TRAFFIC IMPACT ANALYSIS

Carolina Flats at Estes

Chapel Hill, North Carolina

DRAFT REPORT

Prepared for:

The Town of Chapel Hill, NC

Prepared by:

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June 2012

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1.0 INTRODUCTION

The subject development is the Carolina Flats at Estes and is proposed to be located in the northeast quadrant of the intersection of Estes Drive and Martin Luther King, Jr. Boulevard in Chapel Hill, North Carolina. This report presents the traffic operations impacts of this new development on the study area roads.

The proposed development would include approximately 189 student apartment units as well as a 145 room hotel. This development would have access through two driveways as described below:

- Driveway #1 with full ingress/egress on Estes Drive east of Martin Luther King, Jr. Boulevard
- Driveway #2 with right-in, right-out ingress/egress on Martin Luther King, Jr. Boulevard, north of Estes Drive

The proposed development would be built by 2014 and the build analysis year for this report is 2015, one year after the construction is complete. Figure 1 shows the site plan of the proposed development.

1.1 *Project Overview*

The plan proposes to build approximately 189 units of student units as well as a 145 room hotel, which is expected to be completed by 2014. The site is located in the Town of Chapel Hill's Single Family (R-1) zoning district, as shown on Figure 2. The proposed zoning is Multi-Family (MU-V).

1.2 *Site Location and Study Area*

To determine the traffic impacts of the proposed site development on nearby roadways, traffic flow conditions were analyzed at the following seven intersections:

- Martin Luther King, Jr. Boulevard/Piney Mountain Road/Municipal Drive (existing four-leg signalized intersection)
- Martin Luther King, Jr. Boulevard/Shadowood Drive (existing three-leg unsignalized intersection)
- Martin Luther King, Jr. Boulevard/Driveway #2 (proposed three-leg unsignalized intersection)
- Martin Luther King, Jr. Boulevard/Estes Drive (existing four-leg signalized intersection)
- Estes Drive/Driveway #1 (proposed three-leg unsignalized intersection)
- Estes Drive/Somerset Drive (existing three-leg unsignalized intersection)
- Estes Drive/Caswell Road/Clayton Road (existing four-leg signalized intersection)

1.3 *Existing and Proposed Uses in Site Vicinity*

The project site is surrounded by residential zoning to the east and north and Institutional zoning to the west and south. The proposed development would be located on currently undeveloped land (currently used as a certified tree farm) and compose approximately 189 student apartment units and a 145 room hotel.

TOWN OF CHAPEL HILL

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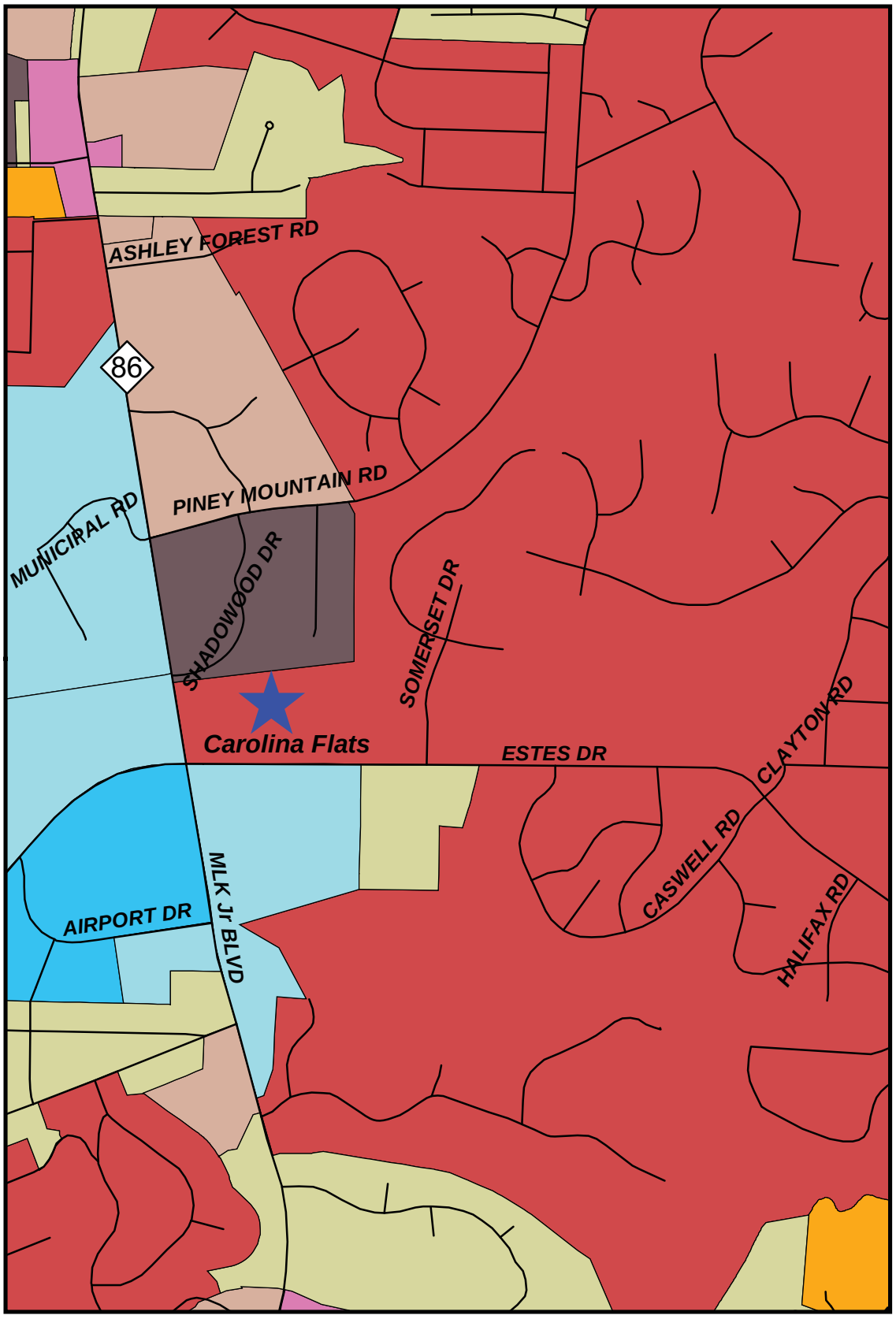
PROJECT SITE PLAN

Figure 1



1 inch = 1,000 feet

TOWN OF CHAPEL HILL	Carolina Flats Development	RS&H IMPROVING YOUR WORLD RS&H Architects-Engineers-Planners, Inc.	PROJECT LOCATION MAP
	Traffic Impact Analysis		Figure 2

1.4 *Existing and Committed Surface Transportation Network*

The transportation network serving the project site and the surrounding area includes Martin Luther King, Jr. Boulevard, Estes Drive, Piney Mountain Road, Shadowood Drive, Somerset Drive, and Clayton Road/Caswell Road.

Figure 3 shows the current lane configuration and traffic-control (traffic signal or stop sign) at the existing intersections analyzed for this study.

Martin Luther King, Jr. Boulevard is a five lane, two-way, north-south major arterial street with two lanes in each direction and a two-way left-turn lane. This roadway connects the Town of Chapel Hill to I-40 to the north of the site. This roadway has a posted speed limit of 35 miles per hour (mph). Martin Luther King, Jr. Boulevard is one of the major connectors in Chapel Hill with residential and commercial land uses along this roadway. Martin Luther King, Jr. Boulevard is also designated as NC Highway 86 through the study area.

At its intersection with Piney Mountain Road/Municipal Drive, the northbound and southbound approaches of Martin Luther King, Jr. Boulevard have one exclusive left-turn lane, one through lane and one through lane with shared right-turning movements. The westbound approach of Piney Mountain Road has two exclusive left-turn lanes and one through lane with shared right-turning movements. The eastbound approach of Municipal Road has one exclusive left-turn lane and one through lane with shared right-turning movements. This intersection is controlled by an actuated traffic signal.

The intersection of Martin Luther King, Jr. Boulevard/Shadowood Road is limited to right-in/right-out movements only. The northbound and southbound approaches of Martin Luther King, Jr. Boulevard have two lanes in each direction with a center turn lane. The northbound approach has right-in access into Shadowood Road. The westbound approach of Shadowood Road has one lane right-out access to Martin Luther King, Jr. Boulevard.

At its intersection with Estes Drive, the northbound and southbound approaches of Martin Luther King, Jr. Boulevard have one exclusive left-turn lane, one through lane and one through lane with shared right-turning movements. The eastbound and westbound approaches of Estes Drive have an exclusive left-turn lane, one through lane and one exclusive right-turn lane. This intersection is controlled by an actuated traffic signal.

Estes Road is a two-lane, two-way, east-west arterial street connecting US 15/501 to Greensboro Street. This roadway has a posted speed limit of 35 mph. Horace Williams Airport is located along Estes Drive just west of its intersection with Martin Luther King, Jr. Boulevard. Other land uses along Estes Drive include suburban residential zoning and middle and elementary schools.

The intersection of Martin Luther King, Jr. Boulevard and Estes Drive is described above.

At its intersection with Somerset Drive, the eastbound and westbound approaches of Estes Drive have one through lane with shared left and right-turning movements respectively. The southbound approach of Somerset Drive has one with shared left and right-turning movement lane. This intersection is controlled by a stop sign along Somerset Drive.

At its intersection with Caswell Road/Clayton Road, the eastbound and westbound approaches of Estes Drive have one exclusive left-turn lane and one through lane with shared right-turning movements. The southbound approach of Clayton Road has one exclusive left-turn lane and one through lane with shared right-turning movements. The northbound approach of Caswell Road has one through lane with shared left and right-turning movements. This intersection is controlled by a traffic signal.

Piney Mountain Road is a two-lane, two-way, east-west residential arterial street, which provides access to suburban homes. The posted speed limit on Piney Mountain Road is 35 mph. Piney Mountain Road becomes Municipal Drive west of the intersection at Martin Luther King, Jr. Boulevard. The speed limit on this side is 25 mph and currently serves light industrial facilities. The intersection of Piney Mountain Road and Martin Luther King, Jr. Boulevard will also serve as one of the main entrances to the future Carolina North development.

The intersection of Martin Luther King, Jr. Boulevard and Piney Mountain Road is described on page four.

Shadowood Road is a two-lane, two-way, east-west residential street providing access/egress to the Shadowood Apartment complex. The speed limit in the development is 10 mph. The intersection of Martin Luther King, Jr. Boulevard and Shadowood Road is described above.

Somerset Drive is a two-lane, two-way, north-south residential street. It provides access/egress to suburban housing to the north.

The intersection of Estes Drive and Somerset Drive is described on page four.

Caswell Road/Clayton Road is a two-lane, two-way, north-south residential local street, which provides access/egress to Estes Drive suburban housing. The speed limit along either roadway is 25 mph. Estes Hills Elementary School, located along Estes Drive uses the intersection of Estes Drive and Caswell Road/Clayton Road as its main entrance. The intersection of Estes Drive and Caswell Road/Clayton Road is described above.

Sidewalks

Martin Luther King, Jr. Boulevard and Estes Drive have sidewalks on one side of the roadway in the vicinity of the proposed site. Estes Drive has sidewalks on the south side of the roadway (opposite the project site) and Martin Luther King, Jr. Boulevard has a sidewalk on the east side (adjacent to the project site).

Piney Mountain Road has sidewalks on both sides of the roadway to the east of Martin Luther King, Jr. Boulevard, however, there are no sidewalks to the west. The west section is a part of the Carolina North development which will be completed at a later date.

At the intersection of Estes Drive and Caswell Road/Clayton Road, sidewalks are located along Estes Drive to the west. Sidewalks are also located along Clayton Road to the north. On Estes Drive to the east, sidewalks are located on the north side only. On Caswell Road there are no sidewalks.

Bicycle Lanes

There are no striped bicycle lanes along any of the roadways in the study area. However, Martin Luther King, Jr. Boulevard does support bicyclists and is shown to have "Share the Road" signs as depicted below.

Bus Routes

Chapel Hill Transit operates the following bus routes through the study area:

- Routes A, G, NS, and T along Martin Luther King, Jr. Boulevard, and Estes Drive.

In the vicinity of the proposed development, a bus stop is located on Estes Drive just west of its intersection with Martin Luther King, Jr. Boulevard for route G. On Martin Luther King, Jr. Boulevard, the closest stop is located just north of Shadowood Road for routes A, NS and T.

The Triangle Transit Authority does have routes serving this area but does not operate any stops in the vicinity of the project site.

Looking northbound along Martin Luther King, Jr. Boulevard at Estes Drive

2.0 2012 EXISTING CONDITIONS

The Existing Conditions capacity analysis included peak hour arterial capacity analysis and peak hour intersection capacity analysis.

2.1 *Arterial Capacity Analysis*

Arterial capacity analyses were performed for the following two segments:

- Martin Luther King, Jr. Boulevard between Timber Hollow Court and Airport Drive
- Estes Drive between Airport Drive and Halifax Road

The 2012 Existing Conditions arterial capacity analysis on Martin Luther King, Jr. Boulevard and Estes Drive was performed using the peak hour traffic volumes per direction obtained from the traffic counts performed for this study. Using these traffic volumes and capacity thresholds for the respective roadway type obtained from *Chapel Hill Guidelines for Traffic Impact Analysis*, Volume-to-Capacity ratios were calculated for the study area roads.

The 2012 arterial capacity analysis indicates that the traffic demand along Martin Luther King, Jr. Boulevard and Estes Drive approach or exceed the roadway capacity limits (volume-to-capacity ratio of greater than 0.9) during at least one peak hour of the day, indicating a need for additional roadway improvements.

Table 1 shows the results of the arterial capacity analysis for the 2012 Existing Conditions.

Table 1: Arterial Capacity Analysis
2012 Existing Conditions

Segment	Direction of Travel	No. of Lanes each direction	Threshold Capacity*	Traffic Volume			Volume-to-Capacity Ratio		
				AM Peak	Mid-day Peak	PM Peak	AM Peak	Mid-day Peak	PM Peak
Martin Luther King, Jr. Boulevard	Northbound	2	1,600	834	782	1,526	0.52	0.49	**0.95**
	Southbound	2	1,600	1,420	769	1,127	0.89	0.48	0.70
Estes Drive	Eastbound	1	550	759	519	681	**1.38**	0.94	**1.24**
	Westbound	1	550	601	606	890	**1.09**	**1.10**	**1.62**

*Source: Guidelines for Traffic Impact Analysis, Town of Chapel Hill, October 2001.

2.2 *Peak Hour Intersection Capacity Analysis*

Peak hour intersection capacity analyses were performed for the following intersections:

- Martin Luther King, Jr. Boulevard at Piney Mountain Road/Municipal Drive
- Martin Luther King, Jr. Boulevard at Shadowood Road
- Martin Luther King, Jr. Boulevard at Estes Drive
- Estes Drive at Somerset Drive
- Estes Drive at Caswell Road/Clayton Road

As the highest traffic demand on area roads usually occurs during AM and PM peak hours with an additional peak hour due to lunch-time traffic volumes, traffic counts were analyzed for the following time periods: between 7:00 and 9:00 AM, 11:30 AM and 1:30 PM, and 4:00 and 6:00 PM. Traffic counts were conducted on Tuesday, April 24, 2012 at these study intersections. The peak hour is defined as the highest four continuous 15-minute traffic count intervals. Based on the traffic counts collected for the above five intersections, the peak hours for the analysis are as follows:

- AM Peak Hour: 7:45 AM – 8:45 AM;
- Mid-day Peak Hour: 12:15 PM – 1:15 PM;
- PM Peak Hour: 4:45 PM – 5:45 PM.

Figure 3 shows the 2012 intersection turning-movement counts for the weekday AM, Mid-day, and PM peak hours.

Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Road: The signalized intersection capacity analysis at Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Road, indicates that this intersection on the whole operates Level of Service B or better, very good rate of traffic flow, during the peak hours. The northbound and southbound approaches function without any delay at Level of Service A during the peak hours. The eastbound approach of Municipal Road and westbound approach of Piney Mountain Road exceed capacity limits (Level of Service F) during the peak hours. However, the volume-to-capacity ratio for the two approaches is less than 0.7, indicating a good rate of traffic flow. The poor Level of Service is a result of longer cycle length, which is required to maintain progression along Martin Luther King, Jr. Boulevard.

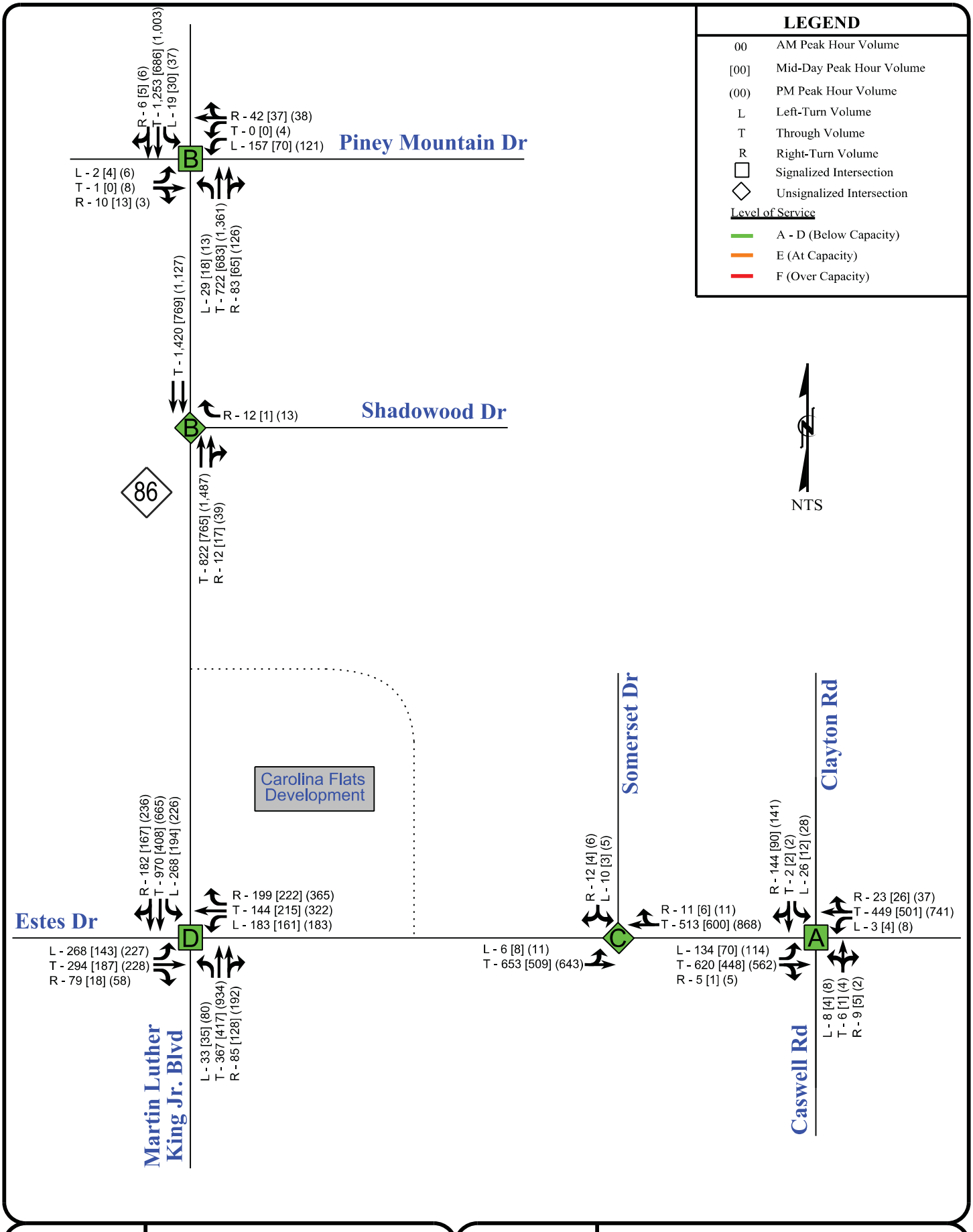
Martin Luther King, Jr. Boulevard and Shadowood Drive: At the intersection of Martin Luther King, Jr. Boulevard and Shadowood Drive, the unsignalized intersection capacity analysis indicates the westbound stop controlled left operates at Level of Service B or better, a very good rate of flow.

Martin Luther King, Jr. Boulevard and Estes Drive: The signalized intersection capacity analysis at Martin Luther King, Jr. Boulevard and Estes Drive indicates that this intersection on the whole operates at Level of Service D or better, an acceptable rate of flow during the peak hours. The northbound and southbound approaches function at Level of Service D or better, an acceptable rate of flow, during the peak hours with one exception. The exception is traffic demand along the southbound approach, flows at a Level of Service E, (approaching roadway capacity limits) during PM Peak Hour. The eastbound and westbound approaches of Estes Drive either approach or exceed the roadway capacity limits (Level of Service E or F) during the peak hours.

Estes Drive and Somerset Road: At the intersection of Estes Drive and Somerset Road, the unsignalized intersection capacity analysis indicates all stop controlled movements operate at Level of Service D or better, an acceptable rate of flow during the peak hours.

Estes Drive and Caswell Road/Clayton Road: The signalized intersection capacity analysis at Estes Drive and Caswell Road/Clayton Road indicates that all approaches operate at Level of Service C or better, a good rate of flow during the peak hours.

Table 2 summarizes the intersection capacity analyses for the 2012 Existing Conditions. Figure 3 presents the results of the 2012 Existing Conditions analysis graphically.



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2012 EXISTING CONDITIONS

Figure 3

Table 2: Intersection Capacity Analysis - 2012 Existing Traffic Conditions

Intersection	Traffic Movement		Level of Service			Volume-to-Capacity Ratio		
			AM Peak	Mid-day Peak	PM Peak	AM Peak	Mid-day Peak	PM Peak
Martin Luther King, Jr. Boulevard at Piney Mountain Road	Overall Intersection		B	B	B	**N/A**	**N/A**	**N/A**
	Eastbound	L	**F**	**F**	**F**	.05	.08	.13
		TR	**F**	**F**	**F**	.25	.28	.23
	Westbound	L	**F**	**F**	**F**	.68	.42	.62
		TR	**F**	**F**	**F**	.40	.49	.47
	Northbound	L	A	A	A	.12	.03	.04
		TR	A	A	A	.32	.29	.58
	Southbound	L	A	A	A	.04	.06	.21
		TR	A	A	A	.46	.25	.37
Martin Luther King, Jr. Blvd at Shadowood Dr	Westbound	R	B	A	A	.02	.01	.02
Martin Luther King, Jr. Boulevard at Estes Drive	Overall Intersection		D	D	D	**N/A**	**N/A**	**N/A**
	Eastbound	L	**E**	**E**	**F**	.82	.79	.91
		T	**F**	**F**	**E**	.88	.79	.60
		R	D	D	D	.23	.06	.15
	Westbound	L	**F**	**E**	D	.96	.77	.62
		T	**E**	**F**	**F**	.58	.85	.98
		R	**E**	**E**	**E**	.57	.72	.86
	Northbound	L	B	B	C	.17	.07	.31
		TR	C	C	D	.27	.29	.76
	Southbound	L	C	B	E	.51	.39	.91
		TR	D	B	C	.65	.30	.57
Estes Drive at Somerset Drive	Eastbound	TL	A	A	A	.01	.01	.02
	Southbound	LR	C	C	D	.09	.03	.08
Estes Drive at Caswell Road/Clayton Road	Overall Intersection		A	A	A	**N/A**	**N/A**	**N/A**
	Eastbound	L	A	A	A	.42	.12	.31
		TR	A	A	A	.32	.34	.43
	Westbound	L	A	A	A	.29	.01	.02
		TR	A	A	A	.29	.40	.59
	Northbound	LTR	C	C	C	.14	.07	.10
	Southbound	L	C	C	C	.20	.09	.22
		TR	B	B	B	.53	.41	.41

Table 2: N/A - Not Applicable

3.0 FUTURE TRAFFIC CONDITIONS WITHOUT PROPOSED DEVELOPMENT

Future traffic flow conditions without the proposed Carolina Flats at Estes are analyzed to provide a benchmark from which the effects of the proposed project's impacts can be measured. This scenario is called the No Build Conditions. The future analysis year is projected to be 2015: one year after Carolina Flats at Estes is expected to be completed and fully occupied.

The No Build Conditions traffic projections include traffic generated by all other development projects in the area that are already approved but not yet built. The Town of Chapel Hill identified the following developments to be included in this analysis:

- Shortbread Loft development
- UNC-Chapel Hill Main Campus Development Plan
- Orange United Methodist Church Expansion
- Carolina North Development
- Parking Lot #5

The **Shortbread Lofts Developments** is located on Rosemary Street between Roberson Street and Church Street in Chapel Hill. This development would replace the existing 3,550 square feet of office space and 22 apartment units with 5,545 square feet of retail space, 104 apartments and a private parking lot with 48 spaces.

The **UNC-Chapel Hill Main Campus Development Plan** will add approximately 7.9 million gross square feet (GSF) of new development to the campus, including parking decks and infrastructure. The net increase in new occupied floor area is approximately 5.6 million square feet, or an estimated 49 percent increase over pre-2001 occupied floor area. As with the previous update, the growth projections used to estimate employee and student growth have been extended through 2015. Employee growth is anticipated to be 31 percent (4,497 additional employees) and student growth is anticipated to be 18 percent (4,575 additional students) over the life of the Development Plan.

The **Orange United Methodist Church** is located at the intersection of Martin Luther King, Jr. Boulevard (NC 86) and Homestead Road in Chapel Hill, North Carolina. The expansion will include adding 660 seats to the existing sanctuary, 34 students to the existing daycare and a Family Life Center. Access will be through one full access driveway and one exit driveway on Martin Luther King, Jr. Boulevard.

The **Carolina North Development** is a new expansion project located in the northwest quadrant of the intersection of Martin Luther King, Jr. Boulevard at Estes Drive. The development consists of 260,000 square feet of research facilities. Access to the site will be primarily through the intersection of Piney Mountain Road at Martin Luther King, Jr. Boulevard.

The **Parking Lot #5** is located on the southeast corner of the intersection of Rosemary Street with Church Street. The Parking Lot #5 will replace 165 parking spaces with 396 parking spaces serving 151 residential dwelling units and 24,621 square feet of retail space, as well as continuing to provide public parking.

3.1 *Background Traffic*

The No Build or background traffic assignment is a two-step process. First, the 2012 existing traffic on area roads was increased by a growth rate of 1.50 percent per year for three years to obtain future background traffic volumes[1]. Second, traffic generated by other development projects that have not yet been completed was added to the background traffic. Traffic for the approved development projects is estimated as follows.

Trip Generation: The AM, Mid-day, and PM Peak Hour trips generated by all developments included in the analysis were obtained from their respective Traffic Impact Analysis Reports (TIAs). The trips generated by each of these developments are shown in Table 3.

Trip Distribution: The traffic distribution for the development projects was obtained from the respective TIAs.

Modal Split: Although there are bus routes on Martin Luther King, Jr. Boulevard and Estes Drive, this study conservatively assumes that all background site travel is via auto. Any transit travel generated by other development projects would decrease the number of auto trips and improve the traffic conditions projected by this study.

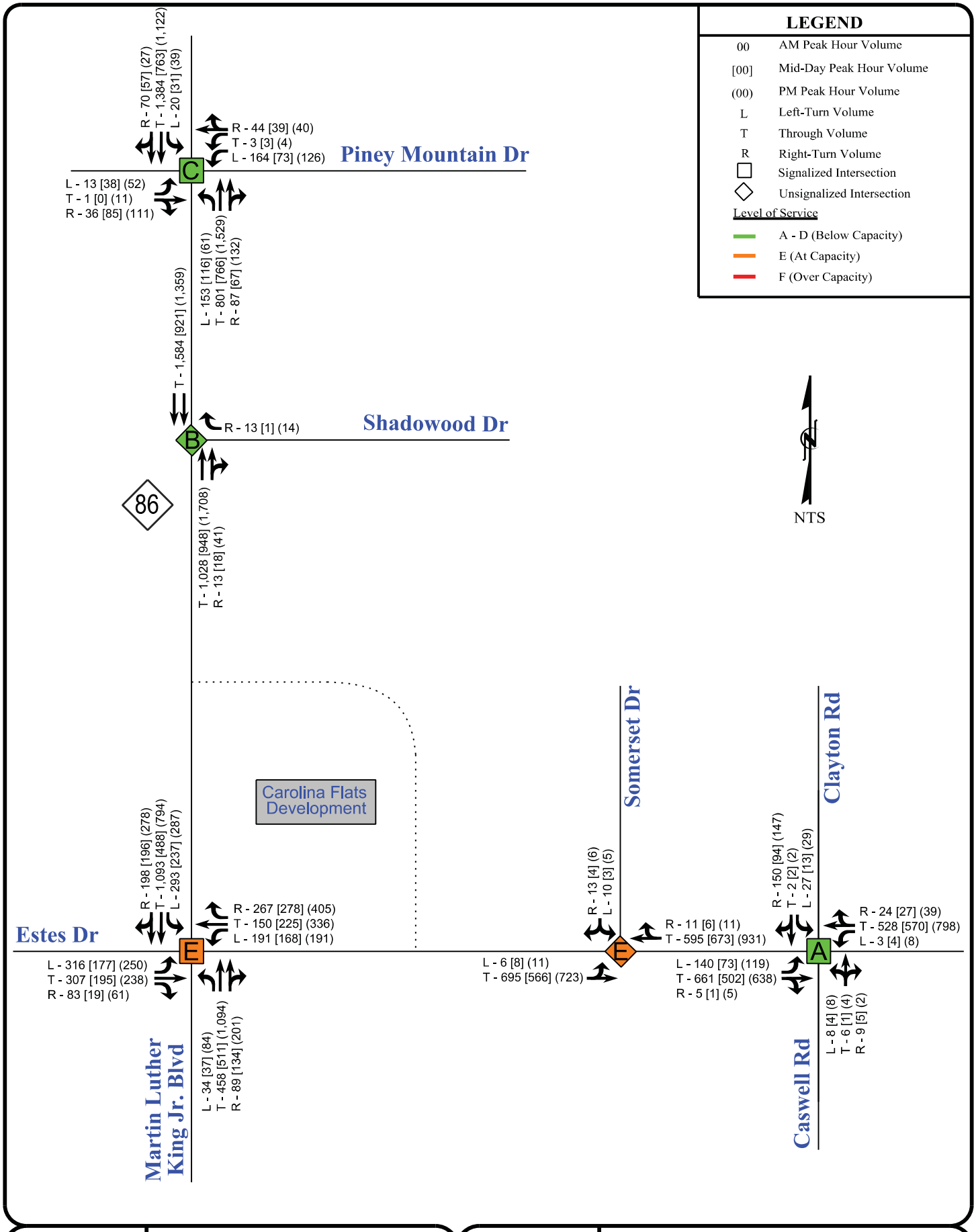
Trip Assignment: Off-site traffic is assigned to area roads using the trip distribution described in the traffic studies cited above. The trip assignments traffic diagrams for all the above mentioned developments are included in the technical appendix - Trip Assignment for Other Developments.

Figure 4 illustrates the No Build Conditions.

[1] The background traffic growth rate was obtained from the Town of Chapel Hill Traffic Engineering Office.

Table 3: Trip Generation Results of Background Project Traffic

Development Project	Land Use/ Size of Development	Weekday (vph)		AM Peak Hour (vph)		Mid-day Peak Hour (vph)		PM Peak Hour (vph)	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Shortbread Loft development	5,545 sq.ft retail space, 104 apartments, 48 space parking lot	878	878	49	12	62	62	25	101
UNC-Chapel Hill Main Campus Development Plan	1,579 spaces added	5,744	5,744	863	249	N/A	N/A	518	761
Orange United Methodist Church Expansion	660 sanctuary seats, 34 student day care center	76	76	14	13	14	14	13	15
Carolina North Development	260,000 sq. ft. research facilities	N/A	N/A	189	37	152	105	68	157
Parking Lot #5	396 Parking Spaces	N/A	N/A	43	58	90	116	101	158



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2015
NO BUILD CONDITIONS

Figure 4

4.0 PROPOSED PROJECT TRAFFIC

The proposed development is located in the northeast quadrant of the Martin Luther King, Jr. Boulevard and Estes Drive intersection in Chapel Hill, North Carolina. The proposed development would include approximately 189 student apartment units and a 145 room hotel with a completion date of 2014. The proposed development would not replace any current development.

Site Access: There are two driveways for the proposed development as described below:

- Driveway #1 with full access/egress on Estes Drive east of Martin Luther King, Jr. Boulevard
- Driveway #2 with right in/right out access/egress on Martin Luther King, Jr. Boulevard north of Estes Drive

Trip Generation: The trips generated by Carolina Flats at Estes were calculated using the trip generation rates for Apartments (Code 220) and for Hotel (310) from the ITE Trip Generation Manual 8th Edition (ITE, Washington, D.C., 2008). The proposed development would generate 2,068 vehicle trips per day. Of these trips, 123 vehicle trips would occur in the AM peak hour, 146 vehicle trips during the Mid-day peak hour, and 182 trips during the PM peak hour.

Table 4 shows the trip rates and Table 5 shows the number of trips generated by the proposed Carolina Flats at Estes.

4.1 *Adjustments to Trip Generation Rates*

Pass-by Trips: There is no adjustment for pass-by trips for the proposed site.

Internal Capture: There is no adjustment for internal capture for the proposed site.

Modal Split: The apartment component of this development is proposed to comprise of student housing and majority of the students are expected to utilize the transit services for their commute to and from the university. Trip reduction factors for Daily, AM and PM Peak Hour trips were determined for the apartment units based on similar student apartment developments in the nearby area. Trip reduction factors for Daily, AM, Mid-Day and PM Peak Hours were determined as 10%, 50%, 50%, and 20% respectively. Additional description of the procedure and calculations of the traffic reductions factors are included in Appendix B. No trip reduction factors were applied to the traffic generated by the hotel.

Trip Generation Budget: As the proposed development will be completed in a single phase, no trip generation budget is used.

Trip Distribution: The new site traffic volumes were distributed to area roads based on current travel patterns developed from the traffic counts in the study area. Figures 5 and 6 show the site traffic distribution for the student apartments and hotel respectively.

