CHAPEL HILL NORTH – HARRIS TEETER EXPANSION

TRAFFIC IMPACT STUDY

Prepared for:

The Town of Chapel Hill

Public Works Department - Engineering

Prepared by:

HNTB North Carolina, PC

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NCBELS License #: C-1554

March 2018

HNTB

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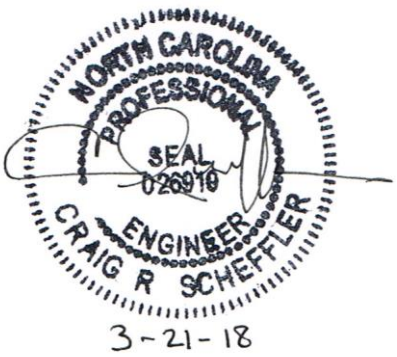

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I. EXISTING CONDITIONS

A. Project Overview

A redevelopment of the Chapel Hill North Shopping Center Harris Teeter supermarket, located along N.C. 86 (Martin Luther King, Jr. Boulevard) near Perkins Drive, is being proposed in Chapel Hill. The project will entail adding space to the existing supermarket building and constructing a fuel station with 14 gas pumps and additional on-site parking at the rear of the existing Harris Teeter parking lot. **Figure 1** (found in ***Appendix A***) shows the general location of the site. The project is anticipated to be fully complete by 2020. This report analyzes the full build-out scenario for the year 2021 (one year after anticipated completion), the no-build scenario for 2021, as well as 2017 existing year traffic conditions.

The proposed site concept plan shows no changes to existing access driveways to the site. There are two existing external access connections – internal driveways to Perkins Drive and the NC 86 corridor or via an existing right-turn in/right-turn out only (RIRO) driveway along NC 86 adjacent to the site. **Figure 2** displays the preliminary concept plan of Harris Teeter Expansion and nearby land uses and roadways.

B. Site Location and Study Area

This report analyzes and presents the transportation impacts that Harris Teeter Expansion will have on the following intersections in the project study area:

- NC 86 (Martin Luther King Jr. Boulevard) and I-40 Westbound Ramps
- NC 86 (Martin Luther King Jr. Boulevard) and I-40 Eastbound Ramps
- NC 86 (Martin Luther King Jr. Boulevard) and Eubanks Road
- NC 86 (Martin Luther King Jr. Boulevard) and Chapel Hill North RIRO Driveway
- NC 86 (Martin Luther King Jr. Boulevard) and Perkins Drive
- NC 86 (Martin Luther King Jr. Boulevard) and Weaver Dairy Road/Weaver Dairy Road Extension
- Perkins Drive and Chapel Hill North Main Access Driveway
- Internal Chapel Hill North Driveway Intersection near Harris Teeter

The impacts of the proposed site at the study area intersections will be evaluated during the AM, noon, and PM peak hours of an average weekday. The following study is based on background traffic for the existing year, 2017, and the year following the estimated site build out year of 2020, as well as the estimated additional site-generated traffic produced by the commercial redevelopment.

There are numerous Town-approved future developments in, or just beyond, the immediate project study area that were considered to be constructed by 2021 and may generate additional background traffic. An area-wide ambient future traffic growth percentage of 0.5 percent per year was applied to the existing 2017 peak hour traffic volumes, based on historical average annual daily traffic (AADT) growth rate data provided by the Town of Chapel Hill and NCDOT, consistent with recent study area traffic impact studies, and considering the fact that a majority of traffic volume growth in the project study area will be due to the Town-approved development projects, four of which were considered to generate specific site-related traffic volumes that were added to the ambient regional growth for 2021.

C. Site Description

The Harris Teeter Expansion site currently contains the existing 51,000 square foot supermarket and on-site paved surface parking facilities as part of the larger Chapel Hill North shopping center development. The site is surrounded by commercial development to the south and high density residential development to the east. The site borders the I-40 corridor to the north. To the west, lower density residential subdivisions currently exist.

Existing Harris Teeter Site

The proposed site redevelopment will utilize existing Chapel Hill North internal driveway connections to provide external vehicular access to the site from the NC 86 corridor and Perkins Drive. The proposed site plan, shown in **Figure 2**, indicates all parking will be accommodated on-site, with a small expansion to existing surface parking facilities.

D. Existing and Proposed Uses in Vicinity of Site

The land uses and development in the study area are a mixture of residential and higher density commercial areas located along Martin Luther King, Jr. Boulevard and Weaver Dairy Road. The Existing Land Use Plan shown in the 2020 *Town of Chapel Hill Comprehensive Plan* and adopted June 25, 2012, indicates that the exiting site is designated as a "commercial". The Future Land Use Plan, that is also a part of the Town Comprehensive Plan, indicates that the parcel would be included in a "Town/Village Center" that also includes the Timberlyne Shopping Center and areas north of Weaver Dairy Road east of NC 86. The Comprehensive Plan also indicates that this parcel is a "Development Opportunity Area" and a "Future Focus Discussion Area". The parcel is currently zoned "Mixed-Use – Office/Institutional 1".

E. Existing and Committed Surface Transportation Network

Roadways

The Harris Teeter Expansion project study area features several major arterial roadways serving areas throughout the Town of Chapel Hill and points beyond, as well as a number of collector and local access streets. **Table 1**, on the following page, summarizes pertinent information on the study area roadway facilities. AADT data was taken from 2015 AADT mapping produced by the NCDOT Traffic Survey Unit. **Figure 3** shows the existing lane configuration, traffic control, and speed limits for these study area roadways.

. Detailed descriptions of several of the major study area roadways are as follows:

- **N.C. Highway 86 (Martin Luther King Jr, Blvd)** is a principal arterial in the study area, serving areas from I-40 (via Martin Luther King Jr. Boulevard) to downtown Chapel Hill and the US 15-501 corridor to the south. In the study area vicinity, Martin Luther King, Jr. Boulevard is a four to six-lane divided cross-section. There are multiple driveway access points along the roadway and several major street intersections. No on-street parking is permitted along N.C. 86 in the project study area. Several bus stops are located along the facility. The posted speed limit is 35 mph in the study area south of Weaver Dairy Road, increasing to 45 mph north of this intersection.

Table 1. Existing Study Area Roadways

Road Name	Functional Classification*	Study Area Cross-Section	2015 AADT	Speed Limit	Sidewalk	On-Street Parking
N.C. 86 (Martin Luther King, Jr. Boulevard)	Other Principal Arterial	4-6 lane median divided	27,000 – 31,000	35-45	Y	N
Eubanks Road	Major Collector	2 lane undivided	8,600	45	N	N
Perkins Drive	Local	2 lane undivided	N/A	25	Y	N
Weaver Dairy Road	Minor Arterial	4 lane median divided	13,000	35	Y	N
Weaver Dairy Road Extension	Local	2 lane median divided	N/A	25	Y	N

TWLTL – Two-Way Left-turn Lane * - As defined on the *NCDOT Urban Functional Classification Map (June 2017) https://ncdot.maps.arcgis.com/home/webmap/viewer.html?useExisting=1*

- **Eubanks Road** is a regional collector roadway for rural and transitioning areas north and west of Chapel Hill. It is a two-lane undivided facility with a posted 45 mph speed limit. Limited sections of sidewalk exist along the facility, none of which are in the project study area. On-street parking is not permitted.

- **Perkins Drive** is a local access street for the Chapel Hill North shopping center and nearby commercial and residential development. It provides access to both NC 86 and Weaver Dairy Road. Perkins Drive has a two-lane undivided cross-section with auxiliary turn lanes at several intersections. It features sidewalks along most of its length and a 25 mph speed limit.

- **Weaver Dairy Road** is a minor arterial that connects areas of east and north Chapel Hill. In the study area, Weaver Dairy Road has been widened to a four-lane divided median facility with a 35 mph speed limit. The upgrades also include access restrictions for private and commercial driveways, sidewalks and bicycle lanes. No on-street parking is permitted.

- **Weaver Dairy Road Extension** is a collector street that provide access to residential neighborhoods west of NC 86. It is a two-lane facility with a raised center median. The posted speed limit is 25 mph and the facility features sidewalk and bicycle lanes. On-street parking is not permitted.

Intersections

Table 2 summarizes all eight existing study area intersections, traffic control features, and pedestrian amenities at each. Laneage details and intersection turn bay lengths are also detailed on **Figure 3**. The project study area features a mixture of signalized and unsignalized intersections. The N.C. 86 (Martin Luther King, Jr. Boulevard) corridor features coordinated signal operation for weekday peak hours.

Bicycle Routes and Sidewalks

Specific bicycle facilities are present in the immediate study area, with striped bicycle lanes in both directions along Martin Luther King, Jr. Boulevard. Bicycle lanes are also present on Weaver Dairy Road Extension and Weaver Dairy Road. Pedestrian sidewalk is found along both sides of Martin Luther King Jr. Boulevard through the study area. Additional connectivity exists between these sections and side streets along the corridor. Crosswalks and pedestrian signals are present across

Martin Luther King, Jr. Boulevard at the Weaver Dairy Road and Perkins Drive intersections. **Figure 4** displays a schematic of existing pedestrian and bicycle facilities in the project study area.

Table 2. Existing Study Area Intersection Details

Intersection	Traffic Control	Signal Phases	Signal Operation	Cross walk	Ped Signals
NC 86 (Martin Luther King Jr. Boulevard) and I-40 Westbound Ramps	Sig	3	Coordinated	No	No
NC 86 (Martin Luther King Jr. Boulevard) and I-40 Eastbound Ramps	Sig	3	Coordinated	No	No
NC 86 (Martin Luther King Jr. Boulevard) and Eubanks Road	Sig	3	Coordinated	No	No
NC 86 (Martin Luther King Jr. Boulevard) and Chapel Hill North Right-In/Right-Out Driveway	Unsig	N/A	Coordinated	No	No
NC 86 (Martin Luther King Jr. Boulevard) and Perkins Drive	Sig	3	Coordinated	Yes (2)	Yes (2)
NC 86 (Martin Luther King Jr. Boulevard) and Weaver Dairy Road/Weaver Dairy Road Extension	Sig	8	Coordinated	Yes (4)	Yes (4)
Perkins Drive and Chapel Hill North Main Driveway	Unsig	N/A	N/A	Yes (1)	No
Internal Chapel Hill North Driveway Intersection near Harris Teeter	Unsig	N/A	N/A	No	No

Sig – Signalized, Unsig – Unsignalized (X) – Number of Pedestrian Crossings/Crossings with Signals

Transit Routes

Current Chapel Hill Transit (CHT) Routes NS and T serve the project study area along Martin Luther King, Jr. Boulevard, Weaver Dairy Road and Eubanks Road with weekday bus service (T Route also provides Saturday service). Numerous bus stops, with a range of amenities (shelters, benches), are present in and near the study area. **Table 3** details the two current CHT routes serving the study area. Go Triangle provides regional bus service to the immediate study area via the 420 Route that runs along NC 86 between Chapel Hill and Hillsborough. Service for this route occurs at 30 minute headways during peak weekday periods. Go Triangle also provides express bus service from Chapel Hill to Raleigh on the CRX Route that uses NC 86 (Martin Luther King, Jr. Boulevard) in the study area on 30 minute headways during weekday peak hours. **Figure 5** displays transit routes and bus stops that currently exist in the project study area. Transit trips that potentially would be served by the Harris Teeter Expansion project are addressed in the following sections of this report.

Recommended/Committed Surface Transportation Improvement Projects

There are no committed/programmed NCDOT State Transportation Improvement Program (STIP) projects in the study area that are expected to be complete by 2021. NCDOT currently has the STIP I-3306A project (I-40 widening) programmed, but it is expected to start construction in 2023. The Town of Chapel Hill is currently planning bus rapid transit (BRT) improvements for the NC 86 corridor, but they are not expected to be complete and in operation by 2021.

There are three approved or under construction improvement private development projects expected to be complete by the 2021 analysis year in the project study area (1701 North (formerly Charterwood), Carraway Village (formerly The Edge) and Children's Campus of Chapel Hill). Their impacts and proposed improvements were considered to be complete by the 2021 analysis year.

There are additional recommended improvements to transportation facilities in Harris Teeter Expansion project study area that may occur as the Carolina North development progresses to the south of the

project study area. However, any additional improvements due to this project were considered post-2021 analysis year for the purposes of this study.

Table 3. Current Study Area Weekday Transit Service

Route	Headways (minutes)			Study Area Stops	Destinations
	AM Peak	PM Peak	Off Peak		
Chapel Hill Transit					
NS	10	10	20	• Weaver Dairy Road Area • NC 86 Corridor • Chapel Hill North	• UNC Campus/Hospitals Area • Eubanks Road Park and Ride • Southern Village Park and Ride
T	25-35	30-35	35	• Timberlyne Shopping Ctr • NC 86 Corridor	• UNC Campus/UNC Hospitals • Downtown Chapel Hill • E. Chapel Hill HS/Cedar Falls Pk
Triangle Transit					
420	30	30	N/A	• NC 86 Corridor	• Hillsborough • Downtown Chapel Hill/UNC Campus
CRX	20-30	20-30	N/A	• None (Express Service)	• Downtown Chapel Hill/UNC Campus • Eubanks Road Park-and-Ride • Raleigh

Sources: CHT 2016 Fall Ride Guide, Go Triangle website information (June 2017)

F. Existing Traffic Conditions

Figure 6 shows recent AM, noon, and PM peak hour traffic volumes for the study area intersections. The counts used to determine these volumes were conducted in May 2017 for all study area intersections during the weekday periods 7:00 - 9:00 AM, 11:30 AM – 1:30 PM, and 4:00 – 6:00 PM. This data, along with all turning movement count output is found in ***Appendix B***.

Traffic count information shows traffic flows on N.C. 86 (Martin Luther King, Jr. Boulevard) were heavy during the AM and PM peak count periods, with southbound flows into downtown Chapel Hill heaviest in the AM peak and northbound return flows heaviest in the PM peak. Traffic on Weaver Dairy Road was moderate to heavy during the peak commuting periods. Traffic flows were light to moderate on the remaining study area roadways that function as collector or local access streets. **Table 4** provides a detailed listing of each intersection count, peak hour, and count date.

Review of traffic count data shows consistent correlation between actual peak hours at each intersection during each two hour count period. Traffic counts between intersection were reviewed and also show a high degree of consistency. No specific traffic count balancing between intersections was done for this analysis.

Table 4. Traffic Count Information

Traffic Count Location	Period Counted	Peak Hour	Count Date
NC 86 (Martin Luther King Jr. Boulevard) & I-40 Westbound Ramps	AM Peak	7:30 – 8:30 AM	5/25/17
	Noon Peak	12:30 – 1:30 PM	
	PM Peak	4:45 – 5:45 PM	
NC 86 (Martin Luther King Jr. Boulevard) & I-40 Eastbound Ramps	AM Peak	7:30 – 8:30 AM	
	Noon Peak	12:15 – 1:15 PM	
	PM Peak	5:00 – 6:00 PM	
NC 86 (Martin Luther King Jr. Boulevard) & Eubanks Road	AM Peak	7:30 – 8:30 AM	
	Noon Peak	12:15 – 1:15 PM	
	PM Peak	5:00 – 6:00 PM	
NC 86 (Martin Luther King Jr. Boulevard) & Chapel Hill North Right-In/Right-Out Driveway	AM Peak	7:30 – 8:30 AM	
	Noon Peak	12:15 – 1:15 PM	
	PM Peak	4:45 – 5:45 PM	
NC 86 (Martin Luther King Jr. Boulevard) & Perkins Drive	AM Peak	7:30 – 8:30 AM	
	Noon Peak	12:15 – 1:15 PM	
	PM Peak	4:45 – 5:45 PM	
NC 86 (Martin Luther King Jr. Boulevard) & Weaver Dairy Road/Weaver Dairy Road Extension	AM Peak	7:45 – 8:45 AM	
	Noon Peak	12:15 – 1:15 PM	
	PM Peak	4:45 – 5:45 PM	
Perkins Drive & Chapel Hill North Main Access Driveway	AM Peak	8:00 – 9:00 AM	
	Noon Peak	12:30 – 1:30 PM	
	PM Peak	4:45 – 5:45 PM	
Internal Chapel Hill North Driveway Intersection near Harris Teeter	AM Peak	8:00 – 9:00 AM	
	Noon Peak	12:30 – 1:30 PM	
	PM Peak	4:15 – 5:15 PM	

II. 2017 BUILD-OUT YEAR +1 CONDITIONS

A. Future Ambient Area-Wide Traffic Growth Estimation

Based on information on average daily traffic collected by the Town of Chapel Hill and the NCDOT, an ambient traffic growth rate of 0.5 percent per year was used for the short-term 2021 design year capacity analyses. This rate is based on previous and anticipated growth trends for this area from Town and NCDOT average daily traffic information from the period 1990-2015.

It is important to also note that multiple background traffic generating developments were included in this study, and would likely contribute a significant portion of new trips in the northern Chapel Hill area between 2017 and 2021, if all of these projects were built and occupied to their approved land use intensities.

B. Approved Background Development Traffic Estimation

Per information from Town of Chapel Hill staff, four Town-approved developments that are either currently under construction or are expected to be built out and fully operational by the 2021 design analysis year (or soon after) were studied for the inclusion of specific background traffic for this report. The four developments are listed in **Table 5**, along with their current status and impact to 2021 future traffic volumes estimates.

Table 5. Study Area Background Development Status

Development Name	Summer 2017 Status	Development Density	TIS Completed?	2017 Traffic Impact
Carraway Village (formerly the Edge)	Beginning Construction	196,250 SF Retail 40,000 SF Office 431 Apartments	Yes – HNTB (2013)	Assume Phase 1 and 2 100% built out – specific generator
1701 North (formerly Charterwood)**	Approximately 50% complete	15k SF Office 20k SF Retail 35 Condos 35 Home sites 100 Unit Hotel	Yes – HNTB (2009)	Assume remaining 50% built out – specific generator
Children's Campus of Chapel Hill	Open Fall 2017	12,500 SF Child-Care Facility	Yes – HNTB (2013)	Assume 100% built out – specific generator
1165 Weaver Dairy Commercial Building	Not Approved	31,000 SF Office 15,000 SF Retail	Yes – HNTB (2015 and 2017 Update)	Assume 100% built out – specific generator

** - Actual Development Program differs from Original Assumptions in TIS

Total approved background traffic volumes for the Harris Teeter Expansion study area are shown in **Figure 8**. ***Appendix C*** displays total background traffic generator peak hour volumes estimates projected across the Harris Teeter Expansion project study area. Traffic assignment from these four developments was estimated based on information already compiled for the *Charterwood Traffic Impact Study*, prepared by HNTB in February 2010, *The Edge Mixed-Use Development Traffic Impact Study – 2013 Update*, prepared by HNTB in August 2013, *The Children's Campus of Chapel Hill Traffic Impact Study* prepared by HNTB in May 2013, and the *1165 Weaver Dairy Commercial Building Traffic Impact Study – Update*, prepared by HNTB in June 2017.

Figures 9A and 9B display the projected 2021 peak hour traffic volumes in the project study area without the proposed site redevelopment. This data represents the ambient area-wide growth and total background site traffic volumes shown in **Figure 8**.

C. Proposed Project Traffic

i. Trip Generation

Projected trips for the proposed Harris Teeter Expansion redevelopment were generated based on the *ITE Trip Generation Manual* (Institute of Transportation Engineers, 9th Edition, 2012). Adjustments to raw trip generation rates (due to internal trips, pass-by trips, transit trips, pedestrian/bicycle trips) were made, as appropriate. Trip generation methodologies use the NCDOT recommended practice for each of the proposed land uses regarding equation-based or rate-based estimation methods.

Table 6 shows the estimated number of vehicular trips generated by Harris Teeter Expansion during the weekday AM, noon, and PM peak hours of adjacent streets. The table also includes estimates of daily trip generation for the development. A peak hour truck percentage of two percent was estimated for all site-generated traffic.

Table 6. Weekday Trip Generation Summary

Trip Generation Type	Land Use	ITE LUC	Density	Daily			AM Peak Hour			Noon Peak Hour			PM Peak Hour		
				Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total	Enter	Exit	Total
1. Total Trips	Supermarket Addition	850	11,908 SF	609	609	1,218	25	15	40	46	43	89	58	55	113
	Fuel Station	944	14 Fueling Positions	1,180	1,180	2,360	87	83	170	92	90	182	97	97	194
	Raw ITE Total Trips			**1,789**	**1,789**	**3,578**	**112**	**98**	**210**	**138**	**133**	**271**	**155**	**152**	**307**
2. Adjusted Total Trips for Trip Chaining	Supermarket Addition			457	457	914	18	11	28	30	28	58	35	34	69
	Fuel Station			885	885	1,770	61	58	119	60	59	119	59	59	118
	Total Adjusted Trips			**1,342**	**1,342**	**2,684**	**78**	**69**	**147**	**90**	**87**	**177**	**95**	**93**	**187**
3. Primary (New) Trips	Supermarket Addition			91	91	183	4	2	6	6	6	12	7	7	14
	Fuel Station			177	177	354	12	12	24	12	12	24	12	12	24
	Total Primary (New) Trips			**268**	**268**	**537**	**16**	**14**	**29**	**18**	**17**	**35**	**19**	**19**	**37**
4. Pass-By Trips	Supermarket Addition			228	228	457	9	5	14	15	14	29	18	17	34
	Fuel Station			443	443	885	30	29	60	30	29	60	30	30	59
	Total Pass-By Trips			671	671	1,342	39	34	74	45	44	89	47	46	94
	Total Pass-By Trips (Balanced)			**671**	**671**	**1,342**	**37**	**37**	**74**	**44**	**44**	**89**	**47**	**47**	**94**
5. Diverted-Linked Trips	Supermarket Addition			137	137	274	5	3	8	9	8	17	11	10	21
	Fuel Station			266	266	531	18	17	36	18	18	36	18	18	36
	Total Diverted Linked Trips			403	403	805	24	21	44	27	26	53	28	28	56
	Total Diverted Linked Trips (Balanced)			**403**	**403**	**805**	**22**	**22**	**44**	**27**	**27**	**53**	**28**	**28**	**56**

LUC = Land Use Code

ii.) Adjustments to Trip Generation Rates

Raw ITE trip generation estimates for daily and peak hour trips are typically adjusted for the following factors to reduce raw trip generation estimates to actual estimated vehicular trips produced by the Harris Teeter Expansion redevelopment. All calculations detailed in this section are found in ***Appendix C***.

a.) Internal Capture

The land uses proposed for Harris Teeter Expansion redevelopment do not exhibit the potential for internally captured trips between the supermarket and gas station on-site uses. However, potential "trip-chaining", where a single external primary, pass-by, or diverted linked trip may enter the site and utilize both the gas station and the supermarket internally, is quite likely. The Applicant provided a study of several similar locations with supermarkets and adjoining fuel stations and the results indicate the following:

- 30% of all AM peak hour entering trips use both the fuel station and supermarket
- 39% of all PM peak hour entering trips use both the fuel station and supermarket

Though the study sample size is small, the consideration that the location of the existing Harris Teeter site may also experience similar "trip-chaining" effects is high. The data above were averaged to estimate a noon peak hour "trip-chaining" reduction. For daily traffic volume adjustments, a 25 percent estimate of "trip-chaining" was made. In all cases, it was assumed that this trip reduction would occur for all types of trips described in the following sections. Additional "trip chaining" may also occur for existing trips being made to/from the current Harris Teeter location. However, to be conservative, trip chaining effects were only applied to trip generation data for the fuel station and expanded supermarket facility trips. ***Appendix D*** contains the original study documentation.

b.) Modal Split

The study area is well served by several CHT and Triangle Transit fixed bus routes with frequent existing service and also has facilities for pedestrians and bicyclists with good connectivity to trip generators in the immediate study area. However, the majority of the site trips to/from the proposed Harris Teeter Expansion fuel station will likely be made by vehicles. To be conservative, no trip generation reductions for trips potentially made by transit, pedestrian or bicycles were made for this study.

c.) Pass-by and Diverted-Linked Trips

Pass-by trips and diverted-linked trips were accounted for in this study for the commercial supermarket and gas station land uses. Information from the Institute of Transportation Engineers *Trip Generation Handbook, 2nd Edition* (2004) was compiled to estimate percentages of "primary" or "new" site trips, pass-by trips, and diverted-linked trips from the adjacent I-40 corridor. **Table 7** provides ITE Trip Generation Handbook estimates for similar land use types utilized in the estimates of trip types for this study.

d.) Trip Generation Budget

Current plans for Harris Teeter Expansion do not specifically designate a phased construction process. This analysis considers impacts and recommends improvements for the ultimate build-out of Harris Teeter Expansion, with the proposed development intensity as provided by the Applicant.

Table 7. Primary/Pass-By/Diverted Linked Trip Analysis

Land Use Type	ITE LUC	Number of Studies	AM Peak Hour			PM Peak Hour		
			Primary	Pass-By	Diverted Linked	Primary	Pass-By	Diverted Linked
Supermarket	850	7				32%	27%	40%
Convenience Market w/ Gas Pumps	853	15				16%	66%	18%
Gasoline / Service Station	944	6	21%	58%	21%	14%	52%	34%
Gas/Service Station w/ Conv Mkt	945	9				12%	56%	31%
Estimated for Harris Teeter			20%	50%	30%	20%	50%	30%

Data Taken from ITE Trip Generation Handbook, 2nd Edition, 2004

e.) Existing Development

The proposed Harris Teeter Expansion redevelopment will expand the existing supermarket and add the fueling station area. Traffic counts (and trips generated) for the existing supermarket were assumed to remain constant and all additional trips as analyzed will be added to existing traffic counts to/from the existing site.

iii.) Trip Distribution

Trip distribution for site-related traffic was based existing daily and peak hour traffic patterns to determine the directional peak hour characteristics of traffic to and from the site from the major study area thoroughfares. This methodology was applied for both new study area vehicle trips as well as pass-by trips that would occur along NC 86 and diverted linked trips to/from the I-40 corridor. No local trips to/from lower volume collector and residential streets were estimated, though the possibility exists a small portion of trip-making may occur to/from these local streets. It was assumed that u-turn movements would likely occur due to access restrictions on NC 86 and that trips to/from external destinations would use the most convenient route for those trips, resulting in some trip patterns entering one driveway and exiting another. Local driveway distribution estimates also include the spatial location of individual land uses of the fueling station and supermarket site and parking facilities within the Harris Teeter Expansion redevelopment. **Figure 10A, 10B, and 10C** present the projected trip distribution traffic percentages for new trips, pass-by trips, and diverted linked trips, respectively, for the proposed site redevelopment in 2021.

iv.) Trip Assignment

Figures 11A, 11B, and 11C show the corresponding new (primary), pass-by, and diverted linked trip site traffic volumes distributed on the 2021 study area network. Total volumes into and out of the site correspond to total vehicular trips generated for each trip type, based on the trip generation methodology developed previously.

D. Future Traffic Forecasts with the Proposed Development

Figures 12A and 12B display the 2021 Build-out+1 year projected study area traffic volumes with site traffic added. These traffic volumes represent the aggregate traffic growth over existing traffic volumes for a) ambient traffic growth, b) specific background development traffic assignments from those developments, and c) estimated site traffic assignments for Harris Teeter Expansion.

III. IMPACT ANALYSES

A. Peak Hour Intersection Level of Service Analysis

i.) Methodology

Evaluation of traffic operations on suburban arterials is most effective through the determination of level of service (LOS) criteria. The concept of level of service correlates qualitative aspects of traffic flow to quantitative terms. This enables transportation professionals to take the qualitative issues, such as congestion and substandard geometrics, and translate them into measurable quantities, such as operating speeds and vehicular delays. The 2010 *Highway Capacity Manual (HCM 2010)* characterizes level of service by letter designations A through F. Level of service A represents ideal low-volume traffic operations, and level of service F represents over-saturated high-volume traffic operations. Level of service is measured differently for various roadway facilities, but in general, level of service letter designations are described in **Table 8** on the following page.

The *Synchro Professional Version 9* operations analysis software was used to analyze peak hour conditions at signalized intersections. The *Synchro Version 9* software HCM 2010 two-way stop-controlled intersection output feature was used to analyze peak hour conditions at unsignalized intersections. The minimum acceptable peak hour intersection level of service established for this project is LOS D for signalized intersections or LOS E for critical movements at unsignalized intersections, or no increase in delay for signalized intersections operating below LOS D or unsignalized intersection critical movements operating below LOS E without the inclusion of site traffic. The following four conditions were evaluated:

Condition 1 - Existing Traffic

Condition 2 - 2021 Traffic without Site Redevelopment Traffic

Condition 3 - 2021 Traffic with Site Redevelopment Traffic Volumes Added

Condition 4 - 2012 Traffic with Site Traffic and Improvements

The results of this analysis are based on the procedures presented in the *HCM 2010* and performed with the corresponding capacity analysis software described previously. The methodology of evaluating each condition for signalized intersections is presented below:

- **Condition 1** – Use current Town of Chapel Hill data for the cycle length, splits and offsets of individual signalized intersections and report LOS and delay values from Synchro.

- **Conditions 2 and 3** – Reoptimize the cycle lengths and splits of individual intersections in Synchro to account for proposed background committed improvements to intersections along the NC 86 corridor. The optimized signal timing information will be held constant for both Conditions, to provide a means to compare effects of the proposed site traffic. For several intersections that will experience capacity improvements, individual intersection retiming and offsets were implemented.

Table 8. Level of Service (LOS) Characteristics

Level of Service Description	Per Vehicle Delay at Signal	Per Vehicle Delay at Stop Sign
LOS A ➢ Free flow ➢ Freedom to select desired speed and to maneuver is extremely high ➢ General level of comfort and convenience for motorists is excellent	**< 10.0 sec**	**< 10.0 sec**
LOS B ➢ Stable flow ➢ Other vehicles in the traffic stream become noticeable ➢ Reduction in freedom to maneuver from LOS A	**10.0 – 20.0 sec**	**10.0 – 15.0 sec**
LOS C ➢ Stable flow ➢ Maneuverability and operating speed are significantly affected by other vehicles ➢ General level of comfort and convenience declines noticeably	**20.0 – 35.0 sec**	**15.0 – 25.0 sec**
LOS D ➢ High density but stable flow ➢ Speed/freedom to maneuver are very restricted ➢ General level of comfort / convenience is poor ➢ Small increases in traffic will generally cause operational problems	**35.0 – 55.0 sec**	**25.0 – 35.0 sec**
LOS E ➢ Unstable flow ➢ Speed reduced to lower but relatively uniform value ➢ Volumes at or near capacity level ➢ Comfort and convenience are extremely poor ➢ Small flow increases or minor traffic stream disturbances cause breakdowns	**55.0 – 80.0 sec**	**35.0 – 50.0 sec**
LOS F ➢ Forced or breakdown flow ➢ Volumes exceed roadway capacity ➢ Formation of unstable queues ➢ Stoppages for long periods of time because of traffic congestion	**> 80.0 sec**	**> 50.0 sec**

- **Condition 4** – Optimize coordinated traffic signals for effects of recommended mitigation strategies that change signal operations and phasing. Evaluate the potential for different signal phasing schemes (left-turn lag phases, for example). Retain existing split minimums and any pedestrian timing values. Recommendations, if warranted, will be made to obtain at least LOS D for the intersection as a whole.

The net effect of this process is that direct comparisons, by movement, of delay and LOS between each of the three conditions are impossible because splits and cycle lengths can and do change between conditions. The pertinent statistic of this analysis is the *overall intersection level of service and delay*. Improvements to deficient intersections in Condition 3 were made by first attempting to adjust signal operations via changes in cycle lengths, splits and/or with acceptable adjustments to signal phasing. If that did not produce satisfactory results for all intersections, geometric improvements to improve intersection capacity were considered for the deficient intersections. ***Appendix E*** contains the Synchro output for all four conditions (where applicable).

Unsignalized intersections were analyzed in Synchro with the use of the HCM 2010 unsignalized two-way stop control intersection output. Their results were evaluated on a per-movement basis, since HCM methodologies do not produce an overall intersection level of service for unsignalized intersections. Thus, intersections with deficient (LOS F) movements in Conditions 2 or 3 would need to be evaluated for improvements in Condition 4. This methodology differs from signalized intersections, where one or more movements at an intersection may be deficient in Condition 2, but as long as the overall intersection level of service does not fall below LOS D, no intersection improvements are deemed necessary. ***Appendix F*** contains the Synchro output for all unsignalized intersections under study.

ii.) Existing Conditions Results

Table 9 presents the results for the existing year traffic conditions as compiled from field data. The table lists LOS and delay values for those movements that are in existence at this time. It also only lists data for individual movements encountering delay at the stop-controlled intersections (which do not have an overall intersection delay value produced by HCM methodologies).

Currently, all study area signalized intersections operate at acceptable levels of service for all the analyzed 2017 peak hours. Several signalized intersection movements are over capacity in at least one peak hour during existing conditions. However, overall intersection delays and LOS are not significantly impacted by these movements, which may have relatively low traffic volumes.

The stop controlled RIRO Chapel Hill North driveway intersection along NC 86 has a reported existing LOS F in the 2017 PM peak hour. All other unsignalized intersection critical stop controlled movements operate at acceptable LOS for all three peak hours.

Table 9. Capacity Analysis Results for Study Area Intersections
Condition 1 – 2017 Existing Traffic

Intersections	LOS			Average Vehicular Delay (sec/veh)		
	AM	Noon	PM	AM	Noon	PM
N.C. 86 (MLK Blvd) and I-40 WB Ramps	C	C	D	25.2	27.3	37.2
WB LT	D	***E***	***E***	50.2	***57.7***	***63.9***
WB RT	A	A	A	0.1	0.1	0.1
NB LT	C	C	D	26.6	34.5	44.6
NB THRU	A	A	B	2.7	1.8	18.7
SB THRU	C	B	C	20.3	17.5	26.1
SB RT	A	A	A	0.0	0.0	0.0
N.C. 86 (MLK Blvd) and I-40 EB Ramps	C	B	B	24.9	14.2	17.7
EB LT	C	D	D	26.2	43.5	45.4
EB RT	***E***	***E***	***E***	***60.5***	***61.9***	***69.5***
NB THRU	C	A	B	22.4	7.2	17.8
NB RT	A	A	A	5.0	1.2	1.6
SB LT	A	A	B	1.8	0.4	13.0
SB THRU	B	B	A	15.4	10.6	7.1
N.C. 86 (MLK Blvd) and Eubanks Road	C	B	B	26.7	13.6	16.8
EB LT	***E***	***E***	***E***	***67.8***	***68.0***	***77.8***
EB RT	C	D	D	27.3	45.6	36.7
NB LT - U-TURN	C	A	C	27.2	8.7	34.8
NB THRU	B	A	A	16.3	6.0	9.4
SB THRU - RT	C	A	B	24.2	8.1	11.2
N.C. 86 (MLK Blvd) and Chapel Hill North RIRO Driveway	N/A	N/A	N/A	N/A	N/A	N/A
WB RT	C	C	***F***	16.7	16.1	***56.1***
N.C. 86 (MLK Blvd) and Perkins Drive	A	B	B	7.1	12.6	10.7
WB LT	D	***E***	***E***	50.3	***56.0***	***66.9***
WB RT	D	D	D	41.3	43.9	50.2
NB THRU - RT	A	A	A	6.4	5.0	5.0
SB LT – U-TURN	A	B	C	3.2	10.3	32.9
SB THRU	A	A	A	3.8	8.8	1.9
N.C. 86 (MLK Blvd) and Weaver Dairy Road	C	C	D	34.3	26.3	40.9
NB LT – U-TURN	***E***	D	***E***	***59.9***	53.3	***66.7***
NB TH	C	B	D	27.8	18.2	35.2
NB RT	B	A	B	17.1	9.7	16.2
SB LT – U-TURN	***E***	D	C	56.6	41.4	58.8
SB TH	B	A	B	18.1	9.0	20.7
SB RT	A	A	***E***	5.3	6.4	11.1
EB LT	***E***	D	***E***	***60.2***	54.9	***66.5***
EB THRT	***E***	D	***E***	***55.4***	53.9	***57.8***
WB LT – U-TURN	***E***	***E***	***E***	***60.5***	***55.2***	***64.3***
WB TH	***E***	***E***	***E***	64.2	***55.2***	***67.5***
WB RT	D	D	***E***	35.4	42.5	***59.5***
Perkins Drive and Chapel Hill North Main Dr	N/A	N/A	N/A	N/A	N/A	N/A
EB LT	A	A	A	7.7	8.0	8.1
SB LT-RT	A	B	B	9.5	11.2	11.5
Chapel Hill North Internal Dr and Harris Teeter Driveway	N/A	N/A	N/A	N/A	N/A	N/A
NB LT	A	A	A	7.3	7.4	7.4
SB LT	A	A	A	7.4	7.5	7.6
EB LT-THRU-RT	A	B	B	8.8	10.3	10.1
WB LT-THRU-RT	A	B	B	9.2	10.7	12.4

N/A => Not Applicable, i.e. movement is non-existent or overall intersection values are not reported for unsignalized intersections
BOLD/ITALICS – Movement or overall intersection is over Town TIS Guidelines threshold capacity

iii.) 2021 No-Build Scenario (Condition 2) Results

Table 10 presents the results for the 2021 analysis year estimated traffic conditions without the impacts of site-related redevelopment traffic. This analysis includes ambient growth, and data for the future background site developments. A summary of operations for each intersection is given below.

During Condition 2 - 2021 Without Site Traffic, all study area intersections are expected to still operate at acceptable levels of service for all analyzed peak hours, though some locations in the project study area will experience relatively significant traffic growth due to the construction of background traffic developments. The intersection of NC 86 (Martin Luther King, Jr. Blvd) and Eubanks Road is expected to be upgraded for capacity improvements with the completion of the Carraway Village development. All assumptions for improvements related to that project were taken from the Traffic Impact Study for the Carraway Village (formerly The Edge) development and applied to Condition 2. There are no other committed background improvement projects in the project study area that are expected to be complete by 2021.

The unsignalized RIRO intersection along NC 86 at the Chapel Hill North Shopping Center is projected to continue to operate at a LOS F in the PM peak hour.

iv.) 2021 Build Scenario (Condition 3) Results

Table 11 presents results for 2021 Build-out+1 year estimated traffic conditions, including impacts of site-related traffic related to the expansion of the supermarket and the inclusion of the fuel station. In general, the addition of site-related traffic will marginally increase delays at intersections and is not expected to cause additional intersections or critical intersection stop-controlled movements to drop to deficient levels in the 2021 analysis year.

Primary impacts of site-related traffic will be experienced at the NC 86 (Martin Luther King, Jr. Blvd) intersections with Perkins Drive, the Chapel Hill North RIRO, and Eubanks Road. At the two signalized intersections, site traffic will likely impact operations due to increased left-turn or u-turn movements. The u-turn movements may conflict with signalized overlap right-turn movements from the side street approaches and were analyzed further for improvements to protect the u-turn movement and remove the right-turn overlap. The unsignalized RIRO intersection that directly services the Harris Teeter surface parking lot to/from NC 86 was analyzed using the SimTraffic microsimulation software in Condition 4 to compare reported delays and queuing with Synchro results.

Table 10. Capacity Analysis Results for Study Area Intersections
Condition 2 – 2021 Traffic Without Site Redevelopment

Intersections	LOS			Average Vehicular Delay (sec/veh)		
	AM	Noon	PM	AM	Noon	PM
N.C. 86 (MLK Blvd) and I-40 WB Ramps	C	C	C	28.7	30.5	34.9
WB LT	D	***E***	***E***	50.9	***55.1***	***60.7***
WB RT	A	A	A	0.1	0.1	0.1
NB LT	C	D	D	33.2	40.0	42.6
NB THRU	A	A	A	2.6	1.9	3.0
SB THRU	C	C	C	23.7	21.3	33.6
SB RT	A	A	A	0.0	0.0	0.0
N.C. 86 (MLK Blvd) and I-40 EB Ramps	C	B	B	25.5	12.5	13.8
EB LT	C	D	D	26.2	40.9	42.0
EB RT	***E***	***E***	***E***	***75.3***	***61.0***	***67.0***
NB THRU	C	B	B	21.7	12.8	13.0
NB RT	A	A	A	2.8	1.0	1.4
SB LT	A	A	B	3.6	0.7	5.3
SB THRU	A	A	A	9.4	1.9	2.2
N.C. 86 (MLK Blvd) and Eubanks Road	C	B	B	20.0	16.3	17.6
EB LT	D	***E***	***E***	49.2	***57.5***	***64.7***
EB RT	D	D	D	36.4	38.0	40.1
NB LT - U-TURN	***F***	D	D	***86.2***	44.1	43.6
NB THRU	A	A	A	4.7	1.9	2.8
SB THRU	B	A	B	14.0	4.4	11.7
SB RT	A	A	A	1.3	1.9	3.0
N.C. 86 (MLK Blvd) and Chapel Hill North RIRO Dr	N/A	N/A	N/A	N/A	N/A	N/A
WB RT	C	C	***F***	19.0	18.8	***103.2***
N.C. 86 (MLK Blvd) and Perkins Drive	A	A	B	6.8	8.9	11.7
WB LT	D	***E***	***E***	50.4	***56.1***	***66.8***
WB RT	D	D	D	38.7	44.0	38.4
NB THRU - RT	A	A	A	7.9	4.9	9.6
SB LT – U-TURN	A	A	D	9.7	5.6	36.7
SB THRU	A	A	A	2.0	1.9	1.0
N.C. 86 (MLK Blvd) and Weaver Dairy Road	D	C	D	36.1	28.3	38.9
NB LT – U-TURN	***E***	***E***	***E***	***61.1***	***56.2***	***69.3***
NB TH	C	C	D	30.8	20.7	39.2
NB RT	B	B	B	18.0	10.8	13.4
SB LT – U-TURN	***E***	D	D	56.1	45.2	45.1
SB TH	B	B	B	22.3	14.1	16.0
SB RT	A	A	A	6.2	5.6	6.2
EB LT	***E***	***E***	***E***	***60.0***	***55.1***	***66.6***
EB THRT	***E***	D	***E***	***56.9***	54.0	***65.0***
WB LT – U-TURN	***E***	***E***	***E***	***60.2***	***55.1***	***55.6***
WB TH	***E***	D	***E***	64.3	54.8	***67.1***
WB RT	D	D	***E***	35.2	42.3	***59.5***
Perkins Drive and Chapel Hill North Main Dr	N/A	N/A	N/A	N/A	N/A	N/A
EB LT	A	A	A	7.7	8.0	8.2
SB LT-RT	A	B	B	9.6	11.3	11.6
Chapel Hill North Internal Dr and Harris Teeter Dr	N/A	N/A	N/A	N/A	N/A	N/A
NB LT	A	A	A	7.3	7.4	7.4
SB LT	A	A	A	7.4	7.5	7.6
EB LT-THRU-RT	A	B	B	8.9	10.3	10.1
WB LT-THRU-RT	A	B	B	9.2	10.7	12.5

N/A => Not Applicable, i.e. movement is non-existent or overall intersection values are not reported for unsignalized intersections
BOLD/ITALICS – Movement or overall intersection is over Town TIS Guidelines threshold capacity

Table 11. Capacity Analysis Results for Study Area Intersections
Condition 3 – 2021 Traffic With Site Redevelopment

Intersections	LOS			Average Vehicular Delay (sec/veh)		
	AM	Noon	PM	AM	Noon	PM
N.C. 86 (MLK Blvd) and I-40 WB Ramps	C	C	D	28.8	30.8	35.7
WB LT	D	D	***E***	51.1	54.8	***60.4***
WB RT	A	A	A	0.1	0.1	0.1
NB LT	C	D	D	32.6	40.2	44.3
NB THRU	A	A	A	2.5	1.9	3.0
SB THRU	C	C	C	23.9	21.8	34.3
SB RT	A	A	A	0.0	0.0	0.0
N.C. 86 (MLK Blvd) and I-40 EB Ramps	C	B	B	27.0	12.8	14.2
EB LT	C	D	D	26.2	40.2	41.4
EB RT	***E***	***E***	***E***	***81.3***	***60.8***	***67.5***
NB THRU	C	B	A	21.8	13.2	13.7
NB RT	A	A	A	2.9	1.0	1.5
SB LT	A	A	B	3.7	0.8	6.1
SB THRU	A	A	A	9.5	2.2	2.5
N.C. 86 (MLK Blvd) and Eubanks Road	C	B	B	21.0	16.3	18.0
EB LT	D	***E***	***E***	49.2	***57.5***	***64.7***
EB RT	D	D	D	36.5	38.2	40.3
NB LT - U-TURN	***F***	D	D	***95.7***	44.7	46.1
NB THRU	A	A	A	4.8	2.0	3.1
SB THRU	B	A	B	14.8	4.4	12.0
SB RT	A	A	A	1.3	1.9	3.0
N.C. 86 (MLK Blvd) and Chapel Hill North RIRO Dr	N/A	N/A	N/A	N/A	N/A	N/A
WB RT	C	D	***F***	24.5	25.6	***261.5***
N.C. 86 (MLK Blvd) and Perkins Drive	A	B	B	8.3	10.1	13.2
WB LT	D	***E***	***E***	50.7	***56.0***	***66.7***
WB RT	C	D	D	34.7	40.4	37.8
NB THRU - RT	A	A	B	9.5	5.6	10.0
SB LT – U-TURN	B	B	D	18.8	12.3	46.8
SB THRU	A	A	A	2.1	2.3	1.1
N.C. 86 (MLK Blvd) and Weaver Dairy Road	D	C	D	36.2	28.3	39.1
NB LT – U-TURN	***E***	***E***	***E***	***61.1***	***56.2***	***69.3***
NB TH	C	C	D	30.9	20.8	39.4
NB RT	B	B	B	18.0	10.8	13.4
SB LT – U-TURN	***E***	D	D	***56.2***	44.4	45.2
SB TH	B	B	B	22.4	14.3	16.0
SB RT	A	A	A	6.2	5.7	6.1
EB LT	***E***	***E***	***E***	***60.0***	***55.1***	***66.6***
EB THRT	***E***	D	***E***	***56.9***	54.0	***65.0***
WB LT – U-TURN	***E***	***E***	***E***	***60.2***	***55.1***	***55.6***
WB TH	***E***	D	***E***	64.3	54.9	***67.1***
WB RT	D	D	***E***	35.3	42.4	***60.6***
Perkins Drive and Chapel Hill North Main Dr	N/A	N/A	N/A	N/A	N/A	N/A
EB LT	A	A	A	7.8	8.1	8.3
SB LT-RT	A	B	B	9.7	11.8	12.0
Chapel Hill North Internal Dr and Harris Teeter Dr	N/A	N/A	N/A	N/A	N/A	N/A
NB LT	A	A	A	7.4	7.5	7.5
SB LT	A	A	A	7.4	7.5	7.6
EB LT-THRU-RT	B	B	B	10.2	11.3	11.5
WB LT-THRU-RT	B	B	C	10.8	13.6	18.7

N/A => Not Applicable, i.e. movement is non-existent or overall intersection values are not reported for unsignalized intersections
BOLD/ITALICS – Movement or overall intersection is over Town TIS Guidelines threshold capacity

v.) 2021 Mitigation Scenario (Condition 4) Results

Table 12 presents results for 2021 Build-out+1 year estimated traffic conditions, including impacts of site-related traffic and mitigation to correct any operational and/or safety and access issues related to the proposed site plan and projected site traffic-related movements. As stated previously, the addition of site-related traffic will marginally increase delays at intersections and is not expected to cause additional intersections or critical intersection stop-controlled movements to drop to deficient levels in the 2021 analysis year. However, issues related to potential traffic queues, conflicts with u-turn and signalized right-turn overlaps, and need for comparison of stop-controlled operations utilizing the SimTraffic microsimulation software package were tested in Condition 4. Results in **Table 12** indicate that removing minor street right-turn overlaps at Eubanks Road and Perkins Drive to protect u-turn operations only have a marginal negative effect on per vehicle delays and still allow both intersections to operate acceptably in all three peak hours. Tests of the NC 86 / Chapel Hill North RIRO Driveway in SimTraffic – using 10 microsimulation runs with different random number seeds and average delay results over an hour of PM peak simulation – indicate that actual operations at this intersection are likely to be far better than LOS/delay values reported in Synchro. This is primarily due to the presence of additional gaps caused up the upstream signal at Perkins Drive. Raw SimTraffic data and results are found in ***Appendix G*** only for the 2021 PM peak hour.

Table 12. Capacity Analysis Results for Study Area Intersections
Condition 4 – 2021 Traffic With Site and Mitigation

Intersections	LOS			Average Vehicular Delay (sec/veh)		
	AM	Noon	PM	AM	Noon	PM
N.C. 86 (MLK Blvd) and Eubanks Road	C	B	C	25.9	19.6	21.6
EB LT	D	D	D	39.6	37.8	45.3
EB RT	***E***	***E***	***E***	***55.7***	***64.9***	***72.1***
NB LT - U-TURN	***F***	D	D	***94.6***	44.4	46.6
NB THRU	A	A	A	6.1	4.4	4.4
SB THRU	C	B	C	26.3	11.3	22.2
SB RT	A	A	A	1.3	1.9	3.4
N.C. 86 (MLK Blvd) and Chapel Hill North RIRO Dr	N/A	N/A	N/A	N/A	N/A	N/A
WB RT	N/A**	N/A**	E	N/A**	N/A**	37.6
N.C. 86 (MLK Blvd) and Perkins Drive	A	B	B	9.7	11.0	15.7
WB LT	D	D	***E***	46.9	52.7	***58.2***
WB RT	***E***	***E***	***E***	***55.5***	***62.6***	***75.8***
NB THRU - RT	B	A	B	10.8	6.1	10.8
SB LT – U-TURN	C	B	D	20.2	17.3	51.0
SB THRU	A	A	A	3.1	1.4	3.6

N/A => Not Applicable, i.e. movement is non-existent or overall intersection values are not reported for unsignalized intersections
BOLD/ITALICS – Movement or overall intersection is over Town TIS Guidelines threshold capacity
N/A** - Critical stop-controlled movement operates acceptably in Condition 3, no additional simulation analysis necessary

B. Access Analysis

Vehicular site access is to be accommodated via two existing internal Chapel Hill North shopping center driveways connecting to external study area roadways. An existing right-turn in/right-turn out only driveway connects directly to the existing Harris Teeter surface parking lot and store frontage. A second internal driveway provides access throughout the Chapel Hill North shopping center and connects to Perkins Drive, with connectivity to the existing signalized intersection with NC 86 (Martin Luther King, Jr Boulevard). No additional driveways are proposed. Additional modifications to driveway aisles and additional surface parking are proposed in the existing surface parking lot for Harris Teeter (see **Figure 2**).

Access for pedestrians and bicyclists is adequate in the project study area. Sidewalk is present on both sides of N.C. 86 (Martin Luther King, Jr. Boulevard) throughout the study area and connectivity is available on at least one side of the street along many facilities in the project study area that connect to the Martin Luther King, Jr. Boulevard and to the Harris Teeter site. Crosswalk and pedestrian signals exist across the NC 86 intersections with Weaver Dairy Road and Perkins Drive near the site. Striped bicycle lanes along NC 86, Weaver Dairy Road and the Weaver Dairy Road Extension currently exist in the project study area.

C. Signal Warrant Analysis

Based on projected 2021 traffic volumes and current/proposed access plans, no unsignalized intersection in the project study area would potentially warrant the installation of a traffic signal, based on the methodology found in the *2009 Manual on Uniform Traffic Control Devices (MUTCD)* and the current access spacing and center concrete median island provisions currently in place along both NC 86 and Weaver Dairy Road. Though the projected LOS for the NC 86 / Chapel Hill North RIRO stop-controlled driveway intersection is LOS F in the 2021 PM peak hour, a traffic signal installation at this location is not recommended. Actual operations analyzed in Condition 4 indicate that this intersection will receive enough adequate gaps due to the presence of the existing traffic signal at Perkins Drive.

D. Sight Distance Analysis

In general, sight distance issues entering/exiting the proposed Harris Teeter Expansion site driveway access points would be minimal. NC 86 (Martin Luther King, Jr. Boulevard) has little horizontal and vertical curvature in the vicinity of the existing RIRO driveway access point. The other existing access point at Perkins Drive is in an area of both horizontal and vertical curvature, but the intersecting road geometrics and posted speed on Perkins Drive provide adequate sight distance, as this intersection is in an area of sag vertical curvature.

E. Crash Analysis

Data from the NCDOT Traffic Safety Unit was compiled from the TEAAS software package for the project study area. Crash statistics were compiled for the five year period 5/1/2012 to 4/30/2017 for the segment along NC 86 from Weaver Dairy Road to Eubanks Road adjacent to the site. Raw corridor segment crash data is located in ***Appendix H*** and results are shown in **Table 10**.

N.C. 86 (Martin Luther King, Jr, Boulevard) Corridor

There were 60 crashes reported along the Martin Luther King, Jr. Boulevard study area corridor between Weaver Dairy Road and Eubanks Road over the five year period (5/1/2012 to 4/30/2017). In this 0.36 mile segment, crash types were primarily angle crashes and rear end crashes, along with several other crash types. 27 of the 60 crashes were rear-end type crashes. Other significant crash types included angle crashes (10), and left-turn crashes (11).

Table 13 presents a comparison between the N.C 86 (Martin Luther King, Jr. Boulevard) study area crash rates and the latest North Carolina statewide rates for the period 2013-2015 (compiled by NCDOT Traffic Safety Unit). Overall, the number of crashes along Martin Luther King, Jr. Boulevard in the project study area is slightly higher than statewide averages for similar facilities in most reported categories. Approximately 25 crashes were in the direct vicinity of the Perkins Drive intersection and six crashes were in the vicinity of the Chapel Hill North RIRO driveway intersection. It is important to note that the segment analysis did not include full details of crashes at all approaches of the Weaver Dairy or Eubanks Road intersections.

Table 13. Study Area Crash Rate Comparison – N.C. 86 (MLK Jr. Blvd) Corridor

Statistic	Crashes Per 100 Million Vehicle Miles	
	NC 86 (MLK, Jr. Boulevard) Weaver Dairy Road to Eubanks Road	North Carolina Statewide Average Urban North Carolina Routes (4+ Lanes with Divided Median)
Total Crash Rate	337.12	277.76
Fatal Crash Rate	0.00	0.71
Non-Fatal (Injury) Crash Rate	146.08	87.46
Night Crash Rate	67.42	62.01
Wet Crash Rate	28.09	51.11

F. Other Transportation-Related Analyses

Other transportation-related analyses relevant to the 2001 Town of Chapel Hill Guidelines for the preparation of Traffic Impact Studies were completed as appropriate. The following topics listed in **Table 14** are germane to the scope of this study.

Table 14. Other Transportation-Related Analyses

Analysis	Comment
Generalized Peak Hour and/or Daily V/C Analysis	Daily Volume/Capacity Ratio and generalized planning-level peak hour roadway link LOS analyses were not conducted for this study, as the proposed site is not expected to generate a significant amount of daily vehicular trips (less than 600 new trips) compared to existing daily vehicular trips along NC 86 (27,000 AADT), Weaver Dairy Road (13,000 AADT) and other study area roadways.
Turn Lane Storage Requirements	Storage bay lengths at study area intersections were analyzed using Synchro 95th percentile (max) queue length estimates for the 2021 Build Scenario. An improvement to the existing 175 foot southbound left-turn lane on NC 86 at the Perkins Drive intersection is necessary due to projected 2021 PM peak maximum queues.
Appropriateness of Acceleration/ Deceleration Lanes	The site concept plan shows no specifics related to acceleration/deceleration lanes. NC 86 in the vicinity of Perkins Drive and the RIRO site driveway has a 35 mph speed limit with no special acceleration or deceleration lanes for either location. No other specific acceleration/deceleration lane issues were analyzed in the project study area.
Pedestrian and Bicycle Analysis	Existing pedestrian and bicycle access and connectivity is excellent along the NC 86 and Weaver Dairy Road corridors near and adjacent to the site and provides connectivity for these modes to other locations in the project study area. Sidewalk exists along major thoroughfares and into several neighborhoods/commercial areas, with signalized crossings of NC 86 at Weaver Dairy Road, Perkins Drive and Eubanks Road (future). Bicycle lanes extend along NC 86 through the study area, as well as on Weaver Dairy Road.
Public Transportation Analysis	Public transportation service to the study area, and to the existing site is excellent with bus stops and multiple local and regional bus routes on NC 86 and proximate to the site.

G. Special Analysis/Issues Related to Project

Per discussion with the Town of Chapel Hill, no special analyses or issues related to the project necessitated additional study for this report.

IV. MITIGATION MEASURES/RECOMMENDATIONS

A. Planned Improvements

There are no Town of Chapel Hill or North Carolina Department of Transportation improvement projects for study area facilities within the analysis year time frame of 2017-2021. NCDOT will begin construction on STIP I-3306A (I-40 Widening) in 2023. The Town is continuing planning activities on bus rapid transit (BRT) improvements for the NC 86 corridor, but the implementation of those was assumed to be after the 2021 analysis year.

B. Background Committed Improvements

There is one specific private development project (Carraway Village – formerly The Edge) that has been approved and is expected to be complete by the 2021 analysis year that would impact project study area transportation facilities. Transportation improvements required by the Carraway Village development include a widening of Eubanks Road to a four-lane divided cross-section and intersection laneage and signal timing improvements at the NC 86 / Eubanks Road signalized intersection (see **Figure 6**). In addition, recommendations from the original The Edge Traffic Impact Study included signal retiming along the NC 86 corridor to mitigate the impacts of site traffic increases from this development.

All of the proposed recommended improvements listed above were included in the 2021 No-Build and Build analyses for the Harris Teeter Expansion project.

C. Applicant Committed Improvements

Based on the preliminary site plan and supporting development information provided, no external transportation improvements are proposed. Internal improvements for traffic circulation and additional parking spaces in the existing Harris Teeter parking lot are shown on **Figure 2**.

D. Necessary Improvements

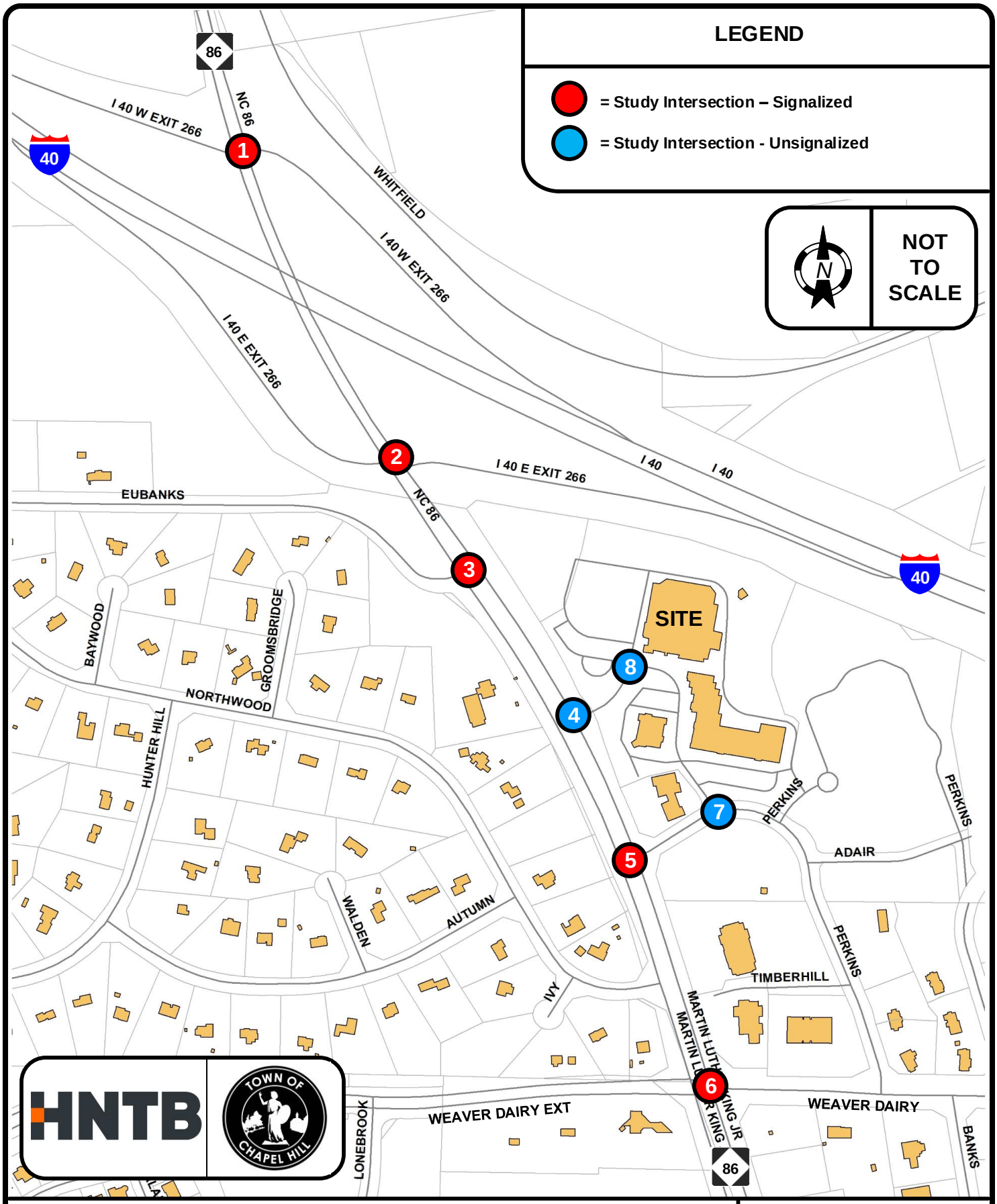
Based on traffic capacity analyses for the 2021 design year, and analyses of existing study area turning bay storage lengths and site access, the following improvements are recommended as being necessary for adequate transportation network operations (see **Figure 13**).

