.12			0.18	0.86	0.74	0.74	0.96	0.80	0.80
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			325			494	268	2615	1170	376	2831	1266
v/s Ratio Prot							0.08	0.64		0.12	c0.84	
v/s Ratio Perm			c0.14			0.16	0.49		0.10	0.54		0.18
v/c Ratio			1.20			0.89	0.66	0.86	0.14	0.69	1.06	0.23
Uniform Delay, d1			53.0			48.2	47.0	11.2	4.5	38.9	12.0	2.9
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			114.0			18.2	6.0	4.0	0.2	5.2	34.0	0.4
Delay (s)			167.0			66.4	52.9	15.2	4.8	44.1	46.0	3.3
Level of Service			F			E	D	B	A	D	D	A
Approach Delay (s)		167.0			66.4			16.9			41.9	
Approach LOS		F			E			B			D	
Intersection Summary												
HCM 2000 Control Delay			42.0			HCM 2000 Level of Service				D		
HCM 2000 Volume to Capacity ratio			1.07									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			98.7%			ICU Level of Service				F		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

14: SR 74 & Palmetto Road/Tyrone Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	302	393	0	386	194	0	2070	282	0	2520	292
Future Volume (vph)	0	302	393	0	386	194	0	2070	282	0	2520	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Lane Util. Factor		1.00	1.00		1.00	1.00		0.95	1.00		0.95	1.00
Frt		1.00	0.85		1.00	0.85		1.00	0.85		1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (prot)		1863	1583		1863	1583		3539	1583		3539	1583
Flt Permitted		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Satd. Flow (perm)		1863	1583		1863	1583		3539	1583		3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	328	427	0	420	211	0	2250	307	0	2739	317
RTOR Reduction (vph)	0	0	14	0	0	14	0	0	44	0	0	25
Lane Group Flow (vph)	0	328	413	0	420	197	0	2250	263	0	2739	292
Turn Type		NA	Perm		NA	Perm		NA	Perm		NA	Perm
Protected Phases		4			8			2			6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)		26.0	26.0		26.0	26.0		84.0	84.0		84.0	84.0
Effective Green, g (s)		26.0	26.0		26.0	26.0		84.0	84.0		84.0	84.0
Actuated g/C Ratio		0.22	0.22		0.22	0.22		0.70	0.70		0.70	0.70
Clearance Time (s)		5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		403	342		403	342		2477	1108		2477	1108
v/s Ratio Prot		0.18			0.23			0.64			c0.77	
v/s Ratio Perm			c0.26			0.12			0.17			0.18
v/c Ratio		0.81	1.21		1.04	0.58		0.91	0.24		1.11	0.26
Uniform Delay, d1		44.7	47.0		47.0	42.1		14.8	6.5		18.0	6.6
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2		11.9	117.6		56.2	2.3		5.4	0.1		54.3	0.1
Delay (s)		56.6	164.6		103.2	44.4		20.2	6.6		72.3	6.8
Level of Service		E	F		F	D		C	A		E	A
Approach Delay (s)		117.7			83.6			18.6			65.5	
Approach LOS		F			F			B			E	
Intersection Summary												
HCM 2000 Control Delay		55.6			HCM 2000 Level of Service			E				
HCM 2000 Volume to Capacity ratio		1.13										
Actuated Cycle Length (s)		120.0			Sum of lost time (s)			10.0				
Intersection Capacity Utilization		102.3%			ICU Level of Service			G				
Analysis Period (min)		15										
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

16: SR 74 & Dogwood Trail

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	268	0	0	330	29	2086	237	91	2390	375
Future Volume (vph)	0	0	268	0	0	330	29	2086	237	91	2390	375
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			0.88			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.85			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			2787			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.06	1.00	1.00	0.05	1.00	1.00
Satd. Flow (perm)			2787			2787	103	3539	1583	102	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	291	0	0	359	32	2267	258	99	2598	408
RTOR Reduction (vph)	0	0	19	0	0	22	0	0	41	0	0	61
Lane Group Flow (vph)	0	0	272	0	0	337	32	2267	217	99	2598	347
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			14.4			15.8	86.4	72.0	72.0	89.2	73.4	73.4
Effective Green, g (s)			14.4			15.8	86.4	72.0	72.0	89.2	73.4	73.4
Actuated g/C Ratio			0.15			0.16	0.88	0.74	0.74	0.91	0.75	0.75
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			410			450	336	2605	1165	362	2656	1188
v/s Ratio Prot							0.01	0.64		0.04	c0.73	
v/s Ratio Perm			0.10			c0.12	0.07		0.14	0.21		0.22
v/c Ratio			0.66			0.75	0.10	0.87	0.19	0.27	0.98	0.29
Uniform Delay, d1			39.4			39.1	32.8	9.5	3.9	17.8	11.4	3.9
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			4.0			6.7	0.1	4.3	0.4	0.4	13.0	0.6
Delay (s)			43.4			45.8	32.9	13.8	4.3	18.3	24.5	4.5
Level of Service			D			D	C	B	A	B	C	A
Approach Delay (s)		43.4			45.8			13.1			21.7	
Approach LOS		D			D			B			C	
Intersection Summary												
HCM 2000 Control Delay			20.6			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.95									
Actuated Cycle Length (s)			97.8			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			83.8%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

17: SR 74 & Crabapple Lane/North Peachtree Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations			TT			TT	T	TT	T	TT	TT	T
Traffic Volume (vph)	0	0	254	0	0	807	33	1488	393	877	2051	227
Future Volume (vph)	0	0	254	0	0	807	33	1488	393	877	2051	227
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			0.88			0.88	1.00	0.95	1.00	0.97	0.95	1.00
Frt			0.85			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			2787			2787	1770	3539	1583	3433	3539	1583
Flt Permitted			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)			2787			2787	1770	3539	1583	3433	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	276	0	0	877	36	1617	427	953	2229	247
RTOR Reduction (vph)	0	0	57	0	0	21	0	0	28	0	0	36
Lane Group Flow (vph)	0	0	219	0	0	856	36	1617	399	953	2229	211
Turn Type			Perm			Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1			2			6
Actuated Green, G (s)			13.6			41.8	13.6	66.1	66.1	41.8	94.3	94.3
Effective Green, g (s)			13.6			41.8	13.6	66.1	66.1	41.8	94.3	94.3
Actuated g/C Ratio			0.12			0.35	0.12	0.56	0.56	0.35	0.80	0.80
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			321			988	204	1984	887	1217	2830	1266
v/s Ratio Prot							0.02	0.46		0.28	c0.63	
v/s Ratio Perm			0.08			c0.31			0.25			0.13
v/c Ratio			0.68			0.87	0.18	0.82	0.45	0.78	0.79	0.17
Uniform Delay, d1			50.1			35.4	47.1	21.0	15.2	34.0	6.4	2.7
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2			5.9			8.1	0.4	3.8	1.6	3.4	2.3	0.3
Delay (s)			56.0			43.5	47.5	24.8	16.9	37.4	8.7	3.0
Level of Service			E			D	D	C	B	D	A	A
Approach Delay (s)		56.0			43.5			23.5			16.2	
Approach LOS		E			D			C			B	
Intersection Summary												
HCM 2000 Control Delay			23.8			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.84									
Actuated Cycle Length (s)			117.9			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			77.7%			ICU Level of Service				D		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

18: SR 74 & Ardenlee Parkway/Georgian Park

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 			 	
Traffic Volume (vph)	0	0	107	0	0	766	34	1757	517	93	2434	95
Future Volume (vph)	0	0	107	0	0	766	34	1757	517	93	2434	95
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.05	1.00	1.00	0.05	1.00	1.00
Satd. Flow (perm)			1611			2787	102	3539	1583	95	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	116	0	0	833	37	1910	562	101	2646	103
RTOR Reduction (vph)	0	0	60	0	0	17	0	0	155	0	0	15
Lane Group Flow (vph)	0	0	56	0	0	816	37	1910	407	101	2646	88
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			7.5			36.3	80.7	73.2	73.2	114.5	102.0	102.0
Effective Green, g (s)			7.5			36.3	80.7	73.2	73.2	114.5	102.0	102.0
Actuated g/C Ratio			0.06			0.30	0.68	0.61	0.61	0.96	0.85	0.85
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			101			846	173	2167	969	599	3020	1351
v/s Ratio Prot							0.01	0.54		0.05	c0.75	
v/s Ratio Perm			0.03			c0.29	0.13		0.26	0.11		0.06
v/c Ratio			0.55			0.96	0.21	0.88	0.42	0.17	0.88	0.07
Uniform Delay, d1			54.4			41.0	23.0	19.5	12.1	19.8	5.1	1.4
Progression Factor			1.00			1.00	1.00	1.00	0.99	1.00	1.00	1.00
Incremental Delay, d2			6.5			22.4	0.6	5.6	1.3	0.1	3.9	0.1
Delay (s)			60.8			63.4	23.6	25.0	13.3	20.0	9.0	1.4
Level of Service			E			E	C	C	B	B	A	A
Approach Delay (s)		60.8			63.4			22.3			9.1	
Approach LOS		E			E			C			A	
Intersection Summary												
HCM 2000 Control Delay			22.5			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			119.5			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			83.7%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

19: Kedron Drive & SR 74

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations						 		 			 	
Traffic Volume (vph)	0	0	111	0	0	344	31	2105	165	297	2240	122
Future Volume (vph)	0	0	111	0	0	344	31	2105	165	297	2240	122
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			0.88	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			2787	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.05	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)			1611			2787	84	3539	1583	79	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	121	0	0	374	34	2288	179	323	2435	133
RTOR Reduction (vph)	0	0	60	0	0	22	0	0	33	0	0	20
Lane Group Flow (vph)	0	0	61	0	0	352	34	2288	146	323	2435	113
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			8.1			20.1	97.1	89.0	89.0	114.1	101.0	101.0
Effective Green, g (s)			8.1			20.1	97.1	89.0	89.0	114.1	101.0	101.0
Actuated g/C Ratio			0.07			0.17	0.82	0.75	0.75	0.96	0.85	0.85
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			109			470	183	2644	1182	361	3001	1342
v/s Ratio Prot							0.01	0.65		c0.15	0.69	
v/s Ratio Perm			0.04			0.13	0.14		0.09	c0.70		0.07
v/c Ratio			0.56			0.75	0.19	0.87	0.12	0.89	0.81	0.08
Uniform Delay, d1			53.8			47.1	14.4	10.8	4.2	42.4	4.4	1.5
Progression Factor			1.00			1.00	0.97	0.99	1.00	0.98	0.97	1.08
Incremental Delay, d2			6.5			6.4	0.5	4.1	0.2	23.4	2.5	0.1
Delay (s)			60.3			53.5	14.4	14.7	4.4	65.1	6.8	1.7
Level of Service			E			D	B	B	A	E	A	A
Approach Delay (s)		60.3			53.5			14.0			13.1	
Approach LOS		E			D			B			B	
Intersection Summary												
HCM 2000 Control Delay			17.0			HCM 2000 Level of Service				B		
HCM 2000 Volume to Capacity ratio			0.92									
Actuated Cycle Length (s)			119.1			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			83.0%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

20: SR 74 & Senoia Road/Lexington Pass

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	298	0	0	98	272	2122	51	80	2227	5
Future Volume (vph)	0	0	298	0	0	98	272	2122	51	80	2227	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor			1.00			1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.86			0.86	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected			1.00			1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)			1611			1611	1770	3539	1583	1770	3539	1583
Flt Permitted			1.00			1.00	0.04	1.00	1.00	0.06	1.00	1.00
Satd. Flow (perm)			1611			1611	82	3539	1583	108	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	324	0	0	107	296	2307	55	87	2421	5
RTOR Reduction (vph)	0	0	14	0	0	59	0	0	8	0	0	1
Lane Group Flow (vph)	0	0	310	0	0	48	296	2307	47	87	2421	4
Turn Type			Perm			Perm	pm+pt	NA	Perm	pm+pt	NA	Perm
Protected Phases							5	2		1	6	
Permitted Phases			5			1	2		2	6		6
Actuated Green, G (s)			24.0			9.2	115.0	100.8	100.8	95.2	86.0	86.0
Effective Green, g (s)			24.0			9.2	115.0	100.8	100.8	95.2	86.0	86.0
Actuated g/C Ratio			0.20			0.08	0.96	0.84	0.84	0.79	0.72	0.72
Clearance Time (s)			5.0			5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)			3.0			3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			322			123	416	2972	1329	213	2536	1134
v/s Ratio Prot							0.14	0.65		0.03	c0.68	
v/s Ratio Perm			c0.19			0.03	0.54		0.03	0.29		0.00
v/c Ratio			0.96			0.39	0.71	0.78	0.04	0.41	0.95	0.00
Uniform Delay, d1			47.5			52.7	40.6	4.4	1.6	21.0	15.3	4.8
Progression Factor			1.00			1.00	1.00	1.00	1.00	1.00	0.99	1.00
Incremental Delay, d2			39.7			2.0	5.7	2.1	0.0	1.3	10.0	0.0
Delay (s)			87.2			54.8	46.3	6.5	1.6	22.3	25.1	4.8
Level of Service			F			D	D	A	A	C	C	A
Approach Delay (s)		87.2			54.8			10.8			25.0	
Approach LOS		F			D			B			C	
Intersection Summary												
HCM 2000 Control Delay			22.4			HCM 2000 Level of Service				C		
HCM 2000 Volume to Capacity ratio			0.96									
Actuated Cycle Length (s)			120.0			Sum of lost time (s)				10.0		
Intersection Capacity Utilization			88.3%			ICU Level of Service				E		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

22: SR 74 & Wisdom Road

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations	 			 				 
Traffic Volume (vph)	285	142	98	2333	101	49	227	2273
Future Volume (vph)	285	142	98	2333	101	49	227	2273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	0.97	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3433	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.05	1.00	1.00		0.05	1.00
Satd. Flow (perm)	3433	1583	91	3539	1583		86	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	310	154	107	2536	110	53	247	2471
RTOR Reduction (vph)	0	61	0	0	21	0	0	0
Lane Group Flow (vph)	310	94	107	2536	89	0	300	2471
Turn Type	Prot	Perm	pm+pt	NA	Perm	custom	pm+pt	NA
Protected Phases	3		5	2			1	6
Permitted Phases		3	2		2	1	6	
Actuated Green, G (s)	10.0	10.0	87.0	82.0	82.0		100.0	90.0
Effective Green, g (s)	10.0	10.0	87.0	82.0	82.0		100.0	90.0
Actuated g/C Ratio	0.08	0.08	0.72	0.68	0.68		0.83	0.75
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	286	131	135	2418	1081		254	2654
v/s Ratio Prot	c0.09		0.03	0.72			c0.13	0.70
v/s Ratio Perm		0.06	0.54		0.06		c0.86	
v/c Ratio	1.08	0.71	0.79	1.05	0.08		1.18	0.93
Uniform Delay, d1	55.0	53.6	31.6	19.0	6.4		46.5	12.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.01	1.01
Incremental Delay, d2	77.4	16.8	26.4	32.7	0.1		114.4	7.4
Delay (s)	132.4	70.4	58.0	51.7	6.5		161.5	20.0
Level of Service	F	E	E	D	A		F	B
Approach Delay (s)	111.8			50.1				35.3
Approach LOS	F			D				D
Intersection Summary								
HCM 2000 Control Delay	48.1			HCM 2000 Level of Service			D	
HCM 2000 Volume to Capacity ratio	1.20							
Actuated Cycle Length (s)	120.0			Sum of lost time (s)			15.0	
Intersection Capacity Utilization	101.1%			ICU Level of Service			G	
Analysis Period (min)	15							
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

23: SR 74 & Aberdeen Parkway

10/17/2018

								
Movement	WBL	WBR	NBU	NBT	NBR	SBU	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	121	210	33	2245	60	15	160	2509
Future Volume (vph)	121	210	33	2245	60	15	160	2509
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00		1.00	0.95
Frt	1.00	0.85	1.00	1.00	0.85		1.00	1.00
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1770	1583	1770	3539	1583		1770	3539
Flt Permitted	0.95	1.00	0.05	1.00	1.00		0.05	1.00
Satd. Flow (perm)	1770	1583	90	3539	1583		85	3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	132	228	36	2440	65	16	174	2727
RTOR Reduction (vph)	0	51	0	0	20	0	0	0
Lane Group Flow (vph)	132	177	36	2440	45	0	190	2727
Turn Type	Prot	Perm	pm+pt	NA	Perm	Perm	pm+pt	NA
Protected Phases	8		5	2			1	6
Permitted Phases		8	2		2	6	6	
Actuated Green, G (s)	14.8	14.8	86.0	83.0	83.0		94.4	87.2
Effective Green, g (s)	14.8	14.8	86.0	83.0	83.0		94.4	87.2
Actuated g/C Ratio	0.12	0.12	0.72	0.69	0.69		0.79	0.73
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	218	195	106	2447	1094		167	2571
v/s Ratio Prot	0.07		0.01	0.69			c0.07	0.77
v/s Ratio Perm		c0.11	0.23		0.03		c0.82	
v/c Ratio	0.61	0.91	0.34	1.00	0.04		1.14	1.06
Uniform Delay, d1	49.8	51.9	31.4	18.4	5.9		44.8	16.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	4.7	39.4	1.9	17.5	0.1		111.5	36.5
Delay (s)	54.5	91.3	33.3	35.9	5.9		156.3	52.9
Level of Service	D	F	C	D	A		F	D
Approach Delay (s)	77.8			35.1				59.6
Approach LOS	E			D				E
Intersection Summary								
HCM 2000 Control Delay			50.0			HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio			1.13					
Actuated Cycle Length (s)			120.0			Sum of lost time (s)		15.0
Intersection Capacity Utilization			97.3%			ICU Level of Service		F
Analysis Period (min)			15					
c Critical Lane Group								

HCM Signalized Intersection Capacity Analysis

24: SR 74 & SR 54/Colonel Joe M Jackson Medal of Honor Highway/SR 54/West Lanier Avenue

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1107	1619	761	194	1844	170	1060	1692	259	284	1594	799
Future Volume (vph)	1107	1619	761	194	1844	170	1060	1692	259	284	1594	799
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lane Util. Factor	0.97	0.95	1.00	0.97	0.95	1.00	0.97	0.91	1.00	1.00	0.91	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1583	3433	3539	1583	3433	5085	1583	1770	5085	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1203	1760	827	211	2004	185	1152	1839	282	309	1733	868
RTOR Reduction (vph)	0	0	176	0	0	111	0	0	88	0	0	206
Lane Group Flow (vph)	1203	1760	651	211	2004	74	1152	1839	194	309	1733	662
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	26.0	66.0	66.0	6.0	46.0	46.0	24.0	44.0	44.0	14.0	34.0	34.0
Effective Green, g (s)	26.0	66.0	66.0	6.0	46.0	46.0	24.0	44.0	44.0	14.0	34.0	34.0
Actuated g/C Ratio	0.17	0.44	0.44	0.04	0.31	0.31	0.16	0.29	0.29	0.09	0.23	0.23
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	595	1557	696	137	1085	485	549	1491	464	165	1152	358
v/s Ratio Prot	c0.35	0.50		0.06	c0.57		c0.34	0.36		0.17	0.34	
v/s Ratio Perm			0.41			0.05			0.12			c0.42
v/c Ratio	2.02	1.13	0.94	1.54	1.85	0.15	2.10	1.23	0.42	1.87	1.50	1.85
Uniform Delay, d1	62.0	42.0	40.0	72.0	52.0	37.8	63.0	53.0	42.7	68.0	58.0	58.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	465.7	67.4	19.8	276.1	384.7	0.1	500.4	111.1	2.8	414.9	231.5	393.1
Delay (s)	527.7	109.4	59.8	348.1	436.7	38.0	563.4	164.1	45.5	482.9	289.5	451.1
Level of Service	F	F	E	F	F	D	F	F	D	F	F	F
Approach Delay (s)		231.4			398.2			294.4			358.3	
Approach LOS		F			F			F			F	
Intersection Summary												
HCM 2000 Control Delay			310.2				HCM 2000 Level of Service			F		
HCM 2000 Volume to Capacity ratio			1.93									
Actuated Cycle Length (s)			150.0				Sum of lost time (s)			20.0		
Intersection Capacity Utilization			160.3%				ICU Level of Service			H		
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis

90: SR 74

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			RL		AA	AA	
Traffic Volume (vph)	0	0	290	0	2134	2860	0
Future Volume (vph)	0	0	290	0	2134	2860	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.04		1.00	1.00	
Satd. Flow (perm)			75		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	315	0	2320	3109	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	315	0	2320	3109	0
Turn Type			pm+pt		NA	NA	
Protected Phases			5		2	6	
Permitted Phases			2				
Actuated Green, G (s)			115.0		120.0	95.0	
Effective Green, g (s)			115.0		120.0	95.0	
Actuated g/C Ratio			0.96		1.00	0.79	
Clearance Time (s)			5.0		5.0	5.0	
Vehicle Extension (s)			3.0		3.0	3.0	
Lane Grp Cap (vph)			283		3539	2801	
v/s Ratio Prot			c0.14		0.66	0.88	
v/s Ratio Perm			c0.93				
v/c Ratio			1.11		0.66	1.11	
Uniform Delay, d1			49.3		0.0	12.5	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			87.4		1.0	55.3	
Delay (s)			136.7		1.0	67.8	
Level of Service			F		A	E	
Approach Delay (s)	0.0				17.2	67.8	
Approach LOS	A				B	E	
Intersection Summary							
HCM 2000 Control Delay			44.6		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio			1.14				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			96.0%		ICU Level of Service		F
Analysis Period (min)			15				

c Critical Lane Group

HCM Signalized Intersection Capacity Analysis

94: SR 74

10/17/2018



Movement	SEL	SER	NEU	NEL	NET	SWT	SWR
Lane Configurations			Ø		↑↑	↑↑	
Traffic Volume (vph)	0	0	239	0	2261	3055	0
Future Volume (vph)	0	0	239	0	2261	3055	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.04		1.00	1.00	
Satd. Flow (perm)			70		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	260	0	2458	3321	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	260	0	2458	3321	0
Turn Type			pm+pt		NA	NA	
Protected Phases			7		4	8	
Permitted Phases			4				
Actuated Green, G (s)			115.0		120.0	102.0	
Effective Green, g (s)			115.0		120.0	102.0	
Actuated g/C Ratio			0.96		1.00	0.85	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			180		3539	3008	
v/s Ratio Prot			c0.10		0.69	0.94	
v/s Ratio Perm			c1.29				
v/c Ratio			1.44		0.69	1.10	
Uniform Delay, d1			52.2		0.0	9.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			228.5		1.1	52.5	
Delay (s)			280.7		1.1	61.5	
Level of Service			F		A	E	
Approach Delay (s)	0.0				27.9	61.5	
Approach LOS	A				C	E	
Intersection Summary							
HCM 2000 Control Delay			46.4		HCM 2000 Level of Service		D
HCM 2000 Volume to Capacity ratio			1.48				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			88.6%		ICU Level of Service		E
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

95: SR 74

10/17/2018

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	2098	0	336	0	2823
Future Volume (vph)	0	0	2098	0	336	0	2823
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.04		1.00
Satd. Flow (perm)			3539		83		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2280	0	365	0	3068
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2280	0	365	0	3068
Turn Type			NA		pm+pt		NA
Protected Phases			2		1		6
Permitted Phases					6		
Actuated Green, G (s)			85.0		115.0		120.0
Effective Green, g (s)			85.0		115.0		120.0
Actuated g/C Ratio			0.71		0.96		1.00
Clearance Time (s)			5.0		5.0		5.0
Lane Grp Cap (vph)			2506		431		3539
v/s Ratio Prot			0.64		0.18		c0.87
v/s Ratio Perm					0.64		
v/c Ratio			0.91		0.85		0.87
Uniform Delay, d1			14.4		41.1		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			5.4		18.3		3.1
Delay (s)			19.8		59.3		3.1
Level of Service			B		E		A
Approach Delay (s)	0.0		19.8				9.1
Approach LOS	A		B				A
Intersection Summary							
HCM 2000 Control Delay			13.4		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.95				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			82.2%		ICU Level of Service		E
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

98: SR 74

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			RL		↑↑	↑↑	
Traffic Volume (vph)	0	0	345	0	1919	2467	0
Future Volume (vph)	0	0	345	0	1919	2467	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.04		1.00	1.00	
Satd. Flow (perm)			78		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	375	0	2086	2682	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	375	0	2086	2682	0
Turn Type			pm+pt		NA	NA	
Protected Phases			5		2	6	
Permitted Phases			2				
Actuated Green, G (s)			115.0		120.0	91.0	
Effective Green, g (s)			115.0		120.0	91.0	
Actuated g/C Ratio			0.96		1.00	0.76	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			342		3539	2683	
v/s Ratio Prot			c0.17		0.59	0.76	
v/s Ratio Perm			c0.88				
v/c Ratio			1.10		0.59	1.00	
Uniform Delay, d1			47.5		0.0	14.5	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			77.1		0.7	11.8	
Delay (s)			124.6		0.7	26.3	
Level of Service			F		A	C	
Approach Delay (s)	0.0				19.6	26.3	
Approach LOS	A				B	C	
Intersection Summary							
HCM 2000 Control Delay			23.1		HCM 2000 Level of Service		C
HCM 2000 Volume to Capacity ratio			1.12				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			82.2%		ICU Level of Service		E
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

100: SR 74

10/17/2018

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	2091	0	261	0	2652
Future Volume (vph)	0	0	2091	0	261	0	2652
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.04		1.00
Satd. Flow (perm)			3539		79		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2273	0	284	0	2883
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2273	0	284	0	2883
Turn Type			NA		pm+pt		NA
Protected Phases			2		1		6
Permitted Phases					6		
Actuated Green, G (s)			89.0		115.0		120.0
Effective Green, g (s)			89.0		115.0		120.0
Actuated g/C Ratio			0.74		0.96		1.00
Clearance Time (s)			5.0		5.0		5.0
Lane Grp Cap (vph)			2624		371		3539
v/s Ratio Prot			c0.64		0.13		c0.81
v/s Ratio Perm					0.60		
v/c Ratio			0.87		0.77		0.81
Uniform Delay, d1			11.2		40.4		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			3.3		14.0		2.2
Delay (s)			14.5		54.4		2.2
Level of Service			B		D		A
Approach Delay (s)	0.0		14.5				6.9
Approach LOS	A		B				A
Intersection Summary							
HCM 2000 Control Delay			10.1		HCM 2000 Level of Service		B
HCM 2000 Volume to Capacity ratio			0.89				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		10.0
Intersection Capacity Utilization			77.5%		ICU Level of Service		D
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

106: SR 74

10/17/2018



Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			RL		↑↑	↑↑	
Traffic Volume (vph)	0	0	309	0	2107	2547	0
Future Volume (vph)	0	0	309	0	2107	2547	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.05		1.00	1.00	
Satd. Flow (perm)			86		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	336	0	2290	2768	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	336	0	2290	2768	0
Turn Type			Perm		NA	NA	
Protected Phases					2	6	
Permitted Phases			2				
Actuated Green, G (s)			120.0		120.0	120.0	
Effective Green, g (s)			120.0		120.0	120.0	
Actuated g/C Ratio			1.00		1.00	1.00	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			86		3539	3539	
v/s Ratio Prot					0.65	0.78	
v/s Ratio Perm			c3.90				
v/c Ratio			3.91		0.65	0.78	
Uniform Delay, d1			60.0		0.0	0.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			1335.7		0.9	1.1	
Delay (s)			1395.7		0.9	1.1	
Level of Service			F		A	A	
Approach Delay (s)	0.0				179.4	1.1	
Approach LOS	A				F	A	
Intersection Summary							
HCM 2000 Control Delay			87.9		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio			4.08				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			76.0%		ICU Level of Service		D
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

108: SR 74

10/17/2018



Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	2111	0	241	0	2417
Future Volume (vph)	0	0	2111	0	241	0	2417
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.08		1.00
Satd. Flow (perm)			3539		142		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	2295	0	262	0	2627
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2295	0	262	0	2627
Turn Type			NA		Perm		NA
Protected Phases			2				6
Permitted Phases					6		
Actuated Green, G (s)			120.0		120.0		120.0
Effective Green, g (s)			120.0		120.0		120.0
Actuated g/C Ratio			1.00		1.00		1.00
Clearance Time (s)			5.0		5.0		5.0
Lane Grp Cap (vph)			3539		142		3539
v/s Ratio Prot			0.65				0.74
v/s Ratio Perm					c1.84		
v/c Ratio			0.65		1.85		0.74
Uniform Delay, d1			0.0		60.0		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			0.8		406.2		1.4
Delay (s)			0.8		466.2		1.4
Level of Service			A		F		A
Approach Delay (s)	0.0		0.8				43.6
Approach LOS	A		A				D

Intersection Summary			
HCM 2000 Control Delay	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	5.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

HCM Signalized Intersection Capacity Analysis

110: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			LT		TH	TH	
Traffic Volume (vph)	0	0	370	0	1925	2785	0
Future Volume (vph)	0	0	370	0	1925	2785	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			1.00		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			1770		3539	3539	
Flt Permitted			0.04		1.00	1.00	
Satd. Flow (perm)			65		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	402	0	2092	3027	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	402	0	2092	3027	0
Turn Type			Perm		NA	NA	
Protected Phases					2	6	
Permitted Phases			2				
Actuated Green, G (s)			120.0		120.0	120.0	
Effective Green, g (s)			120.0		120.0	120.0	
Actuated g/C Ratio			1.00		1.00	1.00	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			65		3539	3539	
v/s Ratio Prot					0.59	0.86	
v/s Ratio Perm			c6.15				
v/c Ratio			6.18		0.59	0.86	
Uniform Delay, d1			60.0		0.0	0.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			2365.7		0.7	2.2	
Delay (s)			2425.7		0.7	2.2	
Level of Service			F		A	A	
Approach Delay (s)	0.0				391.6	2.2	
Approach LOS	A				F	A	
Intersection Summary							
HCM 2000 Control Delay			178.1		HCM 2000 Level of Service		F
HCM 2000 Volume to Capacity ratio			6.45				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			81.2%		ICU Level of Service		D
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

112: SR 74

10/17/2018

Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (vph)	0	0	1692	0	222	0	2083
Future Volume (vph)	0	0	1692	0	222	0	2083
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0		5.0
Lane Util. Factor			0.95		1.00		0.95
Frt			1.00		1.00		1.00
Flt Protected			1.00		0.95		1.00
Satd. Flow (prot)			3539		1770		3539
Flt Permitted			1.00		0.12		1.00
Satd. Flow (perm)			3539		228		3539
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	1839	0	241	0	2264
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1839	0	241	0	2264
Turn Type			NA		Perm		NA
Protected Phases			2				6
Permitted Phases					6		
Actuated Green, G (s)			120.0		120.0		120.0
Effective Green, g (s)			120.0		120.0		120.0
Actuated g/C Ratio			1.00		1.00		1.00
Clearance Time (s)			5.0		5.0		5.0
Vehicle Extension (s)			3.0		3.0		3.0
Lane Grp Cap (vph)			3539		228		3539
v/s Ratio Prot			0.52				0.64
v/s Ratio Perm					c1.06		
v/c Ratio			0.52		1.06		0.64
Uniform Delay, d1			0.0		60.0		0.0
Progression Factor			1.00		1.00		1.00
Incremental Delay, d2			0.4		75.4		0.9
Delay (s)			0.4		135.4		0.9
Level of Service			A		F		A
Approach Delay (s)	0.0		0.4				13.8
Approach LOS	A		A				B
Intersection Summary							
HCM 2000 Control Delay			8.2		HCM 2000 Level of Service		A
HCM 2000 Volume to Capacity ratio			1.10				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			61.7%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

HCM Signalized Intersection Capacity Analysis

114: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations			AA		↑↑	↑↑	
Traffic Volume (vph)	0	0	609	0	1914	2013	0
Future Volume (vph)	0	0	609	0	1914	2013	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			5.0		5.0	5.0	
Lane Util. Factor			0.97		0.95	0.95	
Frt			1.00		1.00	1.00	
Flt Protected			0.95		1.00	1.00	
Satd. Flow (prot)			3433		3539	3539	
Flt Permitted			0.09		1.00	1.00	
Satd. Flow (perm)			308		3539	3539	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	662	0	2080	2188	0
RTOR Reduction (vph)	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	662	0	2080	2188	0
Turn Type			Perm		NA	NA	
Protected Phases					2	6	
Permitted Phases			2				
Actuated Green, G (s)			120.0		120.0	120.0	
Effective Green, g (s)			120.0		120.0	120.0	
Actuated g/C Ratio			1.00		1.00	1.00	
Clearance Time (s)			5.0		5.0	5.0	
Lane Grp Cap (vph)			308		3539	3539	
v/s Ratio Prot					0.59	0.62	
v/s Ratio Perm			c2.15				
v/c Ratio			2.15		0.59	0.62	
Uniform Delay, d1			60.0		0.0	0.0	
Progression Factor			1.00		1.00	1.00	
Incremental Delay, d2			527.9		0.7	0.6	
Delay (s)			587.9		0.7	0.6	
Level of Service			F		A	A	
Approach Delay (s)	0.0				142.5	0.6	
Approach LOS	A				F	A	
Intersection Summary							
HCM 2000 Control Delay			79.5		HCM 2000 Level of Service		E
HCM 2000 Volume to Capacity ratio			2.24				
Actuated Cycle Length (s)			120.0		Sum of lost time (s)		5.0
Intersection Capacity Utilization			61.7%		ICU Level of Service		B
Analysis Period (min)			15				
c Critical Lane Group							

HCM Unsignalized Intersection Capacity Analysis

8: SR 74 & Meadow Glen Parkway

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL
Lane Configurations												
Traffic Volume (veh/h)	90	7	36	5	3	2	11	65	2323	16	15	5
Future Volume (Veh/h)	90	7	36	5	3	2	11	65	2323	16	15	5
Sign Control	Stop			Stop			Free					
Grade	0%			0%			0%					
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	98	8	39	5	3	2	0	71	2525	17	0	5
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	Raised											
Median storage (veh)	1											
Upstream signal (ft)												
pX, platoon unblocked	0.42	0.42	0.42	0.42	0.42		0.00	0.42			0.00	
vC, conflicting volume	4332	6030	1164	3815	6100	850	0	3414			0	2542
vC1, stage 1 conf vol	3346	3346		2676	2676							
vC2, stage 2 conf vol	985	2684		1139	3424							
vCu, unblocked vol	4101	8130	0	2875	8294	850	0	1924			0	2542
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	0.0	4.1			0.0	4.1
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	0.0	2.2			0.0	2.2
p0 queue free %	0	26	91	43	0	99	0	44			0	97
cM capacity (veh/h)	24	11	457	9	0	304	0	128			0	173
Direction, Lane #	EB 1	WB 1	WB 2	WB 3	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4
Volume Total	145	5	3	2	71	1010	1010	522	5	1304	1304	807
Volume Left	98	5	0	0	71	0	0	0	5	0	0	0
Volume Right	39	0	0	2	0	0	0	17	0	0	0	155
cSH	29	9	0	304	128	1700	1700	1700	173	1700	1700	1700
Volume to Capacity	4.96	0.57	6951.05	0.01	0.56	0.59	0.59	0.31	0.03	0.77	0.77	0.47
Queue Length 95th (ft)	Err	29	Err	0	68	0	0	0	2	0	0	0
Control Delay (s)	Err	657.2	Err	16.9	63.8	0.0	0.0	0.0	26.5	0.0	0.0	0.0
Lane LOS	F	F	F	C	F				D			
Approach Delay (s)	Err	3331.7			1.7				0.0			
Approach LOS	F	F										
Intersection Summary												
Average Delay	240.5											
Intersection Capacity Utilization	84.0%											
Analysis Period (min)	15											
ICU Level of Service E												

HCM Unsignalized Intersection Capacity Analysis 8: SR 74 & Meadow Glen Parkway

10/17/2018



Movement	SBT	SBR
Lane Configurations	↑↑↑	↘
Traffic Volume (veh/h)	2998	143
Future Volume (Veh/h)	2998	143
Sign Control	Free	
Grade	0%	
Peak Hour Factor	0.92	0.92
Hourly flow rate (vph)	3259	155
Pedestrians		
Lane Width (ft)		
Walking Speed (ft/s)		
Percent Blockage		
Right turn flare (veh)		
Median type	Raised	
Median storage veh)	1	
Upstream signal (ft)	1262	
pX, platoon unblocked		
vC, conflicting volume		
vC1, stage 1 conf vol		
vC2, stage 2 conf vol		
vCu, unblocked vol		
tC, single (s)		
tC, 2 stage (s)		
tF (s)		
p0 queue free %		
cM capacity (veh/h)		
Direction, Lane #		

HCM Unsignalized Intersection Capacity Analysis

10: R 74/SR 74 & Kirkley Road/Westbourne Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	110	0	0	35	86	2333	20	16	3058	21
Future Volume (Veh/h)	0	0	110	0	0	35	86	2333	20	16	3058	21
Sign Control	Stop			Stop				Free			Free	
Grade	0%			0%				0%			0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	120	0	0	38	93	2536	22	17	3324	23
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4812	6080	1662	4418	6080	1268	3324			2536		
vC1, stage 1 conf vol	3358	3358		2722	2722							
vC2, stage 2 conf vol	1454	2722		1696	3358							
vCu, unblocked vol	4812	6080	1662	4418	6080	1268	3324			2536		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	0	0	0	0	0	76	0			90		
cM capacity (veh/h)	0	0	86	0	0	160	83			174		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3	SB 4		
Volume Total	120	38	93	1268	1268	22	17	1662	1662	23		
Volume Left	0	0	93	0	0	0	17	0	0	0		
Volume Right	120	38	0	0	0	22	0	0	0	23		
cSH	86	160	83	1700	1700	1700	174	1700	1700	1700		
Volume to Capacity	1.39	0.24	1.11	0.75	0.75	0.01	0.10	0.98	0.98	0.01		
Queue Length 95th (ft)	229	22	163	0	0	0	8	0	0	0		
Control Delay (s)	320.3	34.5	223.3	0.0	0.0	0.0	28.0	0.0	0.0	0.0		
Lane LOS	F	D	F				D					
Approach Delay (s)	320.3	34.5	7.8				0.1					
Approach LOS	F	D										
Intersection Summary												
Average Delay			9.9									
Intersection Capacity Utilization			98.0%	ICU Level of Service					F			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

15: SR 74 & East Crestwood Road

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	77	0	0	13	124	2064	25	15	2577	32
Future Volume (Veh/h)	0	0	77	0	0	13	124	2064	25	15	2577	32
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	84	0	0	14	135	2243	27	16	2801	35
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type								Raised		Raised		
Median storage veh								1		1		
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4224	5346	1400	3959	5360	1135	2801			2243		
vC1, stage 1 conf vol	2833	2833		2526	2526							
vC2, stage 2 conf vol	1392	2513		1432	2833							
vCu, unblocked vol	4224	5346	1400	3959	5360	1135	2801			2243		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5		6.5	5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	35	100	100	93	1			93		
cM capacity (veh/h)	0	0	130	0	0	196	136			227		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3	SB 4			
Volume Total	84	14	135	1495	775	16	1400	1400	35			
Volume Left	0	0	135	0	0	16	0	0	0			
Volume Right	84	14	0	0	27	0	0	0	35			
cSH	130	196	136	1700	1700	227	1700	1700	1700			
Volume to Capacity	0.65	0.07	0.99	0.88	0.46	0.07	0.82	0.82	0.02			
Queue Length 95th (ft)	86	6	176	0	0	6	0	0	0			
Control Delay (s)	73.2	24.8	138.7	0.0	0.0	22.1	0.0	0.0	0.0			
Lane LOS	F	C	F			C						
Approach Delay (s)	73.2	24.8	7.8			0.1						
Approach LOS	F	C										
Intersection Summary												
Average Delay			4.8									
Intersection Capacity Utilization			84.8%		ICU Level of Service				E			
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