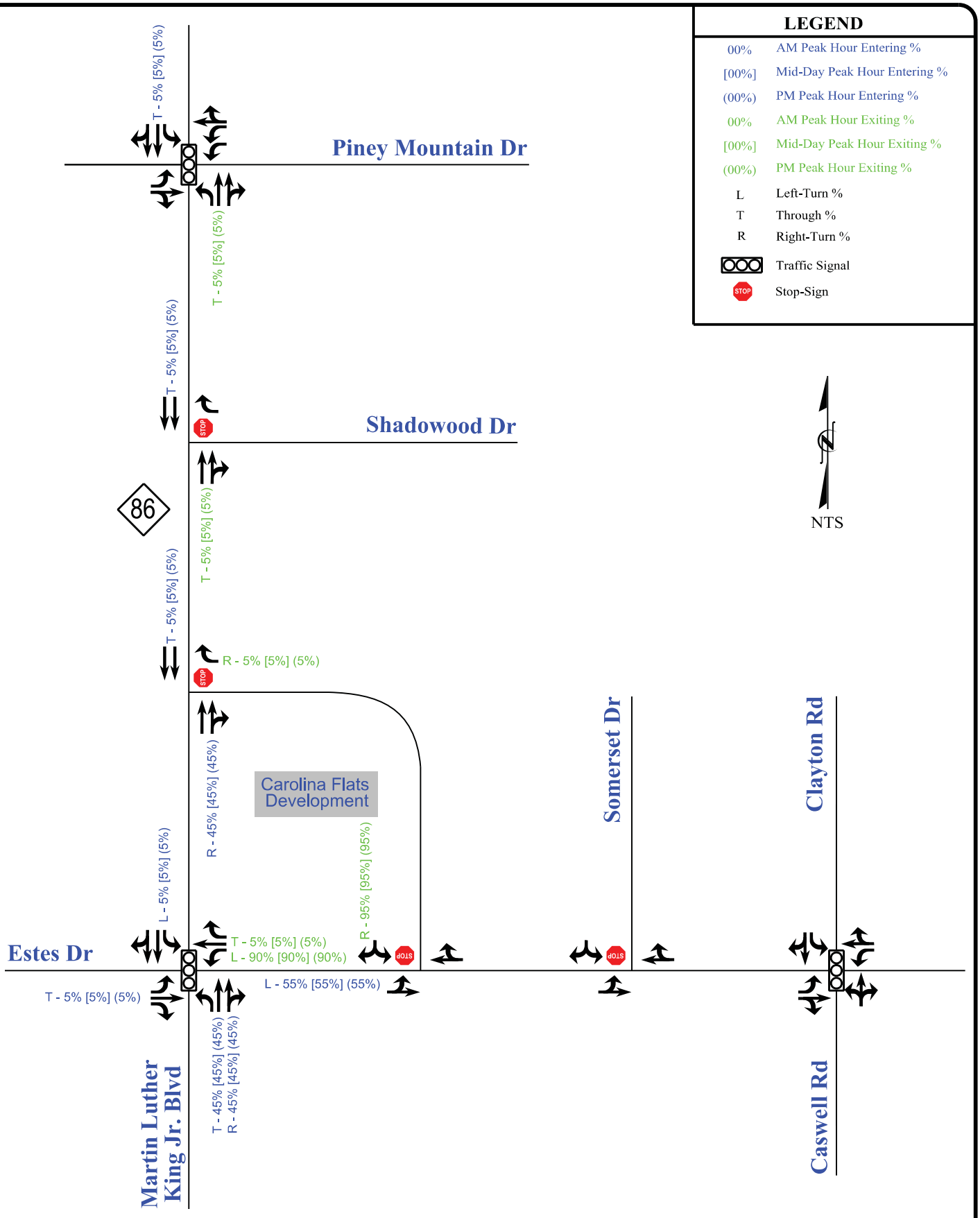
Trip Assignment: The new site traffic volumes were assigned to area roads using the trip distributions. Figures 7 and 8 illustrate the site traffic assignment for the apartments and hotels respectively. Figure 9 illustrates the total site traffic assignment (apartment + hotel) from the proposed Carolina Flats at Estes development.

Table 4: Site Trip Generation Rates
Shortbread Lofts

Land Use	Size	Weekday (vph)		AM Peak Hour (vph)		Mid-day Peak Hour (vph)		PM Peak Hour (vph)	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Student Apartment Units	189 units	3.03	3.03	.05	.21	.16	.16	.33	.18
Hotel	145 rooms	3.19	3.19	.28	.17	.30	.30	.31	.28
Total		**6.22**	**6.22**	**.33**	**.38**	**.46**	**.46**	**.64**	**.46**

Table 5: Site Trip Generation Volumes
Shortbread Lofts

Land Use	Size	Weekday (vph)		AM Peak Hour (vph)		Mid day Peak Hour (vph)		PM Peak Hour (vph)	
		Inbound	Outbound	Inbound	Outbound	Inbound	Outbound	Inbound	Outbound
Student Apartment Units	189 units	572	572	10	39	30	30	63	34
Hotel	145 rooms	462	462	40	25	43	43	45	40
Total		**1,034**	**1,034**	**59**	**64**	**73**	**73**	**108**	**74**



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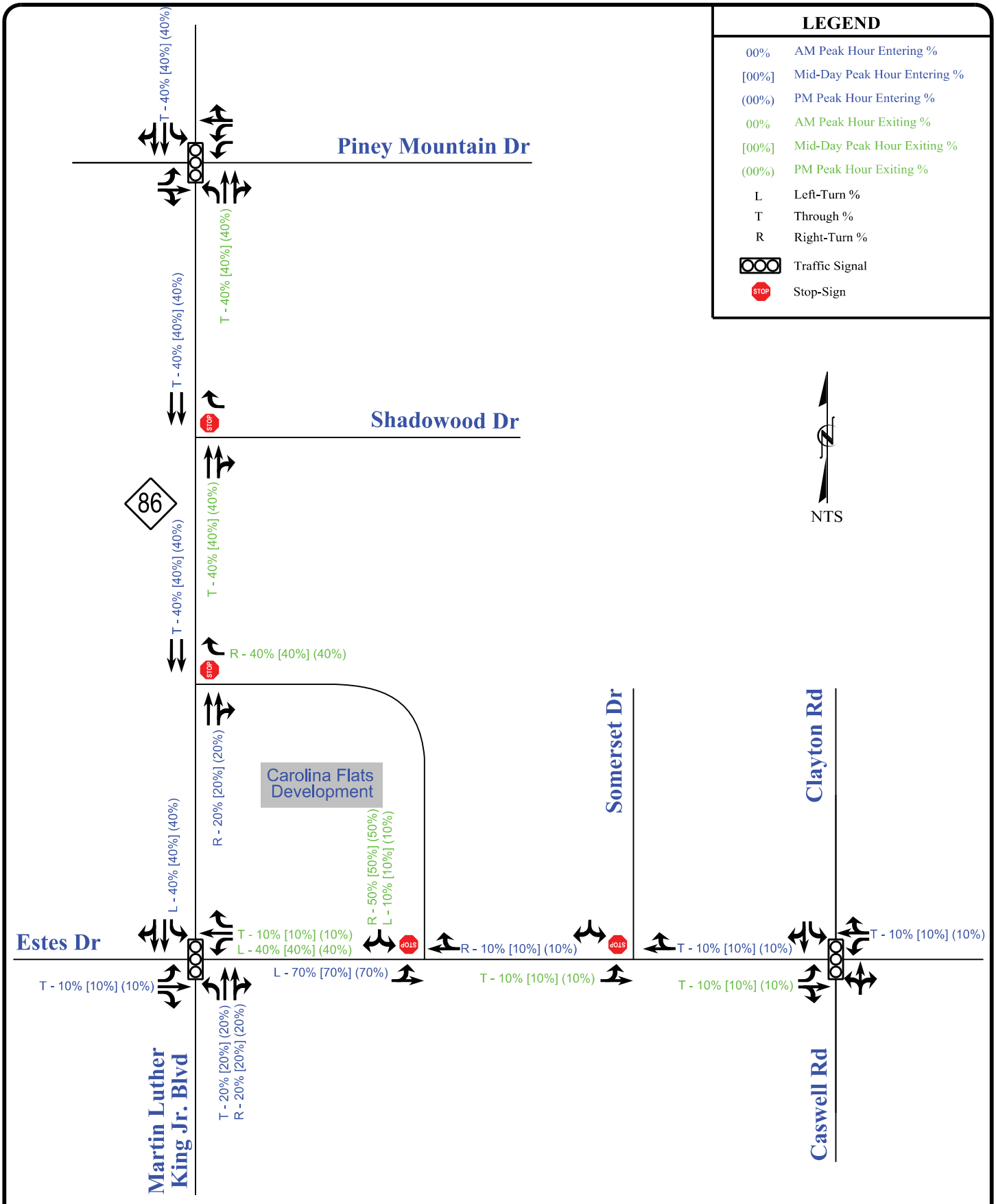
2015 Site Trip Distribution - Student Apartment Units

Figure 5



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2015 Site Trip Distribution - Hotel

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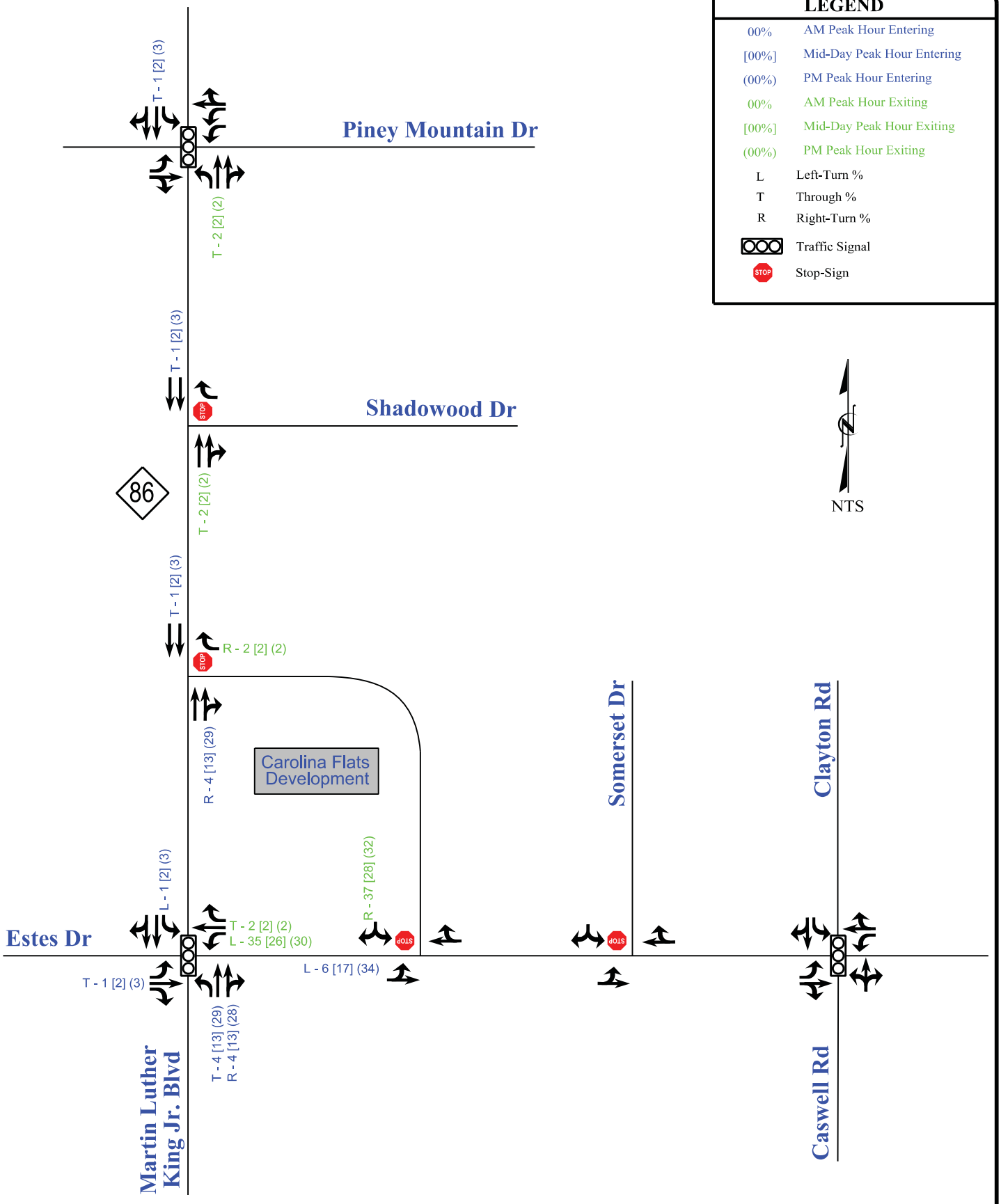
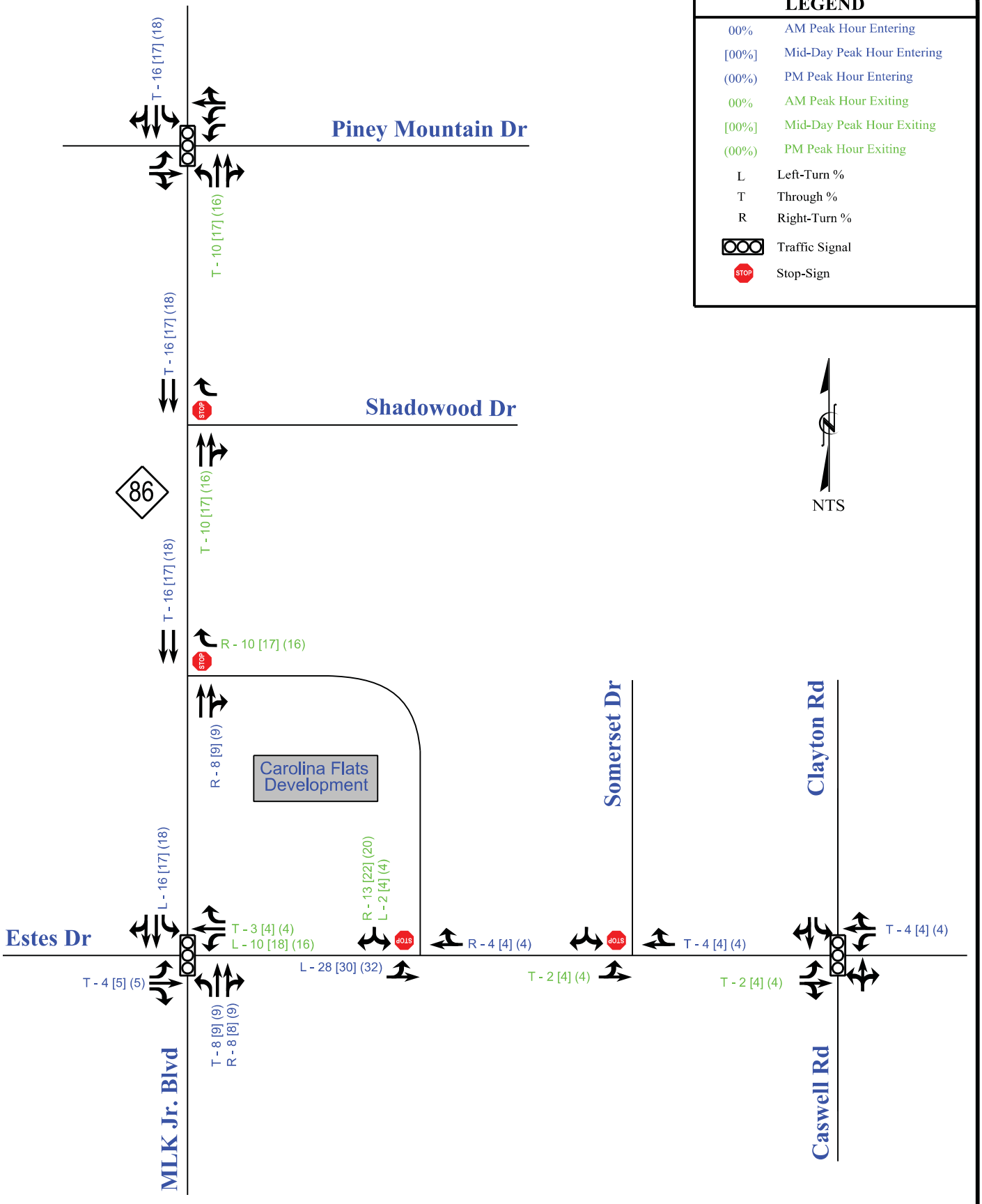
Figure 6



Carolina Flats at Estes Traffic Impact Analysis

2015 Site Trip Assignment - Student Apartment Units

Figure 7



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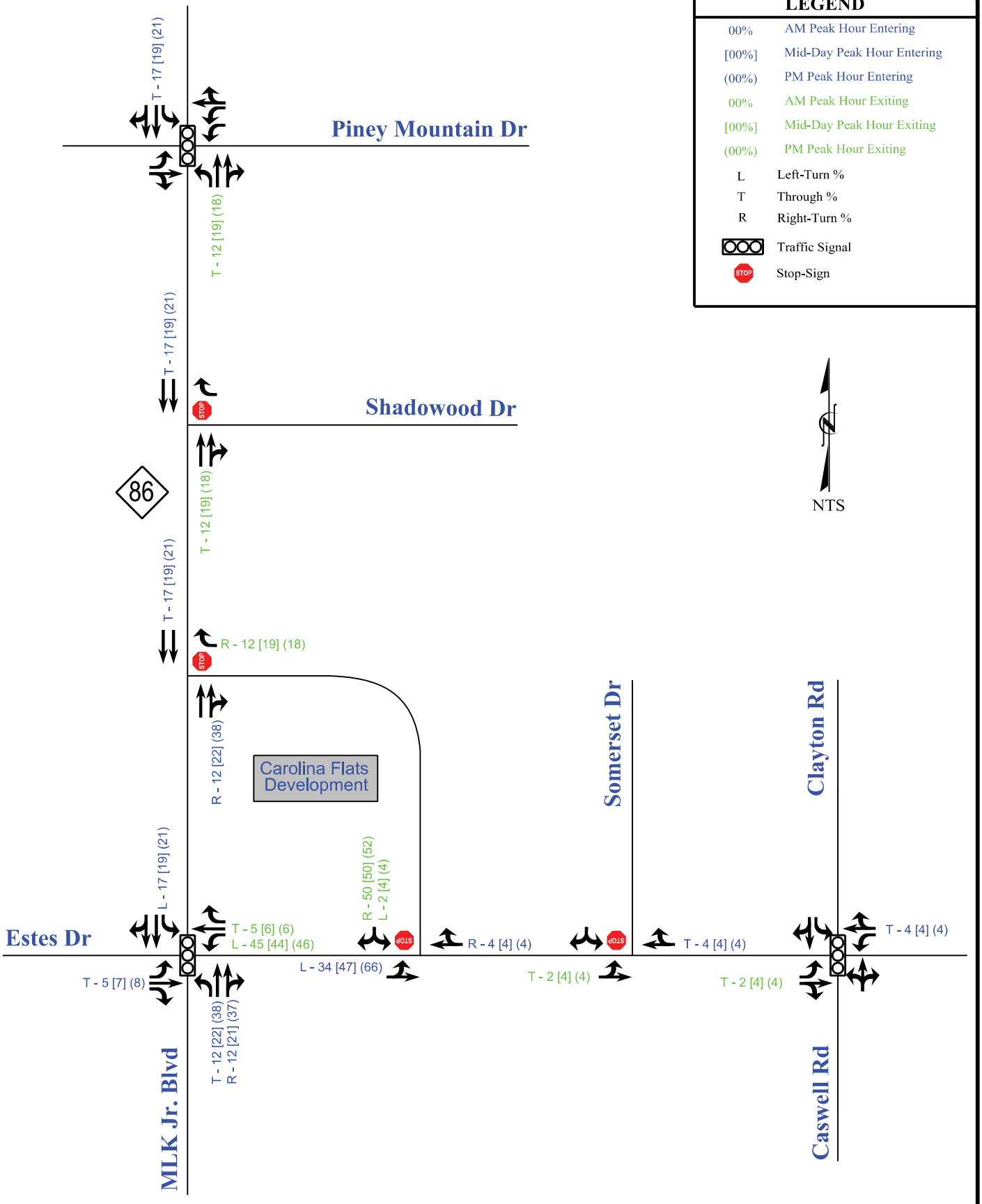
2015 Site Trip Assignment - Hotel

Figure 8



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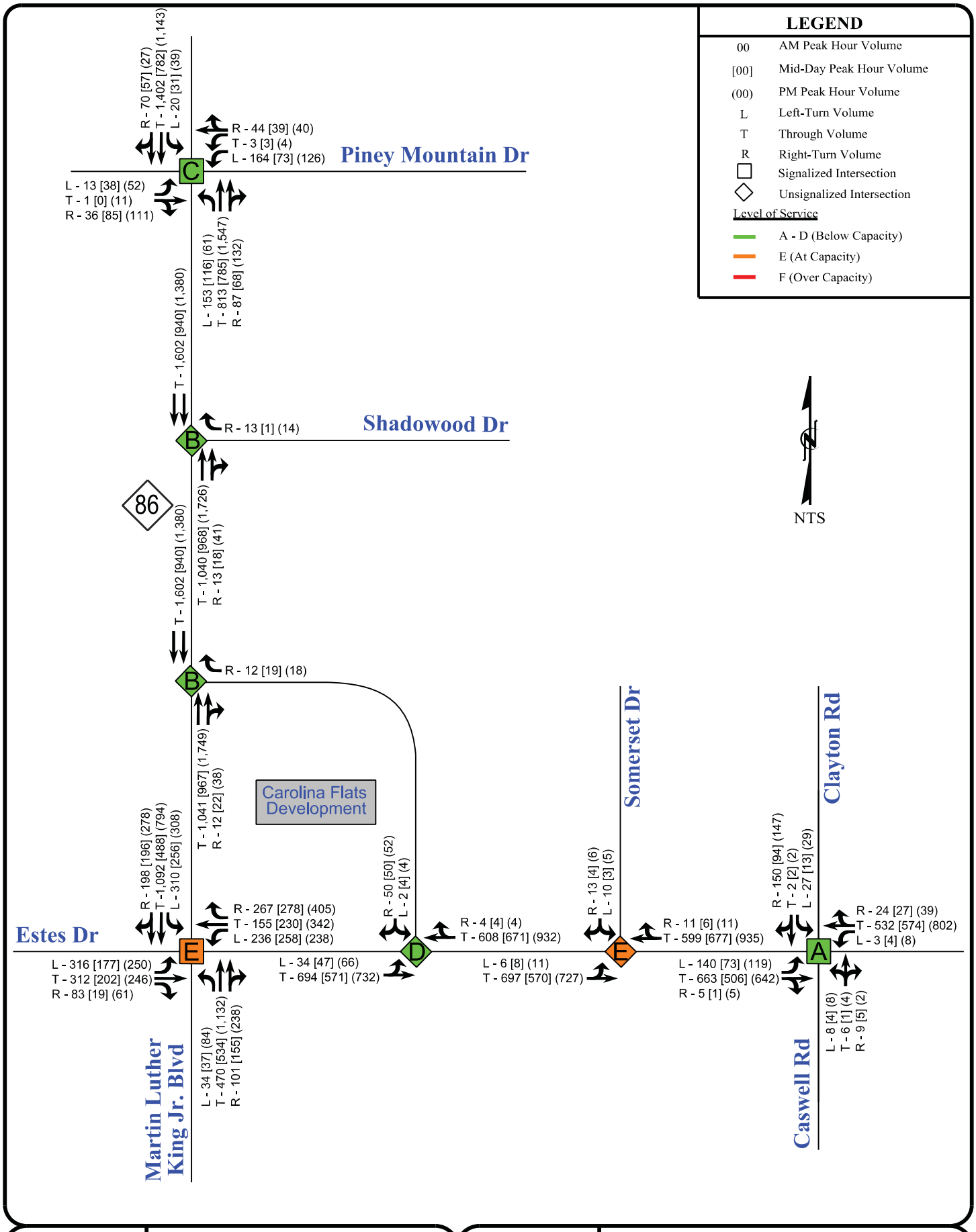
2015 Site Trip Assignment
Student Apartments + Hotel

Figure 9

5.0 FUTURE TRAFFIC FORECASTS WITH THE PROPOSED DEVELOPMENT

To obtain future traffic volumes with the proposed Carolina Flats at Estes development, new traffic demand generated by the development is added to the No Build Conditions. Figure 10 illustrates the total traffic volumes with the proposed development for the 2015 Build Conditions.



Carolina Flats at Estes
Traffic Impact Analysis

2015
BUILD CONDITIONS

Figure 10

6.0 PROJECT IMPACTS

Traffic flow through an intersection is affected by the volume of traffic, by the intersection geometry and by the traffic control device. These intersection-specific characteristics are used to define two measures of congestion: the average vehicle delay time and the Level of Service. Six Levels of Service -- from A to F -- are related to vehicle delay, with Level of Service A representing no congestion, Level of Service E representing long delays, and Level of Service F representing excessive delays with vehicles having to wait several signal cycles to clear an intersection. Table 6 summarizes the Level of Service criteria.

Table 6: Intersection Level of Service Criteria

Mean Delay Time per Vehicle (seconds)		LOS by Volume-to-Capacity Ratio		Description
With Signal	Without Signal	v/c <= 1.0	v/c > 1.0	
Less than 10	Less than 10	A	F	Little or no delay
10 to 20	10 to 15	B	F	Short traffic delays
20 to 35	15 to 25	C	F	Average traffic delays
35 to 55	25 to 35	D	F	Longer but acceptable delays
55 to 80	35 to 50	E	F	Very long traffic delays
More than 80	More than 50	F	F	Unacceptably long traffic delays

Source: HCM 2010: Highway Capacity Manual, Volume 3: Interrupted Flow, Exhibit 18-4 and 19-1, Transportation Research Board of the National Academies, Washington, D.C., 2010.

At intersections with signals, the Volume-to-Capacity ratio is one of the parameters used in calculating Level of Service, and while Level of Service is related to capacity, the relationship is not a simple one. Signal cycle lengths, the quality of vehicle progression through adjacent intersections with signals and green signal time can affect the Levels of Service without varying the Volume-to-Capacity ratio. It is possible therefore, to have an intersection operating with a Volume-to-Capacity ratio of 1.0 (at capacity), while maintaining relatively low average delay times because of efficient intersection operating conditions (i.e. orderly progression, short cycle length, etc.). Similarly, poor operating conditions could result in Level of Service F (i.e. long delays to traffic) with Volume-to-Capacity ratios considerably below 1.0. Therefore, the designation of Level of Service F does not automatically imply that the intersection, approach, or lane group is overloaded, nor does a Level of Service in the A to E range automatically imply that the intersection is operating efficiently.

At intersections without signals, Level of Service is evaluated for left-turning traffic volumes on the main road and for all traffic volumes on the minor road. It should be noted that the unsignalized intersection capacity analysis is extremely conservative. That is, if traffic demand on an approach is predicted to flow at Level of Service F (over capacity), then the intersection should be monitored to determine if a traffic signal or other intersection improvements are needed. In some cases, gaps in the traffic flow created by upstream and downstream signals will enable traffic demand at nearby unsignalized intersections to flow with little or no delay. This may not be reflected in the technical analysis.

The following factors have been used in the intersection capacity analyses:

- Ideal saturation flow rate is 1,900 passenger cars per hour per lane (PCPH).
- Peak hour factor of 0.90.

6.1 *Arterial Capacity Analysis*

The 2015 No Build and Build Conditions arterial capacity analysis indicates that the traffic demand along Martin Luther King, Jr. Boulevard and Estes Drive would continue to exceed the roadway capacity limits (Volume-to-Capacity ratios greater than 1.0) during at least one peak hour of the day, indicating a need for additional roadway improvements.

This indicates that the traffic generated by the proposed Carolina Flats at Estes development would add minimal impact on the surrounding area roads. Tables 7 and 8 show the results of the peak hour arterial capacity analysis for the 2015 No Build and Build Conditions respectively.

Table 7: Arterial Capacity Analysis
2015 No Build Conditions

Segment	Direction of Travel	No. of Lanes	Threshold Capacity*	Traffic Volume			Volume-to-Capacity Ratio		
				AM Peak	Mid-day Peak	PM Peak	AM Peak	Mid-day Peak	PM Peak
Martin Luther King, Jr. Boulevard	Northbound	2	1,600	1,043	958	1,642	0.65	0.59	**1.02**
	Southbound		1,600	1,597	911	1,362	**0.99**	0.57	0.85
Estes Drive	Eastbound	1	550	806	576	762	**1.47**	**1.05**	**1.39**
	Westbound		550	686	679	953	**1.25**	**1.23**	**1.73**

*Source: Guidelines for Traffic Impact Analysis, Town of Chapel Hill, October 2001.

Table 8: Arterial Capacity Analysis
2015 Build Conditions

Segment	Direction of Travel	No. of Lanes	Threshold Capacity*	Traffic Volume			Volume-to-Capacity Ratio		
				AM Peak	Mid-day Peak	PM Peak	AM Peak	Mid-day Peak	PM Peak
Martin Luther King, Jr. Boulevard	Northbound	2	1,600	1,075	1,008	1,697	0.67	0.63	**1.06**
	Southbound		1,600	1,614	931	1,383	**1.01**	0.58	0.86
Estes Drive	Eastbound	1	550	808	616	796	**1.47**	**1.12**	**1.40**
	Westbound		550	690	721	985	**1.25**	**1.31**	**1.79**

*Source: Guidelines for Traffic Impact Analysis, Town of Chapel Hill, October 2001.

6.2 *Access Analysis*

The proposed Carolina Flats at Estes would have two driveways as described below:

- Driveway #1 with full access/egress on Estes Drive east of Martin Luther King, Jr. Boulevard
- Driveway #2 with right in/right out access/egress on Martin Luther King, Jr. Boulevard north of Estes Drive

No additional access would be required for the proposed development.

6.3 *Signal Warrant Analysis*

Signal warrant analyses were performed for the following unsignalized intersections for the 2015 No Build and Build Conditions:

- Martin Luther King, Jr. Boulevard at Shadowood Drive
- Martin Luther King, Jr. Boulevard at Driveway #2 (Build Only)
- Estes Drive at Driveway #1 (Build Only)
- Estes Drive at Somerset Road

Of the nine signal warrants described in the Manual on Uniform Traffic Control Devices (MUTCD) 2009 edition, the required data was available to analyze the following three warrants: Warrant 2 - Four-Hour Vehicular Volume; Warrant 3 - Peak Hour Vehicular Volume; and Warrant 7 - Crash Experience. The following is a brief description of each of these warrants.

Warrant 2 – Four-Hour Vehicular Volume: According to the MUTCD, the need for a traffic signal under the Four-Hour Vehicular Volume Warrant shall be considered if, during any four hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and corresponding vehicles per hour on the higher-volume minor-street approach (one-direction only) fall above the applicable curve representing the warrant threshold.

Warrant 3 - Peak Hour: According to the MUTCD, the need for a traffic signal under the Peak Hour Warrant shall be considered if, for any one peak hour of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one-direction only) fall above the applicable curve representing the warrant threshold.

Warrant 7 – Crash Experience: According to the MUTCD, the need for a traffic signal under the Crash Experience Warrant shall be considered if five or more reported crashes, of types susceptible to correction by a traffic signal, have occurred within a 12-month period. Each crash must have involved personal injury or property damage apparently exceeding the applicable requirements for a reported crash.

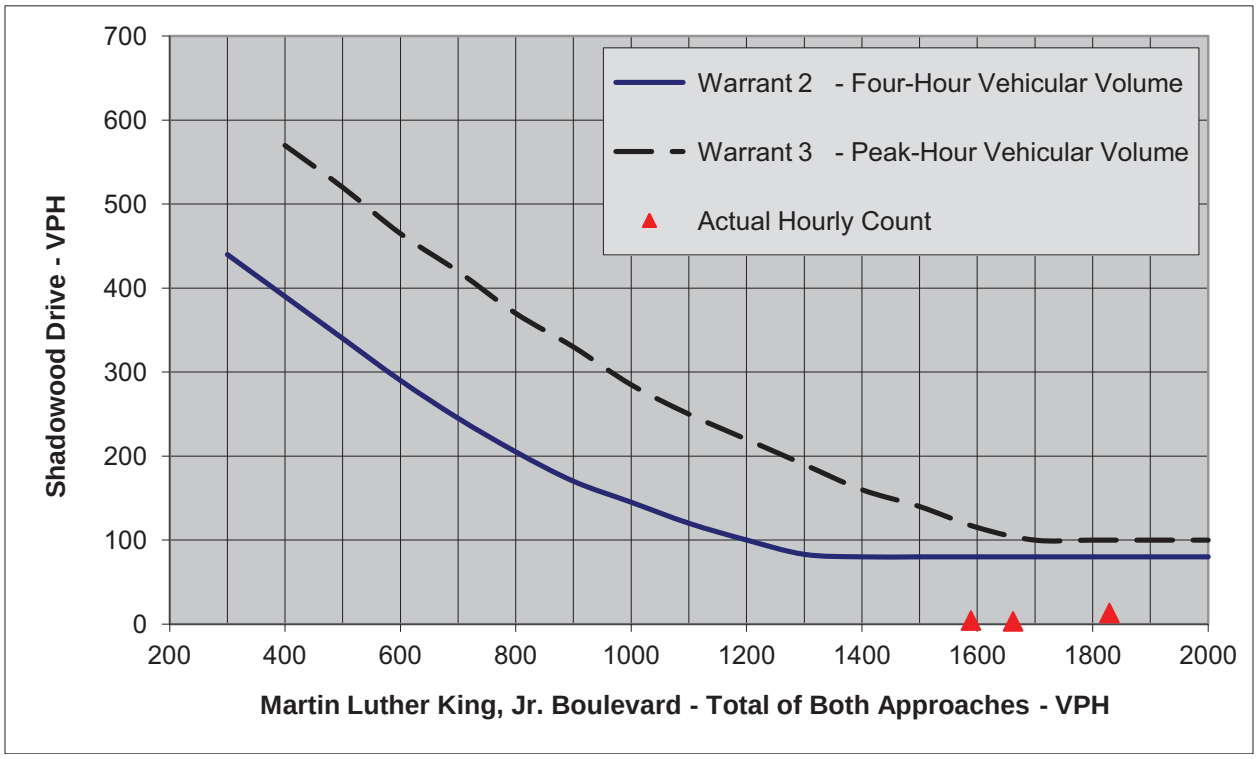
Martin Luther King, Jr. Boulevard at Shadowood Drive - 2015 No Build Conditions:

Warrant 2 – Four-Hour Vehicular Volume: As shown in Figure 11, none of the points corresponding to the six, one hour counts available for this intersection fall above the four-hour vehicular volume curve. Based on this information, the conditions for Warrant 2 **are not met** for this intersection.

Warrant 3 – Peak Hour: As shown in Figure 11, no peak hour counts for this intersection fall above the peak-hour vehicular volume curve. Based on this information, the conditions for Warrant 3 **are not met** for this intersection.

Warrant 7 – Crash Experience: The NCDOT crash records show that there was an average of one crash per year at this intersection for the period from April 1, 2009 to March 31, 2012. Based on this information, the conditions for Warrant 7 **are not met** for this intersection.