1) Monitor and retime the NC 86 (Martin Luther King, Jr. Boulevard) traffic signal at Eubanks Road to allow adequate green time for the northbound left-turn movement – which would be impacted by u-turning site traffic from Harris Teeter. In addition, if u-turning traffic is conflicting with eastbound right-turn traffic and blocking the higher volume of left-turn vehicles seeking to access Eubanks Road, remove the eastbound right-turn overlap signal phase and add signage to alert right-turn drivers to yield to u-turns. <u>This improvement is recommended if the Harris Teeter Expansion site is developed.</u>

2) Monitor and retime the NC 86 (Martin Luther King, Jr. Boulevard) traffic signal at Perkins Drive to allow adequate green time for the southbound left-turn movement – which would be impacted by u-turning site traffic from Harris Teeter. Extend existing southbound left-turn/u-turn storage bay to 300 feet of full storage. Similar to the recommendation above, if u-turning traffic is conflicting with westbound right-turn traffic, remove the eastbound right-turn overlap signal phase and add signage to alert right-turn drivers to yield to u-turns. <u>This improvement is recommended if the Harris Teeter Expansion site is developed.</u>

3) If not already committed to by the Town or other development plans, extend the existing sidewalk along the Harris Teeter NC 86 northbound frontage to connect to the proposed crosswalk improvement at Eubanks Road.

Appendix A – Figures



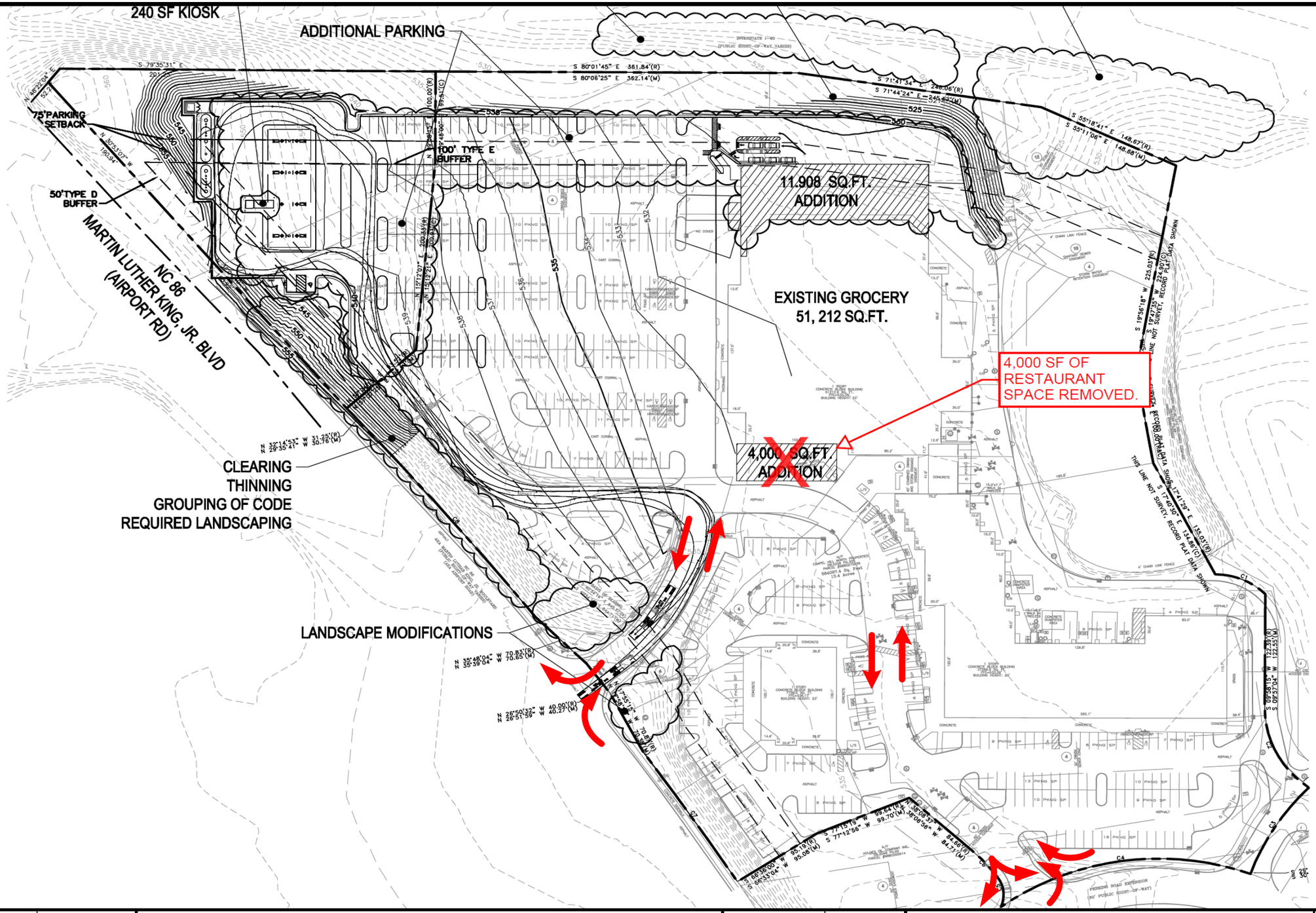
Chapel Hill North – Harris Teeter Expansion

Traffic Impact Study

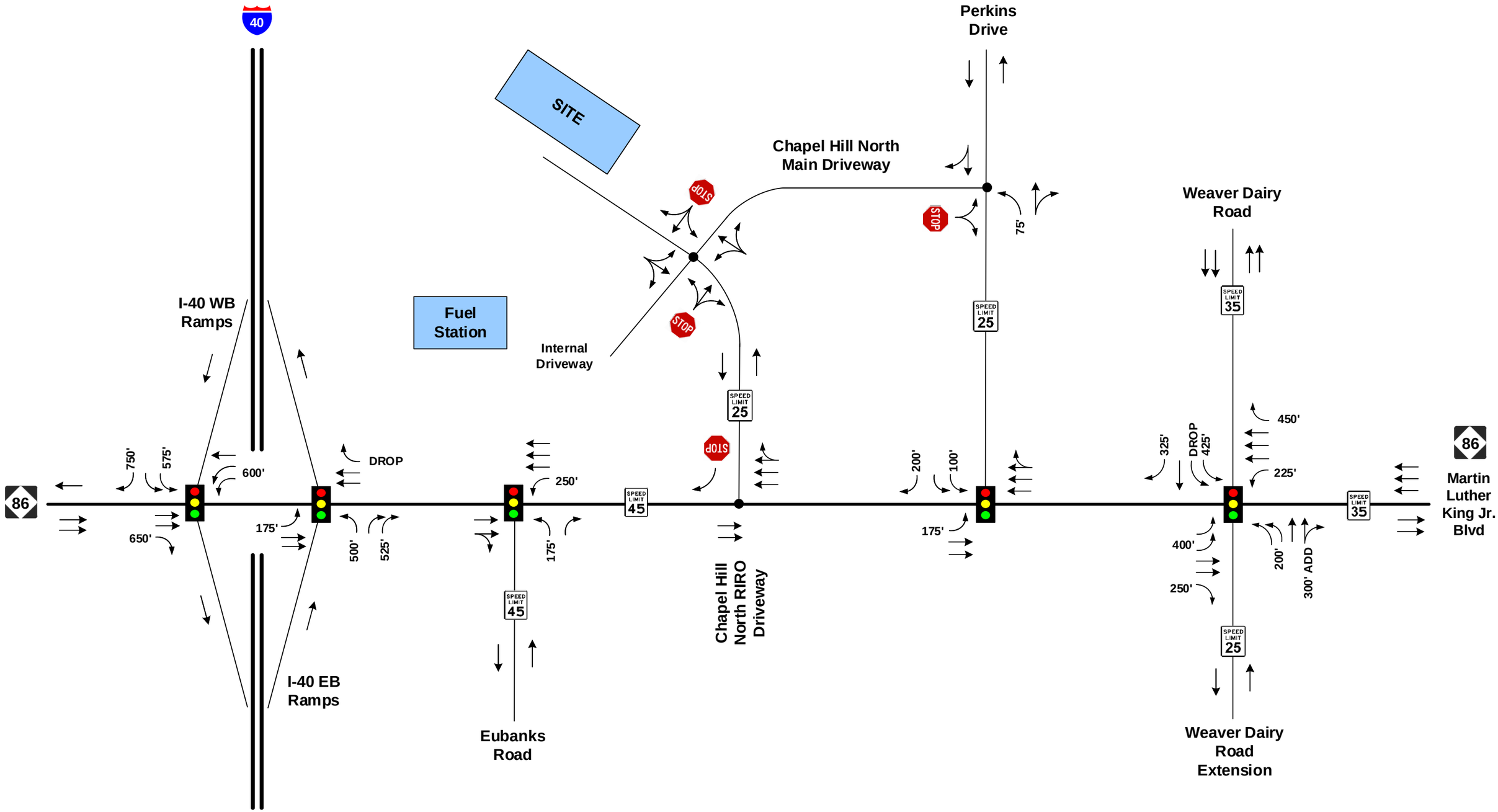
DATE: March 2018

PROJECT STUDY AREA

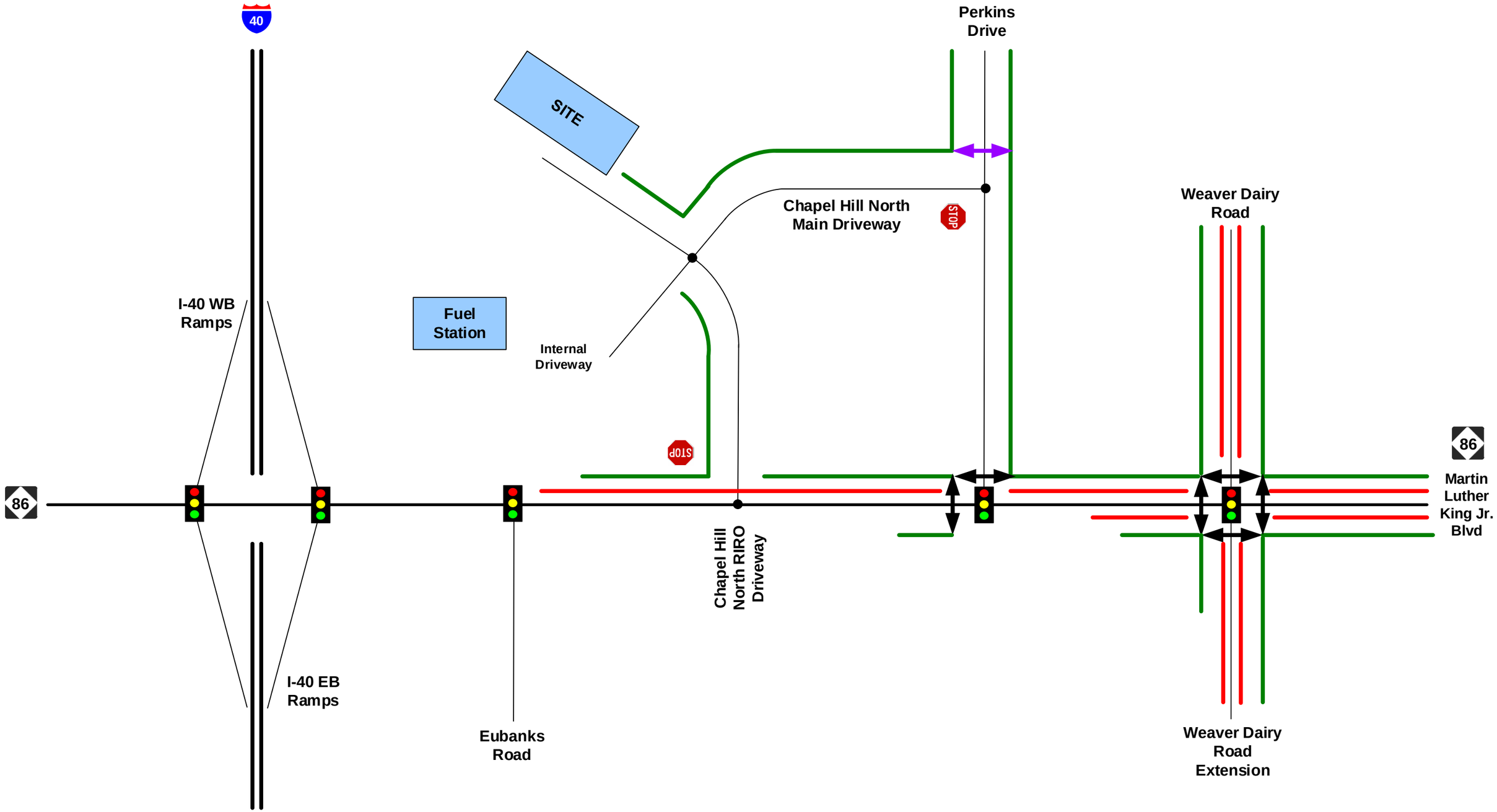
FIGURE 1



HNTB	TOWN OF CHAPEL HILL	**LEGEND** = PROPOSED EXTERNAL ACCESS POINTS	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** **Traffic Impact Study** **PROPOSED REVISED SITE PLAN**	**DATE:** March 2018 **FIGURE 2**



HNTB	TOWN OF CHAPEL HILL	**LEGEND** GEOMETRICS, SPEED LIMITS & TRAFFIC CONTROL AS SHOWN	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** Traffic Impact Study EXISTING LANEAGE & GEOMETRICS	**DATE:** March 2018 **FIGURE 3**



HNTB

TOWN OF CHAPEL HILL

LEGEND

= BIKE LANE

= SIDEWALK

= CROSS WALK WITH PEDESTRIAN SIGNAL

= UNSIGNALIZED CROSS WALK

N

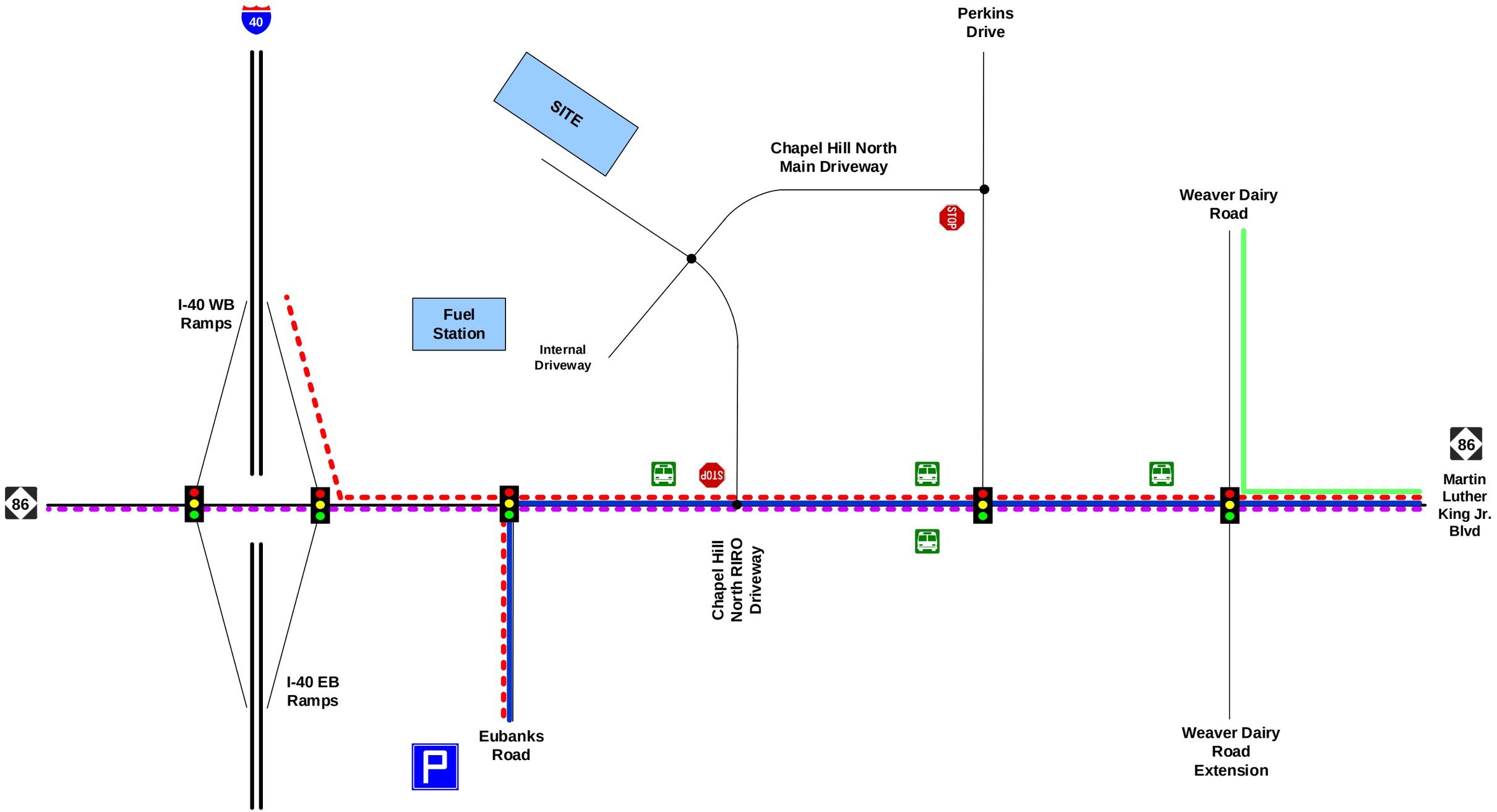
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

STUDY AREA PEDESTRIAN & BICYCLE FACILITIES

DATE: March 2018

FIGURE 4



HNTB

TOWN OF CHAPEL HILL

LEGEND

= NS ROUTE
= T ROUTE
= GoTriangle Route CRX
= GoTriangle Route 420
= Bus Stop
= Park-and-Ride Location

N

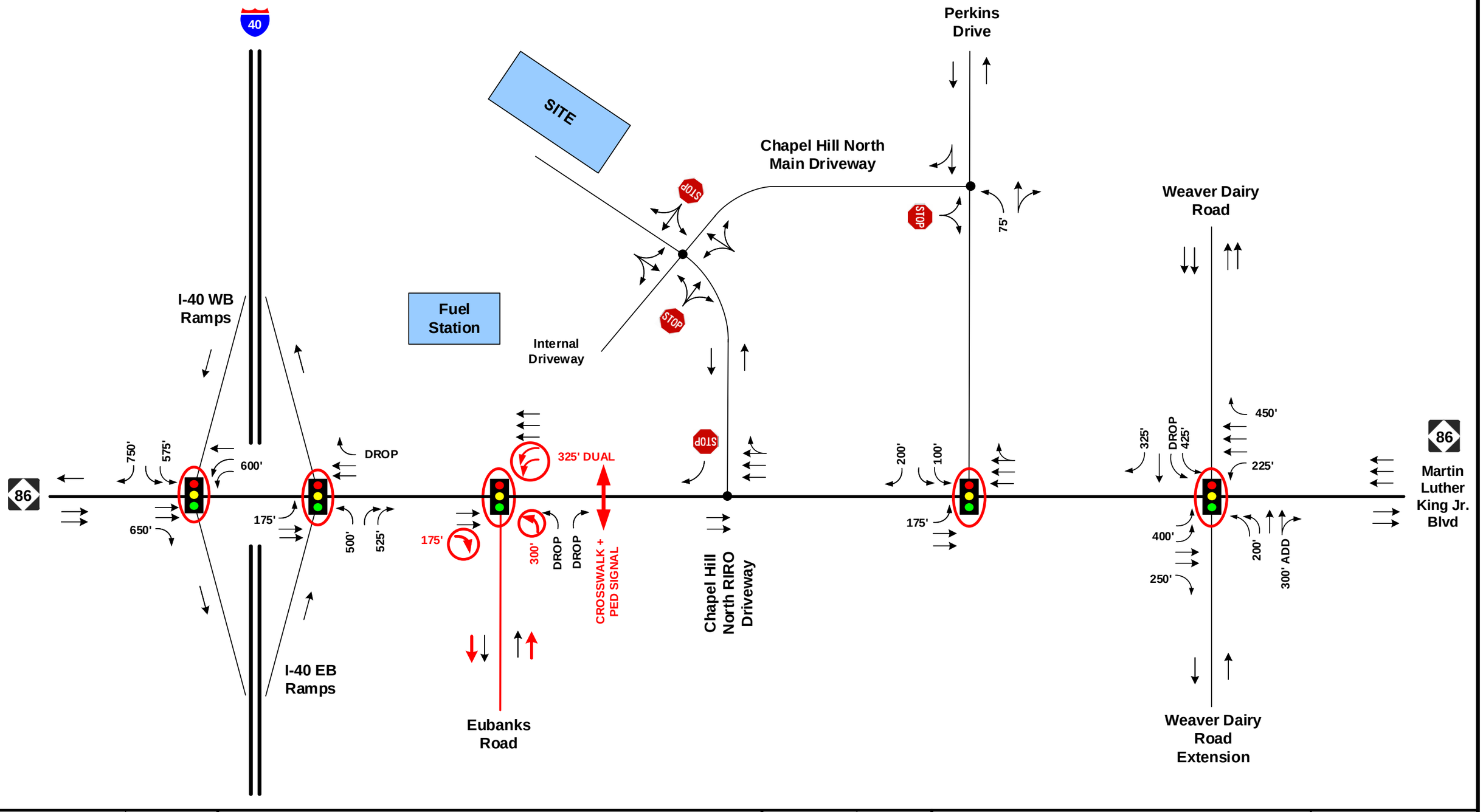
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

EXISTING STUDY AREA TRANSIT ROUTES

DATE: March 2018

FIGURE 5



HNTB

TOWN OF CHAPEL HILL

LEGEND

= Committed Geometric Improvement

= Signal Timing Optimization

N

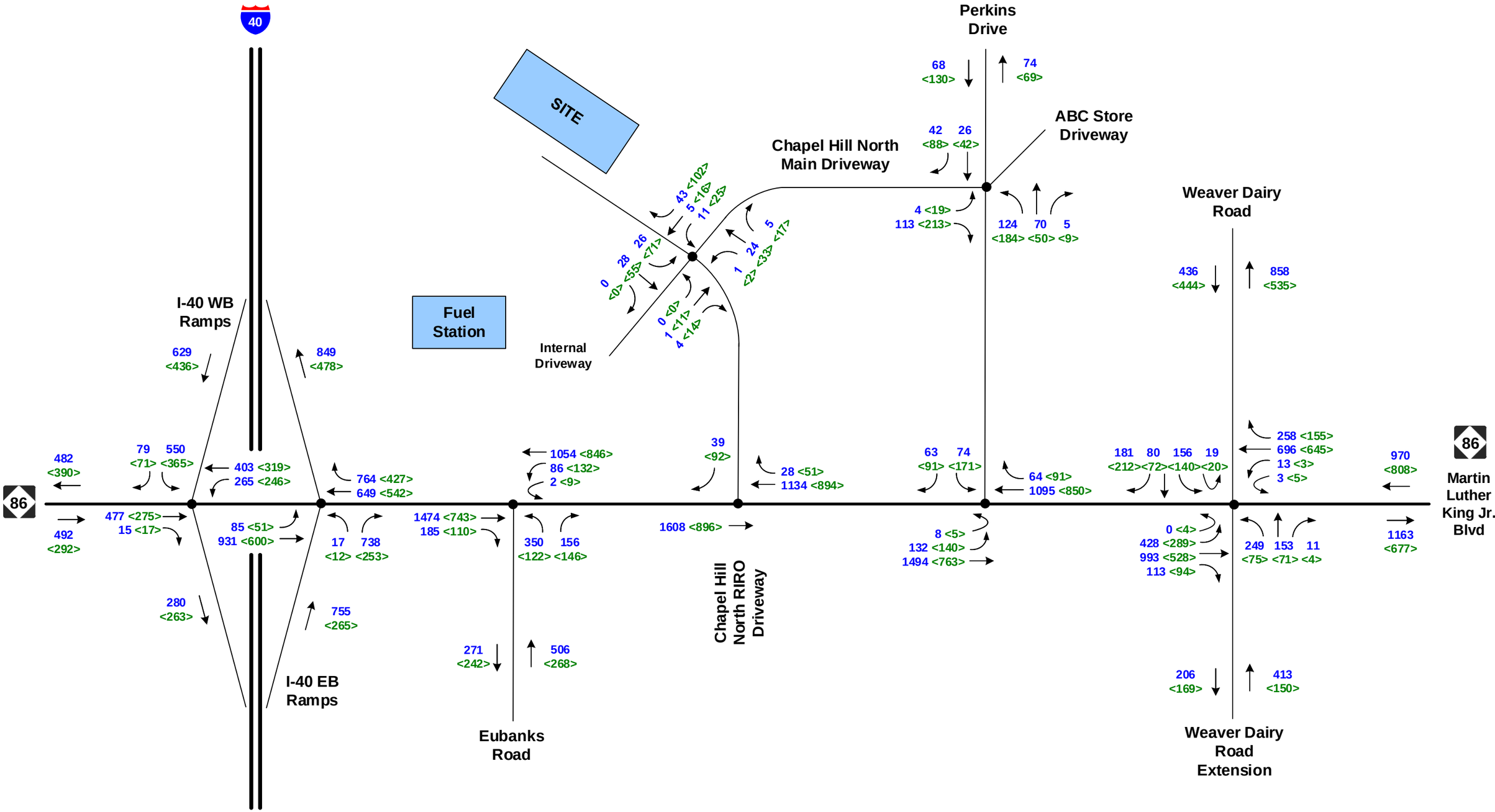
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

COMMITTED NETWORK IMPROVEMENTS

DATE: March 2018

FIGURE 6



HNTB

TOWN OF CHAPEL HILL

LEGEND

XXX = AM Peak Hour Traffic Volume

<XXX> = Noon Peak Hour Traffic Volume

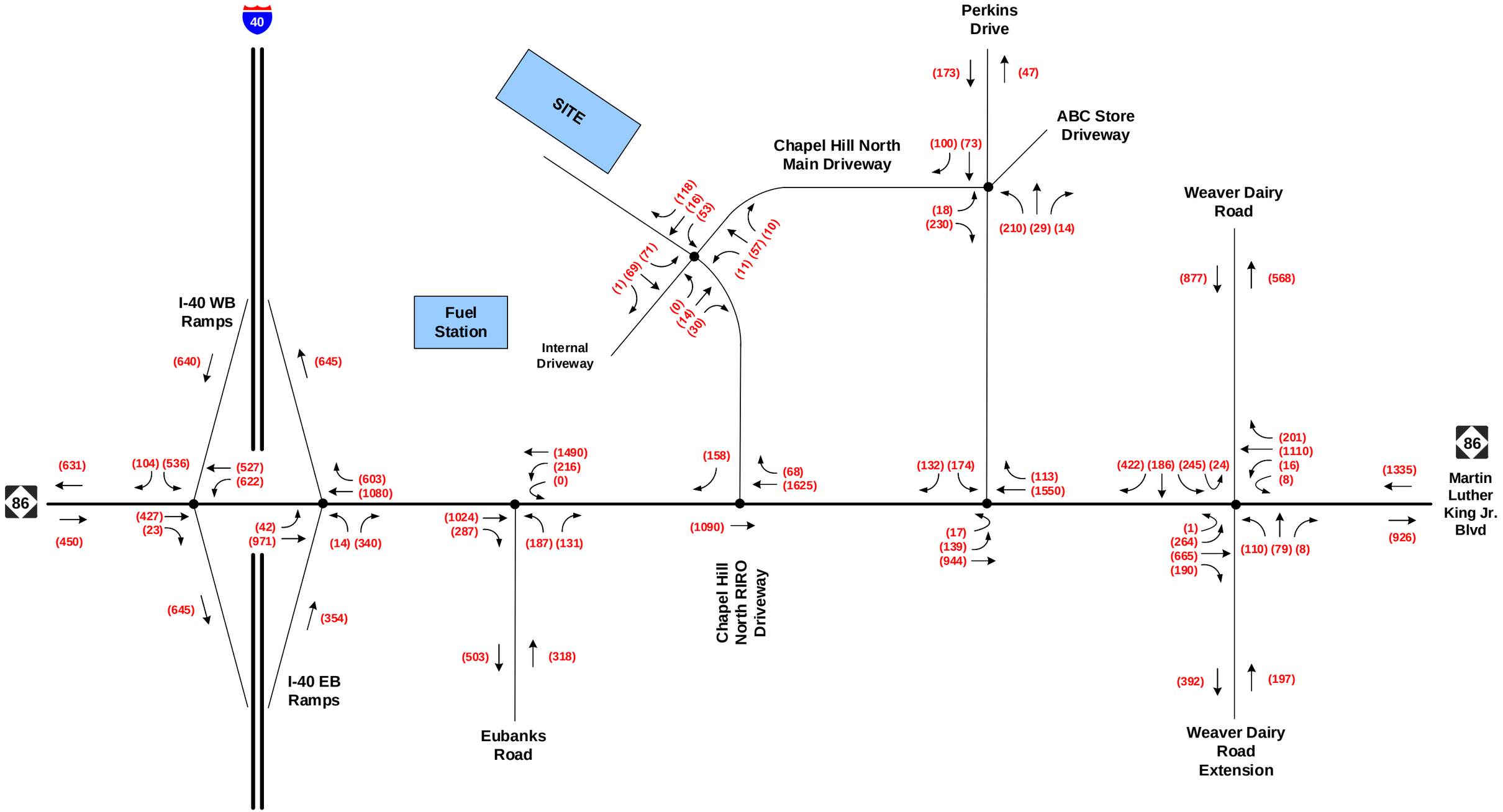
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

2017 EXISTING PEAK HOUR TRAFFIC VOLUMES

DATE: March 2018

FIGURE 7A



HNTB

TOWN OF CHAPEL HILL

LEGEND

(XXX) = PM Peak Hour Traffic Volume

N

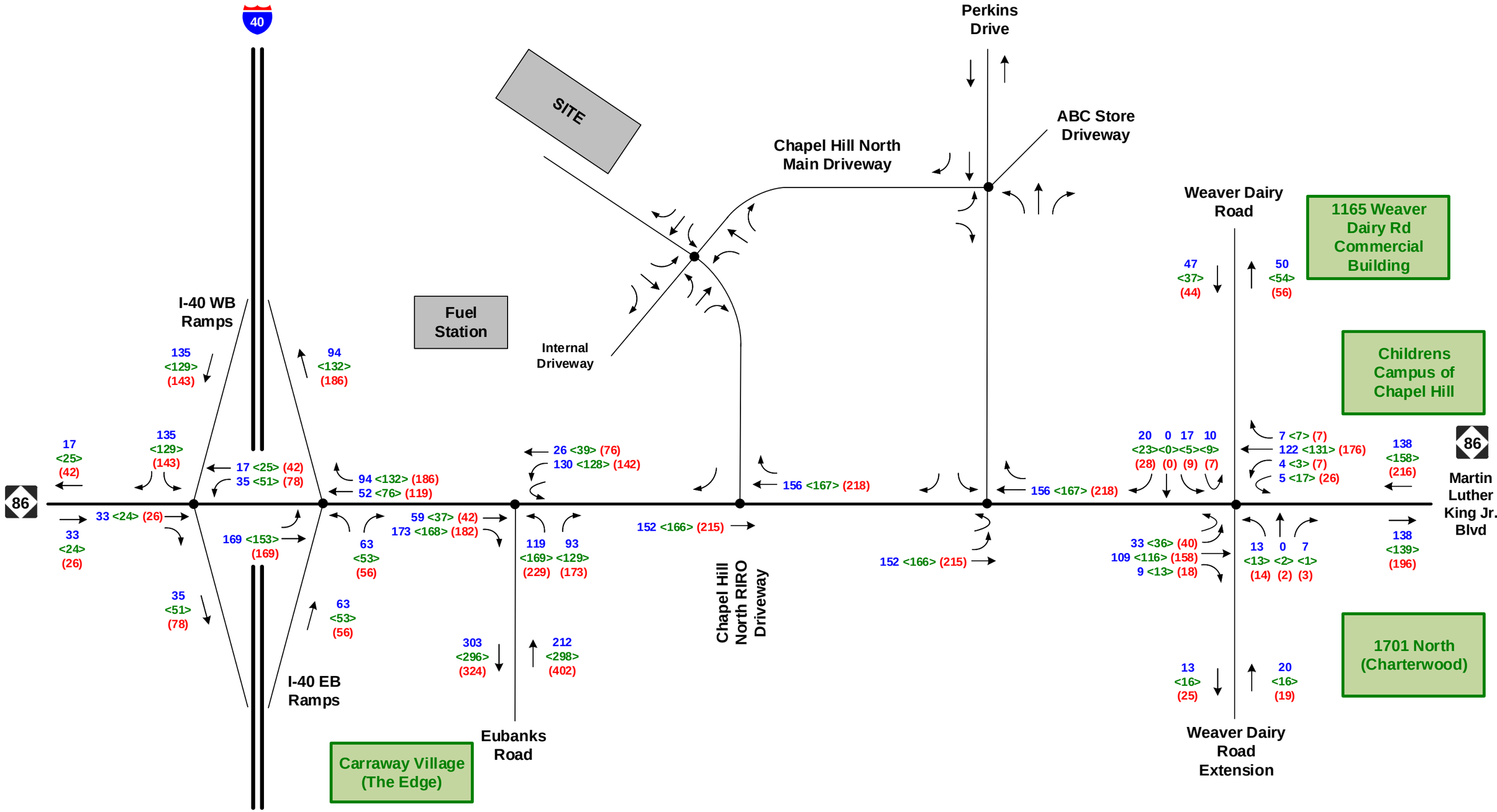
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

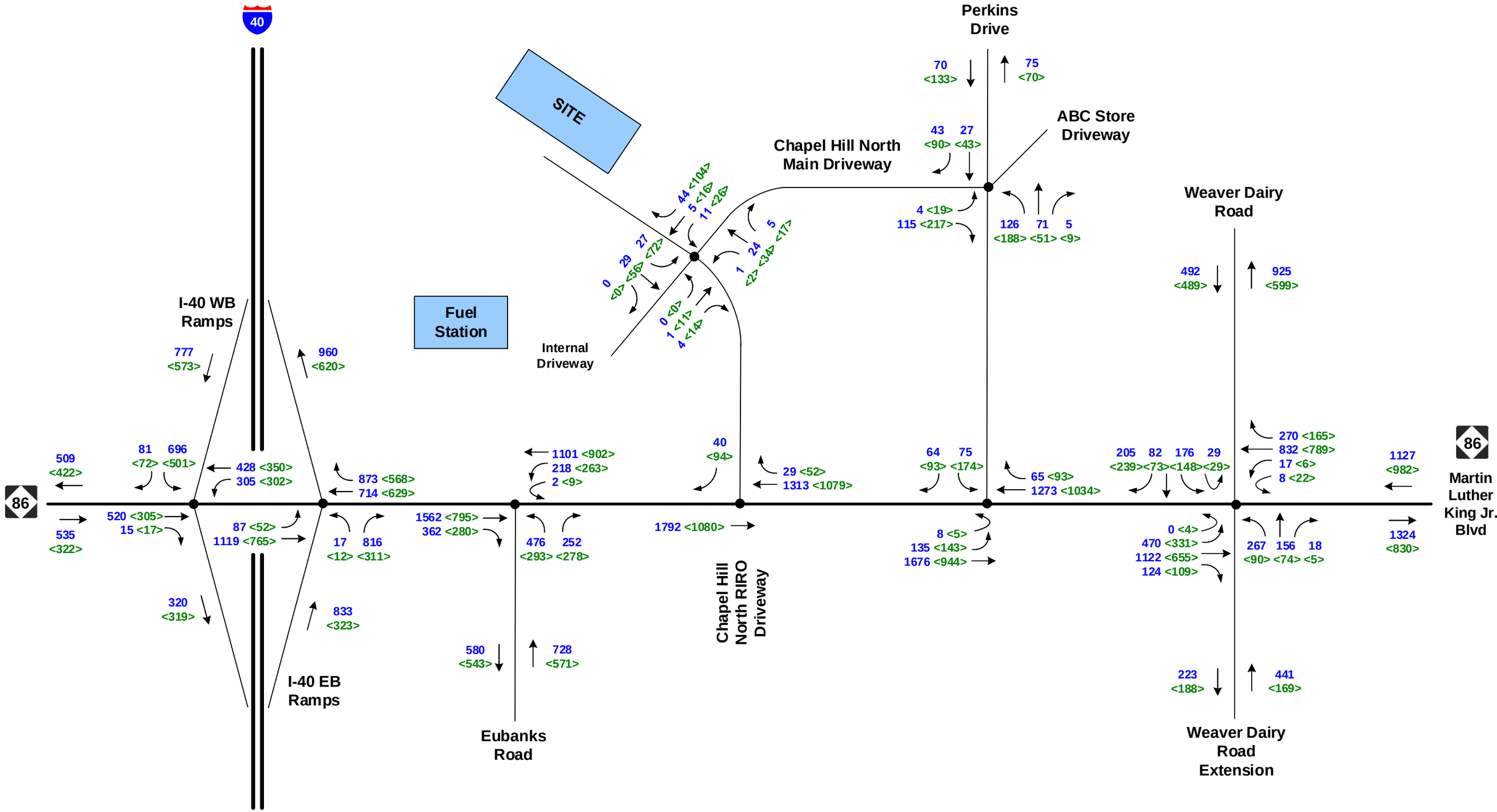
2017 EXISTING PEAK HOUR TRAFFIC VOLUMES

DATE: March 2018

FIGURE 7B



HNTB	TOWN OF CHAPEL HILL	**LEGEND** XXX = AM Peak Hour Traffic Volume <XXX> = Noon Peak Hour Traffic Volume (XXX) = PM Peak Hour Traffic Volume	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** Traffic Impact Study 2021 TOTAL BACKGROUND SITE PEAK HOUR TRAFFIC VOLUMES	**DATE:** March 2018 **FIGURE 8**



HNTB

TOWN OF CHAPEL HILL

LEGEND

XXX = AM Peak Hour Traffic Volume

<XXX> = Noon Peak Hour Traffic Volume

N

NOT TO SCALE

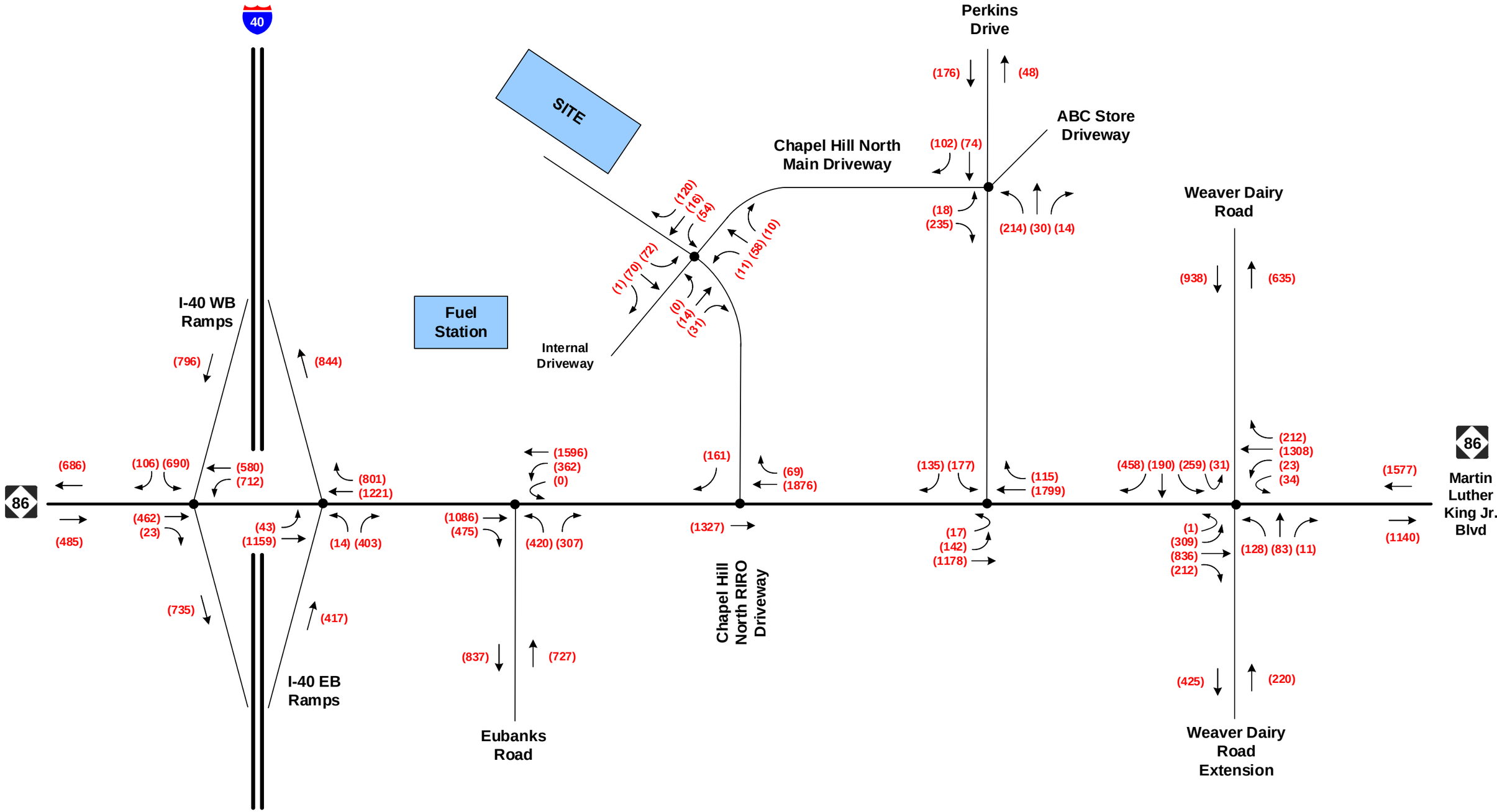
Chapel Hill North - Harris Teeter Expansion

Traffic Impact Study

2021 PEAK HOUR TRAFFIC VOLUMES WITHOUT SITE REDEVELOPMENT

DATE: March 2018

FIGURE 9A



HNTB

TOWN OF CHAPEL HILL

LEGEND

(XXX) = PM Peak Hour Traffic Volume

N

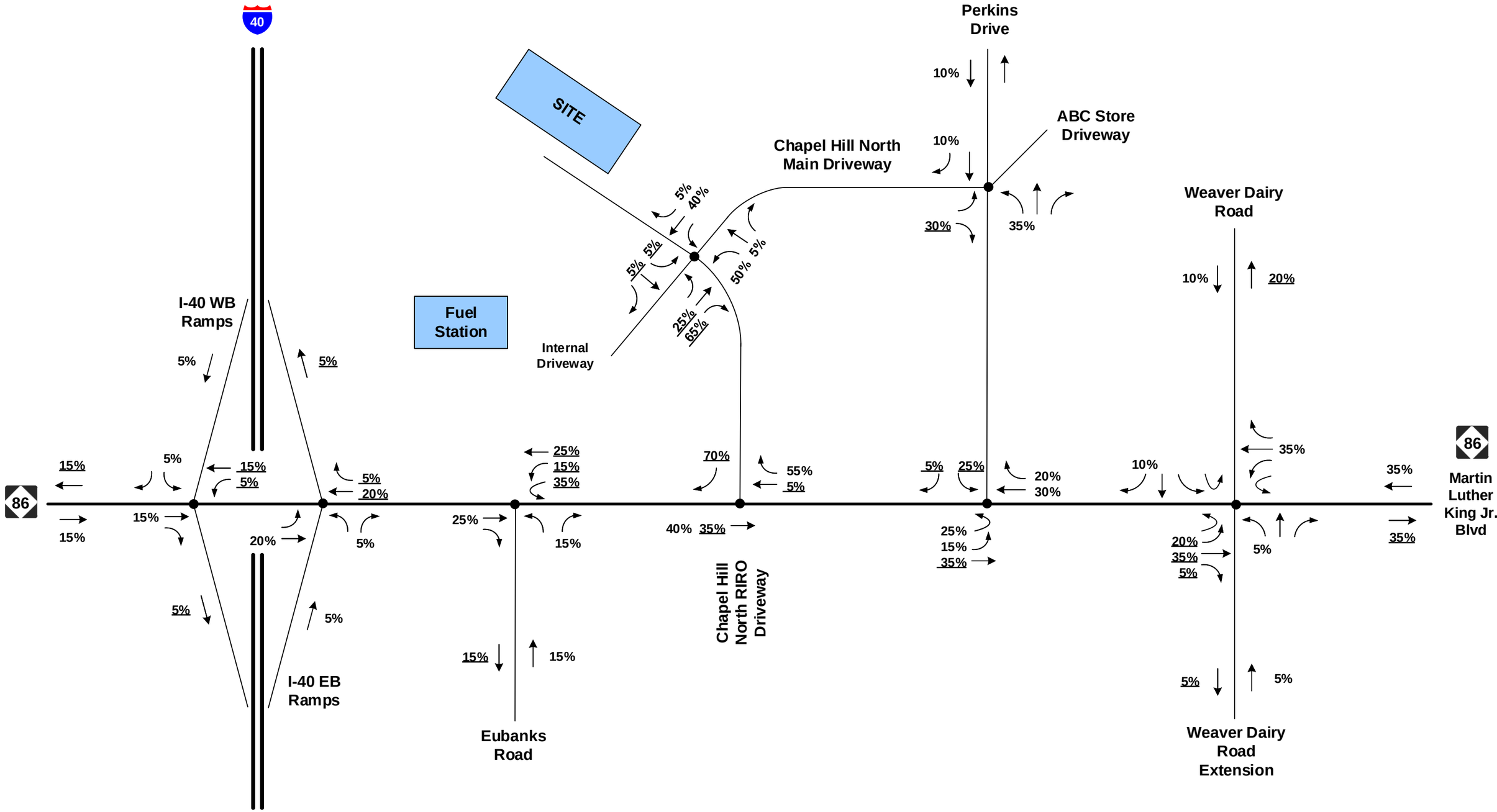
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

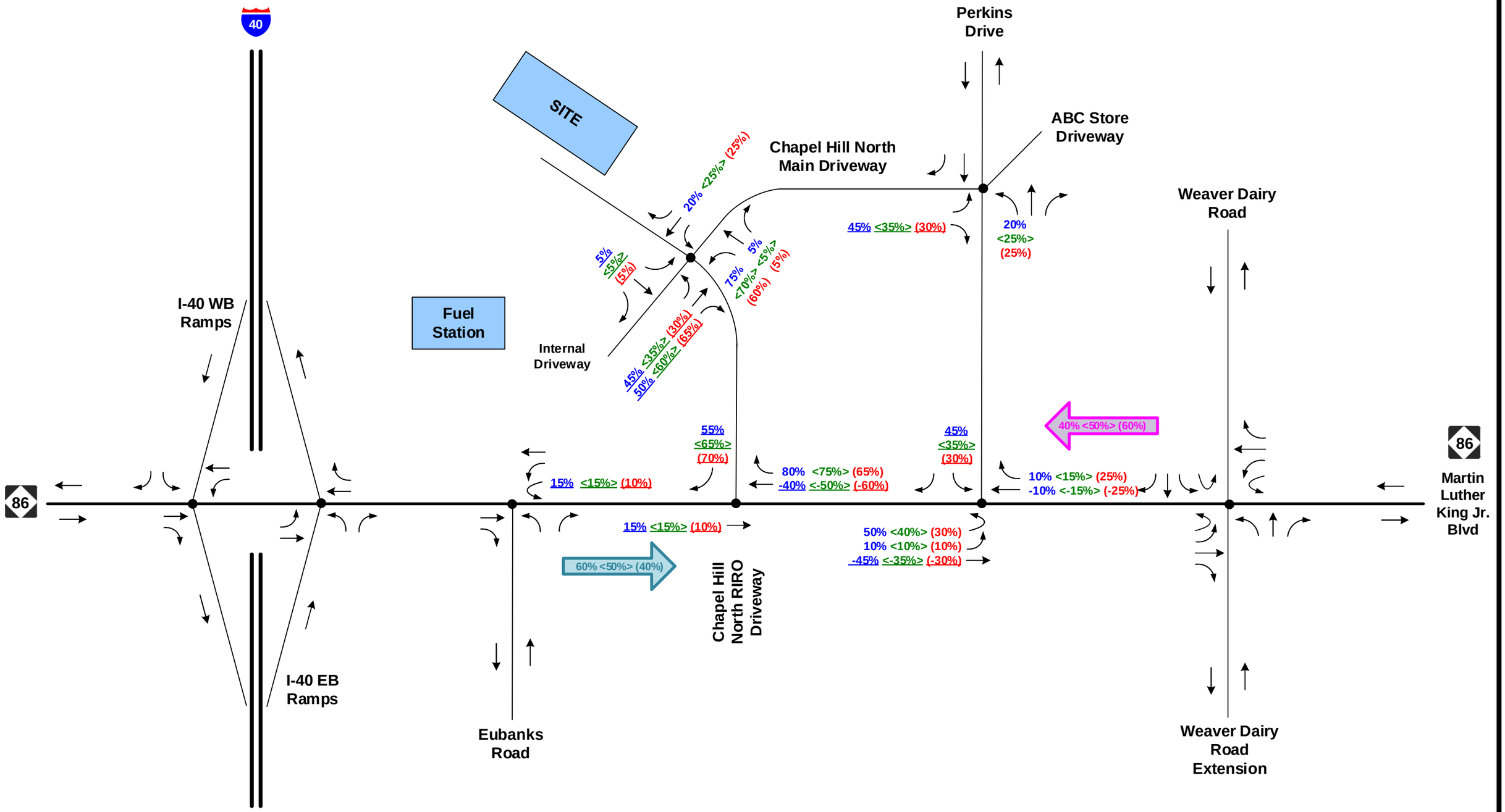
2021 PEAK HOUR TRAFFIC VOLUMES WITHOUT SITE REDEVELOPMENT

DATE: March 2018

FIGURE 9B



HNTB	TOWN OF CHAPEL HILL	**LEGEND** **XX% / XX%** = Peak Hour Entering / Exiting Percentages	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** **Traffic Impact Study** **SITE TRIP DISTRIBUTION PERCENTAGES – NEW TRIPS**	**DATE:** March 2018 **FIGURE 10A**



HNTB

TOWN OF CHAPEL HILL

LEGEND

XX% / XX% = Peak Hour Entering / Exiting Percentages

AM / **<Noon>** / **(PM)** Peak Hours

N

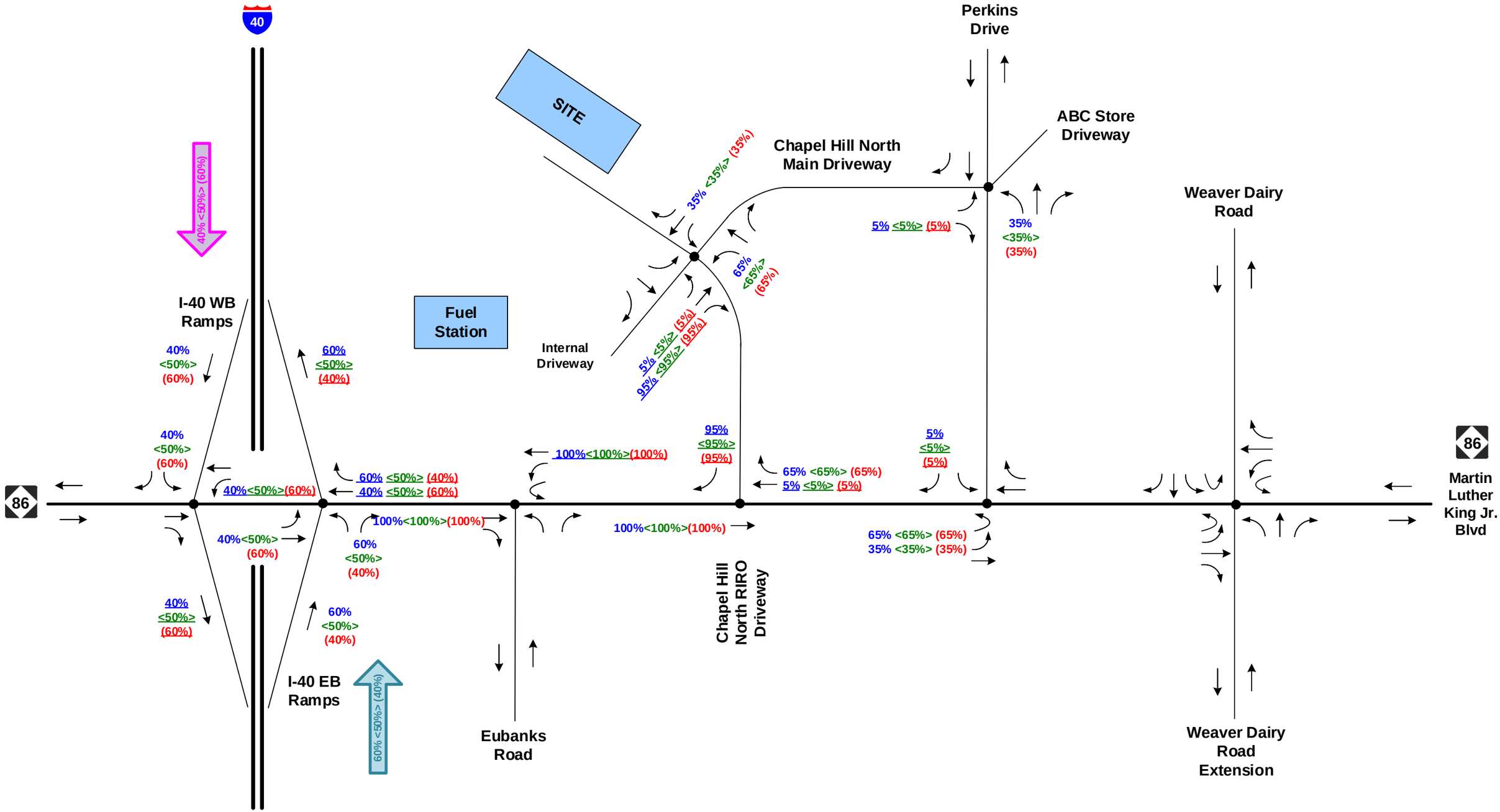
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

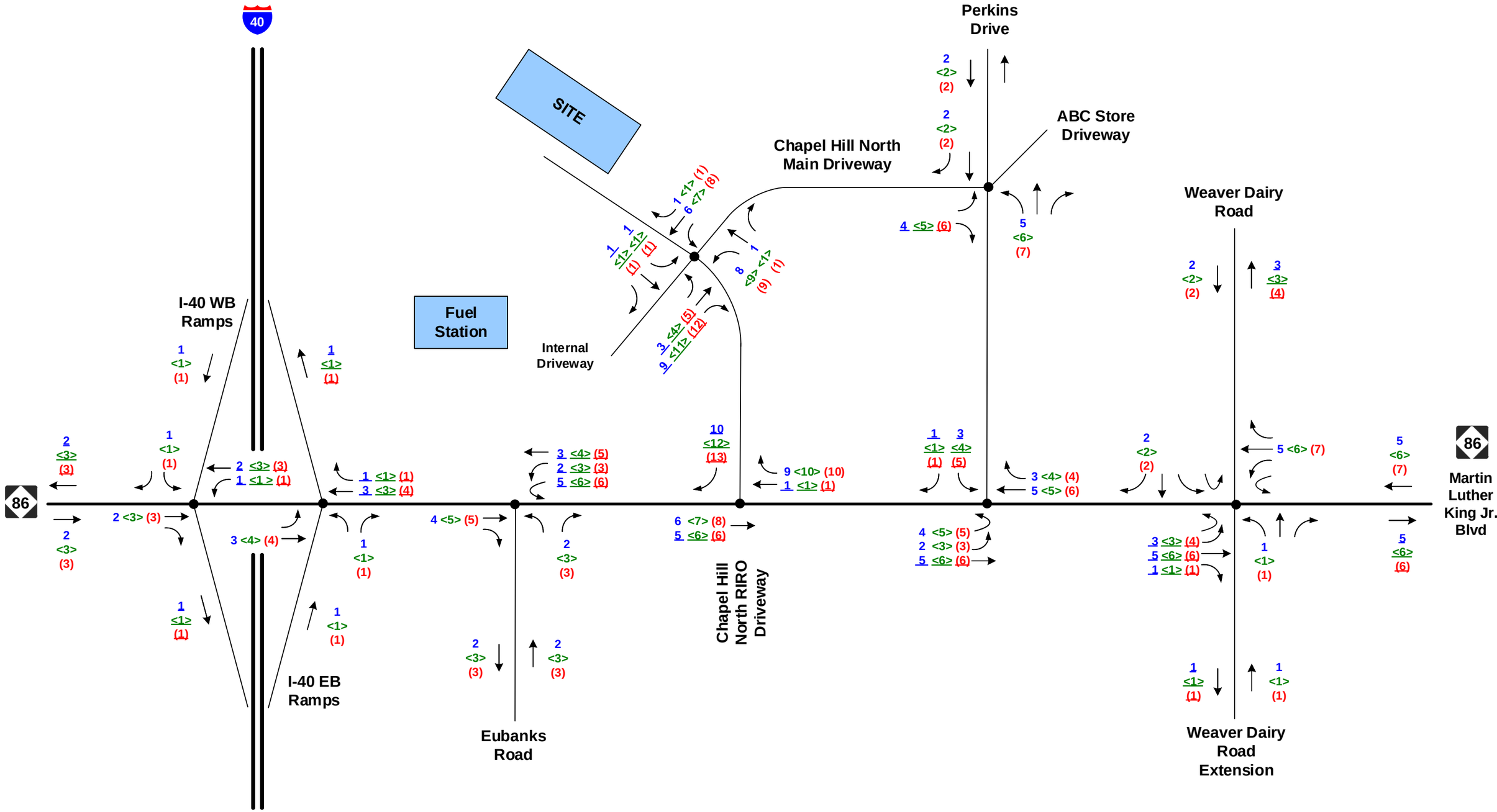
SITE TRIP DISTRIBUTION PERCENTAGES – PASS-BY TRIPS