21: SR 74 & Kedron Drive

10/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								 			 	
Traffic Volume (veh/h)	0	0	1	0	0	105	0	2408	210	0	2640	0
Future Volume (Veh/h)	0	0	1	0	0	105	0	2408	210	0	2640	0
Sign Control	Stop				Stop				Free			
Grade	0%				0%				0%			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	1	0	0	114	0	2617	228	0	2870	0
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type												
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	4178	5487	1435	4053	5487	1308	2870			2617		
vC1, stage 1 conf vol	2870	2870	2617		2617							
vC2, stage 2 conf vol	1308	2617	1436		2870							
vCu, unblocked vol	4178	5487	1435	4053	5487	1308	2870			2617		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)	6.5	5.5	6.5		5.5							
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	99	100	100	24	100			100		
cM capacity (veh/h)	11	19	123	19	19	150	128			161		
Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2					
Volume Total	1	114	1308	1308	228	1913	957					
Volume Left	0	0	0	0	0	0	0					
Volume Right	1	114	0	0	228	0	0					
cSH	123	150	1700	1700	1700	1700	1700					
Volume to Capacity	0.01	0.76	0.77	0.77	0.13	1.13	0.56					
Queue Length 95th (ft)	1	117	0	0	0	0	0					
Control Delay (s)	34.5	80.7	0.0	0.0	0.0	0.0	0.0					
Lane LOS	D	F										
Approach Delay (s)	34.5	80.7	0.0	0.0								
Approach LOS	D	F										
Intersection Summary												
Average Delay			1.6									
Intersection Capacity Utilization			83.0%	ICU Level of Service				E				
Analysis Period (min)			15									

HCM Unsignalized Intersection Capacity Analysis

76: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	48	0	2320	3047	0
Future Volume (Veh/h)	0	0	48	0	2320	3047	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2522	3312	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage (veh)					1	1	
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	4573	1656	0	3312			
vC1, stage 1 conf vol	3312						
vC2, stage 2 conf vol	1261						
vCu, unblocked vol	4573	1656	0	3312			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	14	87	0	84			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1261	1261	0	1656	1656		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.74	0.74	0.00	0.97	0.97		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			87.6%		ICU Level of Service		E
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

84: R 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2416	0	23	0	3145
Future Volume (Veh/h)	0	0	2416	0	23	0	3145
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2626	0	0	0	3418
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage (veh)			1				1
Upstream signal (ft)			777				
pX, platoon unblocked	0.23	0.23			0.00	0.23	
vC, conflicting volume	4335	1313			0	2626	
vC1, stage 1 conf vol	2626						
vC2, stage 2 conf vol	1709						
vCu, unblocked vol	8835	0			0	1365	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	31	248			0	114	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1313	1313	1709	1709	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.77	0.77	1.01	1.01	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			108.3%		ICU Level of Service		G
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

86: R 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	0	0	2496	3797	0
Future Volume (Veh/h)	0	0	0	0	2496	3797	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2713	4127	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage (veh)					1	1	
Upstream signal (ft)					646		
pX, platoon unblocked	0.22		0.00				
vC, conflicting volume	5484	2064	0	4127			
vC1, stage 1 conf vol	4127						
vC2, stage 2 conf vol	1356						
vCu, unblocked vol	14153	2064	0	4127			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	5	45	0	39			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1356	1356	0	2064	2064		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.80	0.80	0.00	1.21	1.21		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			108.3%		ICU Level of Service		G
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

88: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2262	0	0	0	3352
Future Volume (Veh/h)	0	0	2262	0	0	0	3352
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2459	0	0	0	3643
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh)			1				1
Upstream signal (ft)							663
pX, platoon unblocked	0.11				0.00		
vC, conflicting volume	4280	1230			0	2459	
vC1, stage 1 conf vol	2459						
vC2, stage 2 conf vol	1822						
vCu, unblocked vol	14892	1230			0	2459	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	31	169			0	186	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1230	1230	1822	1822	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.72	0.72	1.07	1.07	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			96.0%		ICU Level of Service		F
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

92: SR 74

10/17/2018

							
Movement	NWL	NWR	NET	NER	SWU	SWL	SWT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2281	0	23	0	3050
Future Volume (Veh/h)	0	0	2281	0	23	0	3050
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2479	0	0	0	3315
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)			1006				1089
pX, platoon unblocked	0.49	0.05			0.00	0.05	
vC, conflicting volume	4136	1240			0	2479	
vC1, stage 1 conf vol	2479						
vC2, stage 2 conf vol	1658						
vCu, unblocked vol	0	0			0	0	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	504	49			0	74	
Direction, Lane #	NE 1	NE 2	SW 1	SW 2	SW 3		
Volume Total	1240	1240	1658	1658	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.73	0.73	0.97	0.97	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			88.6%		ICU Level of Service		E
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

102: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	8	0	2064	2616	0
Future Volume (Veh/h)	0	0	8	0	2064	2616	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2243	2843	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh)					1	1	
Upstream signal (ft)							
pX, platoon unblocked			0.00				
vC, conflicting volume	3964	1422	0	2843			
vC1, stage 1 conf vol	2843						
vC2, stage 2 conf vol	1122						
vCu, unblocked vol	3964	1422	0	2843			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	25	126	0	131			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1122	1122	0	1422	1422		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.66	0.66	0.00	0.84	0.84		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			77.5%		ICU Level of Service		D
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

104: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2188	0	25	0	2629
Future Volume (Veh/h)	0	0	2188	0	25	0	2629
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2378	0	0	0	2858
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh)			1				1
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	3807	1189			0	2378	
vC1, stage 1 conf vol	2378						
vC2, stage 2 conf vol	1429						
vCu, unblocked vol	3807	1189			0	2378	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	40	180			0	201	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1189	1189	1429	1429	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.70	0.70	0.84	0.84	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			76.0%		ICU Level of Service		D
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

116: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			 				 
Traffic Volume (veh/h)	0	0	2254	0	54	0	2487
Future Volume (Veh/h)	0	0	2254	0	54	0	2487
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2450	0	0	0	2703
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)							588
pX, platoon unblocked	0.17				0.00		
vC, conflicting volume	3802	1225			0	2450	
vC1, stage 1 conf vol	2450						
vC2, stage 2 conf vol	1352						
vCu, unblocked vol	7817	1225			0	2450	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	36	171			0	188	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1225	1225	1352	1352	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.72	0.72	0.80	0.80	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			72.3%		ICU Level of Service		C
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

118: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations					 	 	
Traffic Volume (veh/h)	0	0	165	0	2284	2494	0
Future Volume (Veh/h)	0	0	165	0	2284	2494	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2483	2711	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh					1	1	
Upstream signal (ft)					630		
pX, platoon unblocked	0.28		0.00				
vC, conflicting volume	3952	1356	0	2711			
vC1, stage 1 conf vol	2711						
vC2, stage 2 conf vol	1242						
vCu, unblocked vol	6364	1356	0	2711			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	29	139	0	148			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1242	1242	0	1356	1356		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.73	0.73	0.00	0.80	0.80		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			72.3%		ICU Level of Service		C
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

120:

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2213	0	88	0	2263
Future Volume (Veh/h)	0	0	2213	0	88	0	2263
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2405	0	0	0	2460
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh)			1				1
Upstream signal (ft)							722
pX, platoon unblocked	0.18				0.00		
vC, conflicting volume	3635	1202			0	2405	
vC1, stage 1 conf vol	2405						
vC2, stage 2 conf vol	1230						
vCu, unblocked vol	6511	1202			0	2405	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	38	177			0	196	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1202	1202	1230	1230	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.71	0.71	0.72	0.72	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			65.9%		ICU Level of Service		C
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

122:

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	67	0	2153	2245	0
Future Volume (Veh/h)	0	0	67	0	2153	2245	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2340	2440	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage veh					1	1	
Upstream signal (ft)					619		
pX, platoon unblocked	0.19		0.00				
vC, conflicting volume	3610	1220	0	2440			
vC1, stage 1 conf vol	2440						
vC2, stage 2 conf vol	1170						
vCu, unblocked vol	6274	1220	0	2440			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	37	172	0	190			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1170	1170	0	1220	1220		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.69	0.69	0.00	0.72	0.72		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			65.9%		ICU Level of Service		C
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

124: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			 				 
Traffic Volume (veh/h)	0	0	2427	0	18	0	2507
Future Volume (Veh/h)	0	0	2427	0	18	0	2507
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2638	0	0	0	2725
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			Raised				Raised
Median storage veh			1				1
Upstream signal (ft)							576
pX, platoon unblocked	0.30				0.00		
vC, conflicting volume	4000	1319			0	2638	
vC1, stage 1 conf vol	2638						
vC2, stage 2 conf vol	1362						
vCu, unblocked vol	6291	1319			0	2638	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	32	147			0	158	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1319	1319	1362	1362	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.78	0.78	0.80	0.80	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			74.1%		ICU Level of Service		D
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

126: SR 74

10/17/2018

							
Movement	EBL	EBR	NBU	NBL	NBT	SBT	SBR
Lane Configurations							
Traffic Volume (veh/h)	0	0	81	0	2432	2559	0
Future Volume (Veh/h)	0	0	81	0	2432	2559	0
Sign Control	Stop				Free	Free	
Grade	0%				0%	0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	0	0	2643	2782	0
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type					Raised	Raised	
Median storage (veh)					1	1	
Upstream signal (ft)						1037	
pX, platoon unblocked	0.32	0.32	0.00	0.32			
vC, conflicting volume	4104	1391	0	2782			
vC1, stage 1 conf vol	2782						
vC2, stage 2 conf vol	1322						
vCu, unblocked vol	6494	0	0	2310			
tC, single (s)	6.8	6.9	0.0	4.1			
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3	0.0	2.2			
p0 queue free %	100	100	0	100			
cM capacity (veh/h)	16	342	0	67			
Direction, Lane #	NB 1	NB 2	NB 3	SB 1	SB 2		
Volume Total	1322	1322	0	1391	1391		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.78	0.78	0.00	0.82	0.82		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0			0.0			
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			74.1%		ICU Level of Service		D
Analysis Period (min)			15				

HCM Unsignalized Intersection Capacity Analysis

128: SR 74

10/17/2018

							
Movement	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations			↑↑		↓		↑↑
Traffic Volume (veh/h)	0	0	2509	0	109	0	2531
Future Volume (Veh/h)	0	0	2509	0	109	0	2531
Sign Control	Stop		Free				Free
Grade	0%		0%				0%
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	0	2727	0	0	0	2751
Pedestrians							
Lane Width (ft)							
Walking Speed (ft/s)							
Percent Blockage							
Right turn flare (veh)							
Median type			None				Raised
Median storage veh							1
Upstream signal (ft)							
pX, platoon unblocked					0.00		
vC, conflicting volume	4102	1364			0	2727	
vC1, stage 1 conf vol	2727						
vC2, stage 2 conf vol	1376						
vCu, unblocked vol	4102	1364			0	2727	
tC, single (s)	6.8	6.9			0.0	4.1	
tC, 2 stage (s)	5.8						
tF (s)	3.5	3.3			0.0	2.2	
p0 queue free %	100	100			0	100	
cM capacity (veh/h)	28	138			0	146	
Direction, Lane #	NB 1	NB 2	SB 1	SB 2	SB 3		
Volume Total	1364	1364	1376	1376	0		
Volume Left	0	0	0	0	0		
Volume Right	0	0	0	0	0		
cSH	1700	1700	1700	1700	1700		
Volume to Capacity	0.80	0.80	0.81	0.81	0.00		
Queue Length 95th (ft)	0	0	0	0	0		
Control Delay (s)	0.0	0.0	0.0	0.0	0.0		
Lane LOS							
Approach Delay (s)	0.0		0.0				
Approach LOS							
Intersection Summary							
Average Delay			0.0				
Intersection Capacity Utilization			82.1%		ICU Level of Service		E
Analysis Period (min)			15				



APPENDIX D: DETAILED DEVELOPMENT GUIDELINES MATRIX

	City of Fairburn (Some requirements from GA Hwy. 74 Overlay District)	Town of Tyrone (Some requirements from Quality Growth Development District)	City of Peachtree City
Setbacks			
Front	50'; 50' from each street ROW on corner lots	O-I, C-1 = 80'; C-2 = 50'; M-1, M-2 = 100'	LC, OI, GC, LUC = 40'; LI = 30'; GI = 50'
Side	20'	O-I = 8'; C-1, C-2, M-1, M-2 = 20'	LC, OI, GC, LUC = 10' (75' adjacent to residential); LI, GI = 20' (100' adjacent to residential)
Rear	30'	30'	LC, OI, GC, LUC = 20' (75' adjacent to residential); LI = 20' (100' adjacent to residential); GI = 50' (100' adjacent to residential)
Greenspace	<1 acre disturbance = min. 30% of site ; < 1 acre disturbance and provide variety of site amenities = min. 20% of site; <1 acre with site amenities and link to similar areas on adjoining property = 10% of site; Grading <50% or installing drainage requiring piping above 18" in diameter = 30% open space; Preserve natural drainage swales and associated areas in permanent natural settings = 20% open space; Preserve natural drainage swales and associated areas in permanent, natural settings which link to natural drainage routes on adjoining properties = 10% open space; Sites encompassed by natural water features, floodplains, greenbelts, and/or wetlands may be credited toward open space	Required in all residential developments	Encourage preservation of greenspace and other conservation areas; coordinate site design plans, which include greenspace, with the County's greenspace protection plan
Easements	20' for single utility; 10' for each additional utility for common easement; permanent and construction easements must be at least 25' from top of stream bank	Minimum width of 20'; permanent and construction easements must be at least 25' from top of stream bank	Minimum width of 10'; permanent and construction easements must be at least 25' from top of stream bank

	City of Fairburn (Some requirements from GA Hwy. 74 Overlay District)	Town of Tyrone (Some requirements from Quality Growth Development District)	City of Peachtree City
Aesthetic Standards	Exterior - Brick or autoclaved concrete substructure; stone (no quarry faced stone allowed); concrete masonry; wood; glass in combination with metal or similar, durable architectural materials; limited use of standing seam metal permitted in combination with listed materials. Side and rear elevations of all restaurants and office buildings shall be majority brick or stone and substantially consistent with front building elevation. Single architectural style per site; form and pitch of roof shall be substantially proportional to chosen architectural style.	Exterior construction shall be 80% brick, veneer, or glass; exterior walls must be designed to provide visual relief at a minimum of every 20 feet	https://library.municode.com/ga/peachtree_city/codes/code_of_ordinances?nodeId=PTIICO_OR_APXBLADEOR_ARTVIIGESTDEGU_DIV4S_TRECOINBUDE
Building Standards	Int'l Building Code 2012; Int'l Residential Code 2012; Int'l Plumbing Code 2012; Int'l Mechanical Code 2012; Int'l Fuel Gas Code 2012; Int'l Energy Conservation Code 2009; National Electrical Code 2014; Int'l Property Maintenance Code 2012; Int'l Existing Building Code 2012; National Green Building Standard 2008; Int'l Swimming Pool and Spa Code 2012	Adopts codes in OCGA by reference	Adopts latest edition of codes as adopted and amended by DCA
Façade Standards	All front facades of principal structure shall be brick; visual relief every 80' - 120' via setbacks, parapet breaks or other architectural element; canopies shall provide visual relief with a break every 40'	Exterior construction shall be 80% brick, veneer, or glass; exterior walls must be designed to provide visual relief at a minimum of every 20 feet	See Aesthetic Standards
Development Standards	Retail/commercial developments = 35' min. landscaped buffer adjacent to Hwy. 74 ROW; 75' min. landscaped buffer adjacent to office use; 100' min. landscaped buffer adjacent to residential use; Office developments = 45' min. landscaped buffer adjacent to Hwy. 74 ROW; 40' min. landscaped buffer adjacent to residential use; Residential developments = 45' min. landscaped buffer adjacent to Hwy. 74; Underground utilities required.	Maintained, planted buffer shall be in place for the first 20' of the building setback which is adjacent to Hwy. 74	SR 74 - Continuous 60' wide tree save/landscape buffer for non-residential development; min. 100' wide city owned greenbelt buffer for residential development

	City of Fairburn (Some requirements from GA Hwy. 74 Overlay District)	Town of Tyrone (Some requirements from Quality Growth Development District)	City of Peachtree City
Site Plan Standards	Drawn to scale of not less than 100' = 1"; maximum sheet size 36" x 48"; minimum sheet size 17" x 22"; location map at scale of 600' = 1"	Drawn to scale of not less than 100' = 1"; sheet size 17" x 22"	24" x 36" and one 11" x 17" reduction, one pdf on CD
Gross Land Area	C-2 General Commercial District (predominant zoning along Hwy. 74) requires 1/2 acre	O-I = min. lot width 125'; C-1, C-2 = min. 1 acre/min. lot width 125'; M-1, M-2 = min. 1 acre/min. lot width 125'	LC, OI, LI = 20,000 sq. ft.; GC, LUC = 30,000 sq. ft.; GI = 80,000 sq. ft.
Block Area and Length	None	Suggested that blocks shall not be greater than 1,800 ft. nor less than 600 ft. in length	Suggested that blocks shall be not greater than 1,800 ft. nor less than 600' in length
Signage Standards	C-2 Zoning - One freestanding or monument sign, max. 50 sq. ft., max. height 20', wall signs max. 10% of gross wall area or 150 sq. ft.; Planned Centers in C-2 Zoning - max. 100 sq. ft. freestanding or monument sign for each street frontage, max. height 20', wall signs max. 10% of gross wall area or 150 sq. ft.	One freestanding sign per parcel - max. 6' height, 10' width, not to exceed 40 sq. ft. in area; multiple businesses on parcel - one freestanding sign, max. 7' height, 10' width, not to exceed 60 sq. ft. in area; external illumination only; one wall sign not to exceed 1.5 sq. ft. per linear foot of the front length of building, if linear frontage of a bldg. or portion thereof occupied is 100' or less, the max. size of a wall sign is 70 sq. ft.; if linear frontage of a bldg. or portion thereof occupied is in excess of 100', max. size of wall sign is 150 sq. ft.	https://library.municode.com/ga/peachtree-city/codes/code_of_ordinances?nodeId=PTIICO_OR_CH66SI_ARTIIRESIZOCL_S66-15RECOOFINLCGCLUOILIGILU
Parking	Retail/commercial = 1 space per 200 sq. ft.; 4.5 spaces/1000 sq. ft. for storage, assembly, warehousing or other purpose open to public; 1 space per 1,000 sq. ft. of floor area used for storage, assembly, warehousing or other purpose closed to the public	Varies by use - business, professional offices and clinics = 1 space/250 sq. ft. of gross floor area; commercial, manufacturing, and industrial = 1 space/2,000 sq. ft. of gross office, plant, and storage area; general business, commercial, shopping centers, personal service establishments = 5.5 spaces/1,000 sq. ft. of gross floor area; restaurants, night clubs, taverns - 1 space/75 sq. ft. of gross floor area	https://library.municode.com/ga/peachtree-city/codes/code_of_ordinances?nodeId=PTIICO_OR_APXAZO_ARTIXGEPR_S909OREAUPARE

	City of Fairburn (Some requirements from GA Hwy. 74 Overlay District)	Town of Tyrone (Some requirements from Quality Growth Development District)	City of Peachtree City
Access Management	Access to Hwy. 74 limited to one driveway per existing parcel, lot coverage bonus of 10% granted for consolidation of driveways currently permitted by GDOT; developers encouraged to create secondary road networks through system of density (lot coverage or building height) bonuses, lot coverage ratios inclusive of the building footprint and pavement for parking and driveways shall not exceed 75%, pavement comprising internal street networks shall be exempted provided such street networks channel traffic between developments along Hwy. 74 and are not directly linked to Hwy. 74; secondary road networks which provide a landscaped boulevard and are linked to adjoining properties shall entitle the property owner to a lot coverage bonus of 10%	All entrances and exits of any public or private street or drive onto any state highway must be approved by GDOT and the Tyrone Town Council prior to issuance of a development permit.	Interparcel site access should be provided when land uses are compatible; common access easements for shared driveways along state highways and busy streets are encouraged.
Service and Loading Standards	No loading areas permitted between buildings and Hwy. 74	Loading docks, trash receptacles, and equipment areas shall be screened from all streets; loading and unloading shall be done only into or from the rear or side of buildings; exterior storage prohibited, unless as permitted in Article VI Supplemental Regulations.	Retail with >2,000 sq. ft. - none; retail with <2,000 sq. ft. - 1 space per 25,000 sq. ft.; industrial and institutional - 1 space for first 25,000 sq. ft and 25,000 - 99,999 = 2 spaces, 100,000 - 159,999 = 3 spaces, 160,000 - 239,999 = 4 spaces, 240,000 - 349,999 = 5 spaces, above 350,000 sq. ft. = one additional space/100,000 sq. ft.

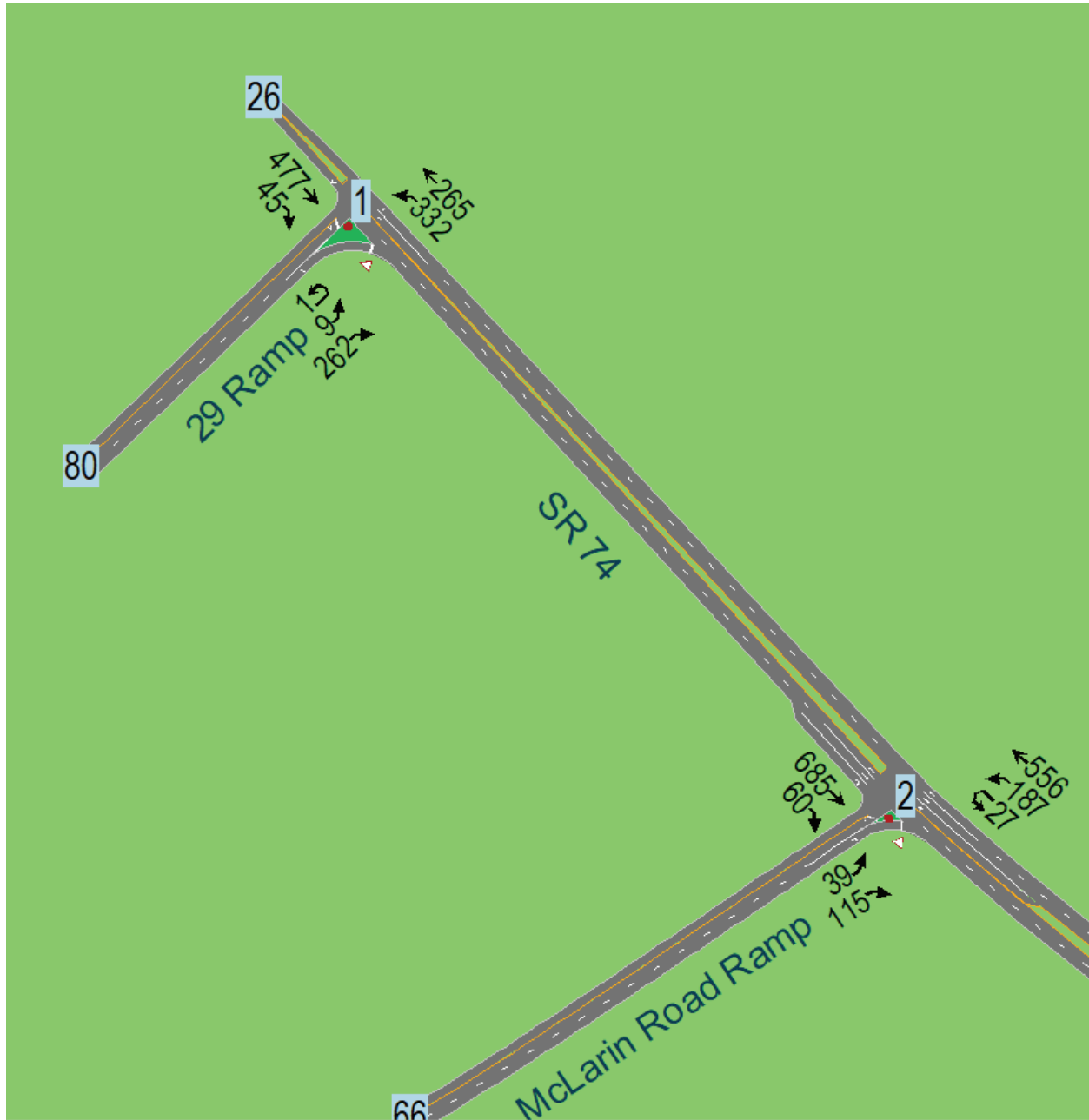
	City of Fairburn (Some requirements from GA Hwy. 74 Overlay District)	Town of Tyrone (Some requirements from Quality Growth Development District)	City of Peachtree City
Landscaping Standards	Tree density standard of 20 units/acre or one unit/2,000 sq. ft. of proposed impervious area; all vehicle use areas shall provide a Perimeter Landscape Area with no horizontal dimension less than 5' and min. one tree/250' of landscape area or fraction thereof; Perimeter Landscape Areas abutting a public street ROW shall have min. dimension of 10' from ROW line to vehicular use area; all areas of public roadway ROW shall be grassed. Interior Landscape Areas shall = 10% of total vehicle use area, exclusive of perimeter landscape areas; interior landscape areas shall have a min. horizontal dimension of 10'; a min. of one tree/250' or fraction thereof of interior landscape area shall be provided; for any parking area that is designed for more than 10 vehicles, plan must provide for landscaped islands and/or peninsulas at least 10' in width so that no more than 12 adjacent parking spaces exist without a landscaped separation.	All side and rear yards shall be used for planted buffers and/or landscaping utilizing berms as feasible; all areas not devoted to structures, site development features, and natural vegetation shall be landscaped; one canopy tree with min. trunk caliper of 2.5" (at 4" from ground) and one understory tree with min. trunk caliper of 1" (at 4" from the ground) for every 1,000 sq. ft. of permanently disturbed area on the site; all landscape areas within parking lots shall be 100% landscaped with deciduous trees, shrubs, ground cover (not requiring mowing) and/or flowers in mulched beds; perimeter of all parking areas shall be landscaped; parking areas designed to accommodate >20 vehicles are not required to install interior landscape areas; parking areas designed for <20 vehicles must install interior landscaped areas so that no more than 12 adjacent parking spaces exist without a landscaped separation of at least 5' in width; screening shall be used as a buffer between incompatible uses and to reduce effects of headlight glare, noise and other objectionable activities*	No more than 12 parking spaces to be located in continuous row without planting island, internal island min. 10' wide, end island min. 12' wide; planting islands shall be 100% landscaped with canopy trees, understory trees, evergreen shrubs and/or groundcover in mulched beds; perimeter of parking lots shall be landscaped with evergreen plant material; planting area min. of 10' shall separate all parking lots, driveways, and/or service courts from adjoining property line; planting areas shall be located in front of (10' wide) and on sides (6' wide) of retail, commercial, and industrial buildings
Street Standards	https://library.municode.com/ga/fairburn/codes/code_of_ordinances?nodeId=PTIILADERERE_CH71L_ADE_ARTIISTIMST	https://library.municode.com/ga/tyrone/codes/code_of_ordinances?nodeId=SPBLAUSDE_CH109LADESU_ARTIIISUSIPL_DIV6COSTOTRI-W	https://library.municode.com/ga/peachtree-city/codes/code_of_ordinances?nodeId=PTIICO OR_APXBLADEOR_ARTVIIGEDESTDEGU_DIV3S_TSTDE; https://library.municode.com/ga/peachtree-city/codes/code_of_ordinances?nodeId=PTIICO OR_APXBLADEOR_ARTVIIIRESTOTRI-W
Sidewalk Standards	Required on all street frontages regardless of zoning district; minimum width of 5' and constructed to ADA standards and City's development standards*	Required in all residential developments	Must meet or exceed ADA and AASHTO standards; min. 2' wide grass strip between back of curb and front edge of sidewalk

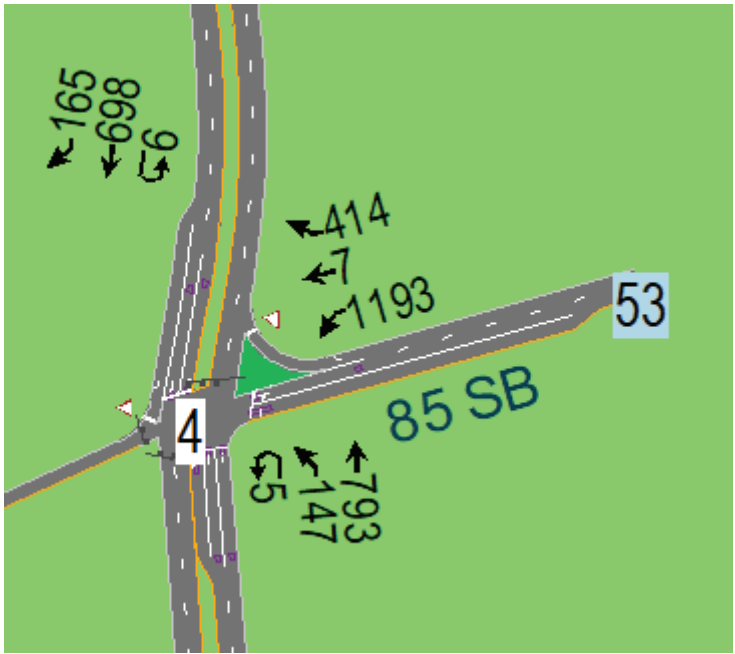
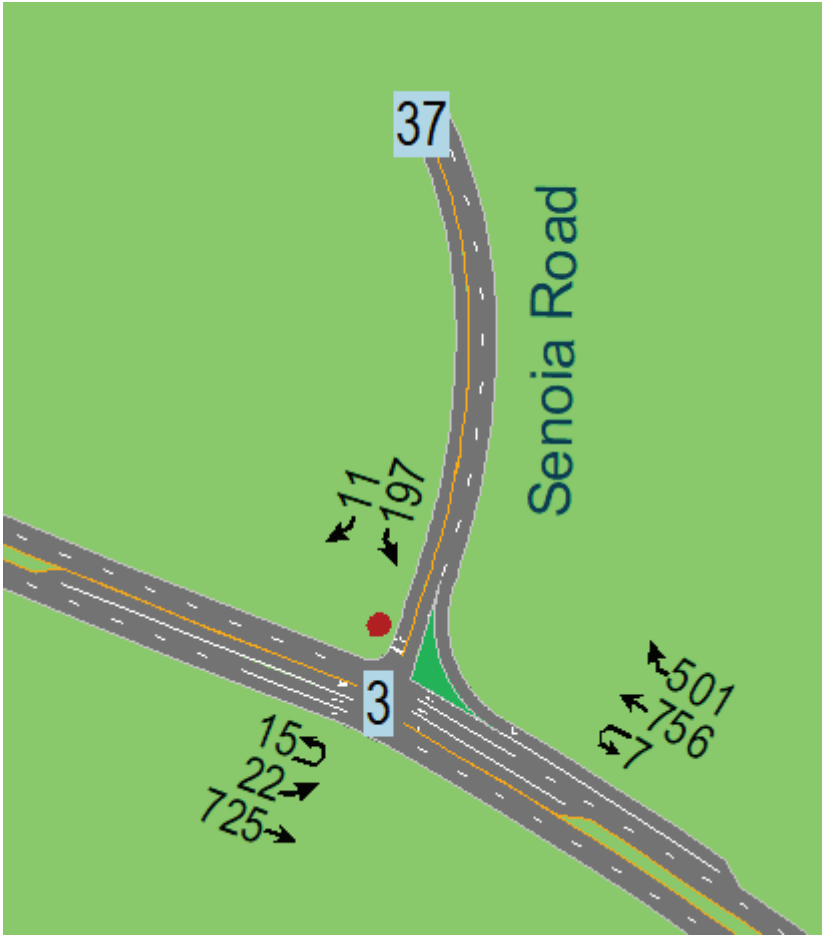
	City of Fairburn (Some requirements from GA Hwy. 74 Overlay District)	Town of Tyrone (Some requirements from Quality Growth Development District)	City of Peachtree City
Bike Facility Standards	None	None	Multi-use paths required to facilitate pedestrian and golf cart access from residential and commercial developments to schools, parks, playgrounds, and other city amenities via the multi-use path system. If there no completed paths to link to development, developer shall be required to dedicate easements and deposit cash payment with City Council equal to cost of installing paths and placed in Multi-Use Path Construction Fund for future construction of paths.
Golf Cart Policies	None	https://library.municode.com/ga/tyrone/codes/code_of_ordinances?nodeId=CH36TRVE_ARTIIIGOCASIVENances?nodeId=CH36TRVE_ARTIIIGOCASIVE	https://library.municode.com/ga/peachtree-city/codes/code_of_ordinances?nodeId=PTIICOOR_CH78TR_ARTIIIMOCA

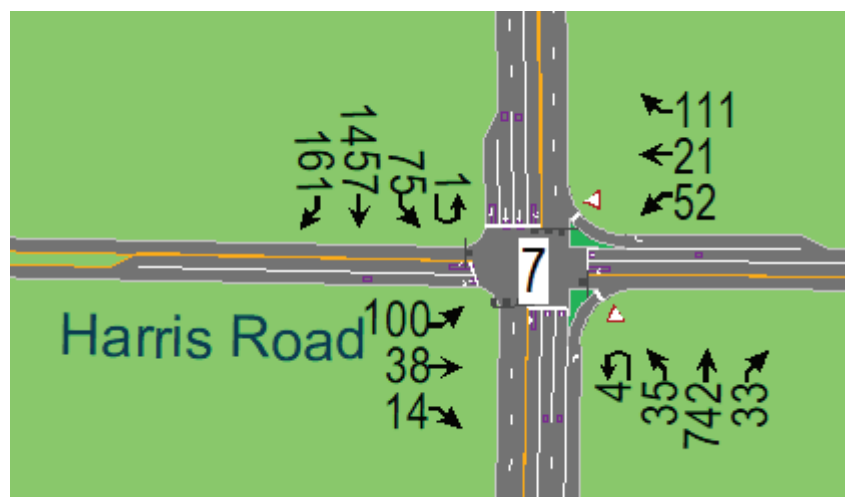
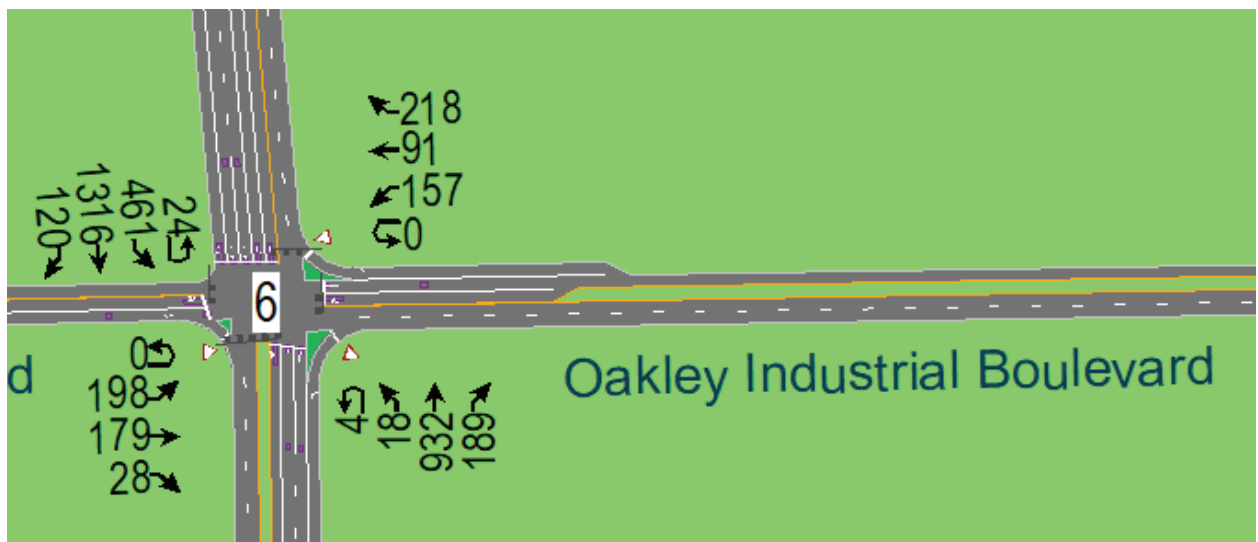
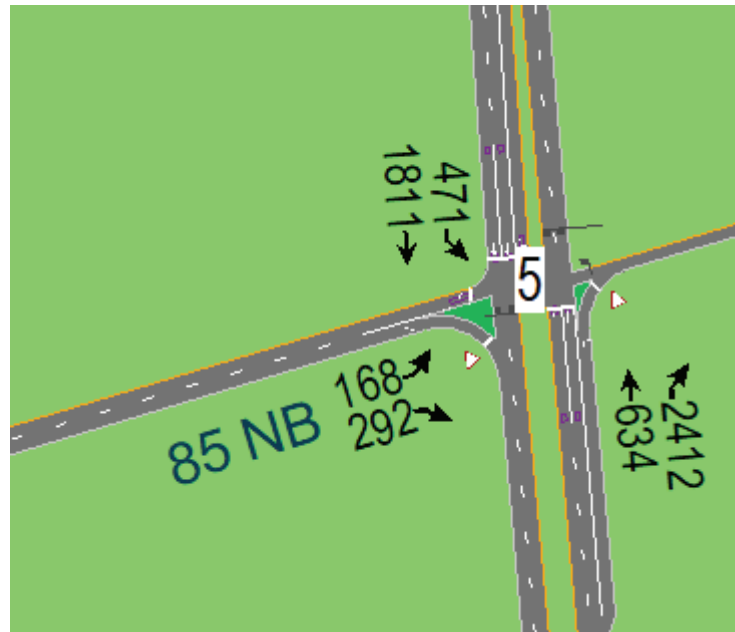


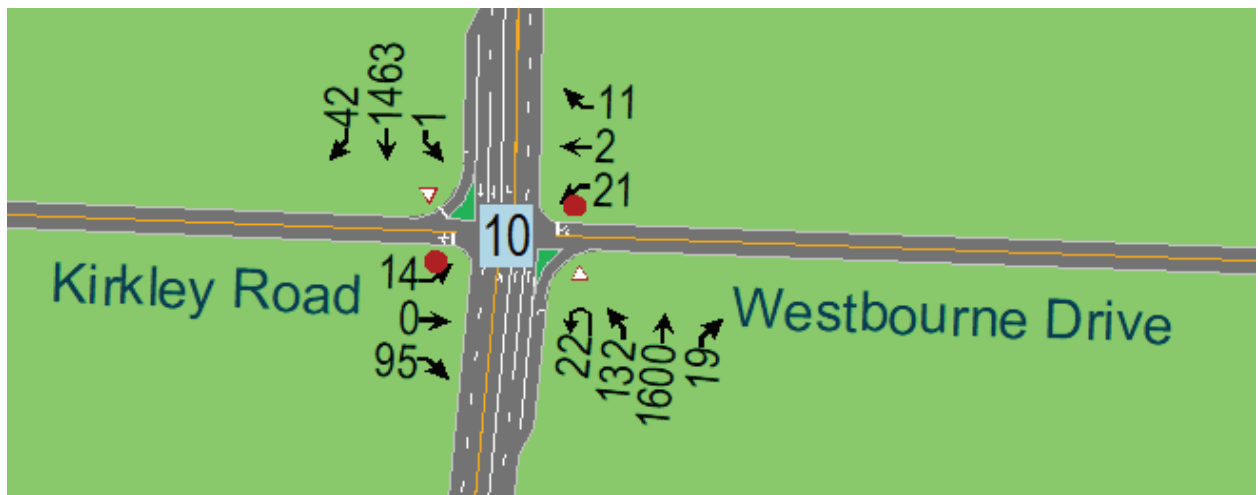
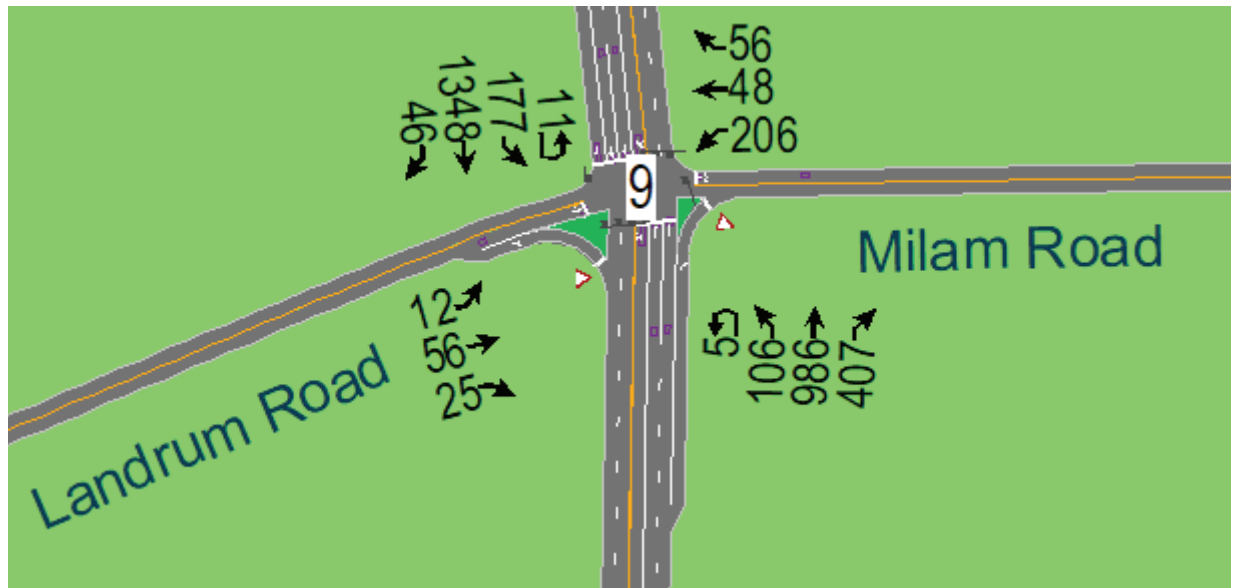
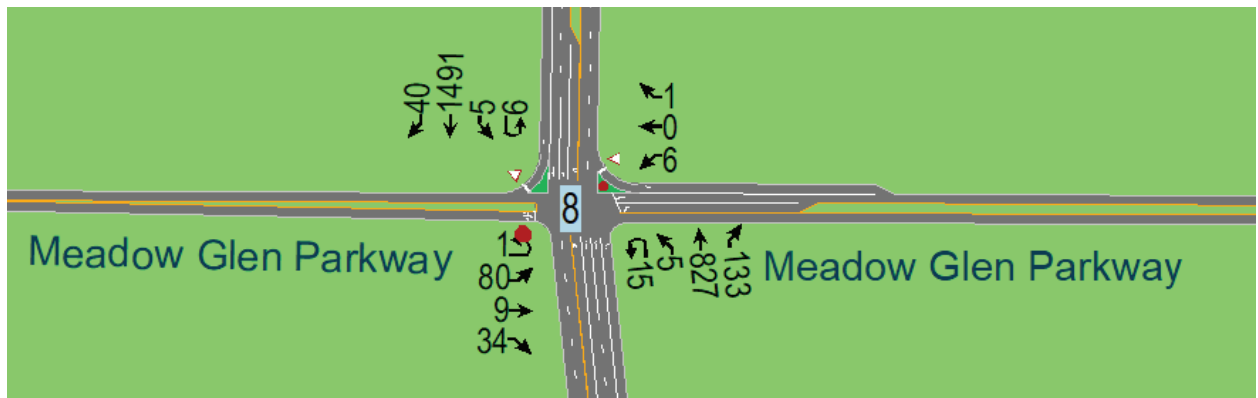
APPENDIX E: FUTURE TURNING MOVEMENT COUNTS