Figure 11. 2015 No Build Conditions Signal Warrant Analysis – Martin Luther King, Jr. Boulevard at Shadowood Drive



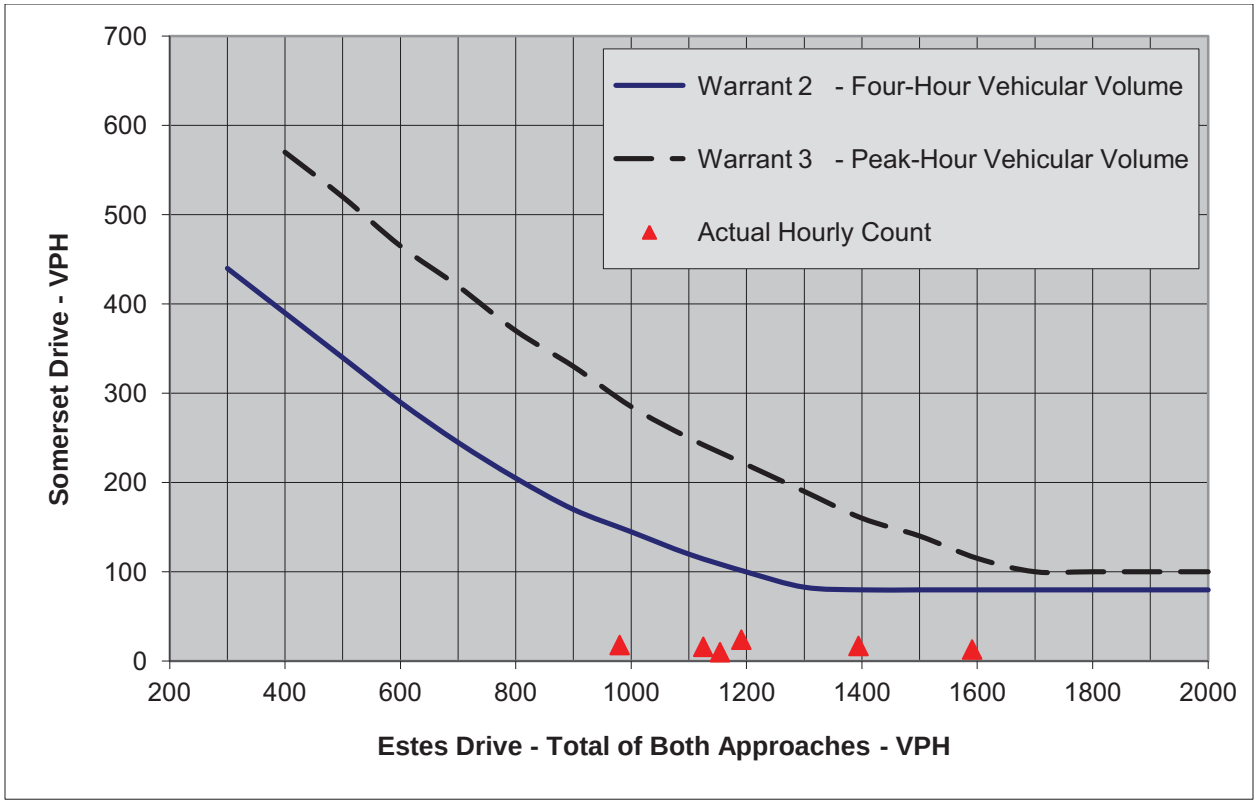
Estes Drive at Somerset Drive - 2015 No Build Conditions:

Warrant 2 – Four-Hour Vehicular Volume: As shown in Figure 12, none of the points corresponding to the six, one hour counts available for this intersection fall above the four-hour vehicular volume curve. Based on this information, the conditions for Warrant 2 **are not met** for this intersection.

Warrant 3 – Peak Hour: As shown in Figure 12, no peak hour counts for this intersection fall above the peak-hour vehicular volume curve. Based on this information, the conditions for Warrant 3 **are not met** for this intersection.

Warrant 7 – Crash Experience: The NCDOT crash records show that there were less than two crashes per year at this intersection for the period from April 1, 2009 to March 31, 2012. Based on this information, the conditions for Warrant 7 **are not met** for this intersection.

Figure 12. 2015 No Build Conditions Signal Warrant Analysis – Estes Drive at Somerset Drive

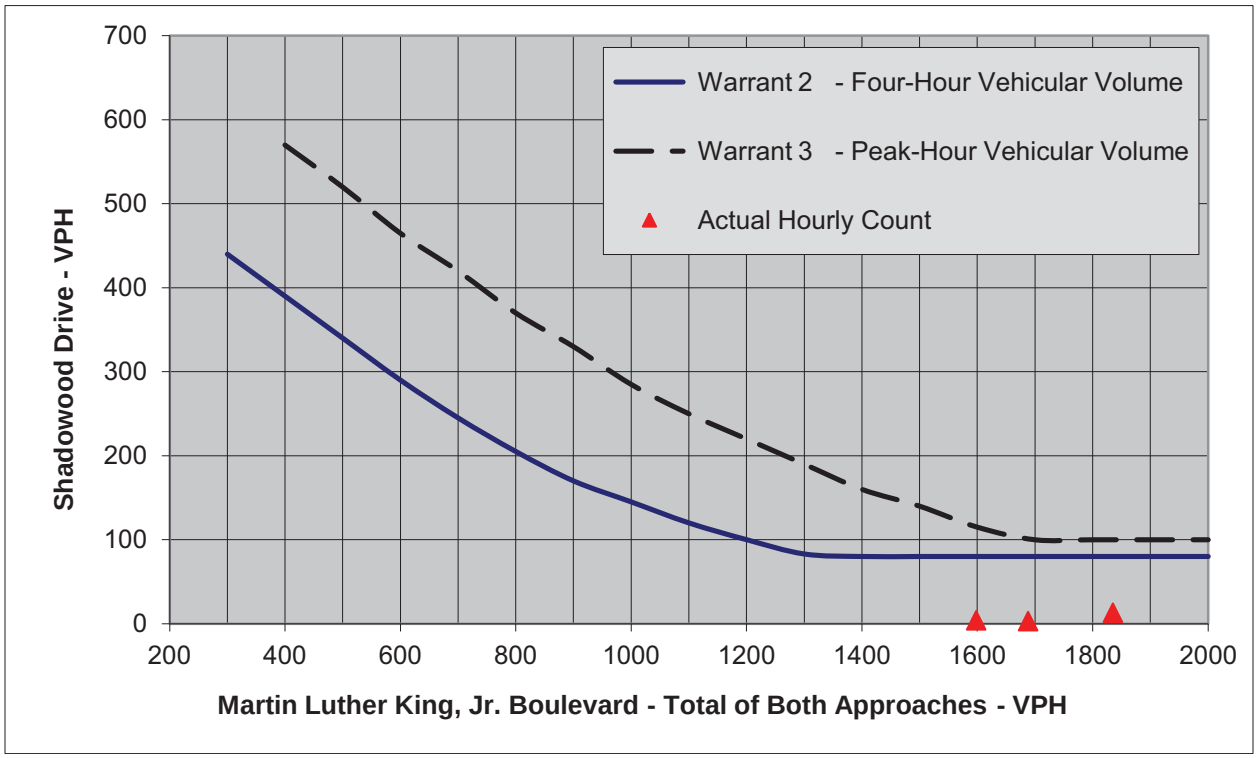


Martin Luther King, Jr. Boulevard at Shadowood Road - 2015 Build Conditions:

Warrant 2 – Four-Hour Vehicular Volume: As shown in Figure 13, none of the points corresponding to the six, one hour counts available for this intersection fall above the four-hour vehicular volume curve. Based on this information, the conditions for Warrant 2 **are not met** for this intersection.

Warrant 3 – Peak Hour: As shown in Figure 13, no peak hour counts for this intersection fall above the peak-hour vehicular volume curve. Based on this information, the conditions for Warrant 3 **are not met** for this intersection.

Figure 13. 2015 Build Conditions Signal Warrant Analysis – Martin Luther King, Jr. Boulevard at Shadowood Drive

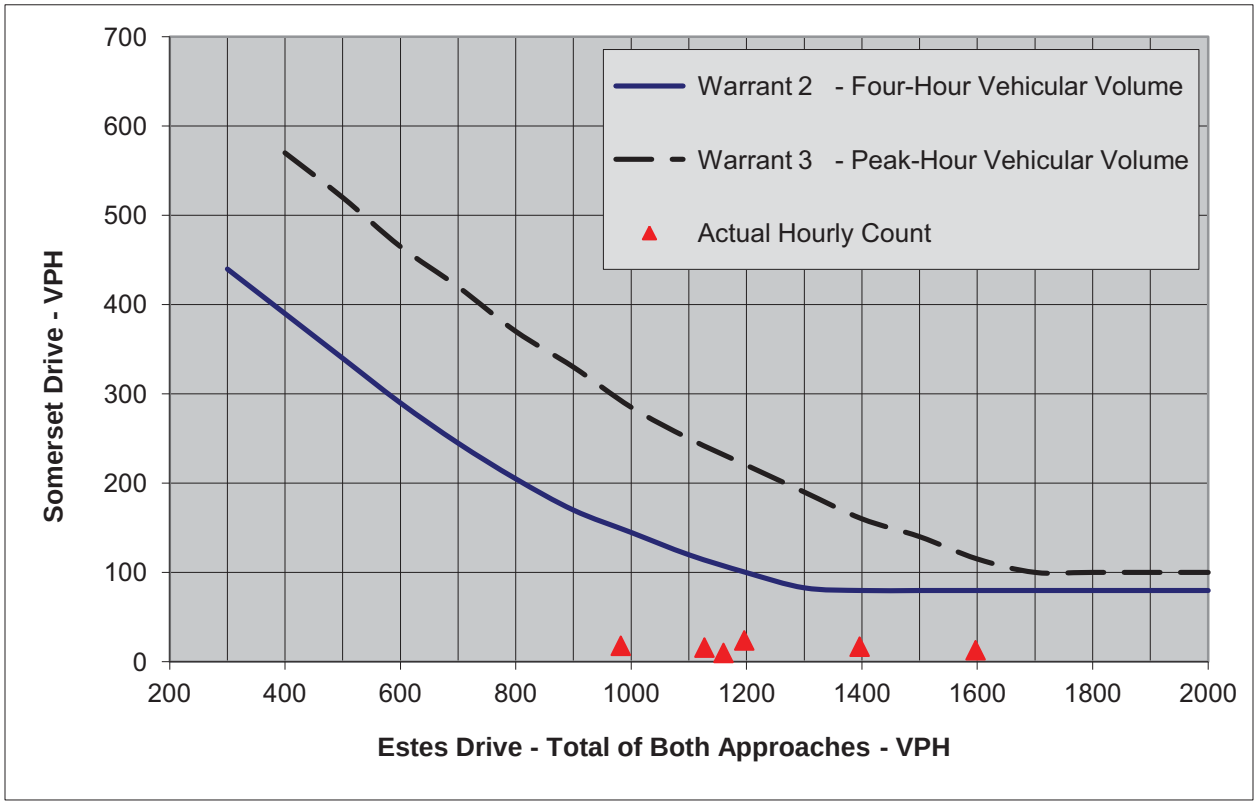


Estes Drive at Somerset Drive - 2015 Build Conditions:

Warrant 2 – Four-Hour Vehicular Volume: As shown in Figure 14, none of the points corresponding to the six, one hour counts available for this intersection fall above the four-hour vehicular volume curve. Based on this information, the conditions for Warrant 2 **are not met** for this intersection.

Warrant 3 – Peak Hour: As shown in Figure 14, no peak hour counts for this intersection fall above the peak-hour vehicular volume curve. Based on this information, the conditions for Warrant 3 **are not met** for this intersection.

Figure 14. 2015 Build Conditions Signal Warrant Analysis – Estes Drive at Somerset Drive

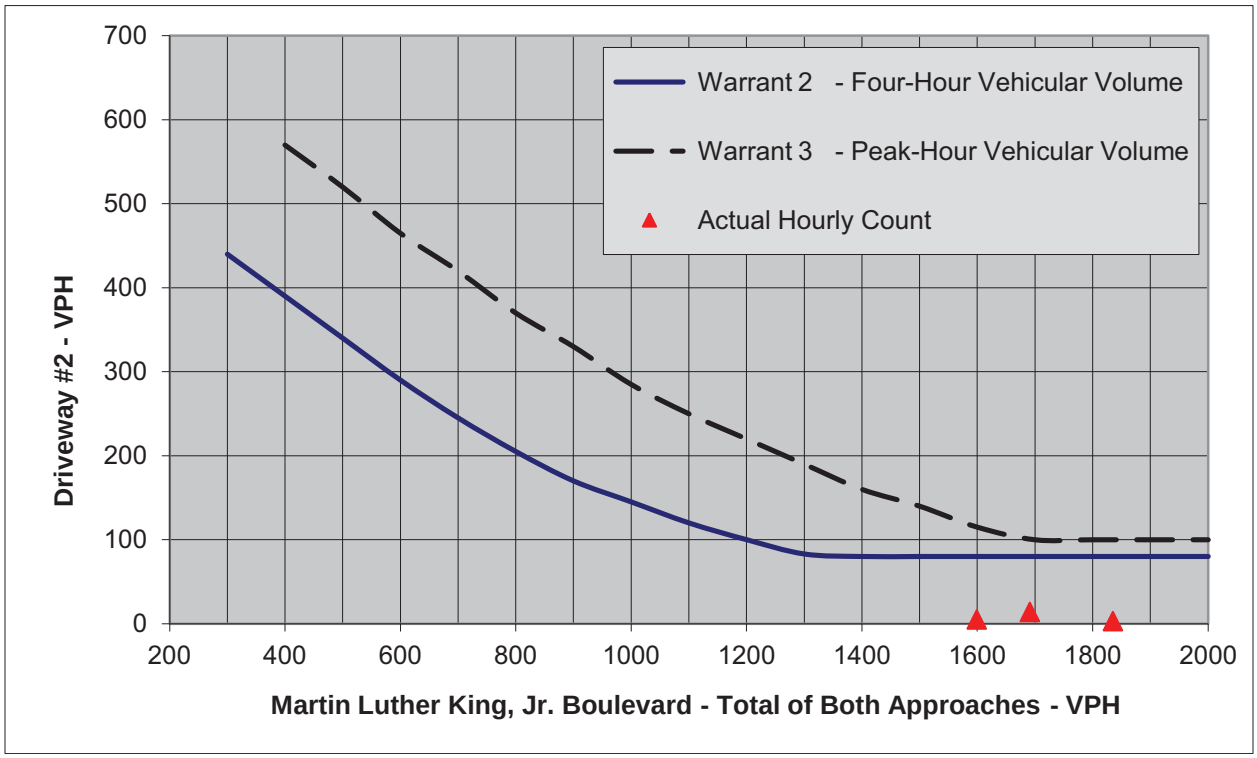


Martin Luther King, Jr. Boulevard at Driveway # 2 - 2015 Build Conditions:

Warrant 2 – Four-Hour Vehicular Volume: As shown in Figure 15, none of the points corresponding to the six, one hour counts available for this intersection fall above the four-hour vehicular volume curve. Based on this information, the conditions for Warrant 2 **are not met** for this intersection.

Warrant 3 – Peak Hour: As shown in Figure 15, no peak hour counts for this intersection fall above the peak-hour vehicular volume curve. Based on this information, the conditions for Warrant 3 **are not met** for this intersection.

Figure 15. 2015 Build Conditions Signal Warrant Analysis – Martin Luther King, Jr. Boulevard at Driveway #2

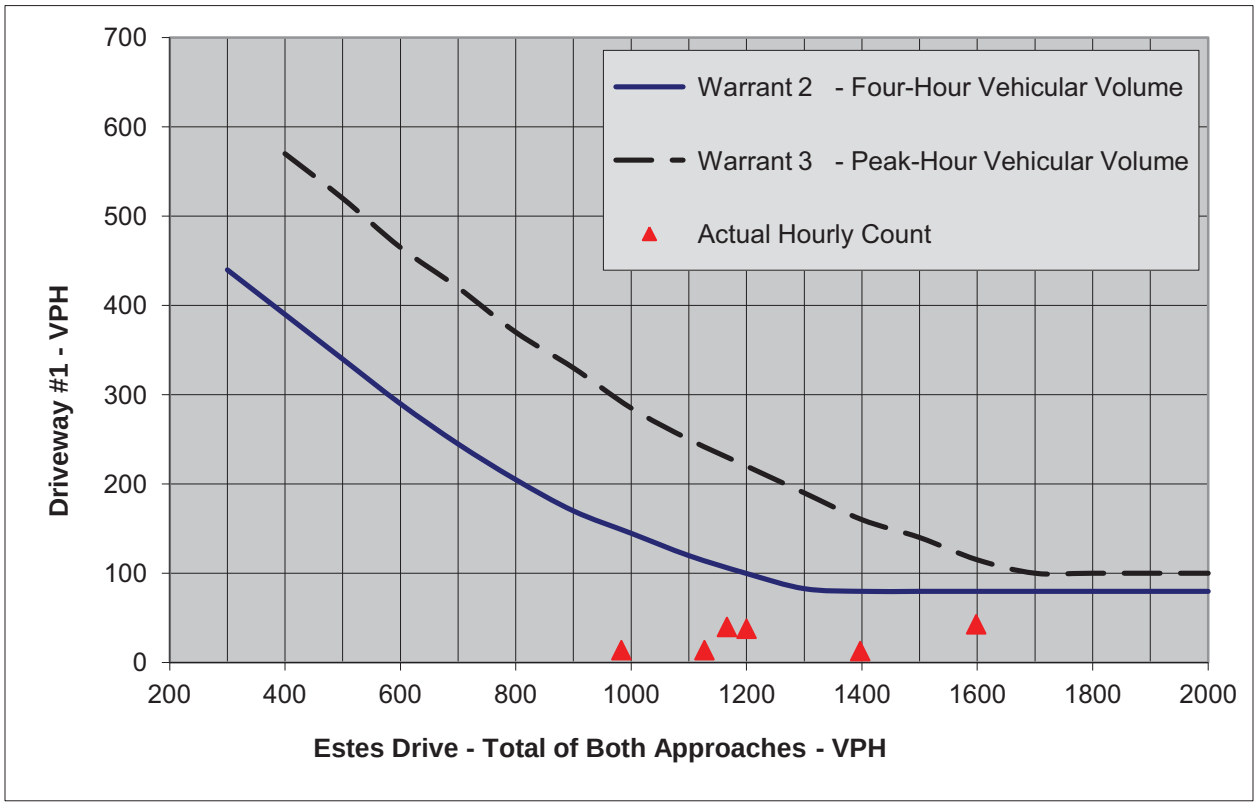


Estes Drive at Driveway # 1 - 2015 Build Conditions:

Warrant 2 – Four-Hour Vehicular Volume: As shown in Figure 16, none of the points corresponding to the six, one hour counts available for this intersection fall above the four-hour vehicular volume curve. Based on this information, the conditions for Warrant 2 **are not met** for this intersection.

Warrant 3 – Peak Hour: As shown in Figure 16, no peak hour counts for this intersection fall above the peak-hour vehicular volume curve. Based on this information, the conditions for Warrant 3 **are not met** for this intersection.

Figure 16. 2015 Build Conditions Signal Warrant Analysis – Estes Drive at Driveway #1



In summary, traffic demand at none of the four unsignalized study intersections would not warrant traffic signals under the 2015 No Build or the 2015 Build Conditions. As the traffic demand in the area increases and/or new development projects occur in the area, these intersections should be monitored to determine a need for traffic signals in the future.

6.4 *Signal Phasing Analysis*

The signalized intersection of Martin Luther King, Jr. Boulevard/Estes Drive has multi-phase signal controllers that can accommodate variations in traffic flow.

6.5 *Crash Analysis*

Crash data were obtained from the NCDOT for the 36-month period (3 years) from April 1, 2009 to March 31, 2012 for the locations most likely to be impacted by the proposed development. The following roadway segments were included in the crash analysis:

- Martin Luther King, Jr. Boulevard from Ashley Forest Road to Airport Drive
- Estes Drive from Halifax Road to Airport Drive

The following intersections were included in the crash analysis:

- Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Drive
- Martin Luther King, Jr. Boulevard and Shadowood Drive
- Martin Luther King, Jr. Boulevard and Estes Drive
- Estes Drive and Somerset Drive
- Estes Drive and Caswell Road/Clayton Road

On Martin Luther King, Jr. Boulevard between Ashley Forest Road and Airport Drive, 84 crashes were reported during the three-year study period resulting in a crash rate of 342 crashes per 100 million vehicle miles travelled (MVMT). Of these, 53 were rear-end crashes, 15 were turning, and five were angle roadway crashes. The possible causes of these crashes might be attributed to congestion along the corridor and signalized intersections. Also, the angle/left/right-turning crashes are likely the result of impatient drivers who misjudge the speed of oncoming traffic.

During the three-year period, 63 crashes were reported on Estes Drive between Airport Drive and Halifax Road resulting in a crash rate of 340 crashes per 100 MVMT. Of these, 34 were rear-end crashes and 16 were angle/left-turning crashes. As with the Martin Luther King, Jr. Boulevard segment, possible causes of these crashes might be attributed to congestion along the corridor and signalized intersections. The angle/left/right-turning crashes are likely the result of impatient drivers who misjudge the speed of oncoming traffic.

During the three-year period, 15 crashes were reported at the intersection of Martin Luther King, Jr. Boulevard at Piney Mountain Drive. Of these, 10 were rear-end crashes, with the rest being dispersed between angle, left-turn and sideswipe type crashes. The possible causes of the high number of rear-end crashes might be attributed to congestion along the corridor and signalized intersection.

At the intersection of Martin Luther King, Jr. Boulevard at Shadowood Drive, 3 crashes were reported. Of these, two were rear-end crashes and one was a left-turning crash.

During the three-year period, 34 crashes were reported at the intersection of Martin Luther King, Jr. Boulevard at Estes Drive. Of these, 17 were rear-end crashes, with the rest being dispersed between angle, left-turn (same and different roadways), right-turn and sideswipe type crashes. The possible

causes of the high number of rear-end crashes might be attributed to congestion along the corridor and signalized intersection.

During the three-year period, four crashes were reported at the intersection of Estes Drive at Somerset Drive. All of these were rear-end crashes.

During the three-year period, eight crashes were reported at the intersection of Estes Drive and Caswell Road/Clayton Road. Of these, five were rear-end crashes, two were angle, and one was ran off road crash.

The state-wide average crash rate for a roadway similar to Martin Luther King, Jr. Boulevard is 258 crashes per 100 MVMT and 228 crashes per 100 MVMT along Estes Drive. This indicates that Martin Luther King, Jr. Boulevard has about 30% more crashes than the state-wide average. Similarly, Estes Drive has about 50% more crashes than the state-wide average. The high crash rate could be attributed to congestion present along Martin Luther King, Jr. Boulevard and Estes Drive. It should also be noted that crash rate calculations for smaller sections, generally, result in skewed results as is in this case.

The new traffic demand generated by the proposed project would have little impact on safety conditions in the study area. Table 9 presents the number of crashes by type in the study area.

Table 9: Number of Crashes by Type
April 1, 2009 – March 31, 2012

Location	TOTAL	Crash Rate	Rear-end	Left-turn	Angle	Other*
Roadway Segments						
NC 86 (Martin Luther King, Jr. Blvd) from Ashley Forest Road to Airport Drive	**84**	342	53	15	5	11
Estes Drive from Halifax Road to Airport Drive	**63**	340	34	11	5	13
Intersections						
NC 86 (Martin Luther King, Jr. Blvd) and Piney Mountain Road	**15**	47	10	3	1	1
NC 86 (Martin Luther King, Jr. Blvd) and Shadowood Drive	**3**	9	2	1	0	0
NC 86 (Martin Luther King, Jr. Blvd) and SR 1780 (Estes Drive)	**34**	78	17	7	4	6
Estes Drive and Somerset Drive	**4**	23	4	0	0	0
Estes Drive and Clayton Road/Caswell Road	**8**	22	5	0	2	1

*Other crashes include crashes caused by backing up, head-on, fixed object, other collision, parked motor vehicle, pedestrian, ran off road, or unknown. Source: Collision Data, North Carolina Department of Transportation from April 1, 2009 – March 31, 2012

6.6 *Progression Analysis*

Since the two signalized study intersections (Piney Mountain and Estes Drive along Martin Luther King, Jr. Drive) are part of the signal system and the proposed development does not add significant number of vehicles to these intersections during the peak hour, no progression analysis was conducted as part of this study.

6.7 *Peak Hour Intersection Capacity Analysis*

A comparison of the 2015 traffic flow conditions without the proposed project (the No Build Conditions) to the 2015 traffic flow conditions with the proposed project in place (the Build Conditions) determines the impacts of the proposed project on the surrounding roadway network.

2015 No Build Conditions:

Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Road: The signalized intersection capacity analysis at Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Road indicates that this intersection on the whole would function at Level of Service C or better, a good rate of flow, during the peak hours. The northbound and southbound approaches would function at Level of Service D or better, an acceptable rate of flow. The eastbound approach of Municipal Road and westbound approach of Piney Mountain Road would continue to exceed roadway capacity limits (LOS F) during the peak hours.

Martin Luther King, Jr. Boulevard and Shadowood Drive: At the intersection of Martin Luther King, Jr. Boulevard and Shadowood Drive, the unsignalized intersection capacity analysis indicates that the westbound stop controlled right-turn movement would operate at a Level of Service B or better, a very good rate of flow during the peak hours.

Martin Luther King, Jr. Boulevard and Estes Drive: The signalized intersection capacity analysis at Martin Luther King, Jr. Boulevard and Estes Drive indicates that this intersection on the whole would approach its roadway capacity limits (Level of Service E) during the peak hours. Martin Luther King, Jr. Boulevard northbound and southbound approaches would function at Level of Service D or better, an acceptable rate of flow, during the peak hours with one exception. The exception is the southbound left-turn movement which would flow at Level of Service F(exceeding its roadway capacity limits) during PM peak Hour. The eastbound and westbound approaches of Estes Drive would also approach or exceed its roadway capacity limits (Level of Service E or F) during the peak hours.

Estes Drive and Somerset Road: At the intersection of Estes Drive and Somerset Road, the unsignalized intersection capacity analysis indicates the southbound stop controlled movements would approach roadway capacity limits (LOS E) during at least one peak hour.

Estes Drive and Caswell Road/Clayton Road: The signalized intersection capacity analysis at Estes Drive and Caswell Road/Clayton Road indicates that all approaches at this intersection would function at a Level of Service C or better, a good rate of flow during the peak hours.

The intersection capacity analyses for the 2015 No Build Conditions are summarized in Table 10.

Table 10: Intersection Capacity Analysis - 2015 No Build Conditions

Intersection	Traffic Movement		Level of Service			Volume-to-Capacity Ratio		
			AM Peak	Mid-day Peak	PM Peak	AM Peak	Mid-day Peak	PM Peak
Martin Luther King, Jr. Boulevard at Piney Mountain Road	Overall Intersection		B	C	C	**N/A**	**N/A**	**N/A**
	Eastbound	L	**F**	**E**	**E**	.18	.27	.29
		TR	**F**	**F**	**F**	.59	.68	.76
	Westbound	L	**F**	**F**	**F**	.69	.42	.64
		TR	**F**	**F**	**F**	.43	.52	.48
	Northbound	L	D	B	B	.88	.32	.29
		TR	A	B	C	.36	.37	.77
	Southbound	L	A	A	D	.06	.09	.55
		TR	A	A	B	.56	.34	.50
Martin Luther King, Jr. Blvd at Shadowood Dr	Westbound	R	B	B	B	.02	.01	.02
Martin Luther King, Jr. Boulevard at Estes Drive	Overall Intersection		**E**	D	**E**	**N/A**	**N/A**	**N/A**
	Eastbound	L	**F**	**F**	**F**	.95	.92	.97
		T	**F**	**F**	**E**	.90	.80	.61
		R	D	D	D	.24	.06	.15
	Westbound	L	**F**	**F**	D	1.01	.97	.65
		T	**F**	**F**	**F**	.61	.85	1.01
		R	**E**	**E**	**F**	.74	.82	.93
	Northbound	L	B	B	C	.22	.09	.43
		TR	C	C	D	.34	.36	.90
	Southbound	L	C	C	**F**	.61	.52	1.33
		TR	D	C	D	.74	.36	.68
Estes Drive at Somerset Drive	Eastbound	TL	A	A	A	.01	.01	.02
	Southbound	LR	C	C	**E**	.10	.03	.09
Estes Drive at Caswell Road/Clayton Road	Overall Intersection		A	A	A	**N/A**	**N/A**	**N/A**
	Eastbound	L	A	A	A	.29	.14	.42
		TR	A	A	A	.54	.38	.52
	Westbound	L	A	A	A	.01	.01	.02
		TR	A	A	A	.45	.46	.69
	Northbound	LTR	C	C	C	.14	.07	.09
	Southbound	L	C	C	C	.21	.10	.21
		TR	B	B	B	.54	.42	.54

Table 10: N/A - Not Applicable

2015 Build Conditions:

Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Road: The signalized intersection capacity analysis at Martin Luther King, Jr. Boulevard and Piney Mountain Road/Municipal Road indicates that this intersection on the whole would continue to operate at a Level of Service C or better, a good rate of flow, during the peak hours. The northbound and southbound approaches would function at Level of Service D or better, an acceptable rate of flow with one exception. The exception is northbound left-turn movement, which would flow at Level of Service E (approaching its roadway capacity limits) during AM Peak Hour. This change in Level of Service would result in increase of an average delay of approximately seven seconds per vehicle to 153 vehicles in the AM Peak Hour. The eastbound approach of Municipal Road and westbound approach of Piney Mountain Road would continue to exceed its roadway capacity limits (LOS F) during the peak hours.

Martin Luther King, Jr. Boulevard and Shadowood Drive: At the intersection of Martin Luther King, Jr. Boulevard and Shadowood Drive, the unsignalized intersection capacity analysis indicates that the westbound stop controlled right-turn movement would operate at Level of Service B or better, a very good rate of flow during the peak hours.

Martin Luther King, Jr. Boulevard and Driveway #2: At the intersection of Martin Luther King, Jr. Boulevard and Shadowood Drive, the unsignalized intersection capacity analysis indicates that the westbound stop controlled right-turn movement would operate at Level of Service B or better, a very good rate of flow during the peak hours.

Martin Luther King, Jr. Boulevard and Estes Drive: The signalized intersection capacity analysis at Martin Luther King, Jr. Boulevard and Estes Drive indicates that this intersection on the whole would approach roadway capacity limits (Level of Service E) during the peak hours. Martin Luther King, Jr. Boulevard northbound and southbound approaches would function at a Level of Service D or better, an acceptable rate of flow, during the peak hours with one exception. The exception is southbound left-turn movement, which would flow at Level of Service F (exceeding its roadway capacity limits) during PM Peak Hour. The eastbound and westbound approaches of Estes Drive would approach or exceed its roadway capacity limits (LOS E or F) during the peak hours.

Estes Drive and Driveway #1: At the intersection of Estes Drive and Driveway #1, the unsignalized intersection capacity analysis indicates southbound stop controlled movements would operate at Level of Service D or better, an acceptable rate of flow during the peak hours.

Estes Drive and Somerset Road: At the intersection of Estes Drive and Somerset Road, the unsignalized intersection capacity analysis indicates that the southbound stop controlled movements would approach its roadway capacity limits (Level of Service E) during at least one peak hour.

Estes Drive and Caswell Road/Clayton Road: The signalized intersection capacity analysis at Estes Drive and Caswell Road/Clayton Road indicates that all approaches of this intersection would operate at Level of Service C or better, a good rate of flow during the peak hours.

In summary, the 2015 Build Conditions traffic flow would be similar to the 2015 No Build Conditions indicating that the traffic generated by the proposed Carolina Flats at Estes development would have

minimal impacts to the surrounding study area roads. The intersection capacity analyses for the 2015 Build Conditions are summarized in Table 11.

Table 11: Intersection Capacity Analysis - 2015 Build Conditions

Intersection	Traffic Movement		Level of Service			Volume-to-Capacity Ratio		
			AM Peak	Mid-day Peak	PM Peak	AM Peak	Mid-day Peak	PM Peak
Martin Luther King Jr Blvd at Piney Mountain Rd	Overall Intersection		B	C	C	**N/A**	**N/A**	**N/A**
	Eastbound	L	**F**	**E**	**E**	.18	.27	.29
		TR	**F**	**F**	**F**	.59	.68	.76
	Westbound	L	**F**	**F**	**F**	.69	.42	.64
		TR	**F**	**F**	**F**	.43	.52	.48
	Northbound	L	**E**	B	B	.91	.33	.30
		TR	A	B	C	.37	.40	.78
	Southbound	L	A	A	D	.06	.09	.59
		TR	A	A	B	.57	.35	.51
Martin Luther King Jr Boulevard at Shadowood Drive	Westbound	R	B	B	B	.02	.01	.02
Martin Luther King Jr Boulevard at Driveway #2	Westbound	R	B	B	B	.02	.03	.03
Martin Luther King Jr Blvd at Estes Dr	Overall Intersection		**E**	**E**	**E**	**N/A**	**N/A**	**N/A**
	Eastbound	L	**F**	**F**	**F**	.95	.91	.97
		T	**F**	**F**	**E**	.90	.81	.68
		R	D	D	D	.23	.06	.16
	Westbound	L	**F**	**F**	**E**	1.24	1.16	.80
		T	**F**	**F**	**F**	.61	.84	1.02
		R	**E**	**E**	**F**	.71	.78	.93
	Northbound	L	C	B	C	.22	.09	.43
		TR	C	C	**E**	.37	.39	.95
	Southbound	L	C	C	**F**	.66	.59	1.43
		TR	D	C	D	.75	.36	.68
Estes Drive at Driveway #1	Eastbound	TL	A	A	A	.04	.06	.11

	Southbound	LR	B	C	D	.13	.18	.33
Estes Drive at Somerset Road	Eastbound	TL	A	A	A	.01	.01	.02
	Southbound	LR	C	C	**E**	.10	.04	.10
Estes Drive at Caswell Road/Clayton Road	Overall Intersection		A	A	A	**N/A**	**N/A**	**N/A**
	Eastbound	L	A	A	A	.29	.15	.42
		TR	A	A	A	.54	.38	.53
	Westbound	L	A	A	A	.01	.01	.02
		TR	A	A	A	.46	.46	.69
	Northbound	LTR	C	C	C	.14	.07	.09
	Southbound	L	C	C	C	.21	.10	.21
		TR	B	B	B	.54	.42	.54

Table 11: N/A - Not Applicable

6.8 *Turn Lane Storage Requirements*

The peak hour intersection capacity analysis indicates that the lane configuration proposed by the developer for Driveways 1 and 2 would be sufficient to accommodate additional traffic demand.

6.9 *Sight Distance Analysis*

Based on the American Association of State Highway and Transportation Officials (AASHTO) – Geometric Design of Highways and Streets, 2004 Edition, the required sight distance at stop-controlled intersections for roadways with 35 mph speed limit (40 mph design speed) is 385 feet for right-turns from a stopped position and 445 feet for left-turns from a stopped position. This sight distance is applicable for the following intersections:

- Martin Luther King, Jr. Boulevard at Driveway #2
- Estes Drive at Driveway #1

According to the proposed site plan and field observations, there would be no obstructions blocking the driver's view of potentially conflicting vehicles at the two intersections listed above.

6.10 *Appropriateness of Acceleration or Deceleration Lanes*

The speed limits on Martin Luther King, Jr. Boulevard and Estes Drive is 35 mph, which does not require acceleration/deceleration lanes at the proposed driveways.