DATE: March 2018

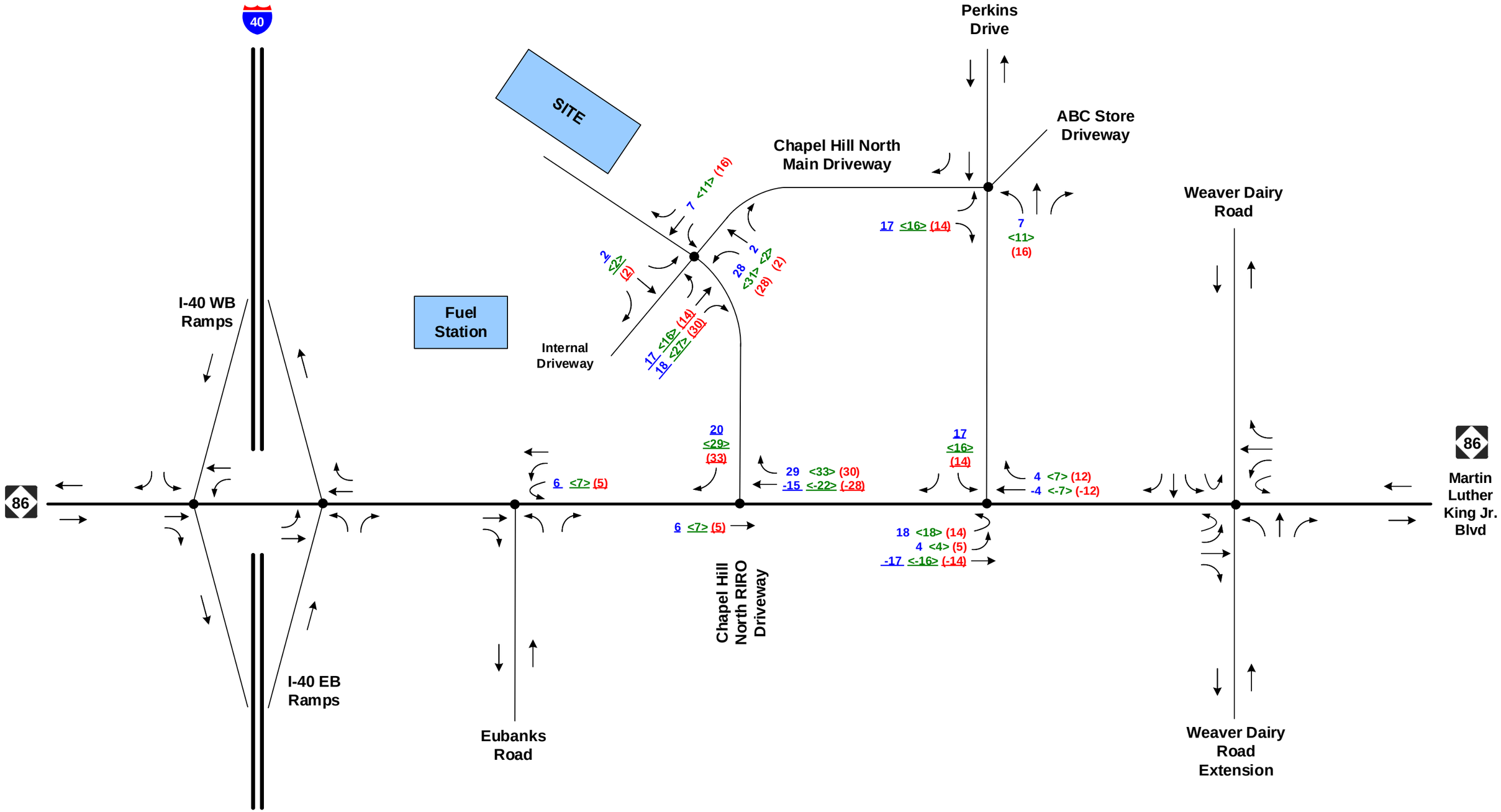
FIGURE 10B



HNTB	TOWN OF CHAPEL HILL	**LEGEND** **XX% / XX%** = Peak Hour Entering / Exiting Percentages **AM** / **<Noon>** / **(PM)** Peak Hours	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** **Traffic Impact Study** **SITE TRIP DISTRIBUTION PERCENTAGES – DIVERTED LINKED TRIPS**	**DATE:** March 2018 **FIGURE 10C**



HNTB	TOWN OF CHAPEL HILL	**LEGEND** XX / XX = Peak Hour Entering / Exiting Traffic Volumes AM / <Noon> / (PM) Peak Hours	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** **Traffic Impact Study** **SITE TRAFFIC ASSIGNMENT – NEW TRIPS**	**DATE:** March 2018 **FIGURE 11A**



HNTB

TOWN OF CHAPEL HILL

LEGEND

XX / XX = Peak Hour Entering / Exiting Traffic Volumes

AM / **<Noon>** / **(PM)** Peak Hours

N

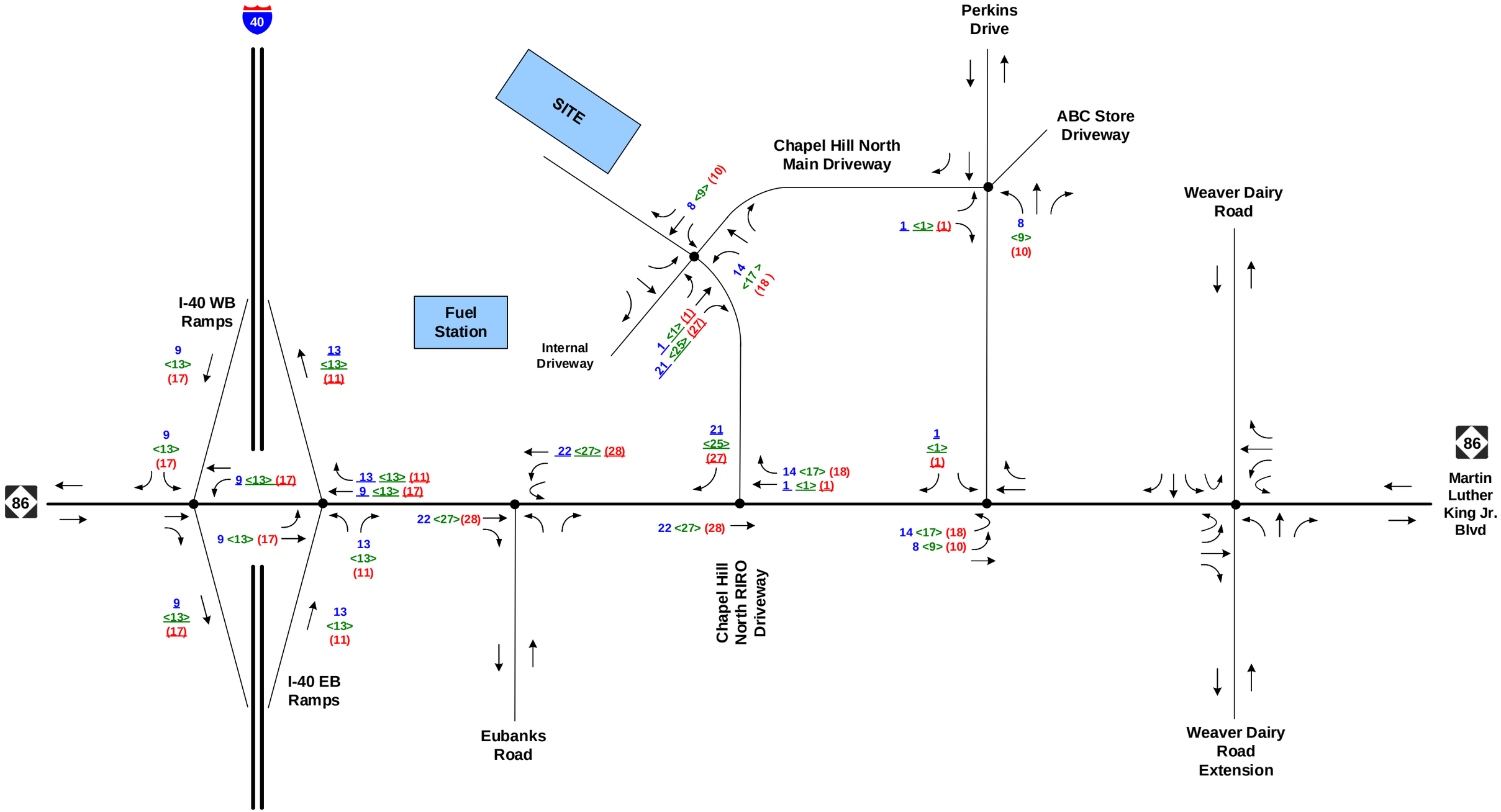
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

SITE TRAFFIC ASSIGNMENT – PASS-BY TRIPS

DATE: March 2018

FIGURE 11B



HNTB

TOWN OF CHAPEL HILL

LEGEND

XX / XX = Peak Hour Entering / Exiting Traffic Volumes

AM / <Noon> / (PM) Peak Hours

N

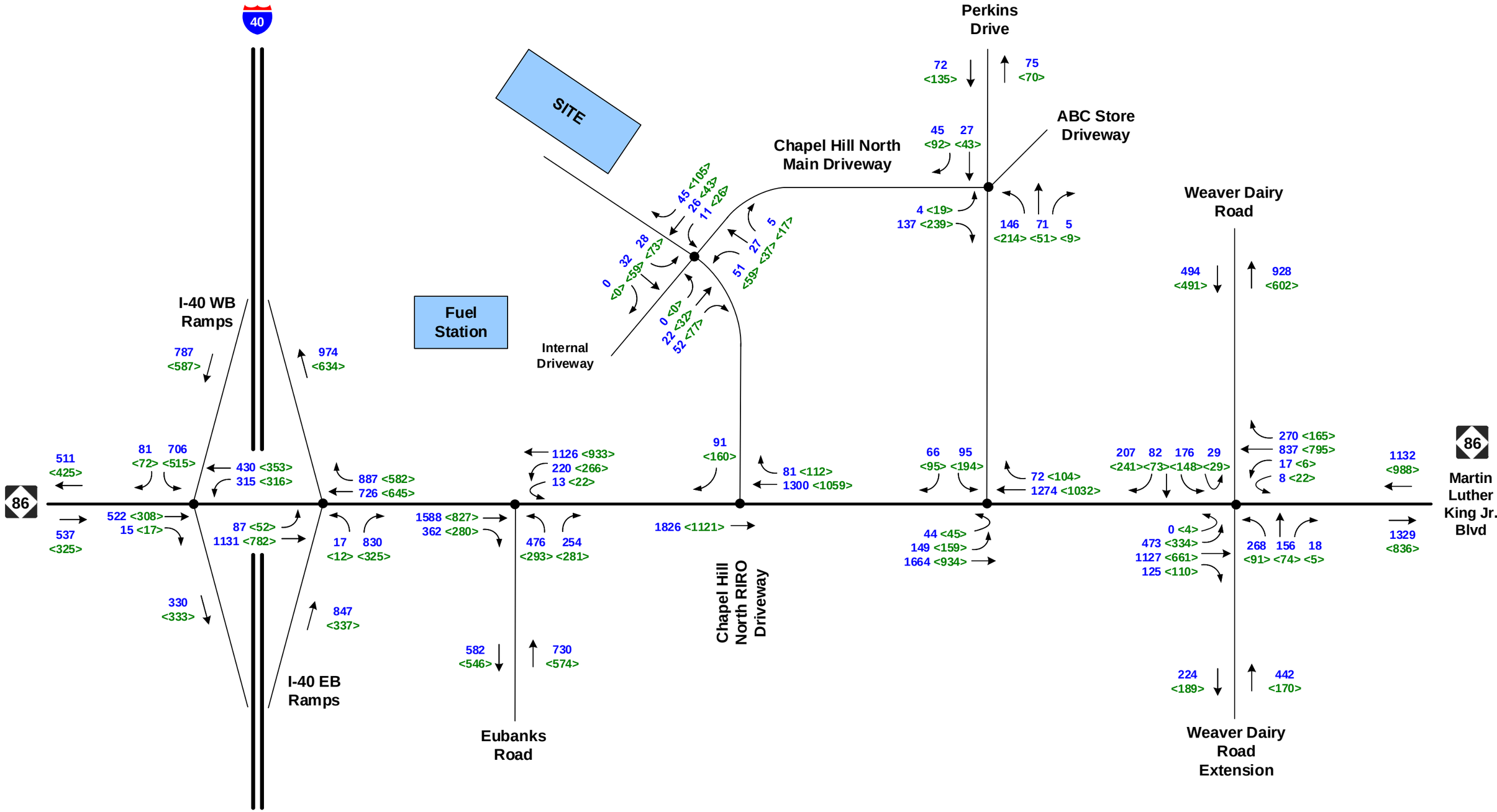
NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

SITE TRAFFIC ASSIGNMENT – DIVERTED LINKED TRIPS

DATE: March 2018

FIGURE 11C



HNTB

TOWN OF CHAPEL HILL

LEGEND

XXX = AM Peak Hour Traffic Volume

<XXX> = Noon Peak Hour Traffic Volume

N

NOT TO SCALE

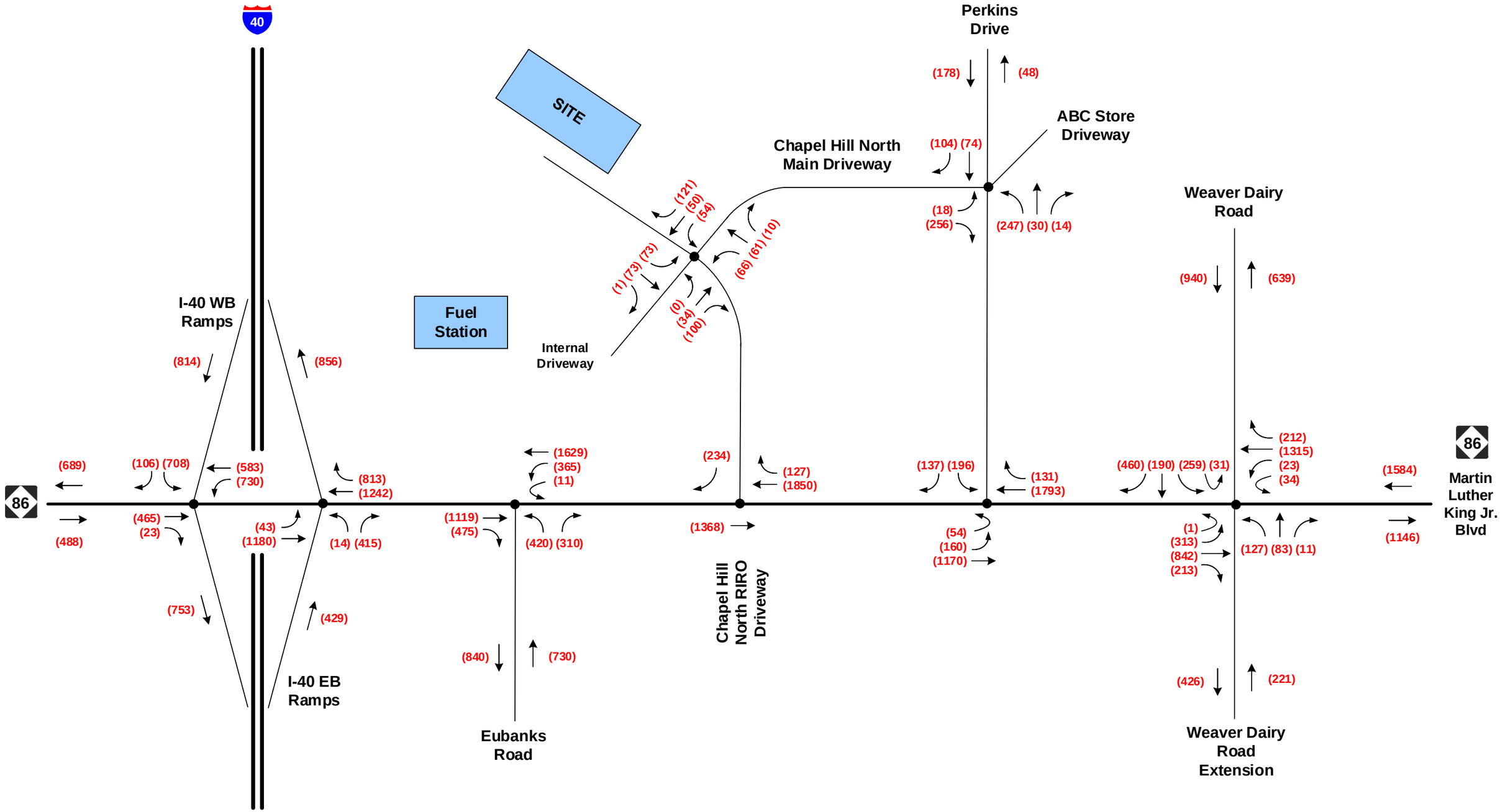
Chapel Hill North - Harris Teeter Expansion

Traffic Impact Study

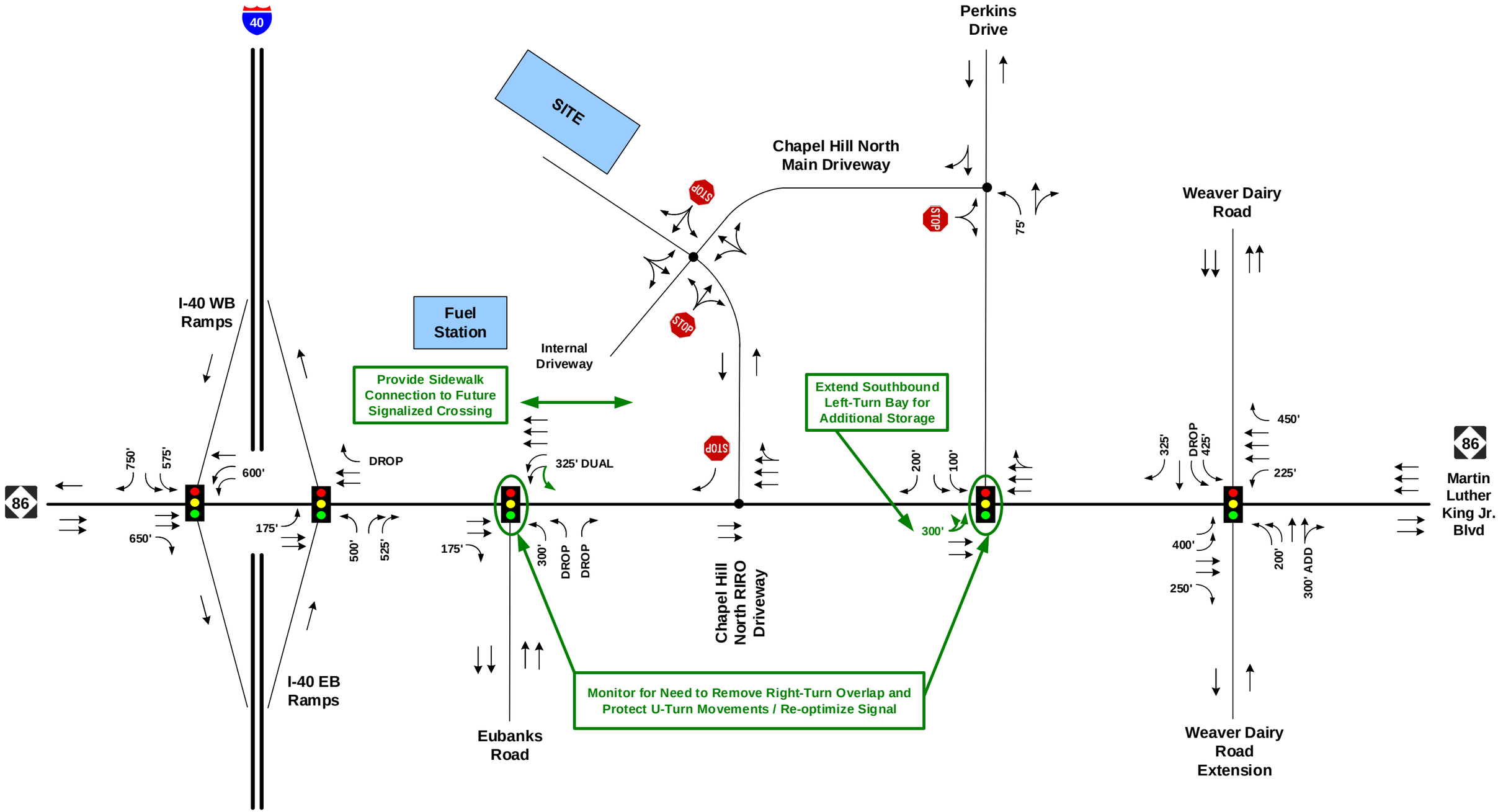
2021 PEAK HOUR TRAFFIC VOLUMES WITH SITE REDEVELOPMENT

DATE: March 2018

FIGURE 12A



HNTB	TOWN OF CHAPEL HILL	**LEGEND** **(XXX) = PM Peak Hour Traffic Volume**	N	NOT TO SCALE	**Chapel Hill North - Harris Teeter Expansion** **Traffic Impact Study** **2021 PEAK HOUR TRAFFIC VOLUMES WITH SITE REDEVELOPMENT**	**DATE:** March 2018 **FIGURE 12B**



HNTB

TOWN OF CHAPEL HILL

LEGEND

= Necesary Geometric Improvement

= Signal Timing Re-optimization/Improvement

N

NOT TO SCALE

Chapel Hill North - Harris Teeter Expansion
Traffic Impact Study

RECOMMENDED IMPROVEMENTS

DATE: March 2018

FIGURE 13

Appendix B – Traffic Count Data

Type of peak hour being reported: Intersection Peak

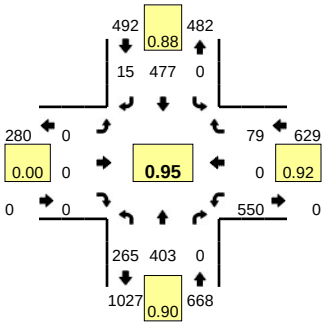
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- I-40 West Ramps

CITY/STATE: Chapel Hill, NC

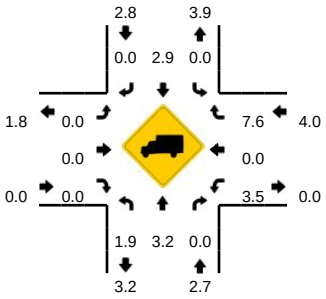
QC JOB #: 14424301

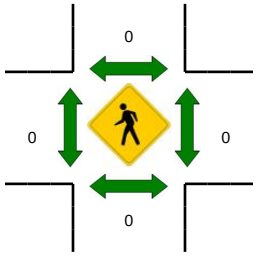
DATE: Thu, May 25 2017

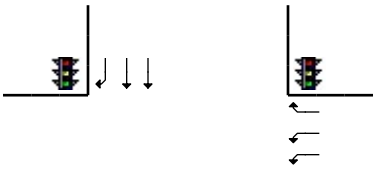


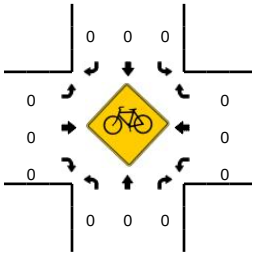
Peak-Hour: 7:30 AM -- 8:30 AM

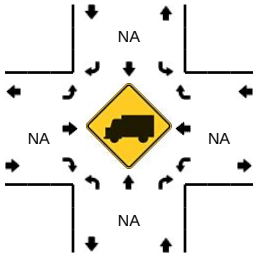
Peak 15-Min: 7:45 AM -- 8:00 AM

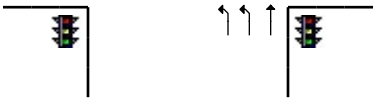


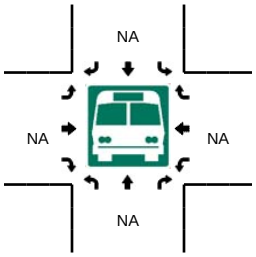












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				I-40 West Ramps (Eastbound)				I-40 West Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	55	52	0	0	0	64	3	0	0	0	0	0	88	0	3	0	265	
7:15 AM	60	73	0	0	0	100	2	0	0	0	0	0	96	0	17	0	348	
7:30 AM	61	106	0	0	0	119	3	0	0	0	0	0	128	0	8	0	425	
7:45 AM	77	109	0	0	0	114	2	0	0	0	0	0	139	0	29	0	470	1508
8:00 AM	61	96	0	0	0	109	5	0	0	0	0	0	134	0	20	0	425	1668
8:15 AM	66	92	0	0	0	135	5	0	0	0	0	0	149	0	22	0	469	1789
8:30 AM	63	92	0	1	0	121	3	0	0	0	0	0	105	0	11	0	396	1760
8:45 AM	58	78	0	2	0	97	7	0	0	0	0	0	109	0	10	0	361	1651

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	308	436	0	0	0	456	8	0	0	0	0	0	556	0	116	0	1880
Heavy Trucks	0	4	0		0	20	0		0	0	0		12	0	16		52
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

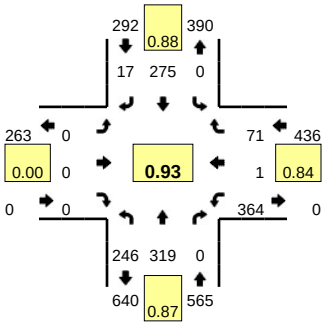
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- I-40 West Ramps

CITY/STATE: Chapel Hill, NC

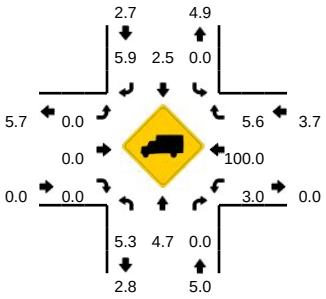
QC JOB #: 14424302

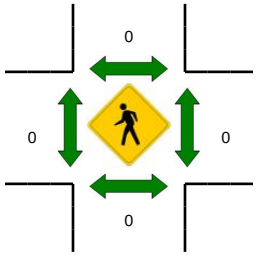
DATE: Thu, May 25 2017

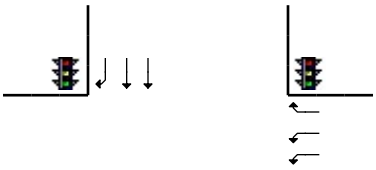


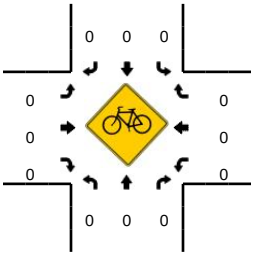
Peak-Hour: 12:30 PM -- 1:30 PM

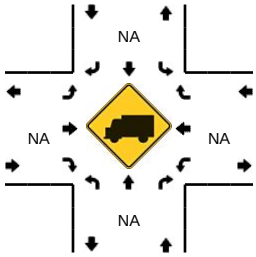
Peak 15-Min: 1:15 PM -- 1:30 PM

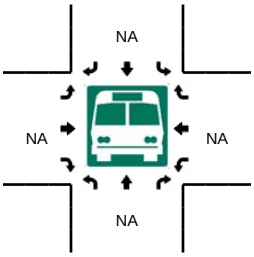












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				I-40 West Ramps (Eastbound)				I-40 West Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	43	66	0	0	0	69	0	0	0	0	0	0	54	0	18	0	250	
11:45 AM	67	71	0	0	0	71	0	0	0	0	0	0	53	0	17	0	279	
12:00 PM	50	69	0	0	0	87	4	0	0	0	0	0	69	0	17	0	296	
12:15 PM	73	74	0	0	0	80	4	0	0	0	0	0	89	0	16	0	336	1161
12:30 PM	45	89	0	0	0	75	0	0	0	0	0	0	66	0	21	0	296	1207
12:45 PM	73	65	0	0	0	54	3	0	0	0	0	0	115	1	13	0	324	1252
1:00 PM	46	84	0	0	0	77	7	0	0	0	0	0	93	0	17	0	324	1280
1:15 PM	81	81	0	1	0	69	7	0	0	0	0	0	90	0	20	0	349	1293

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	324	324	0	4	0	276	28	0	0	0	0	0	360	0	80	0	1396
Heavy Trucks	12	12	0		0	4	0		0	0	0		12	0	4		44
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

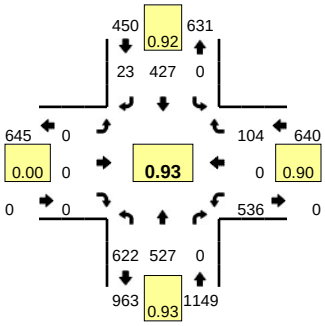
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- I-40 West Ramps

CITY/STATE: Chapel Hill, NC

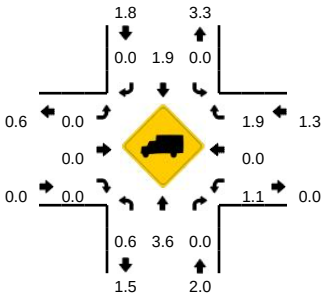
QC JOB #: 14424303

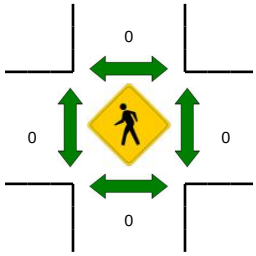
DATE: Thu, May 25 2017

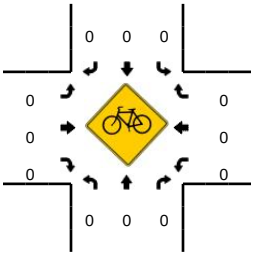


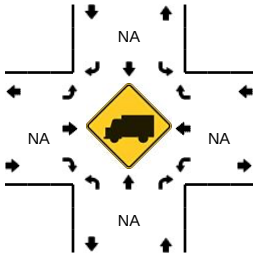
Peak-Hour: 4:45 PM -- 5:45 PM

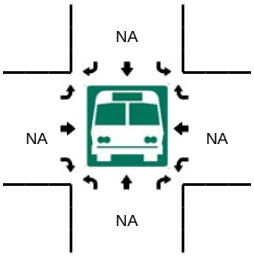
Peak 15-Min: 5:30 PM -- 5:45 PM











15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				I-40 West Ramps (Eastbound)				I-40 West Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	123	96	0	0	0	89	5	0	0	0	0	0	88	0	27	0	428	
4:15 PM	137	131	0	0	0	93	6	0	0	0	0	0	73	0	27	0	467	
4:30 PM	152	120	0	0	0	106	7	0	0	0	0	0	82	0	12	0	479	
4:45 PM	144	117	0	0	0	90	7	0	0	0	0	0	118	0	30	0	506	1880
5:00 PM	157	120	0	0	0	122	5	0	0	0	0	0	111	0	27	0	542	1994
5:15 PM	159	142	0	0	0	93	6	0	0	0	0	0	167	0	22	0	589	2116
5:30 PM	162	148	0	0	0	122	5	0	0	0	0	0	140	0	25	0	602	2239
5:45 PM	96	93	0	0	0	113	3	0	0	0	0	0	159	0	30	0	494	2227

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	648	592	0	0	0	488	20	0	0	0	0	0	560	0	100	0	2408
Heavy Trucks	8	20	0		0	0	0		0	0	0		8	0	0		36
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

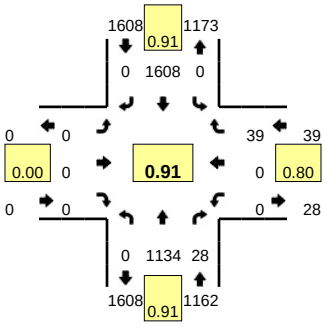
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- Chapel Hill North Shop Ctr RIRO

QC JOB #: 14424304

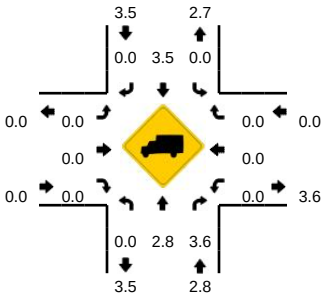
CITY/STATE: Chapel Hill, NC

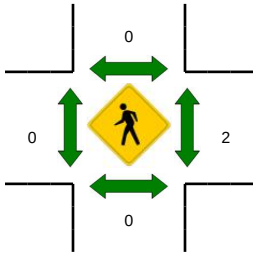
DATE: Thu, May 25 2017

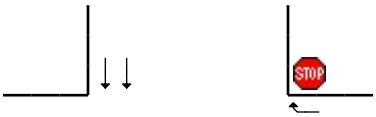


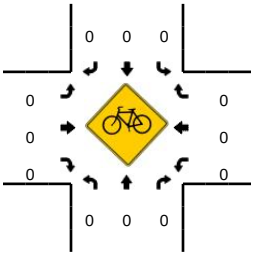
Peak-Hour: 7:30 AM -- 8:30 AM

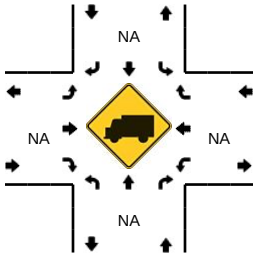
Peak 15-Min: 8:15 AM -- 8:30 AM

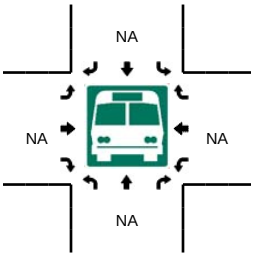












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Chapel Hill North Shop Ctr RIRO (Eastbound)				Chapel Hill North Shop Ctr RIRO (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	191	6	0	0	192	0	0	0	0	0	0	0	0	11	0	400	
7:15 AM	0	229	3	0	0	292	0	0	0	0	0	0	0	0	5	0	529	
7:30 AM	0	252	5	0	0	381	0	0	0	0	0	0	0	0	5	0	643	
7:45 AM	0	284	9	0	0	388	0	0	0	0	0	0	0	0	11	0	692	2264
8:00 AM	0	284	10	0	0	398	0	0	0	0	0	0	0	0	14	0	706	2570
8:15 AM	0	314	4	0	0	441	0	0	0	0	0	0	0	0	9	0	768	2809
8:30 AM	0	244	5	0	0	343	0	0	0	0	0	0	0	0	11	0	603	2769
8:45 AM	0	242	11	0	0	314	0	0	0	0	0	0	0	0	8	0	575	2652

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1256	16	0	0	1764	0	0	0	0	0	0	0	0	36	0	3072
Heavy Trucks	0	32	0		0	68	0		0	0	0		0	0	0		100
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

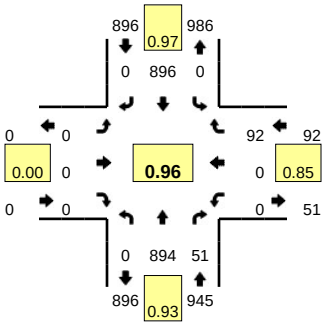
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- Chapel Hill North Shop Ctr RIRO

QC JOB #: 14424305

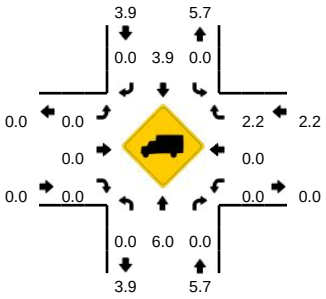
CITY/STATE: Chapel Hill, NC

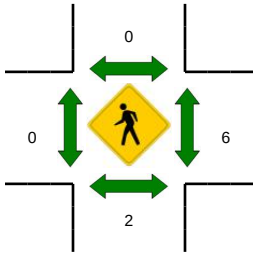
DATE: Thu, May 25 2017

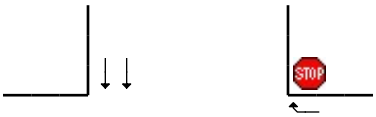


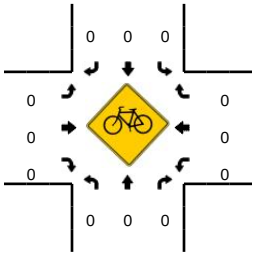
Peak-Hour: 12:15 PM -- 1:15 PM

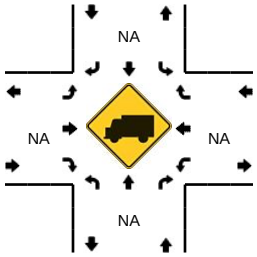
Peak 15-Min: 12:30 PM -- 12:45 PM

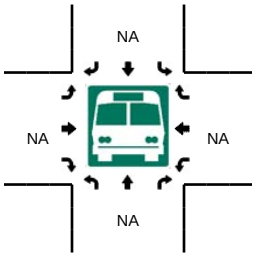












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Chapel Hill North Shop Ctr RIRO (Eastbound)				Chapel Hill North Shop Ctr RIRO (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	204	6	0	0	206	0	0	0	0	0	0	0	0	19	0	435	
11:45 AM	0	203	11	0	0	188	0	0	0	0	0	0	0	0	28	0	430	
12:00 PM	0	191	12	0	0	205	0	0	0	0	0	0	0	0	15	0	423	
12:15 PM	0	226	12	0	0	221	0	0	0	0	0	0	0	0	20	0	479	1767
12:30 PM	0	240	13	0	0	231	0	0	0	0	0	0	0	0	21	0	505	1837
12:45 PM	0	225	14	0	0	217	0	0	0	0	0	0	0	0	27	0	483	1890
1:00 PM	0	203	12	0	0	227	0	0	0	0	0	0	0	0	24	0	466	1933
1:15 PM	0	226	13	0	0	183	0	0	0	0	0	0	0	0	18	0	440	1894

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	960	52	0	0	924	0	0	0	0	0	0	0	0	84	0	2020
Heavy Trucks	0	60	0		0	24	0		0	0	0		0	0	0		84
Pedestrians		8				0				0				8			16
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

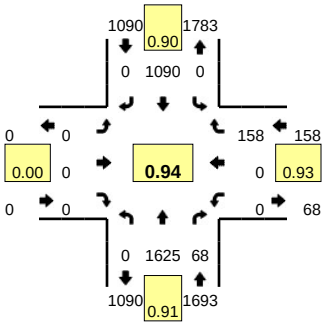
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- Chapel Hill North Shop Ctr RIRO

QC JOB #: 14424306

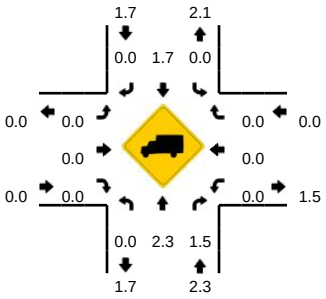
CITY/STATE: Chapel Hill, NC

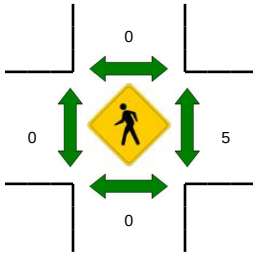
DATE: Thu, May 25 2017

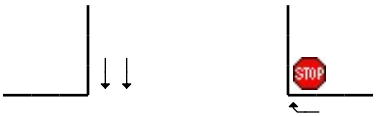


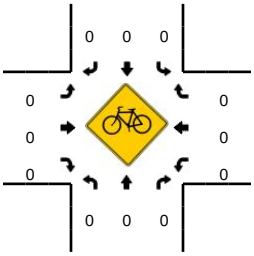
Peak-Hour: 4:45 PM -- 5:45 PM

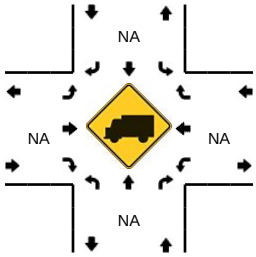
Peak 15-Min: 5:15 PM -- 5:30 PM

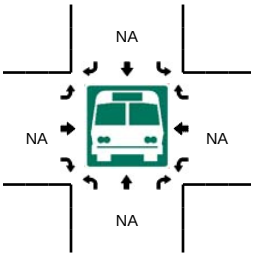












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Chapel Hill North Shop Ctr RIRO (Eastbound)				Chapel Hill North Shop Ctr RIRO (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	367	17	0	0	227	0	0	0	0	0	0	0	0	35	0	646	
4:15 PM	0	373	18	0	0	222	0	0	0	0	0	0	0	0	38	0	651	
4:30 PM	0	395	17	0	0	241	0	0	0	0	0	0	0	0	35	0	688	
4:45 PM	0	377	18	0	0	257	0	0	0	0	0	0	0	0	37	0	689	2674
5:00 PM	0	398	24	0	0	251	0	0	0	0	0	0	0	0	39	0	712	2740
5:15 PM	0	451	12	0	0	278	0	0	0	0	0	0	0	0	39	0	780	2869
5:30 PM	0	399	14	0	0	304	0	0	0	0	0	0	0	0	43	0	760	2941
5:45 PM	0	299	16	0	0	321	0	0	0	0	0	0	0	0	39	0	675	2927

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1804	48	0	0	1112	0	0	0	0	0	0	0	0	156	0	3120
Heavy Trucks	0	24	0		0	16	0		0	0	0		0	0	0		40
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

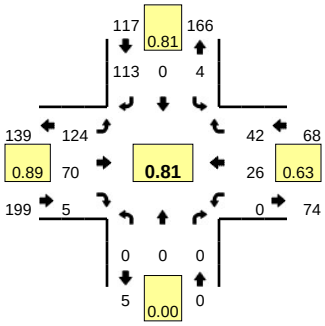
Method for determining peak hour: Total Entering Volume

LOCATION: Chapel Hill North Shop Ctr Dr -- Perkins Dr

QC JOB #: 14424307

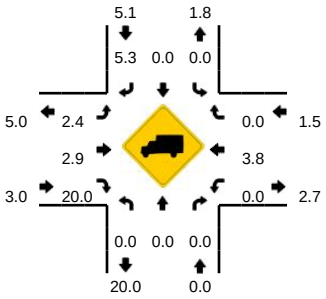
CITY/STATE: Chapel Hill, NC

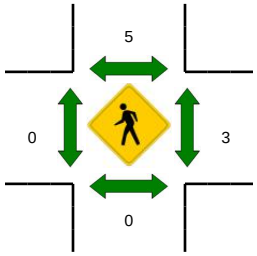
DATE: Thu, May 25 2017

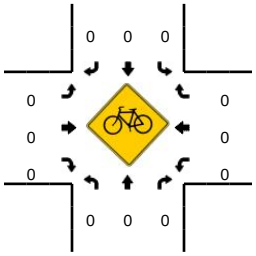


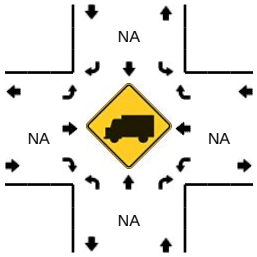
Peak-Hour: 8:00 AM -- 9:00 AM

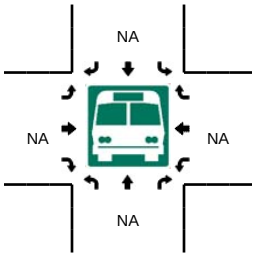
Peak 15-Min: 8:45 AM -- 9:00 AM











15-Min Count Period Beginning At	Chapel Hill North Shop Ctr Dr (Northbound)				Chapel Hill North Shop Ctr Dr (Southbound)				Perkins Dr (Eastbound)				Perkins Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	0	0	16	0	20	5	0	0	0	4	4	0	49	
7:15 AM	0	0	0	0	1	0	24	0	21	12	0	0	0	8	6	0	72	
7:30 AM	0	0	0	0	1	0	24	0	26	14	1	0	0	13	3	0	82	
7:45 AM	0	0	0	0	2	0	23	0	34	14	0	0	0	9	5	0	87	290
8:00 AM	0	0	0	0	1	0	26	0	32	21	0	0	0	3	7	0	90	331
8:15 AM	0	0	0	0	0	0	32	0	35	15	2	0	0	8	13	0	105	364
8:30 AM	0	0	0	0	0	0	22	0	22	15	1	0	0	5	5	0	70	352
8:45 AM	0	0	0	0	3	0	33	0	35	19	2	0	0	10	17	0	119	384

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	12	0	132	0	140	76	8	0	0	40	68	0	476
Heavy Trucks	0	0	0		0	0	4		4	0	0		0	4	0		12
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

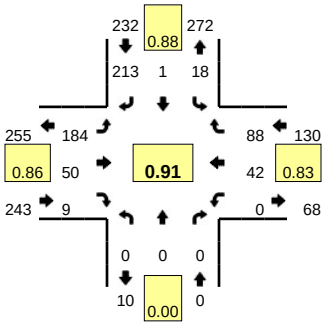
Method for determining peak hour: Total Entering Volume

LOCATION: Chapel Hill North Shop Ctr Dr -- Perkins Dr

QC JOB #: 14424308

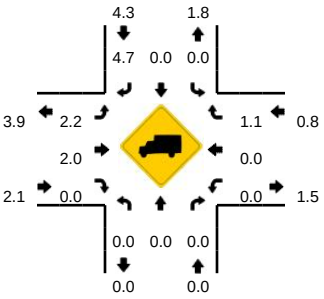
CITY/STATE: Chapel Hill, NC

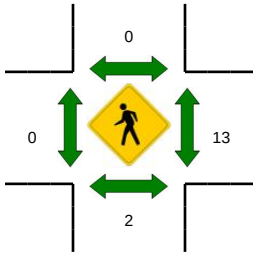
DATE: Thu, May 25 2017

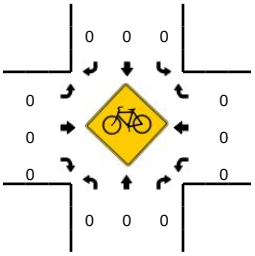


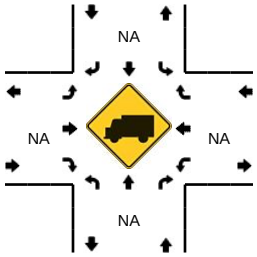
Peak-Hour: 12:30 PM -- 1:30 PM

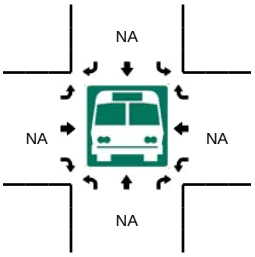
Peak 15-Min: 12:30 PM -- 12:45 PM











15-Min Count Period Beginning At	Chapel Hill North Shop Ctr Dr (Northbound)				Chapel Hill North Shop Ctr Dr (Southbound)				Perkins Dr (Eastbound)				Perkins Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	0	0	0	3	1	51	0	44	8	1	0	0	5	10	0	123	
11:45 AM	0	0	0	0	3	0	35	0	44	11	4	0	0	8	23	0	128	
12:00 PM	0	0	0	0	5	0	40	0	47	5	1	0	0	16	28	0	142	
12:15 PM	0	0	0	0	2	0	55	0	34	9	4	0	0	10	29	0	143	536
12:30 PM	0	0	0	0	5	0	58	0	57	13	1	0	0	9	23	0	166	579
12:45 PM	0	0	0	0	3	0	63	0	40	14	4	0	0	11	18	0	153	604
1:00 PM	0	0	0	0	1	0	45	0	40	14	1	0	0	12	16	0	129	591
1:15 PM	0	0	0	0	9	1	47	0	47	9	3	0	0	10	31	0	157	605

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	20	0	232	0	228	52	4	0	0	36	92	0	664
Heavy Trucks	0	0	0		0	0	20		0	0	0		0	0	4		24
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

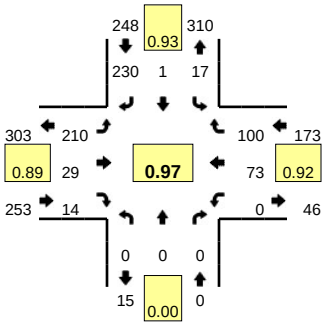
Method for determining peak hour: Total Entering Volume

LOCATION: Chapel Hill North Shop Ctr Dr -- Perkins Dr

QC JOB #: 14424309

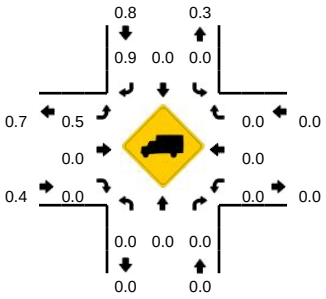
CITY/STATE: Chapel Hill, NC

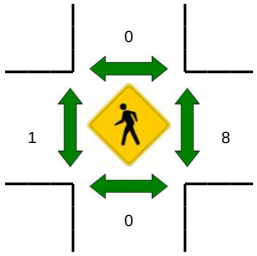
DATE: Thu, May 25 2017

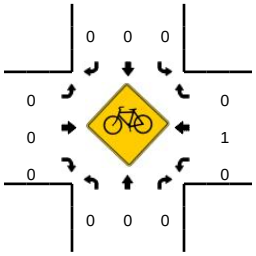


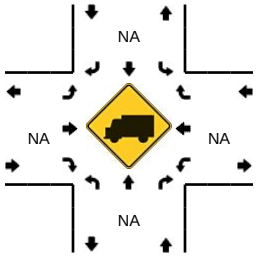
Peak-Hour: 4:45 PM -- 5:45 PM

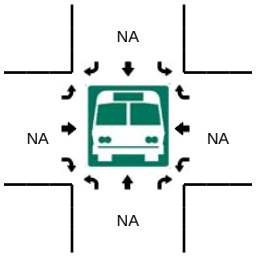
Peak 15-Min: 5:00 PM -- 5:15 PM











15-Min Count Period Beginning At	Chapel Hill North Shop Ctr Dr (Northbound)				Chapel Hill North Shop Ctr Dr (Southbound)				Perkins Dr (Eastbound)				Perkins Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	3	1	45	0	44	14	6	0	0	23	26	0	162	
4:15 PM	0	0	0	0	4	0	52	0	49	12	9	0	0	6	29	0	161	
4:30 PM	0	0	0	0	3	0	42	0	51	3	8	0	0	22	28	0	157	
4:45 PM	0	0	0	0	4	0	63	0	44	3	4	0	0	16	29	0	163	643
5:00 PM	0	0	0	0	5	0	54	0	60	12	1	0	0	22	19	0	173	654
5:15 PM	0	0	0	0	6	1	53	0	49	7	3	0	0	19	29	0	167	660
5:30 PM	0	0	0	0	2	0	60	0	57	7	6	0	0	16	23	0	171	674
5:45 PM	0	0	0	0	4	0	44	0	48	8	3	0	0	8	19	0	134	645

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	0	0	0	20	0	216	0	240	48	4	0	0	88	76	0	692
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Pedestrians		0				0				4				8			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

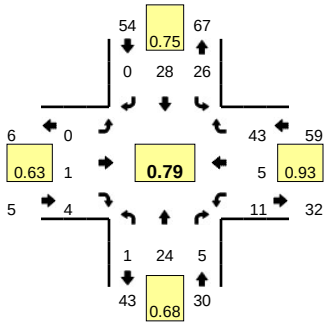
Method for determining peak hour: Total Entering Volume

LOCATION: Chapel Hill North Shop Ctr Dr -- Parking Lot

QC JOB #: 14424310

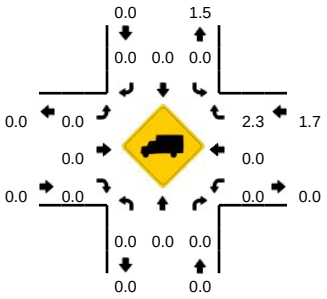
CITY/STATE: Chapel Hill, NC

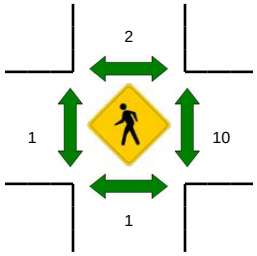
DATE: Thu, May 25 2017

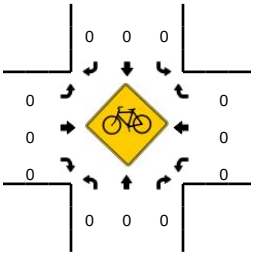


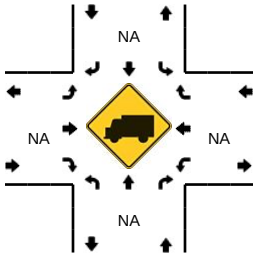
Peak-Hour: 8:00 AM -- 9:00 AM

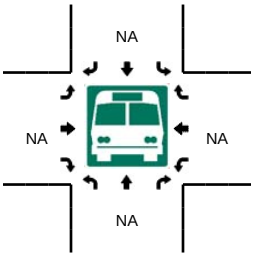
Peak 15-Min: 8:45 AM -- 9:00 AM











15-Min Count Period Beginning At	Chapel Hill North Shop Ctr Dr (Northbound)				Chapel Hill North Shop Ctr Dr (Southbound)				Parking Lot (Eastbound)				Parking Lot (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	2	2	2	0	3	6	0	0	0	1	1	0	5	0	7	0	29	
7:15 AM	0	2	1	0	7	4	0	0	0	0	1	0	0	0	6	0	21	
7:30 AM	0	2	4	0	5	1	0	0	0	0	0	0	6	0	8	0	26	
7:45 AM	0	7	2	0	8	4	0	0	0	0	0	0	6	1	9	0	37	113
8:00 AM	0	8	2	0	2	7	0	0	0	0	1	0	6	0	11	0	37	121
8:15 AM	1	2	1	0	8	8	0	0	0	0	1	0	2	1	13	0	37	137
8:30 AM	0	4	1	0	5	6	0	0	0	0	2	0	2	1	6	0	27	138
8:45 AM	0	10	1	0	11	7	0	0	0	1	0	0	1	3	13	0	47	148

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	40	4	0	44	28	0	0	0	4	0	0	4	12	52	0	188
Heavy Trucks	0	0	0		0	0	0		0	0	0		0	0	0		0
Pedestrians		0				4				0				20			24
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

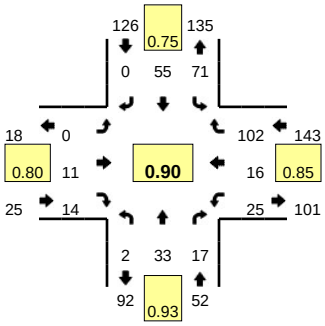
Method for determining peak hour: Total Entering Volume

LOCATION: Chapel Hill North Shop Ctr Dr -- Parking Lot

QC JOB #: 14424311

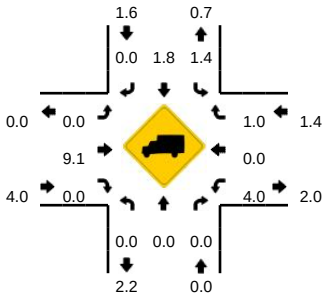
CITY/STATE: Chapel Hill, NC

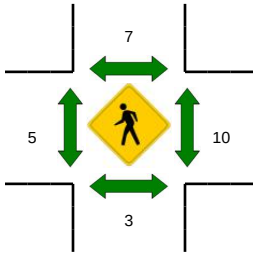
DATE: Thu, May 25 2017

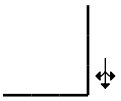


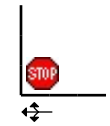
Peak-Hour: 12:30 PM -- 1:30 PM

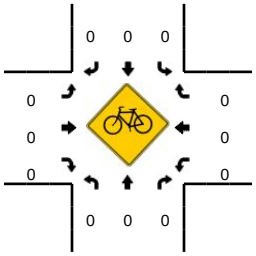
Peak 15-Min: 12:45 PM -- 1:00 PM

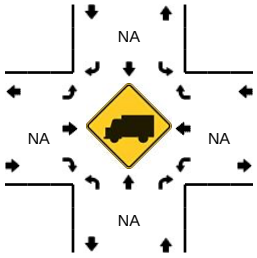


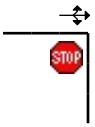


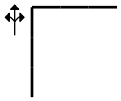


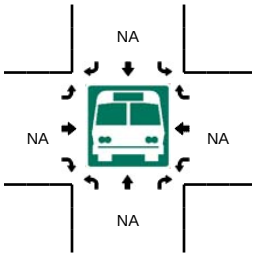












15-Min Count Period Beginning At	Chapel Hill North Shop Ctr Dr (Northbound)				Chapel Hill North Shop Ctr Dr (Southbound)				Parking Lot (Eastbound)				Parking Lot (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	5	0	0	19	12	0	0	0	3	2	0	5	0	27	1	74	
11:45 AM	2	9	1	0	14	13	0	0	0	0	6	0	9	4	24	0	82	
12:00 PM	2	6	4	0	15	10	0	0	1	1	4	0	2	8	18	0	71	
12:15 PM	1	9	2	0	18	11	0	0	0	3	4	0	5	2	26	0	81	308
12:30 PM	1	9	3	0	14	12	0	0	0	6	4	0	8	4	29	1	91	325
12:45 PM	0	10	4	0	27	15	0	0	0	2	7	0	5	5	20	1	96	339
1:00 PM	0	8	4	0	10	18	0	0	0	2	1	0	5	5	24	0	77	345
1:15 PM	1	6	6	0	20	10	0	0	0	1	2	0	5	2	29	0	82	346

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	40	16	0	108	60	0	0	0	8	28	0	20	20	80	4	384
Heavy Trucks	0	0	0		0	4	0		0	0	0		0	0	0		4
Pedestrians		4				4				12				8			28
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

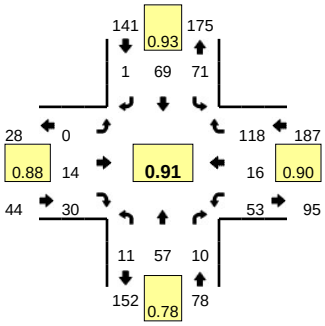
Method for determining peak hour: Total Entering Volume

LOCATION: Chapel Hill North Shop Ctr Dr -- Parking Lot

QC JOB #: 14424312

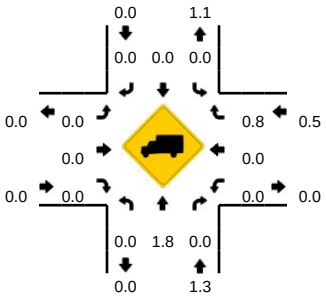
CITY/STATE: Chapel Hill, NC

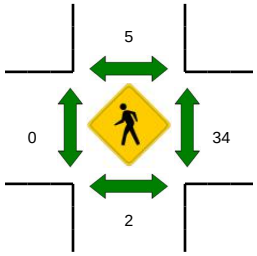
DATE: Thu, May 25 2017

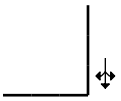


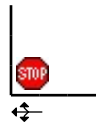
Peak-Hour: 4:15 PM -- 5:15 PM

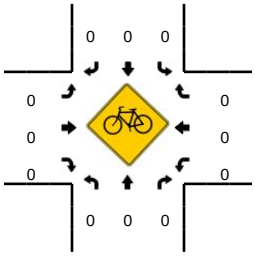
Peak 15-Min: 5:00 PM -- 5:15 PM

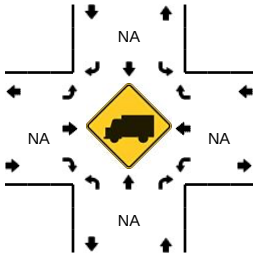


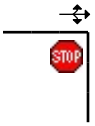


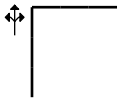


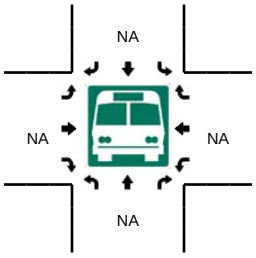












15-Min Count Period Beginning At	Chapel Hill North Shop Ctr Dr (Northbound)				Chapel Hill North Shop Ctr Dr (Southbound)				Parking Lot (Eastbound)				Parking Lot (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	10	4	0	16	24	0	0	0	3	2	0	9	6	27	0	104	
4:15 PM	2	13	3	0	15	18	1	0	0	4	8	0	13	4	25	0	106	
4:30 PM	2	12	3	0	17	14	0	0	0	3	6	0	13	2	31	0	103	
4:45 PM	4	11	3	0	20	17	0	0	0	3	8	0	17	3	32	0	118	431
5:00 PM	3	21	1	0	19	20	0	0	0	4	8	0	10	7	30	0	123	450
5:15 PM	0	11	1	0	18	20	0	0	0	1	9	0	8	1	29	0	98	442
5:30 PM	3	12	0	0	17	27	0	0	0	5	6	0	9	5	20	0	104	443
5:45 PM	2	12	2	0	18	25	0	0	0	3	10	0	6	9	28	0	115	440

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	12	84	4	0	76	80	0	0	0	16	32	0	40	28	120	0	492
Heavy Trucks	0	4	0		0	0	0		0	0	0		0	0	4		8
Pedestrians		0				4				0				28			32
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

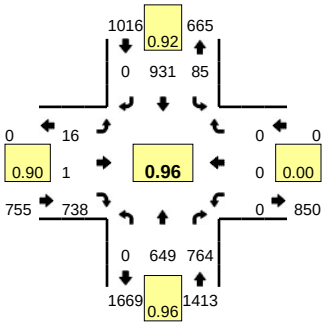
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- I-40 EB Ramps

QC JOB #: 14424313

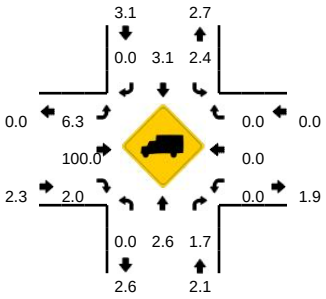
CITY/STATE: Chapel Hill, NC

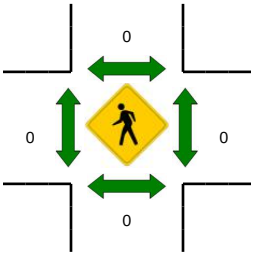
DATE: Thu, May 25 2017

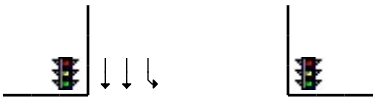


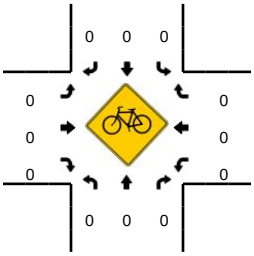
Peak-Hour: 7:30 AM -- 8:30 AM

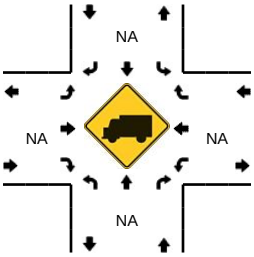
Peak 15-Min: 8:15 AM -- 8:30 AM

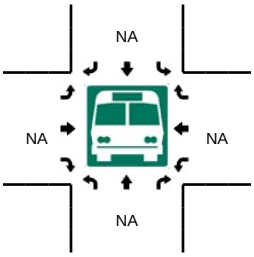












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				I-40 EB Ramps (Eastbound)				I-40 EB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	113	145	0	16	131	0	0	1	0	111	0	0	0	0	0	517	
7:15 AM	0	130	165	0	27	175	0	0	1	0	155	0	0	0	0	0	653	
7:30 AM	0	165	171	0	23	221	0	0	1	0	179	0	0	0	0	0	760	
7:45 AM	0	172	195	0	18	239	0	0	6	0	170	0	0	0	0	0	800	2730
8:00 AM	0	152	191	0	21	219	0	0	7	1	201	0	0	0	0	0	792	3005
8:15 AM	0	160	207	0	23	252	0	0	2	0	188	0	0	0	0	0	832	3184
8:30 AM	0	163	175	0	26	209	0	0	6	0	121	0	0	0	0	0	700	3124
8:45 AM	0	122	185	0	27	184	0	0	3	0	133	0	0	0	0	0	654	2978