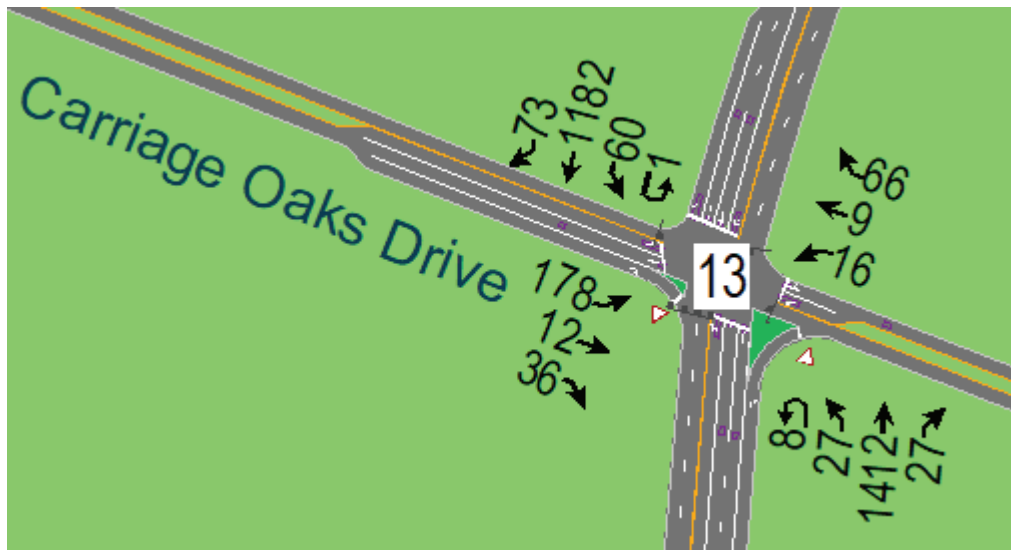
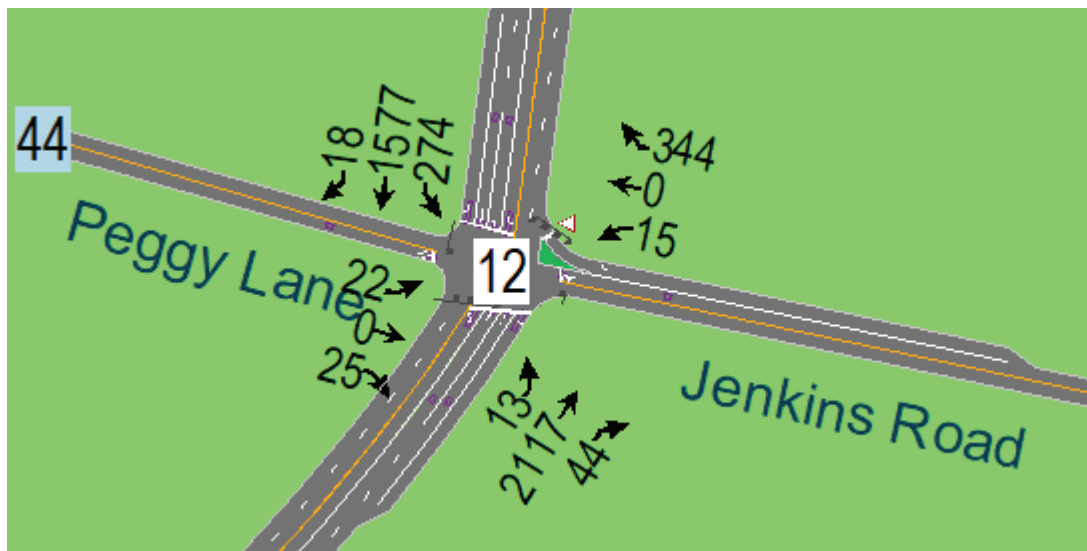
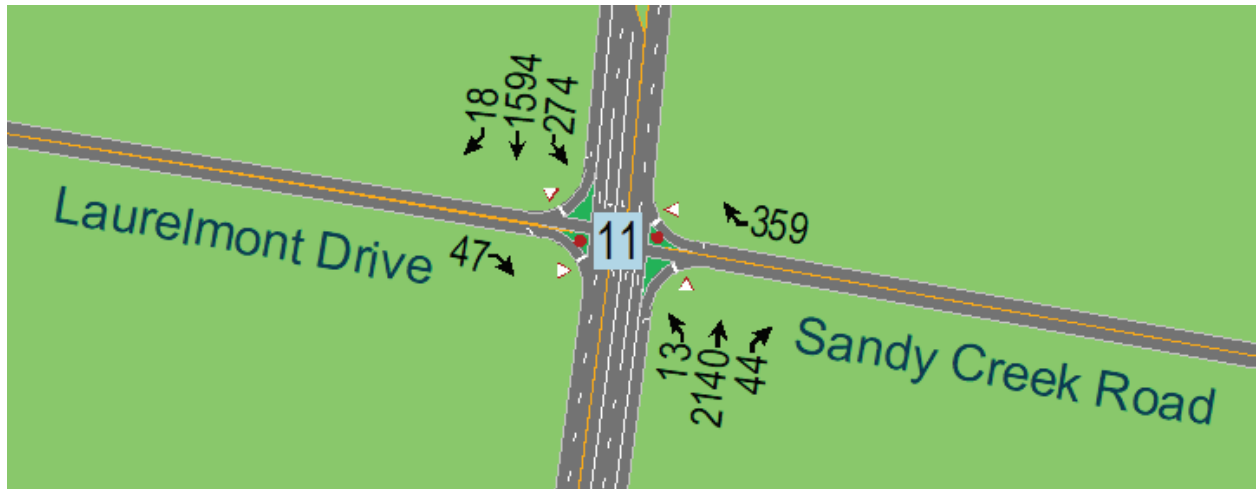
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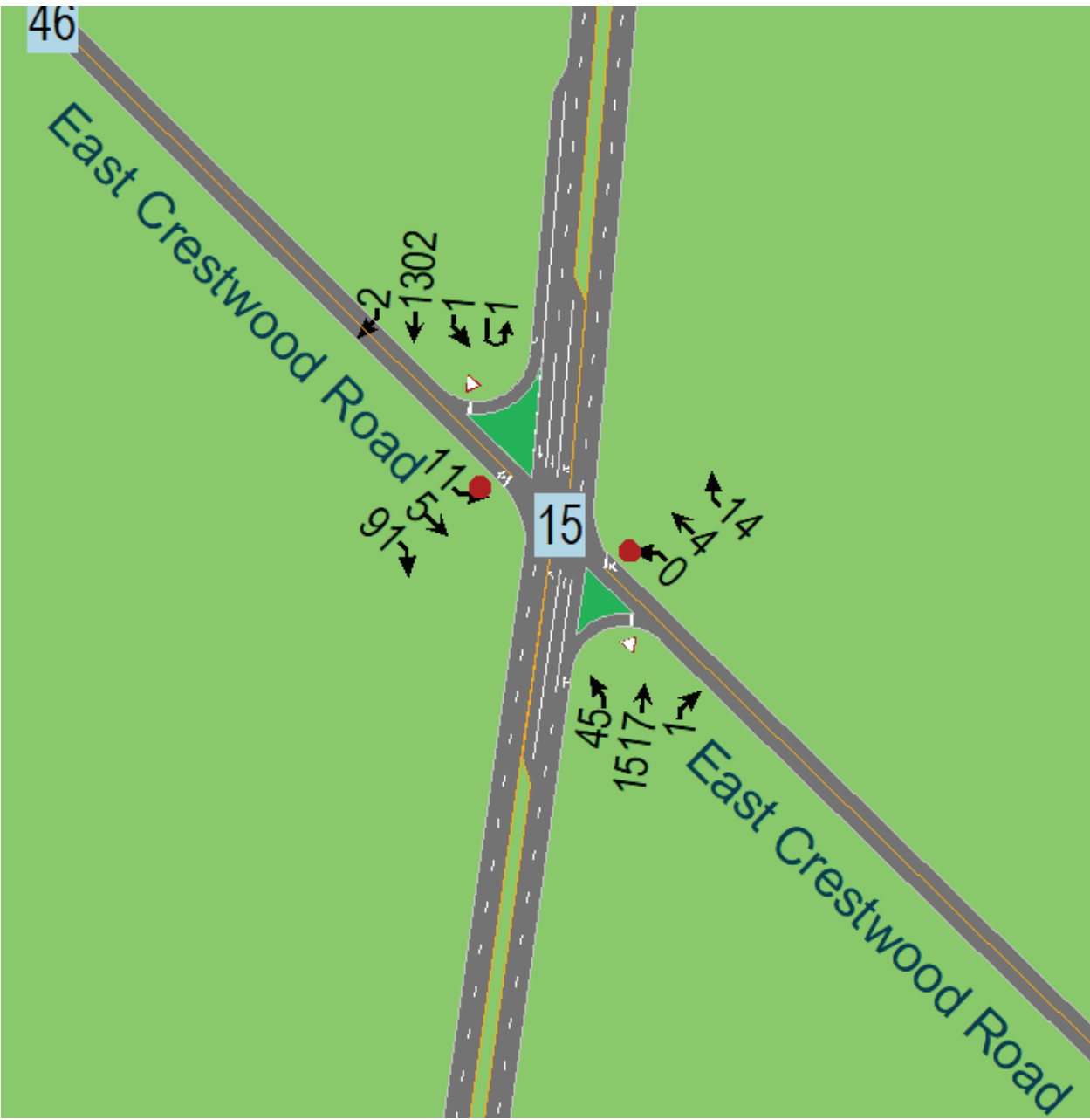


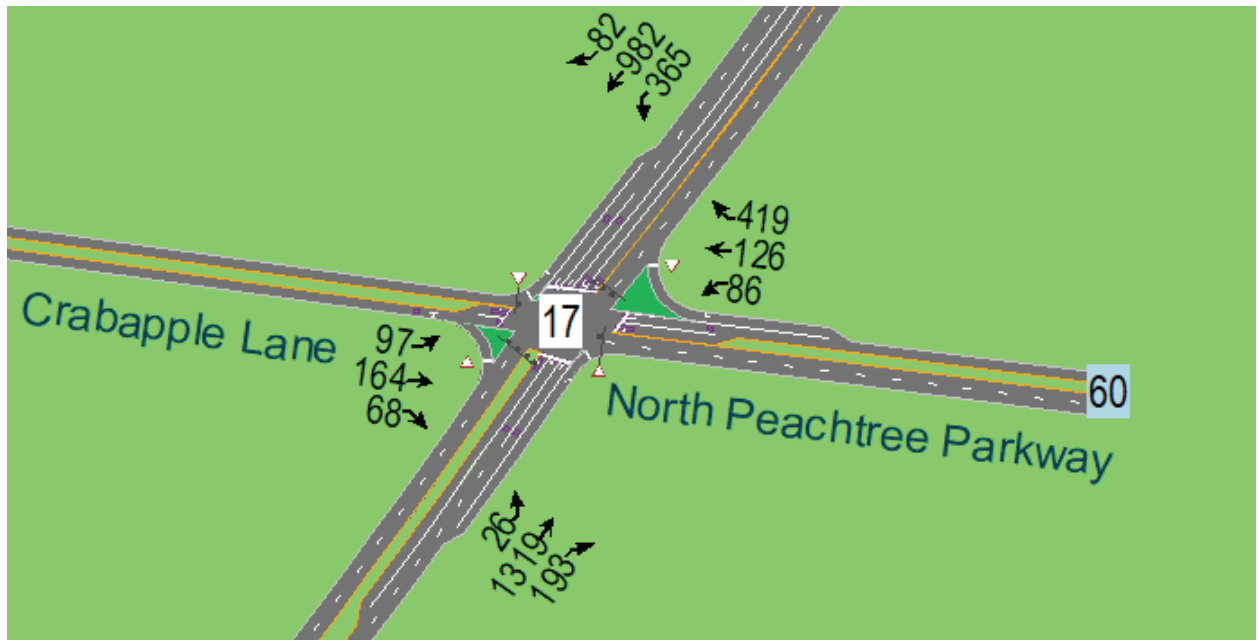
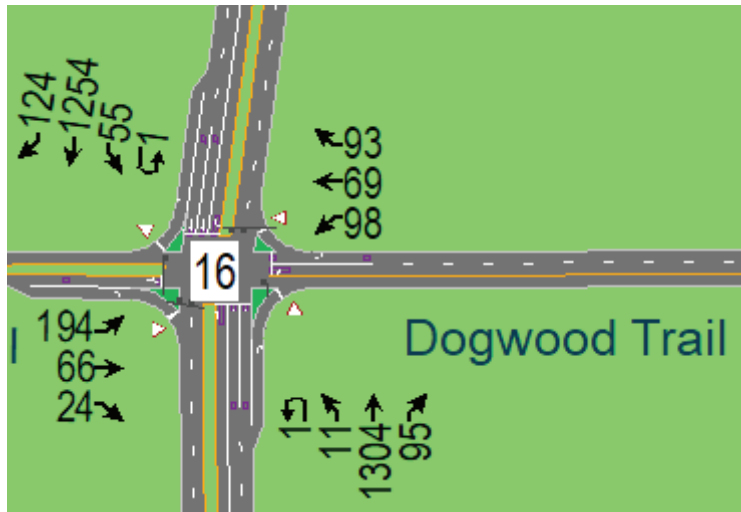


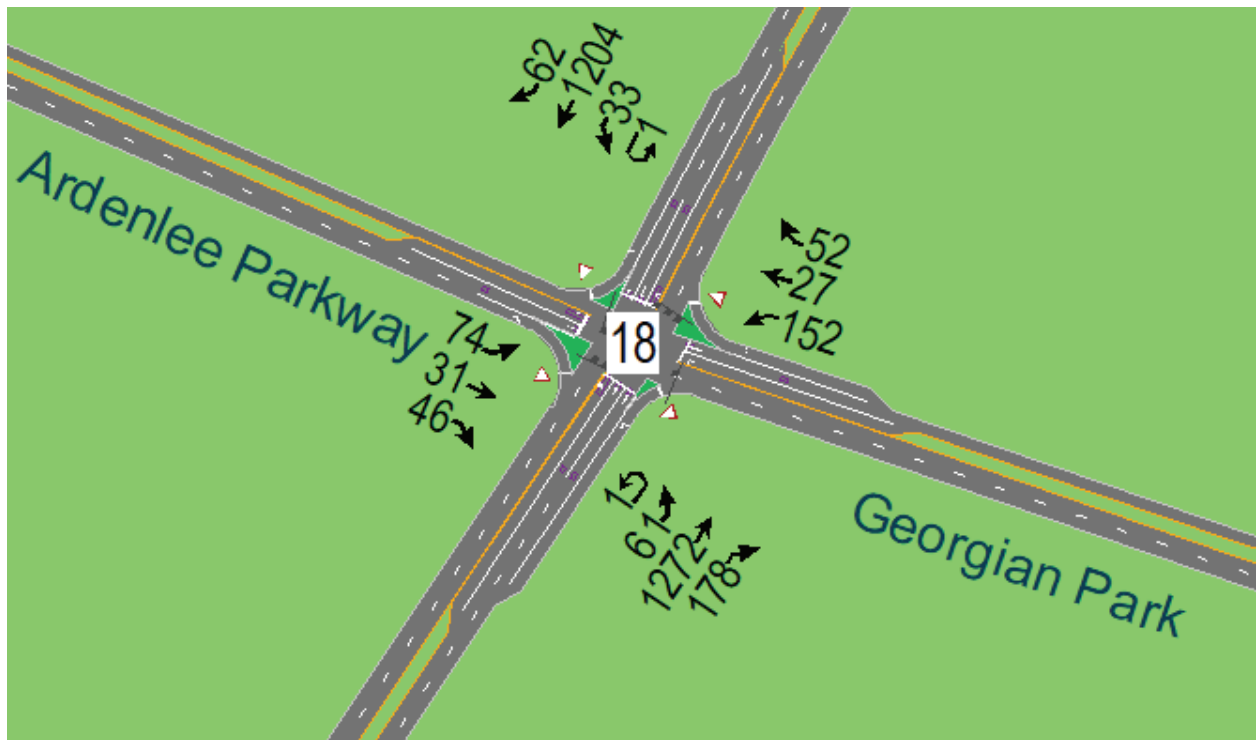


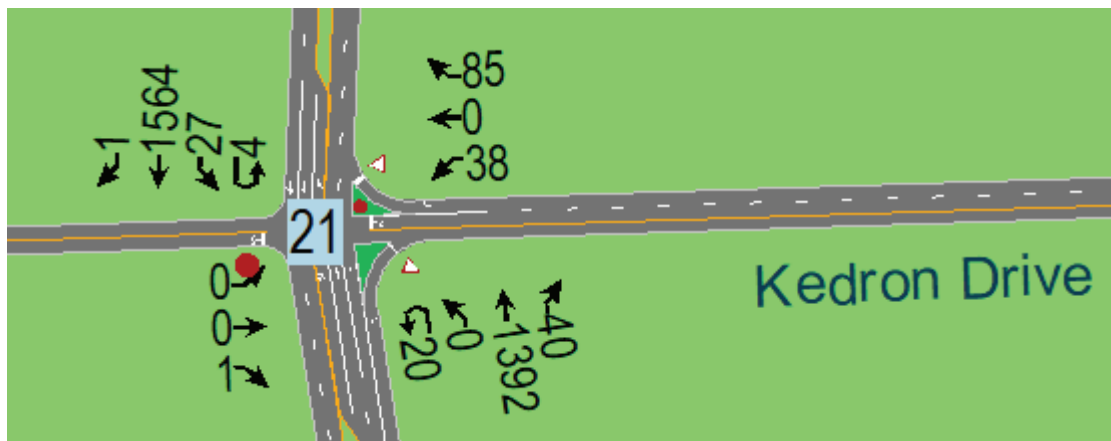
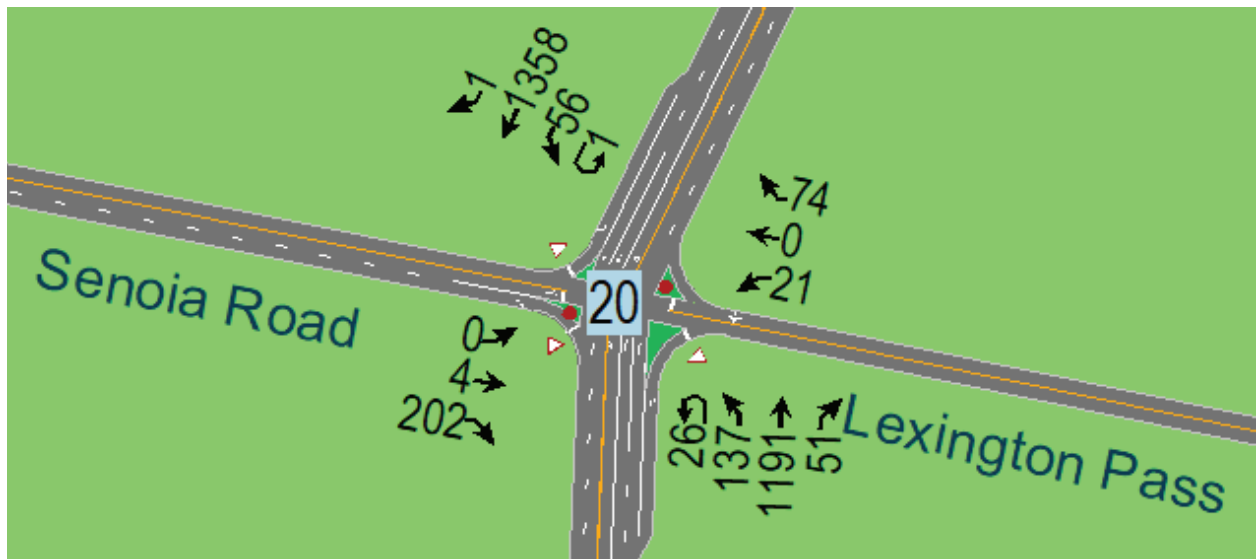


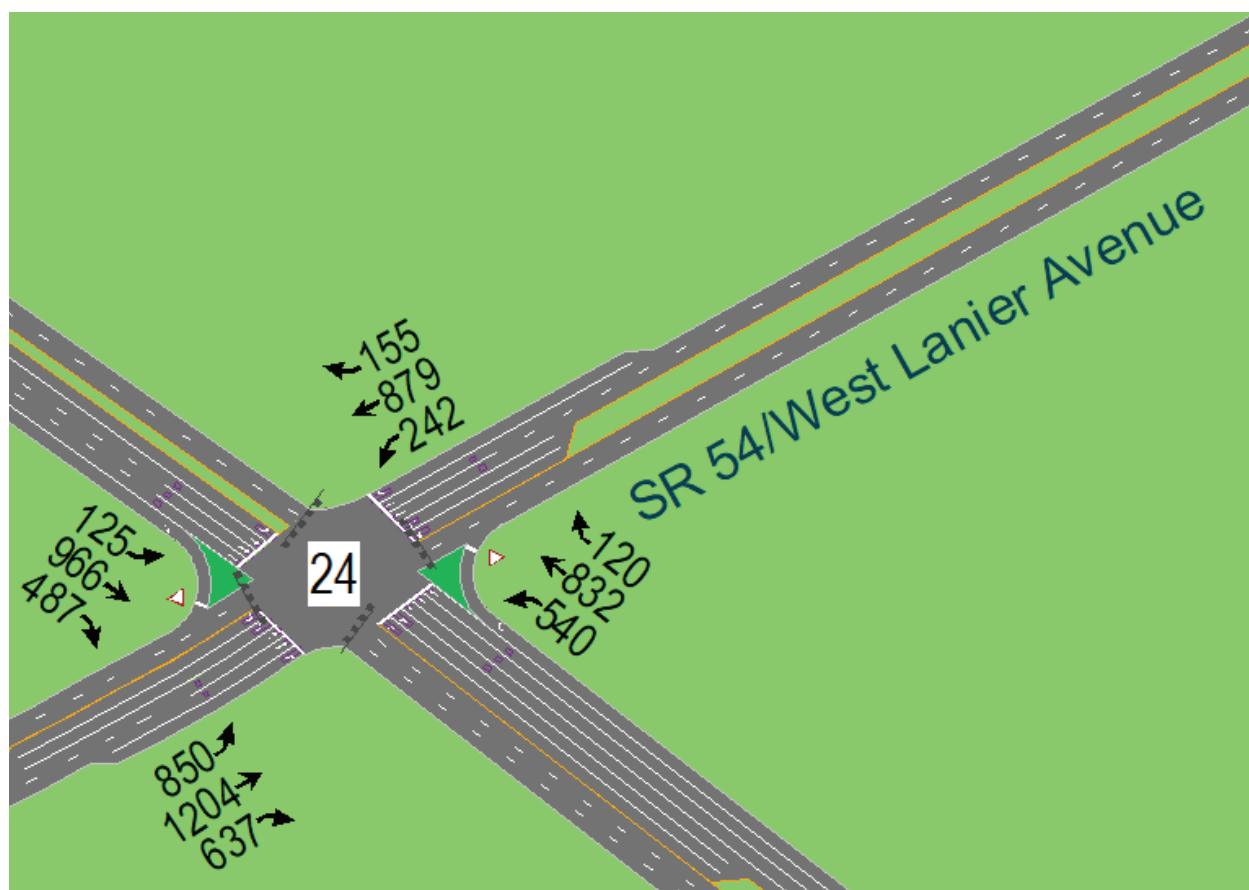
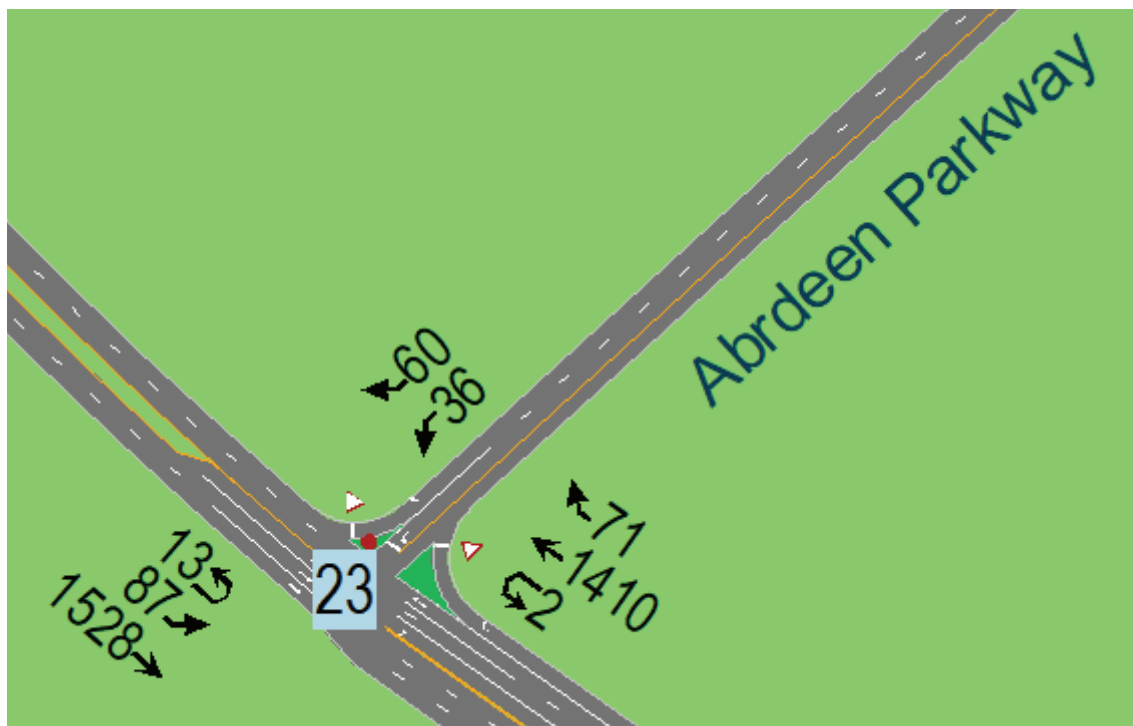






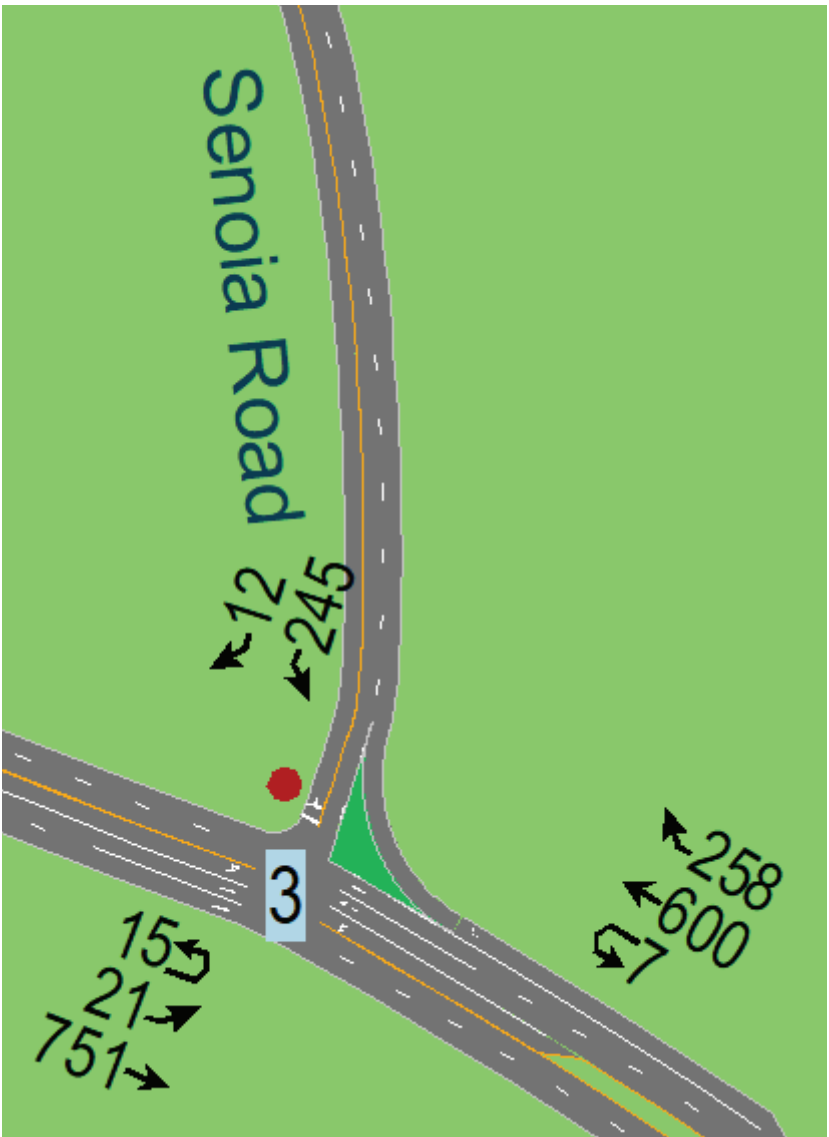


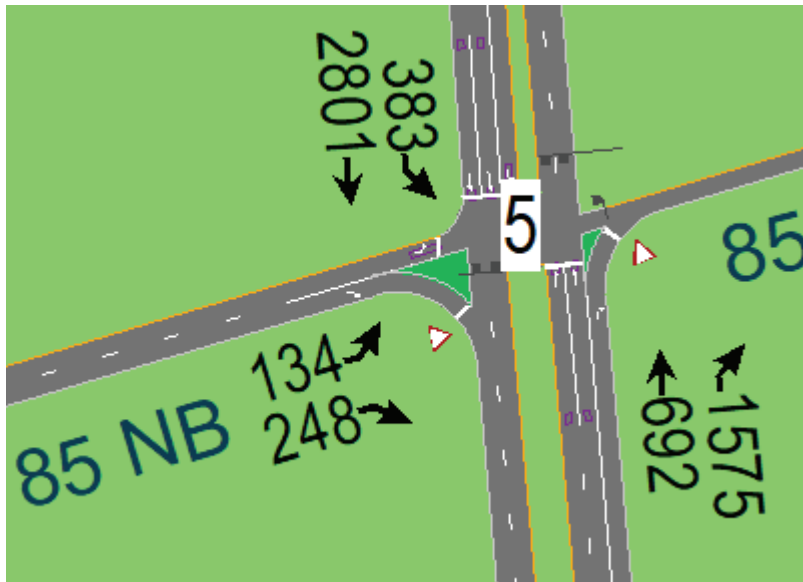
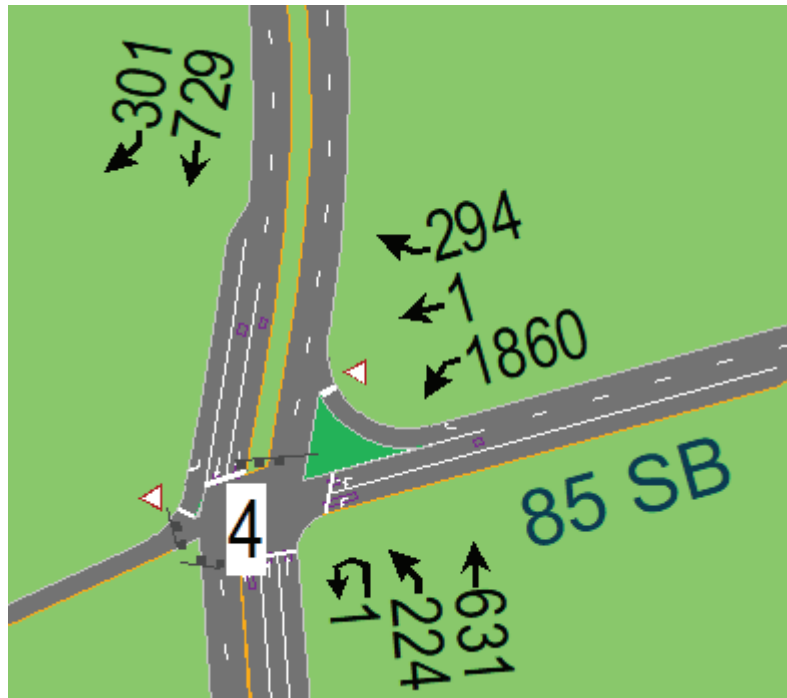


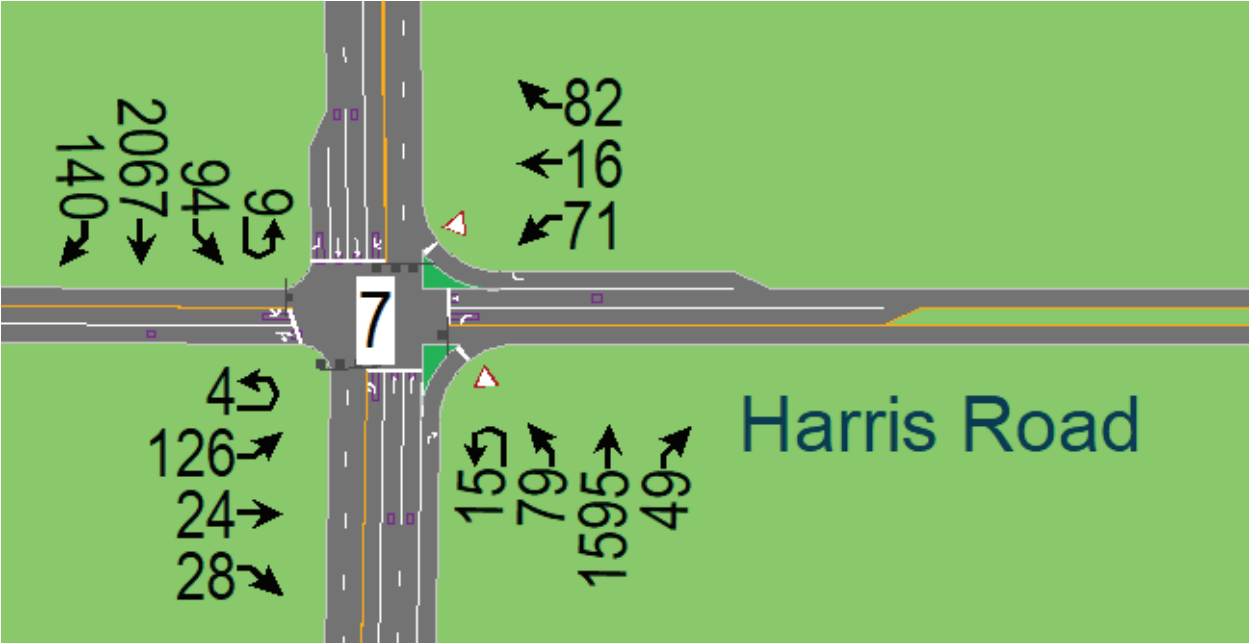
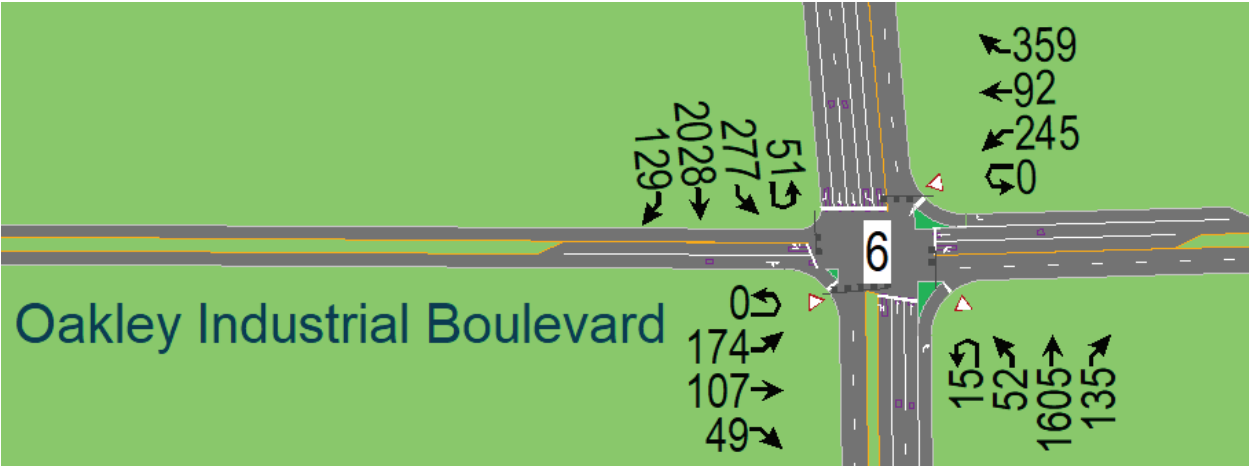