6.11 *Pedestrian and Bicycle Analysis*

As discussed in Section 1.0, Martin Luther King, Jr. Boulevard and Estes Drive have sidewalks on one side of each roadway in the vicinity of the proposed site. Estes Drive has a sidewalk on the south side of the

roadway (opposite the project site) and Martin Luther King, Jr. Boulevard has a sidewalk on the east side (adjacent to the project site).

Piney Mountain Road has sidewalks on both sides of the roadway to the east of Martin Luther King, Jr. Boulevard, however, there are no sidewalks to the west. The west section is a part of the Carolina North development which will be completed at a later date.

At the intersection of Estes Drive and Caswell Road/Clayton Road, sidewalks are located along Estes Drive to the west. Sidewalks are also located along Clayton Road to the north. On Estes Drive to the east, sidewalks are located on the north side only. On Caswell Road there are no sidewalks.

There are no striped bicycle lanes along any of the roadways in the study area. However, Martin Luther King, Jr. Boulevard and Estes Drive do support bicyclists and are shown to have "Shared the Road" signs as depicted in section 1.4 (page 6).

6.12 *Public Transportation Analysis*

Chapel Hill Transit operates the following bus routes through the study area:

- Routes A, G, NS, and T along Martin Luther King, Jr. Boulevard and Estes Drive.

The Triangle Transit Authority does have routes serving this area but does not operate any stops in the vicinity of the project site.

There are no plans to add any new transit routes or bus stops in the study area. The proposed development would have relatively minimal impact on the transit system in the area.

6.13 *Special Analysis/Issues*

No special issues were identified for analysis.

7.0 MITIGATION MEASURES/ RECOMMENDATIONS

Roadway improvements are divided into four categories: improvements already planned by the Town or the NCDOT, those required regardless of development at the proposed site, improvements proposed as part of the site development, and any additional improvements required as a result of site development.

7.1 *Planned Improvements*

There are no other planned improvements that directly impact this proposed development at the time of analysis.

7.2 *Background Committed Improvements*

No other roadway improvements that directly impact this analysis are committed by other development projects in the area at the time of analysis.

7.3 *Applicant Committed Improvements*

The developer has committed to provide two driveways for the proposed development. One right-in right-out driveway on Martin Luther King, Jr. Boulevard and a full access intersection along Estes Drive.

7.4 *Recommended Improvements*

The proposed Carolina Flats at Estes development would generate 1,143 trips per day of which 48 occur in the AM peak and 110 occur during the PM peak. The arterial and intersection capacity analysis indicates that this development would have minimal effects on the study area roads.

8.0 TECHNICAL APPENDIX

Appendix A: Traffic Count Data

Appendix B: Traffic Reduction Memo

Appendix C: Intersection Capacity Analysis Worksheets (Synchro)

Appendix D: Background Volumes

Appendix E: Crash Data

Appendix A: Traffic Count Data

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

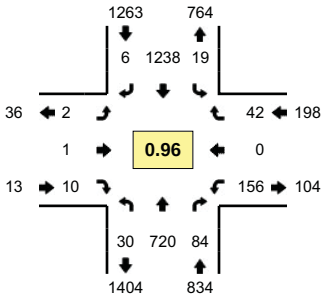
LOCATION: MLK Jr Blvd -- Piney Mountain Rd

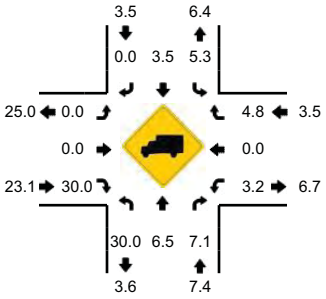
QC JOB #: 10744801

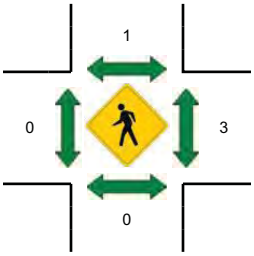
CITY/STATE: Chapel Hill, NC

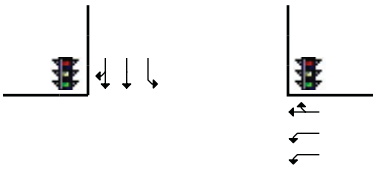
DATE: Tue, Apr 24 2012

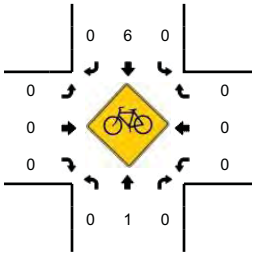
Peak-Hour: 7:45 AM -- 8:45 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

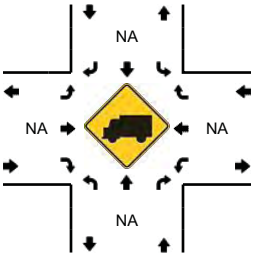


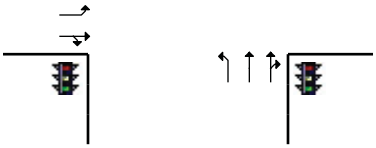


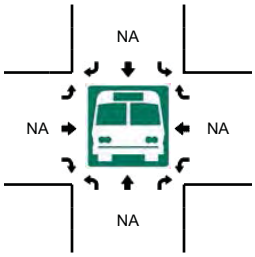












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Piney Mountain Rd (Eastbound)				Piney Mountain Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	4	109	4	0	3	155	3	0	1	0	0	0	23	0	5	0	307	
7:15 AM	2	121	10	0	0	226	2	0	0	0	2	0	23	0	12	0	398	
7:30 AM	2	135	14	0	1	307	2	0	0	0	4	0	41	0	15	0	521	
7:45 AM	6	184	26	0	3	321	0	0	0	0	1	0	33	0	10	0	584	1810
8:00 AM	10	170	17	0	5	327	1	0	0	0	4	0	55	0	11	0	600	2103
8:15 AM	8	171	16	0	7	289	2	0	2	0	2	0	36	0	16	0	549	2254
8:30 AM	6	195	25	0	4	301	3	0	0	1	3	0	32	0	5	0	575	2308
8:45 AM	2	184	14	0	8	292	0	0	2	0	4	0	19	1	7	0	533	2257

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	40	680	68	0	20	1308	4	0	0	0	16	0	220	0	44	0	2400
Heavy Trucks	12	60	8		0	44	0		0	0	4		8	0	0		136
Pedestrians		0				4				0				0			4
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

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: MLK Jr Blvd -- Piney Mountain Rd

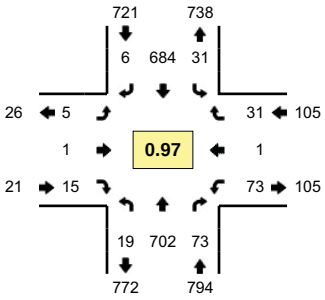
QC JOB #: 10744803

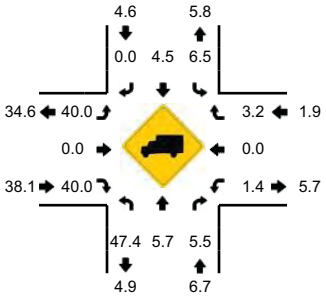
CITY/STATE: Chapel Hill, NC

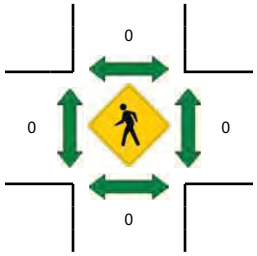
DATE: Tue, Apr 24 2012

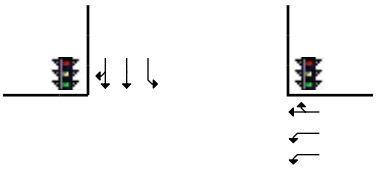
Peak-Hour: 12:30 PM -- 1:30 PM

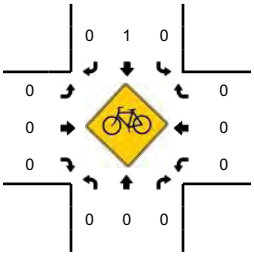
Peak 15-Min: 12:45 PM -- 1:00 PM

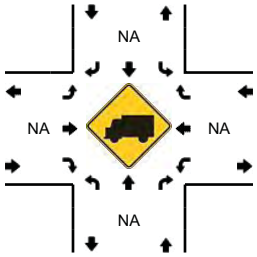


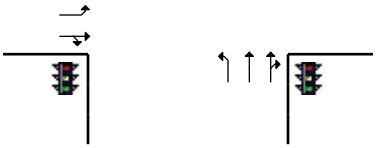


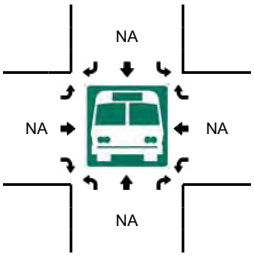












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Piney Mountain Rd (Eastbound)				Piney Mountain Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	3	164	9	0	6	157	1	0	2	0	7	0	20	0	6	0	375	
11:45 AM	2	179	13	0	2	153	0	0	2	2	4	0	23	0	7	0	387	
12:00 PM	4	184	19	0	6	168	1	0	2	0	4	0	10	0	16	0	414	
12:15 PM	1	178	10	0	8	180	1	0	1	0	1	0	15	0	9	0	404	1580
12:30 PM	6	153	18	0	7	165	2	0	0	0	3	0	18	0	7	0	379	1584
12:45 PM	3	187	17	0	6	176	2	0	2	0	6	0	14	0	11	0	424	1621
1:00 PM	8	172	20	0	9	178	0	0	1	0	3	0	23	0	10	0	424	1631
1:15 PM	2	190	18	0	9	165	2	0	2	1	3	0	18	1	3	0	414	1641

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	748	68	0	24	704	8	0	8	0	24	0	56	0	44	0	1696
Heavy Trucks	8	28	0		0	40	0		4	0	4		0	0	0		84
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	1	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

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

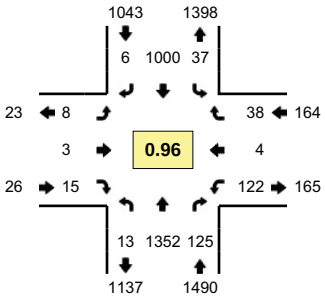
LOCATION: MLK Jr Blvd -- Piney Mountain Rd

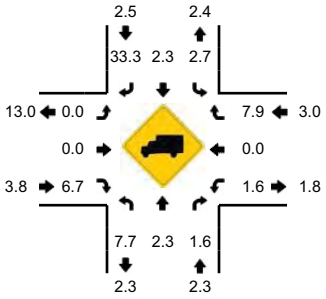
QC JOB #: 10744802

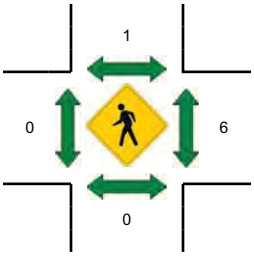
CITY/STATE: Chapel Hill, NC

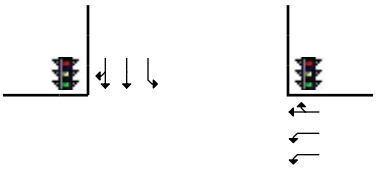
DATE: Tue, Apr 24 2012

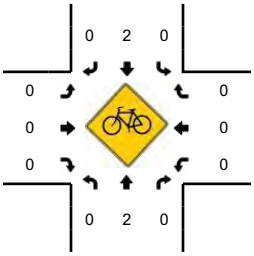
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:00 PM -- 5:15 PM

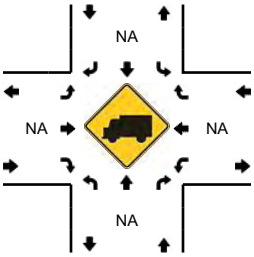


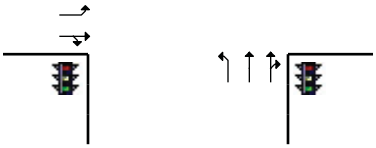


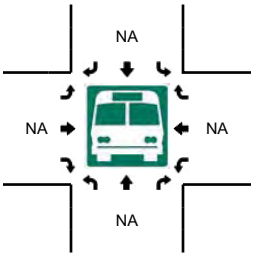












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Piney Mountain Rd (Eastbound)				Piney Mountain Rd (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	7	249	29	0	6	192	0	0	1	0	4	0	15	0	9	0	512	
4:15 PM	5	257	20	0	13	174	0	0	0	0	1	0	22	0	9	0	501	
4:30 PM	2	307	21	0	7	166	1	0	0	0	0	0	30	0	6	0	540	
4:45 PM	3	340	36	0	9	236	0	0	5	1	0	0	29	0	8	0	667	2220
5:00 PM	2	382	30	0	7	239	3	0	1	0	3	0	27	1	12	0	707	2415
5:15 PM	3	349	32	0	10	248	1	0	2	1	5	0	26	2	8	0	687	2601
5:30 PM	5	281	27	0	11	277	2	0	0	1	7	0	40	1	10	0	662	2723
5:45 PM	7	288	31	0	15	246	1	0	4	2	3	0	40	0	15	0	652	2708

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	1528	120	0	28	956	12	0	4	0	12	0	108	4	48	0	2828
Heavy Trucks	0	36	0		0	16	4		0	0	0		0	0	4		60
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 5/2/2012 3:27 PM

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

Type of peak hour being reported: Intersection Peak

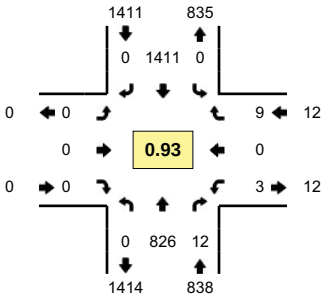
Method for determining peak hour: Total Entering Volume

LOCATION: MLK Jr Blvd -- Shadowood Dr

QC JOB #: 10744804

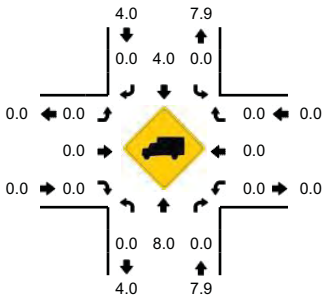
CITY/STATE: Chapel Hill, NC

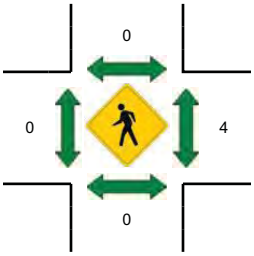
DATE: Tue, Apr 24 2012

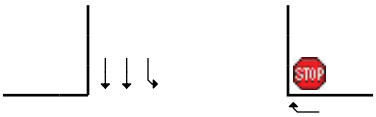


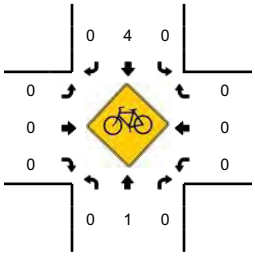
Peak-Hour: 7:45 AM -- 8:45 AM

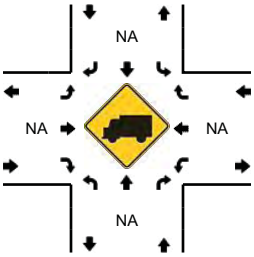
Peak 15-Min: 8:00 AM -- 8:15 AM

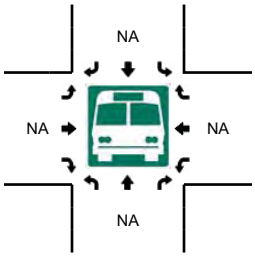












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Shadowood Dr (Eastbound)				Shadowood Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	118	1	0	0	181	0	0	0	0	0	0	2	0	3	0	305	
7:15 AM	0	128	2	0	2	252	0	0	0	0	0	0	0	0	3	0	387	
7:30 AM	0	157	2	0	1	353	0	0	0	0	0	0	1	0	1	0	515	
7:45 AM	0	210	1	0	0	342	0	0	0	0	0	0	0	0	2	0	555	1762
8:00 AM	0	199	3	0	0	399	0	0	0	0	0	0	2	0	2	0	605	2062
8:15 AM	0	197	3	0	0	339	0	0	0	0	0	0	0	0	2	0	541	2216
8:30 AM	0	220	5	0	0	331	0	0	0	0	0	0	1	0	3	0	560	2261
8:45 AM	0	195	0	0	1	314	0	0	0	0	0	0	2	0	5	0	517	2223

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	796	12	0	0	1596	0	0	0	0	0	0	8	0	8	0	2420
Heavy Trucks	0	80	0		0	80	0		0	0	0		0	0	0		160
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 5/2/2012 3:27 PM

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

Type of peak hour being reported: Intersection Peak

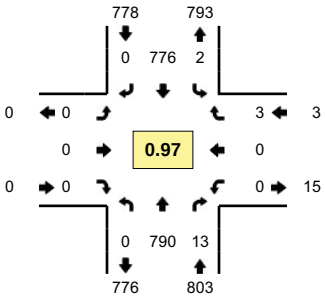
Method for determining peak hour: Total Entering Volume

LOCATION: MLK Jr Blvd -- Shadowood Dr

QC JOB #: 10744806

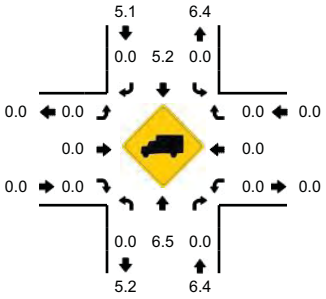
CITY/STATE: Chapel Hill, NC

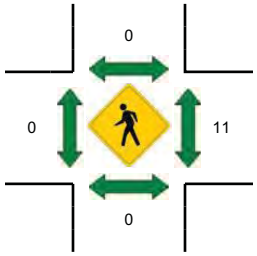
DATE: Tue, Apr 24 2012

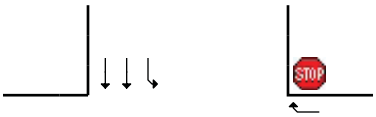


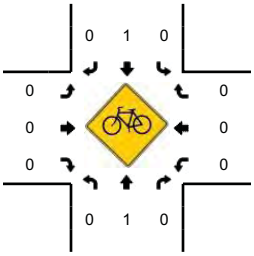
Peak-Hour: 12:30 PM -- 1:30 PM

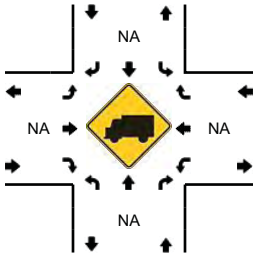
Peak 15-Min: 1:00 PM -- 1:15 PM

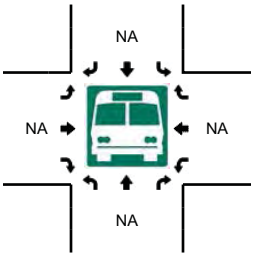












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Shadowood Dr (Eastbound)				Shadowood Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	179	4	0	0	180	0	0	0	0	0	0	1	0	0	0	364	
11:45 AM	0	189	3	0	1	181	0	0	0	0	0	0	1	0	2	0	377	
12:00 PM	0	209	4	0	0	177	0	0	0	0	0	0	0	0	0	0	390	
12:15 PM	0	196	4	0	0	194	0	0	0	0	0	0	0	0	0	0	394	1525
12:30 PM	0	177	5	0	0	191	0	0	0	0	0	0	0	0	1	0	374	1535
12:45 PM	0	210	4	0	0	192	0	0	0	0	0	0	0	0	0	0	406	1564
1:00 PM	0	199	4	0	0	205	0	0	0	0	0	0	0	0	0	0	408	1582
1:15 PM	0	204	0	0	2	188	0	0	0	0	0	0	0	0	2	0	396	1584

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	796	16	0	0	820	0	0	0	0	0	0	0	0	0	0	1632
Heavy Trucks	0	60	0		0	44	0		0	0	0		0	0	0		104
Pedestrians		0				0				0				8			8
Bicycles	0	1	0		0	0	0		0	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

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: MLK Jr Blvd -- Shadowood Dr

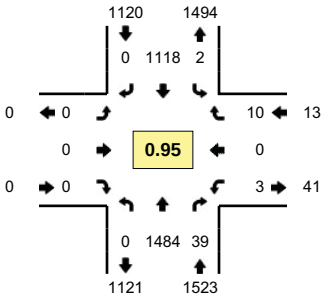
QC JOB #: 10744805

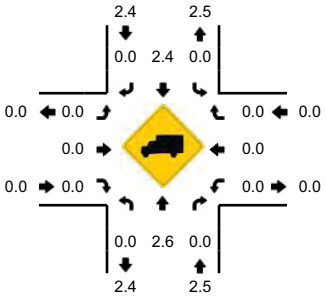
CITY/STATE: Chapel Hill, NC

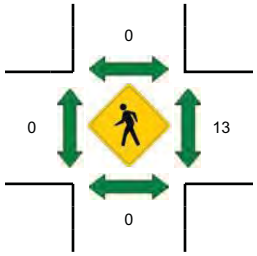
DATE: Tue, Apr 24 2012

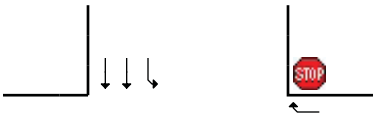
Peak-Hour: 4:45 PM -- 5:45 PM

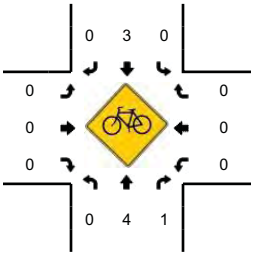
Peak 15-Min: 5:00 PM -- 5:15 PM

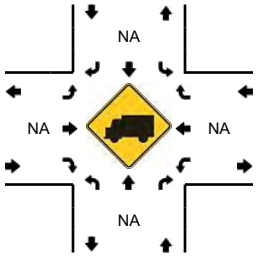


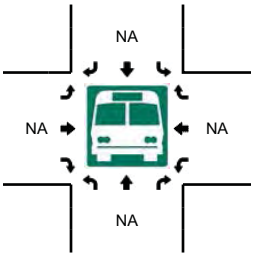












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Shadowood Dr (Eastbound)				Shadowood Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	288	5	0	0	213	0	0	0	0	0	0	2	0	0	0	508	
4:15 PM	0	278	2	0	0	199	0	0	0	0	0	0	0	0	1	0	480	
4:30 PM	0	336	9	0	0	194	0	0	0	0	0	0	1	0	2	0	542	
4:45 PM	0	373	5	0	0	260	0	0	0	0	0	0	0	0	3	0	641	2171
5:00 PM	0	413	10	0	1	269	0	0	0	0	0	0	1	0	2	0	696	2359
5:15 PM	0	381	11	0	0	284	0	0	0	0	0	0	2	0	0	0	678	2557
5:30 PM	0	317	13	0	1	305	0	0	0	0	0	0	0	0	5	0	641	2656
5:45 PM	0	322	8	0	1	297	0	0	0	0	0	0	5	0	2	0	635	2650

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	1652	40	0	4	1076	0	0	0	0	0	0	4	0	8	0	2784
Heavy Trucks	0	44	0		0	16	0		0	0	0		0	0	0		60
Pedestrians		0				0				0				8			8
Bicycles	0	1	1		0	1	0		0	0	0		0	0	0		3
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

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

Type of peak hour being reported: Intersection Peak

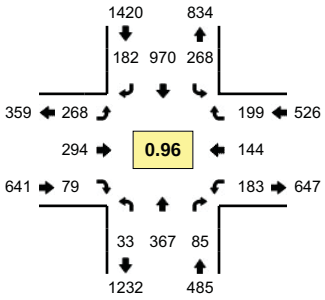
Method for determining peak hour: Total Entering Volume

LOCATION: MLK Jr Blvd -- Estes Dr

QC JOB #: 10744807

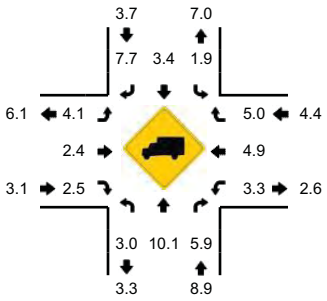
CITY/STATE: Chapel Hill, NC

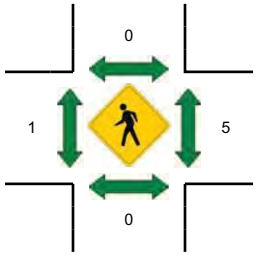
DATE: Tue, Apr 24 2012

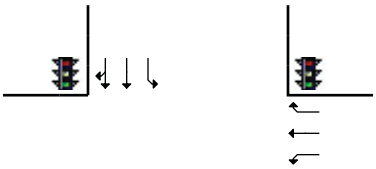


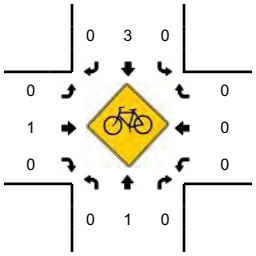
Peak-Hour: 7:45 AM -- 8:45 AM

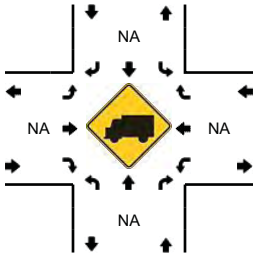
Peak 15-Min: 7:45 AM -- 8:00 AM

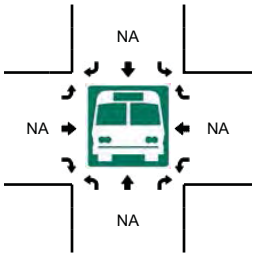












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	5	67	13	0	36	111	24	0	31	32	6	0	11	20	16	0	372	
7:15 AM	3	62	24	0	52	175	24	0	41	48	16	0	25	27	23	0	520	
7:30 AM	7	76	30	0	94	227	34	0	47	63	13	0	44	28	44	0	707	
7:45 AM	11	92	20	0	59	242	50	0	67	87	25	0	46	42	57	0	798	2397
8:00 AM	6	72	19	0	78	267	48	0	71	72	20	0	48	39	57	0	797	2822
8:15 AM	10	93	22	0	71	224	44	0	64	68	22	0	55	33	38	0	744	3046
8:30 AM	6	110	24	0	60	237	40	0	66	67	12	0	34	30	47	0	733	3072
8:45 AM	3	88	28	0	76	198	36	0	51	88	17	0	29	26	49	0	689	2963

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	44	368	80	0	236	968	200	0	268	348	100	0	184	168	228	0	3192
Heavy Trucks	4	28	8		16	28	8		8	12	4		4	0	8		128
Pedestrians		0				0				0				0			0
Bicycles	0	1	0		0	2	0		0	0	0		0	0	0		3
Railroad																	
Stopped Buses																	

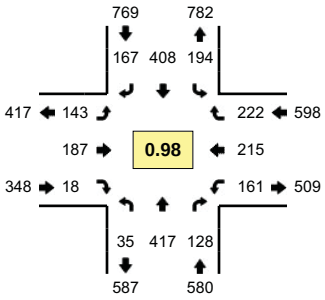
Comments:

Report generated on 5/2/2012 3:27 PM

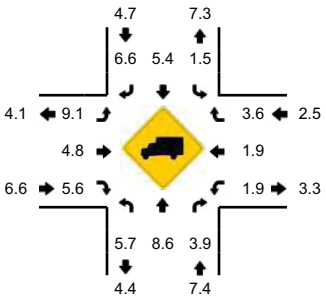
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

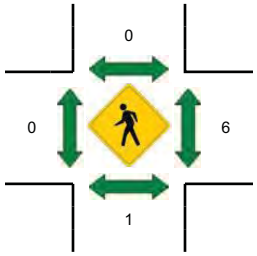
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

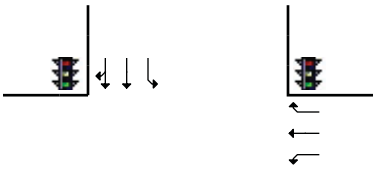
LOCATION: MLK Jr Blvd -- Estes Dr | **QC JOB #:** 10744809
CITY/STATE: Chapel Hill, NC | **DATE:** Tue, Apr 24 2012

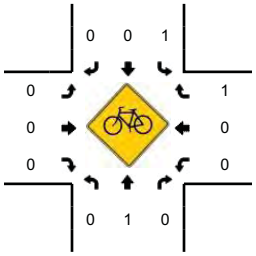


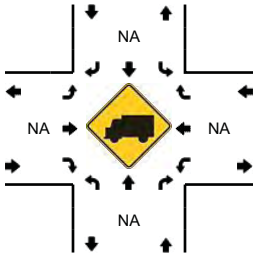
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

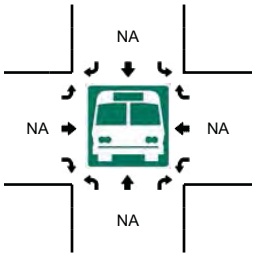












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	4	90	36	0	47	98	31	0	32	47	8	0	21	36	56	0	506	
11:45 AM	6	91	42	0	45	97	34	0	44	47	7	0	37	51	57	0	558	
12:00 PM	9	123	39	0	53	99	32	0	37	38	4	0	19	44	50	0	547	
12:15 PM	11	99	32	0	41	100	43	0	28	57	4	0	42	64	62	0	583	2194
12:30 PM	9	99	35	0	54	96	44	0	33	41	2	0	37	42	47	0	539	2227
12:45 PM	6	102	28	0	53	98	41	0	44	43	5	0	44	58	66	0	588	2257
1:00 PM	9	117	33	0	46	114	39	0	38	46	7	0	38	51	47	0	585	2295
1:15 PM	4	105	28	0	47	108	32	0	42	38	6	0	23	59	56	0	548	2260

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	408	112	0	212	392	164	0	176	172	20	0	176	232	264	0	2352
Heavy Trucks	0	12	8		4	28	16		8	12	0		4	4	12		108
Pedestrians		4				0				0				0			4
Bicycles	0	0	0		1	0	0		0	0	0		0	0	1		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM | SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

Type of peak hour being reported: Intersection Peak

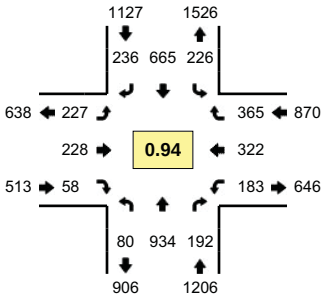
Method for determining peak hour: Total Entering Volume

LOCATION: MLK Jr Blvd -- Estes Dr

QC JOB #: 10744808

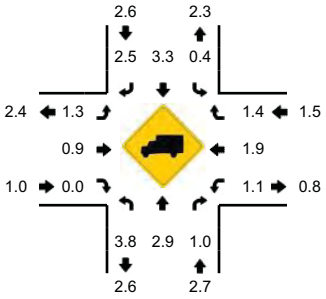
CITY/STATE: Chapel Hill, NC

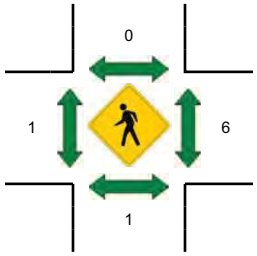
DATE: Tue, Apr 24 2012

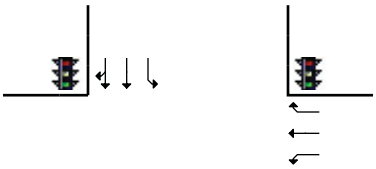


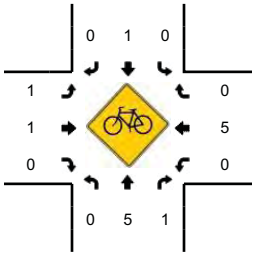
Peak-Hour: 4:45 PM -- 5:45 PM

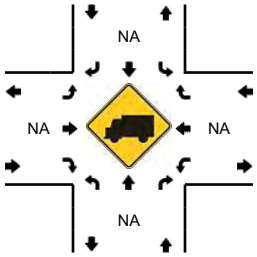
Peak 15-Min: 5:00 PM -- 5:15 PM

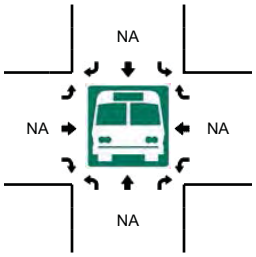












15-Min Count Period Beginning At	MLK Jr Blvd (Northbound)				MLK Jr Blvd (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	14	200	41	0	62	108	48	0	34	65	13	0	35	62	68	0	750	
4:15 PM	11	157	33	0	51	101	44	0	41	58	9	0	30	74	65	0	674	
4:30 PM	10	234	45	0	44	108	40	0	61	60	7	0	26	78	54	0	767	
4:45 PM	14	234	34	0	63	160	40	0	55	52	16	0	48	77	85	0	878	3069
5:00 PM	26	256	66	0	42	165	62	0	64	65	14	0	41	86	106	0	993	3312
5:15 PM	18	237	53	0	59	160	59	0	53	53	15	0	44	82	94	0	927	3565
5:30 PM	22	207	39	0	62	180	75	0	55	58	13	0	50	77	80	0	918	3716
5:45 PM	21	161	37	0	56	158	73	0	55	39	9	0	41	83	95	0	828	3666

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	104	1024	264	0	168	660	248	0	256	260	56	0	164	344	424	0	3972
Heavy Trucks	0	36	0		0	12	4		4	4	0		0	0	4		64
Pedestrians		0				0				0				8			8
Bicycles	0	2	1		0	1	0		1	0	0		0	0	0		5
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

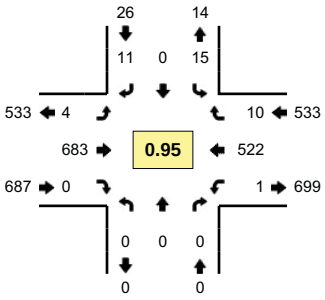
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

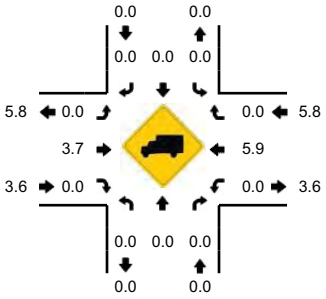
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

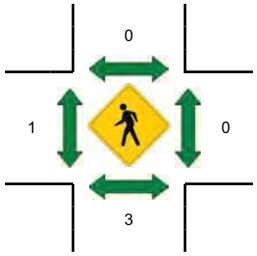
LOCATION: Somerset Dr -- Estes Dr | **QC JOB #:** 10744810

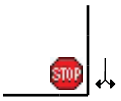
CITY/STATE: Chapel Hill, NC | **DATE:** Tue, Apr 24 2012

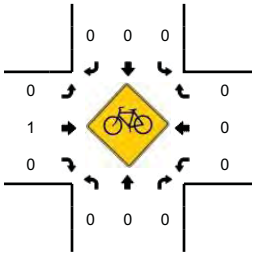
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 7:45 AM -- 8:00 AM