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	640	828	0	92	1008	0	0	8	0	752	0	0	0	0	0	3328
Heavy Trucks	0	12	16		0	36	0		0	0	8		0	0	0		72
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

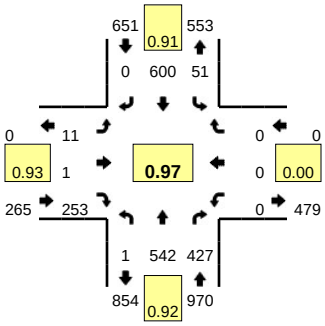
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- I-40 EB Ramps

CITY/STATE: Chapel Hill, NC

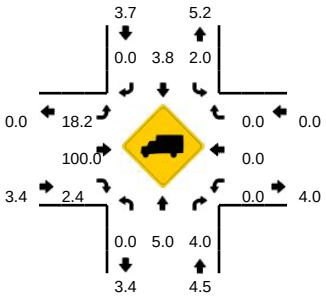
QC JOB #: 14424314

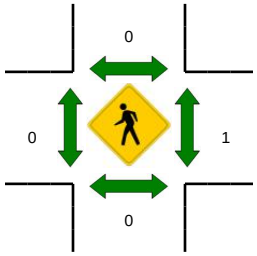
DATE: Thu, May 25 2017

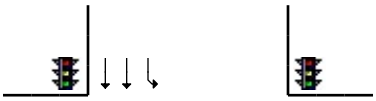


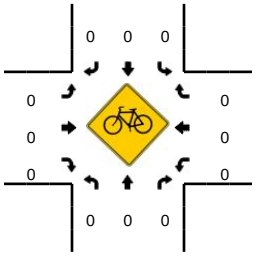
Peak-Hour: 12:15 PM -- 1:15 PM

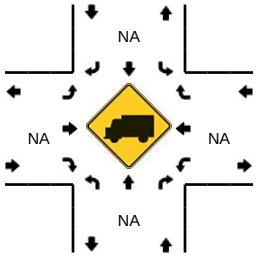
Peak 15-Min: 12:30 PM -- 12:45 PM

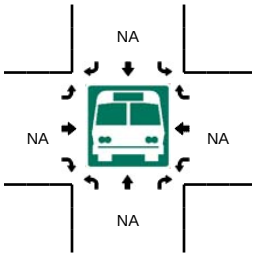












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				I-40 EB Ramps (Eastbound)				I-40 EB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	116	103	0	18	129	0	0	3	0	65	0	0	0	0	0	434	
11:45 AM	0	125	102	0	12	114	0	0	3	1	68	0	0	0	0	0	425	
12:00 PM	0	118	90	0	22	135	0	0	4	0	61	0	0	0	0	0	430	
12:15 PM	0	137	94	1	13	146	0	0	3	0	61	0	0	0	0	0	455	1744
12:30 PM	0	146	119	0	10	142	0	0	1	0	66	0	0	0	0	0	484	1794
12:45 PM	0	125	120	0	15	147	0	0	5	0	60	0	0	0	0	0	472	1841
1:00 PM	0	134	94	0	13	165	0	0	2	1	66	0	0	0	0	0	475	1886
1:15 PM	0	153	87	0	9	141	0	0	4	1	51	0	0	0	0	0	446	1877

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	584	476	0	40	568	0	0	4	0	264	0	0	0	0	0	1936
Heavy Trucks	0	36	4		0	20	0		0	0	8		0	0	0		68
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

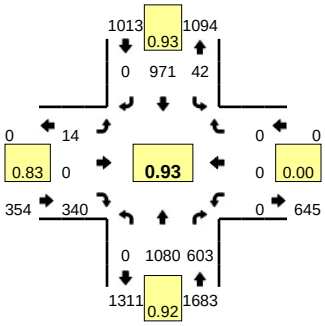
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- I-40 EB Ramps

CITY/STATE: Chapel Hill, NC

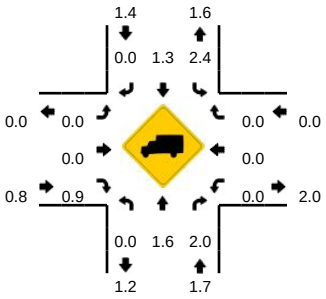
QC JOB #: 14424315

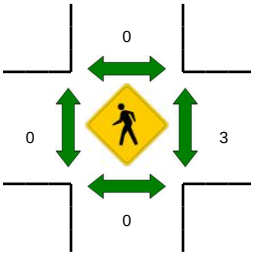
DATE: Thu, May 25 2017

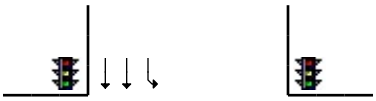


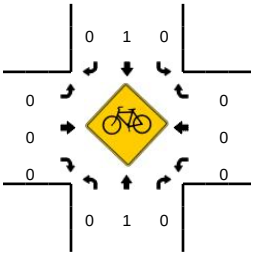
Peak-Hour: 5:00 PM -- 6:00 PM

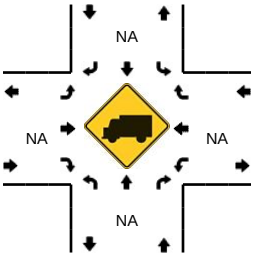
Peak 15-Min: 5:15 PM -- 5:30 PM

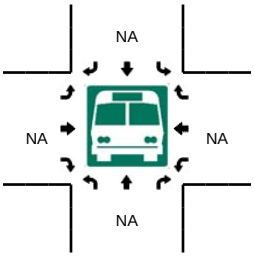












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				I-40 EB Ramps (Eastbound)				I-40 EB Ramps (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	230	163	0	16	172	0	0	1	0	62	0	0	0	0	0	644	
4:15 PM	0	261	147	0	25	168	0	0	0	0	75	0	0	0	0	0	676	
4:30 PM	0	268	164	0	14	176	0	0	5	0	78	0	0	0	0	0	705	
4:45 PM	0	244	147	0	12	198	0	0	3	0	71	0	0	0	0	0	675	2700
5:00 PM	0	283	169	0	12	217	0	0	2	0	67	0	0	0	0	0	750	2806
5:15 PM	0	314	159	0	13	247	0	0	3	0	86	0	0	0	0	0	822	2952
5:30 PM	0	278	154	0	9	243	0	0	6	0	101	0	0	0	0	0	791	3038
5:45 PM	0	205	121	0	8	264	0	0	3	0	86	0	0	0	0	0	687	3050

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1256	636	0	52	988	0	0	12	0	344	0	0	0	0	0	3288
Heavy Trucks	0	12	8		4	20	0		0	0	4		0	0	0		48
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

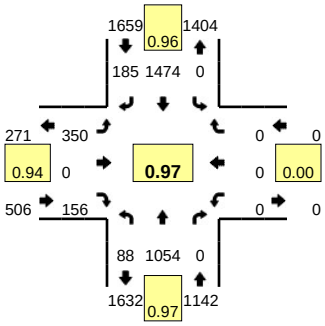
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- Eubanks Rd

CITY/STATE: Chapel Hill, NC

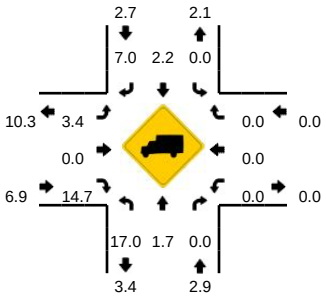
QC JOB #: 14424316

DATE: Thu, May 25 2017

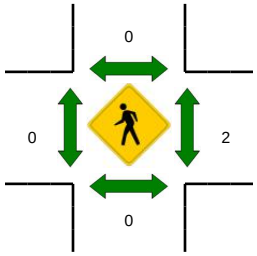


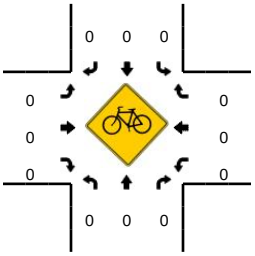
Peak-Hour: 7:30 AM -- 8:30 AM

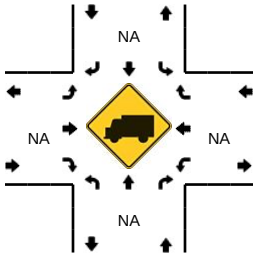
Peak 15-Min: 8:15 AM -- 8:30 AM

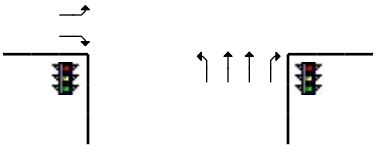


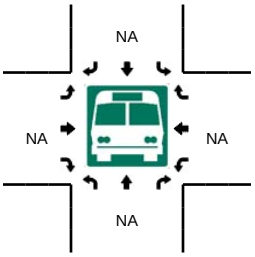
Quality Counts
TRANSPORTATION DATA COLLECTION SERVICES











15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Eubanks Rd (Eastbound)				Eubanks Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	20	188	0	1	0	184	41	0	68	0	20	0	0	0	0	0	522	
7:15 AM	16	221	0	0	0	285	49	0	73	0	21	0	0	0	0	0	665	
7:30 AM	16	241	0	0	0	355	53	0	92	0	40	0	0	0	0	0	797	
7:45 AM	23	270	0	0	0	362	44	0	95	0	40	0	0	0	0	0	834	2818
8:00 AM	27	264	0	1	0	369	46	0	79	0	35	0	0	0	0	0	821	3117
8:15 AM	20	279	0	1	0	388	42	0	84	0	41	0	0	0	0	0	855	3307
8:30 AM	20	253	0	1	0	301	34	0	84	0	51	0	0	0	0	0	744	3254
8:45 AM	33	220	0	0	0	285	35	0	85	0	31	0	0	0	0	0	689	3109

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	80	1116	0	4	0	1552	168	0	336	0	164	0	0	0	0	0	3420
Heavy Trucks	12	20	0		0	44	8		8	0	20		0	0	0		112
Pedestrians		0				0				0				8			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

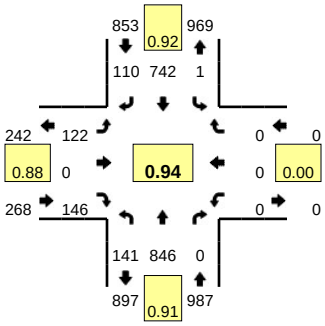
Method for determining peak hour: Total Entering Volume

LOCATION: NC 86 (MLK) -- Eubanks Rd

QC JOB #: 14424317

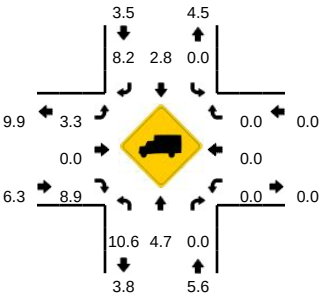
CITY/STATE: Chapel Hill, NC

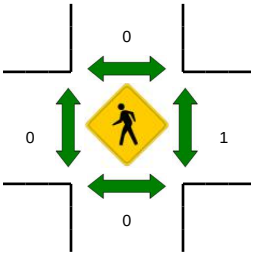
DATE: Thu, May 25 2017

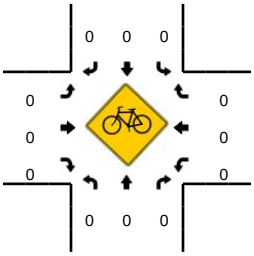


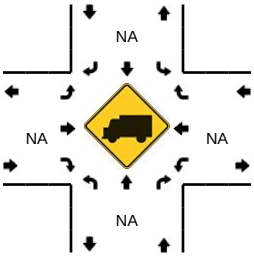
Peak-Hour: 12:15 PM -- 1:15 PM

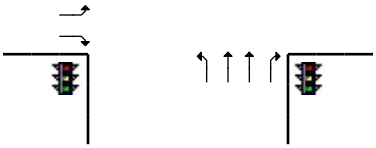
Peak 15-Min: 12:30 PM -- 12:45 PM

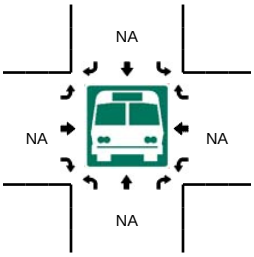












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Eubanks Rd (Eastbound)				Eubanks Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	37	189	0	1	0	173	26	0	30	0	38	0	0	0	0	0	494	
11:45 AM	31	191	0	2	0	156	22	0	36	0	33	0	0	0	0	0	471	
12:00 PM	31	182	0	1	0	171	24	1	24	0	34	0	0	0	0	0	468	
12:15 PM	26	209	0	4	0	173	34	1	27	0	39	0	0	0	0	0	513	1946
12:30 PM	41	226	0	3	0	190	22	0	33	0	43	0	0	0	0	0	558	2010
12:45 PM	35	212	0	1	0	182	18	0	34	0	30	0	0	0	0	0	512	2051
1:00 PM	30	199	0	1	0	197	36	0	28	0	34	0	0	0	0	0	525	2108
1:15 PM	29	204	0	1	0	155	35	0	35	0	28	0	0	0	0	0	487	2082

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	164	904	0	12	0	760	88	0	132	0	172	0	0	0	0	0	2232
Heavy Trucks	24	40	0		0	16	12		0	0	8		0	0	0		100
Pedestrians		0				0				0				4			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

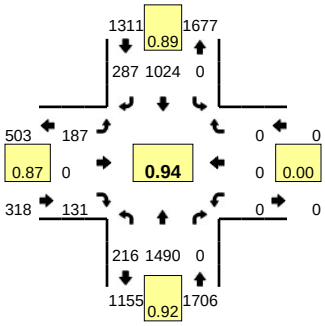
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

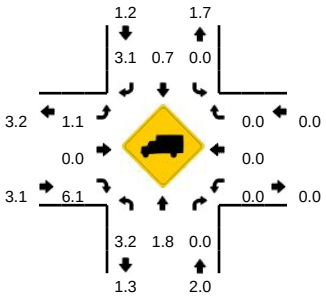
Method for determining peak hour: Total Entering Volume

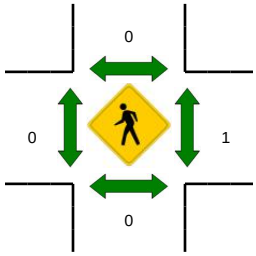
LOCATION: NC 86 (MLK) -- Eubanks Rd
CITY/STATE: Chapel Hill, NC

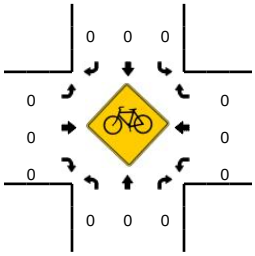
QC JOB #: 14424318
DATE: Thu, May 25 2017

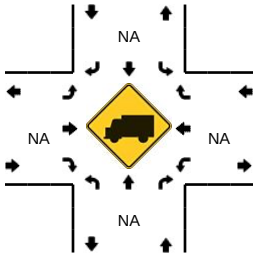


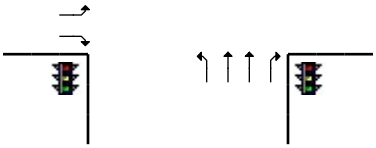
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

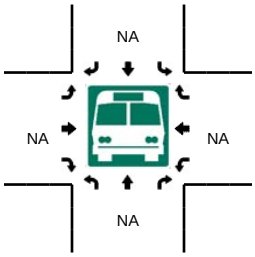












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Eubanks Rd (Eastbound)				Eubanks Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	40	341	0	0	0	202	41	0	43	0	28	0	0	0	0	0	695	
4:15 PM	51	379	0	0	0	196	35	0	29	0	26	0	0	0	0	0	716	
4:30 PM	43	381	0	0	0	206	59	0	48	0	38	0	0	0	0	0	775	
4:45 PM	54	357	0	0	0	217	49	0	36	0	39	0	0	0	0	0	752	2938
5:00 PM	43	404	0	0	0	218	56	0	48	0	33	0	0	0	0	0	802	3045
5:15 PM	59	422	0	0	0	250	81	0	48	0	26	0	0	0	0	0	886	3215
5:30 PM	61	379	0	0	0	264	72	0	51	0	42	0	0	0	0	0	869	3309
5:45 PM	53	285	0	0	0	292	78	0	40	0	30	0	0	0	0	0	778	3335

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	236	1688	0	0	0	1000	324	0	192	0	104	0	0	0	0	0	3544
Heavy Trucks	8	20	0		0	12	12		0	0	4		0	0	0		56
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

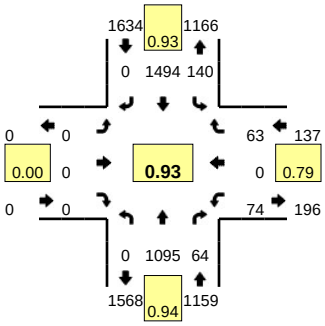
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

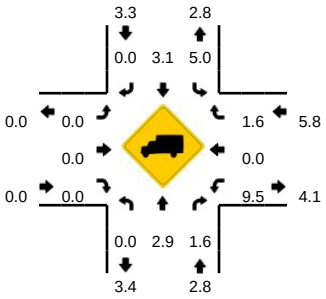
Method for determining peak hour: Total Entering Volume

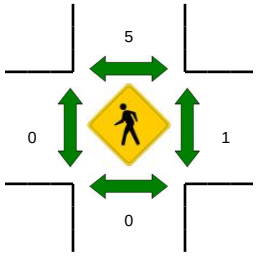
LOCATION: NC 86 (MLK) -- Perkins Dr
CITY/STATE: Orange, NC

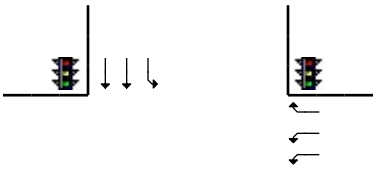
QC JOB #: 14424319
DATE: Thu, May 25 2017

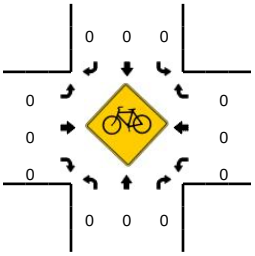


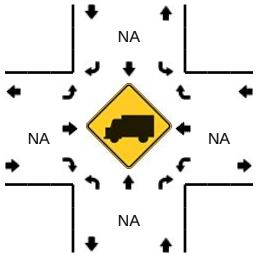
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

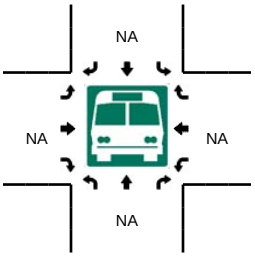












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Perkins Dr (Eastbound)				Perkins Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	182	10	0	15	182	0	3	0	0	0	0	6	0	13	0	411	
7:15 AM	0	220	10	0	23	270	0	0	0	0	0	0	22	0	11	0	556	
7:30 AM	0	240	14	0	27	341	0	0	0	0	0	0	19	0	18	0	659	
7:45 AM	0	284	12	0	38	359	0	4	0	0	0	0	26	0	6	0	729	2355
8:00 AM	0	287	20	0	33	392	0	1	0	0	0	0	10	0	15	0	758	2702
8:15 AM	0	284	18	0	34	402	0	3	0	0	0	0	19	0	24	0	784	2930
8:30 AM	0	236	12	0	24	324	0	3	0	0	0	0	16	0	11	0	626	2897
8:45 AM	0	233	19	0	37	277	0	2	0	0	0	0	26	0	18	0	612	2780

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1136	72	0	136	1608	0	12	0	0	0	0	76	0	96	0	3136
Heavy Trucks	0	32	4		8	60	0		0	0	0		12	0	0		116
Pedestrians		0				8				0				4			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

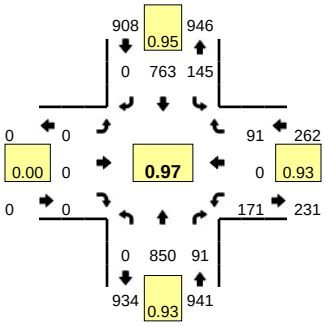
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

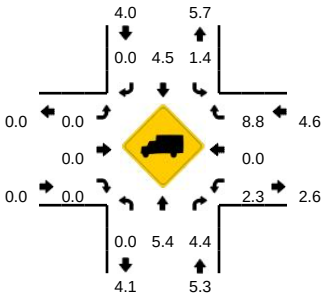
Method for determining peak hour: Total Entering Volume

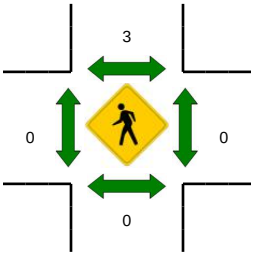
LOCATION: NC 86 (MLK) -- Perkins Dr
CITY/STATE: Orange, NC

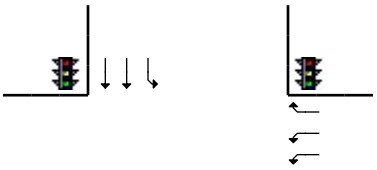
QC JOB #: 14424320
DATE: Thu, May 25 2017

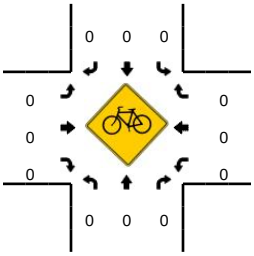


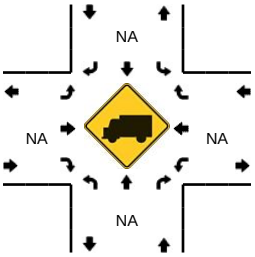
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:30 PM -- 12:45 PM

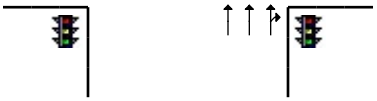


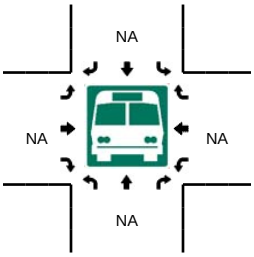












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Perkins Dr (Eastbound)				Perkins Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	193	25	0	28	166	0	4	0	0	0	0	45	0	14	0	475	
11:45 AM	0	201	24	0	35	165	0	3	0	0	0	0	26	0	13	0	467	
12:00 PM	0	171	18	0	33	152	0	3	0	0	0	0	36	0	26	0	439	
12:15 PM	0	225	17	0	31	206	0	1	0	0	0	0	36	0	24	0	540	1921
12:30 PM	0	224	29	0	41	179	0	0	0	0	0	0	49	0	22	0	544	1990
12:45 PM	0	213	20	0	38	189	0	3	0	0	0	0	44	0	26	0	533	2056
1:00 PM	0	188	25	0	30	189	0	1	0	0	0	0	42	0	19	0	494	2111
1:15 PM	0	216	23	0	36	158	0	4	0	0	0	0	34	0	22	0	493	2064

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	896	116	0	164	716	0	0	0	0	0	0	196	0	88	0	2176
Heavy Trucks	0	44	0		0	20	0		0	0	0		4	0	16		84
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

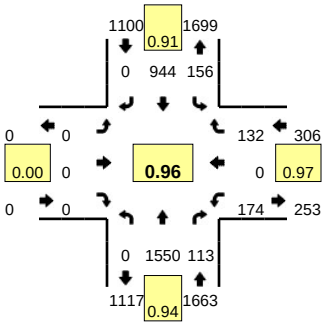
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

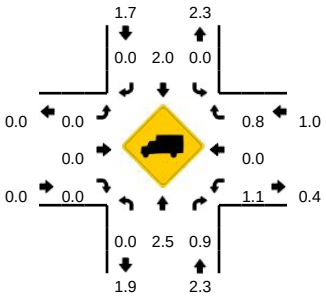
Method for determining peak hour: Total Entering Volume

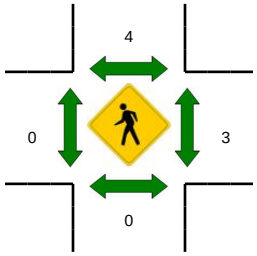
LOCATION: NC 86 (MLK) -- Perkins Dr
CITY/STATE: Orange, NC

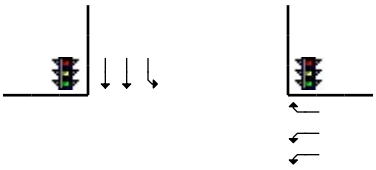
QC JOB #: 14424321
DATE: Thu, May 25 2017

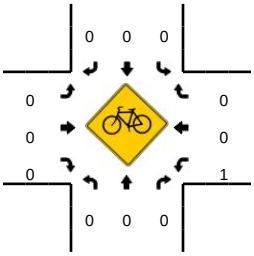


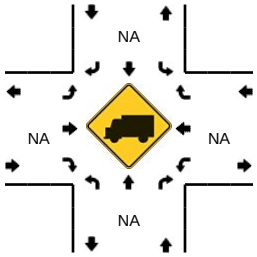
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

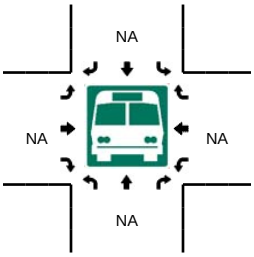












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Perkins Dr (Eastbound)				Perkins Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	364	31	0	33	190	0	4	0	0	0	0	35	0	27	0	684	
4:15 PM	0	356	35	0	36	187	0	1	0	0	0	0	36	0	27	0	678	
4:30 PM	0	389	32	0	29	203	0	5	0	0	0	0	37	0	25	0	720	
4:45 PM	0	359	27	0	24	226	0	5	0	0	0	0	46	0	31	1	719	2801
5:00 PM	0	393	35	0	38	215	0	7	0	0	0	0	42	0	34	0	764	2881
5:15 PM	0	422	27	0	31	243	0	0	0	0	0	0	37	0	36	0	796	2999
5:30 PM	0	376	24	0	46	260	0	5	0	0	0	0	48	0	31	0	790	3069
5:45 PM	0	294	23	0	36	281	0	1	0	0	0	0	34	0	20	0	689	3039

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	0	1688	108	0	124	972	0	0	0	0	0	0	148	0	144	0	3184
Heavy Trucks	0	20	4		0	12	0		0	0	0		4	0	4		44
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

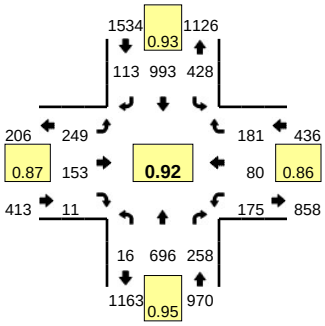
Type of peak hour being reported: Intersection Peak

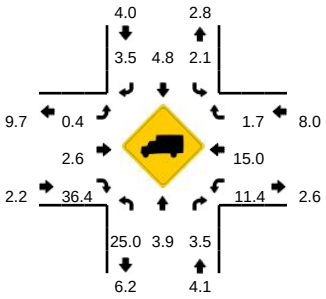
Method for determining peak hour: Total Entering Volume

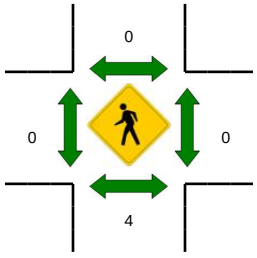
LOCATION: NC 86 (MLK) -- Weaver Dairy Rd
CITY/STATE: Orange, NC

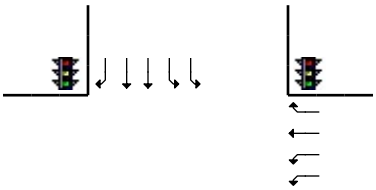
QC JOB #: 14424322
DATE: Thu, May 25 2017

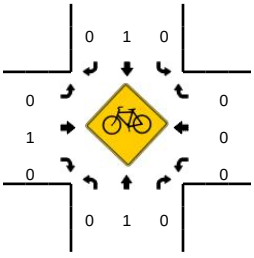
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:15 AM -- 8:30 AM

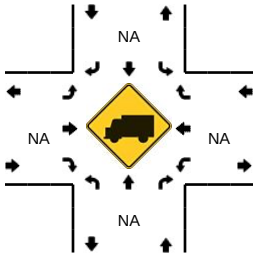


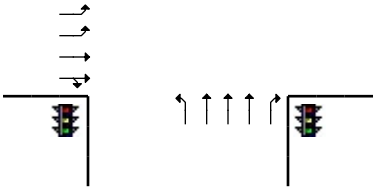


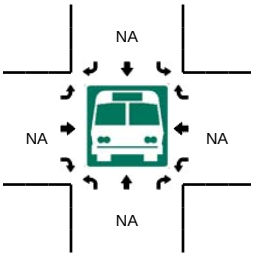












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Weaver Dairy Rd (Eastbound)				Weaver Dairy Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	1	123	21	0	27	150	18	1	25	10	2	0	15	5	36	2	436	
7:15 AM	2	152	20	0	58	204	30	0	48	20	2	0	9	7	28	3	583	
7:30 AM	0	170	40	0	71	249	31	0	67	26	3	0	16	7	32	4	716	
7:45 AM	6	188	48	1	98	252	34	0	68	39	3	0	25	12	40	5	819	2554
8:00 AM	3	185	62	1	103	257	31	0	66	34	5	0	42	25	42	2	858	2976
8:15 AM	1	169	84	1	139	248	29	0	75	49	1	0	43	21	43	7	910	3303
8:30 AM	3	154	64	0	88	236	19	0	40	31	2	0	46	22	56	5	766	3353
8:45 AM	2	155	52	1	86	208	23	2	56	37	2	0	38	9	37	6	714	3248

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	4	676	336	4	556	992	116	0	300	196	4	0	172	84	172	28	3640
Heavy Trucks	0	24	16		20	44	4		0	0	4		16	12	8		148
Pedestrians		8				0				0				0			8
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

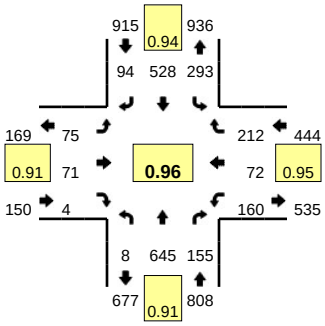
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

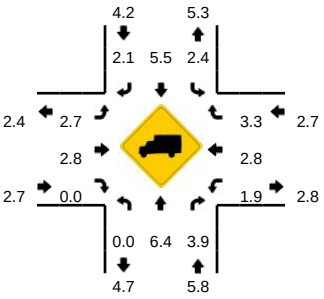
Method for determining peak hour: Total Entering Volume

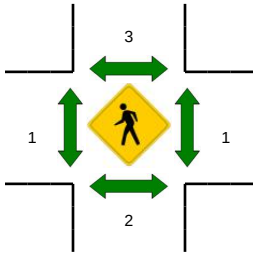
LOCATION: NC 86 (MLK) -- Weaver Dairy Rd
CITY/STATE: Orange, NC

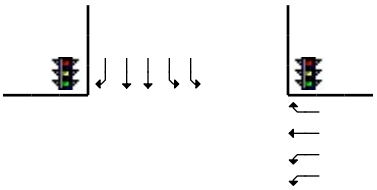
QC JOB #: 14424323
DATE: Thu, May 25 2017

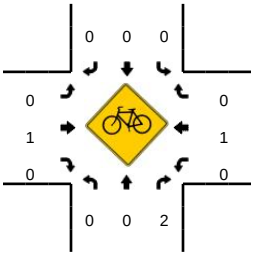


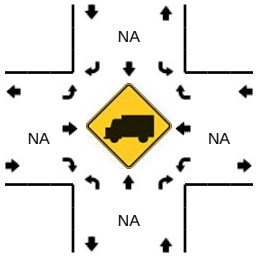
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

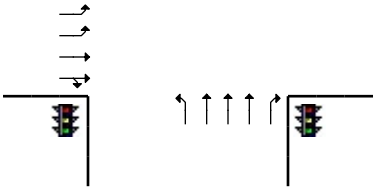


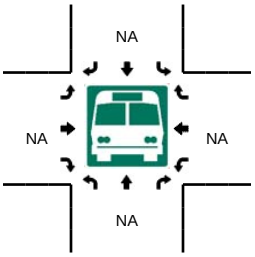












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Weaver Dairy Rd (Eastbound)				Weaver Dairy Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	5	140	34	3	49	136	22	0	24	21	2	0	37	15	52	2	542	
11:45 AM	6	150	41	1	51	124	25	0	21	7	5	0	39	18	50	5	543	
12:00 PM	6	122	43	3	42	116	24	1	19	16	1	0	50	19	42	11	515	
12:15 PM	0	179	31	1	72	153	18	1	8	18	2	0	29	21	54	1	588	2188
12:30 PM	1	178	41	1	80	114	23	1	20	19	1	0	44	19	51	9	602	2248
12:45 PM	2	148	48	1	75	129	37	0	28	17	0	0	32	20	59	8	604	2309
1:00 PM	0	140	35	2	62	132	16	2	19	17	1	0	35	12	48	2	523	2317
1:15 PM	1	158	49	2	69	118	23	4	21	17	3	0	41	20	57	5	588	2317

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	8	592	192	4	300	516	148	0	112	68	0	0	128	80	236	32	2416
Heavy Trucks	0	52	16		0	12	0		4	0	0		0	0	4		88
Pedestrians		0				0				0				4			4
Bicycles	0	0	1		0	0	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 6/6/2017 9:27 AM

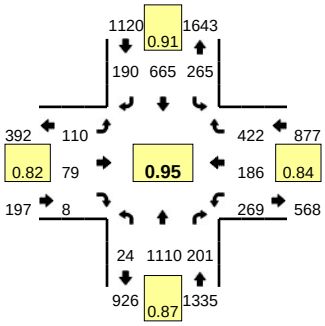
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

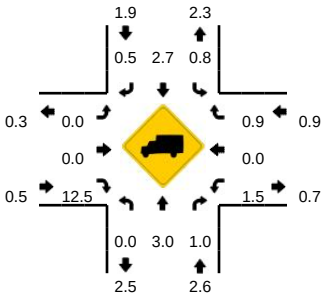
Method for determining peak hour: Total Entering Volume

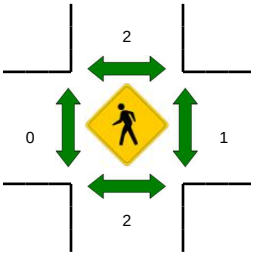
LOCATION: NC 86 (MLK) -- Weaver Dairy Rd
CITY/STATE: Orange, NC

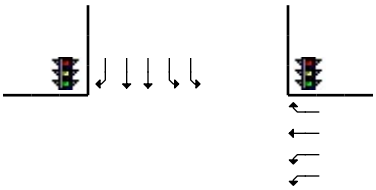
QC JOB #: 14424324
DATE: Thu, May 25 2017

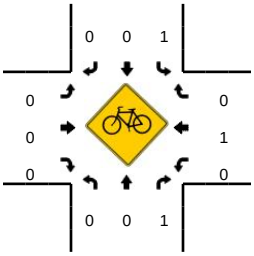


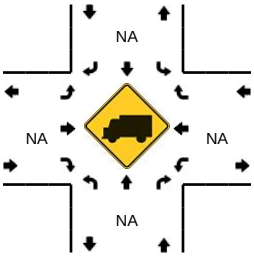
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

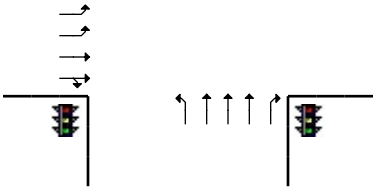


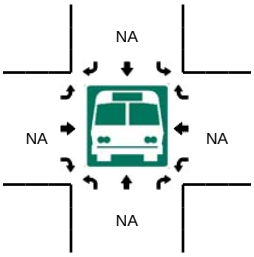












15-Min Count Period Beginning At	NC 86 (MLK) (Northbound)				NC 86 (MLK) (Southbound)				Weaver Dairy Rd (Eastbound)				Weaver Dairy Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	3	271	44	2	64	136	30	2	27	32	2	0	71	29	102	4	819	
4:15 PM	2	254	50	2	51	137	32	0	44	24	6	0	55	28	92	3	780	
4:30 PM	6	293	33	2	50	139	40	1	34	31	4	0	52	39	105	9	838	
4:45 PM	5	249	34	5	78	171	34	0	20	15	2	0	49	37	95	5	799	3236
5:00 PM	3	269	57	2	53	139	51	0	38	24	1	0	72	52	128	10	899	3316
5:15 PM	6	319	61	0	67	183	41	0	28	20	1	0	51	47	97	6	927	3463
5:30 PM	2	273	49	1	66	172	64	1	24	20	4	0	73	50	102	3	904	3529
5:45 PM	2	229	51	1	74	181	61	1	25	13	3	0	42	28	55	6	772	3502

Peak 15-Min Flowrates	Northbound				Southbound				Eastbound				Westbound				Total
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	
All Vehicles	24	1276	244	0	268	732	164	0	112	80	4	0	204	188	388	24	3708
Heavy Trucks	0	16	4		8	12	0		0	0	0		4	0	0		44
Pedestrians		8				4				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

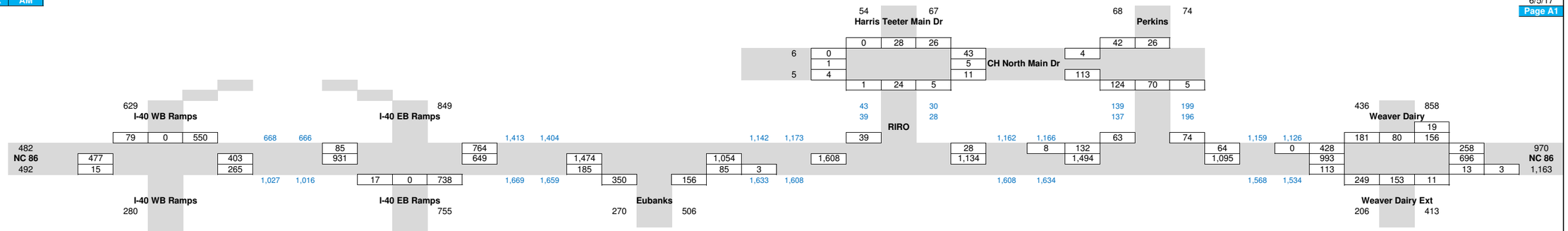
Report generated on 6/6/2017 9:27 AM

SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Appendix C – Traffic Volume Development Spreadsheets

2017 Count Data
Peak | AM

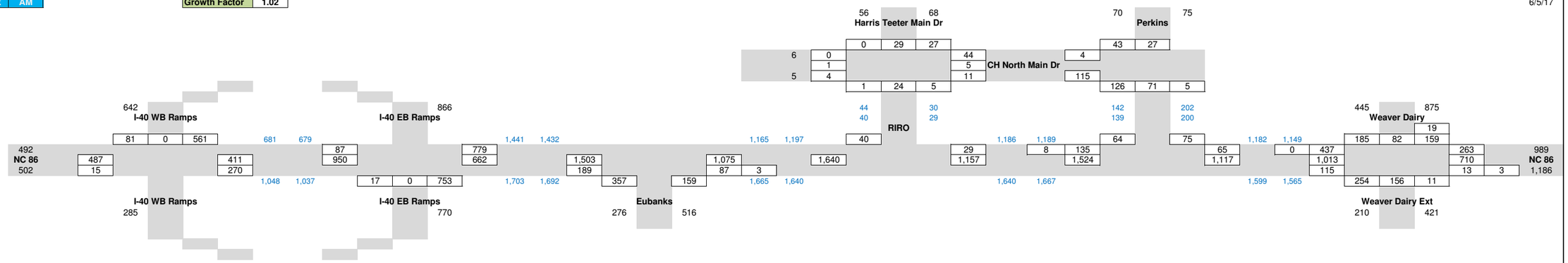
Harris Teeter Expansion TIS
6/5/17
Page A1



2021 Ambient Growth Volumes
Peak | AM

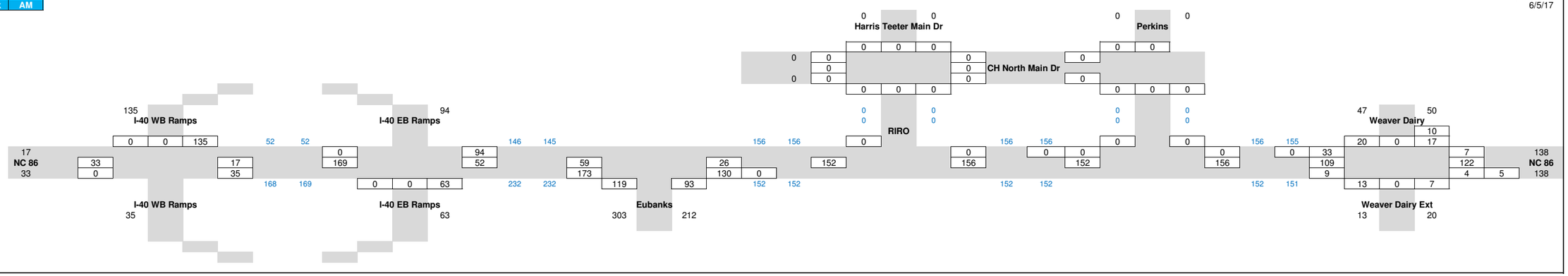
Growth Rate/Yr	0.5%
Growth Factor	1.02

Harris Teeter Expansion TIS
6/5/17



Total Background Traffic Volumes
Peak | AM

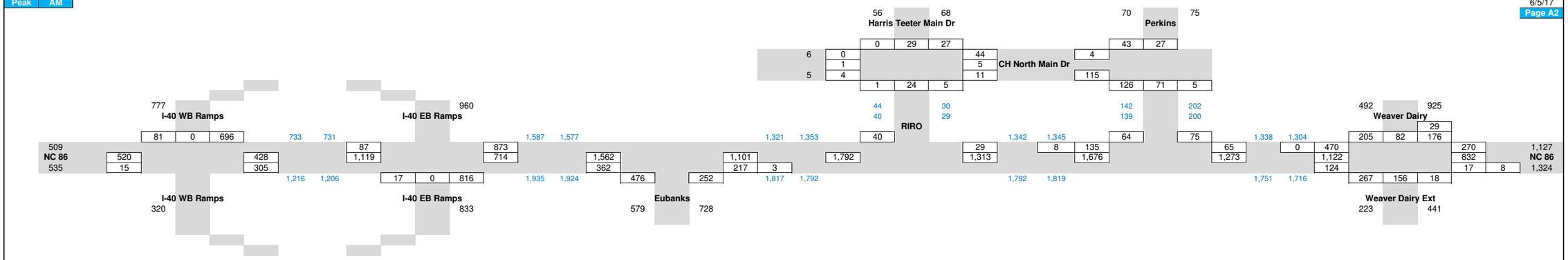
Harris Teeter Expansion TIS
6/5/17



2021 Traffic Volumes Without Site Redevelopment

Peak | AM

Harris Teeter Expansion TIS
6/5/17
Page A2

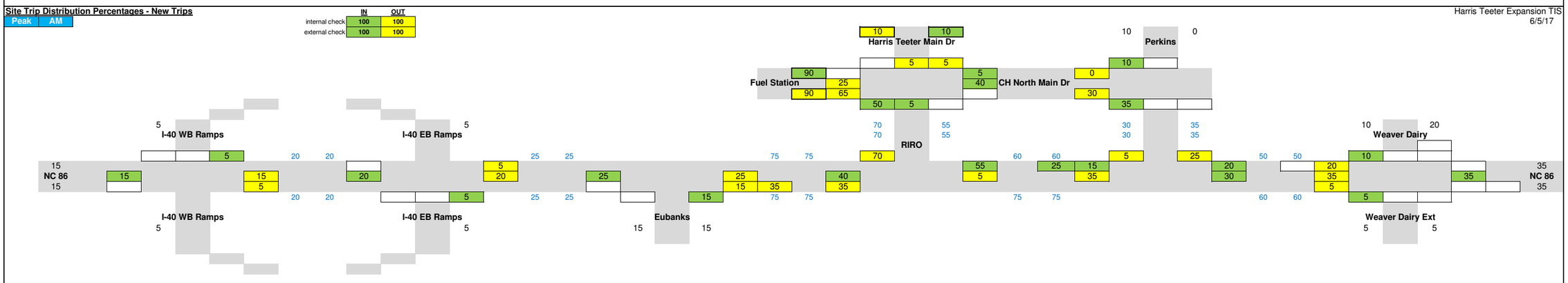


Site Trip Distribution Percentages - New Trips

Peak | AM

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
internal check	100	100
external check	100	100

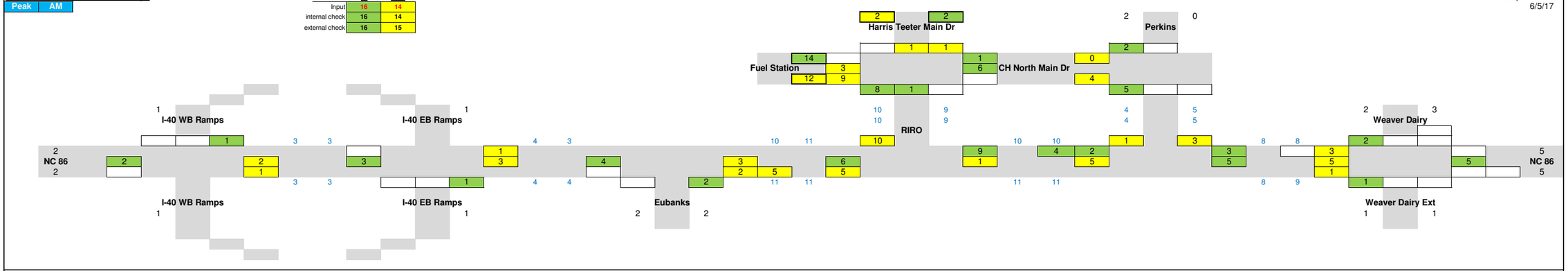


Site Traffic Assignment - New Trips

Peak | AM

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
Input	16	14
internal check	16	14
external check	16	15

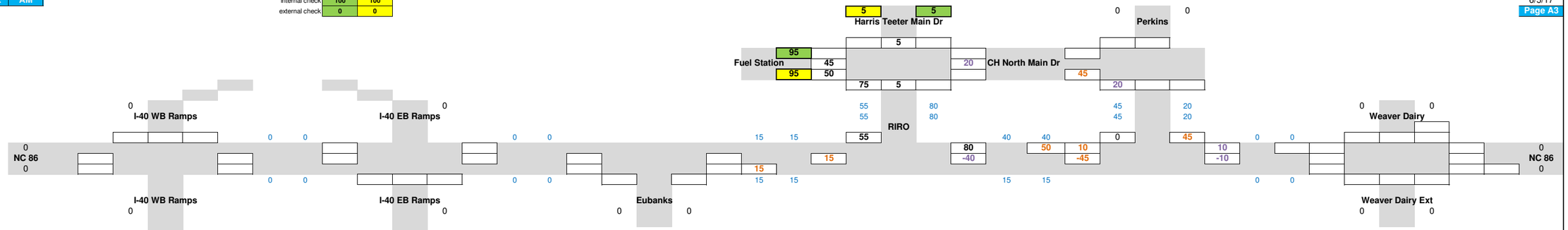


Site Trip Distribution Percentages - Pass-By Trips

Peak | AM

Harris Teeter Expansion TIS
6/5/17
Page A3

	IN	OUT
internal check	100	100
external check	0	0

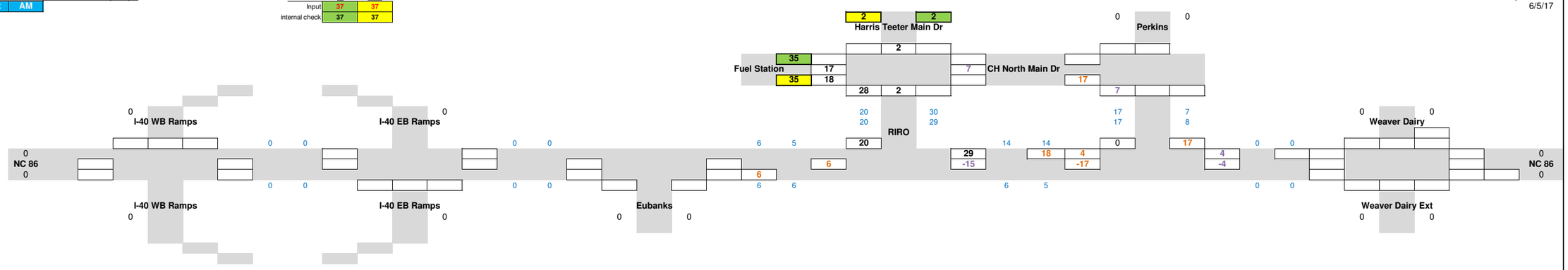


Site Traffic Assignment - Pass-By Trips

Peak | AM

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
Input	37	37
internal check	37	37

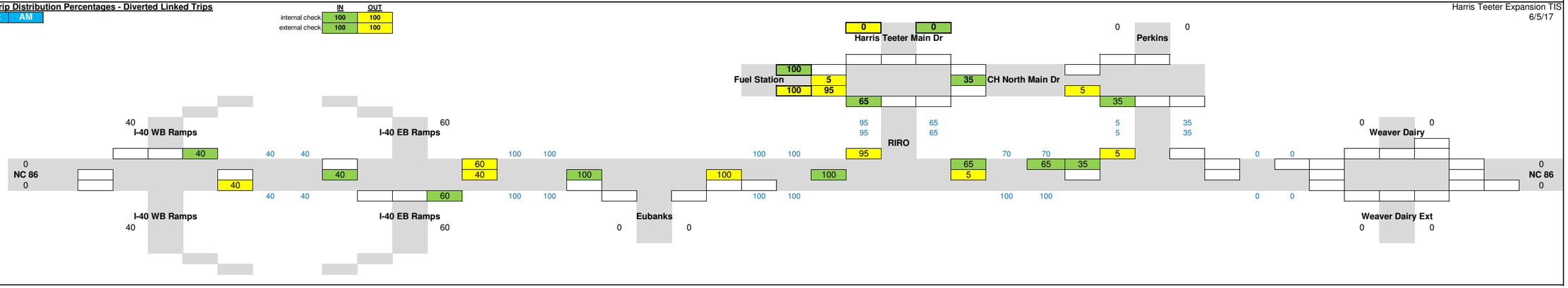


Site Trip Distribution Percentages - Diverted Linked Trips

Peak | AM

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
internal check	100	100
external check	100	100

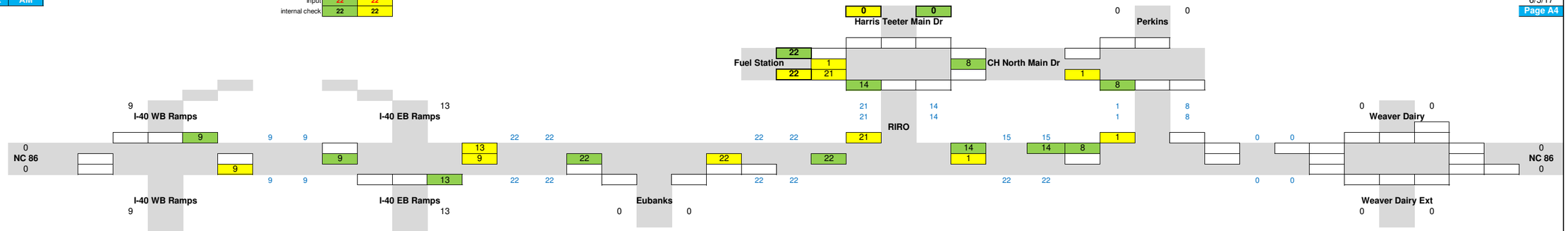


Site Traffic Assignment - Diverted Linked Trips

Peak | AM

	IN	OUT
Input	22	22
internal check	22	22

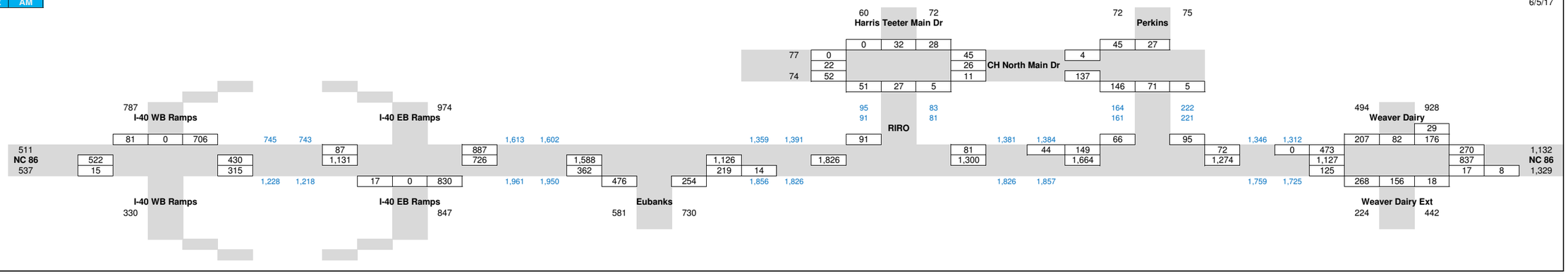
Harris Teeter Expansion TIS
6/5/17
Page A4



2021 Traffic Volumes With Site Redevelopment

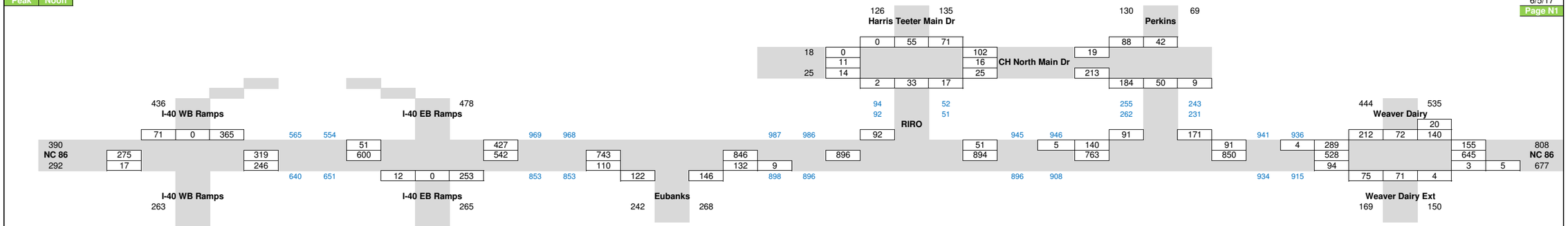
Peak | AM

Harris Teeter Expansion TIS
6/5/17



2017 Count Data
Peak | Noon

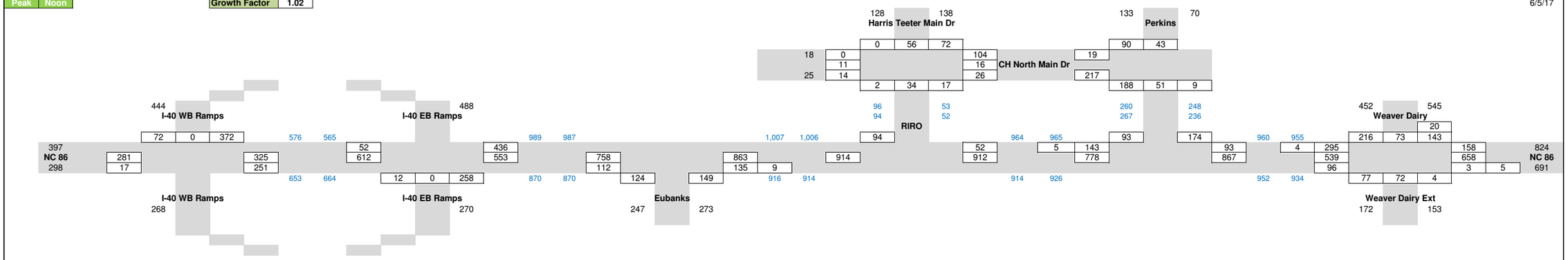
Harris Teeter Expansion TIS
6/5/17
Page N1



2021 Ambient Growth Volumes
Peak | Noon

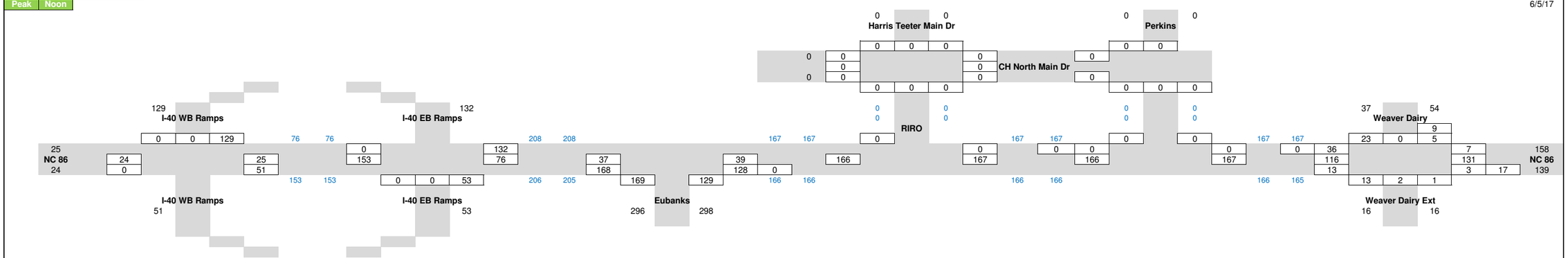
Growth Rate/Yr	0.5%
Growth Factor	1.02

Harris Teeter Expansion TIS
6/5/17



Total Background Traffic Volumes
Peak | Noon

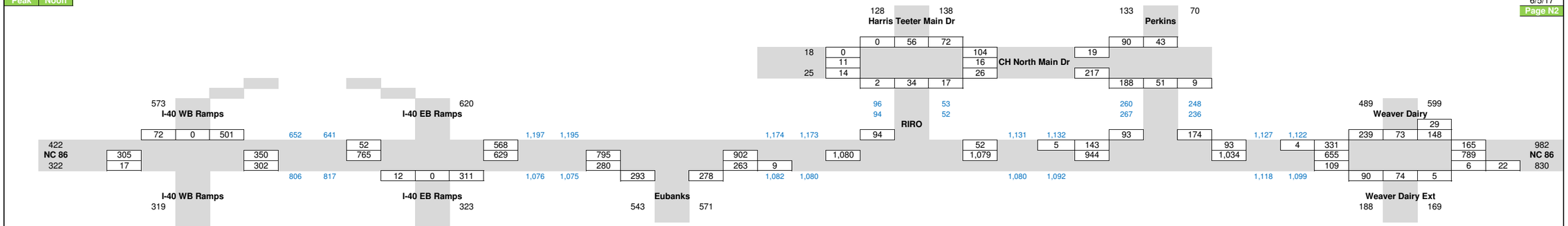
Harris Teeter Expansion TIS
6/5/17



2021 Traffic Volumes Without Site Redevelopment

Peak | Noon

Harris Teeter Expansion TIS
6/5/17
Page N2

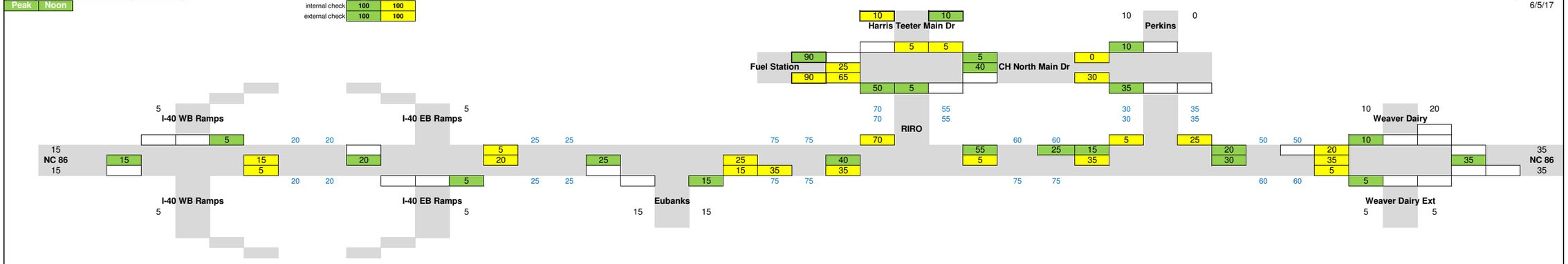


Site Trip Distribution Percentages - New Trips

Peak | Noon

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
internal check	100	100
external check	100	100