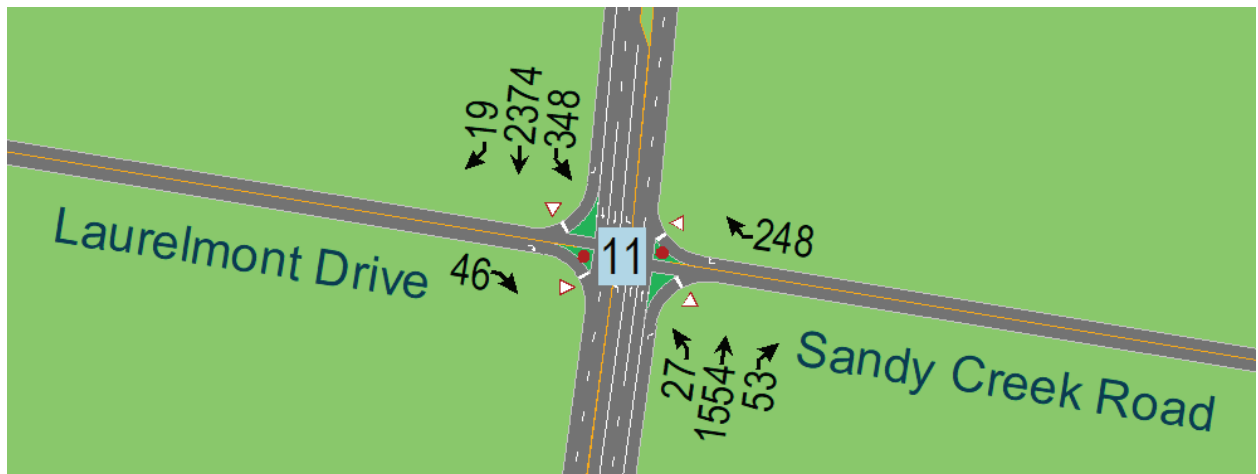
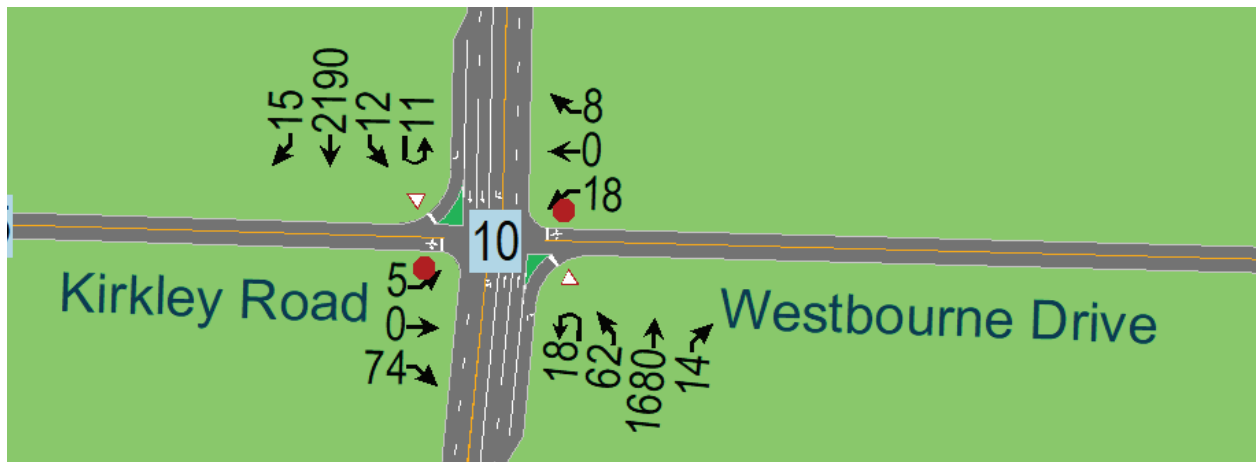
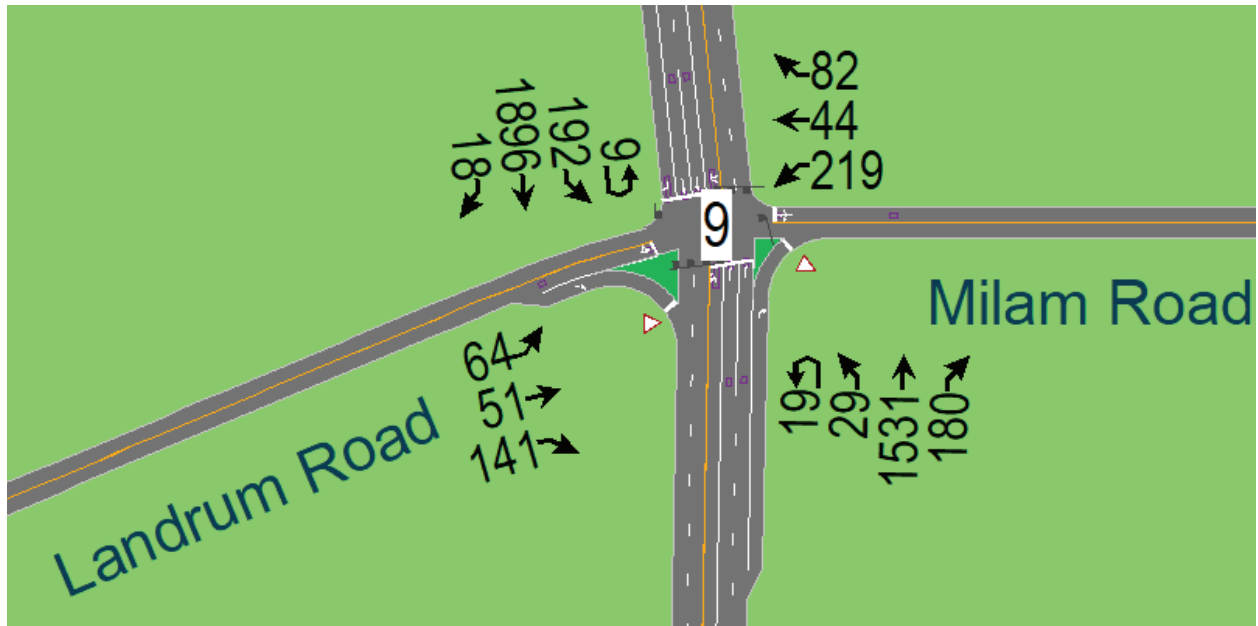
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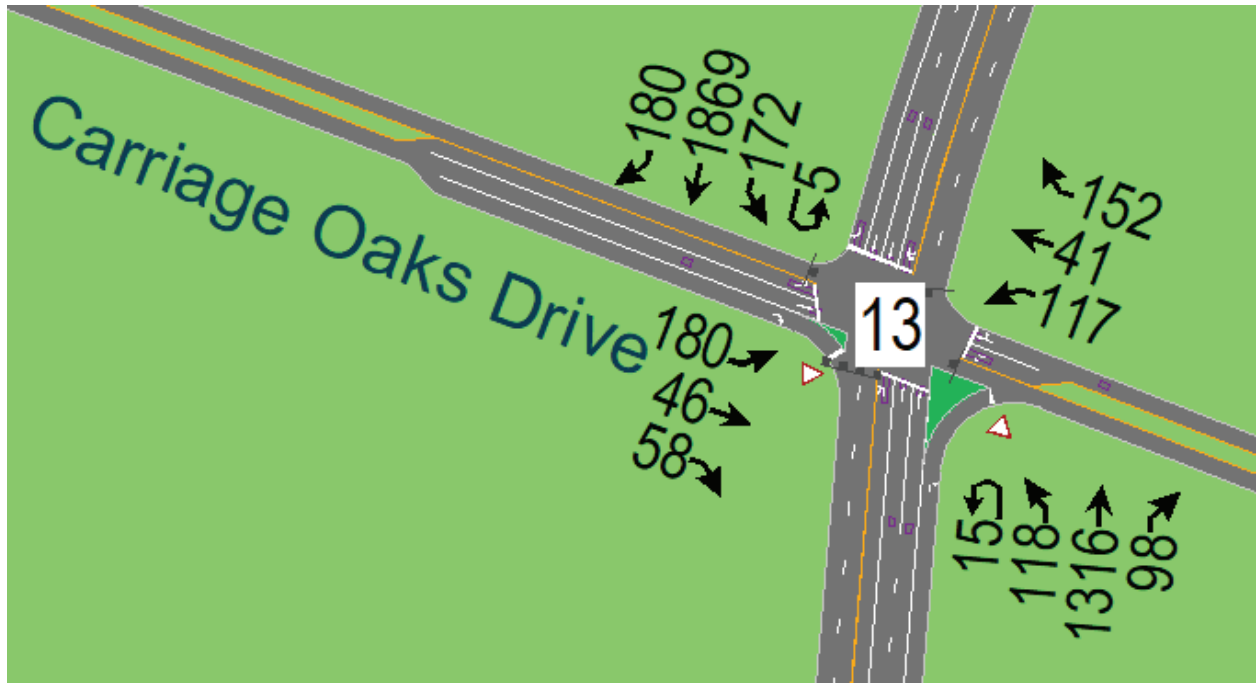
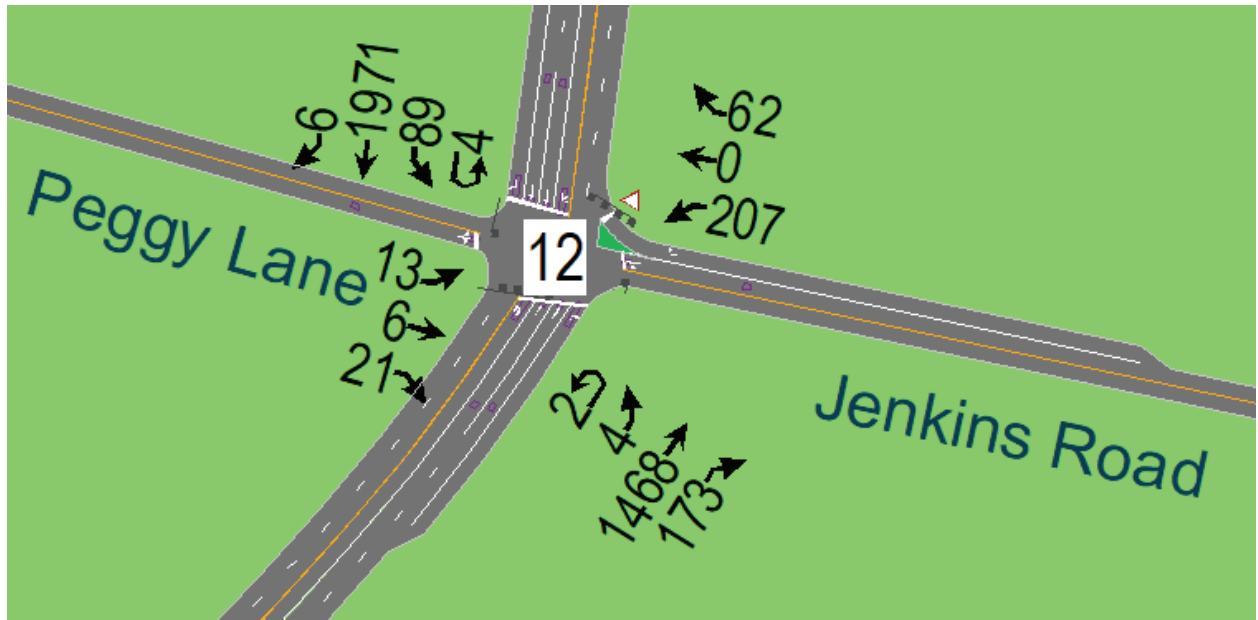








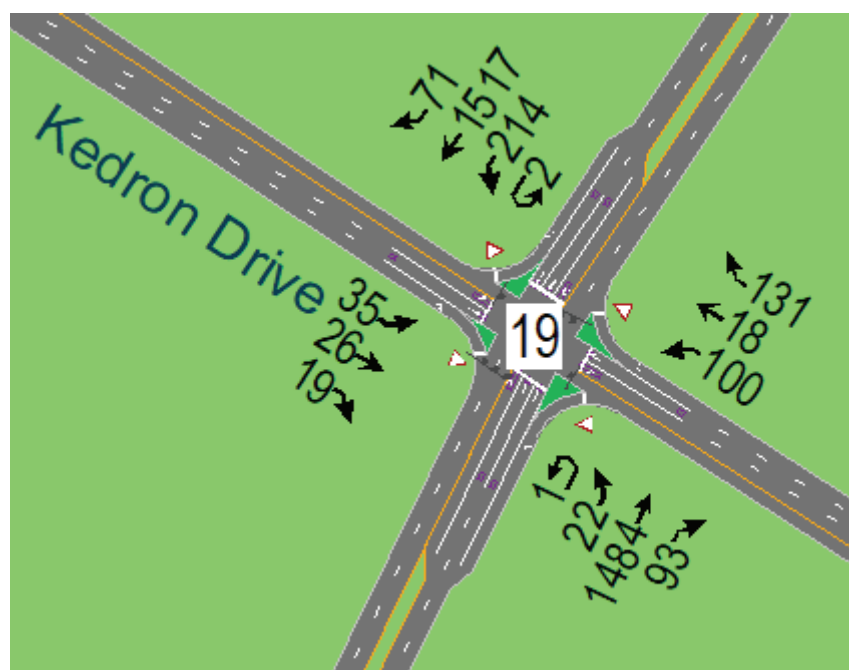


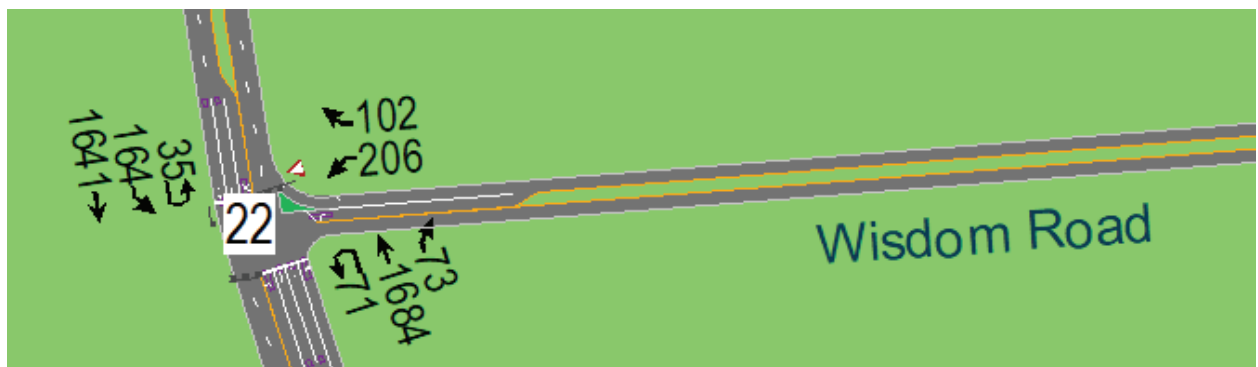
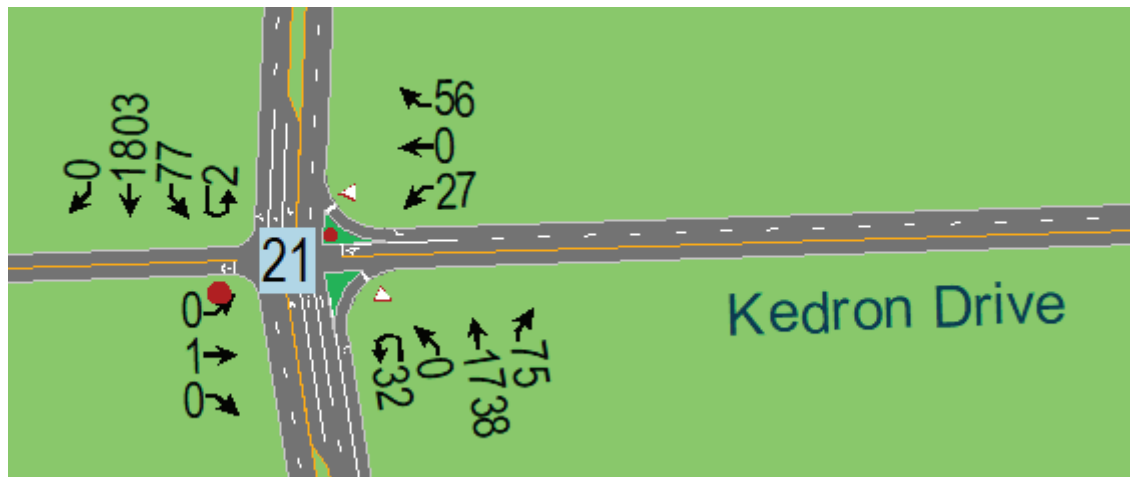
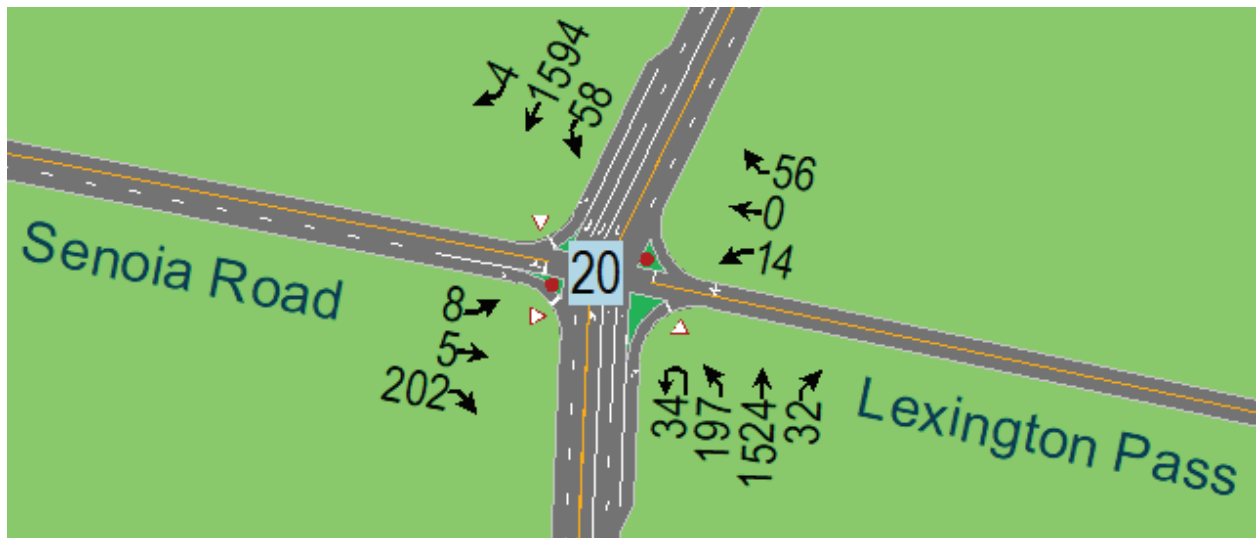


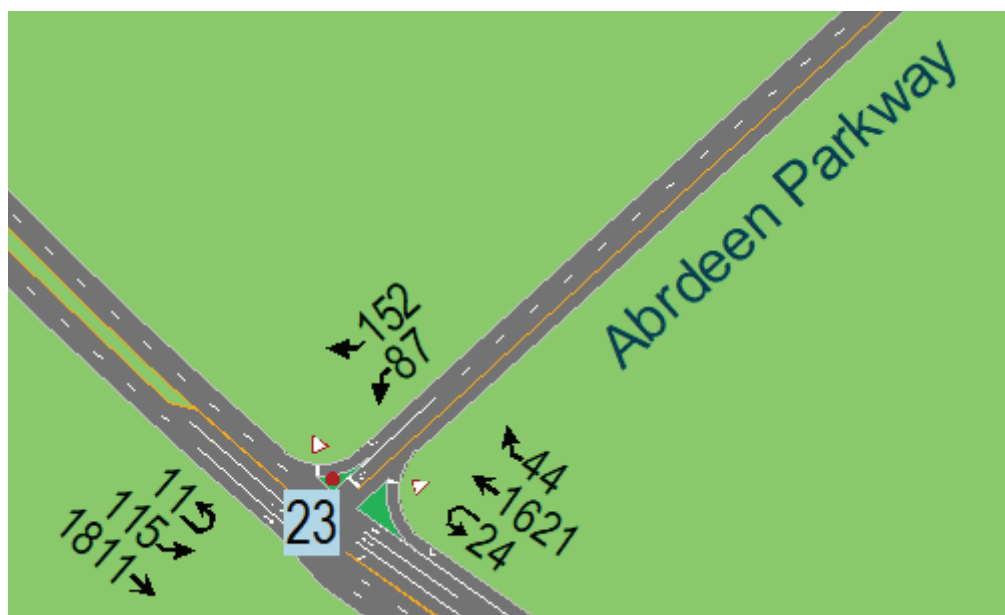




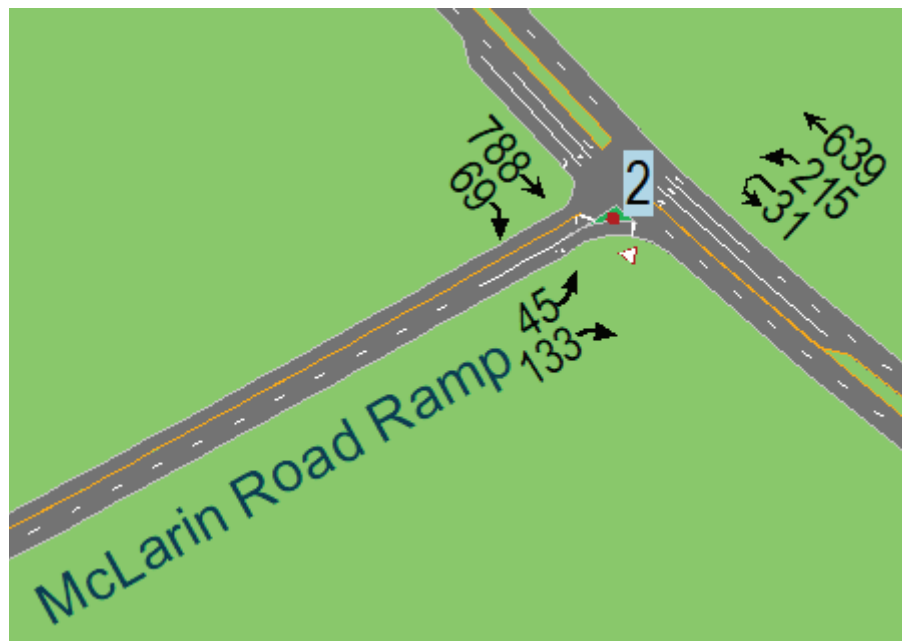
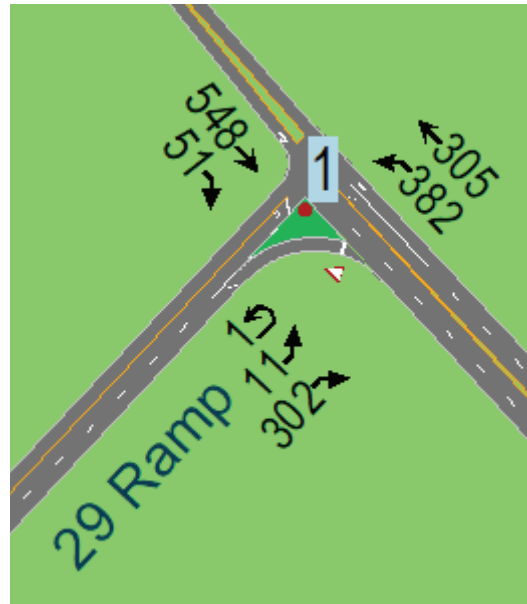


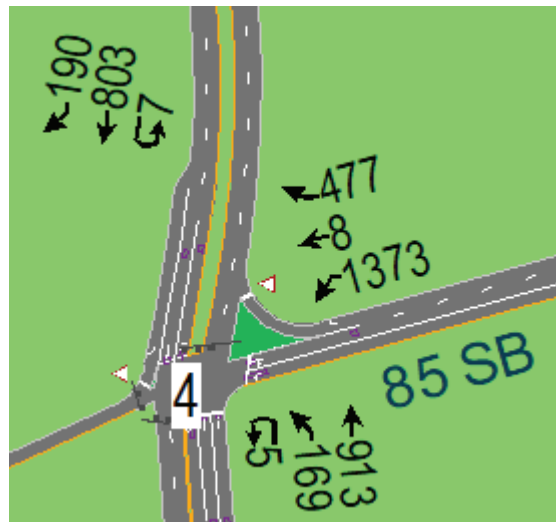
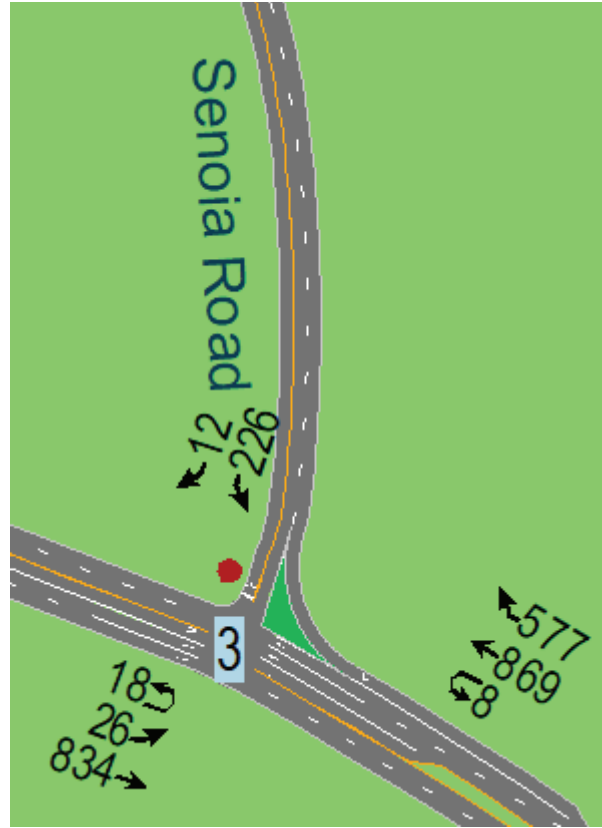


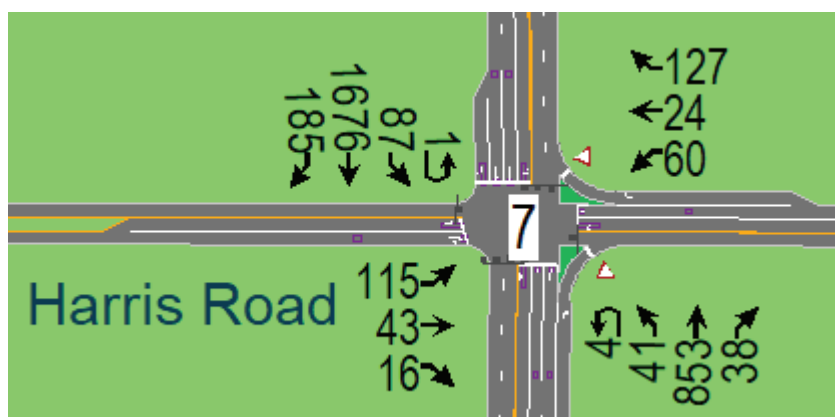
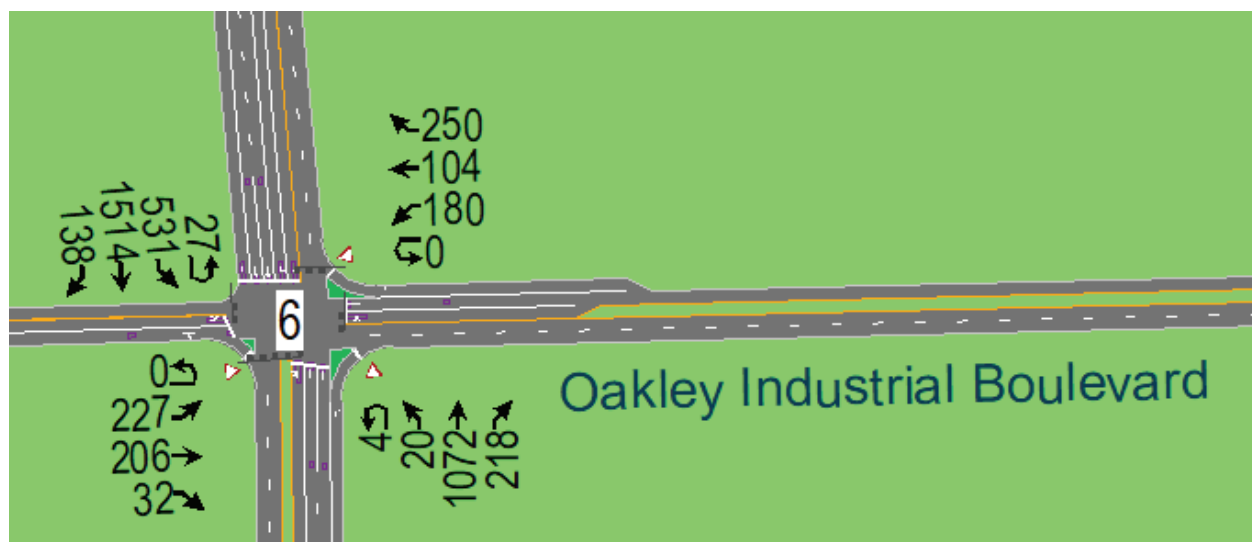
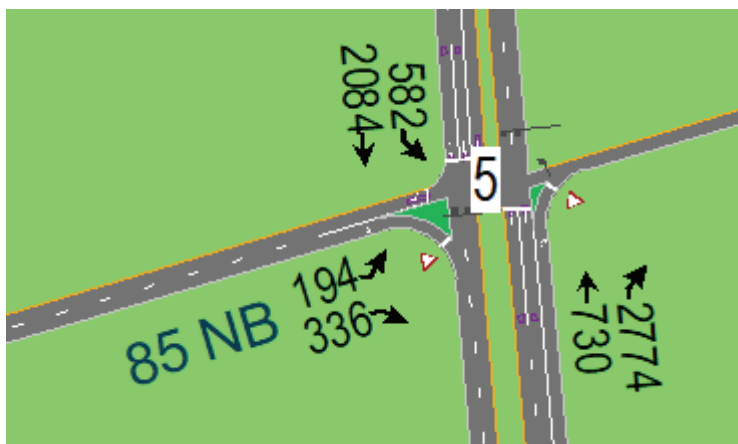


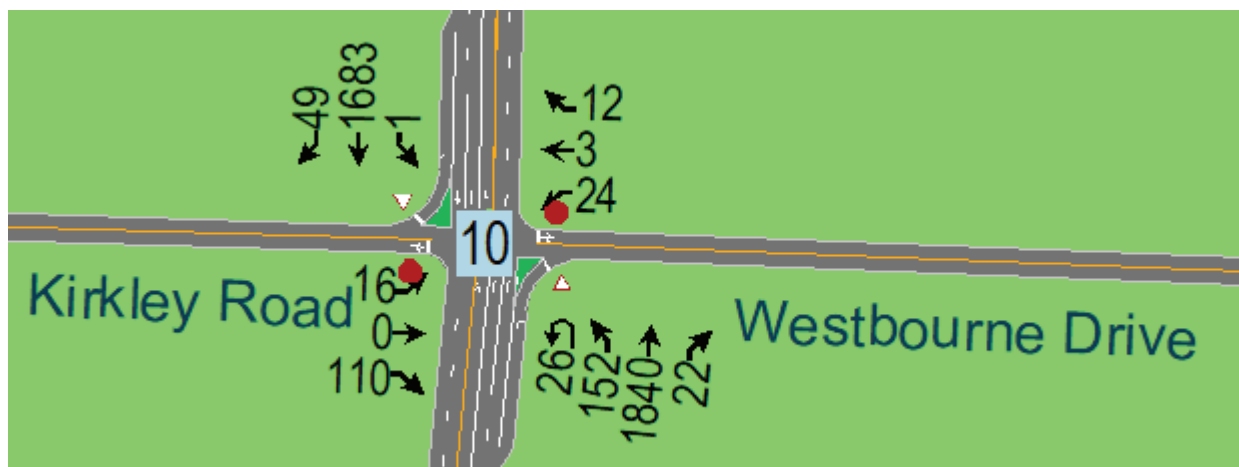
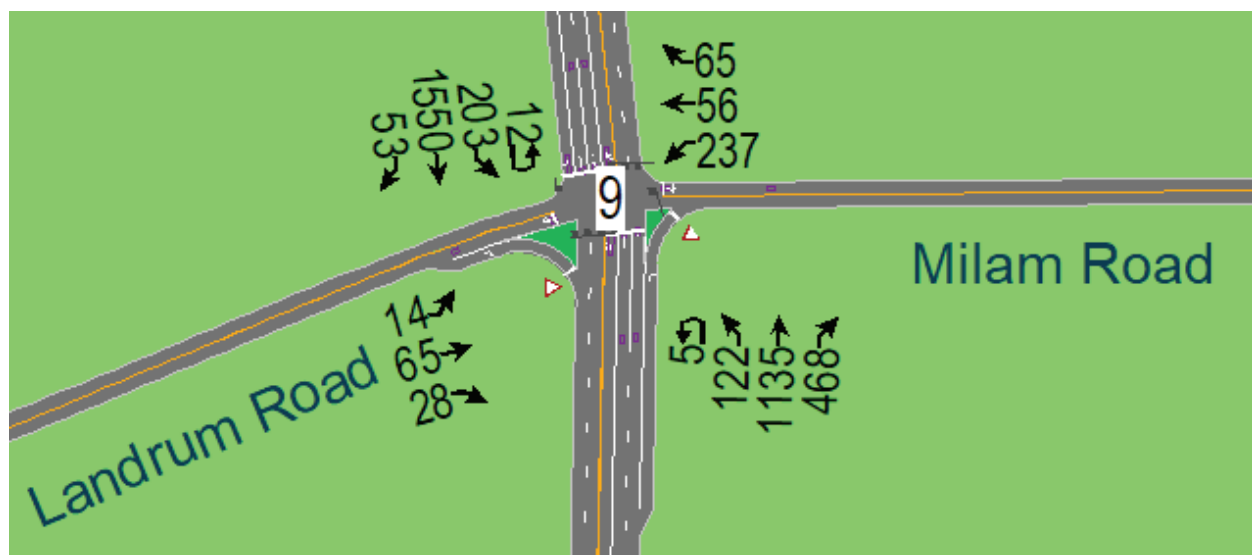
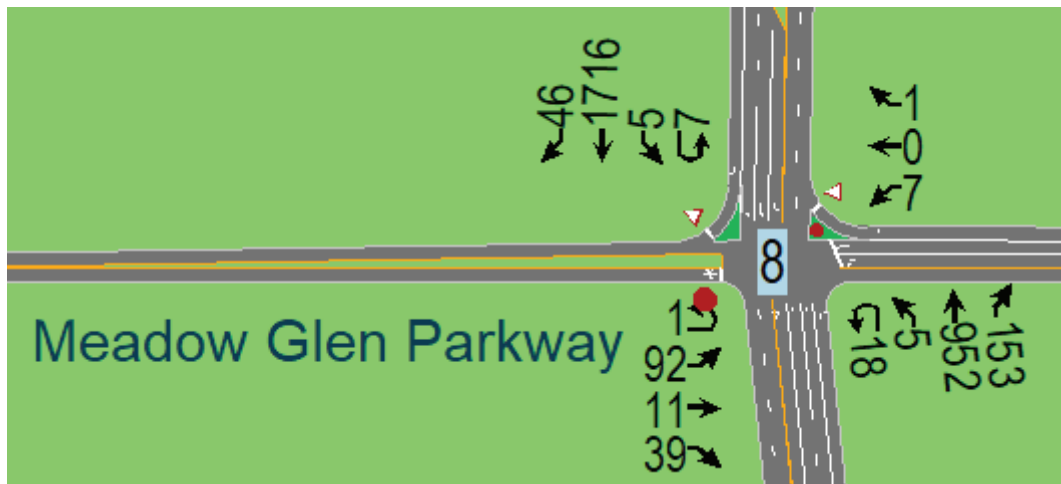


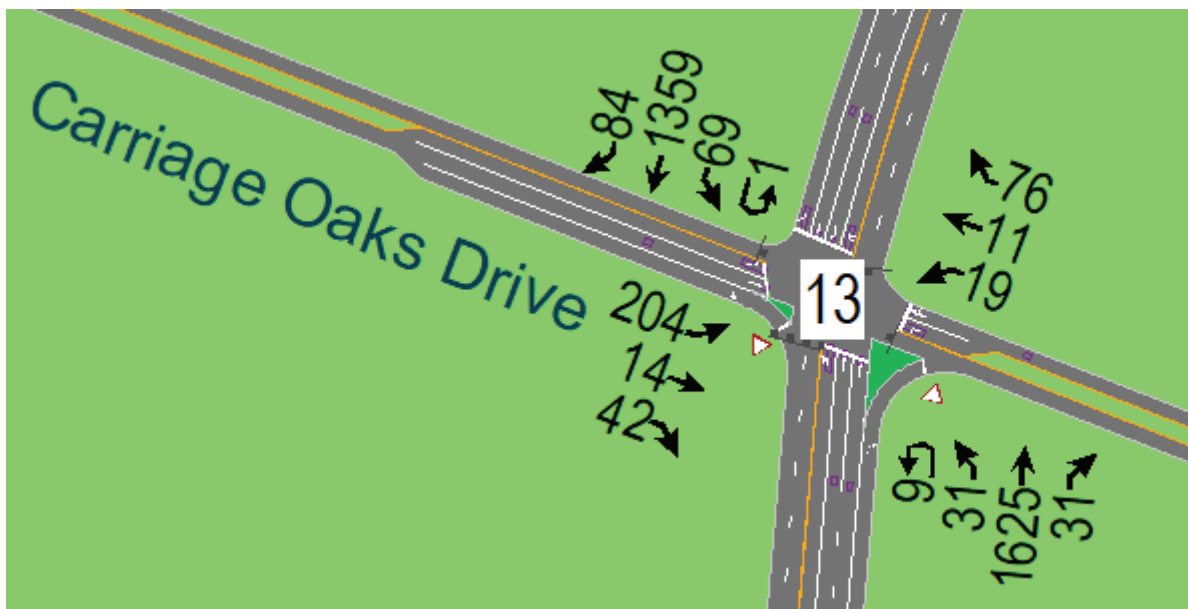
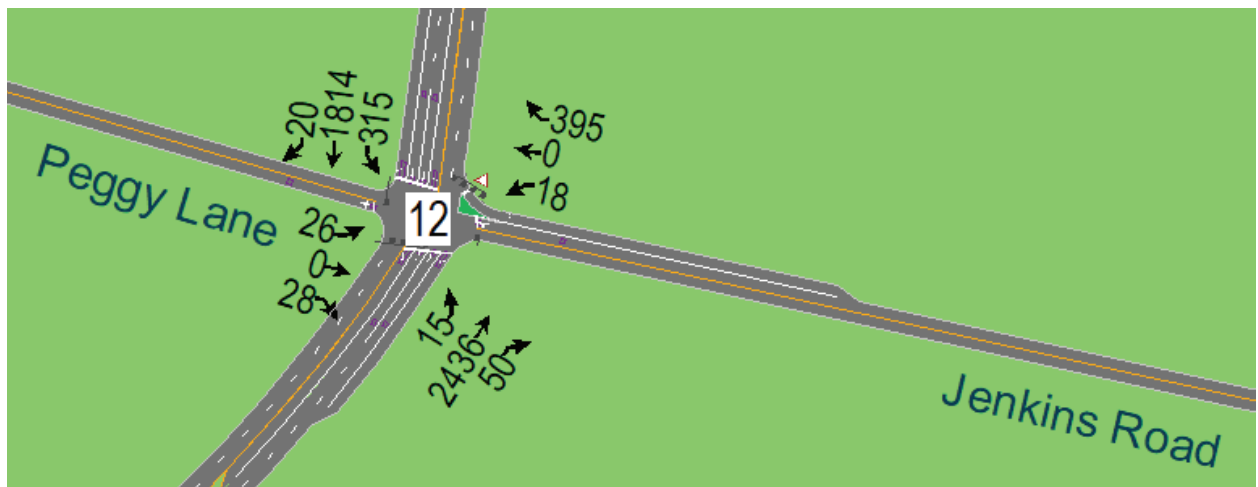
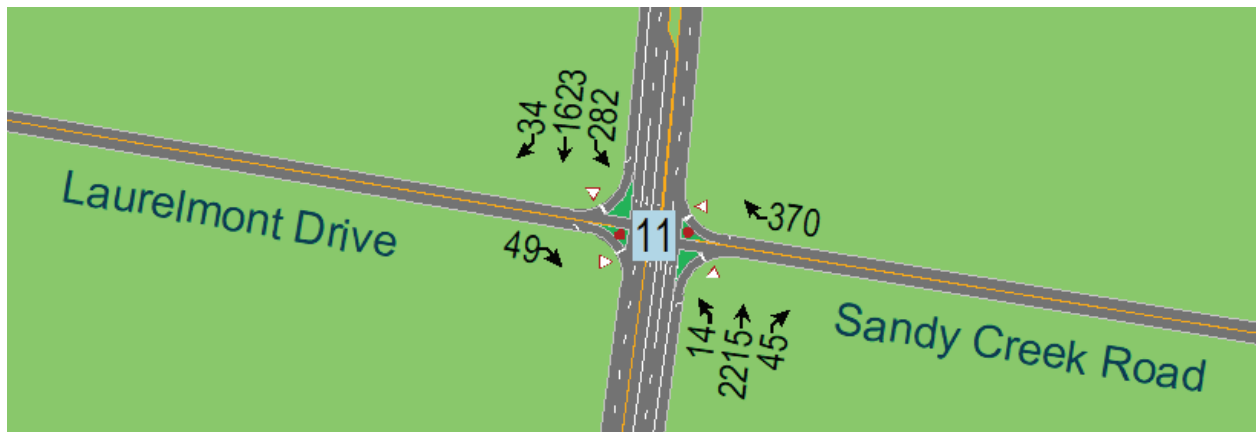
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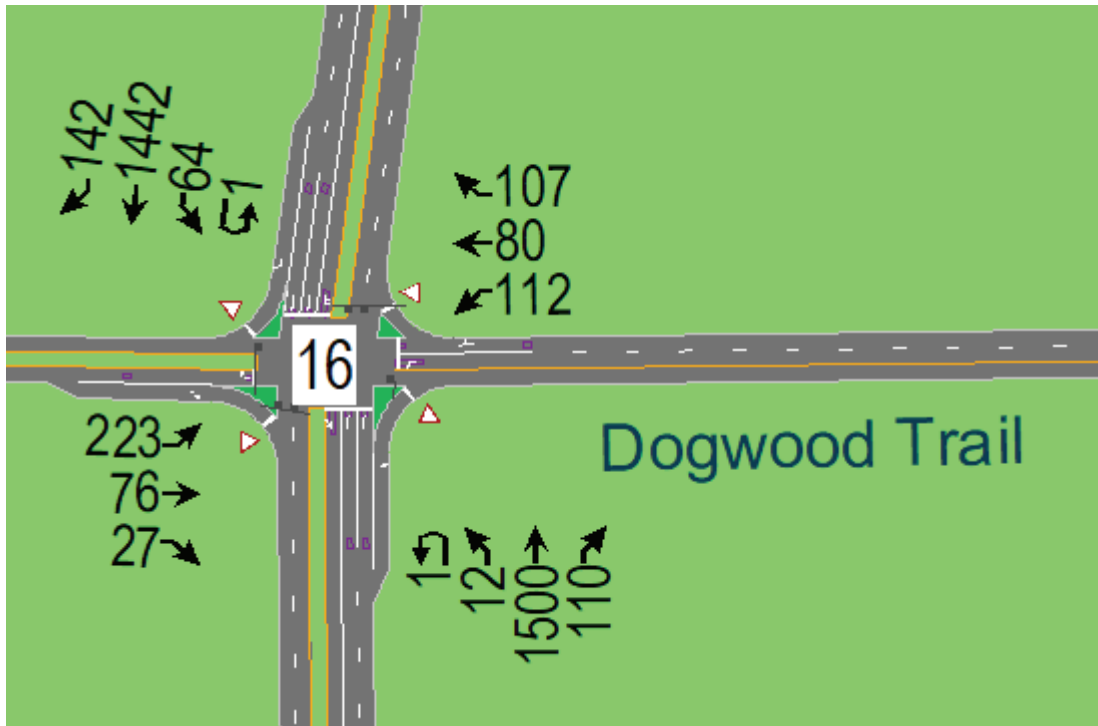