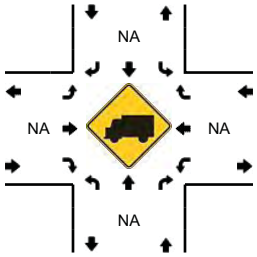


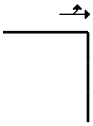


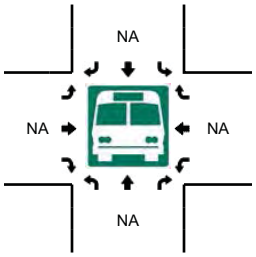












15-Min Count Period Beginning At	Somerset Dr (Northbound)				Somerset Dr (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	0	0	2	0	0	0	1	76	0	0	0	45	1	0	125	
7:15 AM	0	0	0	0	0	0	0	0	0	113	0	0	0	80	0	0	193	
7:30 AM	0	0	0	0	7	0	2	0	0	182	0	0	0	115	3	0	309	
7:45 AM	0	0	0	0	4	0	2	0	0	180	0	0	0	137	5	0	328	955
8:00 AM	0	0	0	0	2	0	1	0	0	159	0	0	0	153	0	1	316	1146
8:15 AM	0	0	0	0	2	0	6	0	4	162	0	0	0	117	2	0	293	1246
8:30 AM	0	0	0	0	2	0	3	0	2	152	0	0	0	106	4	0	269	1206
8:45 AM	0	0	0	0	5	0	2	0	2	178	0	0	0	97	1	0	285	1163

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	16	0	8	0	0	720	0	0	0	548	20	0	1312
Heavy Trucks	0	0	0		0	0	0		0	32	0		0	12	0		44
Pedestrians		12				0				0				0			12
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

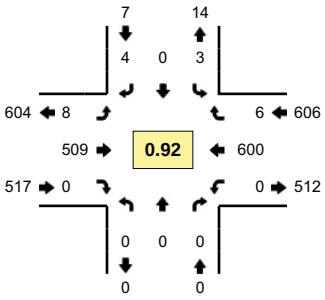
LOCATION: Somerset Dr -- Estes Dr

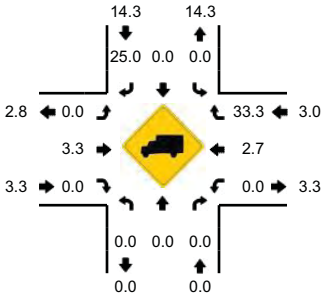
QC JOB #: 10744812

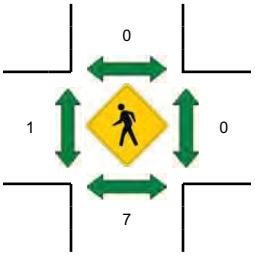
CITY/STATE: Chapel Hill, NC

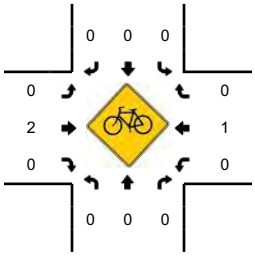
DATE: Tue, Apr 24 2012

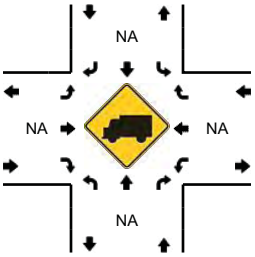
Peak-Hour: 12:15 PM -- 1:15 PM
Peak 15-Min: 12:45 PM -- 1:00 PM

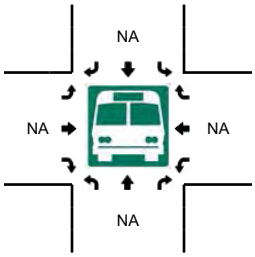












15-Min Count Period Beginning At	Somerset Dr (Northbound)				Somerset Dr (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	0	0	0	3	0	3	0	2	138	0	0	0	120	2	0	268	
11:45 AM	0	0	0	0	2	0	0	0	1	135	0	0	0	136	2	0	276	
12:00 PM	0	0	0	0	2	0	1	0	1	128	0	0	0	127	3	0	262	
12:15 PM	0	0	0	0	2	0	2	0	2	123	0	0	0	156	0	0	285	1091
12:30 PM	0	0	0	0	1	0	1	0	0	130	0	0	0	130	4	0	266	1089
12:45 PM	0	0	0	0	0	0	0	0	6	129	0	0	0	171	0	0	306	1119
1:00 PM	0	0	0	0	0	0	1	0	0	127	0	0	0	143	2	0	273	1130
1:15 PM	0	0	0	0	3	0	4	0	2	118	0	0	0	140	2	0	269	1114

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	0	0	0	0	24	516	0	0	0	684	0	0	1224
Heavy Trucks	0	0	0		0	0	0		0	20	0		0	16	0		36
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	1	0		0	1	0		2
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

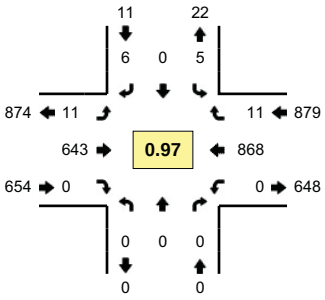
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

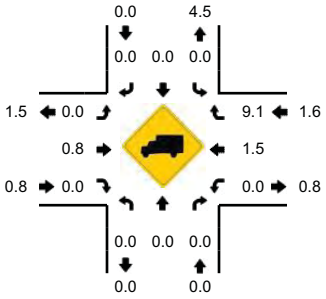
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

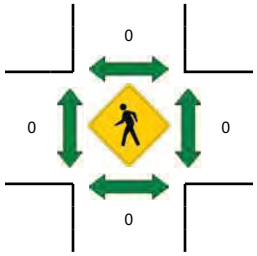
LOCATION: Somerset Dr -- Estes Dr | **QC JOB #:** 10744811

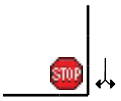
CITY/STATE: Chapel Hill, NC | **DATE:** Tue, Apr 24 2012

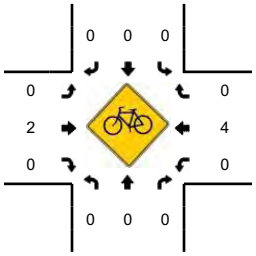
Peak-Hour: 4:45 PM -- 5:45 PM
Peak 15-Min: 5:15 PM -- 5:30 PM

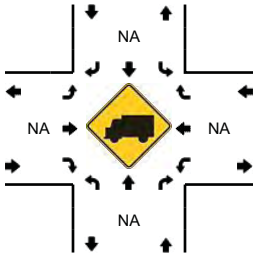


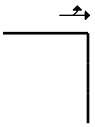


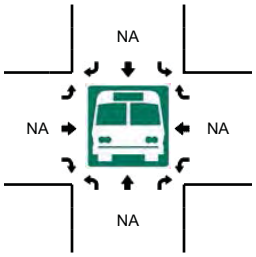












15-Min Count Period Beginning At	Somerset Dr (Northbound)				Somerset Dr (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	0	0	1	0	1	0	0	161	0	1	0	164	4	0	332	
4:15 PM	0	0	0	0	0	0	4	0	1	153	0	0	0	175	0	0	333	
4:30 PM	0	0	0	0	1	0	4	0	0	145	0	0	0	170	1	0	321	
4:45 PM	0	0	0	0	4	0	1	0	6	150	0	0	0	201	3	0	365	1351
5:00 PM	0	0	0	0	1	0	0	0	4	166	0	0	0	221	0	0	392	1411
5:15 PM	0	0	0	0	0	0	2	0	0	177	0	0	0	215	4	0	398	1476
5:30 PM	0	0	0	0	0	0	3	0	1	150	0	0	0	231	4	0	389	1544
5:45 PM	0	0	0	0	3	0	3	0	3	140	0	0	0	204	2	0	355	1534

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	0	0	8	0	0	708	0	0	0	860	16	0	1592
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	8	4		16
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 5/2/2012 3:27 PM

Type of peak hour being reported: Intersection Peak

Method for determining peak hour: Total Entering Volume

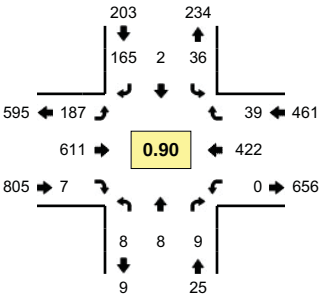
LOCATION: Caswell Dr E -- Estes Dr

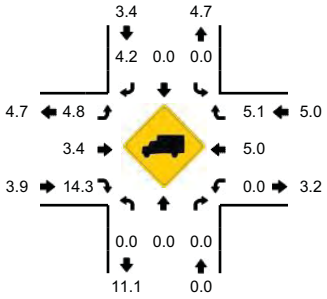
QC JOB #: 10744813

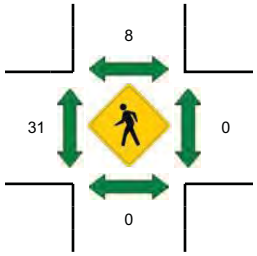
CITY/STATE: Chapel Hill , NC

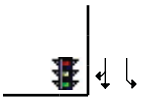
DATE: Tue, Apr 24 2012

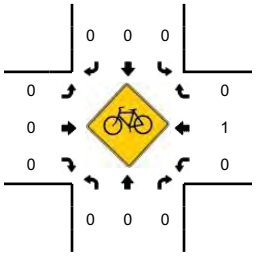
Peak-Hour: 7:30 AM -- 8:30 AM
Peak 15-Min: 8:00 AM -- 8:15 AM

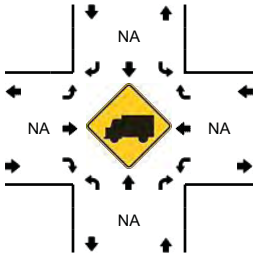


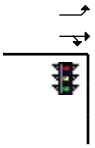


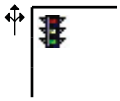


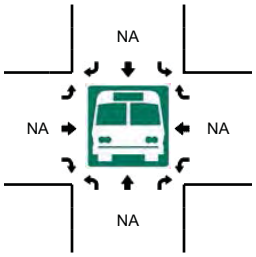












15-Min Count Period Beginning At	Caswell Dr E (Northbound)				Caswell Dr E (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
7:00 AM	0	0	1	0	5	0	9	0	14	65	0	0	0	42	6	0	142	
7:15 AM	1	4	1	0	11	2	9	0	31	77	0	0	0	68	23	0	227	
7:30 AM	1	5	1	0	14	0	38	0	72	131	2	0	0	73	19	0	356	
7:45 AM	1	2	3	0	12	0	51	0	41	160	3	0	0	111	7	0	391	1116
8:00 AM	2	0	2	0	6	1	52	0	42	153	1	0	0	150	8	0	417	1391
8:15 AM	4	1	3	0	4	1	24	0	32	167	1	0	0	88	5	0	330	1494
8:30 AM	1	3	1	0	4	0	17	0	19	140	0	0	3	100	3	0	291	1429
8:45 AM	0	3	2	0	6	2	22	0	23	157	0	0	0	77	4	0	296	1334

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	0	8	0	24	4	208	0	168	612	4	0	0	600	32	0	1668
Heavy Trucks	0	0	0		0	0	12		4	20	4		0	36	0		76
Pedestrians		0				8				32				0			40
Bicycles	0	0	0		0	0	0		0	0	0		0	0	0		0
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

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

Type of peak hour being reported: Intersection Peak

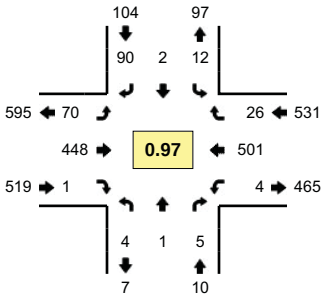
Method for determining peak hour: Total Entering Volume

LOCATION: Caswell Dr E -- Estes Dr

QC JOB #: 10744815

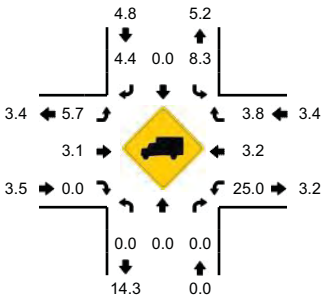
CITY/STATE: Chapel Hill , NC

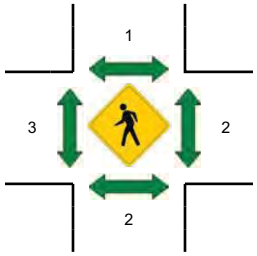
DATE: Tue, Apr 24 2012

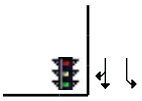


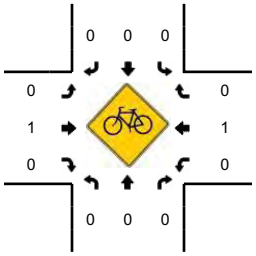
Peak-Hour: 12:15 PM -- 1:15 PM

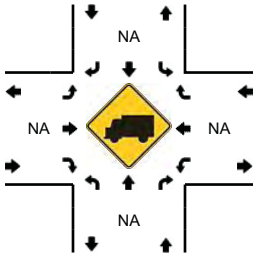
Peak 15-Min: 12:45 PM -- 1:00 PM

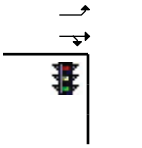


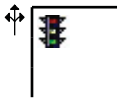


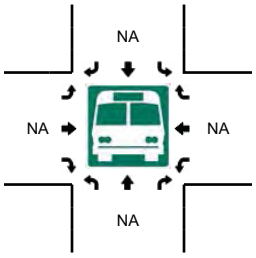












15-Min Count Period Beginning At	Caswell Dr E (Northbound)				Caswell Dr E (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
11:30 AM	0	0	0	0	8	0	21	0	15	126	2	0	1	106	8	0	287	
11:45 AM	1	1	2	0	5	0	21	0	27	119	0	0	1	108	8	0	293	
12:00 PM	1	1	3	0	4	1	18	0	16	119	0	0	1	108	6	0	278	
12:15 PM	0	0	0	0	1	0	23	0	19	112	1	0	1	129	12	0	298	1156
12:30 PM	3	1	3	0	2	1	18	0	11	118	0	0	1	114	8	0	280	1149
12:45 PM	1	0	1	0	7	1	25	0	20	106	0	0	0	136	4	0	301	1157
1:00 PM	0	0	1	0	2	0	24	0	20	112	0	0	2	122	2	0	285	1164
1:15 PM	1	1	0	0	6	1	17	0	17	104	0	0	2	124	8	0	281	1147

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	0	4	0	28	4	100	0	80	424	0	0	0	544	16	0	1204
Heavy Trucks	0	0	0		4	0	0		4	16	0		0	20	0		44
Pedestrians		0				0				0				0			0
Bicycles	0	0	0		0	0	0		0	1	0		0	1	0		2
Railroad																	
Stopped Buses																	

Comments:

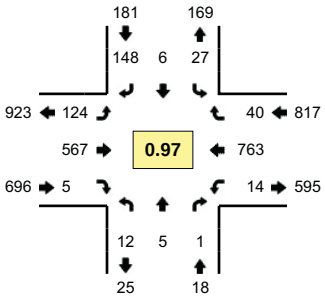
Report generated on 5/2/2012 3:27 PM

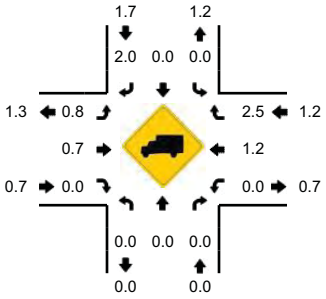
SOURCE: Quality Counts, LLC (http://www.qualitycounts.net) 1-877-580-2212

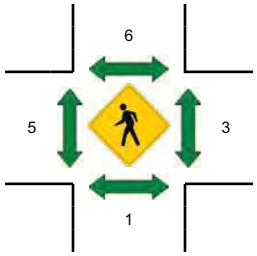
Type of peak hour being reported: Intersection Peak | Method for determining peak hour: Total Entering Volume

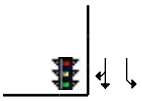
LOCATION: Caswell Dr E -- Estes Dr | **QC JOB #:** 10744814
CITY/STATE: Chapel Hill , NC | **DATE:** Tue, Apr 24 2012

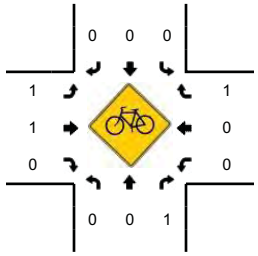
Peak-Hour: 5:00 PM -- 6:00 PM
Peak 15-Min: 5:30 PM -- 5:45 PM

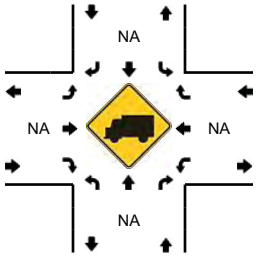


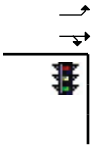


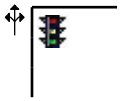


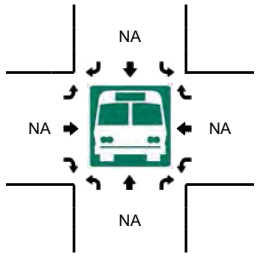












15-Min Count Period Beginning At	Caswell Dr E (Northbound)				Caswell Dr E (Southbound)				Estes Dr (Eastbound)				Estes Dr (Westbound)				Total	Hourly Totals
	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U	Left	Thru	Right	U		
4:00 PM	0	0	1	0	7	1	33	0	22	132	0	0	0	143	6	0	345	
4:15 PM	1	1	0	0	8	2	30	0	25	136	0	0	1	142	9	0	355	
4:30 PM	2	0	1	0	6	3	36	0	24	130	1	0	2	171	12	0	388	
4:45 PM	1	0	2	0	13	0	23	0	26	133	0	0	0	161	7	0	366	1454
5:00 PM	3	0	0	0	5	0	31	0	29	143	2	0	2	187	10	0	412	1521
5:15 PM	1	2	0	0	4	0	47	0	32	151	1	0	3	185	6	0	432	1598
5:30 PM	3	2	0	0	6	2	40	0	27	135	2	0	3	208	14	0	442	1652
5:45 PM	5	1	1	0	12	4	30	0	36	138	0	0	6	183	10	0	426	1712

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	8	0	0	24	8	160	0	108	540	8	0	12	832	56	0	1768
Heavy Trucks	0	0	0		0	0	0		0	4	0		0	12	0		16
Pedestrians		0				16				12				4			32
Bicycles	0	0	0		0	0	0		1	0	0		0	0	0		1
Railroad																	
Stopped Buses																	

Comments:

Report generated on 5/2/2012 3:27 PM

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

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Estes Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	7	0	0	0	0	0	0	0	7
00:15	4	0	0	0	0	0	0	0	4
00:30	8	0	0	0	0	0	0	0	8
00:45	3	0	0	0	0	0	0	0	3
	22	0	0	0	0	0	0	0	22
01:00	6	0	0	0	0	0	0	0	6
01:15	1	0	0	0	0	0	0	0	1
01:30	3	0	0	0	0	0	0	0	3
01:45	2	0	0	0	0	0	0	0	2
	12	0	0	0	0	0	0	0	12
02:00	3	0	0	0	0	0	0	0	3
02:15	1	0	0	0	0	0	0	0	1
02:30	2	0	0	0	0	0	0	0	2
02:45	0	1	0	0	0	0	0	0	1
	6	1	0	0	0	0	0	0	7
03:00	5	0	0	0	0	0	0	0	5
03:15	1	0	0	0	0	0	0	0	1
03:30	4	0	0	0	0	0	0	0	4
03:45	7	0	0	0	0	0	0	0	7
	17	0	0	0	0	0	0	0	17
04:00	1	0	0	0	0	0	0	0	1
04:15	4	1	0	0	0	0	0	0	5
04:30	4	1	0	0	0	0	0	0	5
04:45	9	2	0	0	0	0	0	0	11
	18	4	0	0	0	0	0	0	22
05:00	11	1	0	0	0	0	0	0	12
05:15	15	1	1	0	0	0	0	0	17
05:30	7	0	0	0	0	0	0	0	7
05:45	20	2	1	0	0	0	0	0	23
	53	4	2	0	0	0	0	0	59
06:00	20	2	0	0	0	0	0	0	22
06:15	17	1	0	0	0	0	0	0	18
06:30	29	0	0	0	0	0	0	0	29
06:45	43	6	0	0	0	0	0	0	49
	109	9	0	0	0	0	0	0	118
07:00	74	2	0	0	2	0	0	0	78
07:15	110	5	0	0	0	0	0	0	115
07:30	162	10	0	0	10	0	0	0	182
07:45	146	6	3	0	8	0	0	0	163
	492	23	3	0	20	0	0	0	538
08:00	139	2	0	0	9	0	0	0	150
08:15	135	3	3	0	13	0	0	0	154
08:30	140	3	1	0	2	0	0	0	146
08:45	169	4	0	0	6	0	0	0	179
	583	12	4	0	30	0	0	0	629
09:00	113	2	1	0	5	0	0	0	121
09:15	107	6	3	0	11	0	0	0	127
09:30	122	3	0	0	3	0	0	0	128
09:45	113	2	0	0	7	0	0	0	122
	455	13	4	0	26	0	0	0	498
10:00	106	3	0	0	1	0	0	0	110
10:15	104	3	0	0	3	0	0	0	110
10:30	109	0	0	0	4	0	0	0	113
10:45	109	0	0	0	4	0	0	0	113
	428	6	0	0	12	0	0	0	446
11:00	110	6	1	0	2	0	0	0	119
11:15	117	2	2	0	8	0	0	0	129
11:30	128	3	0	0	7	0	0	0	138
11:45	118	6	0	0	5	0	0	0	129
	473	17	3	0	22	0	0	0	515
Total	2668	89	16	0	110	0	0	0	2883
Percent	92.5%	3.1%	0.6%	0.0%	3.8%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Estes Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
12 PM	118	2	0	0	6	0	0	0	126
12:15	107	4	0	0	5	0	0	0	116
12:30	120	2	0	0	8	0	0	0	130
12:45	99	4	3	0	13	0	0	0	119
	444	12	3	0	32	0	0	0	491
13:00	108	5	0	0	9	0	0	0	122
13:15	108	6	0	0	6	0	0	0	120
13:30	82	5	2	0	8	0	0	0	97
13:45	119	7	0	0	14	0	0	0	140
	417	23	2	0	37	0	0	0	479
14:00	120	12	2	0	7	0	0	0	141
14:15	109	12	1	0	7	0	0	0	129
14:30	132	4	0	0	8	0	0	0	144
14:45	103	4	0	0	9	0	0	0	116
	464	32	3	0	31	0	0	0	530
15:00	125	10	0	0	13	0	0	0	148
15:15	134	3	0	0	10	0	0	0	147
15:30	66	3	0	0	18	0	0	0	87
15:45	91	3	1	0	20	0	0	0	115
	416	19	1	0	61	0	0	0	497
16:00	134	2	1	0	9	0	0	0	146
16:15	126	3	1	0	9	0	0	0	139
16:30	107	1	0	0	12	0	0	0	120
16:45	119	0	0	0	17	0	0	0	136
	486	6	2	0	47	0	0	0	541
17:00	131	2	1	0	21	0	0	0	155
17:15	117	1	0	0	13	0	0	0	131
17:30	109	2	0	0	12	0	0	0	123
17:45	95	1	0	0	18	0	0	0	114
	452	6	1	0	64	0	0	0	523
18:00	87	0	0	0	19	0	0	0	106
18:15	92	0	0	0	6	0	0	0	98
18:30	106	1	0	0	5	0	0	0	112
18:45	113	1	0	0	7	0	0	0	121
	398	2	0	0	37	0	0	0	437
19:00	103	2	0	0	5	0	0	0	110
19:15	107	0	0	0	5	0	0	0	112
19:30	83	2	0	0	5	0	0	0	90
19:45	64	0	0	0	4	0	0	0	68
	357	4	0	0	19	0	0	0	380
20:00	66	1	1	0	4	0	0	0	72
20:15	62	1	0	0	1	0	0	0	64
20:30	60	1	0	0	4	0	0	0	65
20:45	61	1	0	0	5	0	0	0	67
	249	4	1	0	14	0	0	0	268
21:00	45	1	0	0	4	0	0	0	50
21:15	48	0	0	0	1	0	0	0	49
21:30	40	0	0	0	0	0	0	0	40
21:45	26	0	0	0	2	0	0	0	28
	159	1	0	0	7	0	0	0	167
22:00	29	1	0	0	1	0	0	0	31
22:15	23	0	0	0	0	0	0	0	23
22:30	17	0	0	0	0	0	0	0	17
22:45	19	0	0	0	0	0	0	0	19
	88	1	0	0	1	0	0	0	90
23:00	12	0	0	0	0	0	0	0	12
23:15	7	0	0	0	0	0	0	0	7
23:30	16	0	0	0	0	0	0	0	16
23:45	13	0	0	0	0	0	0	0	13
	48	0	0	0	0	0	0	0	48
Total	3978	110	13	0	350	0	0	0	4451
Percent	89.4%	2.5%	0.3%	0.0%	7.9%	0.0%	0.0%	0.0%	
Grand Total	6646	199	29	0	460	0	0	0	7334
Percent	90.6%	2.7%	0.4%	0.0%	6.3%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Estes Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	9	0	0	0	0	0	0	0	9
00:15	7	0	0	0	0	0	0	0	7
00:30	7	0	0	0	0	0	0	0	7
00:45	7	0	0	0	0	0	0	0	7
	30	0	0	0	0	0	0	0	30
01:00	4	0	0	0	0	0	0	0	4
01:15	5	0	1	0	0	0	0	0	6
01:30	5	0	0	0	0	0	0	0	5
01:45	4	0	0	0	1	0	0	0	5
	18	0	1	0	1	0	0	0	20
02:00	2	0	0	0	0	0	0	0	2
02:15	3	0	0	0	0	0	0	0	3
02:30	2	0	0	0	0	0	0	0	2
02:45	4	0	0	0	0	0	0	0	4
	11	0	0	0	0	0	0	0	11
03:00	1	0	0	0	0	0	0	0	1
03:15	3	0	0	0	0	0	0	0	3
03:30	1	0	0	0	0	0	0	0	1
03:45	6	0	0	0	0	0	0	0	6
	11	0	0	0	0	0	0	0	11
04:00	1	0	0	0	0	0	0	0	1
04:15	2	1	0	0	0	0	0	0	3
04:30	3	0	0	0	0	0	0	0	3
04:45	1	1	0	0	0	0	0	0	2
	7	2	0	0	0	0	0	0	9
05:00	5	0	0	0	0	0	0	0	5
05:15	15	1	0	0	0	0	0	0	16
05:30	13	1	0	0	0	0	0	0	14
05:45	9	1	0	0	0	0	0	0	10
	42	3	0	0	0	0	0	0	45
06:00	12	1	0	0	0	0	0	0	13
06:15	17	0	0	0	0	0	0	0	17
06:30	26	2	0	0	0	0	0	0	28
06:45	32	2	1	0	0	0	0	0	35
	87	5	1	0	0	0	0	0	93
07:00	43	0	1	0	1	0	0	0	45
07:15	69	4	1	0	5	0	0	0	79
07:30	95	6	1	0	14	0	0	0	116
07:45	116	2	0	0	14	0	0	0	132
	323	12	3	0	34	0	0	0	372
08:00	125	8	1	0	14	0	0	0	148
08:15	101	5	0	0	6	0	0	0	112
08:30	97	2	0	0	6	0	0	0	105
08:45	81	3	0	0	9	0	0	0	93
	404	18	1	0	35	0	0	0	458
09:00	85	3	0	0	8	0	0	0	96
09:15	87	5	0	0	9	0	0	0	101
09:30	86	5	0	0	3	0	0	0	94
09:45	82	4	1	0	10	0	0	0	97
	340	17	1	0	30	0	0	0	388
10:00	84	3	1	0	4	0	0	0	92
10:15	80	4	0	0	4	0	0	0	88
10:30	78	3	0	0	3	0	0	0	84
10:45	114	6	0	0	5	0	0	0	125
	356	16	1	0	16	0	0	0	389
11:00	102	0	0	0	7	0	0	0	109
11:15	103	6	2	0	11	0	0	0	122
11:30	98	3	2	0	13	0	0	0	116
11:45	122	5	0	0	9	0	0	0	136
	425	14	4	0	40	0	0	0	483
Total	2054	87	12	0	156	0	0	0	2309
Percent	89.0%	3.8%	0.5%	0.0%	6.8%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Estes Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
12 PM	109	2	0	0	9	0	0	0	120
12:15	129	9	1	0	10	0	0	0	149
12:30	119	2	1	0	6	0	0	0	128
12:45	138	5	0	0	12	0	0	0	155
	495	18	2	0	37	0	0	0	552
13:00	130	1	0	0	8	0	0	0	139
13:15	126	4	0	0	8	0	0	0	138
13:30	125	4	1	0	8	0	0	0	138
13:45	133	3	1	0	9	0	0	0	146
	514	12	2	0	33	0	0	0	561
14:00	120	6	0	0	10	0	0	0	136
14:15	116	3	0	0	14	0	0	0	133
14:30	134	6	0	0	8	0	0	0	148
14:45	132	9	0	0	16	0	0	0	157
	502	24	0	0	48	0	0	0	574
15:00	124	6	0	0	11	0	0	0	141
15:15	136	3	1	0	24	0	0	0	164
15:30	89	4	1	0	45	0	0	0	139
15:45	110	4	0	0	28	0	0	0	142
	459	17	2	0	108	0	0	0	586
16:00	139	4	0	0	8	0	0	0	151
16:15	146	6	2	0	14	0	0	0	168
16:30	120	5	0	0	23	0	0	0	148
16:45	166	4	0	0	26	0	0	0	196
	571	19	2	0	71	0	0	0	663
17:00	184	2	2	0	15	0	0	0	203
17:15	177	0	1	0	27	0	0	0	205
17:30	182	7	0	0	19	0	0	0	208
17:45	151	2	0	0	24	0	0	0	177
	694	11	3	0	85	0	0	0	793
18:00	151	0	1	0	20	0	0	0	172
18:15	149	4	0	0	30	0	0	0	183
18:30	137	2	0	0	14	0	0	0	153
18:45	158	0	0	0	12	0	0	0	170
	595	6	1	0	76	0	0	0	678
19:00	119	1	0	0	6	0	0	0	126
19:15	122	2	0	0	5	0	0	0	129
19:30	103	0	0	0	6	0	0	0	109
19:45	104	1	0	0	4	0	0	0	109
	448	4	0	0	21	0	0	0	473
20:00	92	1	0	0	2	0	0	0	95
20:15	97	0	0	0	3	0	0	0	100
20:30	100	1	0	0	4	0	0	0	105
20:45	86	0	0	0	5	0	0	0	91
	375	2	0	0	14	0	0	0	391
21:00	106	0	0	0	0	0	0	0	106
21:15	70	0	0	0	0	0	0	0	70
21:30	60	1	0	0	2	0	0	0	63
21:45	51	1	0	0	2	0	0	0	54
	287	2	0	0	4	0	0	0	293
22:00	52	0	0	0	2	0	0	0	54
22:15	53	0	0	0	1	0	0	0	54
22:30	25	0	0	0	0	0	0	0	25
22:45	27	0	0	0	0	0	0	0	27
	157	0	0	0	3	0	0	0	160
23:00	26	0	0	0	0	0	0	0	26
23:15	27	0	0	0	0	0	0	0	27
23:30	19	0	0	0	0	0	0	0	19
23:45	17	0	0	0	0	0	0	0	17
	89	0	0	0	0	0	0	0	89
Total	5186	115	12	0	500	0	0	0	5813
Percent	89.2%	2.0%	0.2%	0.0%	8.6%	0.0%	0.0%	0.0%	
Grand Total	7240	202	24	0	656	0	0	0	8122
Percent	89.1%	2.5%	0.3%	0.0%	8.1%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
MLK Jr Blvd north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	33	0	0	0	0	0	0	0	33
00:15	29	0	0	0	0	0	0	0	29
00:30	55	0	0	0	1	0	0	0	56
00:45	27	0	0	0	0	0	0	0	27
	144	0	0	0	1	0	0	0	145
01:00	20	0	0	0	0	0	0	0	20
01:15	16	0	0	0	0	0	0	0	16
01:30	18	0	0	0	0	0	0	0	18
01:45	24	1	0	0	0	0	0	0	25
	78	1	0	0	0	0	0	0	79
02:00	11	1	1	0	0	0	0	0	13
02:15	5	0	0	0	0	0	0	0	5
02:30	8	0	0	0	0	0	0	0	8
02:45	16	0	0	0	0	0	0	0	16
	40	1	1	0	0	0	0	0	42
03:00	13	0	0	0	0	0	0	0	13
03:15	10	0	0	0	0	0	0	0	10
03:30	12	0	0	0	0	0	0	0	12
03:45	8	0	1	0	0	0	0	0	9
	43	0	1	0	0	0	0	0	44
04:00	6	0	0	0	0	0	0	0	6
04:15	7	0	0	0	0	0	0	0	7
04:30	10	1	0	0	0	0	0	0	11
04:45	7	1	0	0	0	0	0	0	8
	30	2	0	0	0	0	0	0	32
05:00	20	0	0	0	1	0	0	0	21
05:15	13	0	0	0	0	0	0	0	13
05:30	24	3	0	0	0	0	0	0	27
05:45	22	1	1	0	0	0	0	0	24
	79	4	1	0	1	0	0	0	85
06:00	20	3	0	0	1	0	0	0	24
06:15	41	0	0	0	2	0	0	0	43
06:30	58	3	0	0	1	0	0	0	62
06:45	79	6	1	0	0	0	0	0	86
	198	12	1	0	4	0	0	0	215
07:00	108	5	1	0	1	0	0	0	115
07:15	120	8	3	0	0	0	0	0	131
07:30	116	17	4	1	4	0	0	0	142
07:45	175	11	4	0	9	0	0	0	199
	519	41	12	1	14	0	0	0	587
08:00	163	17	2	1	6	0	0	0	189
08:15	159	12	1	1	6	0	0	0	179
08:30	192	16	4	1	3	0	0	0	216
08:45	161	5	2	1	6	0	0	0	175
	675	50	9	4	21	0	0	0	759
09:00	138	12	4	0	3	0	0	0	157
09:15	158	14	1	1	5	0	0	0	179
09:30	136	10	5	0	4	0	0	0	155
09:45	144	14	1	0	7	0	0	0	166
	576	50	11	1	19	0	0	0	657
10:00	125	17	3	0	0	0	0	0	145
10:15	139	11	3	1	1	0	0	0	155
10:30	134	17	2	0	1	0	0	0	154
10:45	174	19	5	0	3	0	0	0	201
	572	64	13	1	5	0	0	0	655
11:00	159	8	4	1	2	0	0	0	174
11:15	143	13	3	0	3	0	0	0	162
11:30	167	11	1	0	4	0	0	0	183
11:45	172	9	1	0	2	0	0	0	184
	641	41	9	1	11	0	0	0	703
Total	3595	266	58	8	76	0	0	0	4003
Percent	89.8%	6.6%	1.4%	0.2%	1.9%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
MLK Jr Blvd north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
12 PM	189	9	2	0	8	0	0	0	208
12:15	168	13	5	0	2	0	0	0	188
12:30	150	9	2	1	4	0	0	0	166
12:45	189	11	3	0	6	0	0	0	209
	696	42	12	1	20	0	0	0	771
13:00	171	14	5	0	1	0	0	0	191
13:15	164	13	5	0	8	0	0	0	190
13:30	176	14	6	0	4	0	0	0	200
13:45	159	9	4	1	9	0	0	0	182
	670	50	20	1	22	0	0	0	763
14:00	192	12	1	1	3	0	0	0	209
14:15	208	13	4	0	5	0	0	0	230
14:30	216	13	0	0	10	0	0	0	239
14:45	217	9	5	0	10	0	0	0	241
	833	47	10	1	28	0	0	0	919
15:00	187	9	6	0	9	0	0	0	211
15:15	201	5	2	0	6	0	0	0	214
15:30	253	19	4	1	8	0	0	0	285
15:45	244	9	5	0	10	0	0	0	268
	885	42	17	1	33	0	0	0	978
16:00	220	11	4	2	13	0	0	0	250
16:15	239	9	4	0	6	0	0	0	258
16:30	261	6	6	2	17	0	0	0	292
16:45	313	7	7	1	13	0	0	0	341
	1033	33	21	5	49	0	0	0	1141
17:00	325	6	8	0	28	0	0	0	367
17:15	319	6	0	2	19	0	0	0	346
17:30	269	4	5	2	13	0	0	0	293
17:45	257	7	3	0	13	0	0	0	280
	1170	23	16	4	73	0	0	0	1286
18:00	265	7	2	1	10	0	0	0	285
18:15	243	11	5	1	8	0	0	0	268
18:30	196	7	6	1	13	0	0	0	223
18:45	235	5	3	1	4	0	0	0	248
	939	30	16	4	35	0	0	0	1024
19:00	179	4	1	0	2	0	0	0	186
19:15	204	7	1	1	6	0	0	0	219
19:30	181	7	1	0	3	0	0	0	192
19:45	178	3	0	0	4	0	0	0	185
	742	21	3	1	15	0	0	0	782
20:00	167	3	2	0	3	0	0	0	175
20:15	168	4	0	0	2	0	0	0	174
20:30	150	3	0	0	5	0	0	0	158
20:45	145	0	0	0	6	0	0	0	151
	630	10	2	0	16	0	0	0	658
21:00	155	0	0	0	1	0	0	0	156
21:15	134	1	0	0	6	0	0	0	141
21:30	124	3	1	0	2	0	0	0	130
21:45	118	2	1	0	2	0	0	0	123
	531	6	2	0	11	0	0	0	550
22:00	98	1	0	0	2	0	0	0	101
22:15	83	1	0	0	1	0	0	0	85
22:30	71	1	0	0	1	0	0	0	73
22:45	69	1	0	0	1	0	0	0	71
	321	4	0	0	5	0	0	0	330
23:00	61	0	0	0	0	0	0	0	61
23:15	56	1	0	0	0	0	0	0	57
23:30	56	0	0	0	1	0	0	0	57
23:45	48	1	0	0	2	0	0	0	51
	221	2	0	0	3	0	0	0	226
Total	8671	310	119	18	310	0	0	0	9428
Percent	92.0%	3.3%	1.3%	0.2%	3.3%	0.0%	0.0%	0.0%	
Grand Total	12266	576	177	26	386	0	0	0	13431
Percent	91.3%	4.3%	1.3%	0.2%	2.9%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
MLK Jr Blvd north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	22	1	0	0	0	0	0	0	23
00:15	21	0	0	0	0	0	0	0	21
00:30	19	0	0	0	0	0	0	0	19
00:45	16	0	0	0	0	0	0	0	16
	78	1	0	0	0	0	0	0	79
01:00	12	0	0	0	0	0	0	0	12
01:15	8	0	0	0	0	0	0	0	8
01:30	9	0	0	0	0	0	0	0	9
01:45	4	0	0	0	0	0	0	0	4
	33	0	0	0	0	0	0	0	33
02:00	14	0	0	0	0	0	0	0	14
02:15	5	1	0	0	0	0	0	0	6
02:30	10	0	0	0	0	0	0	0	10
02:45	5	0	0	0	0	0	0	0	5
	34	1	0	0	0	0	0	0	35
03:00	6	2	0	0	0	0	0	0	8
03:15	2	0	0	0	0	0	0	0	2
03:30	5	1	0	0	0	0	0	0	6
03:45	13	0	0	0	0	0	0	0	13
	26	3	0	0	0	0	0	0	29
04:00	5	3	0	0	0	0	0	0	8
04:15	9	0	2	0	1	0	0	0	12
04:30	16	3	0	0	0	0	0	0	19
04:45	16	1	0	0	0	0	0	0	17
	46	7	2	0	1	0	0	0	56
05:00	23	2	0	0	0	0	0	0	25
05:15	41	3	2	0	1	0	0	0	47
05:30	36	7	0	0	1	0	0	0	44
05:45	52	6	1	0	1	0	0	0	60
	152	18	3	0	3	0	0	0	176
06:00	56	3	0	1	1	0	0	0	61
06:15	102	9	2	0	6	0	0	0	119
06:30	134	7	3	0	1	0	0	0	145
06:45	132	14	4	1	4	0	0	0	155
	424	33	9	2	12	0	0	0	480
07:00	163	13	3	0	6	0	0	0	185
07:15	188	10	4	1	9	0	0	0	212
07:30	226	13	0	0	21	0	0	0	260
07:45	227	13	14	1	14	0	0	0	269
	804	49	21	2	50	0	0	0	926
08:00	194	13	5	1	30	0	0	0	243
08:15	249	8	4	0	17	0	0	0	278
08:30	219	14	4	0	24	0	0	0	261
08:45	245	19	3	1	10	0	0	0	278
	907	54	16	2	81	0	0	0	1060
09:00	239	7	4	1	12	0	0	0	263
09:15	209	10	7	0	9	0	0	0	235
09:30	165	13	6	1	5	0	0	0	190
09:45	165	6	9	0	5	0	0	0	185
	778	36	26	2	31	0	0	0	873
10:00	164	6	3	0	7	0	0	0	180
10:15	174	14	3	1	1	0	0	0	193
10:30	170	9	1	1	6	0	0	0	187
10:45	139	5	2	1	7	0	0	0	154
	647	34	9	3	21	0	0	0	714
11:00	161	15	2	1	2	0	0	0	181
11:15	138	8	5	1	6	0	0	0	158
11:30	147	12	4	0	3	0	0	0	166
11:45	157	10	2	0	2	0	0	0	171
	603	45	13	2	13	0	0	0	676
Total	4532	281	99	13	212	0	0	0	5137
Percent	88.2%	5.5%	1.9%	0.3%	4.1%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
MLK Jr Blvd north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
12 PM	158	6	3	0	4	0	0	0	171
12:15	179	10	2	1	4	0	0	0	196
12:30	169	3	1	0	6	0	0	0	179
12:45	176	9	6	0	4	0	0	0	195
	682	28	12	1	18	0	0	0	741
13:00	159	10	1	0	4	0	0	0	174
13:15	168	9	4	0	3	0	0	0	184
13:30	155	13	6	0	3	0	0	0	177
13:45	158	9	4	1	4	0	0	0	176
	640	41	15	1	14	0	0	0	711
14:00	163	14	2	1	4	0	0	0	184
14:15	152	10	8	0	4	0	0	0	174
14:30	144	4	6	2	3	0	0	0	159
14:45	167	15	1	0	7	0	0	0	190
	626	43	17	3	18	0	0	0	707
15:00	181	18	2	0	6	0	0	0	207
15:15	158	10	4	1	2	0	0	0	175
15:30	169	14	2	0	10	0	0	0	195
15:45	175	11	4	1	5	0	0	0	196
	683	53	12	2	23	0	0	0	773
16:00	162	7	8	0	5	0	0	0	182
16:15	178	7	2	1	3	0	0	0	191
16:30	174	4	1	1	3	0	0	0	183
16:45	210	8	3	0	9	0	0	0	230
	724	26	14	2	20	0	0	0	786
17:00	200	4	5	0	12	0	0	0	221
17:15	218	7	2	0	8	0	0	0	235
17:30	244	5	5	0	11	0	0	0	265
17:45	235	7	4	0	7	0	0	0	253
	897	23	16	0	38	0	0	0	974
18:00	198	5	5	0	3	0	0	0	211
18:15	207	3	2	1	2	0	0	0	215
18:30	199	4	5	0	7	0	0	0	215
18:45	192	4	2	0	6	0	0	0	204
	796	16	14	1	18	0	0	0	845
19:00	161	3	1	0	4	0	0	0	169
19:15	130	1	1	0	1	0	0	0	133
19:30	134	1	2	0	1	0	0	0	138
19:45	144	1	0	0	2	0	0	0	147
	569	6	4	0	8	0	0	0	587
20:00	117	0	1	0	1	0	0	0	119
20:15	109	3	2	0	3	0	0	0	117
20:30	122	2	1	0	2	0	0	0	127
20:45	104	2	0	0	1	0	0	0	107
	452	7	4	0	7	0	0	0	470
21:00	112	3	0	0	2	0	0	0	117
21:15	102	0	0	0	0	0	0	0	102
21:30	89	0	1	0	1	0	0	0	91
21:45	50	2	1	0	0	0	0	0	53
	353	5	2	0	3	0	0	0	363
22:00	76	2	0	0	0	0	0	0	78
22:15	56	0	1	0	0	0	0	0	57
22:30	64	0	0	0	2	0	0	0	66
22:45	72	1	0	0	0	0	0	0	73
	268	3	1	0	2	0	0	0	274
23:00	40	0	0	0	0	0	0	0	40
23:15	38	0	0	0	0	0	0	0	38
23:30	35	0	0	0	0	0	0	0	35
23:45	28	0	0	0	0	0	0	0	28
	141	0	0	0	0	0	0	0	141
Total	6831	251	111	10	169	0	0	0	7372
Percent	92.7%	3.4%	1.5%	0.1%	2.3%	0.0%	0.0%	0.0%	
Grand Total	11363	532	210	23	381	0	0	0	12509
Percent	90.8%	4.3%	1.7%	0.2%	3.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
12 PM	15	0	0	0	1	0	0	0	16
13:00	18	1	0	0	2	0	0	0	21
14:00	17	1	0	0	0	0	0	0	18
15:00	20	1	0	0	0	0	0	0	21
16:00	20	0	0	0	2	0	0	0	22
17:00	41	1	0	0	2	0	0	0	44
18:00	26	0	0	0	6	0	0	0	32
19:00	23	0	0	0	1	0	0	0	24
20:00	28	0	0	0	0	0	0	0	28
21:00	29	0	0	0	1	0	0	0	30
22:00	27	0	0	0	0	0	0	0	27
23:00	26	0	0	0	0	0	0	0	26
Total	290	4	0	0	15	0	0	0	309
Percent	93.9%	1.3%	0.0%	0.0%	4.9%	0.0%	0.0%	0.0%	