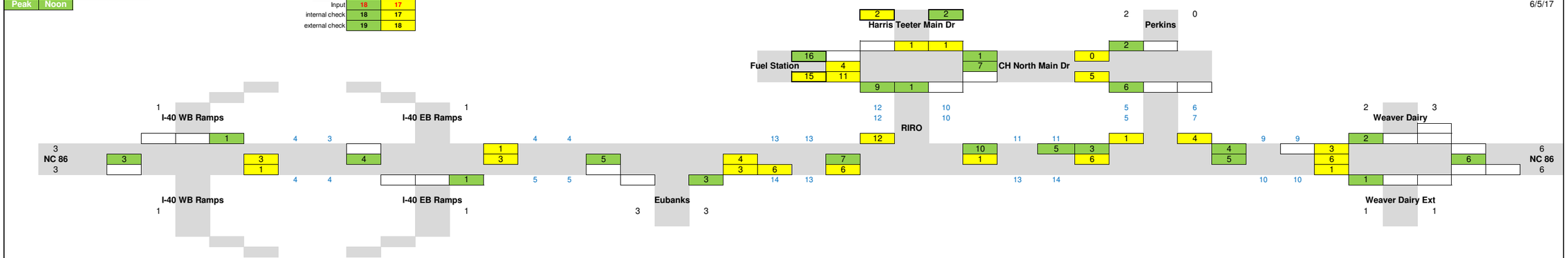


Site Traffic Assignment - New Trips

Peak | Noon

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
Input	18	17
internal check	18	17
external check	19	18

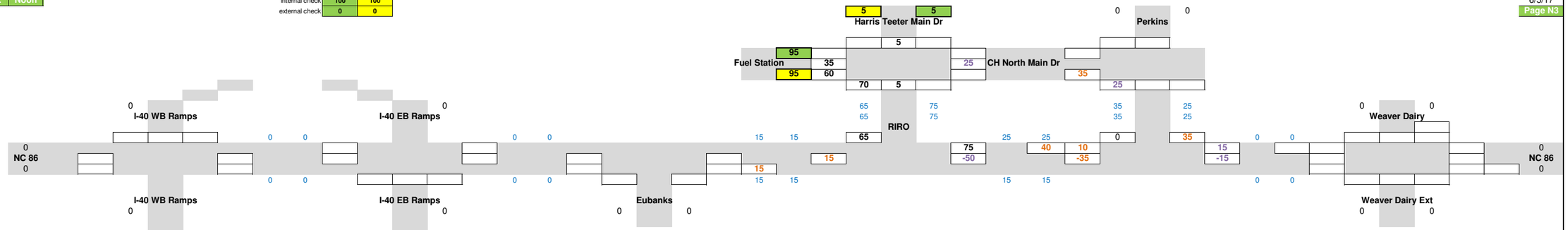


Site Trip Distribution Percentages - Pass-By Trips

Peak | Noon

Harris Teeter Expansion TIS
6/5/17
Page N3

	IN	OUT
internal check	100	100
external check	0	0

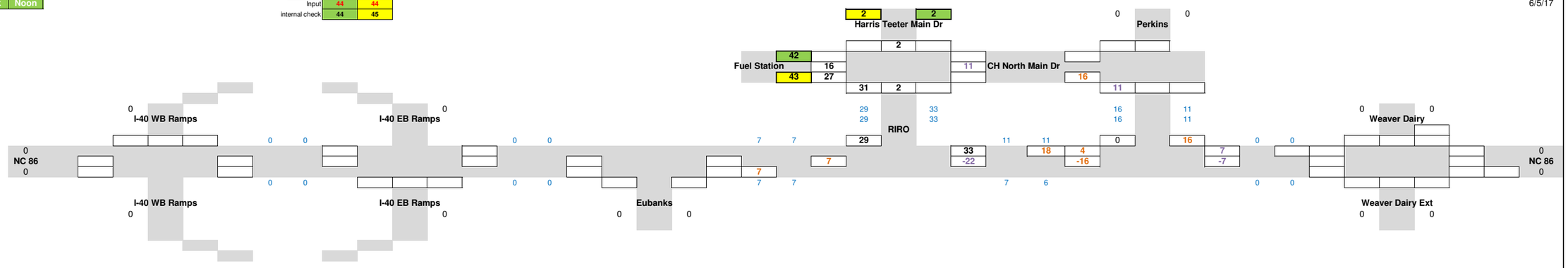


Site Traffic Assignment - Pass-By Trips

Peak | Noon

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
Input	44	44
internal check	44	45

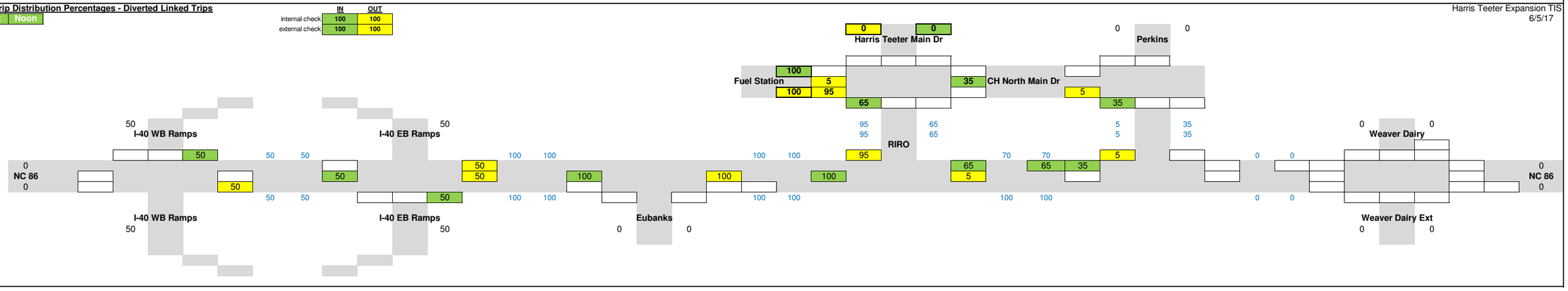


Site Trip Distribution Percentages - Diverted Linked Trips

Peak | Noon

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
internal check	100	100
external check	100	100

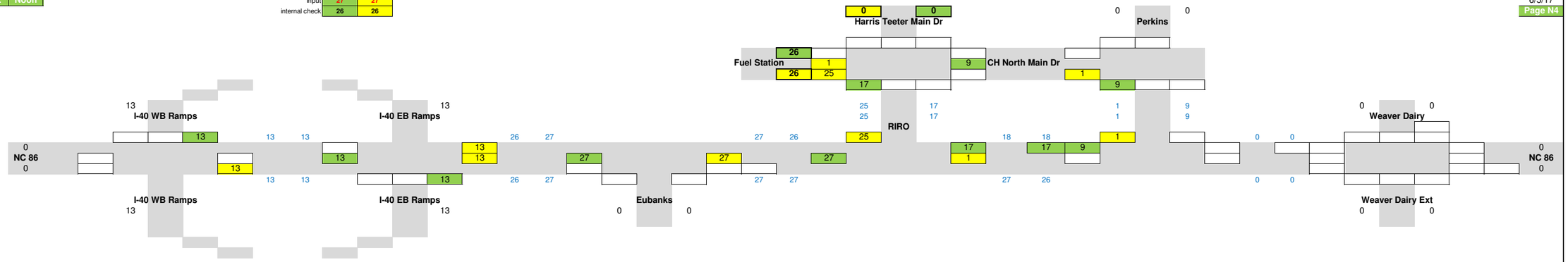


Site Traffic Assignment - Diverted Linked Trips

Peak | Noon

Harris Teeter Expansion TIS
6/5/17
Page N4

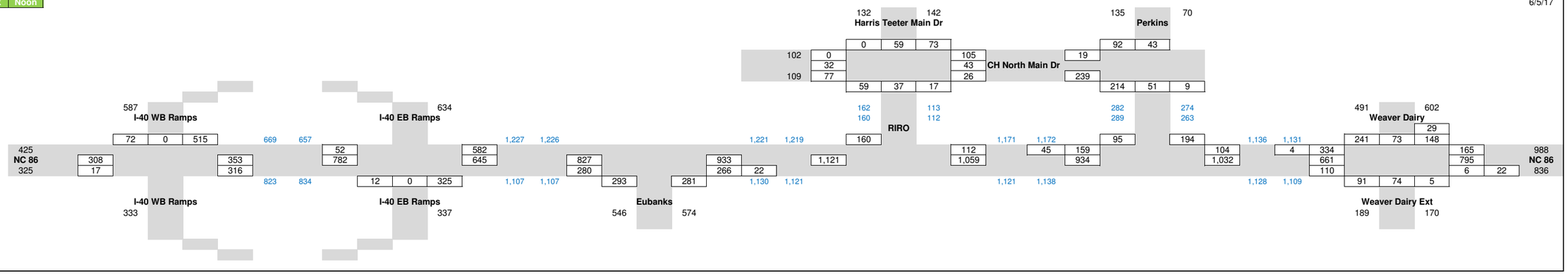
	IN	OUT
Input	27	27
internal check	26	26



2021 Traffic Volumes With Site Redevelopment

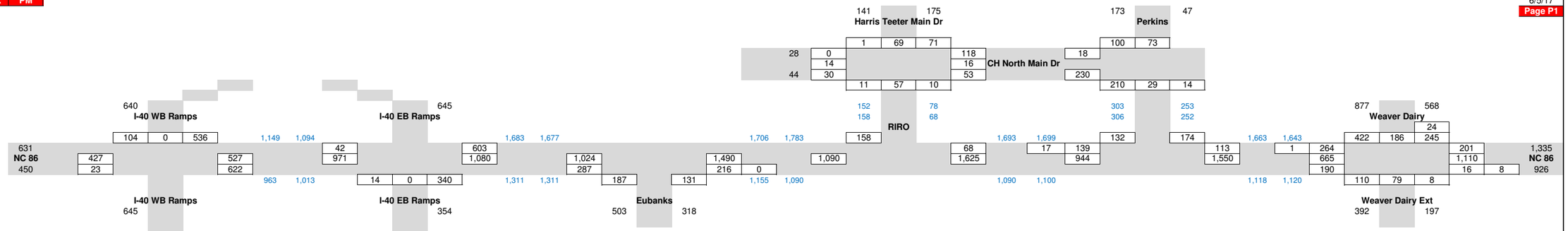
Peak | Noon

Harris Teeter Expansion TIS
6/5/17



2017 Count Data
Peak | **PM**

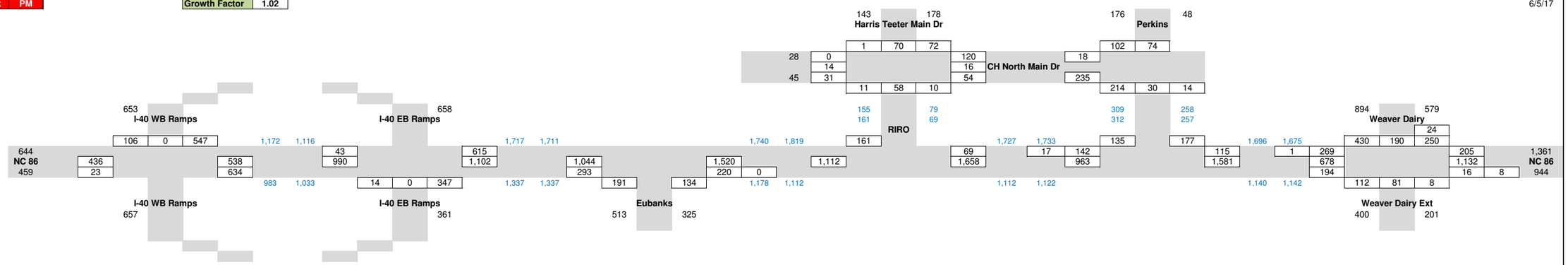
Harris Teeter Expansion TIS
6/5/17
Page P1



2021 Ambient Growth Volumes
Peak | **PM**

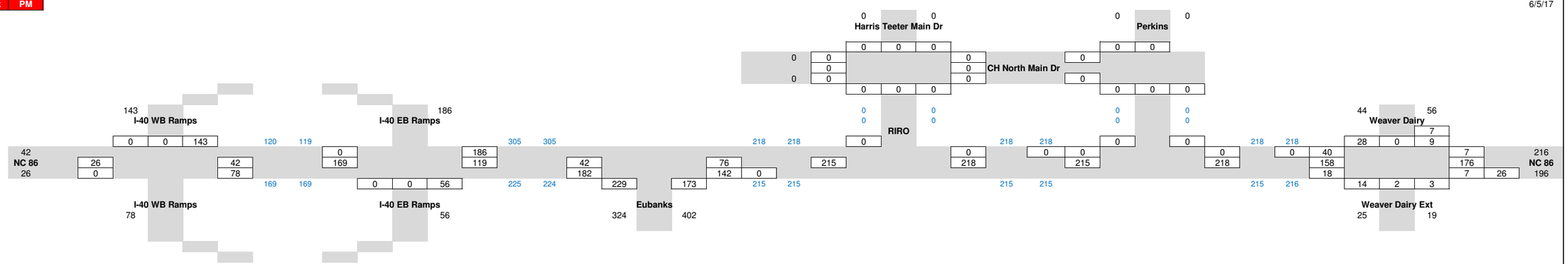
Growth Rate/Yr	0.5%
Growth Factor	1.02

Harris Teeter Expansion TIS
6/5/17



Total Background Traffic Volumes
Peak | **PM**

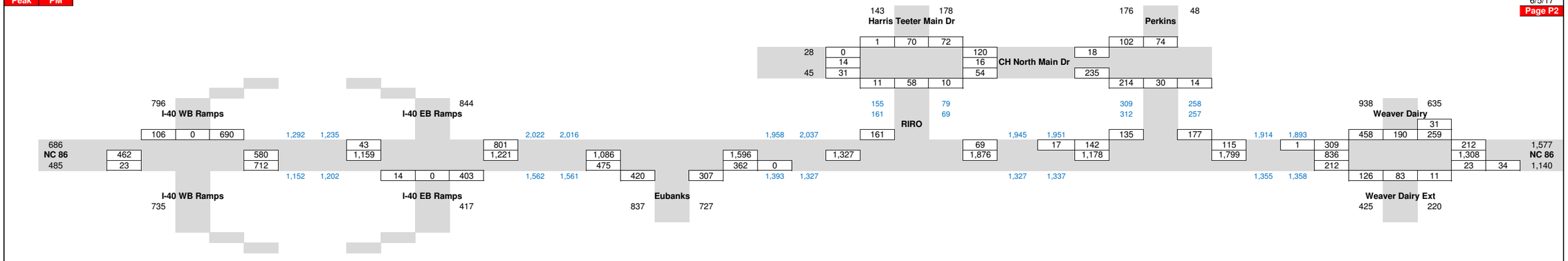
Harris Teeter Expansion TIS
6/5/17



2021 Traffic Volumes Without Site Redevelopment

Peak PM

Harris Teeter Expansion TIS
6/5/17

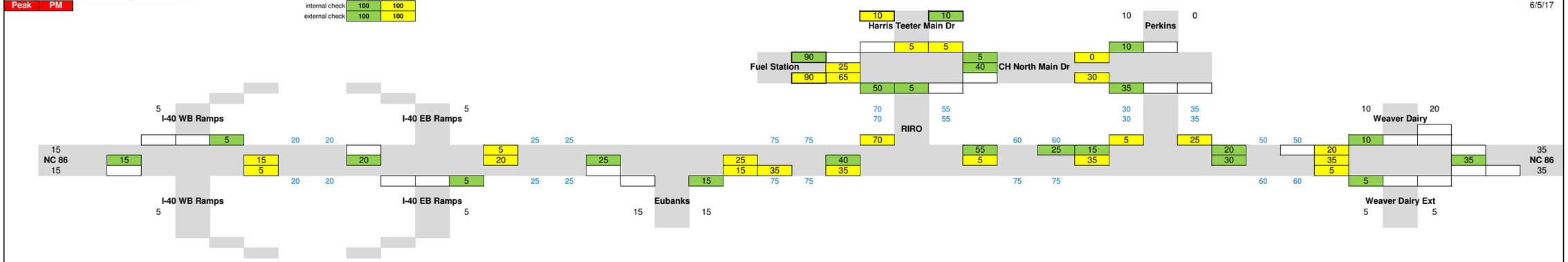


Site Trip Distribution Percentages - New Trips

Peak PM

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
internal check	100	100
external check	100	100

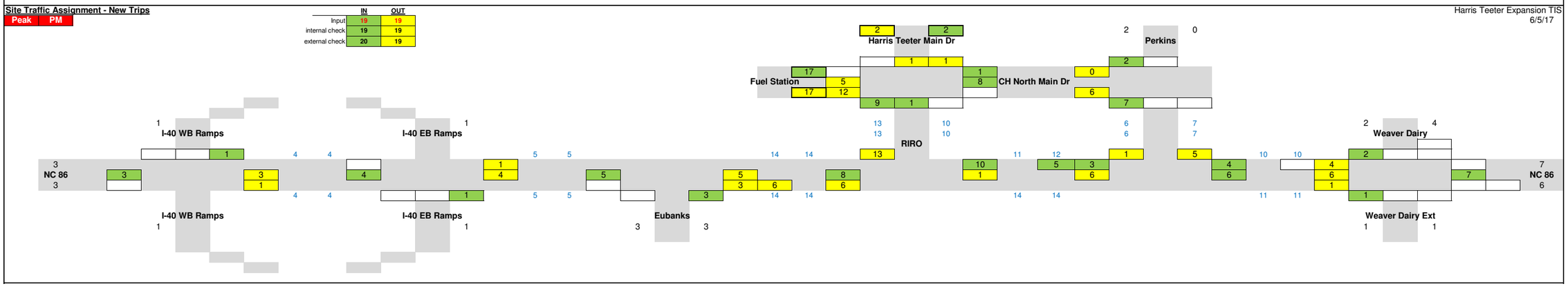


Site Traffic Assignment - New Trips

Peak PM

Harris Teeter Expansion TIS
6/5/17

	IN	OUT
Input	19	19
internal check	19	19
external check	20	19

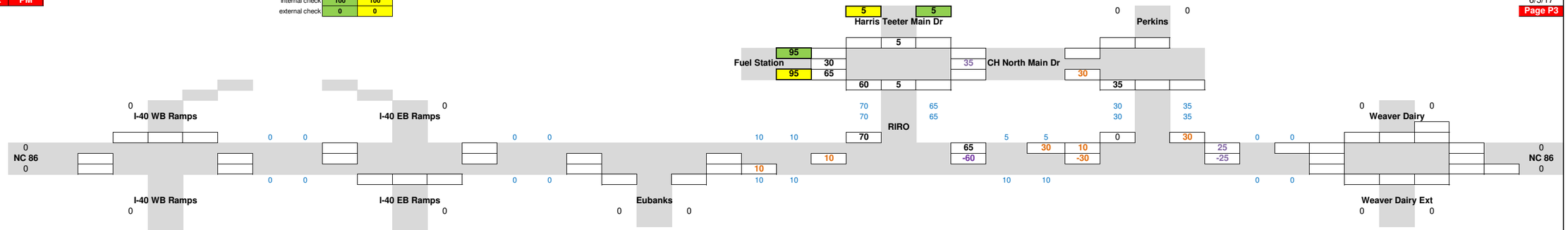


Site Trip Distribution Percentages - Pass-By Trips

Peak PM

	IN	OUT
internal check	100	100
external check	0	0

Harris Teeter Expansion TIS
6/5/17
Page P3

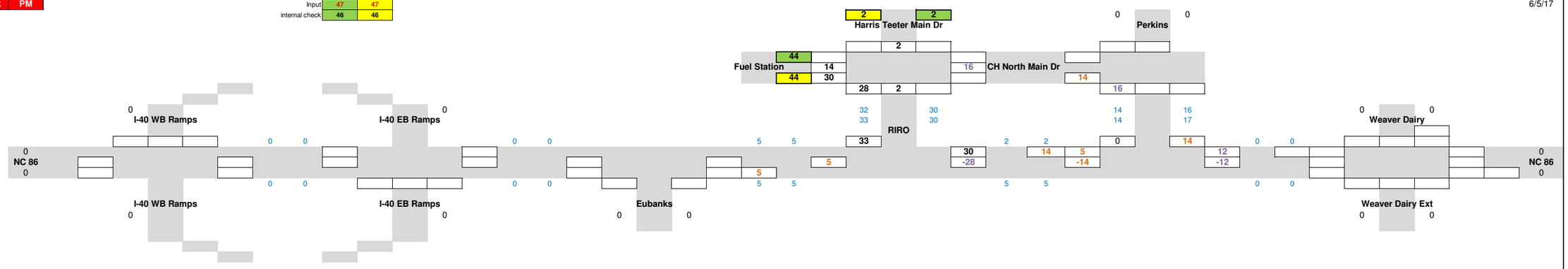


Site Traffic Assignment - Pass-By Trips

Peak PM

	IN	OUT
Input	47	47
internal check	46	46

Harris Teeter Expansion TIS
6/5/17

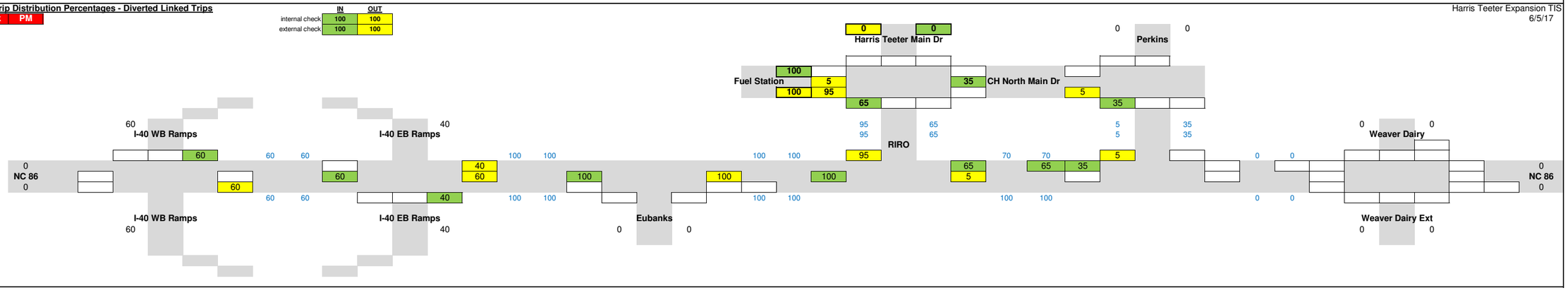


Site Trip Distribution Percentages - Diverted Linked Trips

Peak PM

	IN	OUT
internal check	100	100
external check	100	100

Harris Teeter Expansion TIS
6/5/17

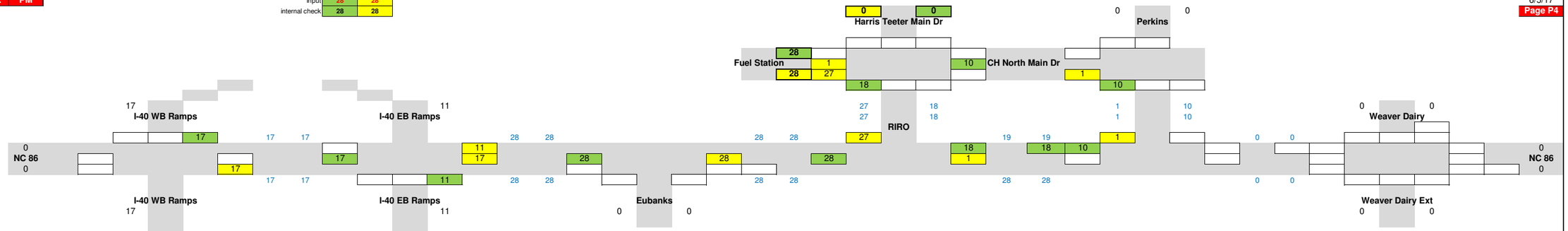


Site Traffic Assignment - Diverted Linked Trips

Peak PM

	IN	OUT
Input	28	28
internal check	28	28

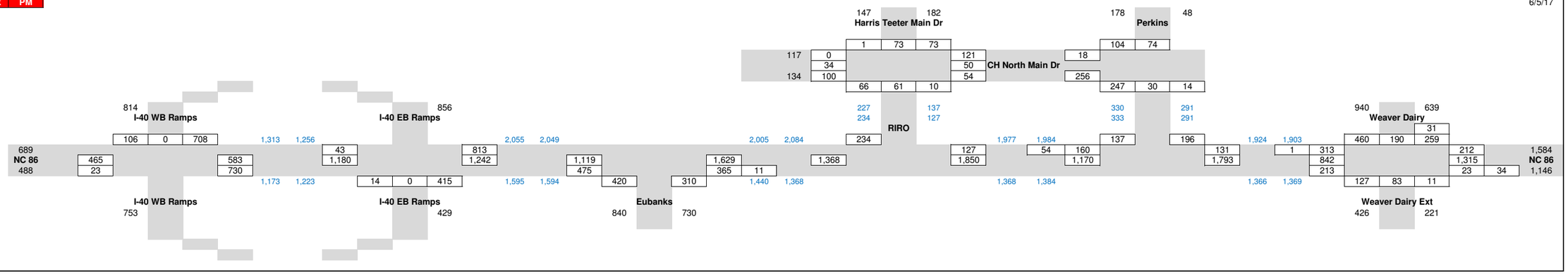
Harris Teeter Expansion TIS
6/5/17
Page P4



2021 Traffic Volumes With Site Redevelopment

Peak PM

Harris Teeter Expansion TIS
6/5/17



Appendix D – KHA Trip Generation Study Documentation

Kimley»Horn

MEMORANDUM

To: Whomever It May Concern

From: Steve Blakley, PE
Brady Finklea, PE
Kimley-Horn

Date: May 10, 2016

Subject: ***Harris Teeter Fuel Services Trip Generation***
Local Data Collection Summary

The purpose for this memorandum is to summarize the projected number of new site trips that would be generated by the addition of a customer-incentive-based fuel center on site of a Harris Teeter grocery store. Due to the incentives tied between the grocery store and fuel center, the internal capture rate between these two uses is higher than the standard Institute of Transportation Engineers' (ITE) internal capture rates typically applied between two general retail uses. Therefore, the projected number of new site trips, and thus the overall traffic impact, is less than the trip generation potential provided by the standard ITE rates.

This memorandum documents the local data collected at existing Harris Teeter fuel centers to determine an alternate internal capture rate that better reflects the trip behavior of these uses.

DATA COLLECTION

Local data was collected for the AM and PM peak hours in Myrtle Beach, South Carolina and Murrell's Inlet, South Carolina in July 2015 at existing Kroger (Harris Teeter is a division) grocery stores with operating fuel centers. The Myrtle Beach fuel center included 12 fueling positions while the Murrell's Inlet site included 10 fueling positions.

Based on the data collected at both sites, 30% of the fuel customers during the AM peak hour and 39% during the PM also entered the grocery store during the same trip. As expected, the internal capture rates collected between these two uses are higher than the standard ITE internal capture rates of 0% during the AM peak hour and 20% for the PM peak hour.

TRIP GENERATION COMPARISON

ITE does not provide data for AM peak-hour internal capture rates. A PM peak-hour internal capture rate of 20% is recommended by ITE between two general retail uses. Based on the local data collected, an AM peak-hour internal capture rate of 30% and PM peak-hour internal capture rate of 39% could be expected between the Harris Teeter and associated fuel center. The increase in rates seems reasonable based on the incentives that tie the two uses together.

The tables below show a comparison of the trip generation calculations between the internal capture rate methods. Table 1 shows the trip generation expected when using the local data collected for internal capture, while Table 2 shows the trip generation expected by using the standard ITE method for calculating internal capture. It should be noted that the local data was not collected for the full day; only the peak hours were collected to capture the typical periods in which traffic impacts are measured. The daily internal capture shown in Table 1 used the average internal capture percentage between the AM and PM peak hours (34.5%).

Table 1 - Trip Generation with LOCALLY-COLLECTED Internal Capture

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Gasoline Service Station with Convenience Market	14 FP	2,279	142	71	71	189	95	94
Fuel Center Subtotal		**2,279**	**142**	**71**	**71**	**189**	**95**	**94**
Internal Capture (30% AM, 39% PM)		**786**	**43**	**21**	**21**	**74**	**37**	**37**
Pass-By (62% AM, 56% PM)		**126**	**62**	**31**	**31**	**64**	**32**	**32**
Fuel Center Net New External Trips		**1,367**	**37**	**19**	**19**	**51**	**26**	**25**

Table 2 - Trip Generation with ITE Internal Capture

Land Use	Intensity	Daily	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Supermarket (Used for Internal Capture Only)	*100,000 SF*	*8,087*	*340*	*211*	*129*	*779*	*397*	*382*
Gasoline Service Station with Convenience Market	14 FP	2,279	142	71	71	189	95	94
Fuel Center Subtotal		**2,279**	**142**	**71**	**71**	**189**	**95**	**94**
Internal Capture (0% AM, 20% PM)		**661**	**0**	**0**	**0**	**38**	**19**	**19**
Pass-By (62% AM, 56% PM)		**172**	**88**	**44**	**44**	**84**	**42**	**42**
Fuel Center Net New External Trips		**1,446**	**54**	**27**	**27**	**67**	**34**	**33**

CONCLUSION

Due to the incentives tied between the grocery store and associated fuel center, the expected internal capture rate between these two uses is shown to be higher than the standard ITE internal capture rates typically applied between two general retail uses. Therefore, the projected number of new site trips, and thus the overall traffic impact, is less than the trip generation potential provided by the standard ITE rates. Specifically, based on Tables 1 and 2, the number of total new site trips is reduced by 31% and 24% during the AM and PM peak hours, respectively.

Should you have any questions or comments please do not hesitate to contact Steve Blakley or Brady Finklea at 704.333.5131.

Appendix E – SYNCHRO Signalized Intersection Analysis Output

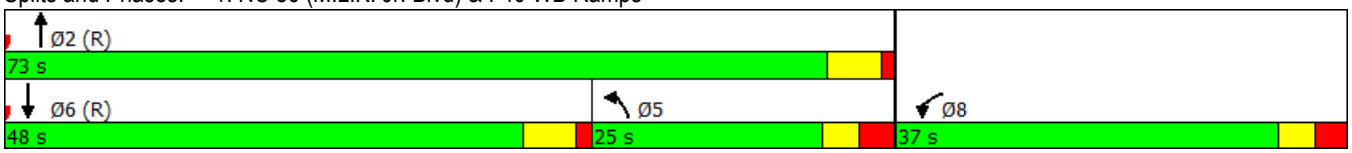
2017 Existing

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	550	0	79	265	403	0	0	477	15
Future Volume (vph)	0	0	0	550	0	79	265	403	0	0	477	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3350	0	1545	3400	1845	0	0	3470	1552
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3350	0	1545	3400	1845	0	0	3470	1552
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	0	0	0	598	0	86	294	448	0	0	542	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	598	0	86	294	448	0	0	542	17
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				37.0			25.0	73.0			48.0	
Total Split (%)				33.6%			22.7%	66.4%			43.6%	
Maximum Green (s)				31.2			18.9	67.3			42.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				24.1		110.0	20.0	75.9			50.9	110.0
Actuated g/C Ratio				0.22		1.00	0.18	0.69			0.46	1.00
v/c Ratio				0.82		0.06	0.48	0.35			0.34	0.01
Control Delay				50.2		0.1	26.6	2.7			20.3	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				50.2		0.1	26.6	2.7			20.3	0.0
LOS				D		A	C	A			C	A
Approach Delay					43.9			12.2			19.7	
Approach LOS					D			B			B	
Queue Length 50th (ft)				208		0	105	16			124	0
Queue Length 95th (ft)				254		0	138	22			178	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				974		1545	618	1273			1606	1552
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.61		0.06	0.48	0.35			0.34	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 25.2		Intersection LOS: C	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps



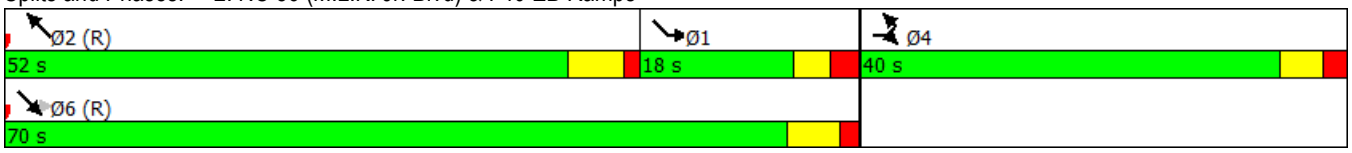
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	17	0	738	0	0	0	85	931	0	0	649	764
Future Volume (vph)	17	0	738	0	0	0	85	931	0	0	649	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1761	0	2773	0	0	0	1744	3487	0	0	3557	1591
Flt Permitted	0.950						0.325					
Satd. Flow (perm)	1761	0	2773	0	0	0	597	3487	0	0	3557	1591
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	19	0	820	0	0	0	92	1012	0	0	676	796
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	0	820	0	0	0	92	1012	0	0	676	796
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	40.0		40.0				18.0	70.0			52.0	
Total Split (%)	36.4%		36.4%				16.4%	63.6%			47.3%	
Maximum Green (s)	34.4		34.4				12.6	64.0			46.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	34.2		34.2				65.8	65.8			51.4	110.0
Actuated g/C Ratio	0.31		0.31				0.60	0.60			0.47	1.00
v/c Ratio	0.03		0.95				0.19	0.48			0.41	0.50
Control Delay	26.2		58.7				1.8	15.1			22.2	5.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Delay	0.0		1.8				0.0	0.3			0.2	0.0
Total Delay	26.2		60.5				1.8	15.4			22.4	5.0
LOS	C		E				A	B			C	A
Approach Delay		59.7						14.2			13.0	
Approach LOS		E						B			B	
Queue Length 50th (ft)	9		317				0	348			238	311
Queue Length 95th (ft)	27		#451				15	351			m301	m480
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	560		882				493	2087			1663	1591
Starvation Cap Reductn	0		0				0	0			339	0
Spillback Cap Reductn	0		18				0	418			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.03		0.95				0.19	0.61			0.51	0.50

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 10 (9%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.95			
Intersection Signal Delay: 24.9		Intersection LOS: C	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

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

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps



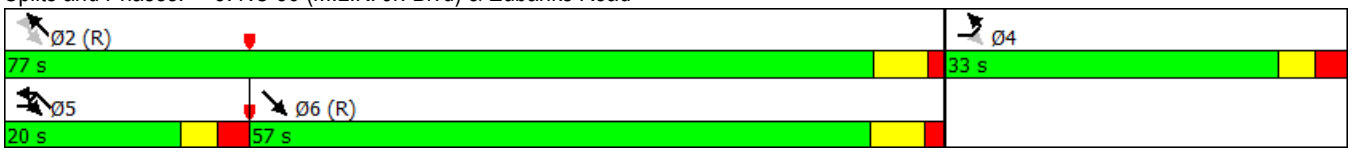
Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	350	156	1474	185	3	85	1054
Future Volume (vph)	350	156	1474	185	3	85	1054
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	175	0		0		250	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	1.00	1.00	0.95	0.95	0.91	1.00	0.91
Frt		0.850	0.983				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	1744	1397	3428	0	0	1549	5085
Flt Permitted	0.950					0.061	
Satd. Flow (perm)	1744	1397	3428	0	0	99	5085
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.94	0.94	0.96	0.96	0.97	0.97	0.97
Heavy Vehicles (%)	3%	15%	3%	3%	2%	17%	2%
Adj. Flow (vph)	372	166	1535	193	3	88	1087
Shared Lane Traffic (%)							
Lane Group Flow (vph)	372	166	1728	0	0	91	1087
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	4	5!	6		5!	5	2
Permitted Phases		4			2	2	
Detector Phase	4	5	6		5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	13.0	13.0	19.0		13.0	13.0	19.0
Total Split (s)	33.0	20.0	57.0		20.0	20.0	77.0
Total Split (%)	30.0%	18.2%	51.8%		18.2%	18.2%	70.0%
Maximum Green (s)	27.2	14.4	50.9		14.4	14.4	71.1
Yellow Time (s)	3.0	3.0	4.4		3.0	3.0	4.5
All-Red Time (s)	2.8	2.6	1.7		2.6	2.6	1.4
Lost Time Adjust (s)	-0.8	-0.6	-1.1			-0.6	-0.9
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	25.9	39.1	60.9			74.1	74.1
Actuated g/C Ratio	0.24	0.36	0.55			0.67	0.67
v/c Ratio	0.91	0.33	0.91			0.52	0.32
Control Delay	67.8	27.3	22.8			27.2	16.3

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Queue Delay	0.0	0.0	1.4			0.0	0.0
Total Delay	67.8	27.3	24.2			27.2	16.3
LOS	E	C	C			C	B
Approach Delay	55.3		24.2				17.2
Approach LOS	E		C				B
Queue Length 50th (ft)	250	83	678			39	181
Queue Length 95th (ft)	#408	133	m#803			76	253
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	175					250	
Base Capacity (vph)	443	582	1899			264	3427
Starvation Cap Reductn	0	0	63			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.84	0.29	0.94			0.34	0.32

Intersection Summary

Area Type: Other
Cycle Length: 110
Actuated Cycle Length: 110
Offset: 9 (8%), Referenced to phase 2:NWTL and 6:SET, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.91
Intersection Signal Delay: 26.7 Intersection LOS: C
Intersection Capacity Utilization 84.4% ICU Level of Service E
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	74	63	1095	64	8	132	1494
Future Volume (vph)	74	63	1095	64	8	132	1494
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.98	1.00			1.00	
Frt		0.850	0.992				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3074	1515	5065	0	0	1735	3470
Flt Permitted	0.950					0.188	
Satd. Flow (perm)	3074	1491	5065	0	0	343	3470
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		5		1		1	
Peak Hour Factor	0.79	0.79	0.94	0.94	0.93	0.93	0.93
Heavy Vehicles (%)	9%	2%	3%	3%	3%	3%	3%
Adj. Flow (vph)	94	80	1165	68	9	142	1606
Shared Lane Traffic (%)							
Lane Group Flow (vph)	94	80	1233	0	0	151	1606
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	25.0	29.0	56.0		29.0	29.0	85.0
Total Split (%)	22.7%	26.4%	50.9%		26.4%	26.4%	77.3%
Maximum Green (s)	18.4	22.7	49.6		22.7	22.7	78.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	9.8	16.4	79.6			92.9	93.9

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.09	0.15	0.72			0.84	0.85
v/c Ratio	0.34	0.36	0.34			0.38	0.54
Control Delay	50.3	41.3	6.4			3.2	3.8
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	50.3	41.3	6.4			3.2	3.8
LOS	D	D	A			A	A
Approach Delay	46.2		6.4				3.7
Approach LOS	D		A				A
Queue Length 50th (ft)	32	48	110			4	108
Queue Length 95th (ft)	50	78	144			m4	m158
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	558	439	3667			593	2963
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.17	0.18	0.34			0.25	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 69 (63%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 7.1		Intersection LOS: A	
Intersection Capacity Utilization 55.5%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			
! Phase conflict between lane groups.			

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

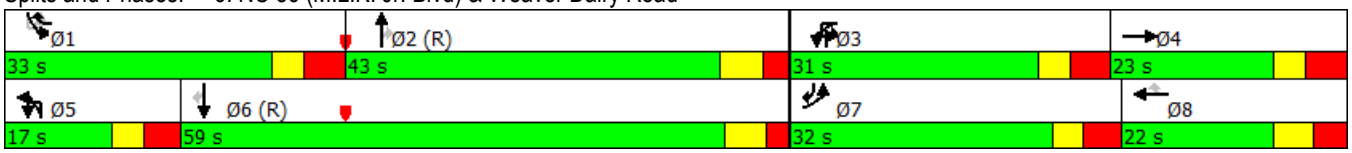
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	249	153	11	19	156	80	181	3	13	696	258	428
Future Volume (vph)	249	153	11	19	156	80	181	3	13	696	258	428
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	400
Storage Lanes	2		0		1		1		1		1	2
Taper Length (ft)	25				25				25			25
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.97
Ped Bike Factor		1.00			1.00							
Frt		0.990					0.850				0.850	
Flt Protected	0.950				0.950				0.950			0.950
Satd. Flow (prot)	3382	3448	0	0	3226	1750	1488	0	1736	4988	1553	3350
Flt Permitted	0.950				0.950				0.950			0.950
Satd. Flow (perm)	3382	3448	0	0	3213	1750	1488	0	1736	4988	1553	3350
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)			4		4							
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.95	0.95	0.95	0.95	0.93
Heavy Vehicles (%)	2%	2%	2%	8%	8%	8%	8%	4%	4%	4%	4%	4%
Adj. Flow (vph)	286	176	13	22	181	93	210	3	14	733	272	460
Shared Lane Traffic (%)												
Lane Group Flow (vph)	286	189	0	0	203	93	210	0	17	733	272	460
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	32.0	23.0		31.0	31.0	22.0	33.0	17.0	17.0	43.0	31.0	33.0
Total Split (%)	24.6%	17.7%		23.8%	23.8%	16.9%	25.4%	13.1%	13.1%	33.1%	23.8%	25.4%
Maximum Green (s)	25.3	15.7		24.0	24.0	14.8	25.8	10.3	10.3	36.2	24.0	25.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	-2.2
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	993	113
Future Volume (vph)	993	113
Ideal Flow (vphpl)	1900	1900
Grade (%)	1%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3454	1545
Flt Permitted		
Satd. Flow (perm)	3454	1545
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	832	
Travel Time (s)	16.2	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	4%	4%
Adj. Flow (vph)	1068	122
Shared Lane Traffic (%)		
Lane Group Flow (vph)	1068	122
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	12.0	7.0
Minimum Split (s)	40.0	14.0
Total Split (s)	59.0	32.0
Total Split (%)	45.4%	24.6%
Maximum Green (s)	52.6	25.3
Yellow Time (s)	4.0	3.0
All-Red Time (s)	2.4	3.7
Lost Time Adjust (s)	-1.4	-1.7
Total Lost Time (s)	5.0	5.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?		
Vehicle Extension (s)	6.0	2.0
Minimum Gap (s)	6.0	2.0
Time Before Reduce (s)	15.0	0.0
Time To Reduce (s)	20.0	0.0
Recall Mode	C-Max	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	17.1	16.1			14.6	13.6	43.0		8.9	54.9	74.5	24.4
Actuated g/C Ratio	0.13	0.12			0.11	0.10	0.33		0.07	0.42	0.57	0.19
v/c Ratio	0.64	0.44			0.56	0.51	0.43		0.14	0.35	0.31	0.73
Control Delay	60.2	55.4			60.5	64.2	35.4		59.9	27.8	17.1	56.6
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	60.2	55.4			60.5	64.2	35.4		59.9	27.8	17.1	56.6
LOS	E	E			E	E	D		E	C	B	E
Approach Delay		58.3				50.8				25.5		
Approach LOS		E				D				C		
Queue Length 50th (ft)	119	78			85	75	138		14	150	113	190
Queue Length 95th (ft)	155	108			115	121	175		39	225	208	235
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	400
Base Capacity (vph)	702	495			645	231	538		160	2107	1026	734
Starvation Cap Reductn	0	0			0	0	0		0	0	0	0
Spillback Cap Reductn	0	0			0	0	0		0	0	0	0
Storage Cap Reductn	0	0			0	0	0		0	0	0	0
Reduced v/c Ratio	0.41	0.38			0.31	0.40	0.39		0.11	0.35	0.27	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 31 (24%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 34.3		Intersection LOS: C	
Intersection Capacity Utilization 66.0%		ICU Level of Service C	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBT	SBR
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	78.7	100.8
Actuated g/C Ratio	0.61	0.78
v/c Ratio	0.51	0.10
Control Delay	18.1	5.3
Queue Delay	0.0	0.0
Total Delay	18.1	5.3
LOS	B	A
Approach Delay	27.8	
Approach LOS	C	
Queue Length 50th (ft)	223	16
Queue Length 95th (ft)	433	57
Internal Link Dist (ft)	752	
Turn Bay Length (ft)		250
Base Capacity (vph)	2091	1315
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.51	0.09

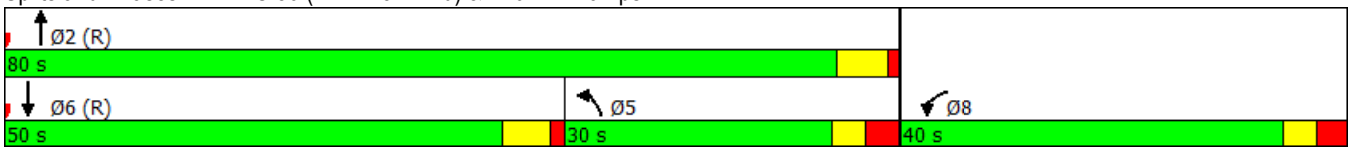
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	365	0	71	246	319	0	0	275	17
Future Volume (vph)	0	0	0	365	0	71	246	319	0	0	275	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3350	0	1545	3335	1810	0	0	3470	1552
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3350	0	1545	3335	1810	0	0	3470	1552
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.84	0.84	0.84	0.87	0.87	0.87	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	0	0	0	435	0	85	283	367	0	0	313	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	435	0	85	283	367	0	0	313	19
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				40.0			30.0	80.0			50.0	
Total Split (%)				33.3%			25.0%	66.7%			41.7%	
Maximum Green (s)				34.2			23.9	74.3			44.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				20.0		120.0	25.0	90.0			60.0	120.0
Actuated g/C Ratio				0.17		1.00	0.21	0.75			0.50	1.00
v/c Ratio				0.78		0.06	0.41	0.27			0.18	0.01
Control Delay				57.7		0.1	34.5	1.8			17.5	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				57.7		0.1	34.5	1.8			17.5	0.0
LOS				E		A	C	A			B	A
Approach Delay					48.2			16.0			16.5	
Approach LOS					D			B			B	
Queue Length 50th (ft)				168		0	101	15			67	0
Queue Length 95th (ft)				196		0	128	14			102	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				977		1545	694	1356			1733	1552
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.45		0.06	0.41	0.27			0.18	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 109 (91%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 27.3		Intersection LOS: C	
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

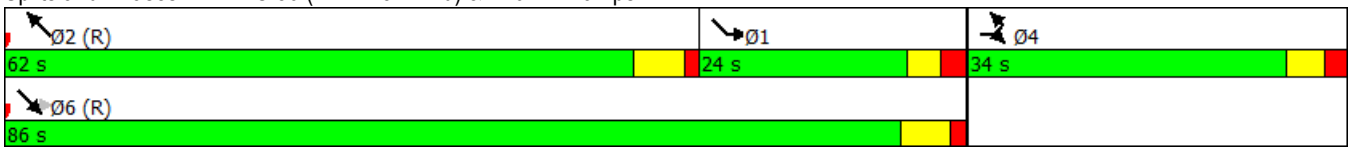


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	12	0	253	0	0	0	51	600	0	0	542	427
Future Volume (vph)	12	0	253	0	0	0	51	600	0	0	542	427
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1744	0	2746	0	0	0	1727	3454	0	0	3489	1561
Flt Permitted	0.950						0.404					
Satd. Flow (perm)	1744	0	2746	0	0	0	734	3454	0	0	3489	1529
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	13	0	272	0	0	0	56	659	0	0	589	464
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	0	272	0	0	0	56	659	0	0	589	464
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	34.0		34.0				24.0	86.0			62.0	
Total Split (%)	28.3%		28.3%				20.0%	71.7%			51.7%	
Maximum Green (s)	28.4		28.4				18.6	80.0			56.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	16.1		16.1				93.9	93.9			74.7	120.0
Actuated g/C Ratio	0.13		0.13				0.78	0.78			0.62	1.00

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.06		0.74				0.08	0.24			0.27	0.30
Control Delay	43.5		61.9				0.4	10.6			7.2	1.2
Queue Delay	0.0		0.0				0.0	0.0			0.0	0.0
Total Delay	43.5		61.9				0.4	10.6			7.2	1.2
LOS	D		E				A	B			A	A
Approach Delay		61.1						9.8			4.5	
Approach LOS		E						A			A	
Queue Length 50th (ft)	9		116				0	181			110	5
Queue Length 95th (ft)	27		161				3	258			145	23
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	421		663				731	2702			2172	1529
Starvation Cap Reductn	0		0				0	0			0	0
Spillback Cap Reductn	0		0				0	74			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.03		0.41				0.08	0.25			0.27	0.30

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 114 (95%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 39.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps



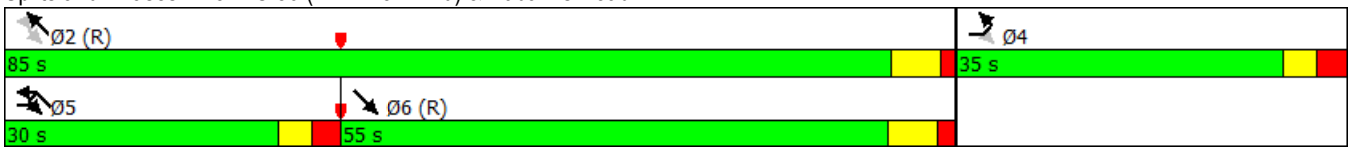
Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	122	146	743	110	9	132	846
Future Volume (vph)	122	146	743	110	9	132	846
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	175	0		0		250	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	1.00	1.00	0.95	0.95	0.91	1.00	0.91
Frt		0.850	0.981				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	1744	1474	3429	0	0	1649	4940
Flt Permitted	0.950					0.260	
Satd. Flow (perm)	1744	1474	3429	0	0	451	4940
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.88	0.88	0.92	0.92	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	2%	8%	2%	10%	5%
Adj. Flow (vph)	139	166	808	120	10	145	930
Shared Lane Traffic (%)							
Lane Group Flow (vph)	139	166	928	0	0	155	930
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	4	5!	6		5!	5	2
Permitted Phases		4			2	2	
Detector Phase	4	5	6		5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	13.0	13.0	19.0		13.0	13.0	19.0
Total Split (s)	35.0	30.0	55.0		30.0	30.0	85.0
Total Split (%)	29.2%	25.0%	45.8%		25.0%	25.0%	70.8%
Maximum Green (s)	29.2	24.4	48.9		24.4	24.4	79.1
Yellow Time (s)	3.0	3.0	4.4		3.0	3.0	4.5
All-Red Time (s)	2.8	2.6	1.7		2.6	2.6	1.4
Lost Time Adjust (s)	-0.8	-0.6	-1.1			-0.6	-0.9
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	13.9	26.8	83.2			96.1	96.1
Actuated g/C Ratio	0.12	0.22	0.69			0.80	0.80
v/c Ratio	0.69	0.51	0.39			0.35	0.24
Control Delay	68.0	45.6	7.9			8.7	6.0

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Queue Delay	0.0	0.0	0.3			0.0	0.0
Total Delay	68.0	45.6	8.1			8.7	6.0
LOS	E	D	A			A	A
Approach Delay	55.8		8.1				6.3
Approach LOS	E		A				A
Queue Length 50th (ft)	105	114	118			36	81
Queue Length 95th (ft)	162	166	411			57	96
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	175					250	
Base Capacity (vph)	436	538	2378			610	3957
Starvation Cap Reductn	0	0	749			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.32	0.31	0.57			0.25	0.24

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 16 (13%), Referenced to phase 2:NWTL and 6:SET, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 53.4%		ICU Level of Service A	
Analysis Period (min) 15			

! Phase conflict between lane groups.

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	171	91	850	91	5	140	763
Future Volume (vph)	171	91	850	91	5	140	763
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.99					
Frt		0.850	0.985				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1418	4939	0	0	1718	3436
Flt Permitted	0.950					0.242	
Satd. Flow (perm)	3285	1398	4939	0	0	438	3436
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		3					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Heavy Vehicles (%)	2%	9%	5%	5%	4%	4%	4%
Adj. Flow (vph)	184	98	914	98	5	147	803
Shared Lane Traffic (%)							
Lane Group Flow (vph)	184	98	1012	0	0	152	803
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	30.0	30.0	60.0		30.0	30.0	90.0
Total Split (%)	25.0%	25.0%	50.0%		25.0%	25.0%	75.0%
Maximum Green (s)	23.4	23.7	53.6		23.7	23.7	83.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	12.7	21.2	83.8			97.3	97.3

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.11	0.18	0.70			0.81	0.81
v/c Ratio	0.53	0.40	0.29			0.34	0.29
Control Delay	56.0	43.9	5.0			10.3	8.8
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	56.0	43.9	5.0			10.3	8.8
LOS	E	D	A			B	A
Approach Delay	51.8		5.0				9.0
Approach LOS	D		A				A
Queue Length 50th (ft)	70	64	80			51	143
Queue Length 95th (ft)	105	111	82			129	267
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	684	443	3450			621	2785
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.27	0.22	0.29			0.24	0.29

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 82 (68%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 12.6		Intersection LOS: B	
Intersection Capacity Utilization 44.9%		ICU Level of Service A	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

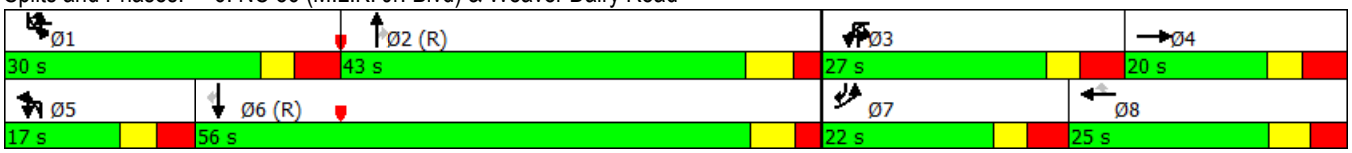
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	75	71	4	20	140	72	212	5	3	645	155	4
Future Volume (vph)	75	71	4	20	140	72	212	5	3	645	155	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	
Storage Lanes	2		0		1		1		1		1	
Taper Length (ft)	25				25				25			
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00		0.99		1.00		0.99	
Frt		0.993					0.850				0.850	
Flt Protected	0.950				0.950				0.950			
Satd. Flow (prot)	3349	3426	0	0	3383	1835	1560	0	1703	4893	1524	0
Flt Permitted	0.950				0.950				0.950			
Satd. Flow (perm)	3341	3426	0	0	3375	1835	1537	0	1701	4893	1504	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)	3		2		2		3		1		1	
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	4%
Adj. Flow (vph)	82	78	4	21	147	76	223	5	3	709	170	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	82	0	0	168	76	223	0	8	709	170	0
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1!
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	22.0	20.0		27.0	27.0	25.0	30.0	17.0	17.0	43.0	27.0	30.0
Total Split (%)	18.3%	16.7%		22.5%	22.5%	20.8%	25.0%	14.2%	14.2%	35.8%	22.5%	25.0%
Maximum Green (s)	15.3	12.7		20.0	20.0	17.8	22.8	10.3	10.3	36.2	20.0	22.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	289	528	94
Future Volume (vph)	289	528	94
Ideal Flow (vphpl)	1900	1900	1900
Grade (%)		1%	
Storage Length (ft)	400		250
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.95	1.00
Ped Bike Factor	1.00		0.98
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	3350	3454	1545
Flt Permitted	0.950		
Satd. Flow (perm)	3348	3454	1511
Right Turn on Red			No
Satd. Flow (RTOR)			
Link Speed (mph)		35	
Link Distance (ft)		832	
Travel Time (s)		16.2	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%
Adj. Flow (vph)	307	562	100
Shared Lane Traffic (%)			
Lane Group Flow (vph)	311	562	100
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7
Permitted Phases			6
Detector Phase	1	6	7
Switch Phase			
Minimum Initial (s)	7.0	12.0	7.0
Minimum Split (s)	15.0	40.0	14.0
Total Split (s)	30.0	56.0	22.0
Total Split (%)	25.0%	46.7%	18.3%
Maximum Green (s)	22.8	49.6	15.3
Yellow Time (s)	3.1	4.0	3.0
All-Red Time (s)	4.1	2.4	3.7
Lost Time Adjust (s)	-2.2	-1.4	-1.7
Total Lost Time (s)	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	6.0	2.0
Minimum Gap (s)	2.0	6.0	2.0
Time Before Reduce (s)	0.0	15.0	0.0
Time To Reduce (s)	0.0	20.0	0.0
Recall Mode	None	C-Max	None
Walk Time (s)		7.0	
Flash Dont Walk (s)		26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	9.6	10.1			12.3	12.8	29.1		8.7	62.3	74.6	
Actuated g/C Ratio	0.08	0.08			0.10	0.11	0.24		0.07	0.52	0.62	
v/c Ratio	0.31	0.28			0.49	0.39	0.59		0.07	0.28	0.18	
Control Delay	54.9	53.9			55.2	55.2	42.5		53.3	18.2	9.7	
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	54.9	53.9			55.2	55.2	42.5		53.3	18.2	9.7	
LOS	D	D			E	E	D		D	B	A	
Approach Delay		54.4				49.2				16.9		
Approach LOS		D				D				B		
Queue Length 50th (ft)	31	32			64	56	142		6	113	48	
Queue Length 95th (ft)	56	57			97	103	200		22	166	93	
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	
Base Capacity (vph)	474	428			620	305	464		170	2539	1060	
Starvation Cap Reductn	0	0			0	0	0		0	0	0	
Spillback Cap Reductn	0	0			0	0	0		0	0	0	
Storage Cap Reductn	0	0			0	0	0		0	0	0	
Reduced v/c Ratio	0.17	0.19			0.27	0.25	0.48		0.05	0.28	0.16	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 89 (74%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.61			
Intersection Signal Delay: 26.3		Intersection LOS: C	
Intersection Capacity Utilization 74.3%		ICU Level of Service D	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	18.2	82.7	92.3
Actuated g/C Ratio	0.15	0.69	0.77
v/c Ratio	0.61	0.24	0.09
Control Delay	41.4	9.0	6.4
Queue Delay	0.0	0.0	0.0
Total Delay	41.4	9.0	6.4
LOS	D	A	A
Approach Delay		19.1	
Approach LOS		B	
Queue Length 50th (ft)	110	116	26
Queue Length 95th (ft)	130	185	50
Internal Link Dist (ft)		752	
Turn Bay Length (ft)	400		250
Base Capacity (vph)	697	2380	1253
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.45	0.24	0.08

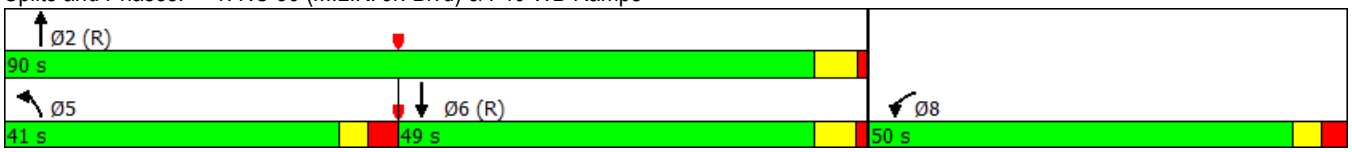
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	536	0	104	622	527	0	0	427	23
Future Volume (vph)	0	0	0	536	0	104	622	527	0	0	427	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3416	0	1575	3433	1863	0	0	3504	1567
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3416	0	1575	3433	1863	0	0	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	596	0	116	669	567	0	0	464	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	596	0	116	669	567	0	0	464	25
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				50.0			41.0	90.0			49.0	
Total Split (%)				35.7%			29.3%	64.3%			35.0%	
Maximum Green (s)				44.2			34.9	84.3			43.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				29.2		140.0	31.8	100.8			64.0	140.0
Actuated g/C Ratio				0.21		1.00	0.23	0.72			0.46	1.00
v/c Ratio				0.84		0.07	0.86	0.42			0.29	0.02
Control Delay				63.9		0.1	44.6	18.7			26.1	0.0
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				63.9		0.1	44.6	18.7			26.1	0.0
LOS				E		A	D	B			C	A
Approach Delay					53.5			32.7			24.8	
Approach LOS					D			C			C	
Queue Length 50th (ft)				270		0	258	339			137	0
Queue Length 95th (ft)				320		0	333	540			211	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				1098		1575	893	1341			1600	1567
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.54		0.07	0.75	0.42			0.29	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 23 (16%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 37.2		Intersection LOS: D	
Intersection Capacity Utilization 57.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

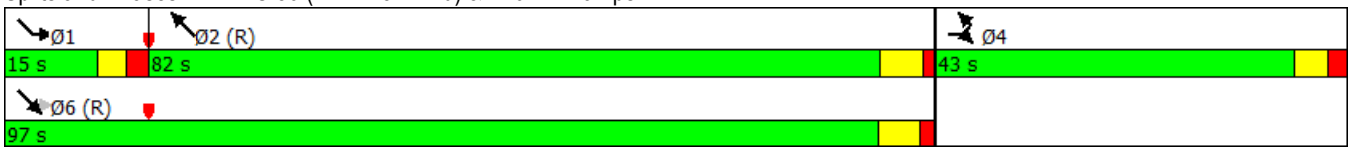


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	14	0	340	0	0	0	42	971	0	0	1080	603
Future Volume (vph)	14	0	340	0	0	0	42	971	0	0	1080	603
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1761	0	2773	0	0	0	1761	3522	0	0	3557	1591
Flt Permitted	0.950						0.182					
Satd. Flow (perm)	1761	0	2773	0	0	0	337	3522	0	0	3557	1557
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	17	0	410	0	0	0	45	1044	0	0	1174	655
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	410	0	0	0	45	1044	0	0	1174	655
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	43.0		43.0				15.0	97.0			82.0	
Total Split (%)	30.7%		30.7%				10.7%	69.3%			58.6%	
Maximum Green (s)	37.4		37.4				9.6	91.0			76.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	25.0		25.0				105.0	105.0			95.0	140.0
Actuated g/C Ratio	0.18		0.18				0.75	0.75			0.68	1.00
v/c Ratio	0.05		0.83				0.14	0.40			0.49	0.42

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay	45.4		69.5				13.0	7.0			17.3	1.6
Queue Delay	0.0		0.0				0.0	0.0			0.5	0.0
Total Delay	45.4		69.5				13.0	7.1			17.8	1.6
LOS	D		E				B	A			B	A
Approach Delay		68.6						7.3			12.0	
Approach LOS		E						A			B	
Queue Length 50th (ft)	13		206				27	168			317	18
Queue Length 95th (ft)	31		235				54	202			507	63
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	477		752				354	2640			2414	1557
Starvation Cap Reductn	0		0				0	0			710	0
Spillback Cap Reductn	0		1				0	139			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.04		0.55				0.13	0.42			0.69	0.42

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 74 (53%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 17.7		Intersection LOS: B	
Intersection Capacity Utilization 57.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

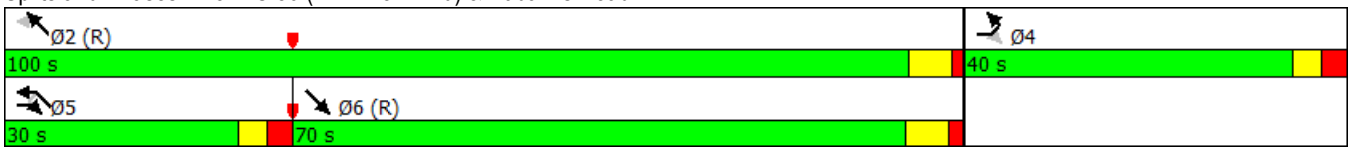


Lane Group	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	187	131	1024	287	216	1490
Future Volume (vph)	187	131	1024	287	216	1490
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%			0%
Storage Length (ft)	175	0		0	250	
Storage Lanes	1	1		0	1	
Taper Length (ft)	25				25	
Lane Util. Factor	1.00	1.00	0.95	0.95	1.00	0.91
Frt		0.850	0.967			
Flt Protected	0.950				0.950	
Satd. Flow (prot)	1778	1516	3405	0	1770	5085
Flt Permitted	0.950				0.100	
Satd. Flow (perm)	1778	1516	3405	0	186	5085
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	35		45			45
Link Distance (ft)	677		451			567
Travel Time (s)	13.2		6.8			8.6
Peak Hour Factor	0.87	0.87	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	1%	6%	2%	2%	2%	2%
Adj. Flow (vph)	215	151	1151	322	235	1620
Shared Lane Traffic (%)						
Lane Group Flow (vph)	215	151	1473	0	235	1620
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	5	6		5	2
Permitted Phases		4			2	
Detector Phase	4	5	6		5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	12.0		7.0	12.0
Minimum Split (s)	13.0	13.0	19.0		13.0	19.0
Total Split (s)	40.0	30.0	70.0		30.0	100.0
Total Split (%)	28.6%	21.4%	50.0%		21.4%	71.4%
Maximum Green (s)	34.2	24.4	63.9		24.4	94.1
Yellow Time (s)	3.0	3.0	4.4		3.0	4.5
All-Red Time (s)	2.8	2.6	1.7		2.6	1.4
Lost Time Adjust (s)	-0.8	-0.6	-1.1		-0.6	-0.9
Total Lost Time (s)	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lead	Lag		Lead	
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0	6.0		1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0		1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0		0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0		0.0	20.0
Recall Mode	None	None	C-Max		None	C-Max
Act Effct Green (s)	21.3	43.1	86.9		108.7	108.7
Actuated g/C Ratio	0.15	0.31	0.62		0.78	0.78
v/c Ratio	0.80	0.32	0.70		0.70	0.41
Control Delay	77.8	36.7	10.8		34.8	9.4

Lane Group	EBL	EBR	SET	SER	NWL	NWT
Queue Delay	0.0	0.0	0.4		0.0	0.0
Total Delay	77.8	36.7	11.2		34.8	9.4
LOS	E	D	B		C	A
Approach Delay	60.8		11.2			12.6
Approach LOS	E		B			B
Queue Length 50th (ft)	191	106	244		124	175
Queue Length 95th (ft)	256	134	567		231	349
Internal Link Dist (ft)	597		371			487
Turn Bay Length (ft)	175				250	
Base Capacity (vph)	444	556	2112		429	3948
Starvation Cap Reductn	0	0	210		0	0
Spillback Cap Reductn	0	0	0		0	326
Storage Cap Reductn	0	0	0		0	0
Reduced v/c Ratio	0.48	0.27	0.77		0.55	0.45

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 53 (38%), Referenced to phase 2:NWTL and 6:SET, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 72.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	174	132	1550	113	17	139	944
Future Volume (vph)	174	132	1550	113	17	139	944
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.99	1.00			1.00	
Frt		0.850	0.990				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1515	5102	0	0	1752	3504
Flt Permitted	0.950					0.094	
Satd. Flow (perm)	3285	1493	5102	0	0	173	3504
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		4		3		3	
Peak Hour Factor	0.97	0.97	0.94	0.94	0.91	0.91	0.91
Adj. Flow (vph)	179	136	1649	120	19	153	1037
Shared Lane Traffic (%)							
Lane Group Flow (vph)	179	136	1769	0	0	172	1037
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	36.0	30.0	74.0		30.0	30.0	104.0
Total Split (%)	25.7%	21.4%	52.9%		21.4%	21.4%	74.3%
Maximum Green (s)	29.4	23.7	67.6		23.7	23.7	97.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	13.6	26.8	98.2			116.4	116.4
Actuated g/C Ratio	0.10	0.19	0.70			0.83	0.83

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.56	0.47	0.49			0.59	0.36
Control Delay	66.9	50.2	5.0			32.9	1.9
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	66.9	50.2	5.0			32.9	1.9
LOS	E	D	A			C	A
Approach Delay	59.7		5.0				6.3
Approach LOS	E		A				A
Queue Length 50th (ft)	81	107	131			57	51
Queue Length 95th (ft)	119	156	140			m147	51
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	727	415	3578			425	2912
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.25	0.33	0.49			0.40	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 72 (51%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 10.7		Intersection LOS: B	
Intersection Capacity Utilization 62.2%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			
! Phase conflict between lane groups.			