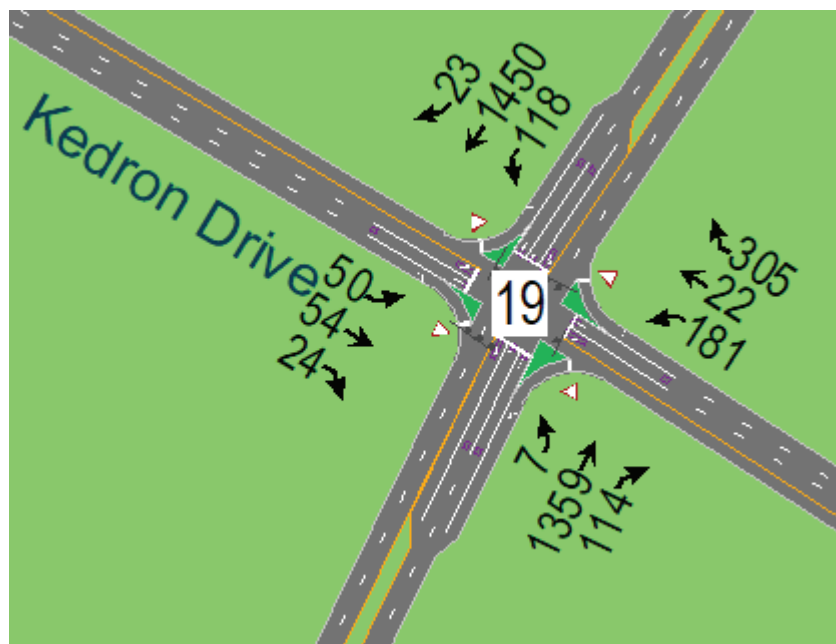
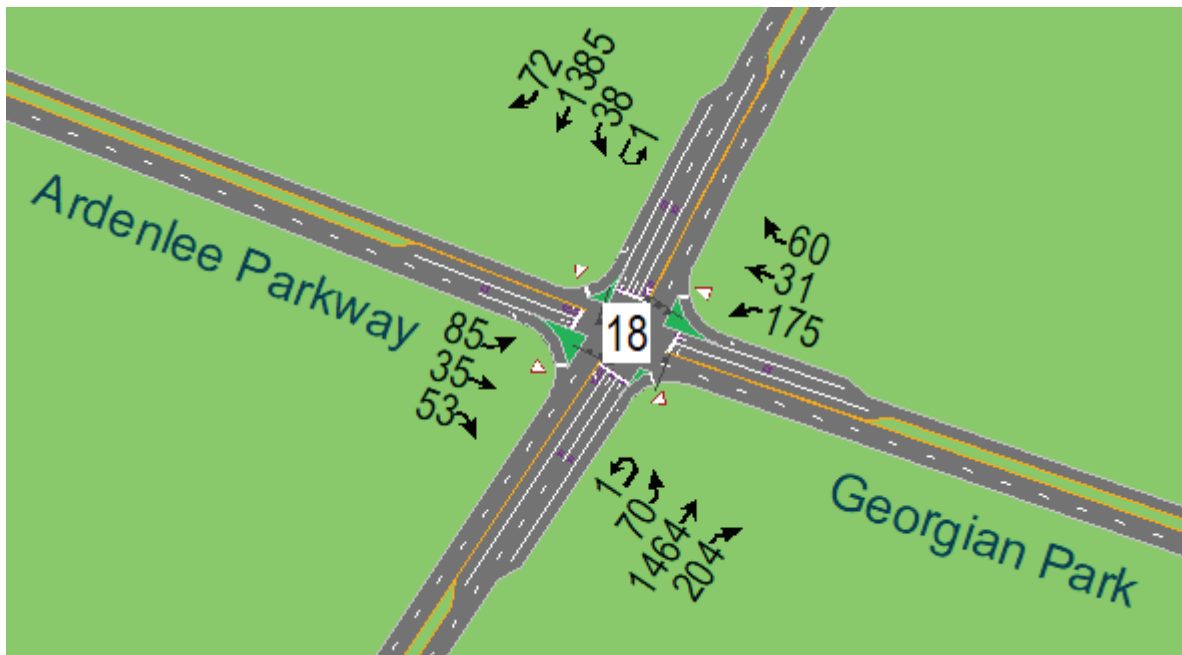


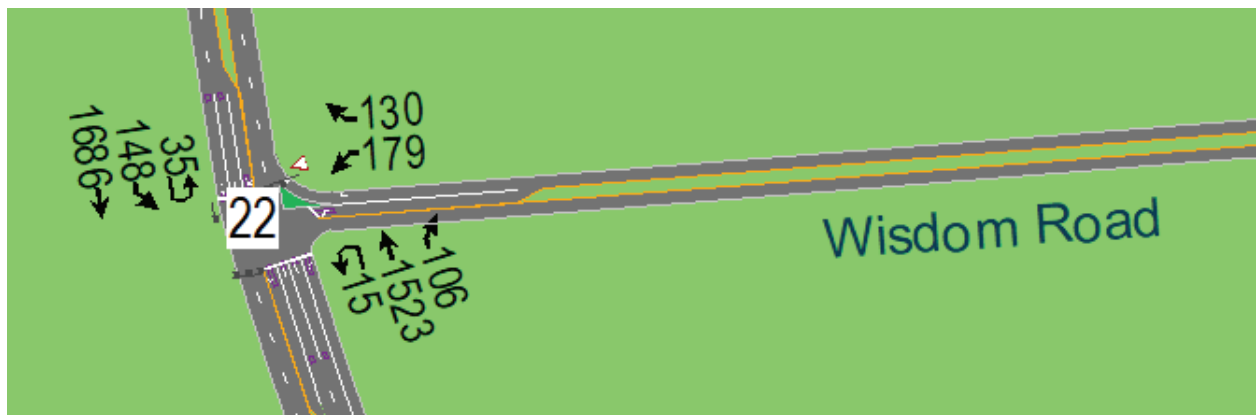
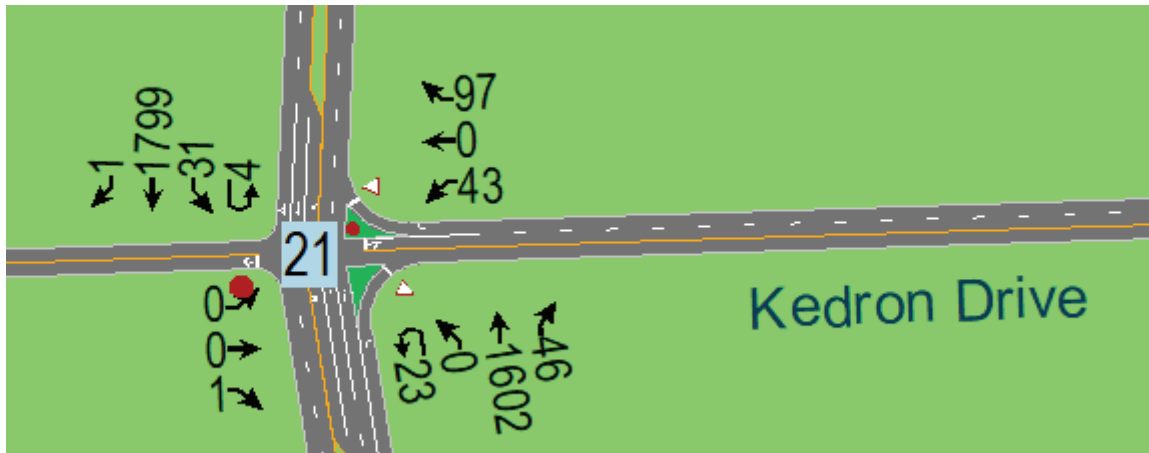
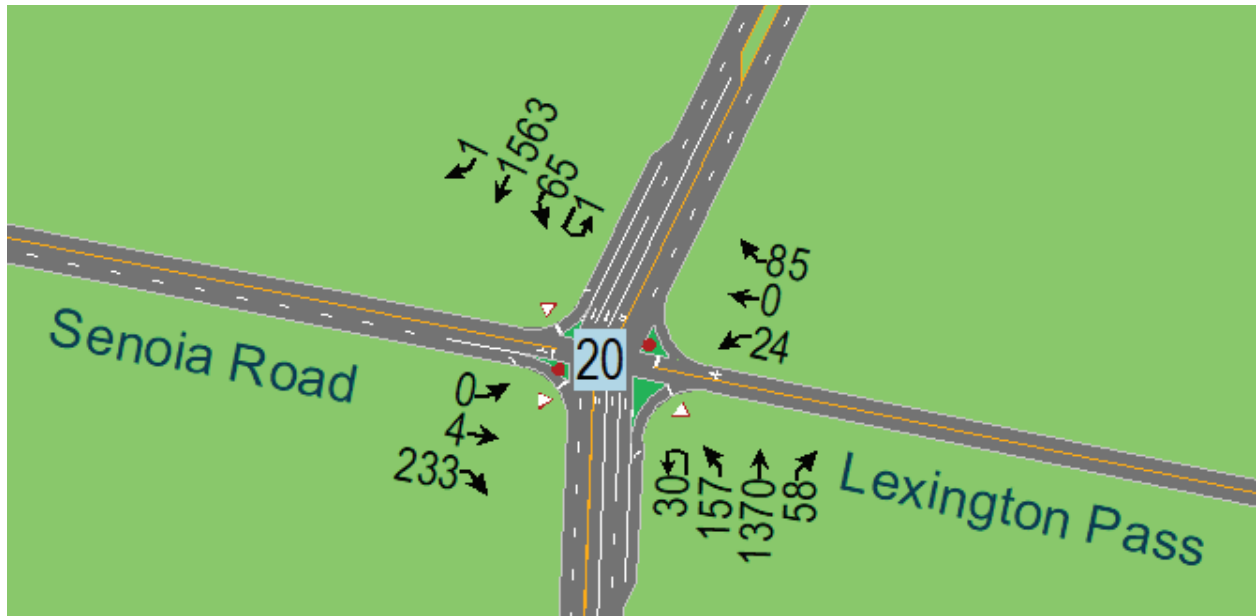








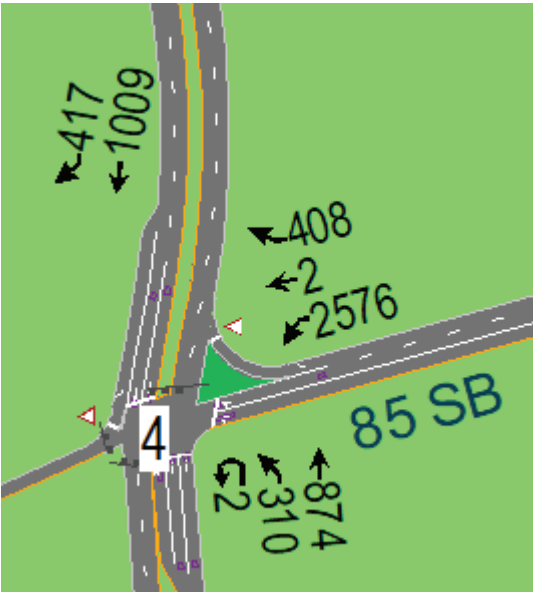
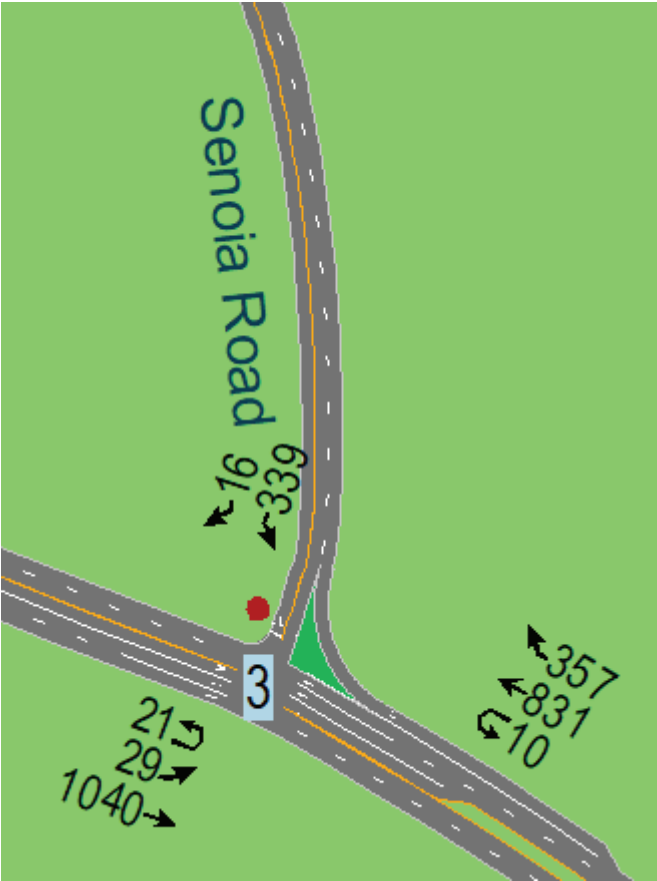


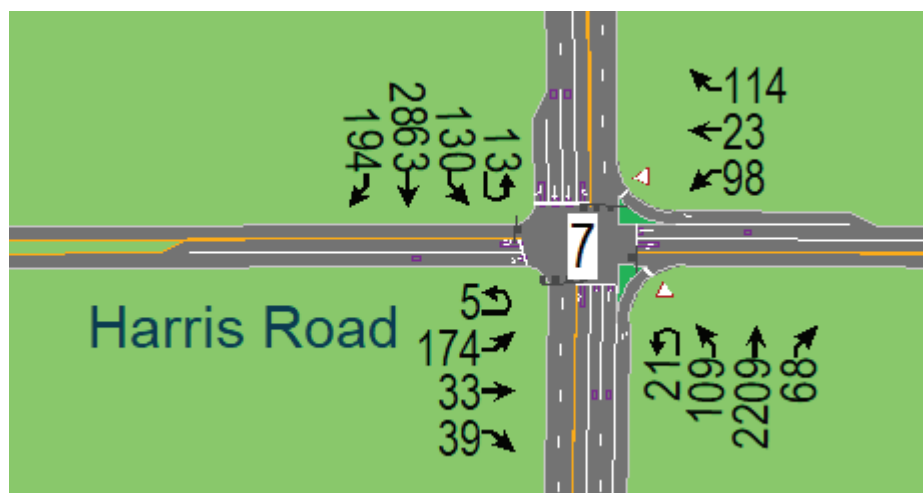
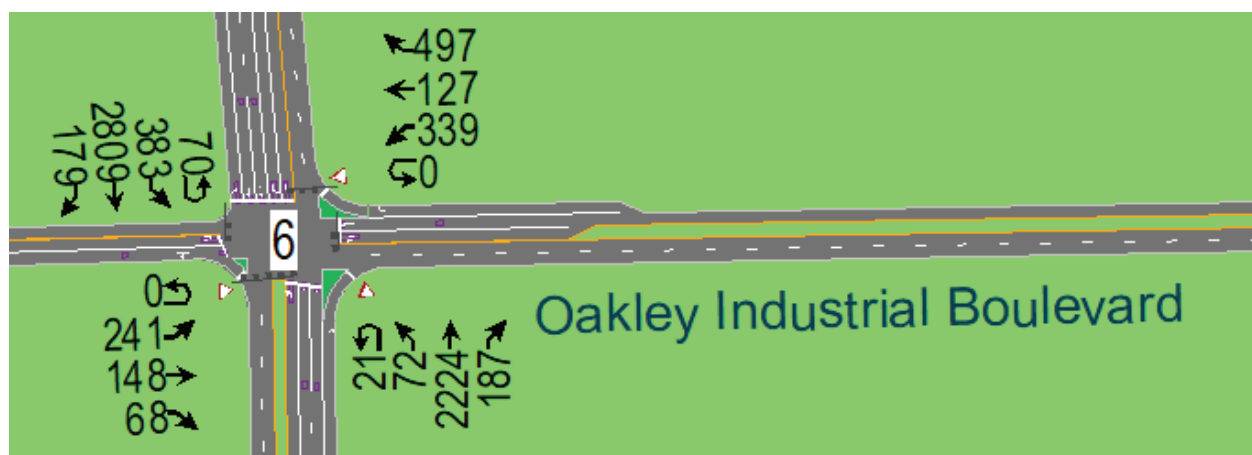
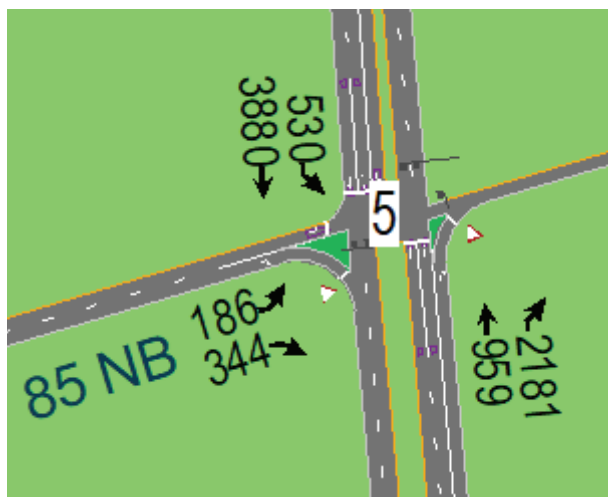


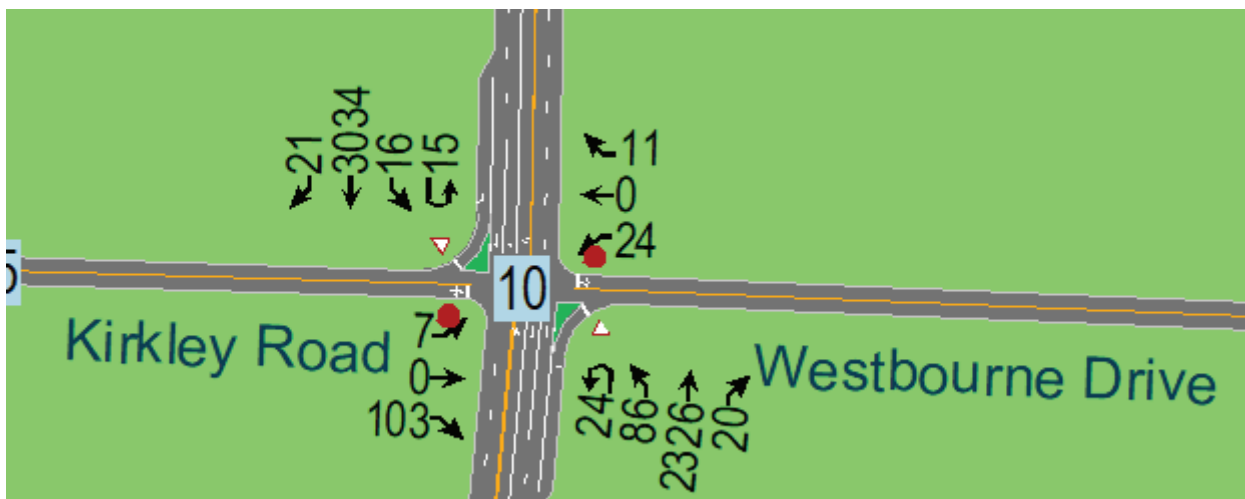
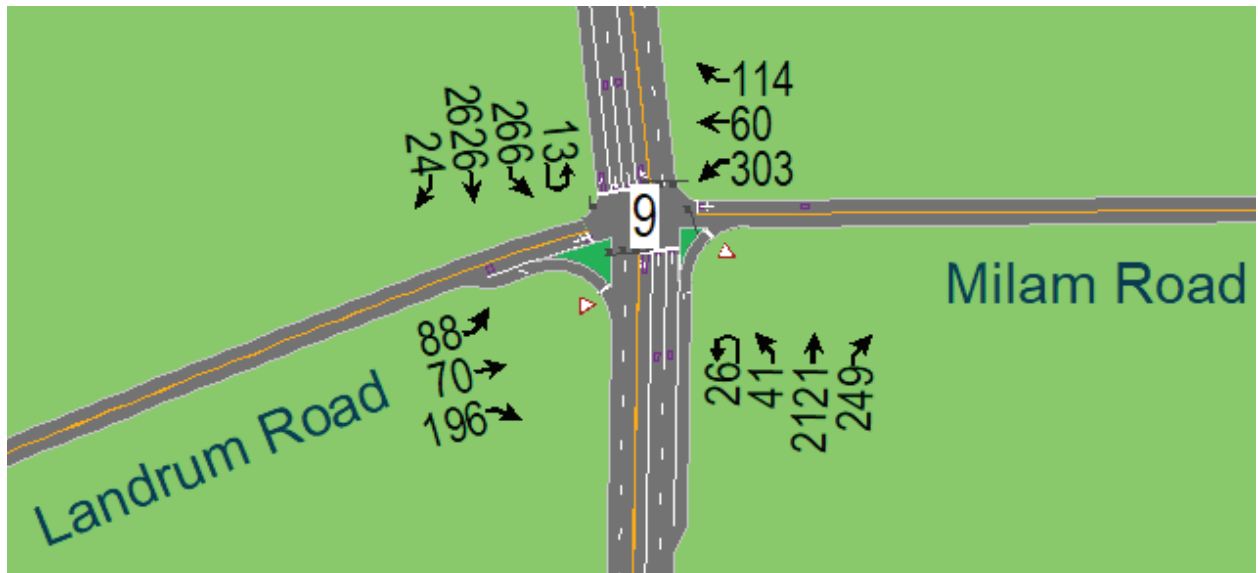
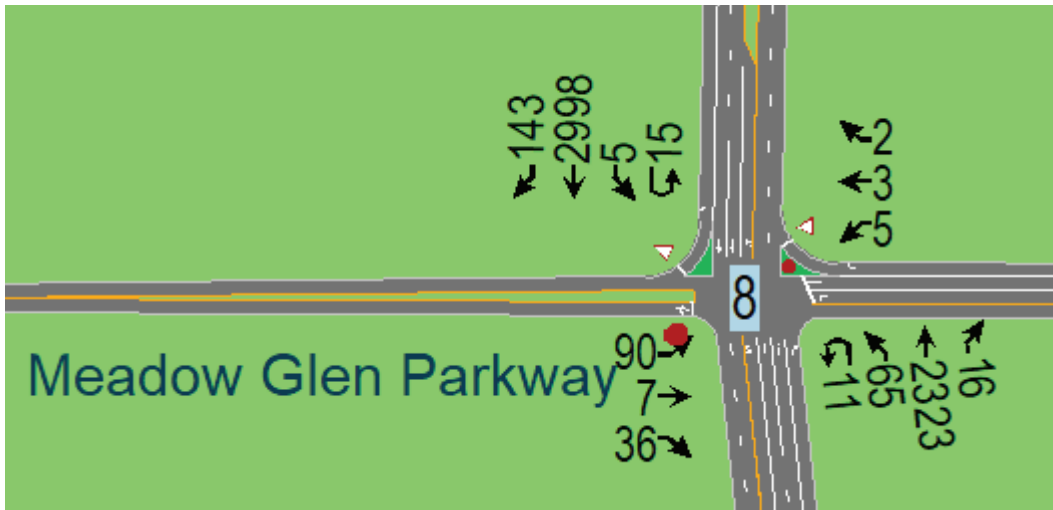


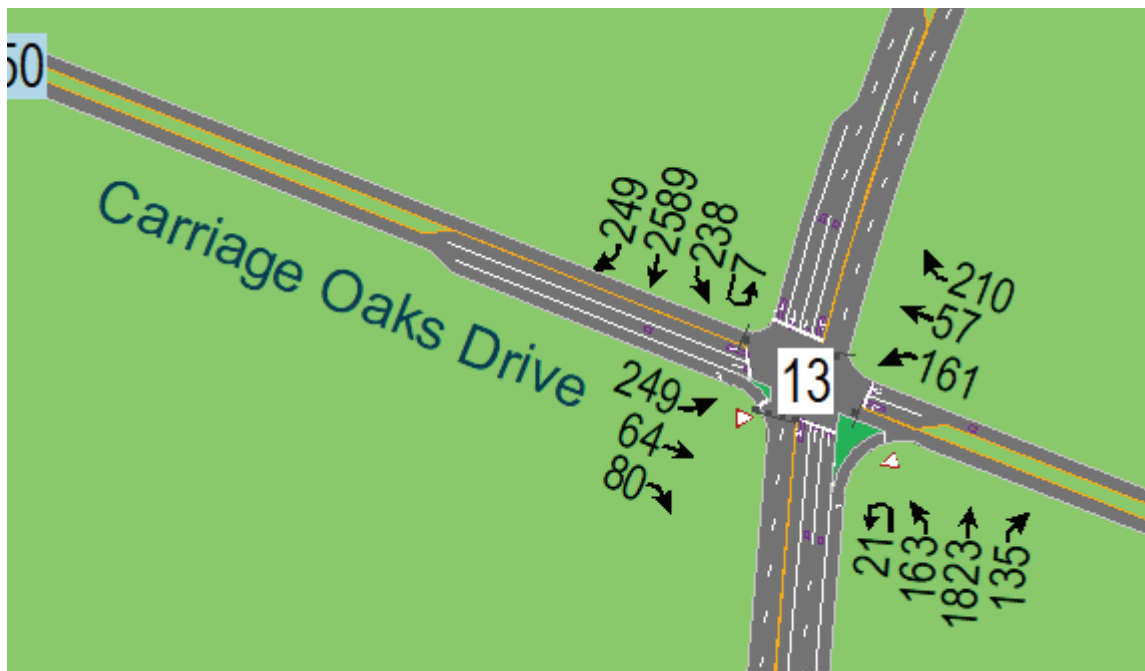
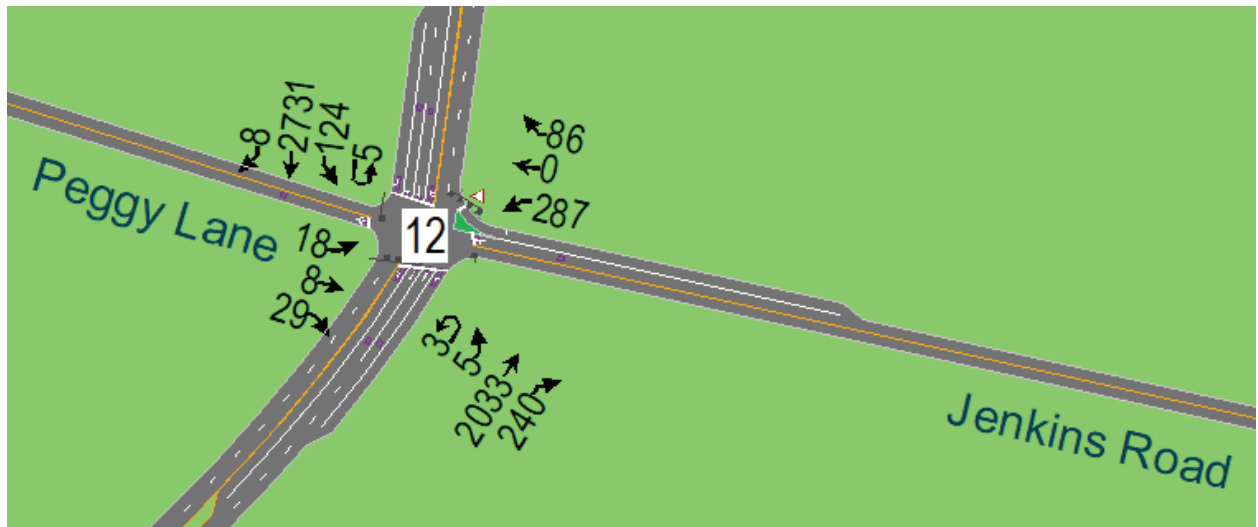
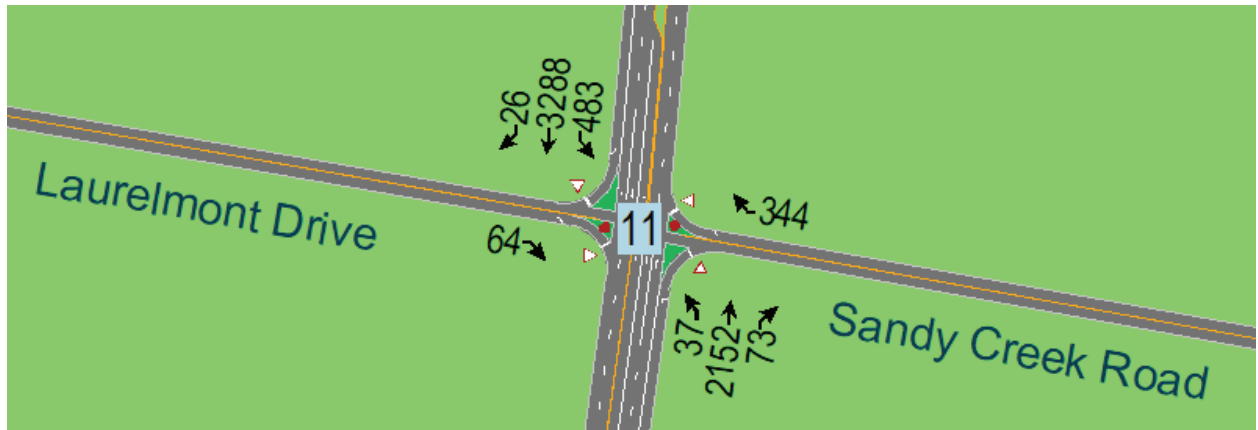
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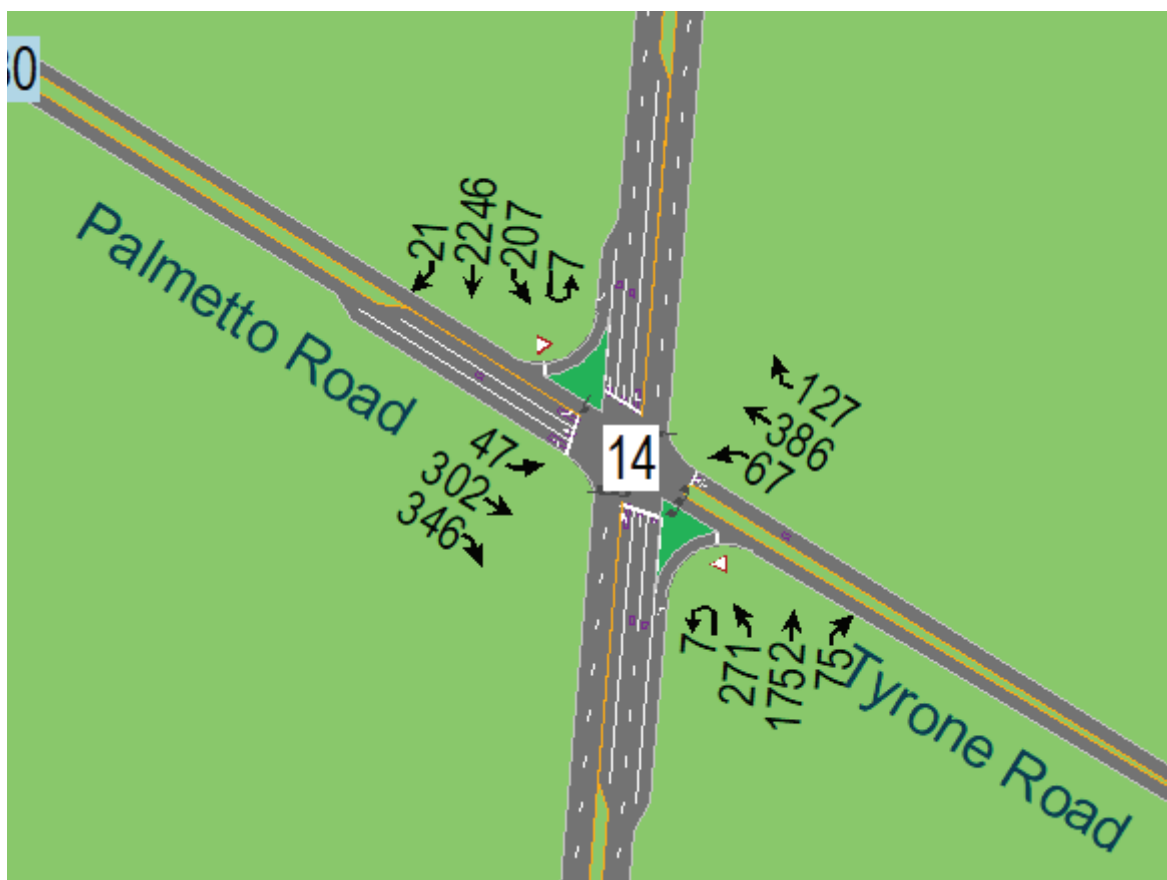


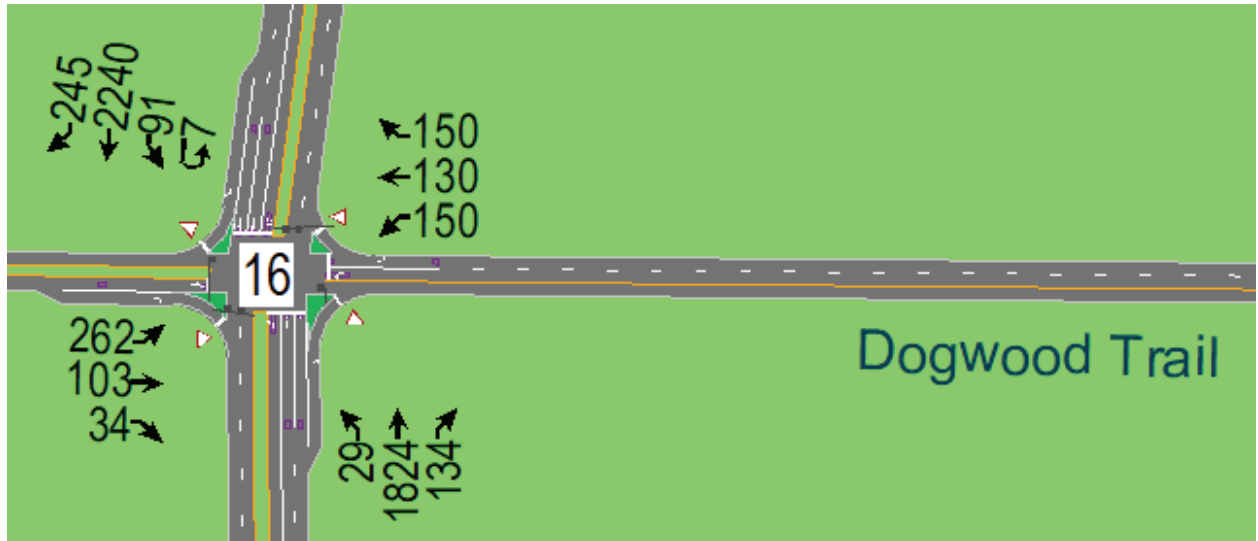
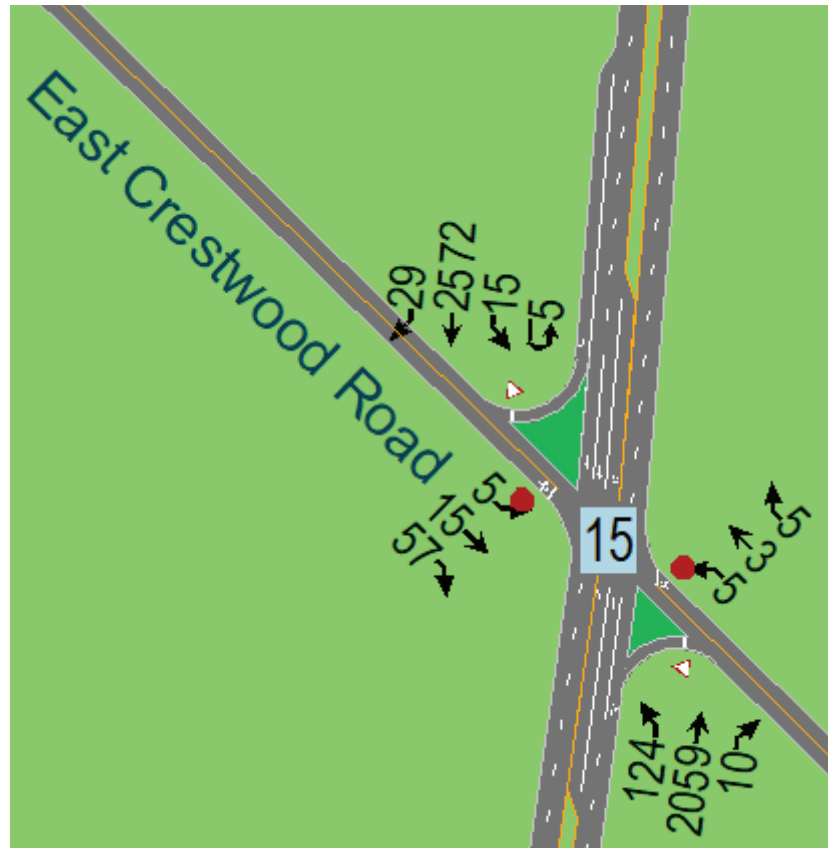