Quality Counts LLC
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704.215.4616

Site Code:
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Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/25/12	19	0	0	0	0	0	0	0	19
01:00	5	0	0	0	0	0	0	0	5
02:00	8	0	0	0	0	0	0	0	8
03:00	2	0	0	0	0	0	0	0	2
04:00	2	0	0	0	0	0	0	0	2
05:00	4	0	0	0	0	0	0	0	4
06:00	1	0	0	0	1	0	0	0	2
07:00	10	0	0	0	0	0	0	0	10
08:00	10	0	0	0	2	0	0	0	12
09:00	8	0	1	0	0	0	0	0	9
10:00	9	0	0	0	1	0	0	0	10
11:00	13	1	0	0	0	0	0	0	14
12 PM	9	0	0	0	0	0	0	0	9
13:00	13	0	0	0	0	0	0	0	13
14:00	20	3	0	0	1	0	0	0	24
15:00	25	0	0	0	3	0	0	0	28
16:00	26	0	0	0	0	0	0	0	26
17:00	48	0	0	0	0	0	0	0	48
18:00	34	1	0	0	0	0	0	0	35
19:00	39	0	0	0	1	0	0	0	40
20:00	34	0	0	0	0	0	0	0	34
21:00	39	0	0	0	0	0	0	0	39
22:00	29	0	0	0	0	0	0	0	29
23:00	11	0	0	0	0	0	0	0	11
Total	418	5	1	0	9	0	0	0	433
Percent	96.5%	1.2%	0.2%	0.0%	2.1%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/26/12	16	0	0	0	0	0	0	0	16
01:00	12	0	0	0	1	0	0	0	13
02:00	11	0	0	0	0	0	0	0	11
03:00	7	0	0	0	0	0	0	0	7
04:00	2	0	0	0	0	0	0	0	2
05:00	4	0	0	0	0	0	0	0	4
06:00	1	0	0	0	0	0	0	0	1
07:00	4	1	0	0	1	0	0	0	6
08:00	13	0	0	0	0	0	0	0	13
09:00	10	0	0	0	1	0	0	0	11
10:00	8	0	0	0	0	0	0	0	8
11:00	23	0	0	0	0	0	0	0	23
12 PM	18	0	0	0	0	0	0	0	18
13:00	23	0	0	0	1	0	0	0	24
14:00	27	1	0	0	0	0	0	0	28
15:00	20	0	0	0	0	0	0	0	20
16:00	27	0	0	0	2	0	0	0	29
17:00	36	0	0	0	1	0	0	0	37
18:00	35	0	0	0	1	0	0	0	36
19:00	30	1	0	0	0	0	0	0	31
20:00	36	0	0	0	1	0	0	0	37
21:00	27	0	0	0	1	0	0	0	28
22:00	28	0	0	0	0	0	0	0	28
23:00	22	0	0	0	0	0	0	0	22
Total	440	3	0	0	10	0	0	0	453
Percent	97.1%	0.7%	0.0%	0.0%	2.2%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/27/12	18	0	0	0	0	0	0	0	18
01:00	7	0	0	0	0	0	0	0	7
02:00	8	0	0	0	0	0	0	0	8
03:00	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	1
05:00	5	0	0	0	0	0	0	0	5
06:00	1	0	0	0	1	0	0	0	2
07:00	12	0	0	0	2	0	0	0	14
08:00	11	0	0	0	0	0	0	0	11
09:00	6	1	0	0	1	0	0	0	8
10:00	17	2	0	0	0	0	0	0	19
11:00	14	1	0	0	1	0	0	0	16
12 PM	27	0	0	0	0	0	0	0	27
13:00	22	0	0	0	0	0	0	0	22
14:00	20	1	0	0	1	0	0	0	22
15:00	30	0	0	0	2	0	0	0	32
16:00	30	0	0	0	2	0	0	0	32
17:00	30	1	0	0	0	0	0	0	31
18:00	33	0	0	0	0	0	0	0	33
19:00	24	0	0	0	2	0	0	0	26
20:00	38	0	0	0	0	0	0	0	38
21:00	30	0	0	0	7	0	0	0	37
22:00	21	0	0	0	0	0	0	0	21
23:00	20	0	0	0	1	0	0	0	21
Total	425	6	0	0	20	0	0	0	451
Percent	94.2%	1.3%	0.0%	0.0%	4.4%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
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704.215.4616

Site Code:
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Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/28/12	16	0	0	0	0	0	0	0	16
01:00	12	0	0	0	0	0	0	0	12
02:00	14	0	0	0	0	0	0	0	14
03:00	4	0	0	0	0	0	0	0	4
04:00	1	0	0	0	0	0	0	0	1
05:00	1	0	0	0	0	0	0	0	1
06:00	5	0	0	0	0	0	0	0	5
07:00	3	0	0	0	1	0	0	0	4
08:00	4	1	0	0	2	0	0	0	7
09:00	9	1	0	0	1	0	0	0	11
10:00	13	0	0	0	1	0	0	0	14
11:00	12	0	0	0	0	0	0	0	12
12 PM	27	1	0	0	0	0	0	0	28
13:00	28	0	0	0	0	0	0	0	28
14:00	36	1	0	0	0	0	0	0	37
15:00	32	0	0	0	0	0	0	0	32
16:00	31	0	0	0	0	0	0	0	31
17:00	34	1	0	0	0	0	0	0	35
18:00	26	0	0	0	3	0	0	0	29
19:00	34	0	0	0	0	0	0	0	34
20:00	22	0	0	0	0	0	0	0	22
21:00	24	0	0	0	0	0	0	0	24
22:00	34	0	0	0	0	0	0	0	34
23:00	18	0	0	0	0	0	0	0	18
Total	440	5	0	0	8	0	0	0	453
Percent	97.1%	1.1%	0.0%	0.0%	1.8%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
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704.215.4616

Site Code:
Station ID:
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Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/29/12	18	0	0	0	0	0	0	0	18
01:00	11	0	0	0	1	0	0	0	12
02:00	14	0	0	0	0	0	0	0	14
03:00	7	0	0	0	0	0	0	0	7
04:00	2	0	0	0	0	0	0	0	2
05:00	1	0	0	0	0	0	0	0	1
06:00	3	0	0	0	0	0	0	0	3
07:00	4	0	0	0	0	0	0	0	4
08:00	7	0	0	0	0	0	0	0	7
09:00	6	0	0	0	0	0	0	0	6
10:00	14	0	0	0	4	0	0	0	18
11:00	10	0	0	0	0	0	0	0	10
12 PM	23	0	0	0	0	0	0	0	23
13:00	29	0	0	0	1	0	0	0	30
14:00	25	1	0	0	0	0	0	0	26
15:00	30	0	0	0	0	0	0	0	30
16:00	20	0	0	0	9	0	0	0	29
17:00	28	1	0	0	2	0	0	0	31
18:00	35	0	0	0	0	0	0	0	35
19:00	33	1	0	0	0	0	0	0	34
20:00	25	0	0	0	0	0	0	0	25
21:00	28	0	0	0	2	0	0	0	30
22:00	29	0	0	0	0	0	0	0	29
23:00	25	0	0	0	0	0	0	0	25
Total	427	3	0	0	19	0	0	0	449
Percent	95.1%	0.7%	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/30/12	10	0	0	0	0	0	0	0	10
01:00	13	0	0	0	1	0	0	0	14
02:00	3	0	0	0	0	0	0	0	3
03:00	3	0	0	0	0	0	0	0	3
04:00	1	0	0	0	0	0	0	0	1
05:00	2	0	0	0	0	0	0	0	2
06:00	2	0	0	0	0	0	0	0	2
07:00	4	1	0	0	0	0	0	0	5
08:00	16	0	0	0	0	0	0	0	16
09:00	9	1	0	0	1	0	0	0	11
10:00	9	0	0	0	1	0	0	0	10
11:00	18	0	1	0	0	0	0	0	19
12 PM	15	1	0	0	0	0	0	0	16
13:00	28	2	0	0	1	0	0	0	31
14:00	28	0	0	0	0	0	0	0	28
15:00	30	0	0	0	0	0	0	0	30
16:00	29	0	0	0	0	0	0	0	29
17:00	30	0	0	0	1	0	0	0	31
18:00	28	1	0	0	0	0	0	0	29
19:00	39	0	0	0	1	0	0	0	40
20:00	26	0	0	0	0	0	0	0	26
21:00	17	1	0	0	2	0	0	0	20
22:00	30	0	0	0	3	0	0	0	33
23:00	27	0	0	0	1	0	0	0	28
Total	417	7	1	0	12	0	0	0	437
Percent	95.4%	1.6%	0.2%	0.0%	2.7%	0.0%	0.0%	0.0%	

Quality Counts LLC
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704.215.4616

Site Code:
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Latitude: 0' 0.000 Undefined

EB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
5/1/12	12	0	0	0	6	0	0	0	18
01:00	6	0	0	0	0	0	0	0	6
02:00	7	0	0	0	0	0	0	0	7
03:00	1	0	0	0	0	0	0	0	1
04:00	3	0	0	0	0	0	0	0	3
05:00	3	0	0	0	0	0	0	0	3
06:00	2	0	0	0	0	0	0	0	2
07:00	6	0	0	0	0	0	0	0	6
08:00	8	0	1	0	0	0	0	0	9
09:00	11	0	0	0	1	0	0	0	12
10:00	11	0	0	0	1	0	0	0	12
11:00	11	0	0	0	0	0	0	0	11
12 PM	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*
Total	81	0	1	0	8	0	0	0	90
Percent	90.0%	0.0%	1.1%	0.0%	8.9%	0.0%	0.0%	0.0%	
Total	2938	33	3	0	101	0	0	0	3075
Percent	95.5%	1.1%	0.1%	0.0%	3.3%	0.0%	0.0%	0.0%	

Quality Counts LLC
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Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
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Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
12 PM	1	0	0	0	0	0	0	0	1
13:00	5	0	0	0	1	0	0	0	6
14:00	9	1	0	0	1	0	0	0	11
15:00	5	0	0	0	0	0	0	0	5
16:00	9	0	0	0	0	0	0	0	9
17:00	16	0	0	0	2	0	0	0	18
18:00	13	0	0	0	3	0	0	0	16
19:00	9	0	0	0	0	0	0	0	9
20:00	14	0	0	0	0	0	0	0	14
21:00	7	0	0	0	0	0	0	0	7
22:00	9	0	0	0	1	0	0	0	10
23:00	3	0	0	0	0	0	0	0	3
Total	100	1	0	0	8	0	0	0	109
Percent	91.7%	0.9%	0.0%	0.0%	7.3%	0.0%	0.0%	0.0%	

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WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/25/12	7	0	0	0	0	0	0	0	7
01:00	3	0	0	0	0	0	0	0	3
02:00	4	0	0	0	0	0	0	0	4
03:00	4	0	0	0	0	0	0	0	4
04:00	1	0	0	0	0	0	0	0	1
05:00	6	0	0	0	0	0	0	0	6
06:00	3	0	0	0	1	0	0	0	4
07:00	11	0	0	0	0	0	0	0	11
08:00	13	0	0	0	1	0	0	0	14
09:00	13	0	1	0	3	0	0	0	17
10:00	7	0	0	0	0	0	0	0	7
11:00	7	0	0	0	1	0	0	0	8
12 PM	6	0	0	0	1	0	0	0	7
13:00	8	0	0	0	1	0	0	0	9
14:00	7	0	0	0	0	0	0	0	7
15:00	11	0	0	0	1	0	0	0	12
16:00	9	1	0	0	1	0	0	0	11
17:00	17	0	0	0	0	0	0	0	17
18:00	16	0	0	0	0	0	0	0	16
19:00	14	0	0	0	0	0	0	0	14
20:00	10	0	0	0	1	0	0	0	11
21:00	12	0	0	0	0	0	0	0	12
22:00	12	0	0	0	0	0	0	0	12
23:00	5	0	0	0	0	0	0	0	5
Total	206	1	1	0	11	0	0	0	219
Percent	94.1%	0.5%	0.5%	0.0%	5.0%	0.0%	0.0%	0.0%	

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WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/26/12	8	0	0	0	0	0	0	0	8
01:00	2	0	0	0	0	0	0	0	2
02:00	6	0	0	0	0	0	0	0	6
03:00	4	0	0	0	0	0	0	0	4
04:00	2	0	0	0	0	0	0	0	2
05:00	2	0	0	0	1	0	0	0	3
06:00	5	0	0	0	0	0	0	0	5
07:00	15	0	0	0	1	0	0	0	16
08:00	11	0	0	0	1	0	0	0	12
09:00	9	0	0	0	0	0	0	0	9
10:00	8	0	0	0	0	0	0	0	8
11:00	9	0	2	0	2	0	0	0	13
12 PM	10	1	0	0	0	0	0	0	11
13:00	12	0	0	0	1	0	0	0	13
14:00	9	0	2	0	1	0	0	0	12
15:00	13	0	0	0	0	0	0	0	13
16:00	14	0	0	0	1	0	0	0	15
17:00	13	0	0	0	1	0	0	0	14
18:00	9	0	0	0	0	0	0	0	9
19:00	13	0	0	0	1	0	0	0	14
20:00	16	1	0	0	1	0	0	0	18
21:00	8	0	0	0	0	0	0	0	8
22:00	7	0	0	0	0	0	0	0	7
23:00	7	0	0	0	0	0	0	0	7
Total	212	2	4	0	11	0	0	0	229
Percent	92.6%	0.9%	1.7%	0.0%	4.8%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/27/12	4	0	0	0	0	0	0	0	4
01:00	3	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	0	0	0	1
04:00	1	0	0	0	0	0	0	0	1
05:00	4	0	0	0	0	0	0	0	4
06:00	5	0	0	0	1	0	0	0	6
07:00	12	0	0	0	0	0	0	0	12
08:00	10	0	0	0	2	0	0	0	12
09:00	6	0	0	0	0	0	0	0	6
10:00	8	0	0	0	1	0	0	0	9
11:00	10	0	0	0	1	0	0	0	11
12 PM	13	0	0	0	0	0	0	0	13
13:00	7	0	0	0	0	0	0	0	7
14:00	9	0	0	0	0	0	0	0	9
15:00	15	0	0	0	0	0	0	0	15
16:00	18	1	0	0	0	0	0	0	19
17:00	19	0	0	0	3	0	0	0	22
18:00	27	0	0	0	0	0	0	0	27
19:00	9	0	0	0	1	0	0	0	10
20:00	16	0	0	0	0	0	0	0	16
21:00	12	1	0	0	7	0	0	0	20
22:00	9	0	0	0	1	0	0	0	10
23:00	5	0	0	0	0	0	0	0	5
Total	223	2	0	0	17	0	0	0	242
Percent	92.1%	0.8%	0.0%	0.0%	7.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/28/12	4	0	0	0	0	0	0	0	4
01:00	4	0	0	0	0	0	0	0	4
02:00	3	0	0	0	0	0	0	0	3
03:00	4	0	0	0	0	0	0	0	4
04:00	1	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0
06:00	5	0	0	0	0	0	0	0	5
07:00	5	0	0	0	1	0	0	0	6
08:00	14	0	0	0	0	0	0	0	14
09:00	6	1	0	0	1	0	0	0	8
10:00	7	0	0	0	3	0	0	0	10
11:00	14	0	0	0	0	0	0	0	14
12 PM	27	0	0	0	0	0	0	0	27
13:00	17	0	0	0	1	0	0	0	18
14:00	17	0	0	0	0	0	0	0	17
15:00	14	0	0	0	0	0	0	0	14
16:00	13	1	0	0	0	0	0	0	14
17:00	19	0	0	0	0	0	0	0	19
18:00	13	0	0	0	1	0	0	0	14
19:00	12	0	0	0	1	0	0	0	13
20:00	16	0	0	0	0	0	0	0	16
21:00	6	0	0	0	0	0	0	0	6
22:00	10	0	0	0	0	0	0	0	10
23:00	7	0	0	0	0	0	0	0	7
Total	238	2	0	0	8	0	0	0	248
Percent	96.0%	0.8%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/29/12	3	0	0	0	0	0	0	0	3
01:00	1	0	0	0	0	0	0	0	1
02:00	6	0	0	0	0	0	0	0	6
03:00	2	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0
05:00	1	0	0	0	0	0	0	0	1
06:00	3	0	0	0	0	0	0	0	3
07:00	3	0	0	0	0	0	0	0	3
08:00	6	0	0	0	0	0	0	0	6
09:00	10	0	0	0	0	0	0	0	10
10:00	12	1	0	0	1	0	0	0	14
11:00	12	0	0	0	0	0	0	0	12
12 PM	12	0	0	0	0	0	0	0	12
13:00	12	0	0	0	1	0	0	0	13
14:00	13	0	0	0	0	0	0	0	13
15:00	17	0	0	0	3	0	0	0	20
16:00	9	1	0	0	3	0	0	0	13
17:00	12	0	0	0	1	0	0	0	13
18:00	16	0	0	0	1	0	0	0	17
19:00	7	0	0	0	1	0	0	0	8
20:00	9	0	0	0	0	0	0	0	9
21:00	12	0	0	0	0	0	0	0	12
22:00	10	0	0	0	1	0	0	0	11
23:00	8	0	0	0	0	0	0	0	8
Total	196	2	0	0	12	0	0	0	210
Percent	93.3%	1.0%	0.0%	0.0%	5.7%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/30/12	4	0	0	0	0	0	0	0	4
01:00	4	0	0	0	0	0	0	0	4
02:00	0	0	0	0	1	0	0	0	1
03:00	1	0	0	0	0	0	0	0	1
04:00	2	0	0	0	0	0	0	0	2
05:00	3	0	0	0	0	0	0	0	3
06:00	3	0	0	0	0	0	0	0	3
07:00	16	0	0	0	0	0	0	0	16
08:00	9	1	0	0	2	0	0	0	12
09:00	12	1	0	0	0	0	0	0	13
10:00	7	0	0	0	1	0	0	0	8
11:00	11	0	0	0	0	0	0	0	11
12 PM	4	0	0	0	2	0	0	0	6
13:00	8	0	0	0	0	0	0	0	8
14:00	11	0	0	0	0	0	0	0	11
15:00	12	0	0	0	0	0	0	0	12
16:00	11	0	0	0	0	0	0	0	11
17:00	12	0	0	0	1	0	0	0	13
18:00	10	0	0	0	0	0	0	0	10
19:00	11	0	0	0	0	0	0	0	11
20:00	10	0	0	0	1	0	0	0	11
21:00	8	0	0	0	1	0	0	0	9
22:00	5	0	0	0	0	0	0	0	5
23:00	6	0	0	0	0	0	0	0	6
Total	180	2	0	0	9	0	0	0	191
Percent	94.2%	1.0%	0.0%	0.0%	4.7%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Shadowood Dr east of MLK Blvd

Latitude: 0' 0.000 Undefined

WB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
5/1/12	4	0	0	0	3	0	0	0	7
01:00	4	0	0	0	2	0	0	0	6
02:00	3	0	0	0	0	0	0	0	3
03:00	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	1	0	0	0	3
05:00	1	0	0	0	0	0	0	0	1
06:00	1	0	0	0	0	0	0	0	1
07:00	10	0	0	0	0	0	0	0	10
08:00	12	0	0	0	0	0	0	0	12
09:00	7	0	0	0	0	0	0	0	7
10:00	9	0	0	0	1	0	0	0	10
11:00	6	0	0	0	0	0	0	0	6
12 PM	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*
Total	59	0	0	0	7	0	0	0	66
Percent	89.4%	0.0%	0.0%	0.0%	10.6%	0.0%	0.0%	0.0%	
Total	1414	12	5	0	83	0	0	0	1514
Percent	93.4%	0.8%	0.3%	0.0%	5.5%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
12 PM	13	1	0	0	0	0	0	0	14
13:00	5	3	0	0	0	0	0	0	8
14:00	10	0	0	0	0	0	0	0	10
15:00	19	0	1	0	0	0	0	0	20
16:00	12	0	0	0	0	0	0	0	12
17:00	22	0	0	0	0	0	0	0	22
18:00	18	0	0	0	0	0	0	0	18
19:00	10	0	0	0	0	0	0	0	10
20:00	10	0	0	0	0	0	0	0	10
21:00	11	0	0	0	0	0	0	0	11
22:00	6	0	0	0	0	0	0	0	6
23:00	1	0	0	0	0	0	0	0	1
Total	137	4	1	0	0	0	0	0	142
Percent	96.5%	2.8%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/25/12	2	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	2	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0
07:00	7	0	0	0	0	0	0	0	7
08:00	10	0	0	0	0	0	0	0	10
09:00	4	1	0	0	0	0	0	0	5
10:00	5	1	0	0	0	0	0	0	6
11:00	12	1	0	0	0	0	0	0	13
12 PM	12	0	0	0	0	0	0	0	12
13:00	9	2	0	0	0	0	0	0	11
14:00	16	2	0	0	2	0	0	0	20
15:00	11	0	0	0	3	0	0	0	14
16:00	20	1	0	0	0	0	0	0	21
17:00	15	1	0	0	0	0	0	0	16
18:00	18	0	0	0	0	0	0	0	18
19:00	10	0	0	0	0	0	0	0	10
20:00	10	0	0	0	0	0	0	0	10
21:00	6	0	0	0	0	0	0	0	6
22:00	5	0	0	0	0	0	0	0	5
23:00	3	0	0	0	0	0	0	0	3
Total	177	9	0	0	5	0	0	0	191
Percent	92.7%	4.7%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/26/12	0	0	0	0	0	0	0	0	0
01:00	1	0	0	0	0	0	0	0	1
02:00	1	0	0	0	0	0	0	0	1
03:00	1	0	0	0	0	0	0	0	1
04:00	1	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0
07:00	4	0	0	0	0	0	0	0	4
08:00	4	1	1	0	1	0	0	0	7
09:00	10	1	0	0	0	0	0	0	11
10:00	6	0	0	0	0	0	0	0	6
11:00	8	0	0	0	0	0	0	0	8
12 PM	6	0	0	0	0	0	0	0	6
13:00	15	2	0	0	0	0	0	0	17
14:00	17	1	0	0	0	0	0	0	18
15:00	12	0	0	0	0	0	0	0	12
16:00	17	0	0	0	0	0	0	0	17
17:00	17	0	0	0	0	0	0	0	17
18:00	19	0	0	0	0	0	0	0	19
19:00	14	0	0	0	0	0	0	0	14
20:00	13	0	0	0	0	0	0	0	13
21:00	6	0	0	0	0	0	0	0	6
22:00	3	0	0	0	0	0	0	0	3
23:00	1	0	0	0	0	0	0	0	1
Total	176	5	1	0	1	0	0	0	183
Percent	96.2%	2.7%	0.5%	0.0%	0.5%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/27/12	0	0	0	0	0	0	0	0	0
01:00	2	0	0	0	0	0	0	0	2
02:00	1	0	0	0	0	0	0	0	1
03:00	1	0	0	0	0	0	0	0	1
04:00	1	0	0	0	0	0	0	0	1
05:00	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0
07:00	2	0	0	0	0	0	0	0	2
08:00	8	1	0	0	0	0	0	0	9
09:00	5	0	0	0	0	0	0	0	5
10:00	10	0	0	0	1	0	0	0	11
11:00	12	0	0	0	0	0	0	0	12
12 PM	13	0	0	0	0	0	0	0	13
13:00	14	1	0	0	1	0	0	0	16
14:00	18	0	0	0	1	0	0	0	19
15:00	16	0	0	0	0	0	0	0	16
16:00	9	0	0	0	0	0	0	0	9
17:00	19	0	0	0	0	0	0	0	19
18:00	21	0	0	0	0	0	0	0	21
19:00	17	0	0	0	0	0	0	0	17
20:00	11	0	0	0	0	0	0	0	11
21:00	5	0	0	0	0	0	0	0	5
22:00	9	0	0	0	0	0	0	0	9
23:00	0	0	0	0	0	0	0	0	0
Total	194	2	0	0	3	0	0	0	199
Percent	97.5%	1.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
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704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/28/12	1	0	0	0	0	0	0	0	1
01:00	1	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0
08:00	2	0	0	0	0	0	0	0	2
09:00	5	1	0	0	0	0	0	0	6
10:00	6	0	0	0	0	0	0	0	6
11:00	8	0	0	0	0	0	0	0	8
12 PM	21	0	0	0	0	0	0	0	21
13:00	11	0	0	0	0	0	0	0	11
14:00	9	0	0	0	1	0	0	0	10
15:00	10	0	0	0	0	0	0	0	10
16:00	13	0	0	0	5	0	0	0	18
17:00	19	0	0	0	0	0	0	0	19
18:00	10	0	0	0	0	0	0	0	10
19:00	6	0	0	0	0	0	0	0	6
20:00	8	0	0	0	0	0	0	0	8
21:00	7	0	0	0	0	0	0	0	7
22:00	9	0	0	0	0	0	0	0	9
23:00	8	0	0	0	0	0	0	0	8
Total	156	1	0	0	6	0	0	0	163
Percent	95.7%	0.6%	0.0%	0.0%	3.7%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/29/12	1	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0
02:00	1	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	1
05:00	1	0	0	0	0	0	0	0	1
06:00	1	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0
08:00	4	0	0	0	0	0	0	0	4
09:00	2	0	0	0	0	0	0	0	2
10:00	5	0	0	0	0	0	0	0	5
11:00	5	0	0	0	0	0	0	0	5
12 PM	7	0	0	0	0	0	0	0	7
13:00	21	0	0	0	0	0	0	0	21
14:00	18	0	0	0	0	0	0	0	18
15:00	16	0	0	0	0	0	0	0	16
16:00	13	0	0	0	4	0	0	0	17
17:00	13	0	0	0	1	0	0	0	14
18:00	17	0	0	0	0	0	0	0	17
19:00	8	0	0	0	0	0	0	0	8
20:00	9	0	0	0	0	0	0	0	9
21:00	6	0	0	0	0	0	0	0	6
22:00	2	0	0	0	0	0	0	0	2
23:00	1	0	0	0	0	0	0	0	1
Total	152	0	0	0	5	0	0	0	157
Percent	96.8%	0.0%	0.0%	0.0%	3.2%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/30/12	1	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0
02:00	1	0	0	0	0	0	0	0	1
03:00	2	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0	0	1
07:00	3	0	0	0	0	0	0	0	3
08:00	11	0	0	0	0	0	0	0	11
09:00	9	0	0	0	0	0	0	0	9
10:00	8	1	0	0	0	0	0	0	9
11:00	5	1	0	0	0	0	0	0	6
12 PM	12	0	0	0	0	0	0	0	12
13:00	12	1	0	0	0	0	0	0	13
14:00	16	1	0	0	3	0	0	0	20
15:00	15	0	0	0	0	0	0	0	15
16:00	15	0	0	0	0	0	0	0	15
17:00	20	0	0	0	0	0	0	0	20
18:00	21	0	0	0	0	0	0	0	21
19:00	13	0	0	0	0	0	0	0	13
20:00	9	0	0	0	0	0	0	0	9
21:00	6	0	0	0	0	0	0	0	6
22:00	2	0	0	0	0	0	0	0	2
23:00	1	0	0	0	0	0	0	0	1
Total	183	4	0	0	3	0	0	0	190
Percent	96.3%	2.1%	0.0%	0.0%	1.6%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