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

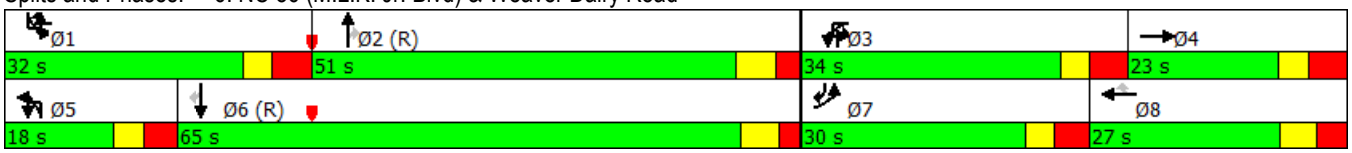
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	110	79	8	24	245	186	422	8	16	1110	201	1
Future Volume (vph)	110	79	8	24	245	186	422	8	16	1110	201	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	
Storage Lanes	2		0		1		1		1		1	
Taper Length (ft)	25				25				25			
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00		0.99				0.99	
Frt		0.986					0.850				0.850	
Flt Protected	0.950				0.950				0.950			
Satd. Flow (prot)	3382	3433	0	0	3416	1853	1575	0	1752	5036	1568	0
Flt Permitted	0.950				0.950				0.950			
Satd. Flow (perm)	3377	3433	0	0	3407	1853	1553	0	1752	5036	1547	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)	2		2		2		2				1	
Peak Hour Factor	0.82	0.82	0.82	0.84	0.84	0.84	0.84	0.87	0.87	0.87	0.87	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	2%
Adj. Flow (vph)	134	96	10	29	292	221	502	9	18	1276	231	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	106	0	0	321	221	502	0	27	1276	231	0
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1!
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	30.0	23.0		34.0	34.0	27.0	32.0	18.0	18.0	51.0	34.0	32.0
Total Split (%)	21.4%	16.4%		24.3%	24.3%	19.3%	22.9%	12.9%	12.9%	36.4%	24.3%	22.9%
Maximum Green (s)	23.3	15.7		27.0	27.0	19.8	24.8	11.3	11.3	44.2	27.0	24.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	264	665	190
Future Volume (vph)	264	665	190
Ideal Flow (vphpl)	1900	1900	1900
Grade (%)		1%	
Storage Length (ft)	400		250
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.95	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	3416	3522	1575
Flt Permitted	0.950		
Satd. Flow (perm)	3415	3522	1575
Right Turn on Red			No
Satd. Flow (RTOR)			
Link Speed (mph)		35	
Link Distance (ft)		832	
Travel Time (s)		16.2	
Confl. Peds. (#/hr)	1		
Peak Hour Factor	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%
Adj. Flow (vph)	290	731	209
Shared Lane Traffic (%)			
Lane Group Flow (vph)	291	731	209
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7
Permitted Phases			6
Detector Phase	1	6	7
Switch Phase			
Minimum Initial (s)	7.0	12.0	7.0
Minimum Split (s)	15.0	40.0	14.0
Total Split (s)	32.0	65.0	30.0
Total Split (%)	22.9%	46.4%	21.4%
Maximum Green (s)	24.8	58.6	23.3
Yellow Time (s)	3.1	4.0	3.0
All-Red Time (s)	4.1	2.4	3.7
Lost Time Adjust (s)	-2.2	-1.4	-1.7
Total Lost Time (s)	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	6.0	2.0
Minimum Gap (s)	2.0	6.0	2.0
Time Before Reduce (s)	0.0	15.0	0.0
Time To Reduce (s)	0.0	20.0	0.0
Recall Mode	None	C-Max	None
Walk Time (s)		7.0	
Flash Dont Walk (s)		26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	11.7	15.6			19.5	23.4	50.0		9.3	58.4	77.9	
Actuated g/C Ratio	0.08	0.11			0.14	0.17	0.36		0.07	0.42	0.56	
v/c Ratio	0.48	0.28			0.67	0.71	0.90		0.23	0.61	0.27	
Control Delay	66.5	57.8			64.3	67.5	59.5		66.7	35.2	16.2	
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	66.5	57.8			64.3	67.5	59.5		66.7	35.2	16.2	
LOS	E	E			E	E	E		E	D	B	
Approach Delay		62.7				62.7				32.9		
Approach LOS		E				E				C		
Queue Length 50th (ft)	61	47			145	192	397		24	335	99	
Queue Length 95th (ft)	85	68			175	248	443		54	420	158	
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	
Base Capacity (vph)	603	453			707	328	581		162	2099	970	
Starvation Cap Reductn	0	0			0	0	0		0	0	0	
Spillback Cap Reductn	0	0			0	0	0		0	0	0	
Storage Cap Reductn	0	0			0	0	0		0	0	0	
Reduced v/c Ratio	0.22	0.23			0.45	0.67	0.86		0.17	0.61	0.24	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 79 (56%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.90			
Intersection Signal Delay: 40.9		Intersection LOS: D	
Intersection Capacity Utilization 86.4%		ICU Level of Service E	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

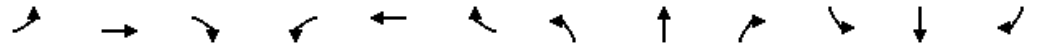
Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	26.5	81.1	97.7
Actuated g/C Ratio	0.19	0.58	0.70
v/c Ratio	0.45	0.36	0.19
Control Delay	58.8	20.7	11.1
Queue Delay	0.0	0.0	0.0
Total Delay	58.8	20.7	11.1
LOS	E	C	B
Approach Delay		28.1	
Approach LOS		C	
Queue Length 50th (ft)	131	196	82
Queue Length 95th (ft)	193	247	100
Internal Link Dist (ft)		752	
Turn Bay Length (ft)	400		250
Base Capacity (vph)	697	2039	1249
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.42	0.36	0.17

Intersection Summary

2021 Without Site

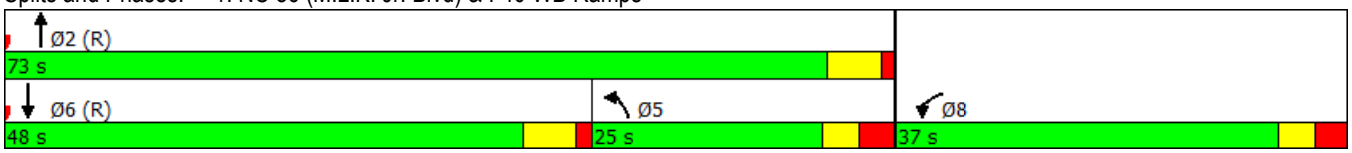


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	696	0	81	305	428	0	0	520	15
Future Volume (vph)	0	0	0	696	0	81	305	428	0	0	520	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3350	0	1545	3400	1845	0	0	3470	1552
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3350	0	1545	3400	1845	0	0	3470	1552
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	0	0	0	757	0	88	339	476	0	0	591	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	757	0	88	339	476	0	0	591	17
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				37.0			25.0	73.0			48.0	
Total Split (%)				33.6%			22.7%	66.4%			43.6%	
Maximum Green (s)				31.2			18.9	67.3			42.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				28.4		110.0	20.0	71.6			46.6	110.0
Actuated g/C Ratio				0.26		1.00	0.18	0.65			0.42	1.00
v/c Ratio				0.88		0.06	0.55	0.40			0.40	0.01
Control Delay				50.9		0.1	33.2	2.6			23.7	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				50.9		0.1	33.2	2.6			23.7	0.0
LOS				D		A	C	A			C	A
Approach Delay					45.6			15.3			23.0	
Approach LOS					D			B			C	
Queue Length 50th (ft)				261		0	120	20			151	0
Queue Length 95th (ft)				324		0	156	25			203	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				974		1545	618	1200			1469	1552
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.78		0.06	0.55	0.40			0.40	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 19 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 28.7		Intersection LOS: C	
Intersection Capacity Utilization 67.8%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

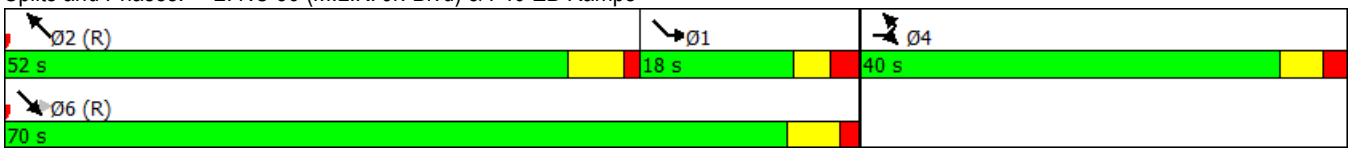


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	17	0	816	0	0	0	87	1119	0	0	714	873
Future Volume (vph)	17	0	816	0	0	0	87	1119	0	0	714	873
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1761	0	2773	0	0	0	1744	3487	0	0	3557	1591
Flt Permitted	0.950						0.280					
Satd. Flow (perm)	1761	0	2773	0	0	0	514	3487	0	0	3557	1591
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	19	0	907	0	0	0	95	1216	0	0	744	909
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	0	907	0	0	0	95	1216	0	0	744	909
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	40.0		40.0				18.0	70.0			52.0	
Total Split (%)	36.4%		36.4%				16.4%	63.6%			47.3%	
Maximum Green (s)	34.4		34.4				12.6	64.0			46.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	35.0		35.0				65.0	65.0			47.0	110.0
Actuated g/C Ratio	0.32		0.32				0.59	0.59			0.43	1.00
v/c Ratio	0.03		1.03				0.21	0.59			0.49	0.57
Control Delay	26.2		75.3				3.6	9.2			21.2	2.8

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Delay	0.0		0.0				0.0	0.1			0.5	0.0
Total Delay	26.2		75.3				3.6	9.4			21.7	2.8
LOS	C		E				A	A			C	A
Approach Delay		74.3						9.0			11.3	
Approach LOS		E						A			B	
Queue Length 50th (ft)	9		~389				2	298			181	28
Queue Length 95th (ft)	27		#527				24	341			220	53
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	560		882				449	2060			1519	1591
Starvation Cap Reductn	0		0				0	0			349	0
Spillback Cap Reductn	0		0				0	173			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.03		1.03				0.21	0.64			0.64	0.57

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 12 (11%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.03			
Intersection Signal Delay: 25.5		Intersection LOS: C	
Intersection Capacity Utilization 67.8%		ICU Level of Service C	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

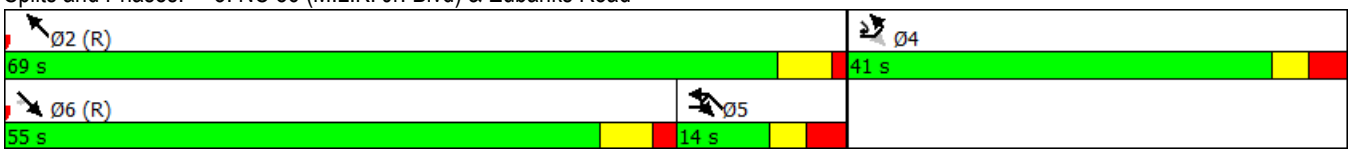


Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	476	252	1562	362	3	217	1101
Future Volume (vph)	476	252	1562	362	3	217	1101
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3383	1397	3487	1560	0	2998	5085
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3383	1397	3487	1560	0	2998	5085
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.94	0.94	0.96	0.96	0.97	0.97	0.97
Heavy Vehicles (%)	3%	15%	3%	3%	2%	17%	2%
Adj. Flow (vph)	506	268	1627	377	3	224	1135
Shared Lane Traffic (%)							
Lane Group Flow (vph)	506	268	1627	377	0	227	1135
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	Prot	NA
Protected Phases	4	5!	6	4	5!	5	2
Permitted Phases		4		6			
Detector Phase	4	5	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	14.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	41.0	14.0	55.0	41.0	14.0	14.0	69.0
Total Split (%)	37.3%	12.7%	50.0%	37.3%	12.7%	12.7%	62.7%
Maximum Green (s)	34.7	7.6	48.7	34.7	7.6	7.6	63.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.4	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.4	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0			7.0			
Flash Dont Walk (s)	27.0			27.0			
Pedestrian Calls (#/hr)	0			0			
Act Effct Green (s)	21.7	35.7	64.3	91.0		9.0	78.3

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.20	0.32	0.58	0.83		0.08	0.71
v/c Ratio	0.76	0.59	0.80	0.29		0.93	0.31
Control Delay	49.2	36.4	12.1	0.7		86.2	4.7
Queue Delay	0.0	0.0	1.9	0.5		0.0	0.0
Total Delay	49.2	36.4	14.0	1.3		86.2	4.7
LOS	D	D	B	A		F	A
Approach Delay	44.8		11.6				18.3
Approach LOS	D		B				B
Queue Length 50th (ft)	175	158	308	8		84	66
Queue Length 95th (ft)	218	226	m437	m10		#161	77
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1107	452	2039	1290		245	3621
Starvation Cap Reductn	0	0	254	529		0	0
Spillback Cap Reductn	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.46	0.59	0.91	0.50		0.93	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 12 (11%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.93			
Intersection Signal Delay: 20.0		Intersection LOS: C	
Intersection Capacity Utilization 77.6%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			
! Phase conflict between lane groups.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	75	64	1273	65	8	135	1676
Future Volume (vph)	75	64	1273	65	8	135	1676
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.98	1.00			1.00	
Frt		0.850	0.993				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3074	1515	5070	0	0	1735	3470
Flt Permitted	0.950					0.146	
Satd. Flow (perm)	3074	1491	5070	0	0	267	3470
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		5		1		1	
Peak Hour Factor	0.79	0.79	0.94	0.94	0.93	0.93	0.93
Heavy Vehicles (%)	9%	2%	3%	3%	3%	3%	3%
Adj. Flow (vph)	95	81	1354	69	9	145	1802
Shared Lane Traffic (%)							
Lane Group Flow (vph)	95	81	1423	0	0	154	1802
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	25.0	29.0	56.0		29.0	29.0	85.0
Total Split (%)	22.7%	26.4%	50.9%		26.4%	26.4%	77.3%
Maximum Green (s)	18.4	22.7	49.6		22.7	22.7	78.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	9.8	18.8	76.2			90.2	90.2

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.09	0.17	0.69			0.82	0.82
v/c Ratio	0.35	0.32	0.41			0.45	0.63
Control Delay	50.4	38.7	7.9			9.7	2.0
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	50.4	38.7	7.9			9.7	2.0
LOS	D	D	A			A	A
Approach Delay	45.0		7.9				2.6
Approach LOS	D		A				A
Queue Length 50th (ft)	32	48	134			5	44
Queue Length 95th (ft)	51	75	194			m39	113
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	558	463	3512			539	2846
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.17	0.17	0.41			0.29	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 27 (25%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 6.8		Intersection LOS: A	
Intersection Capacity Utilization 60.5%		ICU Level of Service B	
Analysis Period (min) 15			

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

! Phase conflict between lane groups.

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

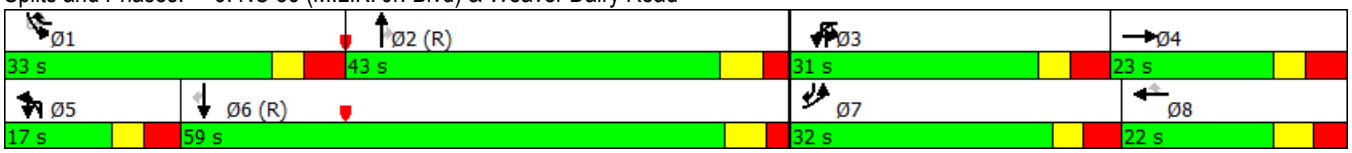
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	267	156	18	29	176	82	205	8	17	832	270	470
Future Volume (vph)	267	156	18	29	176	82	205	8	17	832	270	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	400
Storage Lanes	2		0		1		1		1		1	2
Taper Length (ft)	25				25				25			25
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.97
Ped Bike Factor		1.00			1.00							
Frt		0.984					0.850				0.850	
Flt Protected	0.950				0.950				0.950			0.950
Satd. Flow (prot)	3382	3425	0	0	3226	1750	1488	0	1736	4988	1553	3350
Flt Permitted	0.950				0.950				0.950			0.950
Satd. Flow (perm)	3382	3425	0	0	3213	1750	1488	0	1736	4988	1553	3350
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)			4		4							
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.95	0.95	0.95	0.95	0.93
Heavy Vehicles (%)	2%	2%	2%	8%	8%	8%	8%	4%	4%	4%	4%	4%
Adj. Flow (vph)	307	179	21	34	205	95	238	8	18	876	284	505
Shared Lane Traffic (%)												
Lane Group Flow (vph)	307	200	0	0	239	95	238	0	26	876	284	505
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	32.0	23.0		31.0	31.0	22.0	33.0	17.0	17.0	43.0	31.0	33.0
Total Split (%)	24.6%	17.7%		23.8%	23.8%	16.9%	25.4%	13.1%	13.1%	33.1%	23.8%	25.4%
Maximum Green (s)	25.3	15.7		24.0	24.0	14.8	25.8	10.3	10.3	36.2	24.0	25.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	-2.2
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1122	124
Future Volume (vph)	1122	124
Ideal Flow (vphpl)	1900	1900
Grade (%)	1%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3454	1545
Flt Permitted		
Satd. Flow (perm)	3454	1545
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	832	
Travel Time (s)	16.2	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	4%	4%
Adj. Flow (vph)	1206	133
Shared Lane Traffic (%)		
Lane Group Flow (vph)	1206	133
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	12.0	7.0
Minimum Split (s)	40.0	14.0
Total Split (s)	59.0	32.0
Total Split (%)	45.4%	24.6%
Maximum Green (s)	52.6	25.3
Yellow Time (s)	4.0	3.0
All-Red Time (s)	2.4	3.7
Lost Time Adjust (s)	-1.4	-1.7
Total Lost Time (s)	5.0	5.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?		
Vehicle Extension (s)	6.0	2.0
Minimum Gap (s)	6.0	2.0
Time Before Reduce (s)	15.0	0.0
Time To Reduce (s)	20.0	0.0
Recall Mode	C-Max	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	17.9	15.6			16.0	13.7	44.8		9.2	52.4	73.4	26.1
Actuated g/C Ratio	0.14	0.12			0.12	0.11	0.34		0.07	0.40	0.56	0.20
v/c Ratio	0.66	0.49			0.60	0.52	0.46		0.21	0.44	0.32	0.75
Control Delay	60.0	56.9			60.2	64.3	35.2		61.1	30.8	18.0	56.1
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	60.0	56.9			60.2	64.3	35.2		61.1	30.8	18.0	56.1
LOS	E	E			E	E	D		E	C	B	E
Approach Delay		58.8				50.5				28.4		
Approach LOS		E				D				C		
Queue Length 50th (ft)	128	84			100	77	156		21	193	122	208
Queue Length 95th (ft)	164	115			132	124	196		52	280	218	257
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	400
Base Capacity (vph)	702	488			645	232	544		160	2009	996	744
Starvation Cap Reductn	0	0			0	0	0		0	0	0	0
Spillback Cap Reductn	0	0			0	0	0		0	0	0	0
Storage Cap Reductn	0	0			0	0	0		0	0	0	0
Reduced v/c Ratio	0.44	0.41			0.37	0.41	0.44		0.16	0.44	0.29	0.68

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 36.1		Intersection LOS: D	
Intersection Capacity Utilization 69.6%		ICU Level of Service C	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBT	SBR
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	74.8	97.6
Actuated g/C Ratio	0.58	0.75
v/c Ratio	0.61	0.11
Control Delay	22.3	6.2
Queue Delay	0.0	0.0
Total Delay	22.3	6.2
LOS	C	A
Approach Delay	30.4	
Approach LOS	C	
Queue Length 50th (ft)	366	32
Queue Length 95th (ft)	533	64
Internal Link Dist (ft)	752	
Turn Bay Length (ft)		250
Base Capacity (vph)	1986	1268
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.61	0.10

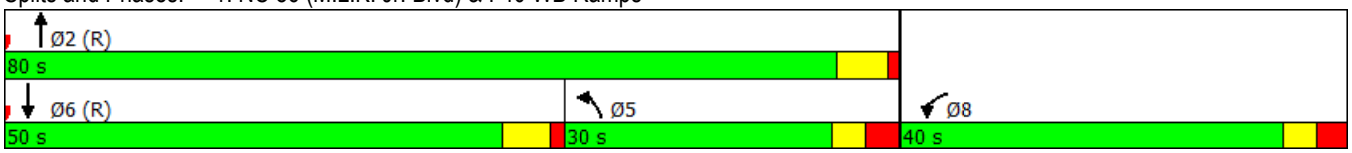
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	501	0	72	302	350	0	0	305	17
Future Volume (vph)	0	0	0	501	0	72	302	350	0	0	305	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3350	0	1545	3335	1810	0	0	3470	1552
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3350	0	1545	3335	1810	0	0	3470	1552
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.84	0.84	0.84	0.87	0.87	0.87	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	0	0	0	596	0	86	347	402	0	0	347	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	596	0	86	347	402	0	0	347	19
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				40.0			30.0	80.0			50.0	
Total Split (%)				33.3%			25.0%	66.7%			41.7%	
Maximum Green (s)				34.2			23.9	74.3			44.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				25.8		120.0	25.0	84.2			54.2	120.0
Actuated g/C Ratio				0.22		1.00	0.21	0.70			0.45	1.00
v/c Ratio				0.83		0.06	0.50	0.32			0.22	0.01
Control Delay				55.1		0.1	40.0	1.9			21.3	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				55.1		0.1	40.0	1.9			21.3	0.0
LOS				E		A	D	A			C	A
Approach Delay					48.1			19.6			20.2	
Approach LOS					D			B			C	
Queue Length 50th (ft)				228		0	133	16			84	0
Queue Length 95th (ft)				253		0	149	20			125	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				977		1545	694	1269			1566	1552
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.61		0.06	0.50	0.32			0.22	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 30.5		Intersection LOS: C	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

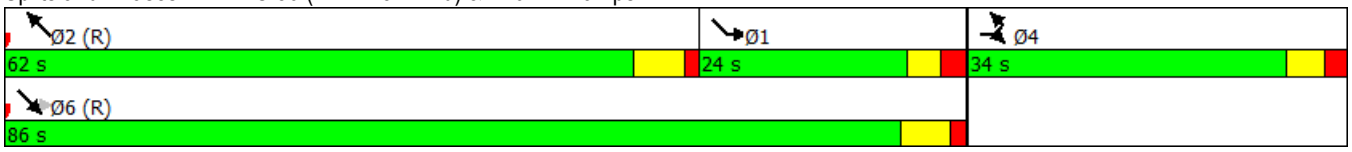


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	12	0	311	0	0	0	52	765	0	0	629	568
Future Volume (vph)	12	0	311	0	0	0	52	765	0	0	629	568
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1744	0	2746	0	0	0	1727	3454	0	0	3489	1561
Flt Permitted	0.950						0.354					
Satd. Flow (perm)	1744	0	2746	0	0	0	643	3454	0	0	3489	1529
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	13	0	334	0	0	0	57	841	0	0	684	617
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	0	334	0	0	0	57	841	0	0	684	617
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	34.0		34.0				24.0	86.0			62.0	
Total Split (%)	28.3%		28.3%				20.0%	71.7%			51.7%	
Maximum Green (s)	28.4		28.4				18.6	80.0			56.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	18.8		18.8				91.2	91.2			72.0	120.0
Actuated g/C Ratio	0.16		0.16				0.76	0.76			0.60	1.00

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.05		0.78				0.09	0.32			0.33	0.40
Control Delay	40.9		61.0				0.7	1.9			12.6	1.0
Queue Delay	0.0		0.0				0.0	0.0			0.2	0.0
Total Delay	40.9		61.0				0.7	1.9			12.8	1.0
LOS	D		E				A	A			B	A
Approach Delay		60.2						1.8			7.2	
Approach LOS		E						A			A	
Queue Length 50th (ft)	9		143				0	0			126	2
Queue Length 95th (ft)	26		189				8	107			193	5
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	421		663				660	2625			2093	1529
Starvation Cap Reductn	0		0				0	0			648	0
Spillback Cap Reductn	0		0				0	0			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.03		0.50				0.09	0.32			0.47	0.40

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 1 (1%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 45			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 12.5		Intersection LOS: B	
Intersection Capacity Utilization 45.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

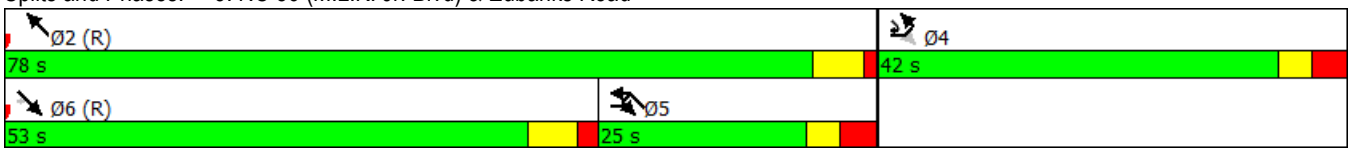


Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	293	278	795	280	9	263	902
Future Volume (vph)	293	278	795	280	9	263	902
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3383	1474	3522	1488	0	3191	4940
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3383	1474	3522	1488	0	3191	4940
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.88	0.88	0.92	0.92	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	2%	8%	2%	10%	5%
Adj. Flow (vph)	333	316	864	304	10	289	991
Shared Lane Traffic (%)							
Lane Group Flow (vph)	333	316	864	304	0	299	991
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	Prot	NA
Protected Phases	4	5!	6	4	5!	5	2
Permitted Phases		4		6			
Detector Phase	4	5	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	14.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	42.0	25.0	53.0	42.0	25.0	25.0	78.0
Total Split (%)	35.0%	20.8%	44.2%	35.0%	20.8%	20.8%	65.0%
Maximum Green (s)	35.7	18.6	46.7	35.7	18.6	18.6	72.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.4	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.4	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0			7.0			
Flash Dont Walk (s)	27.0			27.0			
Pedestrian Calls (#/hr)	0			0			
Act Effct Green (s)	16.7	41.7	68.3	90.0		20.0	93.3

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.14	0.35	0.57	0.75		0.17	0.78
v/c Ratio	0.71	0.62	0.43	0.27		0.56	0.26
Control Delay	57.5	38.0	4.0	1.5		44.1	1.9
Queue Delay	0.0	0.0	0.4	0.5		0.0	0.0
Total Delay	57.5	38.0	4.4	1.9		44.1	1.9
LOS	E	D	A	A		D	A
Approach Delay	48.0		3.8				11.7
Approach LOS	D		A				B
Queue Length 50th (ft)	128	202	25	13		117	29
Queue Length 95th (ft)	166	275	91	18		164	35
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1043	512	2003	1116		531	3840
Starvation Cap Reductn	0	0	592	432		0	0
Spillback Cap Reductn	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.32	0.62	0.61	0.44		0.56	0.26

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 118 (98%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 59.4%		ICU Level of Service B	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	174	93	1034	93	5	143	944
Future Volume (vph)	174	93	1034	93	5	143	944
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.99					
Frt		0.850	0.988				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1418	4954	0	0	1718	3436
Flt Permitted	0.950					0.190	
Satd. Flow (perm)	3285	1398	4954	0	0	344	3436
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		3					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Heavy Vehicles (%)	2%	9%	5%	5%	4%	4%	4%
Adj. Flow (vph)	187	100	1112	100	5	151	994
Shared Lane Traffic (%)							
Lane Group Flow (vph)	187	100	1212	0	0	156	994
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	30.0	30.0	60.0		30.0	30.0	90.0
Total Split (%)	25.0%	25.0%	50.0%		25.0%	25.0%	75.0%
Maximum Green (s)	23.4	23.7	53.6		23.7	23.7	83.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	12.8	21.3	83.7			97.2	97.2

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.11	0.18	0.70			0.81	0.81
v/c Ratio	0.53	0.40	0.35			0.42	0.36
Control Delay	56.1	44.0	4.9			5.6	1.9
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	56.1	44.0	4.9			5.6	1.9
LOS	E	D	A			A	A
Approach Delay	51.9		4.9				2.4
Approach LOS	D		A				A
Queue Length 50th (ft)	71	66	90			6	27
Queue Length 95th (ft)	106	113	91			30	91
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	684	444	3457			564	2783
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.27	0.23	0.35			0.28	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 8.9		Intersection LOS: A	
Intersection Capacity Utilization 48.8%		ICU Level of Service A	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

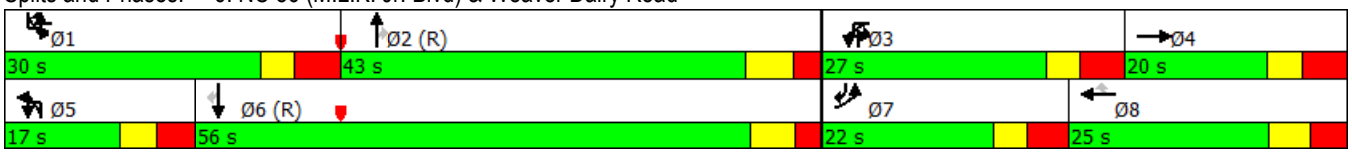
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	90	74	5	29	148	73	239	22	6	789	165	4
Future Volume (vph)	90	74	5	29	148	73	239	22	6	789	165	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	
Storage Lanes	2		0		1		1		1		1	
Taper Length (ft)	25				25				25			
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00		0.99		1.00		0.99	
Frt		0.991					0.850				0.850	
Flt Protected	0.950				0.950				0.950			
Satd. Flow (prot)	3349	3419	0	0	3383	1835	1560	0	1703	4893	1524	0
Flt Permitted	0.950				0.950				0.950			
Satd. Flow (perm)	3341	3419	0	0	3375	1835	1537	0	1702	4893	1504	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)	3		2		2		3		1		1	
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	4%
Adj. Flow (vph)	99	81	5	31	156	77	252	24	7	867	181	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	86	0	0	187	77	252	0	31	867	181	0
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1!
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	22.0	20.0		27.0	27.0	25.0	30.0	17.0	17.0	43.0	27.0	30.0
Total Split (%)	18.3%	16.7%		22.5%	22.5%	20.8%	25.0%	14.2%	14.2%	35.8%	22.5%	25.0%
Maximum Green (s)	15.3	12.7		20.0	20.0	17.8	22.8	10.3	10.3	36.2	20.0	22.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	331	655	109
Future Volume (vph)	331	655	109
Ideal Flow (vphpl)	1900	1900	1900
Grade (%)		1%	
Storage Length (ft)	400		250
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.95	1.00
Ped Bike Factor	1.00		0.98
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	3350	3454	1545
Flt Permitted	0.950		
Satd. Flow (perm)	3349	3454	1511
Right Turn on Red			No
Satd. Flow (RTOR)			
Link Speed (mph)		35	
Link Distance (ft)		832	
Travel Time (s)		16.2	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%
Adj. Flow (vph)	352	697	116
Shared Lane Traffic (%)			
Lane Group Flow (vph)	356	697	116
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7
Permitted Phases			6
Detector Phase	1	6	7
Switch Phase			
Minimum Initial (s)	7.0	12.0	7.0
Minimum Split (s)	15.0	40.0	14.0
Total Split (s)	30.0	56.0	22.0
Total Split (%)	25.0%	46.7%	18.3%
Maximum Green (s)	22.8	49.6	15.3
Yellow Time (s)	3.1	4.0	3.0
All-Red Time (s)	4.1	2.4	3.7
Lost Time Adjust (s)	-2.2	-1.4	-1.7
Total Lost Time (s)	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	6.0	2.0
Minimum Gap (s)	2.0	6.0	2.0
Time Before Reduce (s)	0.0	15.0	0.0
Time To Reduce (s)	0.0	20.0	0.0
Recall Mode	None	C-Max	None
Walk Time (s)		7.0	
Flash Dont Walk (s)		26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	10.1	10.2			13.0	13.0	31.2		9.3	59.6	72.6	
Actuated g/C Ratio	0.08	0.08			0.11	0.11	0.26		0.08	0.50	0.60	
v/c Ratio	0.35	0.30			0.51	0.39	0.63		0.23	0.36	0.20	
Control Delay	55.1	54.0			55.1	54.8	42.3		56.2	20.7	10.8	
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	55.1	54.0			55.1	54.8	42.3		56.2	20.7	10.8	
LOS	E	D			E	D	D		E	C	B	
Approach Delay		54.6				48.8				20.0		
Approach LOS		D				D				C		
Queue Length 50th (ft)	38	33			71	56	160		23	150	54	
Queue Length 95th (ft)	65	59			106	103	218		55	219	105	
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	
Base Capacity (vph)	474	427			620	305	468		170	2431	1026	
Starvation Cap Reductn	0	0			0	0	0		0	0	0	
Spillback Cap Reductn	0	0			0	0	0		0	0	0	
Storage Cap Reductn	0	0			0	0	0		0	0	0	
Reduced v/c Ratio	0.21	0.20			0.30	0.25	0.54		0.18	0.36	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 28.3		Intersection LOS: C	
Intersection Capacity Utilization 77.2%		ICU Level of Service D	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	20.0	75.8	86.0
Actuated g/C Ratio	0.17	0.63	0.72
v/c Ratio	0.64	0.32	0.11
Control Delay	45.2	14.1	5.6
Queue Delay	0.0	0.0	0.0
Total Delay	45.2	14.1	5.6
LOS	D	B	A
Approach Delay		22.7	
Approach LOS		C	
Queue Length 50th (ft)	129	161	24
Queue Length 95th (ft)	155	252	47
Internal Link Dist (ft)		752	
Turn Bay Length (ft)	400		250
Base Capacity (vph)	697	2182	1167
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.51	0.32	0.10

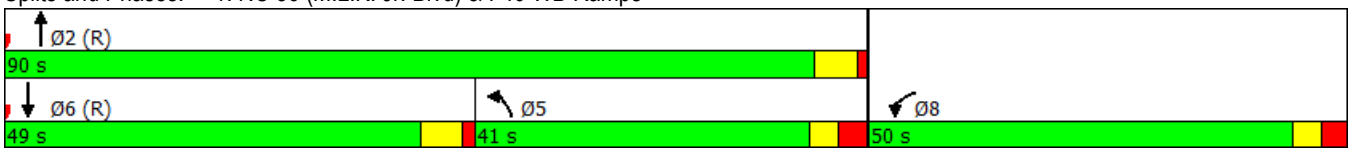
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	690	0	106	712	580	0	0	462	23
Future Volume (vph)	0	0	0	690	0	106	712	580	0	0	462	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3416	0	1575	3433	1863	0	0	3504	1567
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3416	0	1575	3433	1863	0	0	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	767	0	118	766	624	0	0	502	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	767	0	118	766	624	0	0	502	25
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				50.0			41.0	90.0			49.0	
Total Split (%)				35.7%			29.3%	64.3%			35.0%	
Maximum Green (s)				44.2			34.9	84.3			43.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				36.2		140.0	36.0	93.8			52.8	140.0
Actuated g/C Ratio				0.26		1.00	0.26	0.67			0.38	1.00
v/c Ratio				0.87		0.07	0.87	0.50			0.38	0.02
Control Delay				60.7		0.1	42.6	3.0			33.6	0.0
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				60.7		0.1	42.6	3.0			33.6	0.0
LOS				E		A	D	A			C	A
Approach Delay					52.6			24.8			32.1	
Approach LOS					D			C			C	
Queue Length 50th (ft)				345		0	352	25			174	0
Queue Length 95th (ft)				396		0	371	33			242	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				1098		1575	882	1248			1322	1567
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.70		0.07	0.87	0.50			0.38	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 82 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.87			
Intersection Signal Delay: 34.9		Intersection LOS: C	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

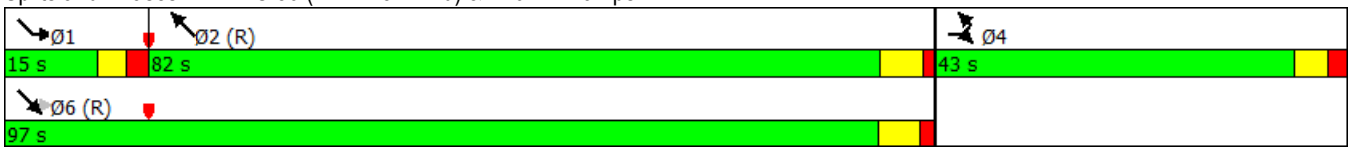


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	14	0	403	0	0	0	43	1159	0	0	1221	801
Future Volume (vph)	14	0	403	0	0	0	43	1159	0	0	1221	801
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1761	0	2773	0	0	0	1761	3522	0	0	3557	1591
Flt Permitted	0.950						0.137					
Satd. Flow (perm)	1761	0	2773	0	0	0	254	3522	0	0	3557	1557
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	17	0	486	0	0	0	46	1246	0	0	1327	871
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	486	0	0	0	46	1246	0	0	1327	871
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	43.0		43.0				15.0	97.0			82.0	
Total Split (%)	30.7%		30.7%				10.7%	69.3%			58.6%	
Maximum Green (s)	37.4		37.4				9.6	91.0			76.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	28.9		28.9				101.1	101.1			91.2	140.0
Actuated g/C Ratio	0.21		0.21				0.72	0.72			0.65	1.00
v/c Ratio	0.05		0.85				0.17	0.49			0.57	0.56

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay	42.0		67.8				5.3	2.1			12.8	1.4
Queue Delay	0.0		0.0				0.0	0.0			0.2	0.0
Total Delay	42.0		67.8				5.3	2.2			13.0	1.4
LOS	D		E				A	A			B	A
Approach Delay		66.9						2.3			8.4	
Approach LOS		E						A			A	
Queue Length 50th (ft)	13		244				2	2			240	0
Queue Length 95th (ft)	29		269				18	171			297	4
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	477		752				291	2544			2317	1557
Starvation Cap Reductn	0		0				0	0			301	0
Spillback Cap Reductn	0		0				0	45			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.04		0.65				0.16	0.50			0.66	0.56

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 74 (53%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 65.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

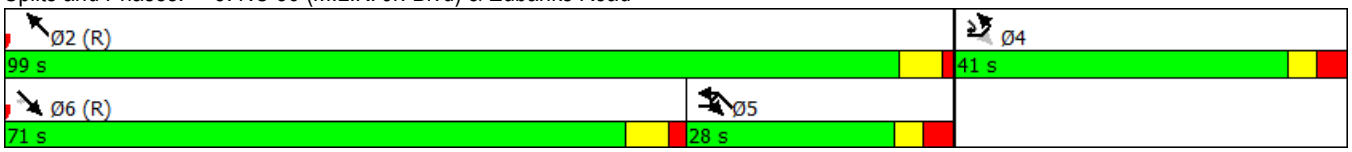


Lane Group	EBL	EBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Volume (vph)	420	307	1086	475	362	1596
Future Volume (vph)	420	307	1086	475	362	1596
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%			0%
Storage Length (ft)	300	0		175	325	
Storage Lanes	1	1		1	2	
Taper Length (ft)	25				25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.97	0.91
Frt		0.850		0.850		
Flt Protected	0.950				0.950	
Satd. Flow (prot)	3450	1516	3522	1575	3433	5085
Flt Permitted	0.950				0.950	
Satd. Flow (perm)	3450	1516	3522	1575	3433	5085
Right Turn on Red		No		No		
Satd. Flow (RTOR)						
Link Speed (mph)	35		45			45
Link Distance (ft)	677		451			567
Travel Time (s)	13.2		6.8			8.6
Peak Hour Factor	0.87	0.87	0.89	0.89	0.92	0.92
Heavy Vehicles (%)	1%	6%	2%	2%	2%	2%
Adj. Flow (vph)	483	353	1220	534	393	1735
Shared Lane Traffic (%)						
Lane Group Flow (vph)	483	353	1220	534	393	1735
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	NA
Protected Phases	4	5!	6	4	5	2
Permitted Phases		4		6		
Detector Phase	4	5	6	4	5	2
Switch Phase						
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	12.0
Minimum Split (s)	41.0	14.0	19.0	41.0	14.0	19.0
Total Split (s)	41.0	28.0	71.0	41.0	28.0	99.0
Total Split (%)	29.3%	20.0%	50.7%	29.3%	20.0%	70.7%
Maximum Green (s)	34.7	21.6	64.7	34.7	21.6	93.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	4.5
All-Red Time (s)	3.3	3.4	1.9	3.3	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.4	-1.3	-1.3	-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag		Lag	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	C-Max
Walk Time (s)	7.0			7.0		
Flash Dont Walk (s)	27.0			27.0		
Pedestrian Calls (#/hr)	0			0		
Act Effct Green (s)	24.8	52.8	77.2	107.0	23.0	105.2

Lane Group	EBL	EBR	SET	SER	NWL	NWT
Actuated g/C Ratio	0.18	0.38	0.55	0.76	0.16	0.75
v/c Ratio	0.79	0.62	0.63	0.44	0.70	0.45
Control Delay	64.7	40.1	11.0	2.4	43.6	2.8
Queue Delay	0.0	0.0	0.7	0.5	0.0	0.0
Total Delay	64.7	40.1	11.7	3.0	43.6	2.8
LOS	E	D	B	A	D	A
Approach Delay	54.3		9.0			10.3
Approach LOS	D		A			B
Queue Length 50th (ft)	220	260	212	30	184	72
Queue Length 95th (ft)	256	327	276	52	213	79
Internal Link Dist (ft)	597		371			487
Turn Bay Length (ft)	300			175	325	
Base Capacity (vph)	887	571	1941	1203	563	3820
Starvation Cap Reductn	0	0	363	309	0	0
Spillback Cap Reductn	0	0	0	0	0	20
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.62	0.77	0.60	0.70	0.46

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 56 (40%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 17.6		Intersection LOS: B	
Intersection Capacity Utilization 71.9%		ICU Level of Service C	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



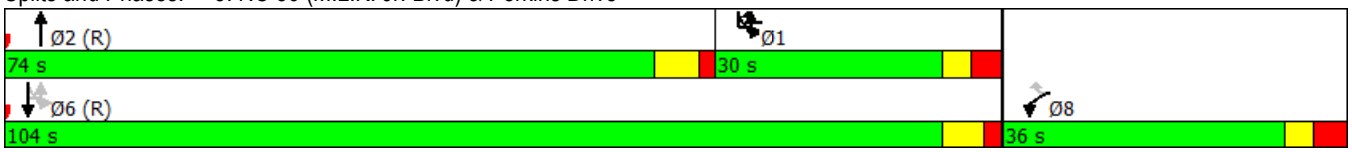
Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	177	135	1799	115	17	142	1178
Future Volume (vph)	177	135	1799	115	17	142	1178
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.99	1.00			1.00	
Frt		0.850	0.991				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1515	5108	0	0	1752	3504
Flt Permitted	0.950					0.058	
Satd. Flow (perm)	3285	1493	5108	0	0	107	3504
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		4		3		3	
Peak Hour Factor	0.97	0.97	0.94	0.94	0.91	0.91	0.91
Adj. Flow (vph)	182	139	1914	122	19	156	1295
Shared Lane Traffic (%)							
Lane Group Flow (vph)	182	139	2036	0	0	175	1295
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	36.0	30.0	74.0		30.0	30.0	104.0
Total Split (%)	25.7%	21.4%	52.9%		21.4%	21.4%	74.3%
Maximum Green (s)	29.4	23.7	67.6		23.7	23.7	97.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	13.8	38.8	86.2			116.2	116.2
Actuated g/C Ratio	0.10	0.28	0.62			0.83	0.83

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.57	0.33	0.65			0.46	0.45
Control Delay	66.8	38.4	9.3			36.7	1.0
Queue Delay	0.0	0.0	0.3			0.0	0.0
Total Delay	66.8	38.4	9.6			36.7	1.0
LOS	E	D	A			D	A
Approach Delay	54.5		9.6				5.3
Approach LOS	D		A				A
Queue Length 50th (ft)	82	96	192			84	20
Queue Length 95th (ft)	120	149	m186			156	43
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	727	417	3146			382	2909
Starvation Cap Reductn	0	0	463			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.25	0.33	0.76			0.46	0.45

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 80 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.65
Intersection Signal Delay: 11.7 Intersection LOS: B
Intersection Capacity Utilization 67.4% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive



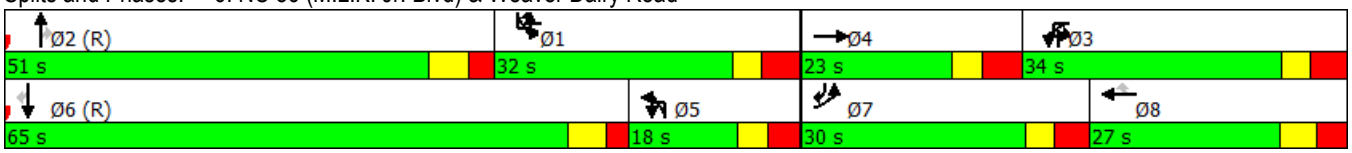
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	126	83	11	31	259	190	458	34	23	1308	212	1
Future Volume (vph)	126	83	11	31	259	190	458	34	23	1308	212	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	
Storage Lanes	2		0		1		1		1		1	
Taper Length (ft)	25				25				25			
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00		0.99				0.99	
Frt		0.983					0.850				0.850	
Flt Protected	0.950				0.950				0.950			
Satd. Flow (prot)	3382	3422	0	0	3416	1853	1575	0	1752	5036	1568	0
Flt Permitted	0.950				0.950				0.950			
Satd. Flow (perm)	3377	3422	0	0	3408	1853	1553	0	1752	5036	1547	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)	2		2		2		2				1	
Peak Hour Factor	0.82	0.82	0.82	0.84	0.84	0.84	0.84	0.87	0.87	0.87	0.87	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	2%
Adj. Flow (vph)	154	101	13	37	308	226	545	39	26	1503	244	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	114	0	0	345	226	545	0	65	1503	244	0
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1!
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	30.0	23.0		34.0	34.0	27.0	32.0	18.0	18.0	51.0	34.0	32.0
Total Split (%)	21.4%	16.4%		24.3%	24.3%	19.3%	22.9%	12.9%	12.9%	36.4%	24.3%	22.9%
Maximum Green (s)	23.3	15.7		27.0	27.0	19.8	24.8	11.3	11.3	44.2	27.0	24.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	309	836	212
Future Volume (vph)	309	836	212
Ideal Flow (vphpl)	1900	1900	1900
Grade (%)		1%	
Storage Length (ft)	400		250
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.95	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	3416	3522	1575
Flt Permitted	0.950		
Satd. Flow (perm)	3415	3522	1575
Right Turn on Red			No
Satd. Flow (RTOR)			
Link Speed (mph)		35	
Link Distance (ft)		832	
Travel Time (s)		16.2	
Confl. Peds. (#/hr)	1		
Peak Hour Factor	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%
Adj. Flow (vph)	340	919	233
Shared Lane Traffic (%)			
Lane Group Flow (vph)	341	919	233
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7
Permitted Phases			6
Detector Phase	1	6	7
Switch Phase			
Minimum Initial (s)	7.0	12.0	7.0
Minimum Split (s)	15.0	40.0	14.0
Total Split (s)	32.0	65.0	30.0
Total Split (%)	22.9%	46.4%	21.4%
Maximum Green (s)	24.8	58.6	23.3
Yellow Time (s)	3.1	4.0	3.0
All-Red Time (s)	4.1	2.4	3.7
Lost Time Adjust (s)	-2.2	-1.4	-1.7
Total Lost Time (s)	5.0	5.0	5.0
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	6.0	2.0
Minimum Gap (s)	2.0	6.0	2.0
Time Before Reduce (s)	0.0	15.0	0.0
Time To Reduce (s)	0.0	20.0	0.0
Recall Mode	None	C-Max	None
Walk Time (s)		7.0	
Flash Dont Walk (s)		26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	12.5	11.5			24.9	23.9	50.9		12.1	56.6	81.5	
Actuated g/C Ratio	0.09	0.08			0.18	0.17	0.36		0.09	0.40	0.58	
v/c Ratio	0.51	0.41			0.57	0.72	0.96		0.43	0.74	0.27	
Control Delay	66.6	65.0			55.6	67.1	59.5		69.3	39.2	13.4	
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	66.6	65.0			55.6	67.1	59.5		69.3	39.2	13.4	
LOS	E	E			E	E	E		E	D	B	
Approach Delay		65.9				59.8				36.8		
Approach LOS		E				E				D		
Queue Length 50th (ft)	70	52			149	196	350		57	423	95	
Queue Length 95th (ft)	95	76			174	252	361		103	516	143	
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	
Base Capacity (vph)	603	439			723	332	569		162	2036	937	
Starvation Cap Reductn	0	0			0	0	0		0	0	0	
Spillback Cap Reductn	0	0			0	0	0		0	0	0	
Storage Cap Reductn	0	0			0	0	0		0	0	0	
Reduced v/c Ratio	0.26	0.26			0.48	0.68	0.96		0.40	0.74	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 72 (51%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 38.9		Intersection LOS: D	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	27.0	74.2	87.7
Actuated g/C Ratio	0.19	0.53	0.63
v/c Ratio	0.52	0.49	0.24
Control Delay	45.1	16.0	6.2
Queue Delay	0.0	0.0	0.0
Total Delay	45.1	16.0	6.2
LOS	D	B	A
Approach Delay		21.1	
Approach LOS		C	
Queue Length 50th (ft)	147	205	33
Queue Length 95th (ft)	203	250	72
Internal Link Dist (ft)		752	
Turn Bay Length (ft)	400		250
Base Capacity (vph)	658	1867	1127
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.52	0.49	0.21

Intersection Summary

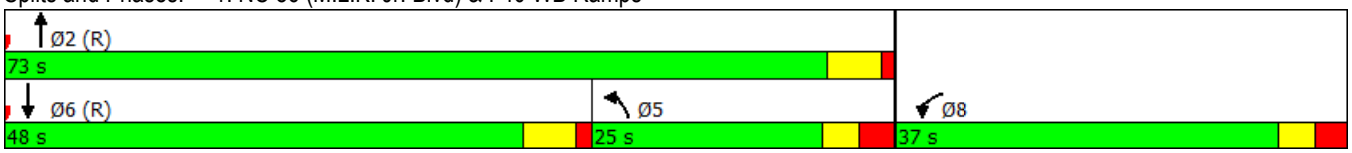
2021 With Site

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	706	0	81	315	430	0	0	522	15
Future Volume (vph)	0	0	0	706	0	81	315	430	0	0	522	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3350	0	1545	3400	1845	0	0	3470	1552
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3350	0	1545	3400	1845	0	0	3470	1552
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.92	0.92	0.92	0.90	0.90	0.90	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Adj. Flow (vph)	0	0	0	767	0	88	350	478	0	0	593	17
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	767	0	88	350	478	0	0	593	17
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				37.0			25.0	73.0			48.0	
Total Split (%)				33.6%			22.7%	66.4%			43.6%	
Maximum Green (s)				31.2			18.9	67.3			42.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				28.7		110.0	20.0	71.3			46.3	110.0
Actuated g/C Ratio				0.26		1.00	0.18	0.65			0.42	1.00
v/c Ratio				0.88		0.06	0.57	0.40			0.41	0.01
Control Delay				51.1		0.1	32.6	2.5			23.9	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				51.1		0.1	32.6	2.5			23.9	0.0
LOS				D		A	C	A			C	A
Approach Delay					45.8			15.2			23.2	
Approach LOS					D			B			C	
Queue Length 50th (ft)				265		0	124	20			153	0
Queue Length 95th (ft)				329		0	158	25			203	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				974		1545	618	1196			1461	1552
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.79		0.06	0.57	0.40			0.41	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 19 (17%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 28.8		Intersection LOS: C	
Intersection Capacity Utilization 68.6%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

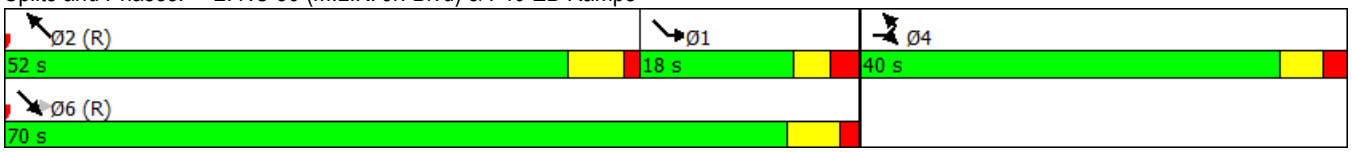


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	17	0	830	0	0	0	87	1131	0	0	726	887
Future Volume (vph)	17	0	830	0	0	0	87	1131	0	0	726	887
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1761	0	2773	0	0	0	1744	3487	0	0	3557	1591
Flt Permitted	0.950						0.274					
Satd. Flow (perm)	1761	0	2773	0	0	0	503	3487	0	0	3557	1591
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.92	0.92	0.92	0.96	0.96	0.96
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	3%	3%	3%	2%	2%	2%
Adj. Flow (vph)	19	0	922	0	0	0	95	1229	0	0	756	924
Shared Lane Traffic (%)												
Lane Group Flow (vph)	19	0	922	0	0	0	95	1229	0	0	756	924
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	40.0		40.0				18.0	70.0			52.0	
Total Split (%)	36.4%		36.4%				16.4%	63.6%			47.3%	
Maximum Green (s)	34.4		34.4				12.6	64.0			46.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	35.0		35.0				65.0	65.0			47.0	110.0
Actuated g/C Ratio	0.32		0.32				0.59	0.59			0.43	1.00
v/c Ratio	0.03		1.05				0.21	0.60			0.50	0.58
Control Delay	26.2		80.0				3.7	9.3			21.4	2.9

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Queue Delay	0.0		1.3				0.0	0.2			0.5	0.0
Total Delay	26.2		81.3				3.7	9.5			21.8	2.9
LOS	C		F				A	A			C	A
Approach Delay		80.2						9.1			11.4	
Approach LOS		F						A			B	
Queue Length 50th (ft)	9		~402				3	303			186	23
Queue Length 95th (ft)	27		#540				25	345			226	52
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	560		882				443	2060			1519	1591
Starvation Cap Reductn	0		0				0	0			343	0
Spillback Cap Reductn	0		3				0	191			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.03		1.05				0.21	0.66			0.64	0.58

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 12 (11%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.05			
Intersection Signal Delay: 27.0		Intersection LOS: C	
Intersection Capacity Utilization 68.6%		ICU Level of Service C	
Analysis Period (min) 15			
~ Volume exceeds capacity, queue is theoretically infinite.			
Queue shown is maximum after two cycles.			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

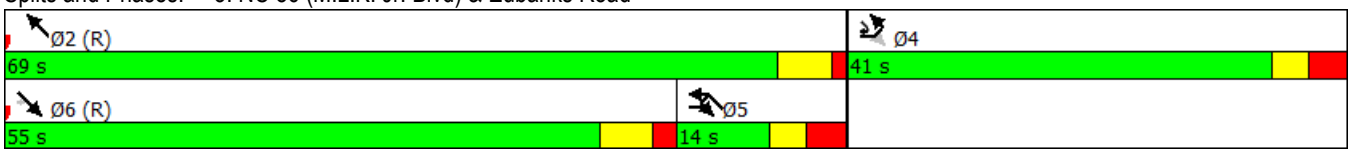


Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	476	254	1588	362	14	219	1126
Future Volume (vph)	476	254	1588	362	14	219	1126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3383	1397	3487	1560	0	3015	5085
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3383	1397	3487	1560	0	3015	5085
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.94	0.94	0.96	0.96	0.97	0.97	0.97
Heavy Vehicles (%)	3%	15%	3%	3%	2%	17%	2%
Adj. Flow (vph)	506	270	1654	377	14	226	1161
Shared Lane Traffic (%)							
Lane Group Flow (vph)	506	270	1654	377	0	240	1161
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	Prot	NA
Protected Phases	4	5!	6	4	5!	5	2
Permitted Phases		4		6			
Detector Phase	4	5	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	14.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	41.0	14.0	55.0	41.0	14.0	14.0	69.0
Total Split (%)	37.3%	12.7%	50.0%	37.3%	12.7%	12.7%	62.7%
Maximum Green (s)	34.7	7.6	48.7	34.7	7.6	7.6	63.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.4	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.4	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0			7.0			
Flash Dont Walk (s)	27.0			27.0			
Pedestrian Calls (#/hr)	0			0			
Act Effct Green (s)	21.7	35.7	64.3	91.0		9.0	78.3

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.20	0.32	0.58	0.83		0.08	0.71
v/c Ratio	0.76	0.60	0.81	0.29		0.98	0.32
Control Delay	49.2	36.5	12.5	0.7		95.7	4.8
Queue Delay	0.0	0.0	2.3	0.5		0.0	0.0
Total Delay	49.2	36.5	14.8	1.3		95.7	4.8
LOS	D	D	B	A		F	A
Approach Delay	44.8		12.2				20.4
Approach LOS	D		B				C
Queue Length 50th (ft)	175	159	315	8		89	68
Queue Length 95th (ft)	218	228	m446	m10		#171	79
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1107	452	2039	1290		246	3621
Starvation Cap Reductn	0	0	251	533		0	0
Spillback Cap Reductn	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.46	0.60	0.93	0.50		0.98	0.32

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 12 (11%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 21.0		Intersection LOS: C	
Intersection Capacity Utilization 78.8%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			
! Phase conflict between lane groups.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	95	66	1274	72	44	149	1664
Future Volume (vph)	95	66	1274	72	44	149	1664
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.98	1.00			1.00	
Frt		0.850	0.992				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3074	1515	5065	0	0	1735	3470
Flt Permitted	0.950					0.141	
Satd. Flow (perm)	3074	1491	5065	0	0	257	3470
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		5		1		1	
Peak Hour Factor	0.79	0.79	0.94	0.94	0.93	0.93	0.93
Heavy Vehicles (%)	9%	2%	3%	3%	3%	3%	3%
Adj. Flow (vph)	120	84	1355	77	47	160	1789
Shared Lane Traffic (%)							
Lane Group Flow (vph)	120	84	1432	0	0	207	1789
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	25.0	29.0	56.0		29.0	29.0	85.0
Total Split (%)	22.7%	26.4%	50.9%		26.4%	26.4%	77.3%
Maximum Green (s)	18.4	22.7	49.6		22.7	22.7	78.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	10.5	21.5	73.5			89.5	89.5

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.10	0.20	0.67			0.81	0.81
v/c Ratio	0.41	0.29	0.42			0.58	0.63
Control Delay	50.7	34.7	9.5			18.8	2.1
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	50.7	34.7	9.5			18.8	2.1
LOS	D	C	A			B	A
Approach Delay	44.1		9.5				3.8
Approach LOS	D		A				A
Queue Length 50th (ft)	41	49	146			36	50
Queue Length 95th (ft)	60	71	233			m90	116
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	558	473	3382			531	2822
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.22	0.18	0.42			0.39	0.63

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 27 (25%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.63			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			
! Phase conflict between lane groups.			