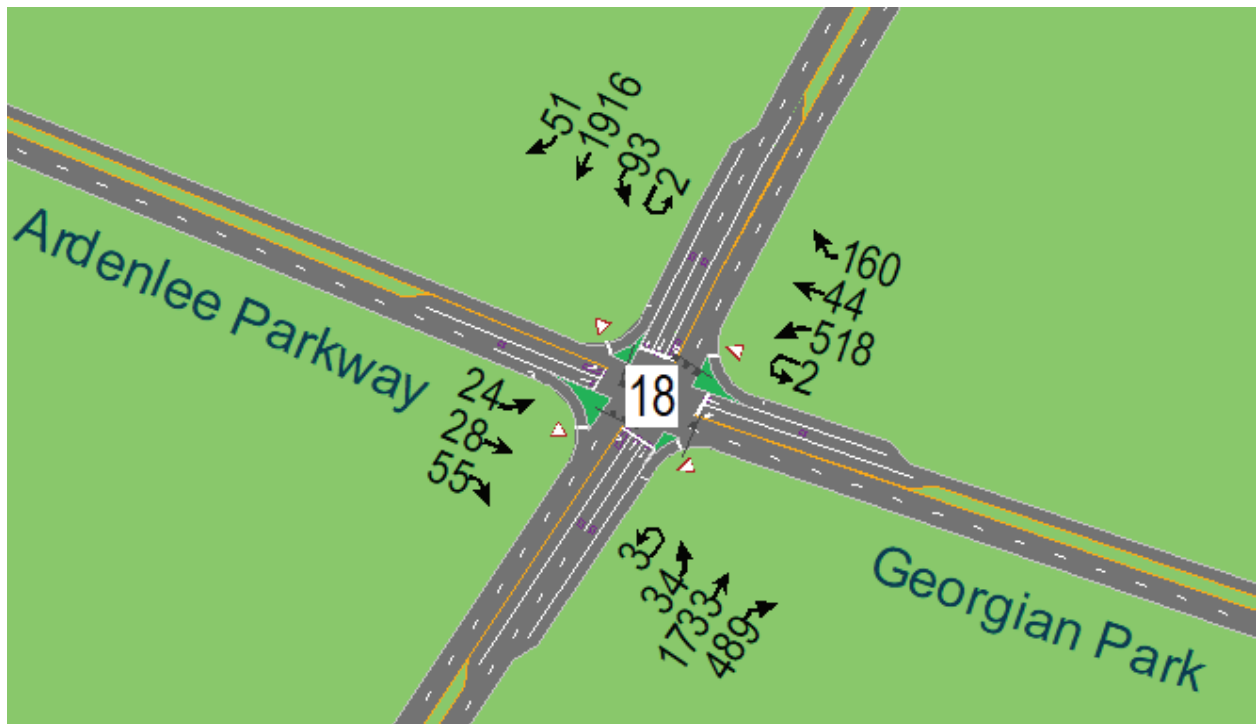
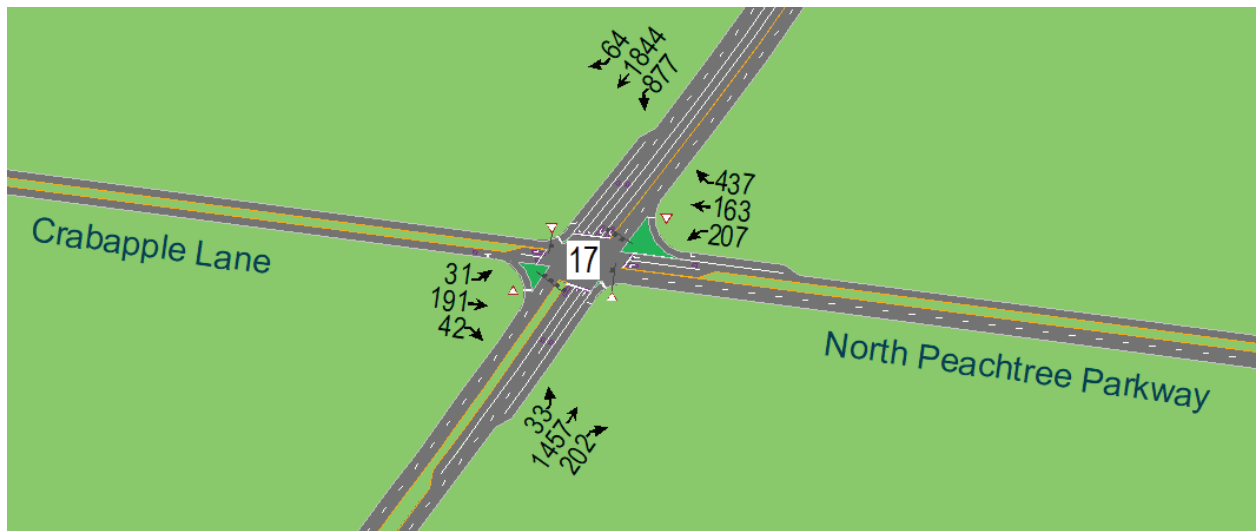


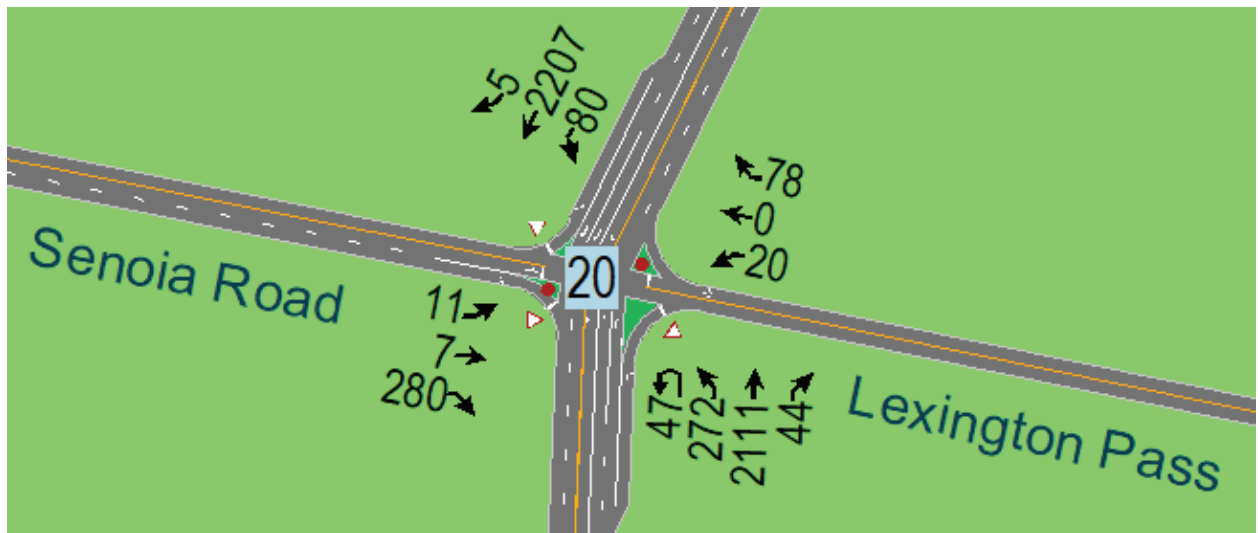
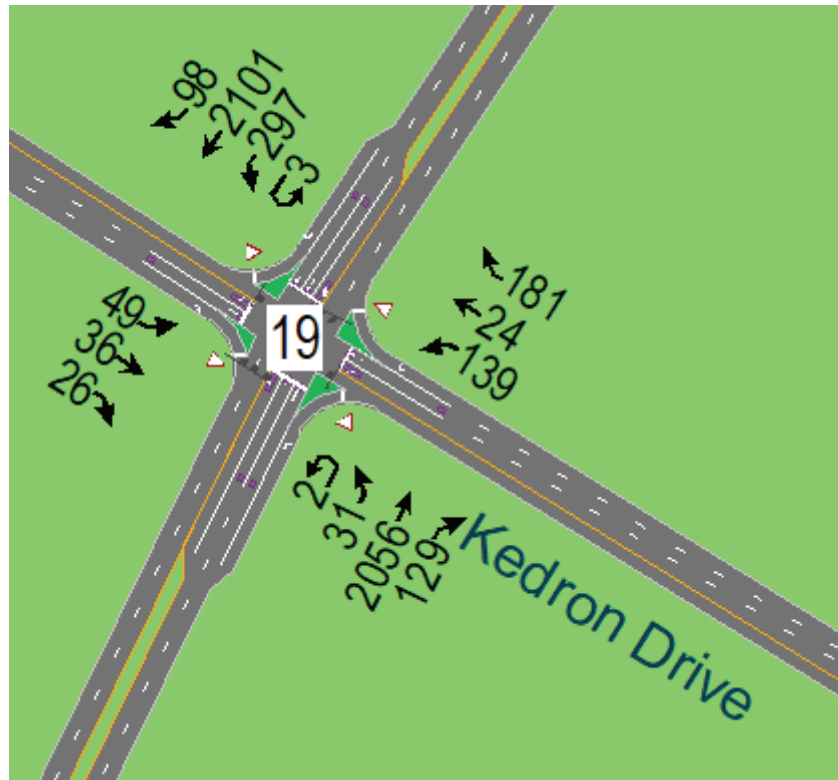


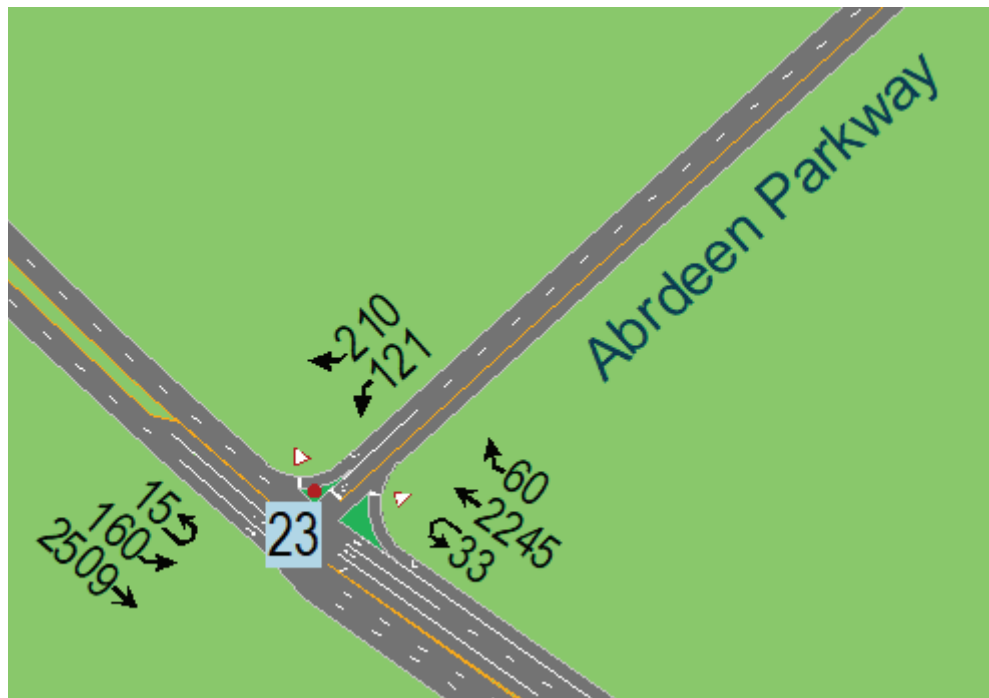
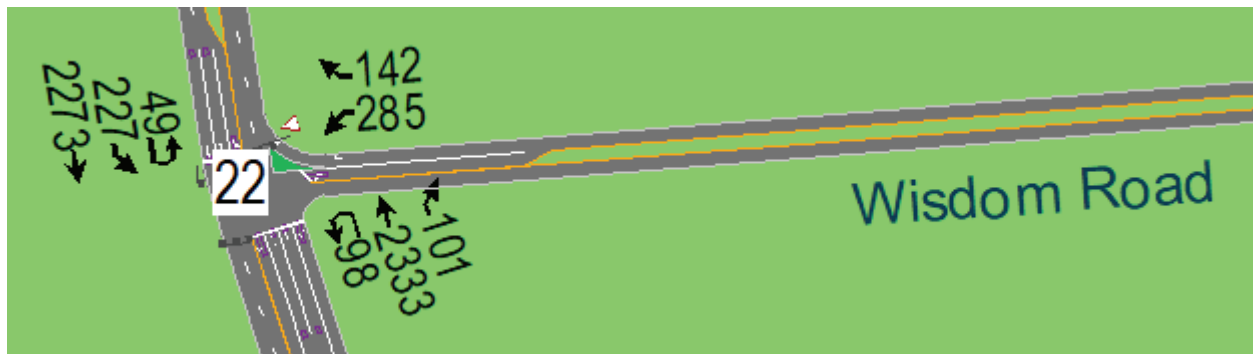
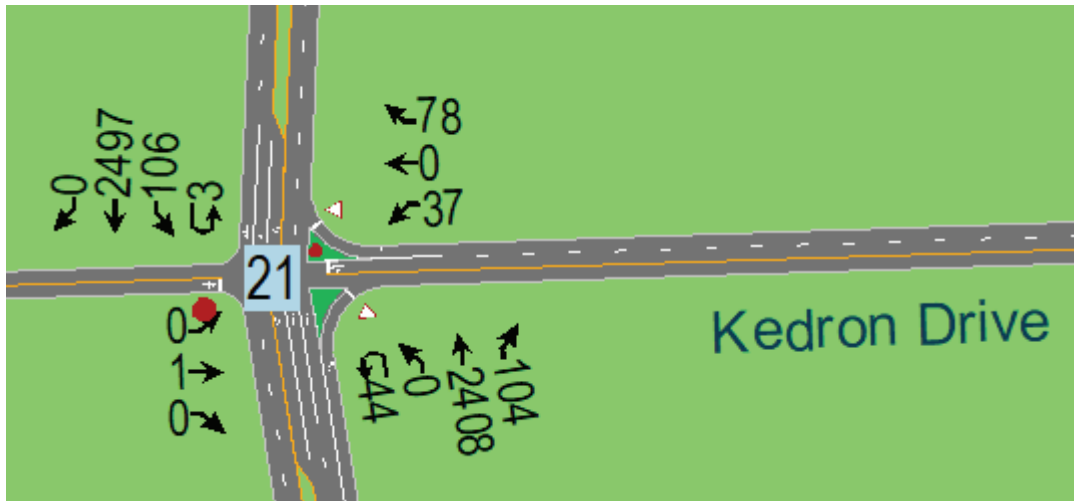






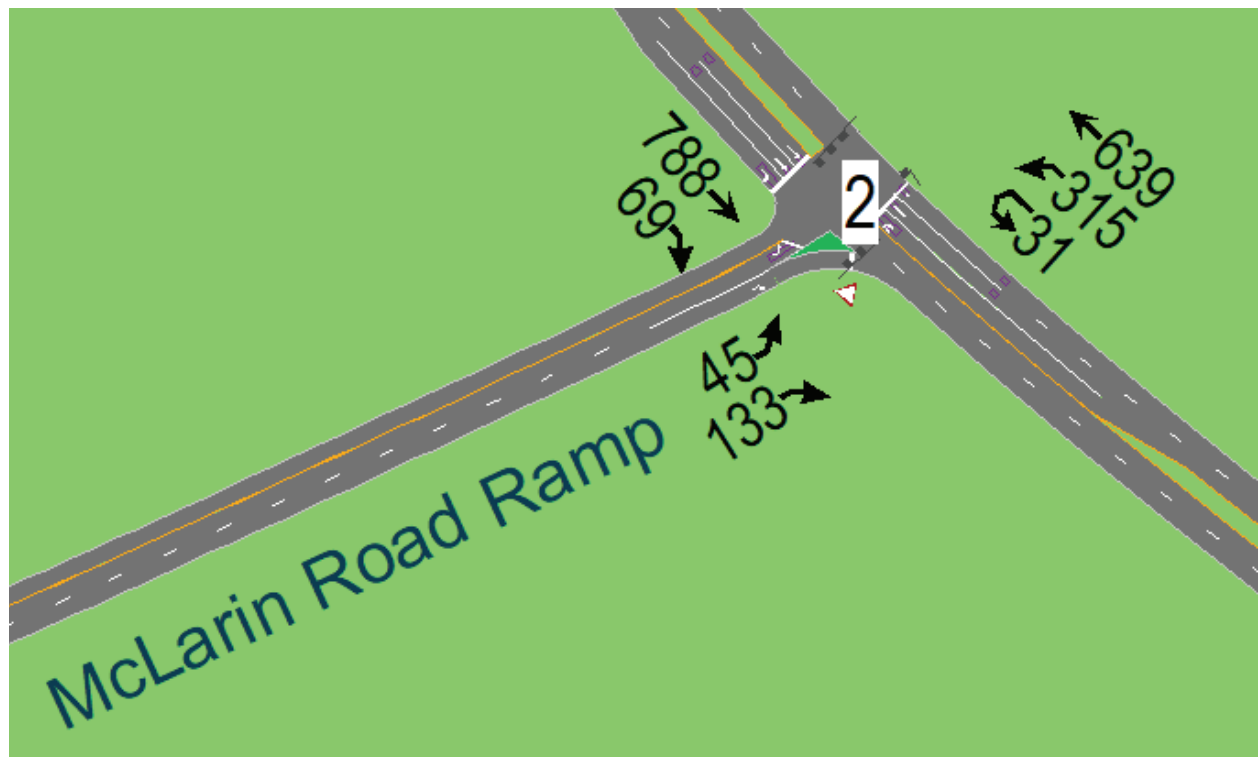
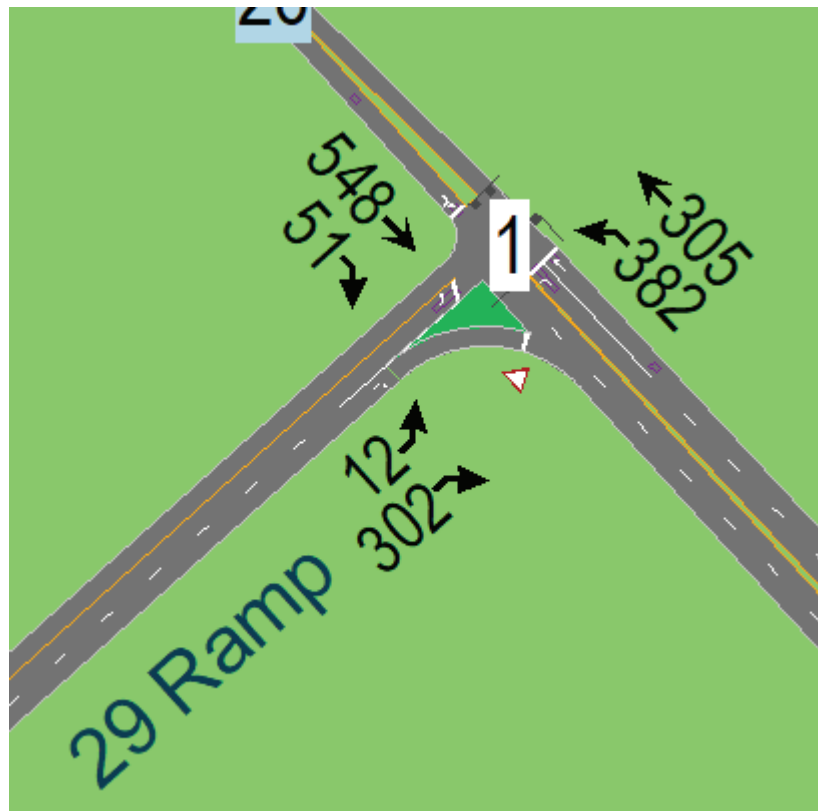


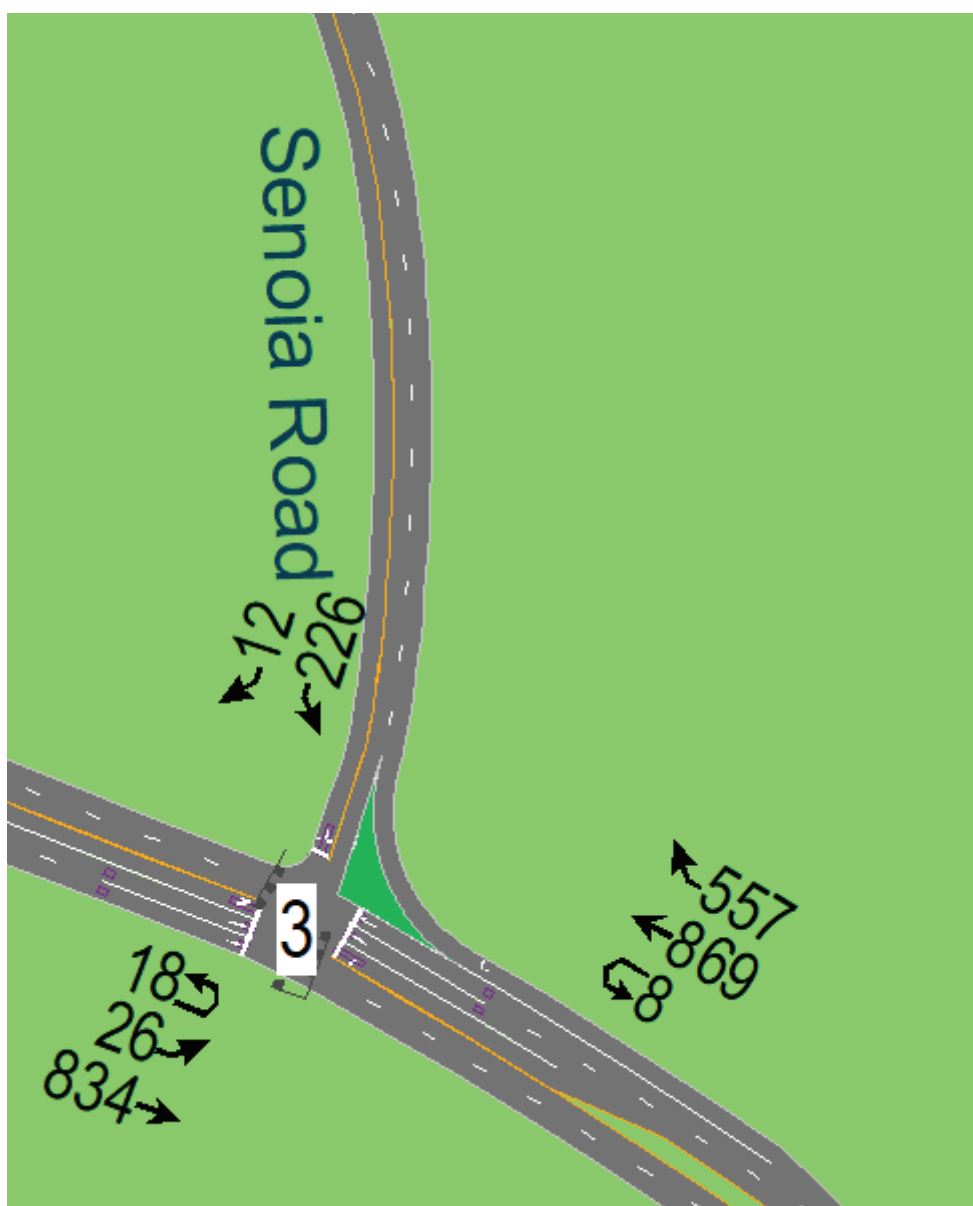


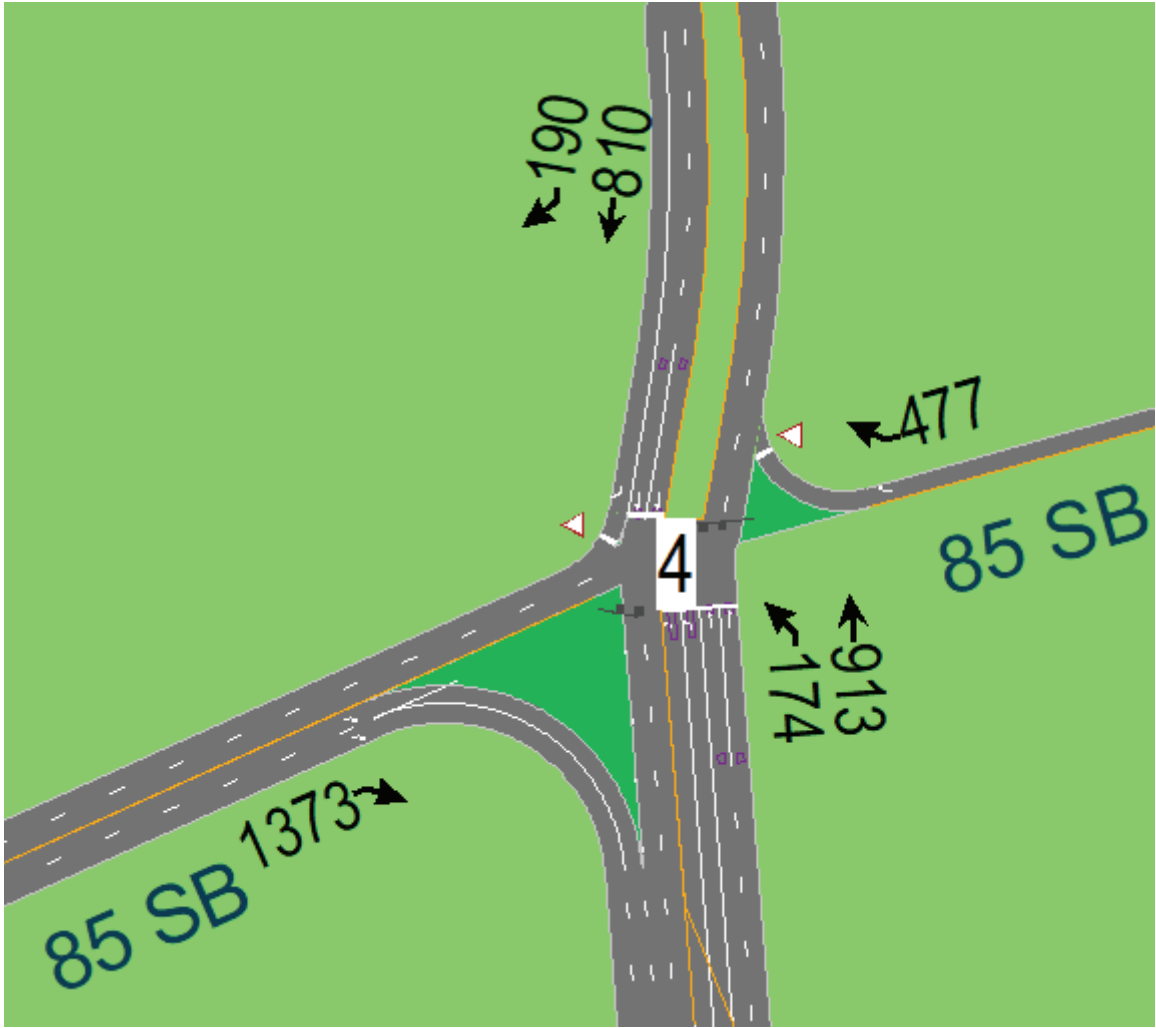


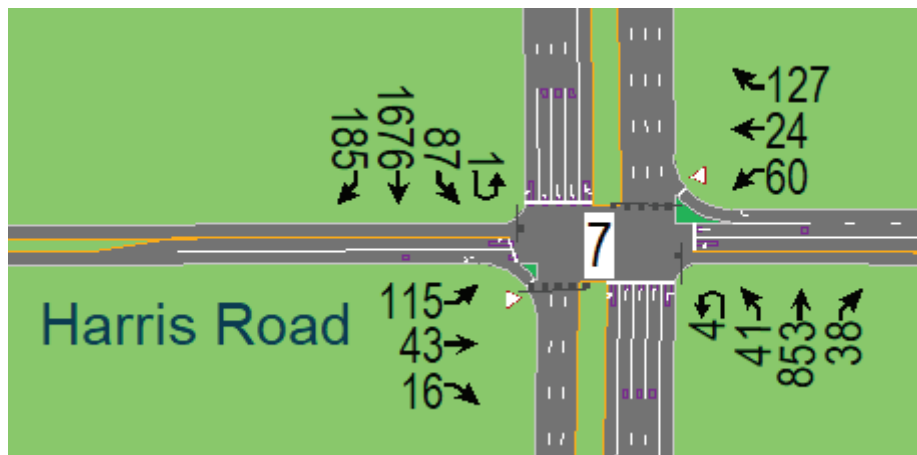
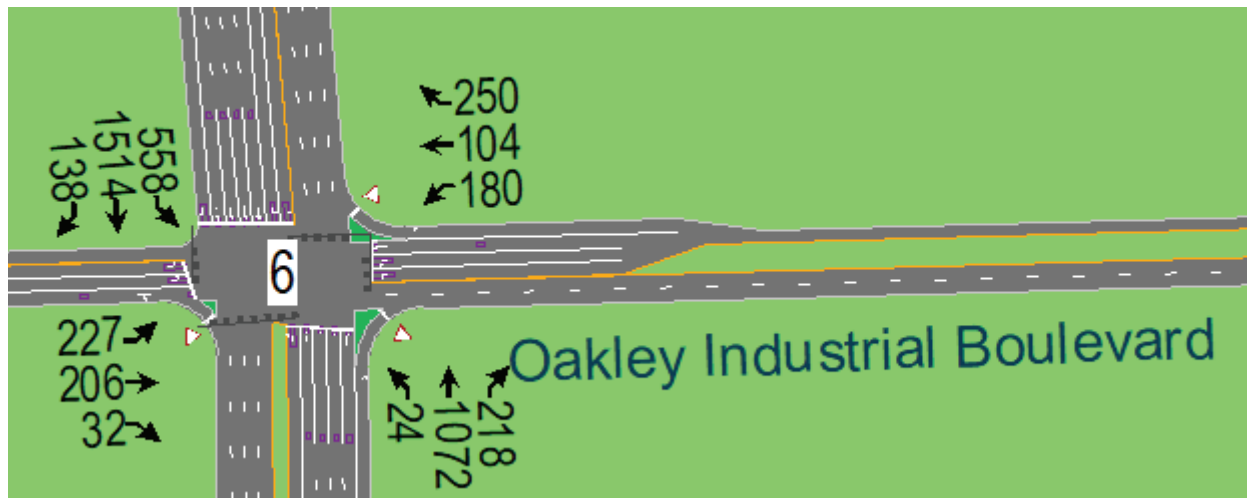
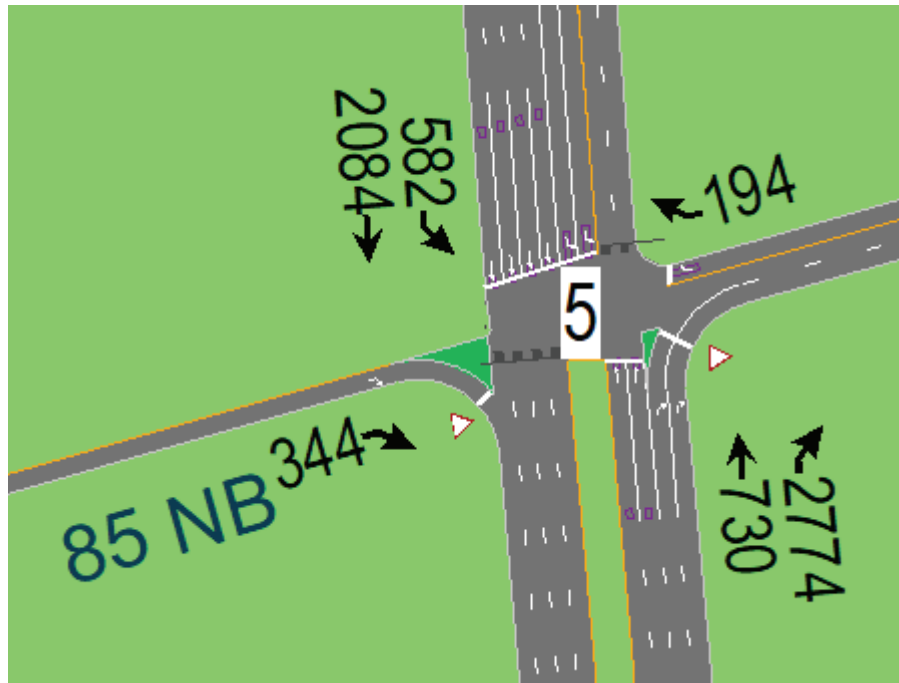


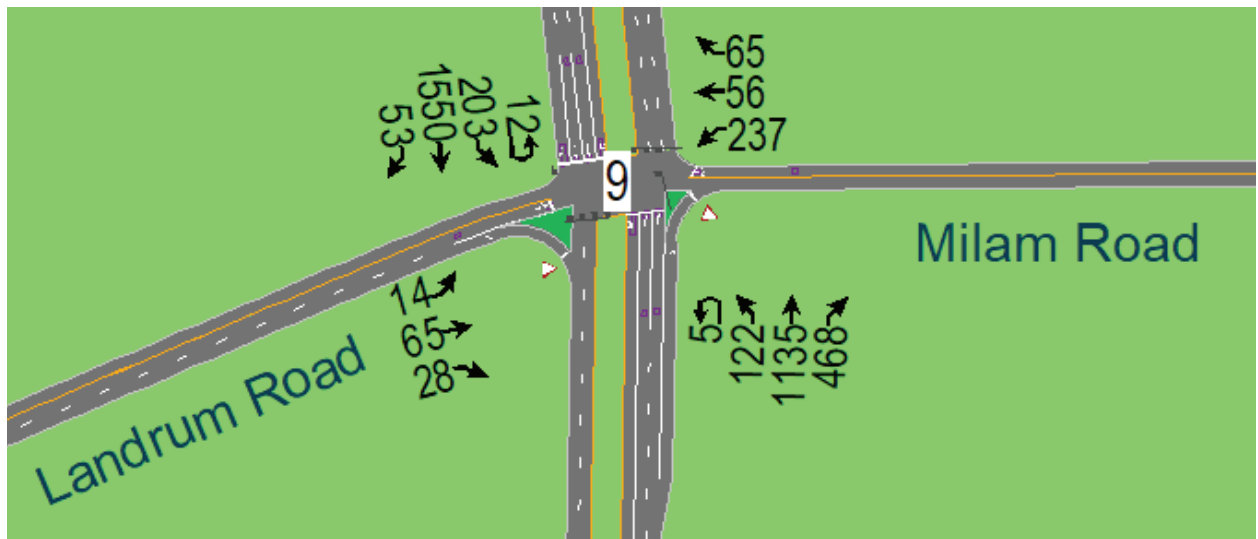
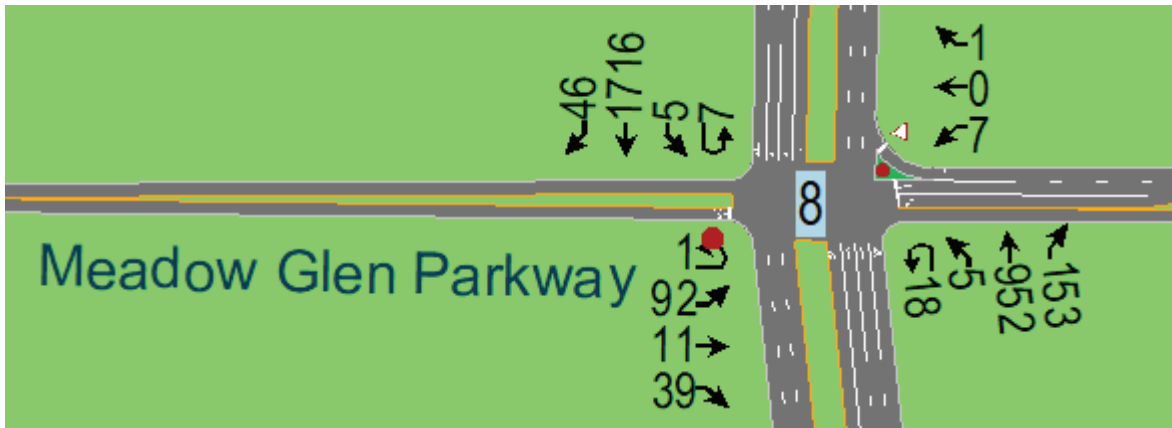
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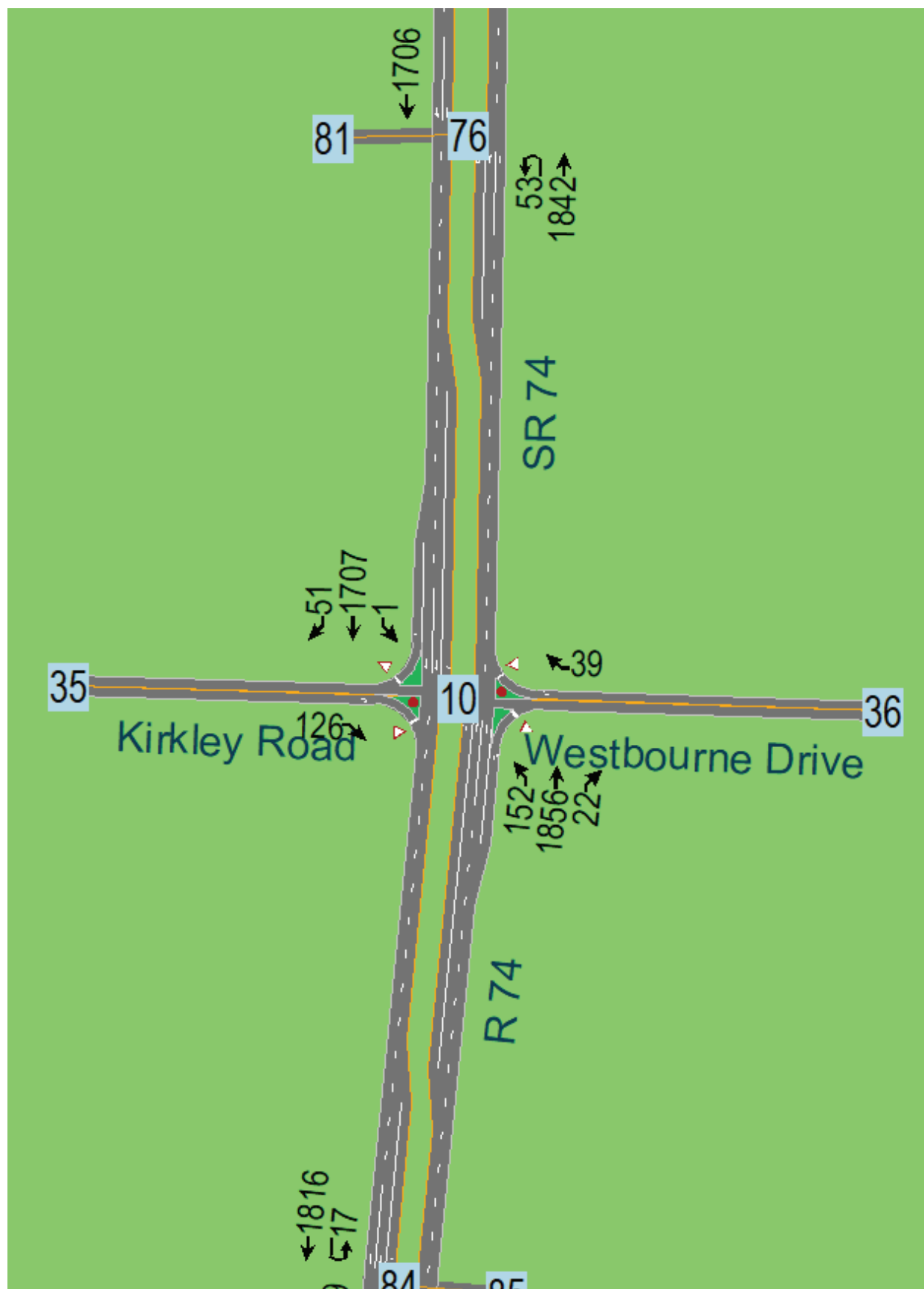