NB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
5/1/12	1	0	0	0	2	0	0	0	3
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	2	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0	0	1
07:00	3	0	0	0	0	0	0	0	3
08:00	10	0	0	0	0	0	0	0	10
09:00	3	1	0	0	0	0	0	0	4
10:00	10	0	0	0	0	0	0	0	10
11:00	9	1	1	0	0	0	0	0	11
12 PM	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*
Total	39	2	1	0	2	0	0	0	44
Percent	88.6%	4.5%	2.3%	0.0%	4.5%	0.0%	0.0%	0.0%	
Total	1214	27	3	0	25	0	0	0	1269
Percent	95.7%	2.1%	0.2%	0.0%	2.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/24/12	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*
11:00	*	*	*	*	*	*	*	*	*
12 PM	7	2	0	0	0	0	0	0	9
13:00	12	1	0	0	0	0	0	0	13
14:00	6	1	0	0	0	0	0	0	7
15:00	7	0	0	0	0	0	0	0	7
16:00	13	1	1	0	0	0	0	0	15
17:00	12	0	0	0	0	0	0	0	12
18:00	15	0	0	0	0	0	0	0	15
19:00	7	0	0	0	0	0	0	0	7
20:00	5	0	0	0	0	0	0	0	5
21:00	4	0	0	0	0	0	0	0	4
22:00	2	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0
Total	90	5	1	0	0	0	0	0	96
Percent	93.8%	5.2%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/25/12	2	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	3	0	0	0	0	0	0	0	3
05:00	3	0	0	0	0	0	0	0	3
06:00	1	0	0	0	0	0	0	0	1
07:00	23	0	0	0	0	0	0	0	23
08:00	20	0	0	0	0	0	0	0	20
09:00	15	1	0	0	0	0	0	0	16
10:00	16	1	0	0	0	0	0	0	17
11:00	10	0	0	0	0	0	0	0	10
12 PM	9	1	0	0	0	0	0	0	10
13:00	9	2	0	0	0	0	0	0	11
14:00	11	1	0	0	0	0	0	0	12
15:00	8	1	0	0	2	0	0	0	11
16:00	13	0	0	0	0	0	0	0	13
17:00	13	1	0	0	0	0	0	0	14
18:00	9	1	0	0	0	0	0	0	10
19:00	10	0	0	0	0	0	0	0	10
20:00	1	1	0	0	0	0	0	0	2
21:00	2	0	0	0	0	0	0	0	2
22:00	2	0	0	0	0	0	0	0	2
23:00	1	0	0	0	0	0	0	0	1
Total	181	10	0	0	2	0	0	0	193
Percent	93.8%	5.2%	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/26/12	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	2	0	0	0	0	0	0	0	2
04:00	1	0	0	0	0	0	0	0	1
05:00	1	0	0	0	0	0	0	0	1
06:00	2	0	0	0	0	0	0	0	2
07:00	13	0	0	0	0	0	0	0	13
08:00	20	1	0	0	0	0	0	0	21
09:00	14	0	1	0	0	0	0	0	15
10:00	11	1	0	0	0	0	0	0	12
11:00	11	0	0	0	0	0	0	0	11
12 PM	7	0	0	0	0	0	0	0	7
13:00	16	4	0	0	0	0	0	0	20
14:00	10	1	0	0	0	0	0	0	11
15:00	11	0	0	0	0	0	0	0	11
16:00	10	0	0	0	0	0	0	0	10
17:00	14	0	0	0	0	0	0	0	14
18:00	13	0	0	0	0	0	0	0	13
19:00	7	0	0	0	0	0	0	0	7
20:00	2	0	0	0	0	0	0	0	2
21:00	3	0	0	0	0	0	0	0	3
22:00	5	0	0	0	0	0	0	0	5
23:00	0	0	0	0	0	0	0	0	0
Total	173	7	1	0	0	0	0	0	181
Percent	95.6%	3.9%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/27/12	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	1	0	0	0	0	0	0	0	1
04:00	2	0	0	0	0	0	0	0	2
05:00	1	0	0	0	0	0	0	0	1
06:00	2	0	0	0	0	0	0	0	2
07:00	12	0	0	0	0	0	0	0	12
08:00	17	0	0	0	0	0	0	0	17
09:00	18	0	0	0	0	0	0	0	18
10:00	13	0	0	0	1	0	0	0	14
11:00	16	0	0	0	0	0	0	0	16
12 PM	9	1	0	0	0	0	0	0	10
13:00	11	0	0	0	2	0	0	0	13
14:00	14	1	0	0	1	0	0	0	16
15:00	10	0	0	0	0	0	0	0	10
16:00	14	0	0	0	0	0	0	0	14
17:00	19	0	0	0	0	0	0	0	19
18:00	11	0	0	0	0	0	0	0	11
19:00	6	0	0	0	0	0	0	0	6
20:00	2	0	0	0	0	0	0	0	2
21:00	3	0	0	0	0	0	0	0	3
22:00	2	0	0	0	0	0	0	0	2
23:00	3	0	0	0	0	0	0	0	3
Total	186	2	0	0	4	0	0	0	192
Percent	96.9%	1.0%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/28/12	3	0	0	0	0	0	0	0	3
01:00	1	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0
04:00	2	0	0	0	0	0	0	0	2
05:00	0	0	0	0	0	0	0	0	0
06:00	3	0	0	0	0	0	0	0	3
07:00	5	0	0	0	0	0	0	0	5
08:00	9	0	0	0	0	0	0	0	9
09:00	8	1	0	0	0	0	0	0	9
10:00	13	0	0	0	0	0	0	0	13
11:00	19	0	0	0	0	0	0	0	19
12 PM	11	0	0	0	0	0	0	0	11
13:00	14	0	0	0	0	0	0	0	14
14:00	12	0	0	0	0	0	0	0	12
15:00	6	0	0	0	0	0	0	0	6
16:00	12	0	0	0	0	0	0	0	12
17:00	15	0	0	0	0	0	0	0	15
18:00	7	0	0	0	0	0	0	0	7
19:00	12	0	0	0	0	0	0	0	12
20:00	4	0	0	0	0	0	0	0	4
21:00	2	0	0	0	0	0	0	0	2
22:00	2	0	0	0	0	0	0	0	2
23:00	1	0	0	0	0	0	0	0	1
Total	161	1	0	0	0	0	0	0	162
Percent	99.4%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/29/12	1	0	0	0	0	0	0	0	1
01:00	0	0	0	0	0	0	0	0	0
02:00	1	0	0	0	0	0	0	0	1
03:00	0	0	0	0	0	0	0	0	0
04:00	1	0	0	0	0	0	0	0	1
05:00	1	0	0	0	0	0	0	0	1
06:00	3	0	0	0	0	0	0	0	3
07:00	1	0	0	0	0	0	0	0	1
08:00	7	0	0	0	0	0	0	0	7
09:00	6	0	0	0	0	0	0	0	6
10:00	8	0	0	0	0	0	0	0	8
11:00	7	0	0	0	0	0	0	0	7
12 PM	10	0	0	0	0	0	0	0	10
13:00	18	0	0	0	0	0	0	0	18
14:00	13	0	0	0	0	0	0	0	13
15:00	20	0	0	0	0	0	0	0	20
16:00	17	0	0	0	3	0	0	0	20
17:00	17	0	0	0	1	0	0	0	18
18:00	6	0	0	0	0	0	0	0	6
19:00	4	0	0	0	0	0	0	0	4
20:00	5	0	0	0	0	0	0	0	5
21:00	1	0	0	0	0	0	0	0	1
22:00	2	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0
Total	149	0	0	0	4	0	0	0	153
Percent	97.4%	0.0%	0.0%	0.0%	2.6%	0.0%	0.0%	0.0%	

Quality Counts LLC
14016 Labeau Ave
Charlotte, NC 28277
704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
4/30/12	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	3	0	0	0	0	0	0	0	3
04:00	0	0	0	0	0	0	0	0	0
05:00	2	0	0	0	0	0	0	0	2
06:00	2	0	0	0	0	0	0	0	2
07:00	17	0	0	0	0	0	0	0	17
08:00	22	0	0	0	0	0	0	0	22
09:00	24	0	0	0	0	0	0	0	24
10:00	10	1	0	0	0	0	0	0	11
11:00	11	2	0	0	0	0	0	0	13
12 PM	7	0	0	0	0	0	0	0	7
13:00	11	0	0	0	0	0	0	0	11
14:00	14	2	0	0	0	0	0	0	16
15:00	9	0	0	0	0	0	0	0	9
16:00	12	0	0	0	0	0	0	0	12
17:00	7	0	0	0	0	0	0	0	7
18:00	8	0	0	0	0	0	0	0	8
19:00	6	0	0	0	0	0	0	0	6
20:00	6	0	0	0	0	0	0	0	6
21:00	9	0	0	0	0	0	0	0	9
22:00	2	0	0	0	0	0	0	0	2
23:00	0	0	0	0	0	0	0	0	0
Total	182	5	0	0	0	0	0	0	187
Percent	97.3%	2.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	

Quality Counts LLC
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704.215.4616

Site Code:
Station ID:
Somerset Dr north of Estes Dr

Latitude: 0' 0.000 Undefined

SB

Start Time	Passenger Vehicles	Duals	TTST	Twins	Not Classified	-	-	-	Total
5/1/12	1	0	0	0	1	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0
03:00	2	0	0	0	0	0	0	0	2
04:00	1	0	0	0	0	0	0	0	1
05:00	2	0	0	0	0	0	0	0	2
06:00	3	0	0	0	0	0	0	0	3
07:00	15	0	0	0	0	0	0	0	15
08:00	20	0	0	0	0	0	0	0	20
09:00	15	0	0	0	0	0	0	0	15
10:00	11	1	0	0	0	0	0	0	12
11:00	14	1	0	0	0	0	0	0	15
12 PM	*	*	*	*	*	*	*	*	*
13:00	*	*	*	*	*	*	*	*	*
14:00	*	*	*	*	*	*	*	*	*
15:00	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*
Total	84	2	0	0	1	0	0	0	87
Percent	96.6%	2.3%	0.0%	0.0%	1.1%	0.0%	0.0%	0.0%	
Total	1206	32	2	0	11	0	0	0	1251
Percent	96.4%	2.6%	0.2%	0.0%	0.9%	0.0%	0.0%	0.0%	

Appendix B: Traffic Reduction Memo

To: Kumar Neppalli, Town of Chapel Hill

From: RS&H Team

Subject: **Carolina Flats Development Traffic Impact Study - Trip Reduction Factor**

1.0 Introduction and Purpose

RS&H has been contracted to perform the Traffic Impact Analysis for the proposed Carolina Flats Development in Town of Chapel Hill. Carolina Flats Development is proposed to be located in the northeast quadrant of the intersection at Martin Luther King Jr, Boulevard and Estes Drive. This project would be developed on vacant land to add a 145 room hotel facility and 189 units of purpose-built student housing.

The number of trips to be generated by the student housing component of this development using ITE Trip Generation Manual, 8th Edition, is 95 and 122 in the AM and PM Peak Hours respectively. Overall, 1,270 daily trips would be generated. It is expected that a portion of this new traffic would use transit over auto to commute to and from the University. As a result, number of trips to be generated by this development would be reduced when compared with the information obtained from the ITE Trip Generation Manual. This memo elaborates the methodology adopted and conclusions in the calculation of trip reduction factors for Carolina Flats Development. The trip reduction factors recommended in this memo will be applied to the trips generated by the student housing component of this development.

2.0 Methodology

University of North Carolina, Chapel Hill is located about two miles south of the proposed project location and this housing development is targeted towards providing residential facilities for students of the university. With parking limited in the university, it is assumed that students would prefer to travel to and from the university using the well connected bus service in the project area. In order to calculate the reduction in traffic generated by the proposed development, the following stepwise procedure was adopted:

Step 1: Traffic counts at the driveways of other student housing developments namely Shadowood, Chapel Ridge and Chapel View Apartments were performed. Figure 1 shows the locations of the proposed Carolina Flats Developments and the other three apartments considered for the calculation of trip reduction factor.

- Step 2: The daily and peak hour totals from the traffic counts at the driveways of these developments were compared with information from the ITE Trip Generation Manual. 8th Edition.

- Step 3: After careful comparison, a unique trip reduction factor for Daily, AM and PM Peak Hours are calculated for the Carolina Flats Development.

3.0 Trip Reduction Factor Calculation and Results

Table 1 shows the locations where mainline counts were performed to capture the traffic generated by the Shadowood, Chapel Ridge and Chapel View Apartments.

Table 1: Mainline Traffic Count Locations

Student Housing Development	Mainline Traffic Count Location
Shadowood Apartments	Shadowood Drive east of Martin Luther King Jr, Boulevard
	Shadowood Drive south of Piney Mountain Road
Chapel Ridge and Chapel View Apartments	Northfield Drive west of Martin Luther King Jr, Boulevard
	Brookstone Drive south of Homestead Road
	Homestead Park Drive south of Homestead Road

The dwelling units and the occupancy rates were obtained by contacting the leasing offices of the respective apartment communities. Table 2 shows the number of dwelling units and the occupancy rates in the three student housing developments.

Table 2: Dwelling Units and Occupancy Rates

Development Information			
	Total Units	Occupancy Rate	Occupied Units
Shadowood Apartments	336	100%	336
Chapel View Apartments	224	100%	224
Chapel Ridge Apartments	180	97%	175

ITE trip generation Manual, 8th Edition was used to perform trip generation for these developments. Table 3 shows the percentage difference between the field traffic counts and the ITE trip generation volumes for Daily, AM Peak Hour and PM Peak Hour conditions respectively.

Table 3: Traffic Counts vs. ITE Trip Generation

Description	Daily Volumes*	Daily % Difference	AM Peak Hour Volumes*	AM % Difference	PM Peak Hour Volumes*	PM % Difference
Shadowood Apartments						
Inbound Volume	762 (1,080)	29%	16(34)	52%	59 (132)	55%
Outbound Volume	758(1,080)	30%	38 (135)	72%	59 (71)	17%
Total Daily Volume	1,520 (2,160)	30%	54 (168)	68%	118 (202)	42%
Chapel View/ Chapel Ridge Apartments						
Inbound Volumes	1,535 (1,331)	-15%	29 (41)	28%	122 (165)	26%
Outbound Volume	1,580 (1,331)	-19%	81 (162)	50%	137 (85)	-61%
Total Daily Volume	3,116 (2,663)	-17%	110 (203)	46%	259 (251)	-3%

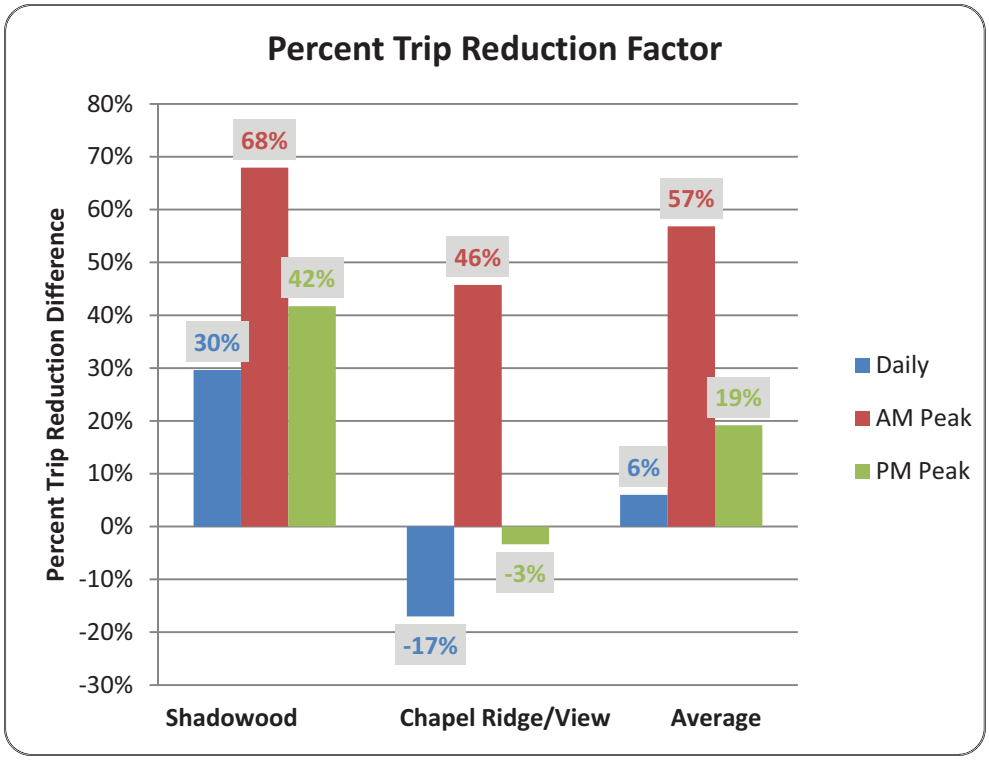
* XXX (XXX) - Volume from Traffic Count (Volume from ITE Trip Generation Manual, 8th Edition)

4.0 Conclusion

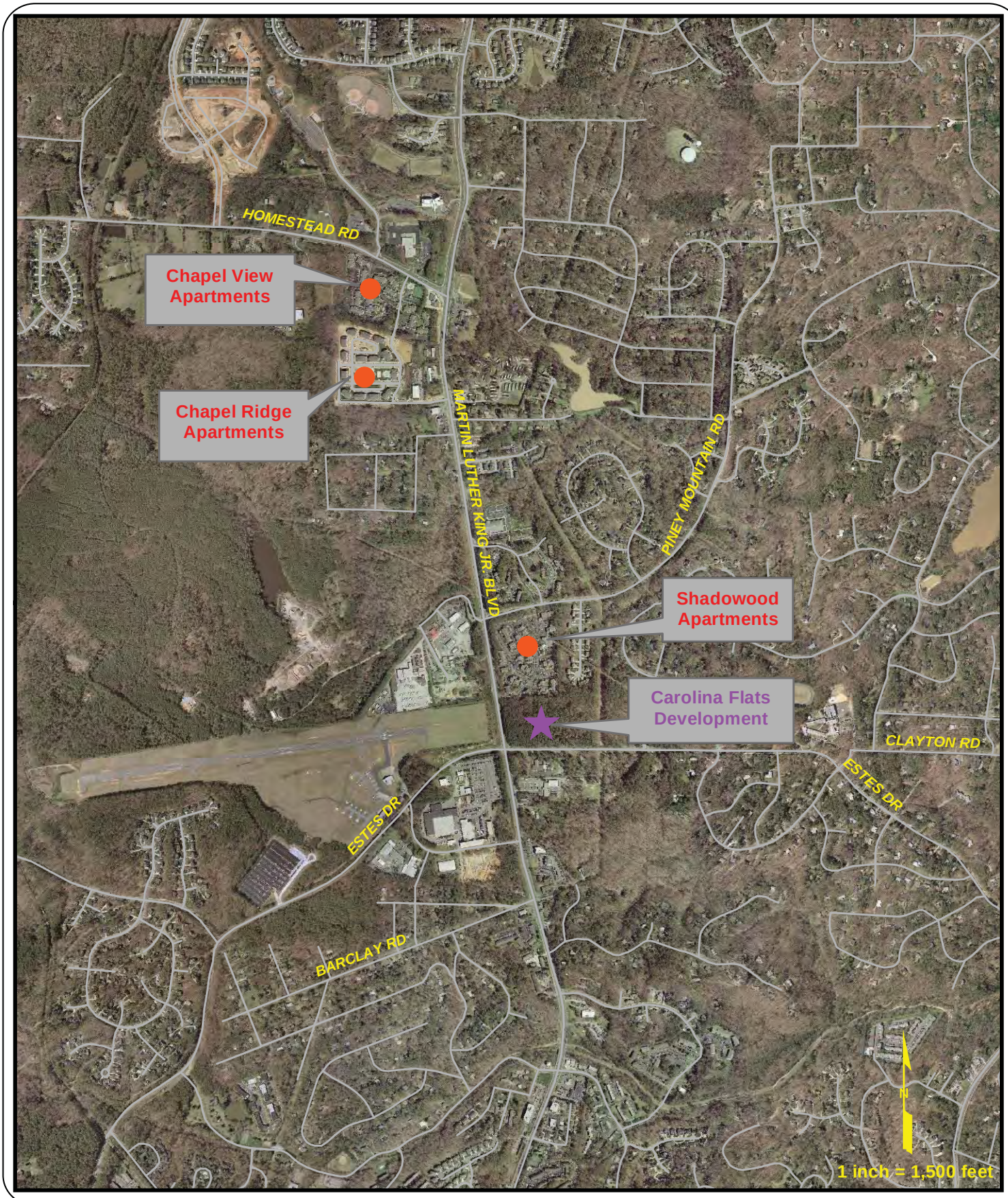
The following are the conclusion from the analysis above:

- Based on the three developments studied in the area, the Daily, AM and PM Peak Hour Trip Reduction Factor is approximately 6%, 57% and 19%
- The following are the recommended trip reductions factors for the Carolina Flats Development
    - Daily Trip Reduction – 10%
    - AM Peak Hour Trip Reduction Factor – 50%
    - PM Peak Hour Trip Reduction Factor – 20%

Chart 1: Average Trip Reduction Factors



- Using these trip reduction factors, the Daily, AM and PM peak hour trips from the proposed student housing development would be 1,143, 48 and 110 respectively.
- The majority of the classes offered by the university are in the morning. Therefore it is expected that a higher percentage of the students living in these housing units would use the transit facilities in the morning than in the evening. This justifies the higher trip reduction rate in the AM Peak Hour when compared to the PM Peak Hour.
- It should be noted that the Carolina Flats development also includes a hotel for which no trip reduction factor will be used.



TOWN OF CHAPEL HILL	**CAROLINA FLATS DEVELOPMENT**	RS&H IMPROVING YOUR WORLD RS&H Architects-Engineers-Planners, Inc.	PROJECT LOCATION MAP
	Traffic Impact Analysis		Figure 1

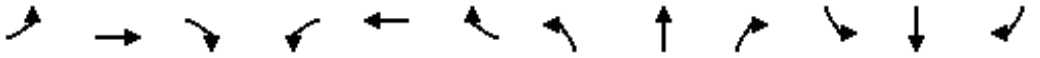
Appendix C: Intersection Capacity Analysis Worksheets (Synchro)

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	268	294	79	183	144	199	8	6	9	26	2	144
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.96	0.98								0.98	0.96	
Frt		0.968			0.913			0.948			0.852	
Flt Protected	0.950			0.950				0.983		0.950		
Satd. Flow (prot)	1770	1770	0	1761	1692	0	0	1736	0	1770	1529	0
Flt Permitted	0.536			0.519				0.845		0.740		
Satd. Flow (perm)	961	1770	0	962	1692	0	0	1492	0	1355	1529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		35			180			10			160	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	31		31							8		8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	298	327	88	203	160	221	9	7	10	29	2	160
Shared Lane Traffic (%)												
Lane Group Flow (vph)	298	415	0	203	381	0	0	26	0	29	162	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

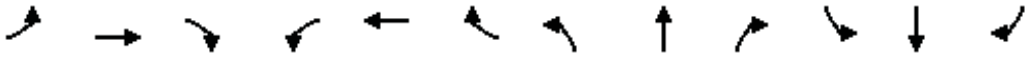
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	51.5	51.5		51.5	51.5			8.0		7.5	7.5	
Actuated g/C Ratio	0.74	0.74		0.74	0.74			0.11		0.11	0.11	
v/c Ratio	0.42	0.32		0.29	0.29			0.14		0.20	0.53	
Control Delay	5.9	3.7		4.5	2.3			22.5		31.5	12.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	5.9	3.7		4.5	2.3			22.5		31.5	12.5	
LOS	A	A		A	A			C		C	B	
Approach Delay		4.6			3.0			22.5			15.4	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.53			
Intersection Signal Delay: 5.7		Intersection LOS: A	
Intersection Capacity Utilization 59.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	2	1	10	157	0	42	29	722	83	19	1253	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				0.99	0.98					1.00	1.00	
Frt		0.861			0.850			0.985			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1309	0	3300	1494	0	1778	3504	0	1752	3501	0
Flt Permitted	0.950			0.950			0.181			0.296		
Satd. Flow (perm)	1444	1309	0	3266	1494	0	339	3504	0	546	3501	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)				3		3				1		1
Confl. Bikes (#/hr)												1
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	3	1	13	173	0	46	33	820	94	20	1333	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	3	14	0	173	46	0	33	914	0	20	1339	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	19.0	19.0	0.0	31.0	31.0	0.0	130.0	130.0	0.0	130.0	130.0	0.0
Total Split (%)	10.6%	10.6%	0.0%	17.2%	17.2%	0.0%	72.2%	72.2%	0.0%	72.2%	72.2%	0.0%
Maximum Green (s)	13.4	13.4		25.1	25.1		124.2	124.2		124.5	124.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	7.8	7.8		13.8	13.8		148.4	148.4		148.4	148.4	
Actuated g/C Ratio	0.04	0.04		0.08	0.08		0.82	0.82		0.82	0.82	
v/c Ratio	0.05	0.25		0.68	0.40		0.12	0.32		0.04	0.46	
Control Delay	84.0	93.7		94.5	88.5		6.0	5.8		4.5	5.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	84.0	93.7		94.5	88.5		6.0	5.8		4.5	5.8	
LOS	F	F		F	F		A	A		A	A	
Approach Delay		92.0			93.3			5.8			5.8	
Approach LOS		F			F			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 13.9		Intersection LOS: B	
Intersection Capacity Utilization 54.5%		ICU Level of Service A	
Analysis Period (min) 15			

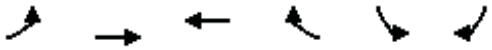
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	268	294	79	183	144	199	33	367	85	268	970	182
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.98						
Frt			0.850			0.850		0.972			0.976	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3423	0	1787	3489	0
Flt Permitted	0.340			0.183			0.140			0.408		
Satd. Flow (perm)	633	1863	1563	338	1853	1550	259	3423	0	768	3489	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			1609			1052			596	
Travel Time (s)		17.2			31.3			17.9			10.2	
Confl. Peds. (#/hr)	1		1	5		5						
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	288	316	85	203	160	221	35	386	89	298	1078	202
Shared Lane Traffic (%)												
Lane Group Flow (vph)	288	316	85	203	160	221	35	475	0	298	1280	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	31.0	49.0	15.0	22.0	40.0	38.0	15.0	71.0	0.0	38.0	94.0	0.0
Total Split (%)	17.2%	27.2%	8.3%	12.2%	22.2%	21.1%	8.3%	39.4%	0.0%	21.1%	52.2%	0.0%
Maximum Green (s)	26.1	43.5	9.2	16.6	34.5	32.2	9.2	65.0		32.2	88.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	56.0	34.6	42.4	43.1	26.7	44.7	98.7	90.9		113.6	101.2	
Actuated g/C Ratio	0.31	0.19	0.24	0.24	0.15	0.25	0.55	0.50		0.63	0.56	
v/c Ratio	0.82	0.88	0.23	0.96	0.58	0.57	0.17	0.27		0.51	0.65	
Control Delay	69.4	95.5	51.6	101.8	79.3	59.5	17.5	28.1		24.0	36.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	69.4	95.5	51.6	101.8	79.3	59.5	17.5	28.1		24.0	36.4	
LOS	E	F	D	F	E	E	B	C		C	D	
Approach Delay		79.2			79.6			27.4			34.1	
Approach LOS		E			E			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 176 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 50.2		Intersection LOS: D	
Intersection Capacity Utilization 80.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	6	653	513	11	10	12
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	726	570	12	11	13
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	583				1316	577
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	583				1316	577
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				94	97
cM capacity (veh/h)	990				173	516

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	732	582	24
Volume Left	7	0	11
Volume Right	0	12	13
cSH	990	1700	271
Volume to Capacity	0.01	0.34	0.09
Queue Length 95th (ft)	1	0	7
Control Delay (s)	0.2	0.0	19.6
Lane LOS	A		C
Approach Delay (s)	0.2	0.0	19.6
Approach LOS			C

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	49.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	12	822	12	0	1420
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	13	913	13	0	1578
Pedestrians						4
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.91	0.94			0.94	
vC, conflicting volume	1709	467			927	
vC1, stage 1 conf vol	920					
vC2, stage 2 conf vol	789					
vCu, unblocked vol	1260	293			784	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	331	656			777	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	609	318	789	789
Volume Left	0	0	0	0	0
Volume Right	13	0	13	0	0
cSH	656	1700	1700	1700	1700
Volume to Capacity	0.02	0.36	0.19	0.46	0.46
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.6	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.6	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	50.5%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	70	448	1	4	501	26	4	1	5	12	2	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99		1.00	0.98	
Frt					0.993			0.926			0.853	
Flt Protected	0.950			0.950				0.982		0.950		
Satd. Flow (prot)	1770	1863	0	1761	1838	0	0	1671	0	1770	1554	0
Flt Permitted	0.423			0.473				0.848		0.750		
Satd. Flow (perm)	786	1863	0	875	1838	0	0	1441	0	1394	1554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					7			6			100	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	3		3	2		2	2		2	1		1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	78	498	1	4	557	29	4	1	6	13	2	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	78	499	0	4	586	0	0	11	0	13	102	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	55.4	55.4		55.4	55.4			7.6		7.2	7.2	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.11		0.10	0.10	
v/c Ratio	0.13	0.34		0.01	0.40			0.07		0.09	0.41	
Control Delay	3.3	3.7		2.5	4.1			22.0		29.8	12.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	3.3	3.7		2.5	4.1			22.0		29.8	12.8	
LOS	A	A		A	A			C		C	B	
Approach Delay		3.6			4.1			22.0			14.7	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 50			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.41			
Intersection Signal Delay: 5.0		Intersection LOS: A	
Intersection Capacity Utilization 56.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road

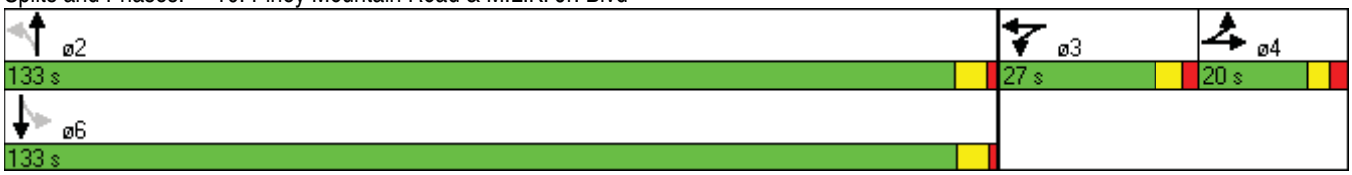
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	0	13	70	0	37	18	683	65	30	686	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt		0.850			0.850			0.987			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1292	0	3300	1522	0	1778	3511	0	1752	3501	0
Flt Permitted	0.950			0.950			0.364			0.322		
Satd. Flow (perm)	1444	1292	0	3300	1522	0	681	3511	0	594	3501	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	5	0	16	77	0	41	20	776	74	32	730	5
Shared Lane Traffic (%)												
Lane Group Flow (vph)	5	16	0	77	41	0	20	850	0	32	735	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	20.0	20.0	0.0	27.0	27.0	0.0	133.0	133.0	0.0	133.0	133.0	0.0
Total Split (%)	11.1%	11.1%	0.0%	15.0%	15.0%	0.0%	73.9%	73.9%	0.0%	73.9%	73.9%	0.0%
Maximum Green (s)	14.4	14.4		21.1	21.1		127.2	127.2		127.5	127.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	8.0	8.0		9.9	9.9		152.2	152.2		152.2	152.2	
Actuated g/C Ratio	0.04	0.04		0.06	0.06		0.85	0.85		0.85	0.85	
v/c Ratio	0.08	0.28		0.42	0.49		0.03	0.29		0.06	0.25	
Control Delay	84.8	95.2		88.9	101.2		4.6	5.6		3.7	3.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	84.8	95.2		88.9	101.2		4.6	5.6		3.7	3.5	
LOS	F	F		F	F		A	A		A	A	
Approach Delay		92.7			93.2			5.6			3.5	
Approach LOS		F			F			A			A	