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

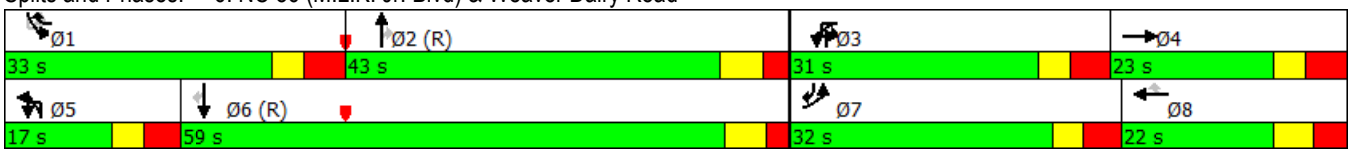
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Lane Configurations												
Traffic Volume (vph)	268	156	18	29	176	82	207	8	17	837	270	473
Future Volume (vph)	268	156	18	29	176	82	207	8	17	837	270	473
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	400
Storage Lanes	2		0		1		1		1		1	2
Taper Length (ft)	25				25				25			25
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.97
Ped Bike Factor		1.00			1.00							
Frt		0.984					0.850				0.850	
Flt Protected	0.950				0.950				0.950			0.950
Satd. Flow (prot)	3382	3425	0	0	3226	1750	1488	0	1736	4988	1553	3350
Flt Permitted	0.950				0.950				0.950			0.950
Satd. Flow (perm)	3382	3425	0	0	3213	1750	1488	0	1736	4988	1553	3350
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)			4		4							
Peak Hour Factor	0.87	0.87	0.87	0.86	0.86	0.86	0.86	0.95	0.95	0.95	0.95	0.93
Heavy Vehicles (%)	2%	2%	2%	8%	8%	8%	8%	4%	4%	4%	4%	4%
Adj. Flow (vph)	308	179	21	34	205	95	241	8	18	881	284	509
Shared Lane Traffic (%)												
Lane Group Flow (vph)	308	200	0	0	239	95	241	0	26	881	284	509
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	32.0	23.0		31.0	31.0	22.0	33.0	17.0	17.0	43.0	31.0	33.0
Total Split (%)	24.6%	17.7%		23.8%	23.8%	16.9%	25.4%	13.1%	13.1%	33.1%	23.8%	25.4%
Maximum Green (s)	25.3	15.7		24.0	24.0	14.8	25.8	10.3	10.3	36.2	24.0	25.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	-2.2
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBT	SBR
Lane Configurations		
Traffic Volume (vph)	1127	125
Future Volume (vph)	1127	125
Ideal Flow (vphpl)	1900	1900
Grade (%)	1%	
Storage Length (ft)		250
Storage Lanes		1
Taper Length (ft)		
Lane Util. Factor	0.95	1.00
Ped Bike Factor		
Frt		0.850
Flt Protected		
Satd. Flow (prot)	3454	1545
Flt Permitted		
Satd. Flow (perm)	3454	1545
Right Turn on Red		No
Satd. Flow (RTOR)		
Link Speed (mph)	35	
Link Distance (ft)	832	
Travel Time (s)	16.2	
Confl. Peds. (#/hr)		
Peak Hour Factor	0.93	0.93
Heavy Vehicles (%)	4%	4%
Adj. Flow (vph)	1212	134
Shared Lane Traffic (%)		
Lane Group Flow (vph)	1212	134
Turn Type	NA	pm+ov
Protected Phases	6	7
Permitted Phases		6
Detector Phase	6	7
Switch Phase		
Minimum Initial (s)	12.0	7.0
Minimum Split (s)	40.0	14.0
Total Split (s)	59.0	32.0
Total Split (%)	45.4%	24.6%
Maximum Green (s)	52.6	25.3
Yellow Time (s)	4.0	3.0
All-Red Time (s)	2.4	3.7
Lost Time Adjust (s)	-1.4	-1.7
Total Lost Time (s)	5.0	5.0
Lead/Lag	Lag	Lead
Lead-Lag Optimize?		
Vehicle Extension (s)	6.0	2.0
Minimum Gap (s)	6.0	2.0
Time Before Reduce (s)	15.0	0.0
Time To Reduce (s)	20.0	0.0
Recall Mode	C-Max	None
Walk Time (s)	7.0	
Flash Dont Walk (s)	26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	17.9	15.6			16.0	13.7	44.8		9.2	52.3	73.2	26.2
Actuated g/C Ratio	0.14	0.12			0.12	0.11	0.34		0.07	0.40	0.56	0.20
v/c Ratio	0.66	0.49			0.60	0.52	0.47		0.21	0.44	0.32	0.76
Control Delay	60.0	56.9			60.2	64.3	35.3		61.1	30.9	18.0	56.2
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	0.0
Total Delay	60.0	56.9			60.2	64.3	35.3		61.1	30.9	18.0	56.2
LOS	E	E			E	E	D		E	C	B	E
Approach Delay		58.8				50.5				28.5		
Approach LOS		E				D				C		
Queue Length 50th (ft)	128	84			100	77	158		21	195	122	209
Queue Length 95th (ft)	164	115			132	124	199		52	282	218	259
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	400
Base Capacity (vph)	702	488			645	232	544		160	2005	994	744
Starvation Cap Reductn	0	0			0	0	0		0	0	0	0
Spillback Cap Reductn	0	0			0	0	0		0	0	0	0
Storage Cap Reductn	0	0			0	0	0		0	0	0	0
Reduced v/c Ratio	0.44	0.41			0.37	0.41	0.44		0.16	0.44	0.29	0.68

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 36.2		Intersection LOS: D	
Intersection Capacity Utilization 69.7%		ICU Level of Service C	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBT	SBR
Pedestrian Calls (#/hr)	0	
Act Effct Green (s)	74.7	97.6
Actuated g/C Ratio	0.57	0.75
v/c Ratio	0.61	0.12
Control Delay	22.4	6.2
Queue Delay	0.0	0.0
Total Delay	22.4	6.2
LOS	C	A
Approach Delay	30.5	
Approach LOS	C	
Queue Length 50th (ft)	370	32
Queue Length 95th (ft)	537	65
Internal Link Dist (ft)	752	
Turn Bay Length (ft)		250
Base Capacity (vph)	1985	1268
Starvation Cap Reductn	0	0
Spillback Cap Reductn	0	0
Storage Cap Reductn	0	0
Reduced v/c Ratio	0.61	0.11

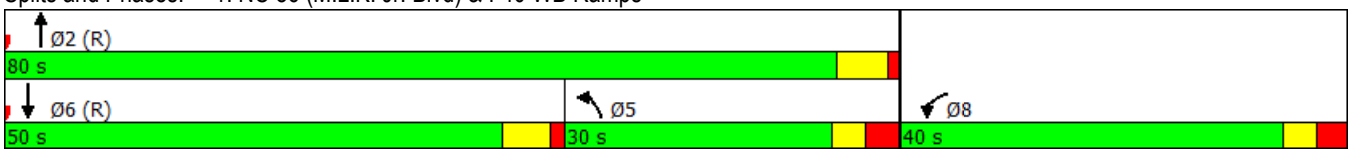
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	515	0	72	316	353	0	0	308	17
Future Volume (vph)	0	0	0	515	0	72	316	353	0	0	308	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3350	0	1545	3335	1810	0	0	3470	1552
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3350	0	1545	3335	1810	0	0	3470	1552
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.84	0.84	0.84	0.87	0.87	0.87	0.88	0.88	0.88
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	5%	5%	5%	3%	3%	3%
Adj. Flow (vph)	0	0	0	613	0	86	363	406	0	0	350	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	613	0	86	363	406	0	0	350	19
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				40.0			30.0	80.0			50.0	
Total Split (%)				33.3%			25.0%	66.7%			41.7%	
Maximum Green (s)				34.2			23.9	74.3			44.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				26.4		120.0	25.0	83.6			53.6	120.0
Actuated g/C Ratio				0.22		1.00	0.21	0.70			0.45	1.00
v/c Ratio				0.83		0.06	0.52	0.32			0.23	0.01
Control Delay				54.8		0.1	40.2	1.9			21.8	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0
Total Delay				54.8		0.1	40.2	1.9			21.8	0.0
LOS				D		A	D	A			C	A
Approach Delay					48.1			20.0			20.6	
Approach LOS					D			C			C	
Queue Length 50th (ft)				235		0	139	16			86	0
Queue Length 95th (ft)				258		0	157	21			127	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				977		1545	694	1260			1549	1552
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.63		0.06	0.52	0.32			0.23	0.01

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 12 (10%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.83			
Intersection Signal Delay: 30.8		Intersection LOS: C	
Intersection Capacity Utilization 46.2%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps



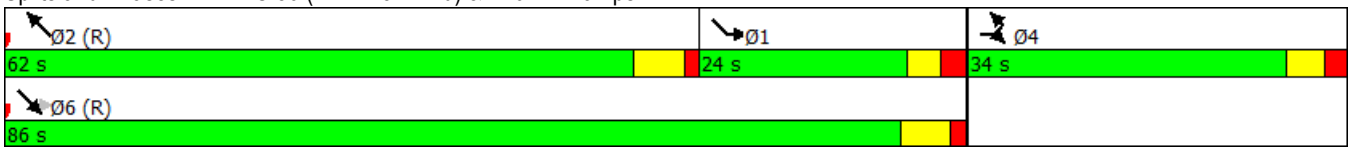
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	12	0	325	0	0	0	52	782	0	0	645	582
Future Volume (vph)	12	0	325	0	0	0	52	782	0	0	645	582
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1744	0	2746	0	0	0	1727	3454	0	0	3489	1561
Flt Permitted	0.950						0.345					
Satd. Flow (perm)	1744	0	2746	0	0	0	627	3454	0	0	3489	1529
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Confl. Peds. (#/hr)							1					1
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.91	0.91	0.91	0.92	0.92	0.92
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	4%	4%	4%
Adj. Flow (vph)	13	0	349	0	0	0	57	859	0	0	701	633
Shared Lane Traffic (%)												
Lane Group Flow (vph)	13	0	349	0	0	0	57	859	0	0	701	633
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	34.0		34.0				24.0	86.0			62.0	
Total Split (%)	28.3%		28.3%				20.0%	71.7%			51.7%	
Maximum Green (s)	28.4		28.4				18.6	80.0			56.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	19.4		19.4				90.6	90.6			71.4	120.0
Actuated g/C Ratio	0.16		0.16				0.76	0.76			0.60	1.00

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
v/c Ratio	0.05		0.79				0.09	0.33			0.34	0.41
Control Delay	40.2		60.8				0.8	2.2			13.0	1.0
Queue Delay	0.0		0.0				0.0	0.0			0.2	0.0
Total Delay	40.2		60.8				0.8	2.2			13.2	1.0
LOS	D		E				A	A			B	A
Approach Delay		60.1						2.1			7.4	
Approach LOS		E						A			A	
Queue Length 50th (ft)	9		148				0	0			134	2
Queue Length 95th (ft)	26		196				8	154			170	0
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	421		663				647	2606			2074	1529
Starvation Cap Reductn	0		0				0	0			622	0
Spillback Cap Reductn	0		0				0	0			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.03		0.53				0.09	0.33			0.48	0.41

Intersection Summary

Area Type: Other
Cycle Length: 120
Actuated Cycle Length: 120
Offset: 1 (1%), Referenced to phase 2:NWT and 6:SETL, Start of Green
Natural Cycle: 45
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 12.8 Intersection LOS: B
Intersection Capacity Utilization 46.2% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

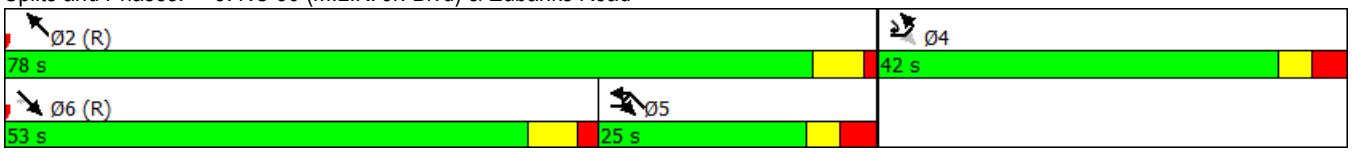


Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	293	281	827	280	22	266	933
Future Volume (vph)	293	281	827	280	22	266	933
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3383	1474	3522	1488	0	3201	4940
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3383	1474	3522	1488	0	3201	4940
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.88	0.88	0.92	0.92	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	2%	8%	2%	10%	5%
Adj. Flow (vph)	333	319	899	304	24	292	1025
Shared Lane Traffic (%)							
Lane Group Flow (vph)	333	319	899	304	0	316	1025
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	Prot	NA
Protected Phases	4	5!	6	4	5!	5	2
Permitted Phases		4		6			
Detector Phase	4	5	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	14.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	42.0	25.0	53.0	42.0	25.0	25.0	78.0
Total Split (%)	35.0%	20.8%	44.2%	35.0%	20.8%	20.8%	65.0%
Maximum Green (s)	35.7	18.6	46.7	35.7	18.6	18.6	72.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.4	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.4	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0			7.0			
Flash Dont Walk (s)	27.0			27.0			
Pedestrian Calls (#/hr)	0			0			
Act Effct Green (s)	16.7	41.7	68.3	90.0		20.0	93.3

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.14	0.35	0.57	0.75		0.17	0.78
v/c Ratio	0.71	0.62	0.45	0.27		0.59	0.27
Control Delay	57.5	38.2	4.0	1.5		44.7	2.0
Queue Delay	0.0	0.0	0.4	0.5		0.0	0.0
Total Delay	57.5	38.2	4.4	1.9		44.7	2.0
LOS	E	D	A	A		D	A
Approach Delay	48.1		3.8				12.1
Approach LOS	D		A				B
Queue Length 50th (ft)	128	205	26	12		123	31
Queue Length 95th (ft)	166	278	94	17		171	37
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1043	512	2003	1116		533	3840
Starvation Cap Reductn	0	0	570	432		0	0
Spillback Cap Reductn	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.32	0.62	0.63	0.44		0.59	0.27

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 118 (98%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 16.3		Intersection LOS: B	
Intersection Capacity Utilization 61.0%		ICU Level of Service B	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	194	95	1032	104	45	159	934
Future Volume (vph)	194	95	1032	104	45	159	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.99					
Frt		0.850	0.986				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1418	4944	0	0	1718	3436
Flt Permitted	0.950					0.185	
Satd. Flow (perm)	3285	1398	4944	0	0	335	3436
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		3					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Heavy Vehicles (%)	2%	9%	5%	5%	4%	4%	4%
Adj. Flow (vph)	209	102	1110	112	47	167	983
Shared Lane Traffic (%)							
Lane Group Flow (vph)	209	102	1222	0	0	214	983
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	30.0	30.0	60.0		30.0	30.0	90.0
Total Split (%)	25.0%	25.0%	50.0%		25.0%	25.0%	75.0%
Maximum Green (s)	23.4	23.7	53.6		23.7	23.7	83.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lead	Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	13.6	23.5	81.5			96.4	96.4

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.11	0.20	0.68			0.80	0.80
v/c Ratio	0.56	0.37	0.36			0.56	0.36
Control Delay	56.0	40.4	5.6			12.3	2.3
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	56.0	40.4	5.6			12.3	2.3
LOS	E	D	A			B	A
Approach Delay	50.8		5.6				4.0
Approach LOS	D		A				A
Queue Length 50th (ft)	80	67	93			11	36
Queue Length 95th (ft)	116	106	98			92	106
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	684	453	3356			557	2760
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.31	0.23	0.36			0.38	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.56			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

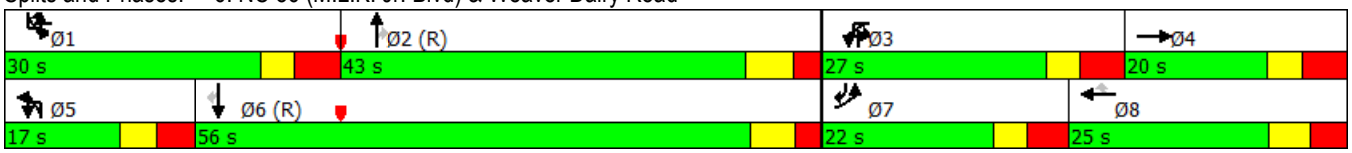
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	91	74	5	29	148	73	241	22	6	795	165	4
Future Volume (vph)	91	74	5	29	148	73	241	22	6	795	165	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	
Storage Lanes	2		0		1		1		1		1	
Taper Length (ft)	25				25				25			
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00		0.99		1.00		0.99	
Frt		0.991					0.850				0.850	
Flt Protected	0.950				0.950				0.950			
Satd. Flow (prot)	3349	3419	0	0	3383	1835	1560	0	1703	4893	1524	0
Flt Permitted	0.950				0.950				0.950			
Satd. Flow (perm)	3341	3419	0	0	3375	1835	1537	0	1702	4893	1504	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)	3		2		2		3		1		1	
Peak Hour Factor	0.91	0.91	0.91	0.95	0.95	0.95	0.95	0.91	0.91	0.91	0.91	0.94
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	6%	6%	6%	6%	4%
Adj. Flow (vph)	100	81	5	31	156	77	254	24	7	874	181	4
Shared Lane Traffic (%)												
Lane Group Flow (vph)	100	86	0	0	187	77	254	0	31	874	181	0
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1!
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	22.0	20.0		27.0	27.0	25.0	30.0	17.0	17.0	43.0	27.0	30.0
Total Split (%)	18.3%	16.7%		22.5%	22.5%	20.8%	25.0%	14.2%	14.2%	35.8%	22.5%	25.0%
Maximum Green (s)	15.3	12.7		20.0	20.0	17.8	22.8	10.3	10.3	36.2	20.0	22.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lag		Lead	Lead	Lag	Lead	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	334	661	110
Future Volume (vph)	334	661	110
Ideal Flow (vphpl)	1900	1900	1900
Grade (%)		1%	
Storage Length (ft)	400		250
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.95	1.00
Ped Bike Factor	1.00		0.98
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	3350	3454	1545
Flt Permitted	0.950		
Satd. Flow (perm)	3349	3454	1511
Right Turn on Red			No
Satd. Flow (RTOR)			
Link Speed (mph)		35	
Link Distance (ft)		832	
Travel Time (s)		16.2	
Confl. Peds. (#/hr)	1		1
Peak Hour Factor	0.94	0.94	0.94
Heavy Vehicles (%)	4%	4%	4%
Adj. Flow (vph)	355	703	117
Shared Lane Traffic (%)			
Lane Group Flow (vph)	359	703	117
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7
Permitted Phases			6
Detector Phase	1	6	7
Switch Phase			
Minimum Initial (s)	7.0	12.0	7.0
Minimum Split (s)	15.0	40.0	14.0
Total Split (s)	30.0	56.0	22.0
Total Split (%)	25.0%	46.7%	18.3%
Maximum Green (s)	22.8	49.6	15.3
Yellow Time (s)	3.1	4.0	3.0
All-Red Time (s)	4.1	2.4	3.7
Lost Time Adjust (s)	-2.2	-1.4	-1.7
Total Lost Time (s)	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	6.0	2.0
Minimum Gap (s)	2.0	6.0	2.0
Time Before Reduce (s)	0.0	15.0	0.0
Time To Reduce (s)	0.0	20.0	0.0
Recall Mode	None	C-Max	None
Walk Time (s)		7.0	
Flash Dont Walk (s)		26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	10.2	10.2			13.0	13.0	31.3		9.3	59.6	72.6	
Actuated g/C Ratio	0.08	0.08			0.11	0.11	0.26		0.08	0.50	0.60	
v/c Ratio	0.35	0.30			0.51	0.39	0.63		0.23	0.36	0.20	
Control Delay	55.1	54.0			55.1	54.9	42.4		56.2	20.8	10.8	
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	55.1	54.0			55.1	54.9	42.4		56.2	20.8	10.8	
LOS	E	D			E	D	D		E	C	B	
Approach Delay		54.6				48.9				20.1		
Approach LOS		D				D				C		
Queue Length 50th (ft)	38	33			71	56	161		23	152	54	
Queue Length 95th (ft)	65	59			106	103	220		55	221	105	
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	
Base Capacity (vph)	474	427			620	305	468		170	2428	1025	
Starvation Cap Reductn	0	0			0	0	0		0	0	0	
Spillback Cap Reductn	0	0			0	0	0		0	0	0	
Storage Cap Reductn	0	0			0	0	0		0	0	0	
Reduced v/c Ratio	0.21	0.20			0.30	0.25	0.54		0.18	0.36	0.18	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 8 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 130			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 28.3		Intersection LOS: C	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	20.1	75.8	86.0
Actuated g/C Ratio	0.17	0.63	0.72
v/c Ratio	0.64	0.32	0.11
Control Delay	44.4	14.3	5.7
Queue Delay	0.0	0.0	0.0
Total Delay	44.4	14.3	5.7
LOS	D	B	A
Approach Delay		22.6	
Approach LOS		C	
Queue Length 50th (ft)	130	172	26
Queue Length 95th (ft)	155	261	48
Internal Link Dist (ft)		752	
Turn Bay Length (ft)	400		250
Base Capacity (vph)	697	2182	1167
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.52	0.32	0.10

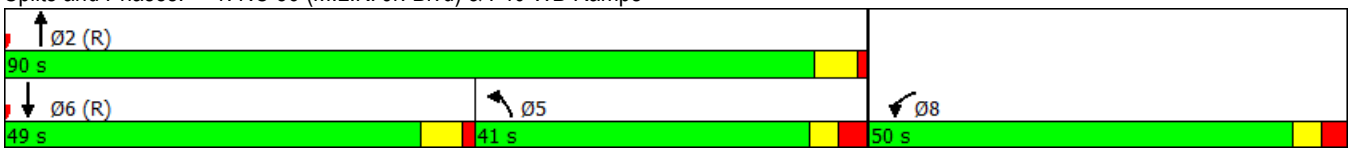
Intersection Summary

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	708	0	106	730	583	0	0	465	23
Future Volume (vph)	0	0	0	708	0	106	730	583	0	0	465	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			2%	
Storage Length (ft)	0		0	550		650	675		0	0		0
Storage Lanes	0		0	1		1	1		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	1.00	0.95	1.00
Frt						0.850						0.850
Flt Protected				0.950			0.950					
Satd. Flow (prot)	0	0	0	3416	0	1575	3433	1863	0	0	3504	1567
Flt Permitted				0.950			0.950					
Satd. Flow (perm)	0	0	0	3416	0	1575	3433	1863	0	0	3504	1567
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		30			45			45			45	
Link Distance (ft)		664			1296			1117			828	
Travel Time (s)		15.1			19.6			16.9			12.5	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	787	0	118	785	627	0	0	505	25
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	0	0	787	0	118	785	627	0	0	505	25
Turn Type				Prot		Free	Prot	NA			NA	Free
Protected Phases				8			5	2			6	
Permitted Phases				8		Free						Free
Detector Phase				8			5	2			6	
Switch Phase												
Minimum Initial (s)				7.0			7.0	12.0			12.0	
Minimum Split (s)				14.0			14.0	18.0			18.0	
Total Split (s)				50.0			41.0	90.0			49.0	
Total Split (%)				35.7%			29.3%	64.3%			35.0%	
Maximum Green (s)				44.2			34.9	84.3			43.4	
Yellow Time (s)				3.0			3.0	4.5			4.3	
All-Red Time (s)				2.8			3.1	1.2			1.3	
Lost Time Adjust (s)				-0.8			-1.1	-0.7			-0.6	
Total Lost Time (s)				5.0			5.0	5.0			5.0	
Lead/Lag							Lag				Lead	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)				1.0			1.0	6.0			6.0	
Minimum Gap (s)				1.0			1.0	6.0			6.0	
Time Before Reduce (s)				0.0			0.0	15.0			15.0	
Time To Reduce (s)				0.0			0.0	25.0			25.0	
Recall Mode				None			None	C-Max			C-Max	
Act Effct Green (s)				36.9		140.0	36.0	93.1			52.1	140.0
Actuated g/C Ratio				0.26		1.00	0.26	0.66			0.37	1.00
v/c Ratio				0.87		0.07	0.89	0.51			0.39	0.02
Control Delay				60.4		0.1	44.3	3.0			34.3	0.0
Queue Delay				0.0		0.0	0.0	0.0			0.0	0.0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay				60.4		0.1	44.3	3.0			34.3	0.0
LOS				E		A	D	A			C	A
Approach Delay					52.5			26.0			32.7	
Approach LOS					D			C			C	
Queue Length 50th (ft)				354		0	362	24			177	0
Queue Length 95th (ft)				405		0	387	33			246	0
Internal Link Dist (ft)		584			1216			1037			748	
Turn Bay Length (ft)				550		650	675					
Base Capacity (vph)				1098		1575	882	1238			1302	1567
Starvation Cap Reductn				0		0	0	0			0	0
Spillback Cap Reductn				0		0	0	0			0	0
Storage Cap Reductn				0		0	0	0			0	0
Reduced v/c Ratio				0.72		0.07	0.89	0.51			0.39	0.02

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 82 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.89			
Intersection Signal Delay: 35.7		Intersection LOS: D	
Intersection Capacity Utilization 66.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

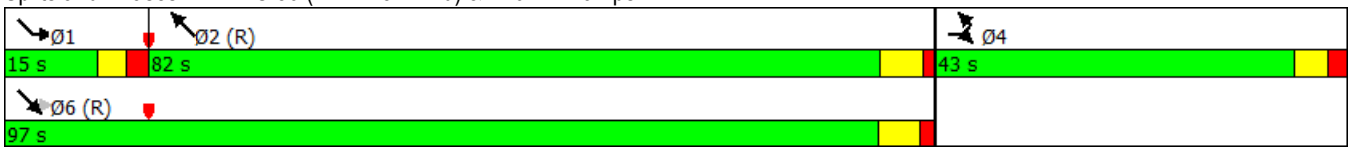


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	14	0	415	0	0	0	43	1180	0	0	1242	813
Future Volume (vph)	14	0	415	0	0	0	43	1180	0	0	1242	813
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		1%			0%			1%			-1%	
Storage Length (ft)	475		475	0		0	175		0	0		0
Storage Lanes	1		1	0		0	2		0	0		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	1.00	0.88	1.00	1.00	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Ped Bike Factor							1.00					0.98
Frt			0.850									0.850
Flt Protected	0.950						0.950					
Satd. Flow (prot)	1761	0	2773	0	0	0	1761	3522	0	0	3557	1591
Flt Permitted	0.950						0.131					
Satd. Flow (perm)	1761	0	2773	0	0	0	243	3522	0	0	3557	1557
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			30			45			45	
Link Distance (ft)		1251			870			1117			451	
Travel Time (s)		24.4			19.8			16.9			6.8	
Confl. Peds. (#/hr)							3					3
Peak Hour Factor	0.83	0.83	0.83	0.90	0.90	0.90	0.93	0.93	0.93	0.92	0.92	0.92
Adj. Flow (vph)	17	0	500	0	0	0	46	1269	0	0	1350	884
Shared Lane Traffic (%)												
Lane Group Flow (vph)	17	0	500	0	0	0	46	1269	0	0	1350	884
Turn Type	Prot		Prot				pm+pt	NA			NA	Free
Protected Phases	4		4				1	6			2	
Permitted Phases	4		4				6					Free
Detector Phase	4		4				1	6			2	
Switch Phase												
Minimum Initial (s)	7.0		7.0				7.0	12.0			12.0	
Minimum Split (s)	13.0		13.0				13.0	18.0			18.0	
Total Split (s)	43.0		43.0				15.0	97.0			82.0	
Total Split (%)	30.7%		30.7%				10.7%	69.3%			58.6%	
Maximum Green (s)	37.4		37.4				9.6	91.0			76.1	
Yellow Time (s)	3.5		3.5				3.0	4.4			4.6	
All-Red Time (s)	2.1		2.1				2.4	1.6			1.3	
Lost Time Adjust (s)	-0.6		-0.6				-0.4	-1.0			-0.9	
Total Lost Time (s)	5.0		5.0				5.0	5.0			5.0	
Lead/Lag							Lead				Lag	
Lead-Lag Optimize?							Yes				Yes	
Vehicle Extension (s)	1.0		1.0				1.0	6.0			6.0	
Minimum Gap (s)	1.0		1.0				1.0	3.2			3.2	
Time Before Reduce (s)	0.0		0.0				0.0	15.0			15.0	
Time To Reduce (s)	0.0		0.0				0.0	20.0			20.0	
Recall Mode	None		None				None	C-Max			C-Max	
Act Effct Green (s)	29.5		29.5				100.5	100.5			90.5	140.0
Actuated g/C Ratio	0.21		0.21				0.72	0.72			0.65	1.00
v/c Ratio	0.05		0.86				0.18	0.50			0.59	0.57

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Control Delay	41.4		67.5				6.1	2.5			13.5	1.5
Queue Delay	0.0		0.0				0.0	0.0			0.2	0.0
Total Delay	41.4		67.5				6.1	2.5			13.7	1.5
LOS	D		E				A	A			B	A
Approach Delay		66.7						2.6			8.8	
Approach LOS		E						A			A	
Queue Length 50th (ft)	12		251				2	2			257	5
Queue Length 95th (ft)	29		276				19	223			316	11
Internal Link Dist (ft)		1171			790			1037			371	
Turn Bay Length (ft)	475		475				175					
Base Capacity (vph)	477		752				282	2527			2300	1557
Starvation Cap Reductn	0		0				0	0			272	0
Spillback Cap Reductn	0		0				0	52			0	0
Storage Cap Reductn	0		0				0	0			0	0
Reduced v/c Ratio	0.04		0.66				0.16	0.51			0.67	0.57

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 74 (53%), Referenced to phase 2:NWT and 6:SETL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 14.2		Intersection LOS: B	
Intersection Capacity Utilization 66.4%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

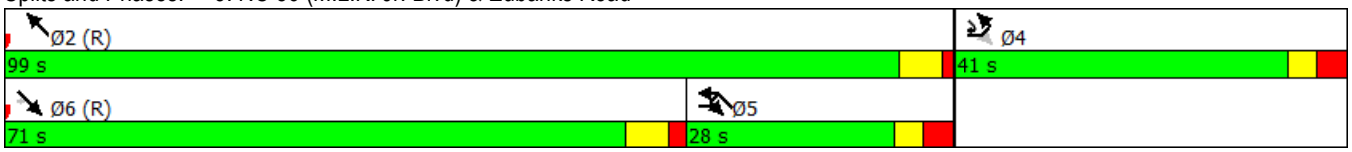


Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	420	310	1119	475	11	365	1629
Future Volume (vph)	420	310	1119	475	11	365	1629
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3450	1516	3522	1575	0	3433	5085
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3450	1516	3522	1575	0	3433	5085
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.87	0.87	0.89	0.89	0.92	0.92	0.92
Heavy Vehicles (%)	1%	6%	2%	2%	2%	2%	2%
Adj. Flow (vph)	483	356	1257	534	12	397	1771
Shared Lane Traffic (%)							
Lane Group Flow (vph)	483	356	1257	534	0	409	1771
Turn Type	Prot	pm+ov	NA	pm+ov	Prot	Prot	NA
Protected Phases	4	5!	6	4	5!	5	2
Permitted Phases		4		6			
Detector Phase	4	5	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	14.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	41.0	28.0	71.0	41.0	28.0	28.0	99.0
Total Split (%)	29.3%	20.0%	50.7%	29.3%	20.0%	20.0%	70.7%
Maximum Green (s)	34.7	21.6	64.7	34.7	21.6	21.6	93.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.4	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.4	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0			7.0			
Flash Dont Walk (s)	27.0			27.0			
Pedestrian Calls (#/hr)	0			0			
Act Effct Green (s)	24.8	52.8	77.2	107.0		23.0	105.2

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.18	0.38	0.55	0.76		0.16	0.75
v/c Ratio	0.79	0.62	0.65	0.44		0.73	0.46
Control Delay	64.7	40.3	11.3	2.5		46.1	3.1
Queue Delay	0.0	0.0	0.7	0.6		0.0	0.0
Total Delay	64.7	40.3	12.0	3.0		46.1	3.1
LOS	E	D	B	A		D	A
Approach Delay	54.3		9.3				11.2
Approach LOS	D		A				B
Queue Length 50th (ft)	220	263	218	29		191	87
Queue Length 95th (ft)	256	329	300	57		225	98
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	887	571	1941	1203		563	3820
Starvation Cap Reductn	0	0	345	315		0	0
Spillback Cap Reductn	0	0	0	0		0	36
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.54	0.62	0.79	0.60		0.73	0.47

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 56 (40%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 18.0		Intersection LOS: B	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



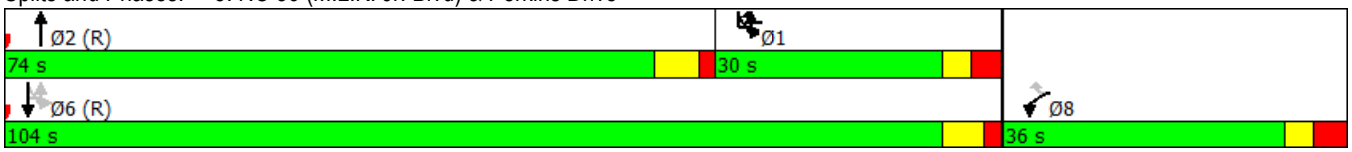
Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	196	137	1793	131	54	160	1170
Future Volume (vph)	196	137	1793	131	54	160	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		175	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.99	1.00			1.00	
Frt		0.850	0.990				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1515	5102	0	0	1752	3504
Flt Permitted	0.950					0.056	
Satd. Flow (perm)	3285	1493	5102	0	0	103	3504
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		4		3		3	
Peak Hour Factor	0.97	0.97	0.94	0.94	0.91	0.91	0.91
Adj. Flow (vph)	202	141	1907	139	59	176	1286
Shared Lane Traffic (%)							
Lane Group Flow (vph)	202	141	2046	0	0	235	1286
Turn Type	Prot	pm+ov	NA		pm+pt	pm+pt	NA
Protected Phases	8	1!	2		1!	1	6
Permitted Phases		8			6!	6	
Detector Phase	8	1	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	14.0	19.0		14.0	14.0	19.0
Total Split (s)	36.0	30.0	74.0		30.0	30.0	104.0
Total Split (%)	25.7%	21.4%	52.9%		21.4%	21.4%	74.3%
Maximum Green (s)	29.4	23.7	67.6		23.7	23.7	97.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.3	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.3	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag		Lag	Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	1.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	1.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	0.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	14.6	39.6	85.4			115.4	115.4
Actuated g/C Ratio	0.10	0.28	0.61			0.82	0.82

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.59	0.33	0.66			0.62	0.45
Control Delay	66.7	37.8	9.7			46.8	1.1
Queue Delay	0.0	0.0	0.4			0.0	0.0
Total Delay	66.7	37.8	10.0			46.8	1.1
LOS	E	D	B			D	A
Approach Delay	54.8		10.0				8.1
Approach LOS	D		B				A
Queue Length 50th (ft)	92	97	195			139	21
Queue Length 95th (ft)	130	150	m191			228	45
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					175	
Base Capacity (vph)	727	426	3112			379	2888
Starvation Cap Reductn	0	0	460			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.28	0.33	0.77			0.62	0.45

Intersection Summary

Area Type: Other
Cycle Length: 140
Actuated Cycle Length: 140
Offset: 80 (57%), Referenced to phase 2:NBT and 6:SBTL, Start of Green
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.66
Intersection Signal Delay: 13.2 Intersection LOS: B
Intersection Capacity Utilization 70.9% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.
! Phase conflict between lane groups.

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive



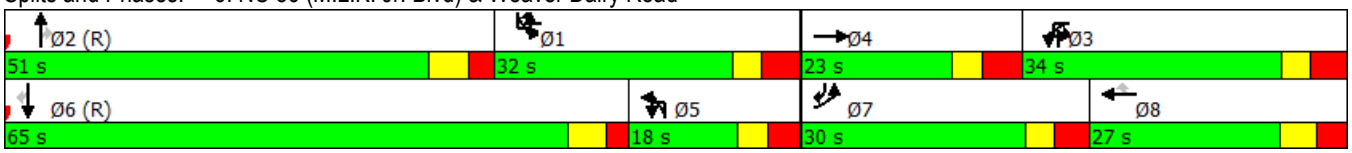
Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Lane Configurations												
Traffic Volume (vph)	127	83	11	31	259	190	460	34	23	1315	212	1
Future Volume (vph)	127	83	11	31	259	190	460	34	23	1315	212	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%				1%				0%		
Storage Length (ft)	200		0		425		325		225		275	
Storage Lanes	2		0		1		1		1		1	
Taper Length (ft)	25				25				25			
Lane Util. Factor	0.97	0.95	0.95	1.00	0.97	1.00	1.00	0.91	1.00	0.91	1.00	0.95
Ped Bike Factor	1.00	1.00			1.00		0.99				0.99	
Frt		0.983					0.850				0.850	
Flt Protected	0.950				0.950				0.950			
Satd. Flow (prot)	3382	3422	0	0	3416	1853	1575	0	1752	5036	1568	0
Flt Permitted	0.950				0.950				0.950			
Satd. Flow (perm)	3377	3422	0	0	3408	1853	1553	0	1752	5036	1547	0
Right Turn on Red			No				No				No	
Satd. Flow (RTOR)												
Link Speed (mph)		25				35				35		
Link Distance (ft)		945				1503				1079		
Travel Time (s)		25.8				29.3				21.0		
Confl. Peds. (#/hr)	2		2		2		2				1	
Peak Hour Factor	0.82	0.82	0.82	0.84	0.84	0.84	0.84	0.87	0.87	0.87	0.87	0.91
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	3%	3%	3%	3%	2%
Adj. Flow (vph)	155	101	13	37	308	226	548	39	26	1511	244	1
Shared Lane Traffic (%)												
Lane Group Flow (vph)	155	114	0	0	345	226	548	0	65	1511	244	0
Turn Type	Prot	NA		Prot	Prot	NA	pm+ov	Prot	Prot	NA	pm+ov	Prot
Protected Phases	7	4		3!	3	8	1!	5	5	2	3!	1!
Permitted Phases							8				2	
Detector Phase	7	4		3	3	8	1	5	5	2	3	1
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	7.0	7.0	12.0	7.0	7.0
Minimum Split (s)	14.0	57.0		15.0	15.0	50.0	15.0	15.0	15.0	43.0	15.0	15.0
Total Split (s)	30.0	23.0		34.0	34.0	27.0	32.0	18.0	18.0	51.0	34.0	32.0
Total Split (%)	21.4%	16.4%		24.3%	24.3%	19.3%	22.9%	12.9%	12.9%	36.4%	24.3%	22.9%
Maximum Green (s)	23.3	15.7		27.0	27.0	19.8	24.8	11.3	11.3	44.2	27.0	24.8
Yellow Time (s)	3.0	3.1		3.0	3.0	3.8	3.1	3.2	3.2	4.2	3.0	3.1
All-Red Time (s)	3.7	4.2		4.0	4.0	3.4	4.1	3.5	3.5	2.6	4.0	4.1
Lost Time Adjust (s)	-1.7	-2.3			-2.0	-2.2	-2.2		-1.7	-1.8	-2.0	
Total Lost Time (s)	5.0	5.0			5.0	5.0	5.0		5.0	5.0	5.0	
Lead/Lag	Lead	Lead		Lag	Lag	Lag	Lag	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Minimum Gap (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	6.0	2.0	2.0
Time Before Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	15.0	0.0	0.0
Time To Reduce (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	20.0	0.0	0.0
Recall Mode	None	None		None	None	None	None	None	None	C-Max	None	None
Walk Time (s)		7.0				7.0				7.0		
Flash Dont Walk (s)		42.0				35.0				29.0		

Lane Group	SBL	SBT	SBR
Lane Configurations			
Traffic Volume (vph)	313	842	213
Future Volume (vph)	313	842	213
Ideal Flow (vphpl)	1900	1900	1900
Grade (%)		1%	
Storage Length (ft)	400		250
Storage Lanes	2		1
Taper Length (ft)	25		
Lane Util. Factor	0.97	0.95	1.00
Ped Bike Factor	1.00		
Frt			0.850
Flt Protected	0.950		
Satd. Flow (prot)	3416	3522	1575
Flt Permitted	0.950		
Satd. Flow (perm)	3415	3522	1575
Right Turn on Red			No
Satd. Flow (RTOR)			
Link Speed (mph)		35	
Link Distance (ft)		832	
Travel Time (s)		16.2	
Confl. Peds. (#/hr)	1		
Peak Hour Factor	0.91	0.91	0.91
Heavy Vehicles (%)	2%	2%	2%
Adj. Flow (vph)	344	925	234
Shared Lane Traffic (%)			
Lane Group Flow (vph)	345	925	234
Turn Type	Prot	NA	pm+ov
Protected Phases	1	6	7
Permitted Phases			6
Detector Phase	1	6	7
Switch Phase			
Minimum Initial (s)	7.0	12.0	7.0
Minimum Split (s)	15.0	40.0	14.0
Total Split (s)	32.0	65.0	30.0
Total Split (%)	22.9%	46.4%	21.4%
Maximum Green (s)	24.8	58.6	23.3
Yellow Time (s)	3.1	4.0	3.0
All-Red Time (s)	4.1	2.4	3.7
Lost Time Adjust (s)	-2.2	-1.4	-1.7
Total Lost Time (s)	5.0	5.0	5.0
Lead/Lag	Lag	Lead	Lead
Lead-Lag Optimize?			
Vehicle Extension (s)	2.0	6.0	2.0
Minimum Gap (s)	2.0	6.0	2.0
Time Before Reduce (s)	0.0	15.0	0.0
Time To Reduce (s)	0.0	20.0	0.0
Recall Mode	None	C-Max	None
Walk Time (s)		7.0	
Flash Dont Walk (s)		26.0	

Lane Group	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Pedestrian Calls (#/hr)		0				0				0		
Act Effct Green (s)	12.5	11.5			24.9	23.9	50.9		12.1	56.6	81.5	
Actuated g/C Ratio	0.09	0.08			0.18	0.17	0.36		0.09	0.40	0.58	
v/c Ratio	0.51	0.41			0.57	0.72	0.96		0.43	0.74	0.27	
Control Delay	66.6	65.0			55.6	67.1	60.6		69.3	39.4	13.4	
Queue Delay	0.0	0.0			0.0	0.0	0.0		0.0	0.0	0.0	
Total Delay	66.6	65.0			55.6	67.1	60.6		69.3	39.4	13.4	
LOS	E	E			E	E	E		E	D	B	
Approach Delay		65.9				60.4				37.0		
Approach LOS		E				E				D		
Queue Length 50th (ft)	70	52			149	196	353		57	426	95	
Queue Length 95th (ft)	95	76			174	252	363		103	519	143	
Internal Link Dist (ft)		865				1423				999		
Turn Bay Length (ft)	200				425		325		225		275	
Base Capacity (vph)	603	439			723	332	569		162	2035	936	
Starvation Cap Reductn	0	0			0	0	0		0	0	0	
Spillback Cap Reductn	0	0			0	0	0		0	0	0	
Storage Cap Reductn	0	0			0	0	0		0	0	0	
Reduced v/c Ratio	0.26	0.26			0.48	0.68	0.96		0.40	0.74	0.26	

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 72 (51%), Referenced to phase 2:NBT and 6:SBT, Start of Green			
Natural Cycle: 140			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 39.1		Intersection LOS: D	
Intersection Capacity Utilization 90.2%		ICU Level of Service E	
Analysis Period (min) 15			
! Phase conflict between lane groups.			

Splits and Phases: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road



Lane Group	SBL	SBT	SBR
Pedestrian Calls (#/hr)		0	
Act Effct Green (s)	27.0	74.2	87.7
Actuated g/C Ratio	0.19	0.53	0.63
v/c Ratio	0.52	0.50	0.24
Control Delay	45.2	16.0	6.1
Queue Delay	0.0	0.0	0.0
Total Delay	45.2	16.0	6.1
LOS	D	B	A
Approach Delay		21.1	
Approach LOS		C	
Queue Length 50th (ft)	150	208	32
Queue Length 95th (ft)	204	251	75
Internal Link Dist (ft)		752	
Turn Bay Length (ft)	400		250
Base Capacity (vph)	658	1866	1127
Starvation Cap Reductn	0	0	0
Spillback Cap Reductn	0	0	0
Storage Cap Reductn	0	0	0
Reduced v/c Ratio	0.52	0.50	0.21

Intersection Summary

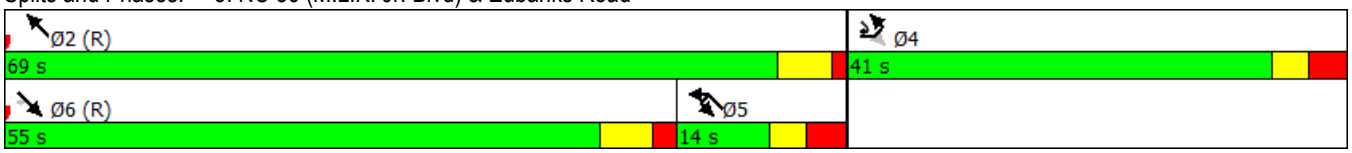
2021 Mitigated

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	476	254	1588	362	14	219	1126
Future Volume (vph)	476	254	1588	362	14	219	1126
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3383	1397	3487	1560	0	3015	5085
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3383	1397	3487	1560	0	3015	5085
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.94	0.94	0.96	0.96	0.97	0.97	0.97
Heavy Vehicles (%)	3%	15%	3%	3%	2%	17%	2%
Adj. Flow (vph)	506	270	1654	377	14	226	1161
Shared Lane Traffic (%)							
Lane Group Flow (vph)	506	270	1654	377	0	240	1161
Turn Type	Prot	Perm	NA	pm+ov	Prot	Prot	NA
Protected Phases	4		6	4	5	5	2
Permitted Phases		4		6			
Detector Phase	4	4	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	41.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	41.0	41.0	55.0	41.0	14.0	14.0	69.0
Total Split (%)	37.3%	37.3%	50.0%	37.3%	12.7%	12.7%	62.7%
Maximum Green (s)	34.7	34.7	48.7	34.7	7.6	7.6	63.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.3	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.3	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag			Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0	7.0		7.0			
Flash Dont Walk (s)	27.0	27.0		27.0			
Pedestrian Calls (#/hr)	0	0		0			
Act Effct Green (s)	26.7	26.7	59.3	91.0		9.0	73.3

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.24	0.24	0.54	0.83		0.08	0.67
v/c Ratio	0.62	0.80	0.88	0.29		0.98	0.34
Control Delay	39.6	55.7	19.3	0.7		94.6	6.1
Queue Delay	0.0	0.0	7.0	0.5		0.0	0.0
Total Delay	39.6	55.7	26.3	1.3		94.6	6.1
LOS	D	E	C	A		F	A
Approach Delay	45.2		21.7				21.3
Approach LOS	D		C				C
Queue Length 50th (ft)	163	179	448	8		88	72
Queue Length 95th (ft)	194	249	m#717	m10		#171	86
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1107	457	1880	1290		246	3390
Starvation Cap Reductn	0	0	201	533		0	0
Spillback Cap Reductn	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.46	0.59	0.99	0.50		0.98	0.34

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 12 (11%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 78.8%		ICU Level of Service D	
Analysis Period (min) 15			
# 95th percentile volume exceeds capacity, queue may be longer.			
Queue shown is maximum after two cycles.			
m Volume for 95th percentile queue is metered by upstream signal.			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	95	66	1274	72	44	149	1664
Future Volume (vph)	95	66	1274	72	44	149	1664
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		275	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.98	1.00			1.00	
Frt		0.850	0.992				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3074	1515	5065	0	0	1735	3470
Flt Permitted	0.950					0.138	
Satd. Flow (perm)	3074	1485	5065	0	0	252	3470
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		5		1		1	
Peak Hour Factor	0.79	0.79	0.94	0.94	0.93	0.93	0.93
Heavy Vehicles (%)	9%	2%	3%	3%	3%	3%	3%
Adj. Flow (vph)	120	84	1355	77	47	160	1789
Shared Lane Traffic (%)							
Lane Group Flow (vph)	120	84	1432	0	0	207	1789
Turn Type	Prot	Perm	NA		pm+pt	pm+pt	NA
Protected Phases	8		2		1	1	6
Permitted Phases		8			6	6	
Detector Phase	8	8	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	15.0	19.0		14.0	14.0	19.0
Total Split (s)	25.0	25.0	56.0		29.0	29.0	85.0
Total Split (%)	22.7%	22.7%	50.9%		26.4%	26.4%	77.3%
Maximum Green (s)	18.4	18.4	49.6		22.7	22.7	78.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.6	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.6	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag			Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	2.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	1.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	12.4	12.4	71.4			87.6	87.6

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.11	0.11	0.65			0.80	0.80
v/c Ratio	0.35	0.50	0.44			0.59	0.65
Control Delay	46.9	55.5	10.8			20.2	3.1
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	46.9	55.5	10.8			20.2	3.1
LOS	D	E	B			C	A
Approach Delay	50.4		10.8				4.8
Approach LOS	D		B				A
Queue Length 50th (ft)	41	57	156			40	10
Queue Length 95th (ft)	58	89	259			m86	124
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					275	
Base Capacity (vph)	558	270	3288			524	2762
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.22	0.31	0.44			0.40	0.65

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 27 (25%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 9.7		Intersection LOS: A	
Intersection Capacity Utilization 60.2%		ICU Level of Service B	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

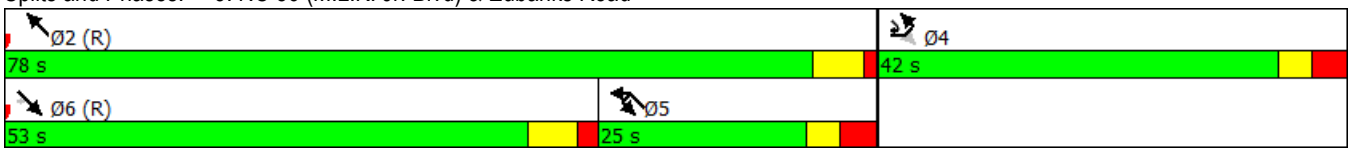
Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	293	281	827	280	22	266	933
Future Volume (vph)	293	281	827	280	22	266	933
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3383	1474	3522	1488	0	3201	4940
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3383	1474	3522	1488	0	3201	4940
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.88	0.88	0.92	0.92	0.91	0.91	0.91
Heavy Vehicles (%)	3%	9%	2%	8%	2%	10%	5%
Adj. Flow (vph)	333	319	899	304	24	292	1025
Shared Lane Traffic (%)							
Lane Group Flow (vph)	333	319	899	304	0	316	1025
Turn Type	Prot	Perm	NA	pm+ov	Prot	Prot	NA
Protected Phases	4		6	4	5	5	2
Permitted Phases		4		6			
Detector Phase	4	4	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	41.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	42.0	42.0	53.0	42.0	25.0	25.0	78.0
Total Split (%)	35.0%	35.0%	44.2%	35.0%	20.8%	20.8%	65.0%
Maximum Green (s)	35.7	35.7	46.7	35.7	18.6	18.6	72.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.3	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.3	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag			Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0	7.0		7.0			
Flash Dont Walk (s)	27.0	27.0		27.0			
Pedestrian Calls (#/hr)	0	0		0			
Act Effct Green (s)	30.1	30.1	54.9	90.0		20.0	79.9

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.25	0.25	0.46	0.75		0.17	0.67
v/c Ratio	0.39	0.86	0.56	0.27		0.59	0.31
Control Delay	37.8	64.9	10.7	1.5		44.4	4.4
Queue Delay	0.0	0.0	0.6	0.5		0.0	0.0
Total Delay	37.8	64.9	11.3	1.9		44.4	4.4
LOS	D	E	B	A		D	A
Approach Delay	51.0		9.0				13.8
Approach LOS	D		A				B
Queue Length 50th (ft)	109	235	140	12		123	41
Queue Length 95th (ft)	138	316	190	17		171	53
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1043	454	1610	1109		533	3288
Starvation Cap Reductn	0	0	350	432		0	0
Spillback Cap Reductn	0	0	0	0		0	0
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.32	0.70	0.71	0.45		0.59	0.31

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 118 (98%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.86			
Intersection Signal Delay: 19.6		Intersection LOS: B	
Intersection Capacity Utilization 61.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	194	95	1032	104	45	159	934
Future Volume (vph)	194	95	1032	104	45	159	934
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		275	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.98					
Frt		0.850	0.986				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1418	4944	0	0	1718	3436
Flt Permitted	0.950					0.184	
Satd. Flow (perm)	3285	1395	4944	0	0	333	3436
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		3					
Peak Hour Factor	0.93	0.93	0.93	0.93	0.95	0.95	0.95
Heavy Vehicles (%)	2%	9%	5%	5%	4%	4%	4%
Adj. Flow (vph)	209	102	1110	112	47	167	983
Shared Lane Traffic (%)							
Lane Group Flow (vph)	209	102	1222	0	0	214	983
Turn Type	Prot	Perm	NA		pm+pt	pm+pt	NA
Protected Phases	8		2		1	1	6
Permitted Phases		8			6	6	
Detector Phase	8	8	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	15.0	19.0		14.0	14.0	19.0
Total Split (s)	30.0	30.0	60.0		30.0	30.0	90.0
Total Split (%)	25.0%	25.0%	50.0%		25.0%	25.0%	75.0%
Maximum Green (s)	23.4	23.4	53.6		23.7	23.7	83.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.6	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.6	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag			Lag		Lead	Lead	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	2.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	1.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	15.0	15.0	80.0			95.0	95.0

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Actuated g/C Ratio	0.12	0.12	0.67			0.79	0.79
v/c Ratio	0.51	0.59	0.37			0.56	0.36
Control Delay	52.7	62.6	6.1			17.3	1.4
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	52.7	62.6	6.1			17.3	1.4
LOS	D	E	A			B	A
Approach Delay	56.0		6.1				4.3
Approach LOS	E		A				A
Queue Length 50th (ft)	79	76	93			42	11
Queue Length 95th (ft)	112	129	115			m102	54
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					275	
Base Capacity (vph)	684	290	3294			552	2720
Starvation Cap Reductn	0	0	0			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.31	0.35	0.37			0.39	0.36

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 2 (2%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 52.3%		ICU Level of Service A	
Analysis Period (min) 15			
m Volume for 95th percentile queue is metered by upstream signal.			