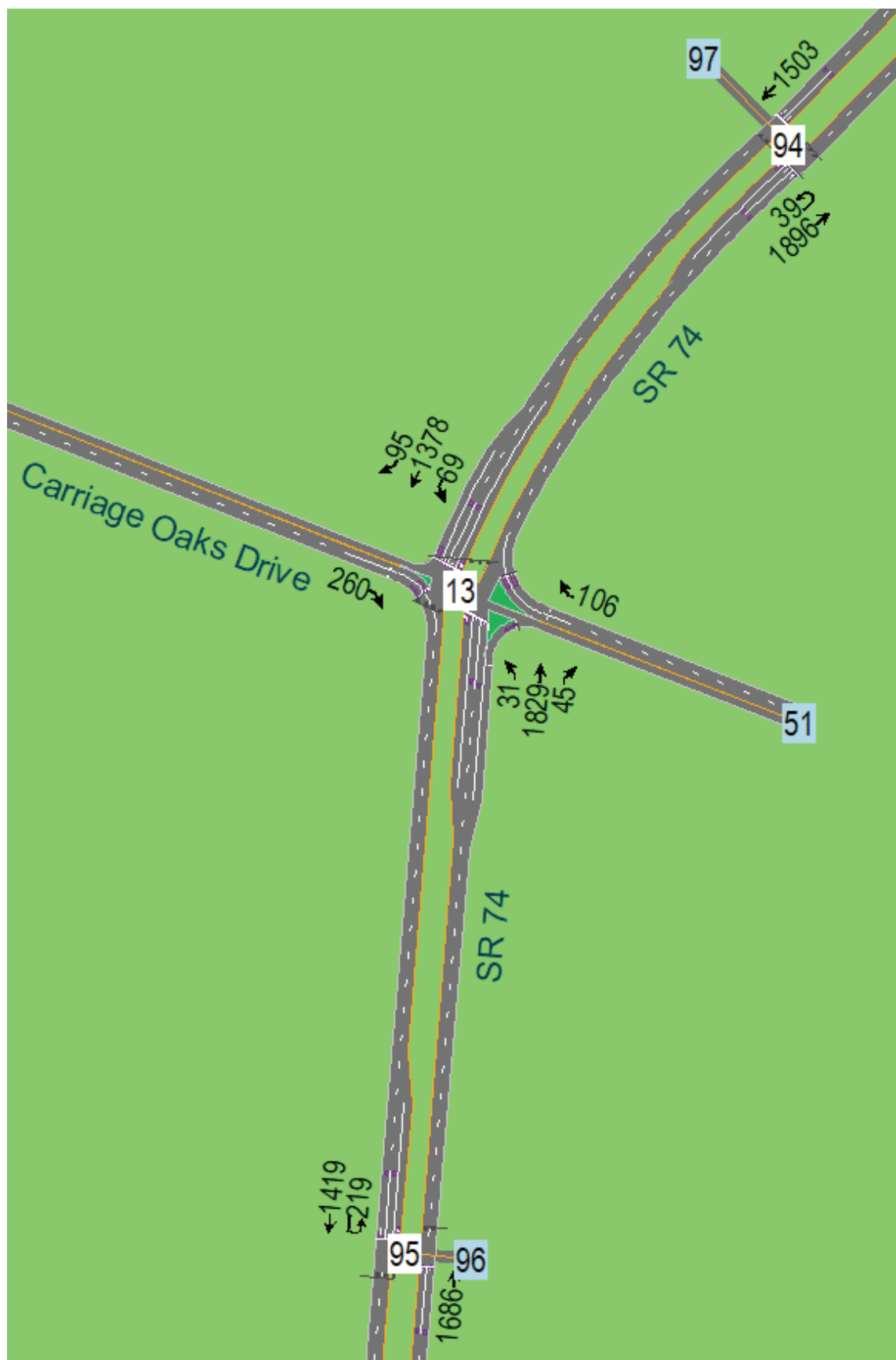








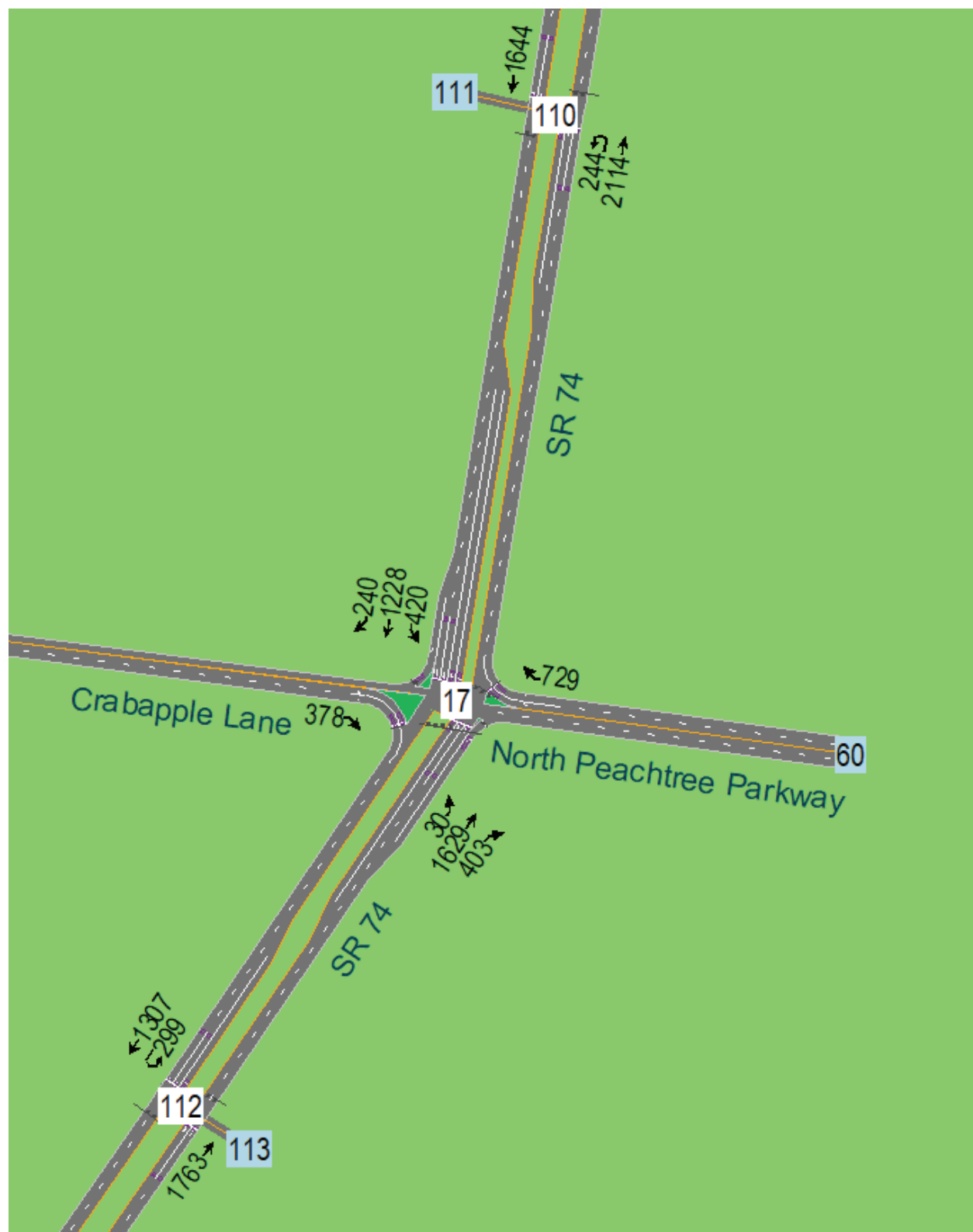




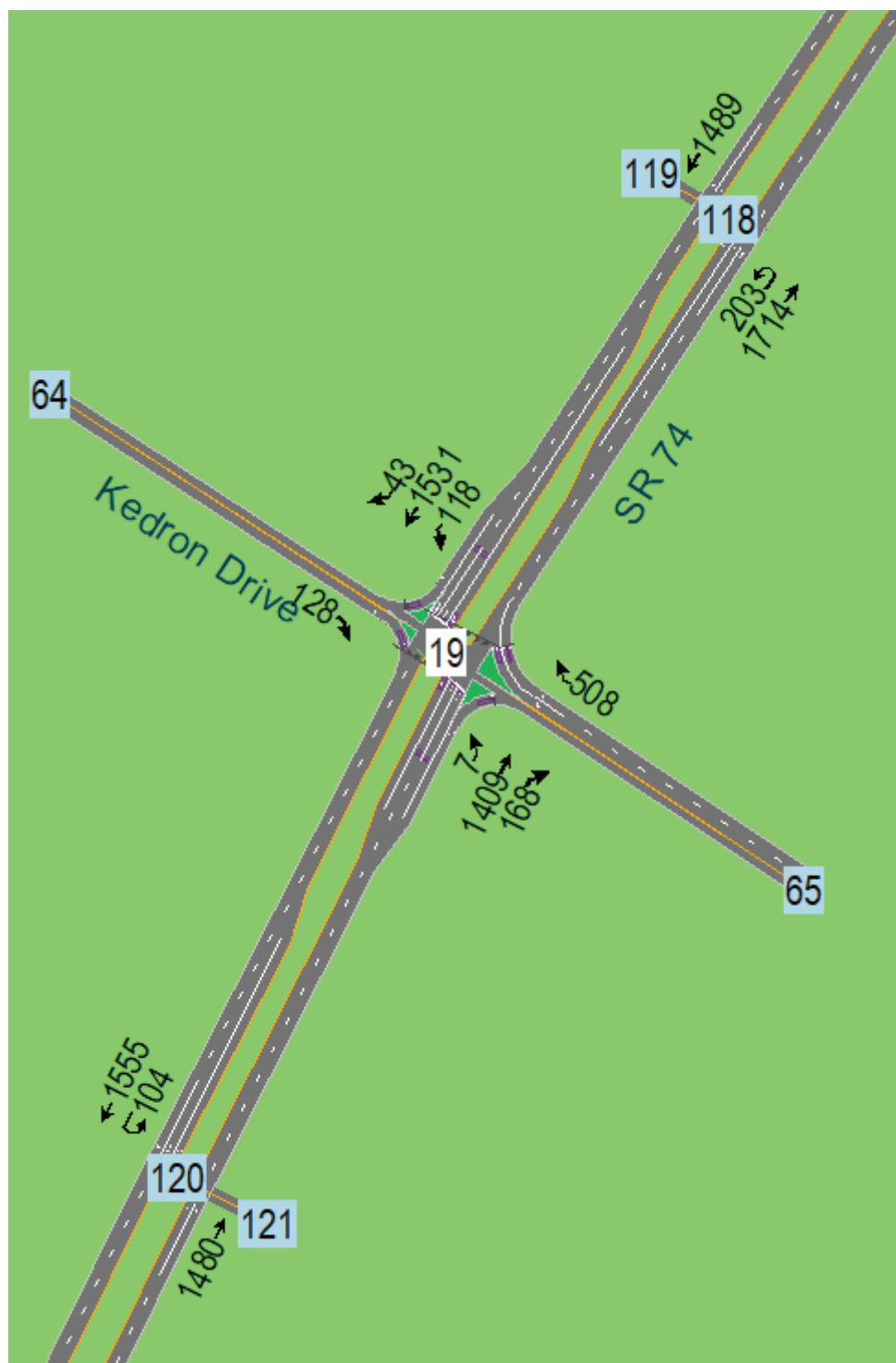






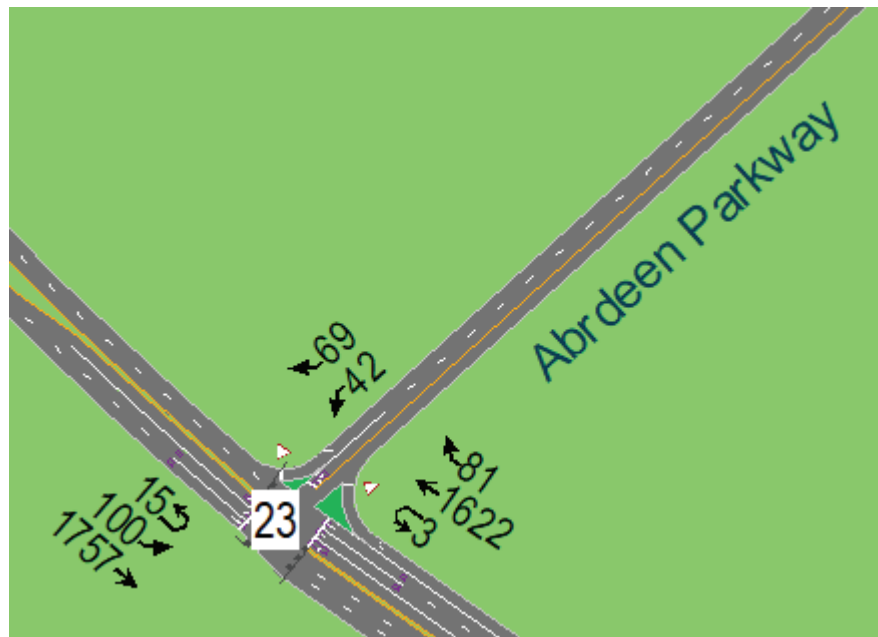
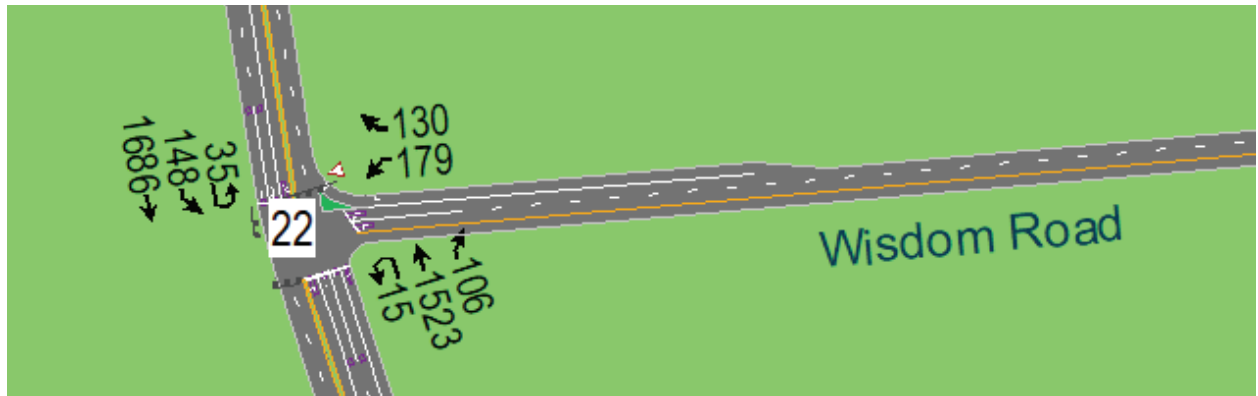


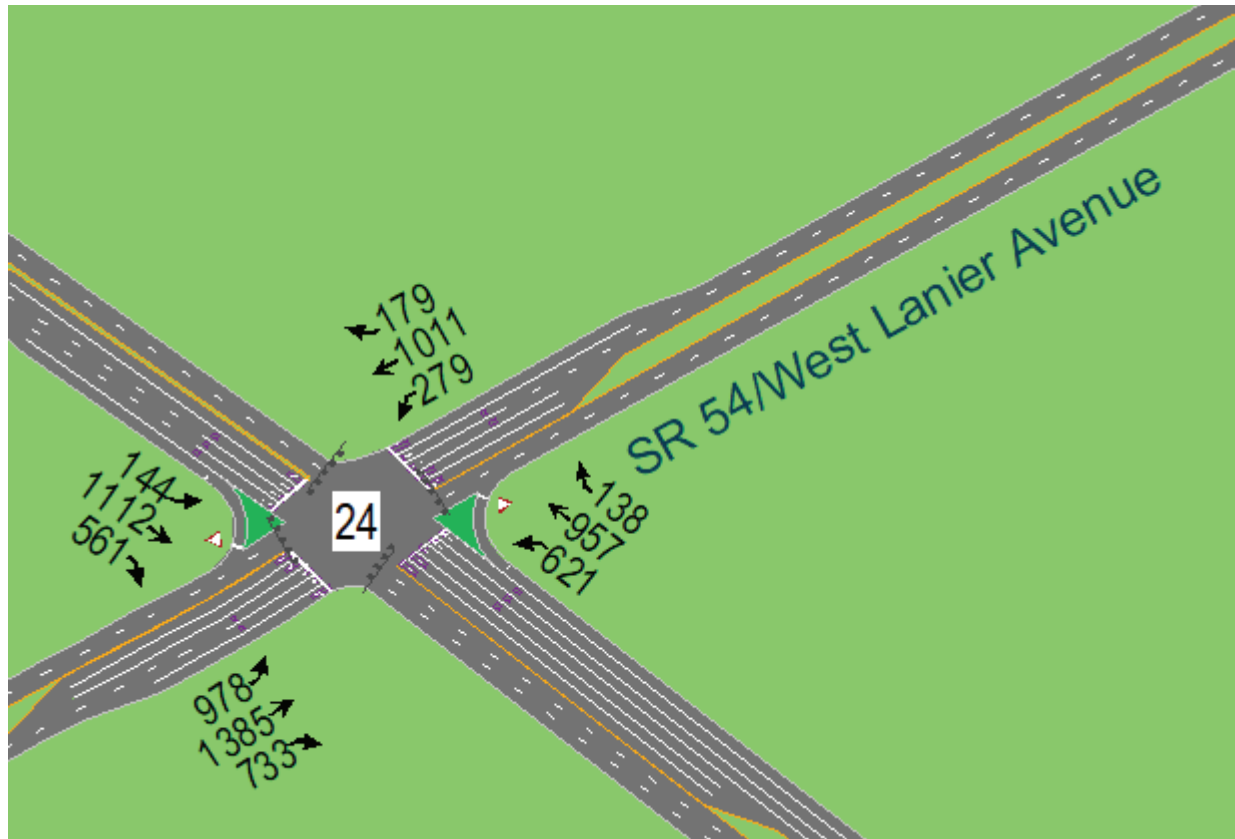




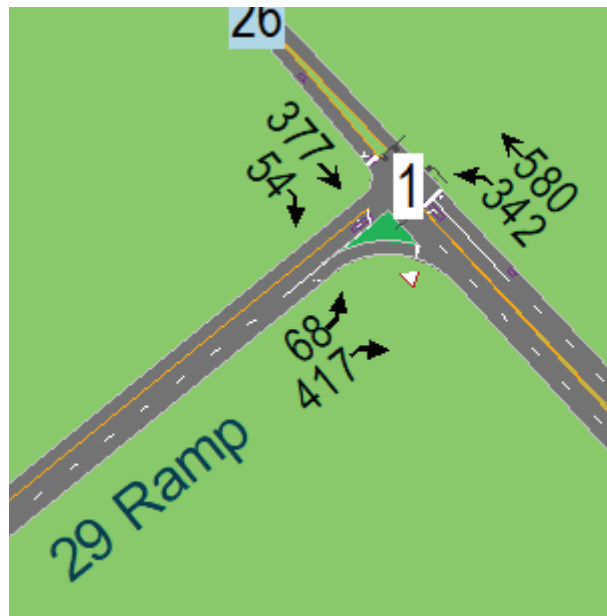


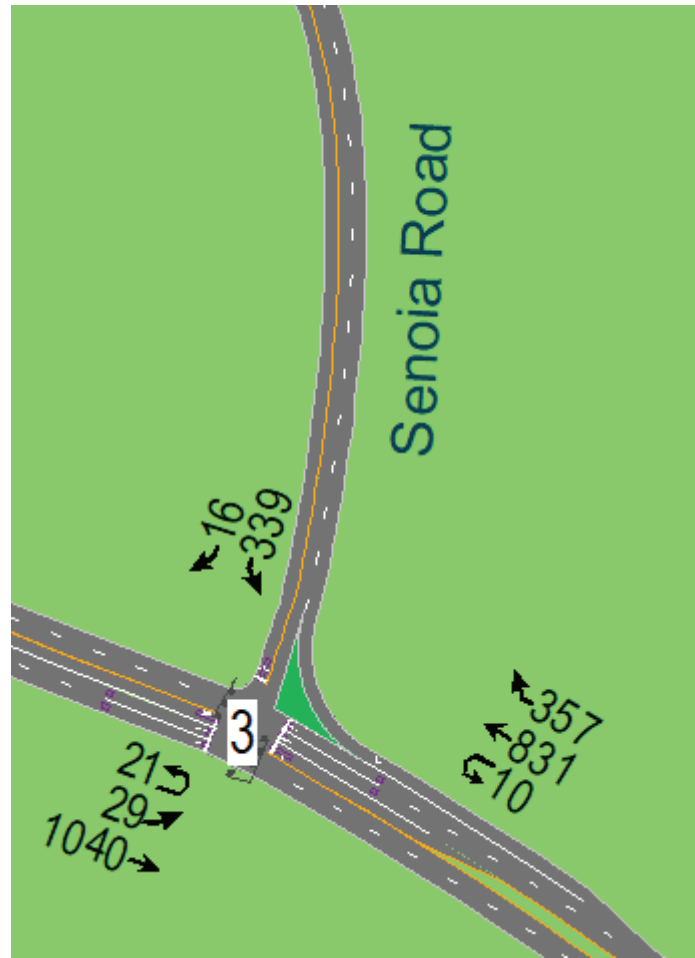


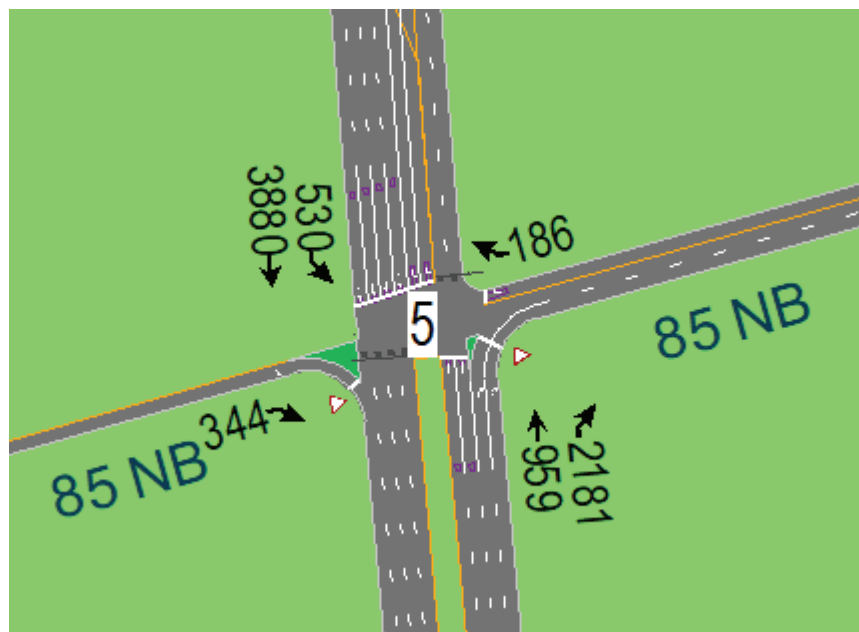
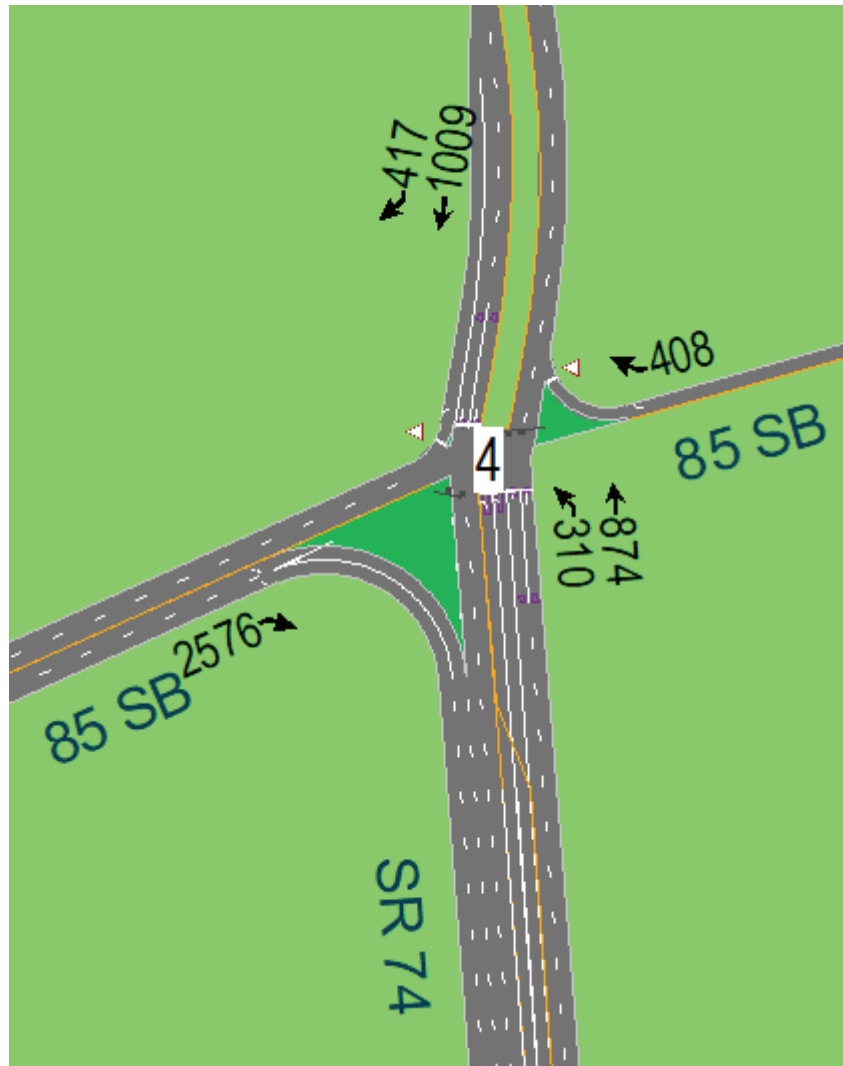


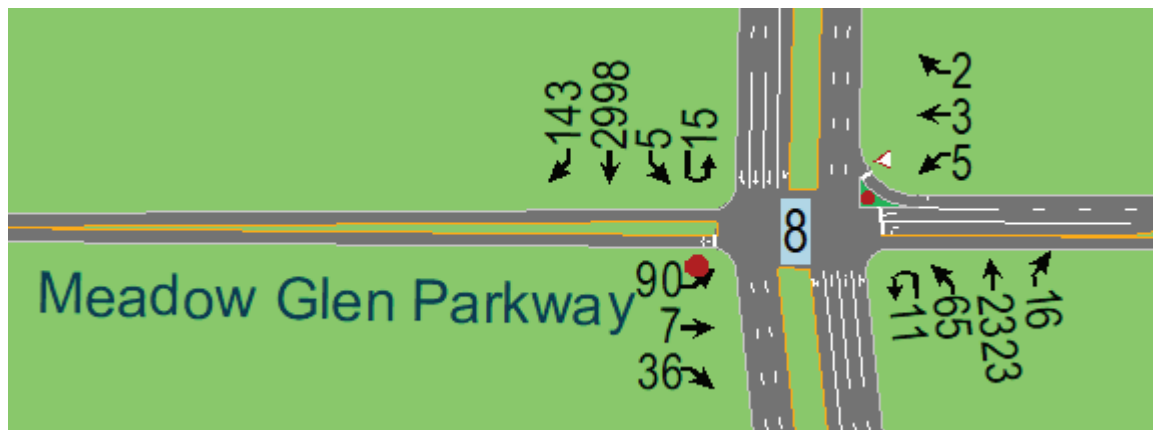
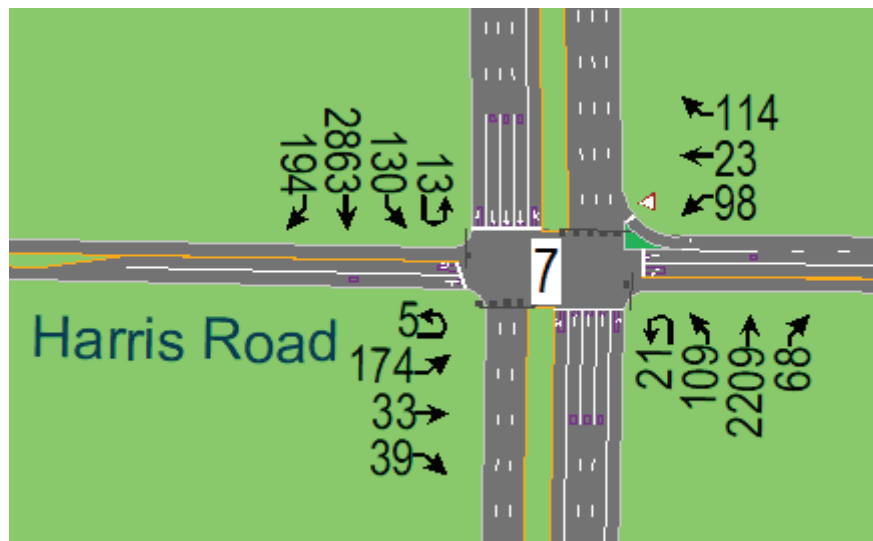
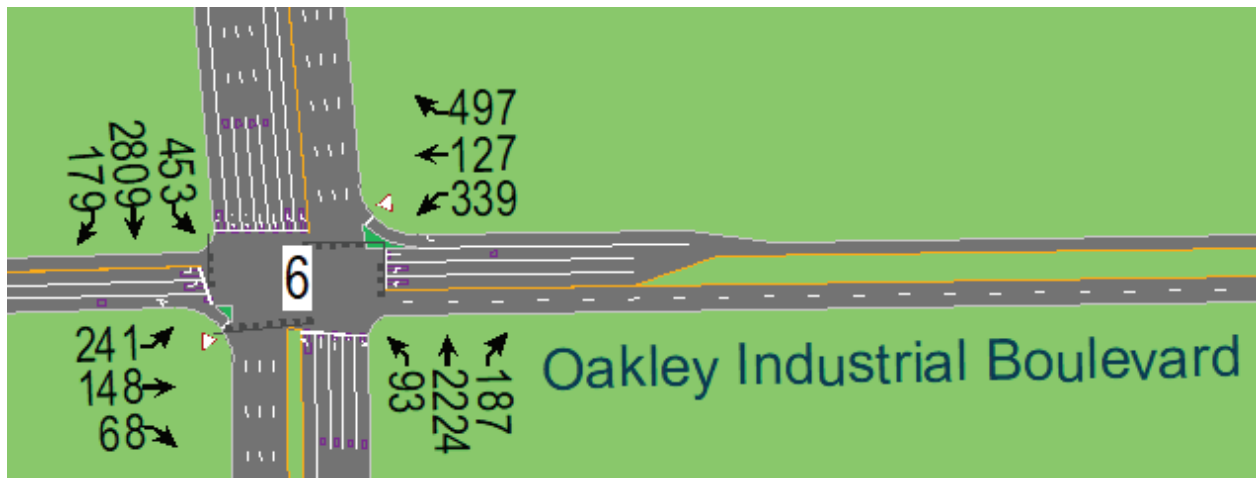


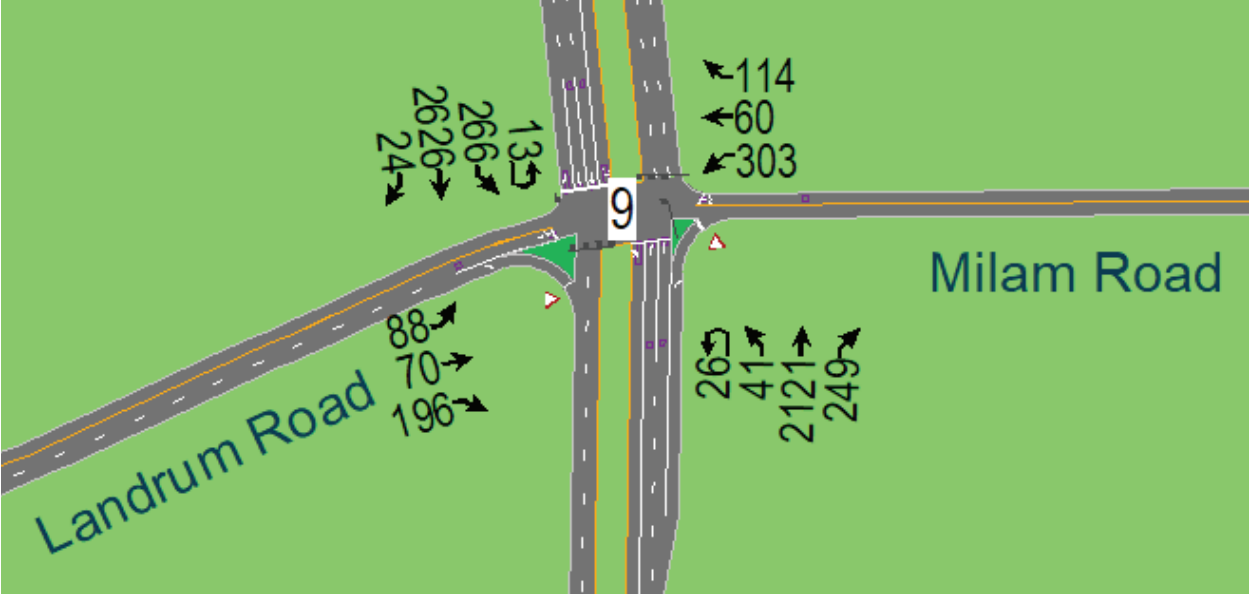
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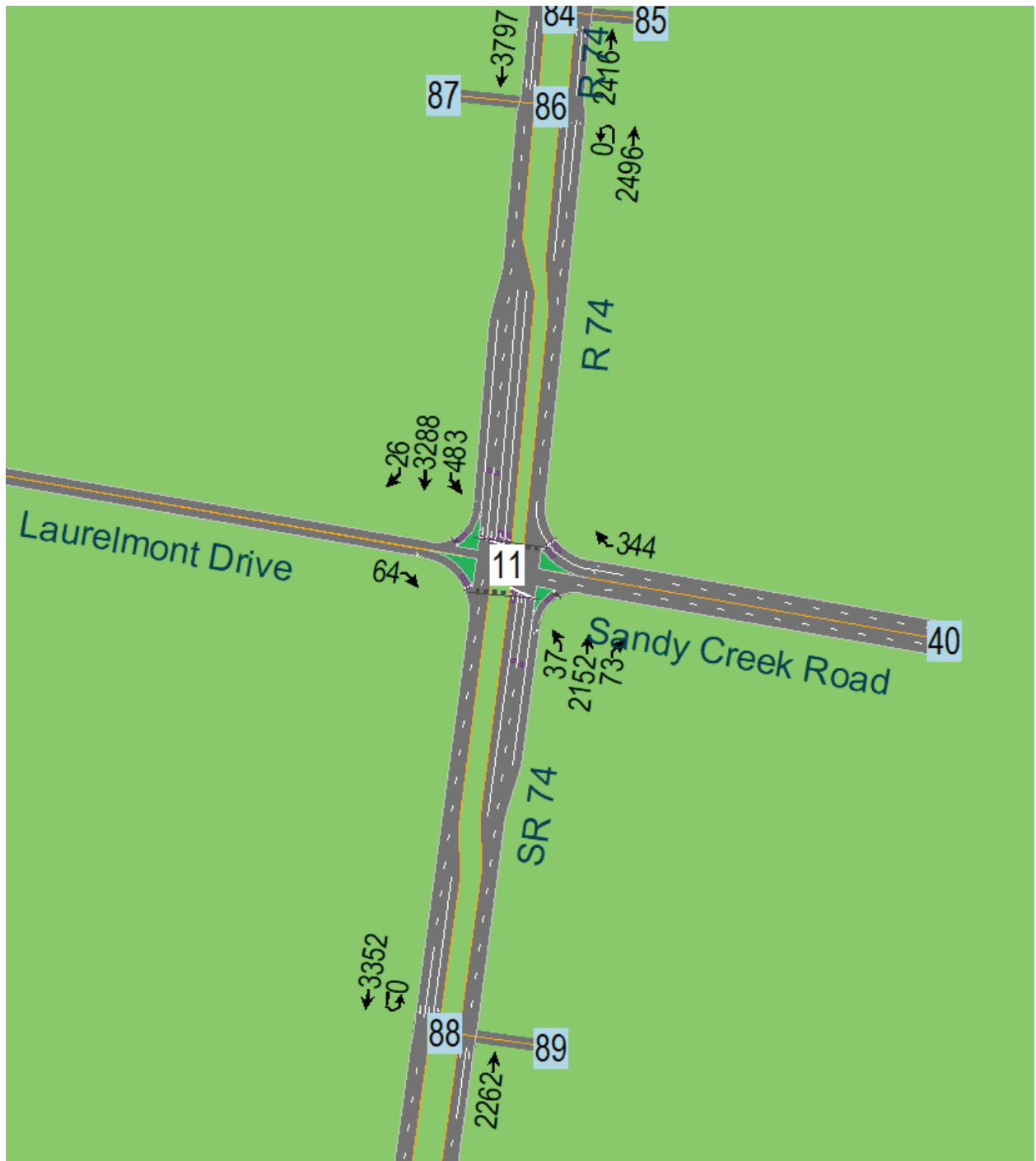