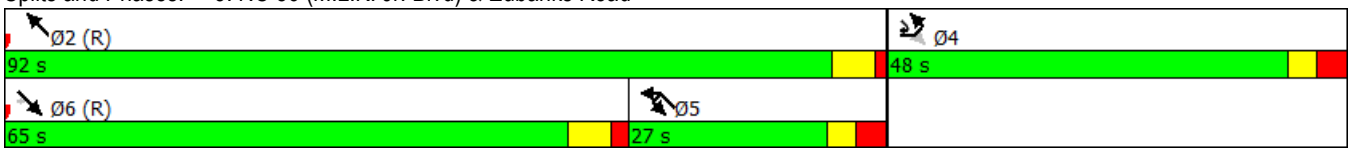
Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Lane Configurations							
Traffic Volume (vph)	420	310	1119	475	11	365	1629
Future Volume (vph)	420	310	1119	475	11	365	1629
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)	1%		1%				0%
Storage Length (ft)	300	0		175		325	
Storage Lanes	1	1		1		2	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.95	1.00	0.91	0.97	0.91
Frt		0.850		0.850			
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3450	1516	3522	1575	0	3433	5085
Flt Permitted	0.950					0.950	
Satd. Flow (perm)	3450	1516	3522	1575	0	3433	5085
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	35		45				45
Link Distance (ft)	677		451				567
Travel Time (s)	13.2		6.8				8.6
Peak Hour Factor	0.87	0.87	0.89	0.89	0.92	0.92	0.92
Heavy Vehicles (%)	1%	6%	2%	2%	2%	2%	2%
Adj. Flow (vph)	483	356	1257	534	12	397	1771
Shared Lane Traffic (%)							
Lane Group Flow (vph)	483	356	1257	534	0	409	1771
Turn Type	Prot	Perm	NA	pm+ov	Prot	Prot	NA
Protected Phases	4		6	4	5	5	2
Permitted Phases		4		6			
Detector Phase	4	4	6	4	5	5	2
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0	7.0	7.0	7.0	12.0
Minimum Split (s)	41.0	41.0	19.0	41.0	14.0	14.0	19.0
Total Split (s)	48.0	48.0	65.0	48.0	27.0	27.0	92.0
Total Split (%)	34.3%	34.3%	46.4%	34.3%	19.3%	19.3%	65.7%
Maximum Green (s)	41.7	41.7	58.7	41.7	20.6	20.6	86.2
Yellow Time (s)	3.0	3.0	4.4	3.0	3.0	3.0	4.5
All-Red Time (s)	3.3	3.3	1.9	3.3	3.4	3.4	1.3
Lost Time Adjust (s)	-1.3	-1.3	-1.3	-1.3		-1.4	-0.8
Total Lost Time (s)	5.0	5.0	5.0	5.0		5.0	5.0
Lead/Lag			Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Minimum Gap (s)	1.0	1.0	6.0	1.0	1.0	1.0	6.0
Time Before Reduce (s)	0.0	0.0	15.0	0.0	0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	20.0	0.0	0.0	0.0	20.0
Recall Mode	None	None	C-Max	None	None	None	C-Max
Walk Time (s)	7.0	7.0		7.0			
Flash Dont Walk (s)	27.0	27.0		27.0			
Pedestrian Calls (#/hr)	0	0		0			
Act Effct Green (s)	37.3	37.3	65.7	108.0		22.0	92.7

Lane Group	EBL	EBR	SET	SER	NWU	NWL	NWT
Actuated g/C Ratio	0.27	0.27	0.47	0.77		0.16	0.66
v/c Ratio	0.53	0.88	0.76	0.44		0.76	0.53
Control Delay	45.3	72.1	20.1	2.9		46.6	4.4
Queue Delay	0.0	0.0	2.1	0.6		0.0	0.0
Total Delay	45.3	72.1	22.2	3.4		46.6	4.4
LOS	D	E	C	A		D	A
Approach Delay	56.7		16.6				12.3
Approach LOS	E		B				B
Queue Length 50th (ft)	191	307	455	30		192	71
Queue Length 95th (ft)	226	399	562	89		230	124
Internal Link Dist (ft)	597		371				487
Turn Bay Length (ft)	300			175		325	
Base Capacity (vph)	1059	465	1653	1213		539	3367
Starvation Cap Reductn	0	0	252	330		0	0
Spillback Cap Reductn	0	0	0	0		0	65
Storage Cap Reductn	0	0	0	0		0	0
Reduced v/c Ratio	0.46	0.77	0.90	0.60		0.76	0.54

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 57 (41%), Referenced to phase 2:NWT and 6:SET, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 21.6		Intersection LOS: C	
Intersection Capacity Utilization 73.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road



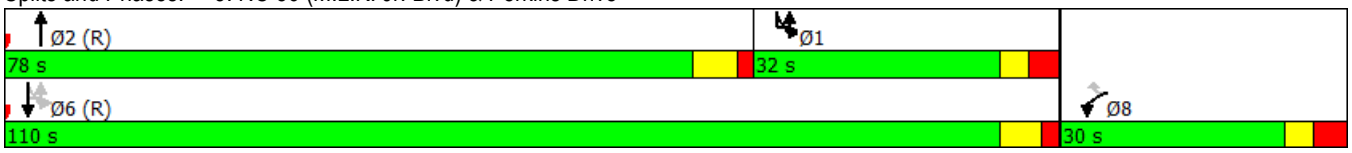
Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
Lane Configurations							
Traffic Volume (vph)	196	137	1793	131	54	160	1170
Future Volume (vph)	196	137	1793	131	54	160	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	11	11	12	12	12	12	12
Grade (%)	2%		-3%				2%
Storage Length (ft)	100	0		0		275	
Storage Lanes	1	1		0		1	
Taper Length (ft)	25					25	
Lane Util. Factor	0.97	1.00	0.91	0.91	0.95	1.00	0.95
Ped Bike Factor		0.98	1.00			1.00	
Frt		0.850	0.990				
Flt Protected	0.950					0.950	
Satd. Flow (prot)	3285	1515	5102	0	0	1752	3504
Flt Permitted	0.950					0.049	
Satd. Flow (perm)	3285	1487	5102	0	0	90	3504
Right Turn on Red		No		No			
Satd. Flow (RTOR)							
Link Speed (mph)	25		35				35
Link Distance (ft)	309		832				491
Travel Time (s)	8.4		16.2				9.6
Confl. Peds. (#/hr)		4		3		3	
Peak Hour Factor	0.97	0.97	0.94	0.94	0.91	0.91	0.91
Adj. Flow (vph)	202	141	1907	139	59	176	1286
Shared Lane Traffic (%)							
Lane Group Flow (vph)	202	141	2046	0	0	235	1286
Turn Type	Prot	Perm	NA		pm+pt	pm+pt	NA
Protected Phases	8		2		1	1	6
Permitted Phases		8			6	6	
Detector Phase	8	8	2		1	1	6
Switch Phase							
Minimum Initial (s)	7.0	7.0	12.0		7.0	7.0	12.0
Minimum Split (s)	15.0	15.0	19.0		14.0	14.0	19.0
Total Split (s)	30.0	30.0	78.0		32.0	32.0	110.0
Total Split (%)	21.4%	21.4%	55.7%		22.9%	22.9%	78.6%
Maximum Green (s)	23.4	23.4	71.6		25.7	25.7	103.7
Yellow Time (s)	3.0	3.0	4.8		3.0	3.0	4.3
All-Red Time (s)	3.6	3.6	1.6		3.3	3.3	2.0
Lost Time Adjust (s)	-1.6	-1.6	-1.4			-1.3	-1.3
Total Lost Time (s)	5.0	5.0	5.0			5.0	5.0
Lead/Lag			Lead		Lag	Lag	
Lead-Lag Optimize?							
Vehicle Extension (s)	2.0	2.0	6.0		1.0	1.0	6.0
Minimum Gap (s)	2.0	2.0	6.0		1.0	1.0	6.0
Time Before Reduce (s)	1.0	1.0	15.0		0.0	0.0	15.0
Time To Reduce (s)	0.0	0.0	25.0		0.0	0.0	20.0
Recall Mode	None	None	C-Max		None	None	C-Max
Act Effct Green (s)	18.9	18.9	79.1			111.1	111.1
Actuated g/C Ratio	0.14	0.14	0.56			0.79	0.79

Lane Group	WBL	WBR	NBT	NBR	SBU	SBL	SBT
v/c Ratio	0.46	0.70	0.71			0.60	0.46
Control Delay	58.2	75.8	10.8			51.0	3.6
Queue Delay	0.0	0.0	0.0			0.0	0.0
Total Delay	58.2	75.8	10.8			51.0	3.6
LOS	E	E	B			D	A
Approach Delay	65.4		10.8				10.9
Approach LOS	E		B				B
Queue Length 50th (ft)	88	124	214			180	133
Queue Length 95th (ft)	123	191	m209			m253	135
Internal Link Dist (ft)	229		752				411
Turn Bay Length (ft)	100					275	
Base Capacity (vph)	586	265	2882			391	2780
Starvation Cap Reductn	0	0	45			0	0
Spillback Cap Reductn	0	0	0			0	0
Storage Cap Reductn	0	0	0			0	0
Reduced v/c Ratio	0.34	0.53	0.72			0.60	0.46

Intersection Summary			
Area Type:	Other		
Cycle Length: 140			
Actuated Cycle Length: 140			
Offset: 61 (44%), Referenced to phase 2:NBT and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 15.7		Intersection LOS: B	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			

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

Splits and Phases: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive



Appendix F – Synchro HCM 2010 Unsignalized Intersection Analysis Output

2017 Existing

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	39	1134	28	0	1608
Future Vol, veh/h	0	39	1134	28	0	1608
Conflicting Peds, #/hr	0	2	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	80	80	91	91	91	91
Heavy Vehicles, %	2	2	3	3	2	3
Mvmt Flow	0	49	1246	31	0	1767

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	642	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	357	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	356	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.7	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	356	-
HCM Lane V/C Ratio	-	-	0.137	-
HCM Control Delay (s)	-	-	16.7	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.5	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	124	70	5	0	26	42	4	0	113	0	0	0
Future Vol, veh/h	124	70	5	0	26	42	4	0	113	0	0	0
Conflicting Peds, #/hr	5	0	0	0	0	5	3	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	63	63	63	81	81	81	90	90	90
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	2	2	2
Mvmt Flow	139	79	6	0	41	67	5	0	140	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	113	0	0	-	-	0	443	443	80
Stage 1	-	-	-	-	-	-	80	80	-
Stage 2	-	-	-	-	-	-	363	363	-
Critical Hdwy	4.13	-	-	-	-	-	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.545	4.045	3.345
Pot Cap-1 Maneuver	1470	-	-	0	-	-	520	505	972
Stage 1	-	-	-	0	-	-	921	823	-
Stage 2	-	-	-	0	-	-	650	619	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1470	-	-	-	-	-	479	455	968
Mov Cap-2 Maneuver	-	-	-	-	-	-	479	455	-
Stage 1	-	-	-	-	-	-	830	820	-
Stage 2	-	-	-	-	-	-	587	560	-

Approach	EB	WB	SE
HCM Control Delay, s	4.8	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1470	-	-	-	-	935
HCM Lane V/C Ratio	0.095	-	-	-	-	0.154
HCM Control Delay (s)	7.7	-	-	-	-	9.6
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.5

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	4	11	5	43	1	24	5	28	26	0
Future Vol, veh/h	0	1	4	11	5	43	1	24	5	28	26	0
Conflicting Peds, #/hr	2	0	1	1	0	2	1	0	10	10	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	93	93	93	68	68	68	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	6	12	5	46	1	35	7	37	35	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	180	166	37	166	162	51	36	0	0	53	0	0
Stage 1	110	110	-	52	52	-	-	-	-	-	-	-
Stage 2	70	56	-	114	110	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	782	727	1035	798	730	1017	1575	-	-	1553	-	-
Stage 1	895	804	-	961	852	-	-	-	-	-	-	-
Stage 2	940	848	-	891	804	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	726	702	1033	770	705	1007	1574	-	-	1550	-	-
Mov Cap-2 Maneuver	726	702	-	770	705	-	-	-	-	-	-	-
Stage 1	893	784	-	952	844	-	-	-	-	-	-	-
Stage 2	889	840	-	862	784	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.8	9.2	0.2	3.8
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1574	-	-	944	921	1550	-	-
HCM Lane V/C Ratio	0.001	-	-	0.008	0.069	0.024	-	-
HCM Control Delay (s)	7.3	0	-	8.8	9.2	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	92	894	51	0	896
Future Vol, veh/h	0	92	894	51	0	896
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	85	85	93	93	97	97
Heavy Vehicles, %	2	2	5	5	4	4
Mvmt Flow	0	108	961	55	0	924

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	514	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	433	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	431	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	16.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	431	-
HCM Lane V/C Ratio	-	-	0.251	-
HCM Control Delay (s)	-	-	16.1	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	184	50	9	0	42	88	19	0	213	0	0	0
Future Vol, veh/h	184	50	9	0	42	88	19	0	213	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	13	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	83	83	83	88	88	88	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	4	4	4	2	2	2
Mvmt Flow	214	58	10	0	51	106	22	0	242	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	157	0	0	-	-	0	608	603	104
Stage 1	-	-	-	-	-	-	104	104	-
Stage 2	-	-	-	-	-	-	504	499	-
Critical Hdwy	4.12	-	-	-	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	1423	-	-	0	-	-	456	410	945
Stage 1	-	-	-	0	-	-	915	805	-
Stage 2	-	-	-	0	-	-	603	540	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1423	-	-	-	-	-	387	0	945
Mov Cap-2 Maneuver	-	-	-	-	-	-	387	0	-
Stage 1	-	-	-	-	-	-	915	0	-
Stage 2	-	-	-	-	-	-	512	0	-

Approach	EB	WB	SE
HCM Control Delay, s	6	0	11.2
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1423	-	-	-	-	845
HCM Lane V/C Ratio	0.15	-	-	-	-	0.312
HCM Control Delay (s)	8	-	-	-	-	11.2
HCM Lane LOS	A	-	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	-	1.3

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	11	14	25	16	102	2	33	17	71	55	0
Future Vol, veh/h	0	11	14	25	16	102	2	33	17	71	55	0
Conflicting Peds, #/hr	7	0	3	3	0	7	5	0	10	10	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	85	85	85	93	93	93	75	75	75
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	18	29	19	120	2	35	18	95	73	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	393	336	81	340	327	62	78	0	0	64	0	0
Stage 1	268	268	-	59	59	-	-	-	-	-	-	-
Stage 2	125	68	-	281	268	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	563	581	973	614	591	1003	1520	-	-	1538	-	-
Stage 1	733	684	-	953	846	-	-	-	-	-	-	-
Stage 2	874	834	-	726	687	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	453	536	967	555	545	989	1516	-	-	1529	-	-
Mov Cap-2 Maneuver	453	536	-	555	545	-	-	-	-	-	-	-
Stage 1	729	637	-	944	838	-	-	-	-	-	-	-
Stage 2	746	826	-	651	640	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.7	0.3	4.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1516	-	-	714	805	1529	-	-
HCM Lane V/C Ratio	0.001	-	-	0.044	0.209	0.062	-	-
HCM Control Delay (s)	7.4	0	-	10.3	10.7	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.8	0.2	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	158	1625	68	0	1090
Future Vol, veh/h	0	158	1625	68	0	1090
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	93	93	91	91	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	170	1786	75	0	1211

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	935	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	229	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	228	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	56.1	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	228	-
HCM Lane V/C Ratio	-	-	0.745	-
HCM Control Delay (s)	-	-	56.1	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	5.1	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	210	29	14	0	73	100	18	0	230	0	0	0
Future Vol, veh/h	210	29	14	0	73	100	18	0	230	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	93	93	93	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	236	33	16	0	79	109	19	0	247	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	188	0	0	-	-	0	654	654	135
Stage 1	-	-	-	-	-	-	134	134	-
Stage 2	-	-	-	-	-	-	520	520	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1386	-	-	0	-	-	431	386	914
Stage 1	-	-	-	0	-	-	892	785	-
Stage 2	-	-	-	0	-	-	597	532	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1385	-	-	-	-	-	358	0	913
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	0	-
Stage 1	-	-	-	-	-	-	892	0	-
Stage 2	-	-	-	-	-	-	495	0	-

Approach	EB	WB	SE
HCM Control Delay, s	6.7	0	11.5
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1385	-	-	-	-	821
HCM Lane V/C Ratio	0.17	-	-	-	-	0.325
HCM Control Delay (s)	8.1	-	-	-	-	11.5
HCM Lane LOS	A	-	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	-	1.4

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	14	30	53	17	118	11	57	10	71	69	1
Future Vol, veh/h	0	14	30	53	17	118	11	57	10	71	69	1
Conflicting Peds, #/hr	5	0	2	2	0	5	0	0	34	34	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	90	90	90	78	78	78	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	34	59	19	131	14	73	13	76	74	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	415	375	77	396	370	118	75	0	0	120	0	0
Stage 1	227	227	-	142	142	-	-	-	-	-	-	-
Stage 2	188	148	-	254	228	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	548	556	984	564	560	934	1524	-	-	1468	-	-
Stage 1	776	716	-	861	779	-	-	-	-	-	-	-
Stage 2	814	775	-	750	715	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	432	506	982	491	510	904	1521	-	-	1462	-	-
Mov Cap-2 Maneuver	432	506	-	491	510	-	-	-	-	-	-	-
Stage 1	768	677	-	828	749	-	-	-	-	-	-	-
Stage 2	669	746	-	668	676	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	12.4	1	3.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1521	-	-	756	692	1462	-	-
HCM Lane V/C Ratio	0.009	-	-	0.066	0.302	0.052	-	-
HCM Control Delay (s)	7.4	0	-	10.1	12.4	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.3	0.2	-	-

2021 Without Site

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	40	1313	29	0	1792
Future Vol, veh/h	0	40	1313	29	0	1792
Conflicting Peds, #/hr	0	2	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	80	80	91	91	91	91
Heavy Vehicles, %	2	2	3	3	2	3
Mvmt Flow	0	50	1443	32	0	1969

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	741	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	308	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	307	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	307	-
HCM Lane V/C Ratio	-	-	0.163	-
HCM Control Delay (s)	-	-	19	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	0.6	-

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	126	71	5	0	27	43	4	0	115	0	0	0
Future Vol, veh/h	126	71	5	0	27	43	4	0	115	0	0	0
Conflicting Peds, #/hr	5	0	0	0	0	5	3	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	63	63	63	81	81	81	90	90	90
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	2	2	2
Mvmt Flow	142	80	6	0	43	68	5	0	142	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	116	0	0	-	-	0	451	451	82
Stage 1	-	-	-	-	-	-	82	82	-
Stage 2	-	-	-	-	-	-	369	369	-
Critical Hdwy	4.13	-	-	-	-	-	6.45	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	5.45	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.45	5.55	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.545	4.045	3.345
Pot Cap-1 Maneuver	1466	-	-	0	-	-	561	499	969
Stage 1	-	-	-	0	-	-	934	821	-
Stage 2	-	-	-	0	-	-	693	616	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1466	-	-	-	-	-	502	0	965
Mov Cap-2 Maneuver	-	-	-	-	-	-	502	0	-
Stage 1	-	-	-	-	-	-	930	0	-
Stage 2	-	-	-	-	-	-	623	0	-

Approach	EB	WB	SE
HCM Control Delay, s	4.8	0	9.6
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1466	-	-	-	-	936
HCM Lane V/C Ratio	0.097	-	-	-	-	0.157
HCM Control Delay (s)	7.7	-	-	-	-	9.6
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.6

Intersection	
Int Delay, s/veh	4.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	1	4	11	5	44	1	24	5	27	29	0
Future Vol, veh/h	0	1	4	11	5	44	1	24	5	27	29	0
Conflicting Peds, #/hr	2	0	1	1	0	2	1	0	10	10	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	93	93	93	68	68	68	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	6	12	5	47	1	35	7	36	39	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	182	168	41	168	164	51	40	0	0	53	0	0
Stage 1	112	112	-	52	52	-	-	-	-	-	-	-
Stage 2	70	56	-	116	112	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	779	725	1030	796	729	1017	1570	-	-	1553	-	-
Stage 1	893	803	-	961	852	-	-	-	-	-	-	-
Stage 2	940	848	-	889	803	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	722	700	1028	768	704	1007	1569	-	-	1550	-	-
Mov Cap-2 Maneuver	722	700	-	768	704	-	-	-	-	-	-	-
Stage 1	891	783	-	952	844	-	-	-	-	-	-	-
Stage 2	888	840	-	860	783	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	8.9	9.2	0.2	3.6
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1569	-	-	940	921	1550	-	-
HCM Lane V/C Ratio	0.001	-	-	0.008	0.07	0.023	-	-
HCM Control Delay (s)	7.3	0	-	8.9	9.2	7.4	0	-
HCM Lane LOS	A	A	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0.2	0.1	-	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	94	1079	52	0	1080
Future Vol, veh/h	0	94	1079	52	0	1080
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	85	85	93	93	97	97
Heavy Vehicles, %	2	2	5	5	4	4
Mvmt Flow	0	111	1160	56	0	1113

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	614	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	373	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	371	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	18.8	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	371	-
HCM Lane V/C Ratio	-	-	0.298	-
HCM Control Delay (s)	-	-	18.8	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1.2	-

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	188	51	9	0	43	90	19	0	217	0	0	0
Future Vol, veh/h	188	51	9	0	43	90	19	0	217	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	13	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	83	83	83	88	88	88	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	4	4	4	2	2	2
Mvmt Flow	219	59	10	0	52	108	22	0	247	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	160	0	0	-	-	0	621	615	106
Stage 1	-	-	-	-	-	-	106	106	-
Stage 2	-	-	-	-	-	-	515	509	-
Critical Hdwy	4.12	-	-	-	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	1419	-	-	0	-	-	448	404	943
Stage 1	-	-	-	0	-	-	913	804	-
Stage 2	-	-	-	0	-	-	596	535	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1419	-	-	-	-	-	379	0	943
Mov Cap-2 Maneuver	-	-	-	-	-	-	379	0	-
Stage 1	-	-	-	-	-	-	913	0	-
Stage 2	-	-	-	-	-	-	504	0	-

Approach	EB	WB	SE
HCM Control Delay, s	6.1	0	11.3
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1419	-	-	-	-	842
HCM Lane V/C Ratio	0.154	-	-	-	-	0.319
HCM Control Delay (s)	8	-	-	-	-	11.3
HCM Lane LOS	A	-	-	-	-	B
HCM 95th %tile Q(veh)	0.5	-	-	-	-	1.4

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	11	14	26	16	104	2	34	17	72	56	0
Future Vol, veh/h	0	11	14	26	16	104	2	34	17	72	56	0
Conflicting Peds, #/hr	7	0	3	3	0	7	5	0	10	10	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	85	85	85	93	93	93	75	75	75
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	14	18	31	19	122	2	37	18	96	75	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	400	341	83	345	332	63	80	0	0	65	0	0
Stage 1	272	272	-	60	60	-	-	-	-	-	-	-
Stage 2	128	69	-	285	272	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	557	578	971	609	588	1002	1518	-	-	1537	-	-
Stage 1	730	681	-	951	845	-	-	-	-	-	-	-
Stage 2	871	834	-	722	685	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	446	533	965	550	542	988	1514	-	-	1528	-	-
Mov Cap-2 Maneuver	446	533	-	550	542	-	-	-	-	-	-	-
Stage 1	726	633	-	942	837	-	-	-	-	-	-	-
Stage 2	741	826	-	646	637	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.3	10.7	0.3	4.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1514	-	-	711	802	1528	-	-
HCM Lane V/C Ratio	0.001	-	-	0.044	0.214	0.063	-	-
HCM Control Delay (s)	7.4	0	-	10.3	10.7	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.8	0.2	-	-

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	161	1876	69	0	1327
Future Vol, veh/h	0	161	1876	69	0	1327
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	93	93	91	91	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	173	2062	76	0	1474

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1074	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	185	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	184	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	103.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	184	-
HCM Lane V/C Ratio	-	-	0.941	-
HCM Control Delay (s)	-	-	103.2	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	7.4	-

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	214	30	14	0	74	102	18	0	235	0	0	0
Future Vol, veh/h	214	30	14	0	74	102	18	0	235	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	93	93	93	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	240	34	16	0	80	111	19	0	253	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	191	0	0	-	-	0	666	666	137
Stage 1	-	-	-	-	-	-	136	136	-
Stage 2	-	-	-	-	-	-	530	530	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1383	-	-	0	-	-	425	380	911
Stage 1	-	-	-	0	-	-	890	784	-
Stage 2	-	-	-	0	-	-	590	527	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1382	-	-	-	-	-	351	0	910
Mov Cap-2 Maneuver	-	-	-	-	-	-	351	0	-
Stage 1	-	-	-	-	-	-	890	0	-
Stage 2	-	-	-	-	-	-	488	0	-

Approach	EB	WB	SE
HCM Control Delay, s	6.8	0	11.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1382	-	-	-	-	817
HCM Lane V/C Ratio	0.174	-	-	-	-	0.333
HCM Control Delay (s)	8.2	-	-	-	-	11.6
HCM Lane LOS	A	-	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	-	1.5

Intersection	
Int Delay, s/veh	7.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	14	31	54	16	120	11	58	10	72	70	1
Future Vol, veh/h	0	14	31	54	16	120	11	58	10	72	70	1
Conflicting Peds, #/hr	5	0	2	2	0	5	0	0	34	34	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	90	90	90	78	78	78	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	16	35	60	18	133	14	74	13	77	75	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	421	380	78	401	374	120	76	0	0	121	0	0
Stage 1	231	231	-	143	143	-	-	-	-	-	-	-
Stage 2	190	149	-	258	231	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	543	552	983	560	557	931	1523	-	-	1467	-	-
Stage 1	772	713	-	860	779	-	-	-	-	-	-	-
Stage 2	812	774	-	747	713	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	426	502	981	486	506	901	1520	-	-	1461	-	-
Mov Cap-2 Maneuver	426	502	-	486	506	-	-	-	-	-	-	-
Stage 1	764	674	-	827	749	-	-	-	-	-	-	-
Stage 2	666	745	-	663	674	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.1	12.5	1	3.8
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1520	-	-	756	689	1461	-	-
HCM Lane V/C Ratio	0.009	-	-	0.068	0.306	0.053	-	-
HCM Control Delay (s)	7.4	0	-	10.1	12.5	7.6	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	1.3	0.2	-	-

2021 With Site

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	91	1300	81	0	1826
Future Vol, veh/h	0	91	1300	81	0	1826
Conflicting Peds, #/hr	0	2	0	2	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	80	80	91	91	91	91
Heavy Vehicles, %	2	2	3	3	2	3
Mvmt Flow	0	114	1429	89	0	2007

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	763	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	298	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	297	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	24.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	297	-
HCM Lane V/C Ratio	-	-	0.383	-
HCM Control Delay (s)	-	-	24.5	-
HCM Lane LOS	-	-	C	-
HCM 95th %tile Q(veh)	-	-	1.7	-

Intersection	
Int Delay, s/veh	5.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	146	71	5	0	27	45	4	0	137	0	0	0
Future Vol, veh/h	146	71	5	0	27	45	4	0	137	0	0	0
Conflicting Peds, #/hr	5	0	0	0	0	5	3	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	63	63	63	81	81	81	90	90	90
Heavy Vehicles, %	3	3	3	2	2	2	5	5	5	2	2	2
Mvmt Flow	164	80	6	0	43	71	5	0	169	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	119	0	0	-	-	0	498	497	84
Stage 1	-	-	-	-	-	-	84	84	-
Stage 2	-	-	-	-	-	-	414	413	-
Critical Hdwy	4.13	-	-	-	-	-	7.15	6.55	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.15	5.55	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.15	5.55	-
Follow-up Hdwy	2.227	-	-	-	-	-	3.545	4.045	3.345
Pot Cap-1 Maneuver	1463	-	-	0	-	-	478	470	967
Stage 1	-	-	-	0	-	-	917	819	-
Stage 2	-	-	-	0	-	-	610	588	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1463	-	-	-	-	-	434	416	963
Mov Cap-2 Maneuver	-	-	-	-	-	-	434	416	-
Stage 1	-	-	-	-	-	-	811	816	-
Stage 2	-	-	-	-	-	-	540	522	-

Approach	EB	WB	SE
HCM Control Delay, s	5.1	0	9.8
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1463	-	-	-	-	931
HCM Lane V/C Ratio	0.112	-	-	-	-	0.187
HCM Control Delay (s)	7.8	-	-	-	-	9.8
HCM Lane LOS	A	-	-	-	-	A
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.7

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	22	52	11	26	45	51	27	5	28	32	0
Future Vol, veh/h	0	22	52	11	26	45	51	27	5	28	32	0
Conflicting Peds, #/hr	2	0	1	1	0	2	1	0	10	10	0	1
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	63	63	63	93	93	93	68	68	68	75	75	75
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	35	83	12	28	48	75	40	7	37	43	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	352	325	45	380	321	55	44	0	0	57	0	0
Stage 1	118	118	-	203	203	-	-	-	-	-	-	-
Stage 2	234	207	-	177	118	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	603	593	1025	578	596	1012	1564	-	-	1547	-	-
Stage 1	887	798	-	799	733	-	-	-	-	-	-	-
Stage 2	769	731	-	825	798	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	520	545	1023	473	548	1002	1563	-	-	1544	-	-
Mov Cap-2 Maneuver	520	545	-	473	548	-	-	-	-	-	-	-
Stage 1	843	777	-	754	691	-	-	-	-	-	-	-
Stage 2	667	689	-	706	777	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	10.2	10.8	4.6	3.4
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1563	-	-	811	709	1544	-	-
HCM Lane V/C Ratio	0.048	-	-	0.145	0.124	0.024	-	-
HCM Control Delay (s)	7.4	0	-	10.2	10.8	7.4	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.5	0.4	0.1	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	160	1059	112	0	1121
Future Vol, veh/h	0	160	1059	112	0	1121
Conflicting Peds, #/hr	0	0	0	6	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	85	85	93	93	97	97
Heavy Vehicles, %	2	2	5	5	4	4
Mvmt Flow	0	188	1139	120	0	1156

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	636	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	361	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	359	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.6	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	359	-
HCM Lane V/C Ratio	-	-	0.524	-
HCM Control Delay (s)	-	-	25.6	-
HCM Lane LOS	-	-	D	-
HCM 95th %tile Q(veh)	-	-	2.9	-

Intersection	
Int Delay, s/veh	7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	214	51	9	0	43	92	19	0	239	0	0	0
Future Vol, veh/h	214	51	9	0	43	92	19	0	239	0	0	0
Conflicting Peds, #/hr	0	0	2	0	0	0	13	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	83	83	83	88	88	88	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	4	4	4	2	2	2
Mvmt Flow	249	59	10	0	52	111	22	0	272	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	163	0	0	-	-	0	682	676	107
Stage 1	-	-	-	-	-	-	107	107	-
Stage 2	-	-	-	-	-	-	575	569	-
Critical Hdwy	4.12	-	-	-	-	-	6.44	6.54	6.24
Critical Hdwy Stg 1	-	-	-	-	-	-	5.44	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.44	5.54	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.536	4.036	3.336
Pot Cap-1 Maneuver	1416	-	-	0	-	-	412	373	942
Stage 1	-	-	-	0	-	-	912	803	-
Stage 2	-	-	-	0	-	-	559	503	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1416	-	-	-	-	-	340	0	942
Mov Cap-2 Maneuver	-	-	-	-	-	-	340	0	-
Stage 1	-	-	-	-	-	-	912	0	-
Stage 2	-	-	-	-	-	-	461	0	-

Approach	EB	WB	SE
HCM Control Delay, s	6.3	0	11.7
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1416	-	-	-	-	833
HCM Lane V/C Ratio	0.176	-	-	-	-	0.352
HCM Control Delay (s)	8.1	-	-	-	-	11.7
HCM Lane LOS	A	-	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	-	1.6

Intersection	
Int Delay, s/veh	8.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	32	77	26	43	105	59	37	17	73	59	0
Future Vol, veh/h	0	32	77	26	43	105	59	37	17	73	59	0
Conflicting Peds, #/hr	7	0	3	3	0	7	5	0	10	10	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	80	80	80	85	85	85	93	93	93	75	75	75
Heavy Vehicles, %	4	4	4	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	40	96	31	51	124	63	40	18	97	79	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	548	473	87	530	464	66	84	0	0	68	0	0
Stage 1	278	278	-	186	186	-	-	-	-	-	-	-
Stage 2	270	195	-	344	278	-	-	-	-	-	-	-
Critical Hdwy	7.14	6.54	6.24	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.14	5.54	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.14	5.54	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.536	4.036	3.336	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	444	487	966	460	495	998	1513	-	-	1533	-	-
Stage 1	724	677	-	816	746	-	-	-	-	-	-	-
Stage 2	731	736	-	671	680	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	322	429	960	349	436	984	1509	-	-	1524	-	-
Mov Cap-2 Maneuver	322	429	-	349	436	-	-	-	-	-	-	-
Stage 1	690	629	-	774	708	-	-	-	-	-	-	-
Stage 2	565	698	-	526	632	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.3	13.6	3.9	4.2
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1509	-	-	704	622	1524	-	-
HCM Lane V/C Ratio	0.042	-	-	0.194	0.329	0.064	-	-
HCM Control Delay (s)	7.5	0	-	11.3	13.6	7.5	0	-
HCM Lane LOS	A	A	-	B	B	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.7	1.4	0.2	-	-

Intersection	
Int Delay, s/veh	16.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	234	1850	127	0	1368
Future Vol, veh/h	0	234	1850	127	0	1368
Conflicting Peds, #/hr	0	0	0	5	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	2
Peak Hour Factor	93	93	91	91	90	90
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	252	2033	140	0	1520

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	-	1091	0	0	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	7.14	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.92	-	-	-	-
Pot Cap-1 Maneuver	0	~ 180	-	-	0	-
Stage 1	0	-	-	-	0	-
Stage 2	0	-	-	-	0	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	-	~ 179	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	261.5	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBT
Capacity (veh/h)	-	-	179	-
HCM Lane V/C Ratio	-	-	1.406	-
HCM Control Delay (s)	-	-	261.5	-
HCM Lane LOS	-	-	F	-
HCM 95th %tile Q(veh)	-	-	15.3	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	247	30	14	0	74	104	18	0	256	0	0	0
Future Vol, veh/h	247	30	14	0	74	104	18	0	256	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	1	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	50	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	2	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	92	92	92	93	93	93	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	278	34	16	0	80	113	19	0	275	0	0	0

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	193	0	0	-	-	0	742	741	138
Stage 1	-	-	-	-	-	-	137	137	-
Stage 2	-	-	-	-	-	-	605	604	-
Critical Hdwy	4.12	-	-	-	-	-	6.42	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	5.42	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	5.42	5.52	-
Follow-up Hdwy	2.218	-	-	-	-	-	3.518	4.018	3.318
Pot Cap-1 Maneuver	1380	-	-	0	-	-	383	344	910
Stage 1	-	-	-	0	-	-	890	783	-
Stage 2	-	-	-	0	-	-	545	488	-
Platoon blocked, %		-	-		-	-			
Mov Cap-1 Maneuver	1379	-	-	-	-	-	306	0	909
Mov Cap-2 Maneuver	-	-	-	-	-	-	306	0	-
Stage 1	-	-	-	-	-	-	890	0	-
Stage 2	-	-	-	-	-	-	435	0	-

Approach	EB	WB	SE
HCM Control Delay, s	7	0	12
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	EBR	WBT	WBR	SELn1
Capacity (veh/h)	1379	-	-	-	-	805
HCM Lane V/C Ratio	0.201	-	-	-	-	0.366
HCM Control Delay (s)	8.3	-	-	-	-	12
HCM Lane LOS	A	-	-	-	-	B
HCM 95th %tile Q(veh)	0.8	-	-	-	-	1.7

Intersection	
Int Delay, s/veh	10.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	0	34	100	54	50	121	66	61	10	73	73	1
Future Vol, veh/h	0	34	100	54	50	121	66	61	10	73	73	1
Conflicting Peds, #/hr	5	0	2	2	0	5	0	0	34	34	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	90	90	90	78	78	78	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	39	114	60	56	134	85	78	13	78	78	1

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	590	530	81	602	525	124	80	0	0	125	0	0
Stage 1	236	236	-	288	288	-	-	-	-	-	-	-
Stage 2	354	294	-	314	237	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	419	455	979	412	458	927	1518	-	-	1462	-	-
Stage 1	767	710	-	720	674	-	-	-	-	-	-	-
Stage 2	663	670	-	697	709	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	290	393	977	299	395	897	1515	-	-	1456	-	-
Mov Cap-2 Maneuver	290	393	-	299	395	-	-	-	-	-	-	-
Stage 1	722	670	-	658	616	-	-	-	-	-	-	-
Stage 2	481	613	-	547	669	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	11.5	18.7	3.6	3.8
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1515	-	-	709	509	1456	-	-
HCM Lane V/C Ratio	0.056	-	-	0.215	0.491	0.054	-	-
HCM Control Delay (s)	7.5	0	-	11.5	18.7	7.6	0	-
HCM Lane LOS	A	A	-	B	C	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.8	2.7	0.2	-	-

Appendix G – SimTraffic Microsimulation 2021 PM Peak Hour Results

1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps Performance by movement

Movement	WBL	WBR	NBL	NBT	SBT	SBR	All
Denied Del/Veh (s)	1.3	3.0	0.0	0.0	0.2	0.1	0.5
Total Del/Veh (s)	58.8	4.5	73.2	11.0	32.3	2.5	44.9

2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps Performance by movement

Movement	EBL	EBR	SEL	SET	NWT	NWR	All
Denied Del/Veh (s)	3.3	1.6	0.3	0.0	0.0	0.1	0.2
Total Del/Veh (s)	52.4	60.1	27.3	9.3	6.9	8.8	15.0

3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road Performance by movement

Movement	EBL	EBR	SET	SER	NWU	NWL	NWT	All
Denied Del/Veh (s)	1.2	0.5	0.1	0.0	0.0	0.0	0.0	0.2
Total Del/Veh (s)	53.6	30.9	30.7	18.1	43.7	45.4	12.0	25.7

4: NC 86 (M.L.K. Jr. Blvd) & Chapel Hill N Access Dr Performance by movement

Movement	WBR	NBT	NBR	SBT	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.0	0.0
Total Del/Veh (s)	37.6	5.6	4.7	3.3	6.7

5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive Performance by movement

Movement	WBL	WBT	WBR	NBT	NBR	SBU	SBL	SBT	All
Denied Del/Veh (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Del/Veh (s)	57.8	1.4	29.5	24.3	27.5	45.9	46.3	4.1	21.0

6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road Performance by movement

Movement	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU
Denied Del/Veh (s)	3.7	0.1	0.2	2.8	1.0	1.2	2.8	1.8	2.1	0.4	2.1	0.0
Total Del/Veh (s)	77.2	75.9	34.3	75.3	72.0	91.5	69.3	85.8	100.0	48.4	17.3	628.4

6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road Performance by movement

Movement	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.0	0.0	0.1	0.9
Total Del/Veh (s)	112.9	25.5	7.7	53.3

7: Perkins Drive & Chapel Hill North Main Dr Performance by movement

Movement	EBL	EBT	EBR	WBT	WBR	SEL	SER	All
Denied Del/Veh (s)	0.2	0.0	0.0	0.2	0.2	0.3	0.4	0.2
Total Del/Veh (s)	4.2	1.5	1.3	1.0	0.5	11.9	4.9	3.6

8: Chapel Hill N Access Dr & Chapel Hill N Main Dr Performance by movement

Movement	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	All
Denied Del/Veh (s)	0.2	0.2	0.5	0.5	0.4	0.1	0.0	0.1	0.2	0.2	0.2	0.2
Total Del/Veh (s)	9.4	6.5	9.4	8.7	5.5	1.8	0.6	0.3	2.2	1.8	0.2	4.7

Total Network Performance

Denied Del/Veh (s)	1.1
Total Del/Veh (s)	94.6

Intersection: 1: NC 86 (M.L.K. Jr. Blvd) & I-40 WB Ramps

Movement	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	L	R	L	L	T	T	T
Maximum Queue (ft)	457	508	26	517	532	358	244	224
Average Queue (ft)	298	346	1	325	335	113	135	119
95th Queue (ft)	425	470	19	510	517	270	214	200
Link Distance (ft)		1250			1034	1034	741	741
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	550		650	675				
Storage Blk Time (%)		0		0	0			
Queuing Penalty (veh)		0		0	1			

Intersection: 2: NC 86 (M.L.K. Jr. Blvd) & I-40 EB Ramps

Movement	EB	EB	EB	SE	SE	SE	NW	NW	NW
Directions Served	L	R	R	L	T	T	T	T	R
Maximum Queue (ft)	64	346	326	72	76	103	290	279	312
Average Queue (ft)	15	176	165	20	13	17	115	100	91
95th Queue (ft)	47	312	304	53	50	67	253	241	283
Link Distance (ft)		1189			1034	1034	336	336	336
Upstream Blk Time (%)							0	0	0
Queuing Penalty (veh)							0	0	0
Storage Bay Dist (ft)	475		475	175					
Storage Blk Time (%)		0	0						
Queuing Penalty (veh)		1	1						

Intersection: 3: NC 86 (M.L.K. Jr. Blvd) & Eubanks Road

Movement	EB	EB	EB	SE	SE	SE	NW	NW	NW	NW	NW
Directions Served	L	L	R	T	T	R	UL	L	T	T	T
Maximum Queue (ft)	295	375	344	369	379	200	236	248	241	274	381
Average Queue (ft)	153	223	164	305	302	182	134	138	120	114	205
95th Queue (ft)	271	341	279	410	413	247	201	213	209	213	348
Link Distance (ft)		602	602	336	336				516	516	516
Upstream Blk Time (%)		0	0	11	10						
Queuing Penalty (veh)		0	0	95	87						
Storage Bay Dist (ft)	300					175	325	325			
Storage Blk Time (%)	0	2			25	7			0		
Queuing Penalty (veh)	0	5			133	46			0		

Intersection: 4: NC 86 (M.L.K. Jr. Blvd) & Chapel Hill N Access Dr

Movement	WB	NB	NB	NB	SB	SB
Directions Served	R	T	T	TR	T	T
Maximum Queue (ft)	214	37	61	111	49	30
Average Queue (ft)	132	1	3	12	4	3
95th Queue (ft)	225	37	38	68	56	53
Link Distance (ft)	201	407	407	407	516	516
Upstream Blk Time (%)	5					
Queuing Penalty (veh)	13					
Storage Bay Dist (ft)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 5: NC 86 (M.L.K. Jr. Blvd) & Perkins Drive

Movement	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	L	R	T	T	TR	UL	T	T
Maximum Queue (ft)	125	200	170	686	676	685	273	352	234
Average Queue (ft)	76	109	78	248	248	278	179	73	61
95th Queue (ft)	138	183	142	510	518	545	273	229	166
Link Distance (ft)		210	210	742	742	742		407	407
Upstream Blk Time (%)		1	0	0	0	0		1	0
Queuing Penalty (veh)		1	0	2	1	1		4	1
Storage Bay Dist (ft)	100						250		
Storage Blk Time (%)	3	16					4	1	
Queuing Penalty (veh)	3	17					23	3	

Intersection: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB
Directions Served	L	L	T	TR	UL	L	T	R	UL	T	T	T
Maximum Queue (ft)	191	201	182	136	295	626	936	350	250	679	680	702
Average Queue (ft)	66	94	57	33	139	232	420	279	110	378	357	348
95th Queue (ft)	148	170	127	93	249	689	1016	418	269	619	594	603
Link Distance (ft)			866	866		1407	1407			1001	1001	1001
Upstream Blk Time (%)						1	1					
Queuing Penalty (veh)						0	0					
Storage Bay Dist (ft)	200	200			425			325	225			
Storage Blk Time (%)	0	0	0			0	2	23	0	32		17
Queuing Penalty (veh)	0	0	1			0	13	53	0	21		42

Intersection: 6: NC 86 (M.L.K. Jr. Blvd) & Weaver Dairy Road

Movement	NB	SB	SB	SB	SB	SB
Directions Served	R	UL	L	T	T	R
Maximum Queue (ft)	300	376	409	555	573	272
Average Queue (ft)	171	173	195	201	202	60
95th Queue (ft)	375	350	379	458	425	183
Link Distance (ft)				742	742	
Upstream Blk Time (%)				2	0	
Queuing Penalty (veh)				15	1	
Storage Bay Dist (ft)	275	400	400			250
Storage Blk Time (%)	0	1	5	0	3	0
Queuing Penalty (veh)	0	3	22	1	7	0

Intersection: 7: Perkins Drive & Chapel Hill North Main Dr

Movement	EB	EB	WB	SE
Directions Served	L	TR	TR	LTR
Maximum Queue (ft)	72	126	36	133
Average Queue (ft)	38	9	2	62
95th Queue (ft)	75	63	17	101
Link Distance (ft)		210	389	181
Upstream Blk Time (%)				0
Queuing Penalty (veh)				0
Storage Bay Dist (ft)	50			
Storage Blk Time (%)	3	0		
Queuing Penalty (veh)	2	0		

Intersection: 8: Chapel Hill N Access Dr & Chapel Hill N Main Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (ft)	112	120	52	93
Average Queue (ft)	49	67	9	13
95th Queue (ft)	87	110	37	52
Link Distance (ft)	133	95	201	152
Upstream Blk Time (%)	0	3		0
Queuing Penalty (veh)	0	0		0
Storage Bay Dist (ft)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 620

APPENDIX H – Crash Data

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 05/01/2012 **to** 04/30/2017 **Study:** HARRISTEETEREXPANSIONTIS
Location: NC 86 (Airport Rd) from SR 1727 (Eubanks Rd) to SR 1733 (Weaver Dairy Rd)

Report Details

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op
1	**103551346**	5.108	09/17/2012 13:00	REAR END, SLOW OR STOP	$ 6500	0	0	0	0	1	1	2	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
2	**103704972**	5.108	03/04/2013 20:55	LEFT TURN, DIFFERENT ROADWAYS	$ 1500	0	0	0	0	1	4	1	1	0	0	3
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
3	**104112293**	5.108	06/25/2014 10:16	LEFT TURN, SAME ROADWAY	$ 3000	0	0	0	1	1	1	1	3	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 8 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 9	**Obj Strk:**											
4	**104766135**	5.108	06/03/2016 16:41	REAR END, SLOW OR STOP	$ 9000	0	0	0	2	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
5	**104407243**	5.110	06/09/2015 17:39	REAR END, SLOW OR STOP	$ 2200	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
6	**103678925**	5.111	02/05/2013 20:32	PEDESTRIAN	$ 1000	0	0	1	0	1	4	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:** 14											
Unit 2 : 23	**Alchl/Drgs:** 3	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**	**Obj Strk:** 14											
7	**103860525**	5.158	09/11/2013 12:17	REAR END, SLOW OR STOP	$ 8600	0	0	0	1	1	1	1	3	0	0	
Unit 1 : 10	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
8	**104020934**	5.158	03/21/2014 11:53	REAR END, SLOW OR STOP	$ 200	0	0	0	1	1	1	1		0		
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 3 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
9	**104415501**	5.158	06/19/2015 18:08	REAR END, SLOW OR STOP	$ 1400	0	0	0	0	1	1	1	1	0	3	2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
10	**104364253**	5.168	04/29/2015 09:47	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	1	3	0		
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
11	**104901651**	5.205	10/12/2016 07:32	REAR END, SLOW OR STOP	$ 6400	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
12	**104019669**	5.232	03/25/2014 07:33	REAR END, SLOW OR STOP	$ 2300	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
13	**103588939**	5.270	10/26/2012 16:58	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
14	**104892383**	5.280	09/17/2016 08:49	ANGLE	$ 13000	0	0	0	0	1	1	2	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 8 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
15	**103670910**	5.289	01/17/2013 22:15	LEFT TURN, DIFFERENT ROADWAYS	$ 7000	0	0	0	0	6	5	4	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
16	**103803150**	5.289	07/02/2013 07:14	ANGLE	$ 6500	0	0	0	0	2	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	7	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
17	**103803149**	5.289	07/02/2013 07:15	HEAD ON	$ 3000	0	0	0	0	2	1	2	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	7	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
18	**103836898**	5.289	08/07/2013 17:49	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	1	1	0	3	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
19	**103892310**	5.289	10/14/2013 11:32	LEFT TURN, DIFFERENT ROADWAYS	$ 11500	0	0	2	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
20	**103973879**	5.289	01/18/2014 15:44	SIDESWIPE, OPPOSITE DIRECTION	$ 2700	0	0	0	0	1	1	1	1	0	3	2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
21	**104074581**	5.289	05/23/2014 22:06	ANGLE	$ 7000	0	0	0	0	1	4	1	1	0	12	2
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
22	**104231279**	5.289	11/11/2014 11:26	REAR END, SLOW OR STOP	$ 2600	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
23	**104355704**	5.289	03/31/2015 20:45	ANGLE	$ 25000	0	0	3	0	1	4	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
24	**104377301**	5.289	05/09/2015 10:58	LEFT TURN, DIFFERENT ROADWAYS	$ 5000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
25	**104490926**	5.289	09/06/2015 15:16	ANGLE	$ 18000	0	0	0	1	1	1	2	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
26	**104654589**	5.289	02/17/2016 17:09	RIGHT TURN, DIFFERENT ROADWAYS	$ 3000	0	0	0	0	1	1	1	2	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
27	**104676071**	5.289	03/04/2016 11:18	ANGLE	$ 11000	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
28	**104865368**	5.289	09/10/2016 09:00	ANGLE	$ 950	0	0	1	0	1	1	1	2	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
29	**104940317**	5.289	11/18/2016 18:00	LEFT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	1	1	5	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
30	**104940315**	5.289	11/19/2016 05:43	REAR END, SLOW OR STOP	$ 2500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 4 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			12			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
31	**105019817**	5.289	02/06/2017 19:35	PEDESTRIAN	$ 200	0	0	1	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**	14			
Unit	**2 :** 24	**Alchl/Drgs:**	1	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**						**Obj Strk:**	14			
32	**105030091**	5.289	02/18/2017 18:38	LEFT TURN, SAME ROADWAY	$ 1500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 32	**Alchl/Drgs:**	7	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
33	**105029675**	5.289	02/21/2017 14:10	LEFT TURN, DIFFERENT ROADWAYS	$ 4800	0	0	0	1	1	1	2	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**3 :** 10	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**	18			
34	**105041348**	5.289	03/09/2017 15:02	RAN OFF ROAD - LEFT	$ 30	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			11			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
35	**103794079**	5.308	06/25/2013 20:53	ANIMAL	$ 3000	0	0	0	0	1	2	1	1	0	0	3
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**	17			

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
36	**104734726**	5.310	04/27/2016 10:07	REAR END, SLOW OR STOP	$ 14500	0	0	1	3	1	1	1	3	0		2
Unit 1 : 9	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**											
Unit 4 : 24	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:**	**Veh Mnvr/Ped Actn:**	**Obj Strk:**											
37	**104364281**	5.318	02/05/2015 15:05	REAR END, SLOW OR STOP	$ 3500	0	0	0	1	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 4 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 5 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
38	**103558685**	5.327	09/26/2012 09:07	REAR END, SLOW OR STOP	$ 4500	0	0	0	0	1	1	1	1	0		
Unit 1 : 5	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
39	**105041351**	5.339	03/10/2017 13:42	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	3	0	0	2
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**											
Unit 3 : 4	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
40	**104975614**	5.347	12/06/2016 08:57	REAR END, SLOW OR STOP	$ 2000	0	0	0	0	2	1	3	3	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
41	**103816255**	5.369	07/22/2013 14:19	SIDESWIPE, SAME DIRECTION	$ 350	0	0	0	0	1	1	1	3	0	0	
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**											
Unit 2 : 4	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
42	**104265277**	5.369	01/09/2015 12:55	REAR END, SLOW OR STOP	$ 2300	0	0	0	0	1	1	1	1	0	13	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 2	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
43	**105003426**	5.369	01/25/2017 17:25	ANIMAL	$ 4000	0	0	0	1	1	2	1	7	0	13	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17											

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
44	**104120644**	5.384	06/27/2014 11:54	RIGHT TURN, DIFFERENT ROADWAYS	$ 8800	0	0	0	0	1	1	2	1	0	1	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
45	**103814996**	5.393	07/19/2013 12:54	REAR END, SLOW OR STOP	$ 900	0	0	0	3	1	1	1	1	0	0	2
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**										
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
46	**104975621**	5.393	12/05/2016 08:59	REAR END, SLOW OR STOP	$ 2100	0	0	0	1	2	1	1	3	0	0	2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
47	**105011762**	5.428	02/14/2017 08:01	REAR END, SLOW OR STOP	$ 2200	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
48	**104975885**	5.429	12/14/2016 08:03	REAR END, SLOW OR STOP	$ 3500	0	0	0	0	1	1	1	3	0		2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
49	**103690417**	5.441	02/20/2013 08:22	REAR END, SLOW OR STOP	$ 9500	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
50	**103639562**	5.450	12/04/2012 18:54	ANIMAL	$ 1500	0	0	0	1	1	4	1	1	0	0	2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 16	**Obj Strk:**										
51	**104631165**	5.454	01/11/2016 17:34	REAR END, SLOW OR STOP	$ 1200	0	0	0	1	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
52	**104101718**	5.466	07/12/2014 01:16	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	5	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
53	**103572028**	5.469	10/04/2012 18:42	ANGLE	$ 7000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8		**Obj Strk:**					
54	**103677659**	5.469	02/13/2013 08:38	LEFT TURN, SAME ROADWAY	$ 14500	0	0	0	1	2	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8		**Obj Strk:**					
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
55	**103835098**	5.469	08/28/2013 07:08	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
56	**104481928**	5.469	08/22/2015 16:28	ANGLE	$ 550	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			8		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
57	**104535815**	5.469	10/23/2015 09:26	SIDESWIPE, SAME DIRECTION	$ 7000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			5		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
58	**104676072**	5.469	03/04/2016 10:53	ANGLE	$ 3500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
59	**104773573**	5.469	06/03/2016 14:36	LEFT TURN, DIFFERENT ROADWAYS	$ 1350	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			8		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			8		**Obj Strk:**					
60	**104765123**	5.469	06/07/2016 16:42	LEFT TURN, SAME ROADWAY	$ 4200	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**			8		**Obj Strk:**					

North Carolina Department of Transportation
Traffic Engineering Accident Analysis System
Strip Analysis Report

Acc No	Crash ID	Milepost	Date	Accident Type	Total Damage	Injuries				Condition			Road		Trfc Ctl	
						F	A	B	C	R	L	W	Ch	Ci	Dv	Op

Legend for Report Details:

Acc No - Accident Number
Injuries: F - Fatal, A - Class A, B - Class B, C - Class C
Condition: R - Road Surface, L - Ambient Light, W - Weather
Rd Ch - Road Character
Rd Ci - Roadway Contributing Circumstances
Trfc Ctl - Traffic Control: Dv - Device, Op - Operating
Alchl/Drgs - Alcohol Drugs Suspected
Veh Mnvr/Ped Actn - Vehicle Maneuver/Pedestrian Action
Obj Strk - Object Struck

Summary Statistics

High Level Crash Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	60	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	26	43.33
Total Injury Crashes	26	43.33
Property Damage Only Crashes	34	56.67
Night Crashes	12	20.00
Wet Crashes	5	8.33
Alcohol/Drugs Involvement Crashes	1	1.67

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	60	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	6	10.00
Class C Crashes	20	33.33
Property Damage Only Crashes	34	56.67

Vehicle Exposure Statistics

Annual ADT = 27000

Total Length = 0.361 (Miles) **0.581 (Kilometers)**

Total Vehicle Exposure = 17.8 (MVMT) **28.64 (MVKMT)**

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	337.12	209.47
Fatal Crash Rate	0.00	0.00
Non Fatal Crash Rate	146.08	90.77
Night Crash Rate	67.42	41.89
Wet Crash Rate	28.09	17.46
EPDO Rate	1418.13	881.19

Miscellaneous Statistics

Severity Index =	4.21
EPDO Crash Index =	252.40
Estimated Property Damage Total = $	287330.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	10	16.67
ANIMAL	3	5.00
HEAD ON	1	1.67
LEFT TURN, DIFFERENT ROADWAYS	7	11.67
LEFT TURN, SAME ROADWAY	4	6.67
PEDESTRIAN	2	3.33
RAN OFF ROAD - LEFT	1	1.67
REAR END, SLOW OR STOP	27	45.00
RIGHT TURN, DIFFERENT ROADWAYS	2	3.33
SIDESWIPE, OPPOSITE DIRECTION	1	1.67
SIDESWIPE, SAME DIRECTION	2	3.33

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	9	25.71
Class C Injuries	26	74.29
Total Non-Fatal Injuries	35	100.00
Total Injuries	35	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	5	8.33
Feb	9	15.00
Mar	8	13.33
Apr	2	3.33
May	2	3.33
Jun	8	13.33
Jul	5	8.33
Aug	3	5.00
Sep	6	10.00
Oct	5	8.33
Nov	3	5.00
Dec	4	6.67

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	7	11.67
Tue	13	21.67
Wed	13	21.67
Thu	4	6.67
Fri	14	23.33
Sat	8	13.33
Sun	1	1.67

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	1	1.67
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	1	1.67
0600-0659	0	0.00
0700-0759	5	8.33
0800-0859	7	11.67
0900-0959	4	6.67
1000-1059	4	6.67
1100-1159	5	8.33
1200-1259	3	5.00
1300-1359	2	3.33
1400-1459	3	5.00
1500-1559	4	6.67
1600-1659	4	6.67
1700-1759	5	8.33
1800-1859	5	8.33
1900-1959	1	1.67
2000-2059	4	6.67
2100-2159	0	0.00
2200-2259	2	3.33
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	41	5	0	46
Dark	11	0	1	12
Other	2	0	0	2
Total	54	5	1	60

Object Struck Summary

Object Type	Times Struck	Percent of Total
ANIMAL	2	28.57
MOVABLE OBJECT	1	14.29
PEDESTRIAN	4	57.14

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
LIGHT TRUCK (MINI-VAN, PANEL)	2	1.56
OTHER BUS	1	0.78
PASSENGER CAR	80	62.50
PEDALCYCLE	1	0.78
PEDESTRIAN	2	1.56
PICKUP	6	4.69
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	2	1.56
SPORT UTILITY	29	22.66
UNKNOWN	1	0.78
VAN	4	3.12

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2012	5	0	1	4
2013	14	0	6	8
2014	8	0	2	6
2015	10	0	5	5
2016	16	0	9	7
2017	7	0	3	4
Total	60	0	26	34

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2012	0	1
2013	0	9
2014	0	2
2015	0	7
2016	0	13
2017	0	3
Total	0	35

Miscellaneous Totals

Year	Property Damage	EPDO Index
2012	$ 20500	12.40
2013	$ 69350	58.40
2014	$ 30600	22.80
2015	$ 68950	47.00
2016	$ 80200	82.60
2017	$ 17730	29.20
Total	$ 287330	252.40

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2012	0	0	3	0	1	0	1
2013	4	0	5	0	1	1	3
2014	1	1	4	0	1	1	0

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2015	1	0	5	0	3	1	0
2016	3	1	8	0	4	0	0
2017	2	0	2	1	0	0	2
Total	11	2	27	1	10	3	6

Strip Diagram

Features	Milepost	Crash IDs
SR 1733 | WEAVER DAIRY	5.11	103551346 | 103704972 | 104112293 | 104766135 | 104407243 | 103678925
ML-CHAPEL HILL	5.12	
	5.13	
	5.14	
	5.15	
	5.16	103860525 | 104020934 | 104415501
	5.17	104364253
SR 1865 | NORTHWOOD	5.18	
	5.19	
	5.20	104901651
	5.21	
	5.22	
	5.23	104019669
	5.24	
	5.25	
	5.26	
	5.27	103588939
	5.28	104892383
PERKINS	5.29	103670910 | 103803150 | 103803149 | 103836898 | 103892310 | 103973879 | 104074581 | 104231279 | 104355704 | 104377301 | 104490926 | 104654589 | 104676071 | 104865368 | 104940317 | 104940315 | 105019817 | 105030091 | 105029675 | 105041348
	5.30	
	5.31	103794079 | 104734726
	5.32	104364281
	5.33	103558685
	5.34	105041351
	5.35	104975614
	5.36	
	5.37	103816255 | 104265277 | 105003426
	5.38	104120644
	5.39	103814996 | 104975621
	5.40	
	5.41	
	5.42	
	5.43	105011762 | 104975885
	5.44	103690417
	5.45	103639562 | 104631165
	5.46	
SR 1727 | EUBANK	5.47	104101718 | 103572028 | 103677659 | 103835098 |

Features	Milepost	Crash IDs
		104481928 | 104535815 | 104676072 | 104773573 | 104765123

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
HARRISTEETEREXPANSIONTIS				76.8	8.4	27000	30000086

Request Date	Courier Service	Phone No.	Ext.	Fax No.

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	68	7	All and Rural		0	05/01/2012	04/30/2017	5.00

Location Text

NC 86 (Airport Rd) from SR 1727 (Eubanks Rd) to
SR 1733 (Weaver Dairy Rd)

Requestor

Included Accidents	Old MP	New MP	Type
103803150		5.289	I
104265277		5.369	I
104415501		5.158	I

Excluded Accidents

105034904
103761584
103926100
104925197
103845916
104952191

Fiche Roads

Name	Code
NC 86	30000086
AIRPORT	50000279
MARTIN LUTHER KING	50019060
NC 86 SB COUPLET	30400086

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
NC 86	30000086	5.108	5.469	0.361	0.581