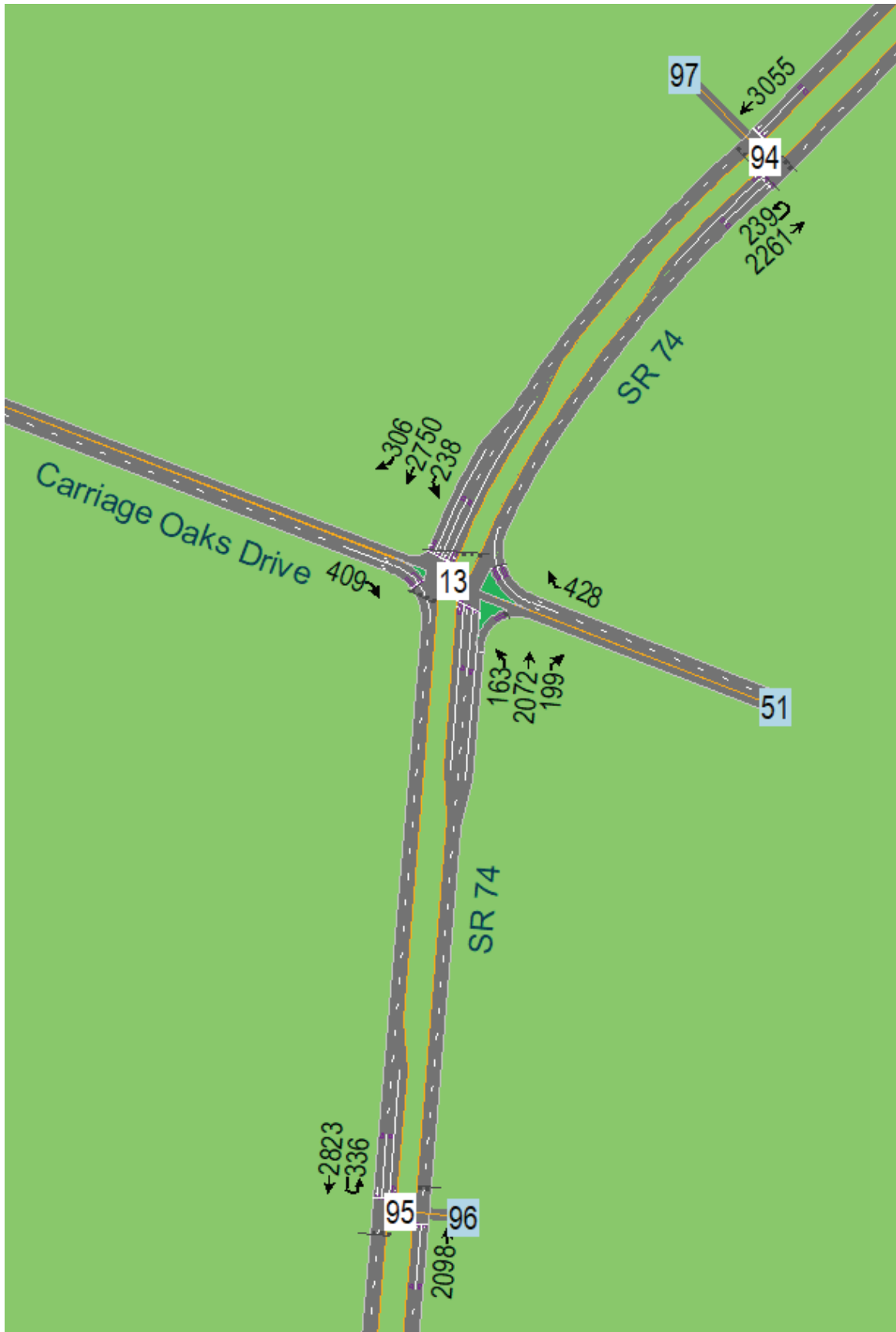








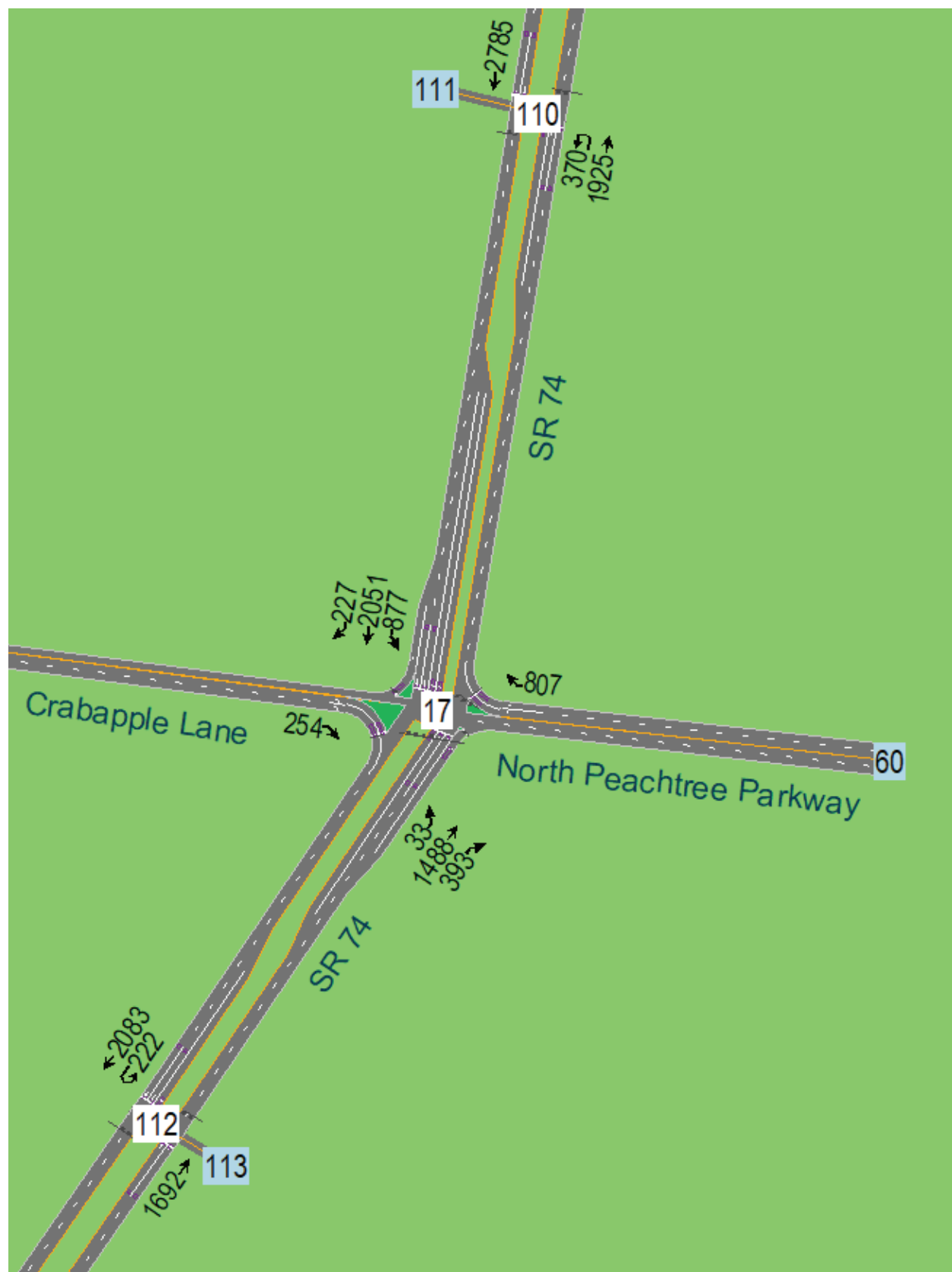


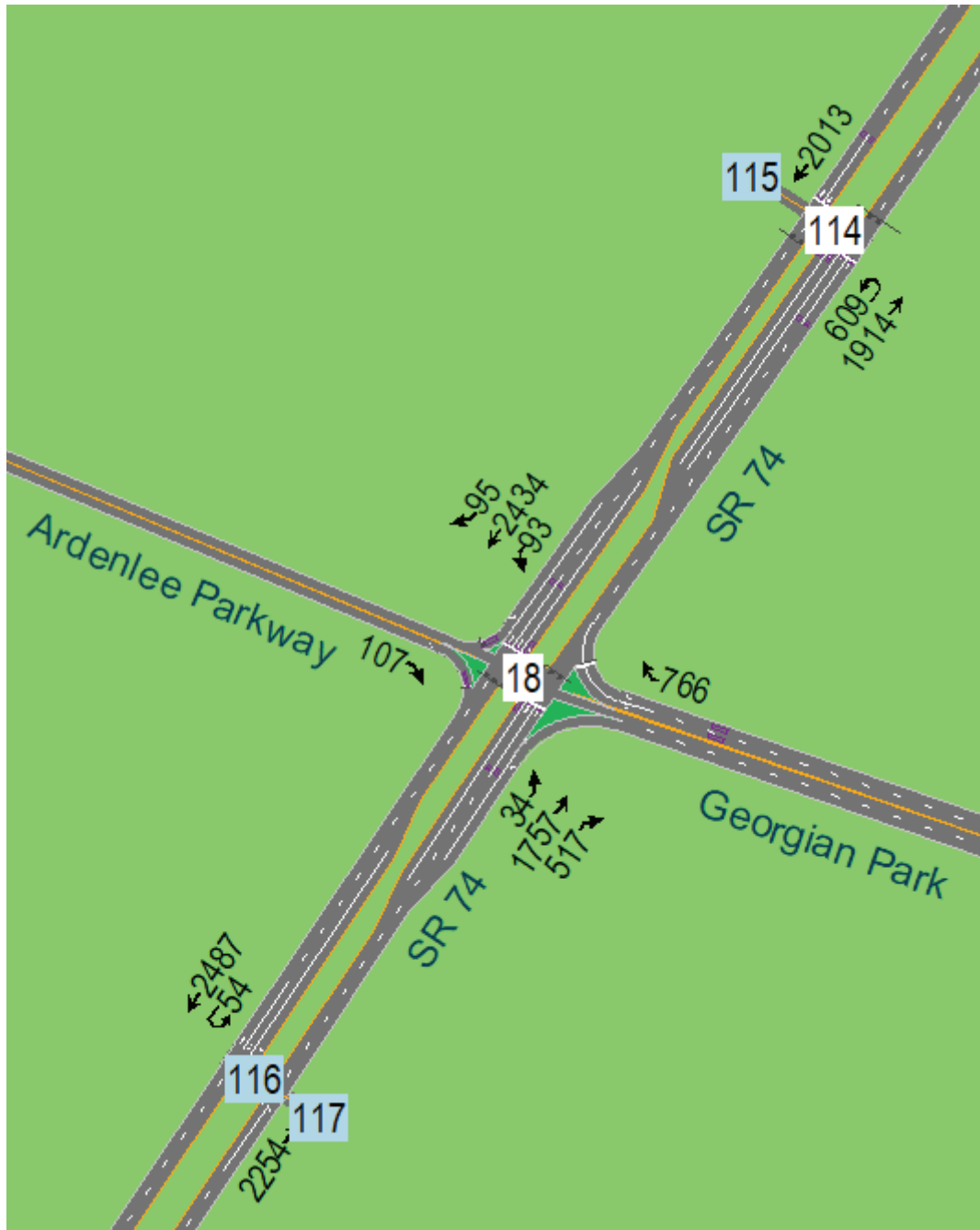






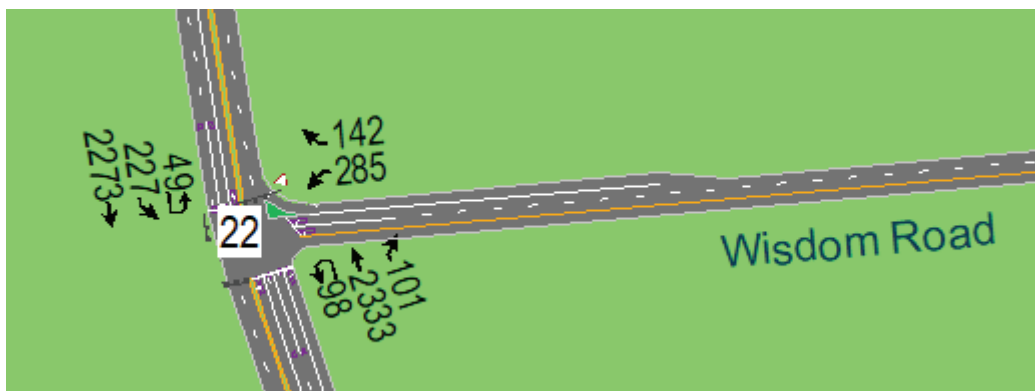


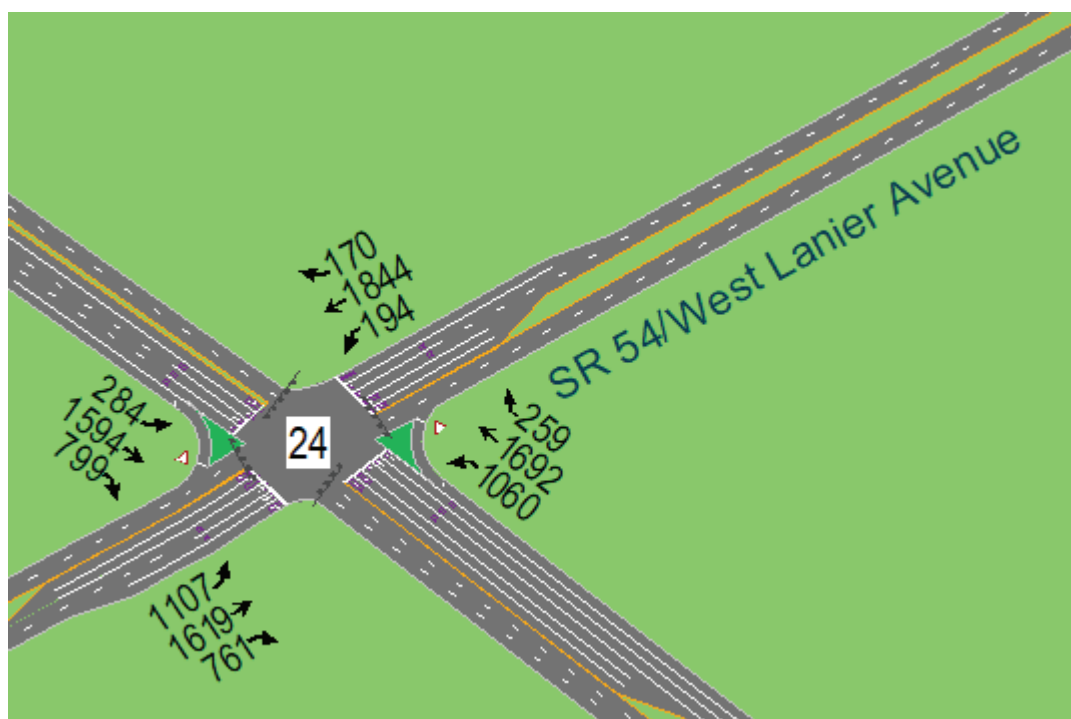
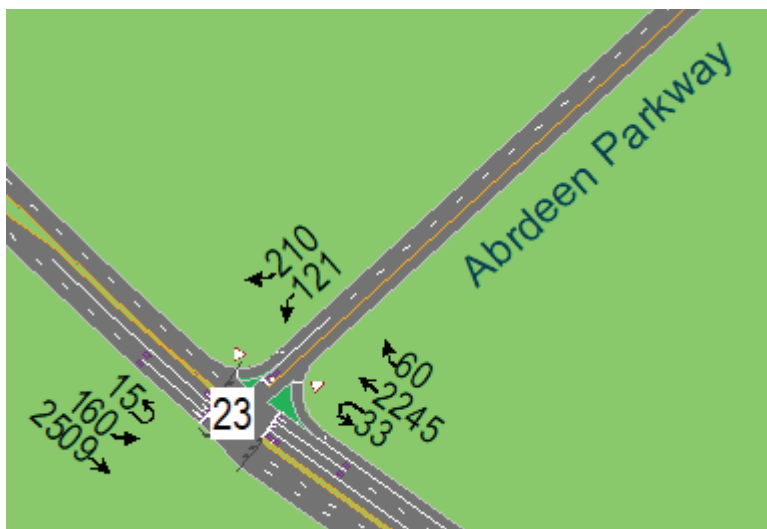














APPENDIX F: INTERSECTION CONTROL EVALUATION SUMMARIES



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

County: Fayette

Project Location: SR 74 @ Aberdeen Pkwy

Existing Intersection Control: Conventional (Minor Stop)

GDOT District: 3 - Thomaston

Area Type: Suburb/Transition

Date: 8/9/2018

Agency/Firm: ARCADIS

Analyst: Jonathan Reid

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		8	4	0	24%
Head-On		2	0	0	4%
Rear End		27	4	0	61%
Sideswipe - same		3	0	0	6%
Sideswipe - opposite		0	0	0	0%
Not Collision w/Motor Veh		3	0	0	6%
TOTALS:		43	8	0	51

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

Proposed Control Type/Improvement:

Project Cost: (From CostEst Worksheet)

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	Continuous Green-T			
Turn Lane Improvements	Additional description here				
Construction Cost	\$275,000	\$362,000			
ROW Cost	\$0	\$41,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$12,000			
Design & Contingency Cost	\$119,000	\$90,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$411,000	\$505,000			

Traffic Operations:

Traffic Analysis Software Used	Synchro 9		Synchro 9		
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	
2040 Design Yr Build Intersection Delay	9.2 sec	50.0 sec	9.2 sec	50.0 sec	
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00	

Safety Analysis:

Predefined CRF: PDO	39%	39%			
Predefined CRF: Fatal/Inj	40%	49%			
Predefined CRF Source:	FHWA Clearinghouse #s 7982 / 7984	FHWA Clearinghouse #s 325/8655 / 7984/8656			
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None			
Archaeology Resources	None	None			
Graveyard	None	None			
Stream	None	None			
Underground Tank/Hazmat	None	None			
Park Land	None	None			
EJ Community	None	None			
Wooded Area	None	None			
Wetland	None	None			

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral			
GDOT Support	Neutral	Neutral			

Final ICE Stage 2 Score:	5.3	5.2			
Rank of Control Type Alternatives:	1	2			

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Ardenlle Pkwy

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	18.7 sec	41.8 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	27.1 sec	130.7 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☒ PEDESTRIANS
☒ BICYCLES
☒ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		1	4	0	7%
Head-On		1	0	0	1%
Rear End		36	14	0	70%
Sideswipe - same		1	0	0	1%
Sideswipe - opposite		0	0	0	0%
Not Collision w/Motor Veh		13	1	0	20%
TOTALS:		52	19	0	71

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$650,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$893,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	18.5 sec	36.0 sec	11.1 sec	22.5 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	4.0	4.2		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 7 - Metro Atlanta

Date: 8/9/2018

County: Fulton

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Bohannon Rd

Analyst: Jonathan Reid

Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants		Complete Streets Warrants Met? ☐ PEDESTRIANS ☐ BICYCLES ☐ TRANSIT
Traffic Analysis Measure of Effectiveness	Intersection Delay		
Traffic Analysis Software Used	--select one--		
Analysis Time Period	AM Peak Hr	PM Peak Hr	
2022 Opening Yr No-Build Peak Hr Intersection Delay	28.0 sec	15.4 sec	
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00	
2040 Design Yr No-Build Peak Hr Intersection Delay	56.6 sec	31.1 sec	
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00	

Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	1	2	0	30%
Head-On	0	0	0	0%
Rear End	4	0	0	40%
Sideswipe - same	0	0	0	0%
Sideswipe - opposite	1	0	0	10%
Not Collision w/Motor Veh	2	0	0	20%
TOTALS:	8	2	0	10

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	High-T (unsignalized)	Traffic Signal	Continuous Green-T		
Project Cost: (From CostEst Worksheet)	Additional description here	Add LT bays all approaches	Additional description here		
Construction Cost	\$362,000	\$341,000	\$362,000		
ROW Cost	\$411,000	\$0	\$411,000		
Environmental Cost	\$0	\$0	\$0		
Reimbursable Utility Cost	\$12,000	\$17,000	\$12,000		
Design & Contingency Cost	\$90,000	\$119,000	\$90,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	\$875,000	\$477,000	\$875,000		

Traffic Operations:

Traffic Analysis Software Used	--select one--		--select one--		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	56.6 sec	31.1 sec	13.7 sec	9.5 sec	13.5 sec	9.5 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	23%	39%	39%		
Predefined CRF: Fatal/Inj	45%	40%	49%		
Predefined CRF Source:	FHWA Clearinghouse #s 2753 / 2755	FHWA Clearinghouse #s 325 / 7984	FHWA Clearinghouse #s 7982/8655 / 7984/8656		
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None	None		
Archaeology Resources	None	None	None		
Graveyard	None	None	None		
Stream	None	None	None		
Underground Tank/Hazmat	None	None	None		
Park Land	None	None	None		
EJ Community	None	None	None		
Wooded Area	None	None	None		
Wetland	None	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral	Neutral		
GDOT Support	Neutral	Neutral	Neutral		

Final ICE Stage 2 Score:	4.9	6.0	5.0		
Rank of Control Type Alternatives:	3	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Carriage Oaks

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	17.4 sec	91.5 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	43.1 sec	322.1 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	3	2	1	20%
Head-On	1	0	0	3%
Rear End	16	1	0	57%
Sideswipe - same	1	0	0	3%
Sideswipe - opposite	2	0	0	7%
Not Collision w/Motor Veh	3	0	0	10%
TOTALS:	26	3	1	30

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$650,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$893,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	--select one--		--select one--	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	18.5 sec	59.0 sec	8.7 sec	42.0 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	3.8	4.0		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or
explain any unique analysis inputs, or
results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Crabapple Ln

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	41.9 sec	44.2 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	75.4 sec	160.2 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
	Angle	2	5	0	9%
	Head-On	0	0	0	0%
	Rear End	42	10	0	63%
	Sideswipe - same	8	0	0	10%
	Sideswipe - opposite	2	0	0	2%
	Not Collision w/Motor Veh	13	0	0	16%
	TOTALS:	67	15	0	82

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$650,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$893,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	40.0 sec	45.0 sec	23.9 sec	23.8 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	3.7	4.0		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Crestwood Road

Analyst: Jonathan Reid

Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants		Complete Streets Warrants Met? ☐ PEDESTRIANS ☐ BICYCLES ☐ TRANSIT
Traffic Analysis Measure of Effectiveness	Intersection Delay		
Traffic Analysis Software Used	--select one--		
Analysis Time Period	AM Peak Hr	PM Peak Hr	
2022 Opening Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec	
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00	
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec	
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00	

Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	0	1	0	10%
Head-On	0	0	0	0%
Rear End	5	1	0	60%
Sideswipe - same	0	0	0	0%
Sideswipe - opposite	0	0	0	0%
Not Collision w/Motor Veh	3	0	0	30%
TOTALS:	8	2	0	10

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	RCUT (stop control)	Traffic Signal			
Project Cost: (From CostEst Worksheet)	Additional description here	Add LT bays all approaches			
Construction Cost	\$350,000	\$341,000			
ROW Cost	\$50,000	\$0			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$24,000	\$17,000			
Design & Contingency Cost	\$169,000	\$119,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$593,000	\$477,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	1.2 sec	4.8 sec	18.0 sec	22.5 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	31%	39%		
Predefined CRF: Fatal/Inj	53%	40%		
Predefined CRF Source:	NC/MO Table 4-7	FHWA Clearinghouse #s 325 / 7984		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	5.6	5.4		
Rank of Control Type Alternatives:	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Dogwood Trail

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	13.8 sec	18.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	18.5 sec	99.3 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☒ PEDESTRIANS
☒ BICYCLES
☒ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
	Angle	2	3	0	26%
	Head-On	0	0	0	0%
	Rear End	10	1	0	58%
	Sideswipe - same	1	0	0	5%
	Sideswipe - opposite	0	0	0	0%
	Not Collision w/Motor Veh	2	0	0	11%
TOTALS:		15	4	0	19

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$550,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$793,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	18.5 sec	25.0 sec	14.4 sec	18.9 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	4.1	4.3		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 7 - Metro Atlanta

Date: 8/9/2018

County: Fulton

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Harris Road

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	13.5 sec	92.6 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	18.2 sec	276.4 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		14	6	0	11%
Head-On		1	1	0	1%
Rear End		112	24	0	72%
Sideswipe - same		25	0	0	13%
Sideswipe - opposite		2	0	0	1%
Not Collision w/Motor Veh		4	1	0	3%
TOTALS:		158	32	0	190

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Turn Bay Improvements	Additional description here			
Construction Cost	\$341,000	\$550,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$793,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	--select one--		--select one--	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	18.5 sec	59.0 sec	8.8 sec	40.5 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	3.7	4.1		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Kedron Dr

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants		Complete Streets Warrants Met? ☐ PEDESTRIANS ☐ BICYCLES ☐ TRANSIT
Traffic Analysis Measure of Effectiveness	Intersection Delay		
Traffic Analysis Software Used	--select one--		
Analysis Time Period	AM Peak Hr	PM Peak Hr	
2022 Opening Yr No-Build Peak Hr Intersection Delay	18.9 sec	40.7 sec	
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00	
2040 Design Yr No-Build Peak Hr Intersection Delay	24.7 sec	187.0 sec	
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00	

Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	1	2	0	5%
Head-On	1	0	0	2%
Rear End	41	3	0	76%
Sideswipe - same	3	0	0	5%
Sideswipe - opposite	0	0	0	0%
Not Collision w/Motor Veh	6	1	0	12%
TOTALS:	52	6	0	58

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$650,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$893,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	28.0 sec	45.0 sec	14.2 sec	17.0 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	3.9	4.1		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Kedron Dr-2

Analyst: Jonathan Reid

Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	387.0 sec	500.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☒ PEDESTRIANS
☒ BICYCLES
☒ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		8	11	0	48%
Head-On		0	0	0	0%
Rear End		11	3	0	35%
Sideswipe - same		1	1	0	5%
Sideswipe - opposite		0	0	0	0%
Not Collision w/Motor Veh		3	2	0	13%
TOTALS:		23	17	0	40

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	RCUT (stop control)	Traffic Signal			
Project Cost: (From CostEst Worksheet)	Additional description here	Add LT bays all approaches			
Construction Cost	\$450,000	\$341,000			
ROW Cost	\$50,000	\$0			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$24,000	\$17,000			
Design & Contingency Cost	\$169,000	\$119,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$693,000	\$477,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	1.2 sec	1.6 sec	18.0 sec	22.5 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	31%	39%		
Predefined CRF: Fatal/Inj	53%	40%		
Predefined CRF Source:	NC/MO Table 4-7	FHWA Clearinghouse #s 325 / 7984		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (**RED**), provide justification impact won't jeopardize project delivery using "Env" worksheet¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	5.8	5.6		
Rank of Control Type Alternatives:	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or
explain any unique analysis inputs, or
results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

County: Fayette

Project Location: SR 74 @ Westbourne Dr

Existing Intersection Control: Conventional (Minor Stop)

GDOT District: 3 - Thomaston

Area Type: Suburb/Transition

Date: 8/9/2018

Agency/Firm: ARCADIS

Analyst: Jonathan Reid

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☒ PEDESTRIANS
☒ BICYCLES
☒ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		2	0	0	13%
Head-On		0	0	0	0%
Rear End		3	1	0	25%
Sideswipe - same		5	0	0	31%
Sideswipe - opposite		1	0	0	6%
Not Collision w/Motor Veh		3	1	0	25%
TOTALS:		14	2	0	16

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	RCUT (stop control)	Traffic Signal			
Project Cost: (From CostEst Worksheet)	Additional description here	Add LT bays all approaches			
Construction Cost	\$250,000	\$341,000			
ROW Cost	\$50,000	\$0			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$24,000	\$17,000			
Design & Contingency Cost	\$169,000	\$119,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$493,000	\$477,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	2.3 sec	9.9 sec	15.0 sec	27.0 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	31%	39%		
Predefined CRF: Fatal/Inj	53%	40%		
Predefined CRF Source:	NC/MO Table 4-7	FHWA Clearinghouse #s 325 / 7984		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	5.6	5.3		
Rank of Control Type Alternatives:	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 7 - Metro Atlanta

Date: 8/9/2018

County: Fulton

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Landrum Rd

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	30.6 sec	128.1 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	63.8 sec	319.7 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☒ PEDESTRIANS
☒ BICYCLES
☒ TRANSIT

Crash Type

Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	8	7	0	18%
Head-On	3	1	0	5%
Rear End	48	8	0	67%
Sideswipe - same	5	0	0	6%
Sideswipe - opposite	1	0	0	1%
Not Collision w/Motor Veh	2	1	0	4%
TOTALS:	67	17	0	84

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$650,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$893,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	--select one--		--select one--	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	18.0 sec	78.0 sec	9.4 sec	51.7 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	3.6	3.9		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 7 - Metro Atlanta

Date: 8/9/2018

County: Fulton

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Meadow Glen Way

Analyst: Jonathan Reid

Existing Intersection Control: Conventional (Minor Stop)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
	Angle	7	5	0	30%
	Head-On	0	0	0	0%
	Rear End	17	1	0	45%
	Sideswipe - same	5	0	0	13%
	Sideswipe - opposite	1	0	0	3%
	Not Collision w/Motor Veh	3	1	0	10%
TOTALS:		33	7	0	40

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$550,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$793,000			

Traffic Operations:

	--select one--		--select one--	
Traffic Analysis Software Used	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
Analysis Period	25.0 sec	70.0 sec	6.6 sec	49.3 sec
2040 Design Yr Build Intersection Delay	0.00	0.00	0.00	0.00
2040 Design Yr Build Intersection V/C				

Safety Analysis:

Predefined CRF: PDO	39%	48%		
Predefined CRF: Fatal/Inj	40%	53%		
Predefined CRF Source:	FHWA Clearinghouse #s 7982 / 7984	FHWA Clearinghouse #s 325/HRT-17-083 / 7984/HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	5.1	5.3		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 7 - Metro Atlanta

Date: 8/9/2018

County: Fulton

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Oakley Blvd

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	127.9 sec	244.3 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	176.4 sec	526.7 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
	Angle	56	17	0	18%
	Head-On	6	1	1	2%
	Rear End	220	33	0	61%
	Sideswipe - same	63	3	0	16%
	Sideswipe - opposite	7	1	0	2%
	Not Collision w/Motor Veh	4	2	0	1%
	TOTALS:	356	57	1	414

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Turn Lane Improvements	Additional description here			
Construction Cost	\$852,500	\$678,000			
ROW Cost	\$0	\$2,447,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$42,500	\$24,000			
Design & Contingency Cost	\$297,500	\$169,000			
Cost Adjustment (justification req'd)	+150%	0%			
Total Cost	\$1,192,500	\$3,318,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	45.2 sec	56.0 sec	30.0 sec	48.9 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Negative		
GDOT Support	Neutral	Negative		

Final ICE Stage 2 Score:	3.8	3.3		
Rank of Control Type Alternatives:	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Palmetto Rd

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	27.8 sec	154.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	59.0 sec	349.7 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets

Warrants Met?

☐ PEDESTRIANS☐ BICYCLES☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		5	4	0	24%
Head-On		0	1	0	3%
Rear End		21	3	0	63%
Sideswipe - same		2	0	0	5%
Sideswipe - opposite		0	0	0	0%
Not Collision w/Motor Veh		2	0	0	5%
TOTALS:		30	8	0	38

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	Median U-Turn (Indirect Left)	RCUT (signalized)		
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here	Additional description here		
Construction Cost	\$341,000	\$750,000	\$650,000		
ROW Cost	\$0	\$50,000	\$50,000		
Environmental Cost	\$0	\$0	\$0		
Reimbursable Utility Cost	\$17,000	\$21,000	\$24,000		
Design & Contingency Cost	\$119,000	\$149,000	\$169,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	\$477,000	\$970,000	\$893,000		

Traffic Operations:

	Synchro 9		Synchro 9		Synchro 9			
Traffic Analysis Software Used	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr		
Analysis Period	39.5 sec	75.0 sec	14.2 sec	55.6 sec	25.5 sec	66.0 sec		
2040 Design Yr Build Intersection Delay	0.00	0.00	0.00	0.00	0.00	0.00		
2040 Design Yr Build Intersection V/C								

Safety Analysis:

Predefined CRF: PDO	0%	9%	15%		
Predefined CRF: Fatal/Inj	0%	30%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-07-033	FHWA-HRT-17-083		
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None	None		
Archaeology Resources	None	None	None		
Graveyard	None	None	None		
Stream	None	None	None		
Underground Tank/Hazmat	None	None	None		
Park Land	None	None	None		
EJ Community	None	None	None		
Wooded Area	None	None	None		
Wetland	None	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral	Neutral		
GDOT Support	Neutral	Neutral	Neutral		

Final ICE Stage 2 Score:	3.6	4.0	3.8		
Rank of Control Type Alternatives:	3	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

GDOT District: 3 - Thomaston

Date: 8/9/2018

County: Fayette

Area Type: Suburb/Transition

Agency/Firm: ARCADIS

Project Location: SR 74 @ Palmetto Rd

Analyst: Jonathan Reid

Existing Intersection Control: Signal (turn lanes on mainline)

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	127.9 sec	202.5 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	57.4 sec	241.6 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☒ PEDESTRIANS
☒ BICYCLES
☒ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		3	2	0	14%
Head-On		0	0	0	0%
Rear End		19	2	0	58%
Sideswipe - same		5	0	0	14%
Sideswipe - opposite		0	0	0	0%
Not Collision w/Motor Veh		5	0	0	14%
TOTALS:		32	4	0	36

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$650,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$893,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	45.0 sec	48.0 sec	30.3 sec	29.4 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	0%	15%		
Predefined CRF: Fatal/Inj	0%	22%		
Predefined CRF Source:	N/A	FHWA-HRT-17-083		
User Defined CRF: PDO				
User Defined CRF: Fatal/Inj				
User Defined CRF Source (write in if applicable):				

Environmental Impacts:¹

Historic District/Property	None	None		
Archaeology Resources	None	None		
Graveyard	None	None		
Stream	None	None		
Underground Tank/Hazmat	None	None		
Park Land	None	None		
EJ Community	None	None		
Wooded Area	None	None		
Wetland	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral		
GDOT Support	Neutral	Neutral		

Final ICE Stage 2 Score:	3.7	3.9		
Rank of Control Type Alternatives:	2	1		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

County: Fulton

Project Location: SR 74 @ Aberdeen Pkwy

Existing Intersection Control: Conventional (Minor Stop)

GDOT District: 7 - Metro Atlanta

Area Type: Suburb/Transition

Date: 8/9/2018

Agency/Firm: ARCADIS

Analyst: Jonathan Reid

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	260.5 sec	231.7 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	3	2	0	45%
Head-On	0	0	0	0%
Rear End	1	0	0	9%
Sideswipe - same	3	1	0	36%
Sideswipe - opposite	0	0	0	0%
Not Collision w/Motor Veh	1	0	0	9%
TOTALS:	8	3	0	11

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

Proposed Control Type/Improvement:

Project Cost: (From CostEst Worksheet)

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	High-T (unsignalized)	Traffic Signal	Continuous Green-T		
Additional description here	Add LT bays all approaches	Add LT bays all approaches	Add LT bays all approaches		
Construction Cost	\$362,000	\$341,000	\$362,000		
ROW Cost	\$411,000	\$0	\$411,000		
Environmental Cost	\$0	\$0	\$0		
Reimbursable Utility Cost	\$12,000	\$17,000	\$12,000		
Design & Contingency Cost	\$90,000	\$119,000	\$90,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	\$875,000	\$477,000	\$875,000		

Traffic Operations:

Traffic Analysis Software Used	Synchro 9		Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	120.0 sec	120.0 sec	12.7 sec	16.5 sec	12.5 sec	15.8 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	23%	39%	39%		
Predefined CRF: Fatal/Inj	45%	40%	49%		
Predefined CRF Source:	FHWA Clearinghouse #s 2753 / 2755	FHWA Clearinghouse #s 325 / 7984	FHWA Clearinghouse #s 7982/8655 / 7984/8656		
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None	None		
Archaeology Resources	None	None	None		
Graveyard	None	None	None		
Stream	None	None	None		
Underground Tank/Hazmat	None	None	None		
Park Land	None	None	None		
EJ Community	None	None	None		
Wooded Area	None	None	None		
Wetland	None	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral	Neutral		
GDOT Support	Neutral	Neutral	Neutral		

Final ICE Stage 2 Score:	3.4	5.9	5.4		
Rank of Control Type Alternatives:	3	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000
County: Fayette
Project Location: SR 74 @ Lexington Pass
Existing Intersection Control: Conventional (Minor Stop)

GDOT District: 3 - Thomaston
Area Type: Suburb/Transition

Date: 8/9/2018
Agency/Firm: ARCADIS
Analyst: Jonathan Reid

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	500.0 sec	500.0 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets
Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
Angle		6	2	1	28%
Head-On		1	0	0	3%
Rear End		6	3	0	28%
Sideswipe - same		2	0	0	6%
Sideswipe - opposite		0	1	0	3%
Not Collision w/Motor Veh		10	0	0	31%
TOTALS:		25	6	1	32

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	RCUT (signalized)			
Project Cost: (From CostEst Worksheet)	Add LT bays all approaches	Additional description here			
Construction Cost	\$341,000	\$550,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$24,000			
Design & Contingency Cost	\$119,000	\$169,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$477,000	\$793,000			

Traffic Operations:

	User Cost Override			
Traffic Analysis Software Used	Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	22.8 sec	48.0 sec	11.7 sec	22.4 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	39%	48%			
Predefined CRF: Fatal/Inj	40%	53%			
Predefined CRF Source:	FHWA Clearinghouse #s 7982 / 7984	FHWA Clearinghouse #s 325/HRT-17-083 / 7984/HRT-17-083			
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None			
Archaeology Resources	None	None			
Graveyard	None	None			
Stream	None	None			
Underground Tank/Hazmat	None	None			
Park Land	None	None			
EJ Community	None	None			
Wooded Area	None	None			
Wetland	None	None			

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral			
GDOT Support	Neutral	Neutral			

Final ICE Stage 2 Score:	5.3	5.5			
Rank of Control Type Alternatives:	2	1			

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or
explain any unique analysis inputs, or
results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

County: Fulton

Project Location: SR 74 @ US 29 WB Ramp

Existing Intersection Control: Conventional (Minor Stop)

GDOT District: 7 - Metro Atlanta

Area Type: Suburb/Transition

Date: 8/9/2018

Agency/Firm: ARCADIS

Analyst: Jonathan Reid

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	20.1 sec	18.6 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	29.0 sec	69.6 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Severity			
	PDO	Injury Crash*	Fatal Crash*	
Angle	1	2	0	30%
Head-On	0	0	0	0%
Rear End	4	0	0	40%
Sideswipe - same	0	0	0	0%
Sideswipe - opposite	1	0	0	10%
Not Collision w/Motor Veh	2	0	0	20%
TOTALS:	8	2	0	10

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	High-T (unsignalized)	Traffic Signal	Continuous Green-T		
Project Cost: (From CostEst Worksheet)	Additional description here	Add LT bays all approaches	Additional description here		
Construction Cost	\$362,000	\$341,000	\$362,000		
ROW Cost	\$411,000	\$0	\$411,000		
Environmental Cost	\$0	\$0	\$0		
Reimbursable Utility Cost	\$12,000	\$17,000	\$12,000		
Design & Contingency Cost	\$90,000	\$119,000	\$90,000		
Cost Adjustment (justification req'd)	0%	0%	0%		
Total Cost	\$875,000	\$477,000	\$875,000		

Traffic Operations:

Traffic Analysis Software Used	Synchro 9		Synchro 9		Synchro 9	
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr
2040 Design Yr Build Intersection Delay	29.0 sec	69.6 sec	23.5 sec	15.7 sec	22.0 sec	14.8 sec
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00	0.00	0.00

Safety Analysis:

Predefined CRF: PDO	23%	39%	39%		
Predefined CRF: Fatal/Inj	45%	40%	49%		
Predefined CRF Source:	FHWA Clearinghouse #s 2753 / 2755	FHWA Clearinghouse #s 325 / 7984	FHWA Clearinghouse #s 7982/8655 / 7984/8656		
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None	None		
Archaeology Resources	None	None	None		
Graveyard	None	None	None		
Stream	None	None	None		
Underground Tank/Hazmat	None	None	None		
Park Land	None	None	None		
EJ Community	None	None	None		
Wooded Area	None	None	None		
Wetland	None	None	None		

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral	Neutral		
GDOT Support	Neutral	Neutral	Neutral		

Final ICE Stage 2 Score:	4.9	6.0	5.0		
Rank of Control Type Alternatives:	3	1	2		

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):



GDOT ICE STAGE 2: ALTERNATIVE SELECTION DECISION RECORD

ICE Version 2.14 | Revised 07/20/2018

GDOT PI # (or N/A) 0000000

County: Fayette

Project Location: SR 74 @ Wisdom Rd

Existing Intersection Control: Signal (turn lanes on mainline)

GDOT District: 3 - Thomaston

Area Type: Suburb/Transition

Date: 8/9/2018

Agency/Firm: ARCADIS

Analyst: Jonathan Reid

Type of Analysis: Conventional Non-Safety Funded Project

Opening / Design Year Traffic Operations

Intersection meets signal/AWS warrants?	Meets Signal Warrants	
Traffic Analysis Measure of Effectiveness	Intersection Delay	
Traffic Analysis Software Used	--select one--	
Analysis Time Period	AM Peak Hr	PM Peak Hr
2022 Opening Yr No-Build Peak Hr Intersection Delay	11.7 sec	38.1 sec
2022 Opening Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00
2040 Design Yr No-Build Peak Hr Intersection Delay	20.1 sec	143.9 sec
2040 Design Yr No-Build Peak Hr Intersection V/C ratio	0.00	0.00

Complete Streets Warrants Met?

- ☐ PEDESTRIANS
☐ BICYCLES
☐ TRANSIT

Crash Type	Crash Data: Enter 5 most recent years of intersection crash data	Crash Severity			
		PDO	Injury Crash*	Fatal Crash*	
	Angle	12	11	0	29%
	Head-On	0	0	0	0%
	Rear End	29	11	0	51%
	Sideswipe - same	8	1	0	12%
	Sideswipe - opposite	0	0	0	0%
	Not Collision w/Motor Veh	5	1	0	8%
	TOTALS:	54	24	0	78

* Number of crashes resulting in injuries / fatalities, not number of persons

Alternatives Analysis:

Proposed Control Type/Improvement:

Project Cost: (From CostEst Worksheet)

	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5
Proposed Control Type/Improvement:	Traffic Signal	Continuous Green-T			
Turn Lane Improvements		Additional description here			
Construction Cost	\$225,000	\$400,000			
ROW Cost	\$0	\$50,000			
Environmental Cost	\$0	\$0			
Reimbursable Utility Cost	\$17,000	\$12,000			
Design & Contingency Cost	\$119,000	\$90,000			
Cost Adjustment (justification req'd)	0%	0%			
Total Cost	\$361,000	\$552,000			

Traffic Operations:

Traffic Analysis Software Used	Synchro 9		Synchro 9		
Analysis Period	AM Peak Hr	PM Peak Hr	AM Peak Hr	PM Peak Hr	
2040 Design Yr Build Intersection Delay	14.7 sec	48.1 sec	13.5 sec	42.0 sec	
2040 Design Yr Build Intersection V/C	0.00	0.00	0.00	0.00	

Safety Analysis:

Predefined CRF: PDO	0%	1%			
Predefined CRF: Fatal/Inj	0%	15%			
Predefined CRF Source:	N/A	FHWA Clearinghouse #s 8655 / 8656			
User Defined CRF: PDO					
User Defined CRF: Fatal/Inj					
User Defined CRF Source (write in if applicable):					

Environmental Impacts:¹

Historic District/Property	None	None			
Archaeology Resources	None	None			
Graveyard	None	None			
Stream	None	None			
Underground Tank/Hazmat	None	None			
Park Land	None	None			
EJ Community	None	None			
Wooded Area	None	None			
Wetland	None	None			

Note: If environmental impact is significant (RED), provide justification impact won't jeopardize project delivery using "Env" worksheet

¹ Environmental impacts are only preliminary estimates; detailed environmental impact documentation will be included with project concept report

Stakeholder Posture:

Local Community Support	Neutral	Neutral			
GDOT Support	Neutral	Neutral			

Final ICE Stage 2 Score:	3.8	3.8			
Rank of Control Type Alternatives:	1	2			

Note: Stage 2 score is not given (shown as "-") if signal or AWS is selected as control type but respective warrants are not met

Provide additional comments and/or explain any unique analysis inputs, or results (as necessary):