Intersection Summary

Area Type: Other
Cycle Length: 180
Actuated Cycle Length: 180
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green
Natural Cycle: 55
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.49
Intersection Signal Delay: 11.5 Intersection LOS: B
Intersection Capacity Utilization 41.9% ICU Level of Service A
Analysis Period (min) 15

Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

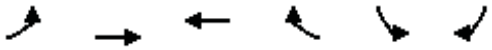


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	143	187	18	161	215	222	35	417	128	194	408	167
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.98	1.00	0.99				
Frt			0.850			0.850		0.965			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3380	0	1787	3417	0
Flt Permitted	0.213			0.226			0.391			0.377		
Satd. Flow (perm)	397	1863	1583	417	1853	1549	724	3380	0	709	3417	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			1609			1052			596	
Travel Time (s)		17.2			31.3			17.9			10.2	
Confl. Peds. (#/hr)				6		6	1		1			
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	154	201	19	179	239	247	37	439	135	216	453	186
Shared Lane Traffic (%)												
Lane Group Flow (vph)	154	201	19	179	239	247	37	574	0	216	639	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	21.0	43.0	16.0	24.0	46.0	35.0	16.0	78.0	0.0	35.0	97.0	0.0
Total Split (%)	11.7%	23.9%	8.9%	13.3%	25.6%	19.4%	8.9%	43.3%	0.0%	19.4%	53.9%	0.0%
Maximum Green (s)	16.1	37.5	10.2	18.6	40.5	29.2	10.2	72.0		29.2	91.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	38.9	24.4	37.2	44.6	27.3	39.7	113.6	105.8		122.6	113.0	
Actuated g/C Ratio	0.22	0.14	0.21	0.25	0.15	0.22	0.63	0.59		0.68	0.63	
v/c Ratio	0.79	0.79	0.06	0.77	0.85	0.72	0.07	0.29		0.39	0.30	
Control Delay	79.7	96.8	54.7	75.2	99.9	71.4	11.7	20.4		13.0	15.1	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	79.7	96.8	54.7	75.2	99.9	71.4	11.7	20.4		13.0	15.1	
LOS	E	F	D	E	F	E	B	C		B	B	
Approach Delay		87.6			82.7			19.9			14.5	
Approach LOS		F			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 2 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.85			
Intersection Signal Delay: 44.8		Intersection LOS: D	
Intersection Capacity Utilization 70.4%		ICU Level of Service C	
Analysis Period (min) 15			

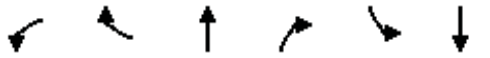
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	8	509	600	6	3	4
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	566	667	7	3	4
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	674				1254	671
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	674				1254	671
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	99
cM capacity (veh/h)	916				188	456

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	574	673	8
Volume Left	9	0	3
Volume Right	0	7	4
cSH	916	1700	283
Volume to Capacity	0.01	0.40	0.03
Queue Length 95th (ft)	1	0	2
Control Delay (s)	0.3	0.0	18.1
Lane LOS	A		C
Approach Delay (s)	0.3	0.0	18.1
Approach LOS			C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	43.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	1	765	17	0	769
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1	850	19	0	854
Pedestrians						11
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.95	0.94			0.94	
vC, conflicting volume	1287	445			869	
vC1, stage 1 conf vol	859					
vC2, stage 2 conf vol	427					
vCu, unblocked vol	1033	271			723	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	385	674			819	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	1	567	302	427	427
Volume Left	0	0	0	0	0
Volume Right	1	0	19	0	0
cSH	674	1700	1700	1700	1700
Volume to Capacity	0.00	0.33	0.18	0.25	0.25
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	10.3	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.3	0.0		0.0	
Approach LOS	B				

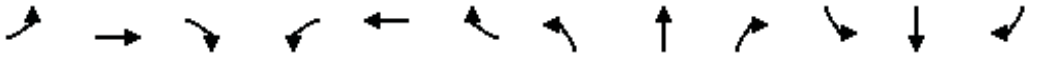
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	34.8%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	114	562	5	8	741	37	8	4	2	28	2	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00			1.00		0.99	0.97	
Frt		0.999			0.993			0.982			0.853	
Flt Protected	0.950			0.950				0.971		0.950		
Satd. Flow (prot)	1770	1860	0	1761	1838	0	0	1771	0	1770	1538	0
Flt Permitted	0.279			0.398				0.758		0.748		
Satd. Flow (perm)	520	1860	0	736	1838	0	0	1381	0	1375	1538	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			6			2			100	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	5		5	3		3	1		1	6		6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	127	624	6	9	823	41	9	4	2	31	2	100
Shared Lane Traffic (%)												
Lane Group Flow (vph)	127	630	0	9	864	0	0	15	0	31	102	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

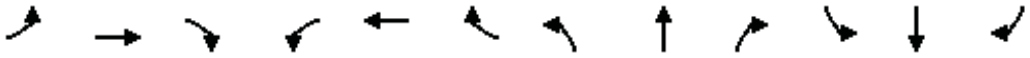
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	55.4	55.4		55.4	55.4			7.6		7.2	7.2	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.11		0.10	0.10	
v/c Ratio	0.31	0.43		0.02	0.59			0.10		0.22	0.41	
Control Delay	5.5	4.4		2.6	6.2			27.6		32.6	12.8	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	5.5	4.4		2.6	6.2			27.6		32.6	12.8	
LOS	A	A		A	A			C		C	B	
Approach Delay		4.5			6.2			27.6			17.4	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 6.5		Intersection LOS: A	
Intersection Capacity Utilization 71.0%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	6	8	3	121	4	38	13	1361	126	37	1003	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				0.98	0.98						1.00	
Frt		0.957			0.863			0.987			0.999	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1455	0	3300	1510	0	1778	3511	0	1752	3501	0
Flt Permitted	0.950			0.950			0.250			0.118		
Satd. Flow (perm)	1444	1455	0	3230	1510	0	468	3511	0	218	3501	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)				6		6				1		1
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	8	10	4	133	4	42	15	1547	143	39	1067	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	8	14	0	133	46	0	15	1690	0	39	1073	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	20.0	20.0	0.0	30.0	30.0	0.0	130.0	130.0	0.0	130.0	130.0	0.0
Total Split (%)	11.1%	11.1%	0.0%	16.7%	16.7%	0.0%	72.2%	72.2%	0.0%	72.2%	72.2%	0.0%
Maximum Green (s)	14.4	14.4		24.1	24.1		124.2	124.2		124.5	124.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	7.8	7.8		11.6	11.6		150.7	150.7		150.7	150.7	
Actuated g/C Ratio	0.04	0.04		0.06	0.06		0.84	0.84		0.84	0.84	
v/c Ratio	0.13	0.23		0.62	0.47		0.04	0.58		0.21	0.37	
Control Delay	87.5	91.8		94.7	96.2		2.8	4.4		7.4	4.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	87.5	91.8		94.7	96.2		2.8	4.4		7.4	4.4	
LOS	F	F		F	F		A	A		A	A	
Approach Delay		90.2			95.1			4.4			4.5	
Approach LOS		F			F			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 10.5		Intersection LOS: B	
Intersection Capacity Utilization 60.7%		ICU Level of Service B	
Analysis Period (min) 15			

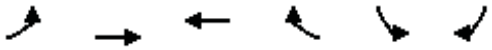
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	227	228	58	183	322	365	80	934	192	226	665	236
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.98		1.00				
Frt			0.850			0.850		0.974			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3416	0	1787	3435	0
Flt Permitted	0.102			0.384			0.214			0.097		
Satd. Flow (perm)	190	1863	1563	709	1853	1548	397	3416	0	182	3435	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			1609			1052			596	
Travel Time (s)		17.2			31.3			17.9			10.2	
Confl. Peds. (#/hr)	1		1	6		6	1		1			
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	244	245	62	203	358	406	84	983	202	251	739	262
Shared Lane Traffic (%)												
Lane Group Flow (vph)	244	245	62	203	358	406	84	1185	0	251	1001	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	29.0	40.0	25.0	30.0	41.0	25.0	25.0	85.0	0.0	25.0	85.0	0.0
Total Split (%)	16.1%	22.2%	13.9%	16.7%	22.8%	13.9%	13.9%	47.2%	0.0%	13.9%	47.2%	0.0%
Maximum Green (s)	24.1	34.5	19.2	24.6	35.5	19.2	19.2	79.0		19.2	79.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	61.9	39.7	48.3	54.5	35.6	54.5	91.1	82.4		106.4	92.7	
Actuated g/C Ratio	0.34	0.22	0.27	0.30	0.20	0.30	0.51	0.46		0.59	0.52	
v/c Ratio	0.91	0.60	0.15	0.62	0.98	0.86	0.31	0.76		0.91	0.57	
Control Delay	88.8	70.5	48.1	51.6	111.7	73.8	20.3	45.0		72.2	27.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	88.8	70.5	48.1	51.6	111.7	73.8	20.3	45.0		72.2	27.3	
LOS	F	E	D	D	F	E	C	D		E	C	
Approach Delay		76.1			83.2			43.3			36.3	
Approach LOS		E			F			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 2 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.98			
Intersection Signal Delay: 55.2		Intersection LOS: E	
Intersection Capacity Utilization 90.7%		ICU Level of Service E	
Analysis Period (min) 15			

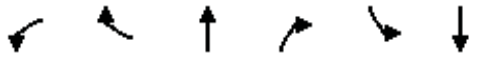
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	11	643	868	11	5	6
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	714	964	12	6	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	977				1709	971
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	977				1709	971
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				94	98
cM capacity (veh/h)	706				98	307

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	727	977	12
Volume Left	12	0	6
Volume Right	0	12	7
cSH	706	1700	156
Volume to Capacity	0.02	0.57	0.08
Queue Length 95th (ft)	1	0	6
Control Delay (s)	0.5	0.0	30.0
Lane LOS	A		D
Approach Delay (s)	0.5	0.0	30.0
Approach LOS			D

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	13	1487	39	0	1127
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	14	1652	43	0	1252
Pedestrians						13
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.76	0.72			0.72	
vC, conflicting volume	2300	861			1696	
vC1, stage 1 conf vol	1674					
vC2, stage 2 conf vol	626					
vCu, unblocked vol	1619	40			1195	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	178	731			419	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	14	1101	594	626	626
Volume Left	0	0	0	0	0
Volume Right	14	0	43	0	0
cSH	731	1700	1700	1700	1700
Volume to Capacity	0.02	0.65	0.35	0.37	0.37
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.0	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.0	0.0		0.0	
Approach LOS	B				

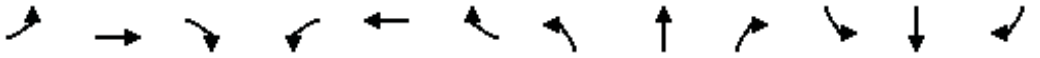
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	661	5	3	528	24	8	6	9	27	2	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00								0.98	0.96	
Frt		0.999			0.993			0.948			0.852	
Flt Protected	0.950			0.950				0.983		0.950		
Satd. Flow (prot)	1770	1860	0	1761	1840	0	0	1736	0	1770	1529	0
Flt Permitted	0.399			0.330				0.843		0.740		
Satd. Flow (perm)	727	1860	0	612	1840	0	0	1489	0	1355	1529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			6			10			167	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	32		32							8		8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	156	734	6	3	587	27	9	7	10	30	2	167
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	740	0	3	614	0	0	26	0	30	169	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

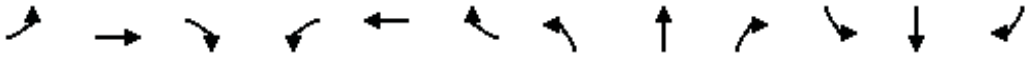
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	51.5	51.5		51.5	51.5			8.0		7.5	7.5	
Actuated g/C Ratio	0.74	0.74		0.74	0.74			0.11		0.11	0.11	
v/c Ratio	0.29	0.54		0.01	0.45			0.14		0.21	0.54	
Control Delay	5.0	6.0		3.0	5.1			22.4		31.6	12.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	5.0	6.0		3.0	5.1			22.4		31.6	12.5	
LOS	A	A		A	A			C		C	B	
Approach Delay		5.9			5.1			22.4			15.3	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 68.2%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1	36	164	3	44	153	801	87	20	1384	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				0.99	0.98					1.00	1.00	
Frt		0.853			0.859			0.985			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1297	0	3300	1512	0	1778	3504	0	1752	3477	0
Flt Permitted	0.950			0.950			0.134			0.261		
Satd. Flow (perm)	1444	1297	0	3268	1512	0	251	3504	0	481	3477	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)				3		3				1		1
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	16	1	46	180	3	48	174	910	99	21	1472	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	47	0	180	51	0	174	1009	0	21	1546	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	19.0	19.0	0.0	31.0	31.0	0.0	130.0	130.0	0.0	130.0	130.0	0.0
Total Split (%)	10.6%	10.6%	0.0%	17.2%	17.2%	0.0%	72.2%	72.2%	0.0%	72.2%	72.2%	0.0%
Maximum Green (s)	13.4	13.4		25.1	25.1		124.2	124.2		124.5	124.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	11.0	11.0		14.2	14.2		142.3	142.3		142.3	142.3	
Actuated g/C Ratio	0.06	0.06		0.08	0.08		0.79	0.79		0.79	0.79	
v/c Ratio	0.18	0.59		0.69	0.43		0.88	0.36		0.06	0.56	
Control Delay	83.1	109.9		94.5	89.2		52.5	7.5		6.3	9.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	83.1	109.9		94.5	89.2		52.5	7.5		6.3	9.1	
LOS	F	F		F	F		D	A		A	A	
Approach Delay		103.1			93.3			14.1			9.1	
Approach LOS		F			F			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.88			
Intersection Signal Delay: 19.4		Intersection LOS: B	
Intersection Capacity Utilization 74.5%		ICU Level of Service D	
Analysis Period (min) 15			

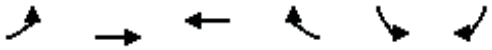
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	316	307	83	191	150	267	34	458	89	293	1093	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.98						
Frt			0.850			0.850		0.976			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3437	0	1787	3492	0
Flt Permitted	0.322			0.171			0.099			0.348		
Satd. Flow (perm)	599	1863	1563	316	1853	1550	183	3437	0	655	3492	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			1609			1052			596	
Travel Time (s)		17.2			31.3			17.9			10.2	
Confl. Peds. (#/hr)	1		1	5		5						
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	340	330	89	212	167	297	36	482	94	326	1214	220
Shared Lane Traffic (%)												
Lane Group Flow (vph)	340	330	89	212	167	297	36	576	0	326	1434	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	31.0	49.0	15.0	22.0	40.0	38.0	15.0	71.0	0.0	38.0	94.0	0.0
Total Split (%)	17.2%	27.2%	8.3%	12.2%	22.2%	21.1%	8.3%	39.4%	0.0%	21.1%	52.2%	0.0%
Maximum Green (s)	26.1	43.5	9.2	16.6	34.5	32.2	9.2	65.0		32.2	88.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	57.3	35.6	43.4	43.3	26.6	46.5	95.7	87.9		112.6	99.9	
Actuated g/C Ratio	0.32	0.20	0.24	0.24	0.15	0.26	0.53	0.49		0.63	0.56	
v/c Ratio	0.95	0.90	0.24	1.01	0.61	0.74	0.22	0.34		0.61	0.74	
Control Delay	88.7	96.5	51.1	113.1	80.4	67.2	19.6	31.0		29.0	44.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	88.7	96.5	51.1	113.1	80.4	67.2	19.6	31.0		29.0	44.8	
LOS	F	F	D	F	F	E	B	C		C	D	
Approach Delay		87.7			84.9			30.3			41.9	
Approach LOS		F			F			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 176 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.01			
Intersection Signal Delay: 56.8		Intersection LOS: E	
Intersection Capacity Utilization 85.8%		ICU Level of Service E	
Analysis Period (min) 15			

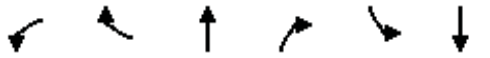
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	6	695	536	11	10	13
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	772	596	12	11	14
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	609				1388	603
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	609				1388	603
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	97
cM capacity (veh/h)	969				156	499

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	779	608	26
Volume Left	7	0	11
Volume Right	0	12	14
cSH	969	1700	255
Volume to Capacity	0.01	0.36	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.2	0.0	20.7
Lane LOS	A		C
Approach Delay (s)	0.2	0.0	20.7
Approach LOS			C

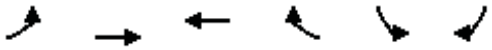
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	51.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	13	1028	13	0	1584
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	14	1142	14	0	1760
Pedestrians						4
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.86	0.91			0.91	
vC, conflicting volume	2029	582			1157	
vC1, stage 1 conf vol	1149					
vC2, stage 2 conf vol	880					
vCu, unblocked vol	1408	342			974	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	270	593			640	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	14	761	395	880	880
Volume Left	0	0	0	0	0
Volume Right	14	0	14	0	0
cSH	593	1700	1700	1700	1700
Volume to Capacity	0.02	0.45	0.23	0.52	0.52
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.2	0.0		0.0	
Approach LOS	B				

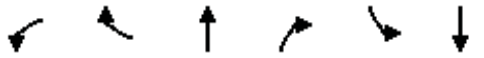
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	8	566	673	6	3	4
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	629	748	7	3	4
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	755				1399	752
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	755				1399	752
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	99
cM capacity (veh/h)	854				153	410

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	638	754	8
Volume Left	9	0	3
Volume Right	0	7	4
cSH	854	1700	239
Volume to Capacity	0.01	0.44	0.03
Queue Length 95th (ft)	1	0	3
Control Delay (s)	0.3	0.0	20.6
Lane LOS	A		C
Approach Delay (s)	0.3	0.0	20.6
Approach LOS			C

Intersection Summary			
Average Delay	0.2		
Intersection Capacity Utilization	46.2%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	1	948	18	0	921
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1	1053	20	0	1023
Pedestrians						12
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.95	0.91			0.91	
vC, conflicting volume	1575	549			1073	
vC1, stage 1 conf vol	1063					
vC2, stage 2 conf vol	512					
vCu, unblocked vol	1112	298			877	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	320	627			695	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	1	702	371	512	512
Volume Left	0	0	0	0	0
Volume Right	1	0	20	0	0
cSH	627	1700	1700	1700	1700
Volume to Capacity	0.00	0.41	0.22	0.30	0.30
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	10.8	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.8	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	40.1%	ICU Level of Service	A
Analysis Period (min)	15		

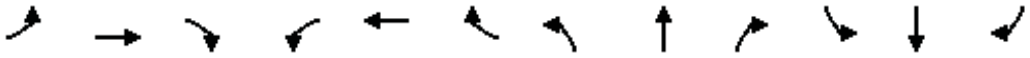
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	119	638	5	8	798	39	8	4	2	29	2	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00			1.00		0.99	0.97	
Frt		0.999			0.993			0.982			0.852	
Flt Protected	0.950			0.950				0.971		0.950		
Satd. Flow (prot)	1770	1860	0	1761	1838	0	0	1771	0	1770	1536	0
Flt Permitted	0.232			0.342				0.763		0.748		
Satd. Flow (perm)	432	1860	0	633	1838	0	0	1390	0	1375	1536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			6			2			157	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	5		5	3		3	1		1	6		6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	132	709	6	9	887	43	9	4	2	32	2	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	132	715	0	9	930	0	0	15	0	32	165	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	51.4	51.4		51.4	51.4			8.1		7.6	7.6	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.12		0.11	0.11	
v/c Ratio	0.42	0.52		0.02	0.69			0.09		0.21	0.54	
Control Delay	8.6	5.8		3.0	8.5			26.7		31.7	13.3	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	8.6	5.8		3.0	8.5			26.7		31.7	13.3	
LOS	A	A		A	A			C		C	B	
Approach Delay		6.3			8.5			26.7			16.3	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 8.5		Intersection LOS: A	
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	11	111	126	4	40	61	1529	132	39	1122	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				0.98	0.98						1.00	
Frt		0.864			0.863			0.988			0.996	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1313	0	3300	1510	0	1778	3514	0	1752	3489	0
Flt Permitted	0.950			0.950			0.182			0.058		
Satd. Flow (perm)	1444	1313	0	3242	1510	0	341	3514	0	107	3489	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)				6		6				1		1
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	66	14	141	138	4	44	69	1738	150	41	1194	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	155	0	138	48	0	69	1888	0	41	1223	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	20.0	20.0	0.0	30.0	30.0	0.0	130.0	130.0	0.0	130.0	130.0	0.0
Total Split (%)	11.1%	11.1%	0.0%	16.7%	16.7%	0.0%	72.2%	72.2%	0.0%	72.2%	72.2%	0.0%
Maximum Green (s)	14.4	14.4		24.1	24.1		124.2	124.2		124.5	124.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	28.1	28.1		11.9	11.9		125.0	125.0		125.0	125.0	
Actuated g/C Ratio	0.16	0.16		0.07	0.07		0.69	0.69		0.69	0.69	
v/c Ratio	0.29	0.76		0.64	0.48		0.29	0.77		0.55	0.50	
Control Delay	72.3	94.9		94.8	96.4		10.0	19.7		46.8	13.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	72.3	94.9		94.8	96.4		10.0	19.7		46.8	13.8	
LOS	E	F		F	F		B	B		D	B	
Approach Delay		88.2			95.2			19.4			14.9	
Approach LOS		F			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			

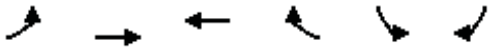
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	250	238	61	191	336	405	84	1094	201	287	794	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.98		1.00				
Frt			0.850			0.850		0.977			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3428	0	1787	3435	0
Flt Permitted	0.100			0.375			0.144			0.047		
Satd. Flow (perm)	186	1863	1563	693	1853	1548	267	3428	0	88	3435	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			1609			1052			596	
Travel Time (s)		17.2			31.3			17.9			10.2	
Confl. Peds. (#/hr)	1		1	6		6	1		1			
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	269	256	66	212	373	450	88	1152	212	319	882	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	269	256	66	212	373	450	88	1364	0	319	1191	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	29.0	40.0	25.0	30.0	41.0	25.0	25.0	85.0	0.0	25.0	85.0	0.0
Total Split (%)	16.1%	22.2%	13.9%	16.7%	22.8%	13.9%	13.9%	47.2%	0.0%	13.9%	47.2%	0.0%
Maximum Green (s)	24.1	34.5	19.2	24.6	35.5	19.2	19.2	79.0		19.2	79.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	63.0	40.6	49.4	55.4	36.0	56.0	88.8	80.0		105.0	91.2	
Actuated g/C Ratio	0.35	0.23	0.27	0.31	0.20	0.31	0.49	0.44		0.58	0.51	
v/c Ratio	0.97	0.61	0.15	0.65	1.01	0.93	0.43	0.90		1.33	0.68	
Control Delay	101.7	70.8	48.2	52.0	117.6	82.7	24.2	55.0		214.3	45.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	101.7	70.8	48.2	52.0	117.6	82.7	24.2	55.0		214.3	45.4	
LOS	F	E	D	D	F	F	C	D		F	D	
Approach Delay		82.3			89.0			53.1			81.1	
Approach LOS		F			F			D			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 2 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.33			
Intersection Signal Delay: 74.2		Intersection LOS: E	
Intersection Capacity Utilization 100.8%		ICU Level of Service G	
Analysis Period (min) 15			

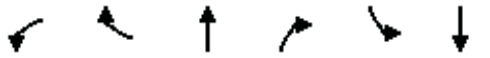
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	11	723	931	11	5	6
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	803	1034	12	6	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1047				1868	1041
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1047				1868	1041
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				93	98
cM capacity (veh/h)	665				78	279

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	816	1047	12
Volume Left	12	0	6
Volume Right	0	12	7
cSH	665	1700	129
Volume to Capacity	0.02	0.62	0.09
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.5	0.0	35.9
Lane LOS	A		E
Approach Delay (s)	0.5	0.0	35.9
Approach LOS			E

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	59.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	14	1708	41	0	1359
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	16	1898	46	0	1510
Pedestrians						14
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.72	0.64			0.64	
vC, conflicting volume	2676	986			1943	
vC1, stage 1 conf vol	1921					
vC2, stage 2 conf vol	755					
vCu, unblocked vol	1509	0			1351	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	134	687			324	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	1265	678	755	755
Volume Left	0	0	0	0	0
Volume Right	16	0	46	0	0
cSH	687	1700	1700	1700	1700
Volume to Capacity	0.02	0.74	0.40	0.44	0.44
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.4	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.4	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	62.2%	ICU Level of Service	B
Analysis Period (min)	15		

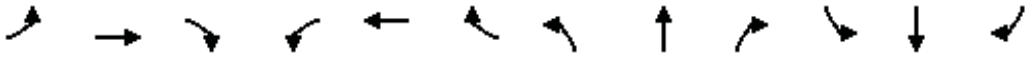
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	140	663	5	3	532	24	8	6	9	27	2	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.98	1.00								0.98	0.96	
Frt		0.999			0.993			0.948			0.852	
Flt Protected	0.950			0.950				0.983		0.950		
Satd. Flow (prot)	1770	1860	0	1761	1840	0	0	1736	0	1770	1529	0
Flt Permitted	0.396			0.328				0.843		0.740		
Satd. Flow (perm)	722	1860	0	608	1840	0	0	1489	0	1355	1529	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			6			10			167	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	32		32							8		8
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	156	737	6	3	591	27	9	7	10	30	2	167
Shared Lane Traffic (%)												
Lane Group Flow (vph)	156	743	0	3	618	0	0	26	0	30	169	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	51.5	51.5		51.5	51.5			8.0		7.5	7.5	
Actuated g/C Ratio	0.74	0.74		0.74	0.74			0.11		0.11	0.11	
v/c Ratio	0.29	0.54		0.01	0.46			0.14		0.21	0.54	
Control Delay	5.0	6.1		3.0	5.1			22.4		31.6	12.5	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	5.0	6.1		3.0	5.1			22.4		31.6	12.5	
LOS	A	A		A	A			C		C	B	
Approach Delay		5.9			5.1			22.4			15.3	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.54			
Intersection Signal Delay: 6.9		Intersection LOS: A	
Intersection Capacity Utilization 68.3%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	13	1	36	164	3	44	153	813	87	20	1402	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				0.99	0.98					1.00	1.00	
Frt		0.853			0.859			0.985			0.993	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1297	0	3300	1512	0	1778	3504	0	1752	3477	0
Flt Permitted	0.950			0.950			0.130			0.257		
Satd. Flow (perm)	1444	1297	0	3268	1512	0	243	3504	0	474	3477	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)				3		3				1		1
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	16	1	46	180	3	48	174	924	99	21	1491	74
Shared Lane Traffic (%)												
Lane Group Flow (vph)	16	47	0	180	51	0	174	1023	0	21	1565	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	19.0	19.0	0.0	31.0	31.0	0.0	130.0	130.0	0.0	130.0	130.0	0.0
Total Split (%)	10.6%	10.6%	0.0%	17.2%	17.2%	0.0%	72.2%	72.2%	0.0%	72.2%	72.2%	0.0%
Maximum Green (s)	13.4	13.4		25.1	25.1		124.2	124.2		124.5	124.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	11.0	11.0		14.2	14.2		142.3	142.3		142.3	142.3	
Actuated g/C Ratio	0.06	0.06		0.08	0.08		0.79	0.79		0.79	0.79	
v/c Ratio	0.18	0.59		0.69	0.43		0.91	0.37		0.06	0.57	
Control Delay	83.1	109.9		94.5	89.2		59.2	7.4		6.3	9.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	83.1	109.9		94.5	89.2		59.2	7.4		6.3	9.2	
LOS	F	F		F	F		E	A		A	A	
Approach Delay		103.1			93.3			15.0			9.2	
Approach LOS		F			F			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.91			
Intersection Signal Delay: 19.7		Intersection LOS: B	
Intersection Capacity Utilization 75.0%		ICU Level of Service D	
Analysis Period (min) 15			

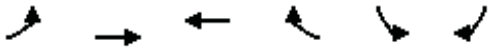
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	316	312	83	236	155	267	34	470	101	310	1094	198
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.98						
Frt			0.850			0.850		0.974			0.977	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3430	0	1787	3492	0
Flt Permitted	0.320			0.163			0.098			0.331		
Satd. Flow (perm)	596	1863	1563	301	1853	1550	182	3430	0	623	3492	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			860			1052			543	
Travel Time (s)		17.2			16.8			17.9			9.3	
Confl. Peds. (#/hr)	1		1	5		5						
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	340	335	89	262	172	297	36	495	106	344	1216	220
Shared Lane Traffic (%)												
Lane Group Flow (vph)	340	335	89	262	172	297	36	601	0	344	1436	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	31.0	49.0	15.0	22.0	40.0	38.0	15.0	71.0	0.0	38.0	94.0	0.0
Total Split (%)	17.2%	27.2%	8.3%	12.2%	22.2%	21.1%	8.3%	39.4%	0.0%	21.1%	52.2%	0.0%
Maximum Green (s)	26.1	43.5	9.2	16.6	34.5	32.2	9.2	65.0		32.2	88.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	58.0	36.0	43.8	44.3	27.3	48.4	93.8	86.0		112.0	99.2	
Actuated g/C Ratio	0.32	0.20	0.24	0.25	0.15	0.27	0.52	0.48		0.62	0.55	
v/c Ratio	0.95	0.90	0.23	1.24	0.61	0.71	0.22	0.37		0.66	0.75	
Control Delay	87.3	96.9	50.8	182.4	80.0	63.7	20.0	32.5		30.8	45.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	87.3	96.9	50.8	182.4	80.0	63.7	20.0	32.5		30.8	45.4	
LOS	F	F	D	F	F	E	C	C		C	D	
Approach Delay		87.3			110.1			31.8			42.6	
Approach LOS		F			F			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 176 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.24			
Intersection Signal Delay: 62.2		Intersection LOS: E	
Intersection Capacity Utilization 88.6%		ICU Level of Service E	
Analysis Period (min) 15			

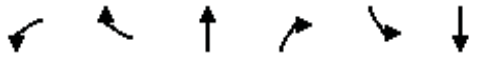
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	6	698	540	11	10	13
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	7	776	600	12	11	14
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	613				1396	607
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	613				1396	607
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				93	97
cM capacity (veh/h)	965				154	496

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	782	612	26
Volume Left	7	0	11
Volume Right	0	12	14
cSH	965	1700	253
Volume to Capacity	0.01	0.36	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.2	0.0	20.8
Lane LOS	A		C
Approach Delay (s)	0.2	0.0	20.8
Approach LOS			C

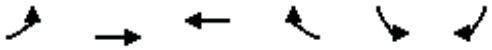
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	13	1040	13	0	1602
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	14	1156	14	0	1780
Pedestrians						4
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.86	0.90			0.90	
vC, conflicting volume	2053	589			1170	
vC1, stage 1 conf vol	1163					
vC2, stage 2 conf vol	890					
vCu, unblocked vol	1400	332			975	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	268	598			635	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	14	770	400	890	890
Volume Left	0	0	0	0	0
Volume Right	14	0	14	0	0
cSH	598	1700	1700	1700	1700
Volume to Capacity	0.02	0.45	0.24	0.52	0.52
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	11.2	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.2	0.0		0.0	
Approach LOS	B				

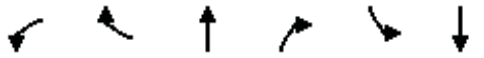
Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	34	702	536	4	2	50
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	38	780	596	4	2	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		860				
pX, platoon unblocked					0.72	
vC, conflicting volume	600				1453	598
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	600				1435	598
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	96				98	89
cM capacity (veh/h)	977				102	502

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	818	600	58
Volume Left	38	0	2
Volume Right	0	4	56
cSH	977	1700	436
Volume to Capacity	0.04	0.35	0.13
Queue Length 95th (ft)	3	0	11
Control Delay (s)	1.0	0.0	14.5
Lane LOS	A		B
Approach Delay (s)	1.0	0.0	14.5
Approach LOS			B

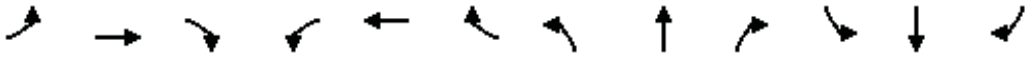
Intersection Summary			
Average Delay	1.1		
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	12	1041	12	0	1602
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	13	1157	13	0	1780
Pedestrians						4
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						0
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			543			963
pX, platoon unblocked	0.86	0.90			0.90	
vC, conflicting volume	2053	589			1170	
vC1, stage 1 conf vol	1163					
vC2, stage 2 conf vol	890					
vCu, unblocked vol	1392	326			971	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	269	602			636	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	13	771	399	890	890
Volume Left	0	0	0	0	0
Volume Right	13	0	13	0	0
cSH	602	1700	1700	1700	1700
Volume to Capacity	0.02	0.45	0.23	0.52	0.52
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	11.1	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	11.1	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	55.5%	ICU Level of Service	B
Analysis Period (min)	15		



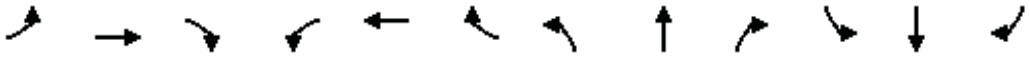
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	73	506	1	4	574	27	4	1	5	13	2	94
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00	1.00			0.99		1.00	0.98	
Frt					0.993			0.926			0.853	
Flt Protected	0.950			0.950				0.982		0.950		
Satd. Flow (prot)	1770	1863	0	1761	1838	0	0	1671	0	1770	1554	0
Flt Permitted	0.378			0.436				0.846		0.750		
Satd. Flow (perm)	703	1863	0	807	1838	0	0	1438	0	1394	1554	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					6			6			104	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	3		3	2		2	2		2	1		1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	81	562	1	4	638	30	4	1	6	14	2	104
Shared Lane Traffic (%)												
Lane Group Flow (vph)	81	563	0	4	668	0	0	11	0	14	106	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	55.4	55.4		55.4	55.4			7.6		7.2	7.2	
Actuated g/C Ratio	0.79	0.79		0.79	0.79			0.11		0.10	0.10	
v/c Ratio	0.15	0.38		0.01	0.46			0.07		0.10	0.42	
Control Delay	3.5	4.0		2.5	4.6			22.0		29.9	12.7	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	3.5	4.0		2.5	4.6			22.0		29.9	12.7	
LOS	A	A		A	A			C		C	B	
Approach Delay		3.9			4.6			22.0			14.7	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 55			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.46			
Intersection Signal Delay: 5.3		Intersection LOS: A	
Intersection Capacity Utilization 60.3%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	38	0	85	73	3	39	116	785	68	31	782	57
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor								0.93				
Frt		0.850			0.860			0.988			0.990	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1292	0	3300	1540	0	1778	3262	0	1752	3470	0
Flt Permitted	0.950			0.950			0.290			0.265		
Satd. Flow (perm)	1444	1292	0	3300	1540	0	543	3262	0	489	3470	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)									785			
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	48	0	108	80	3	43	132	892	77	33	832	61
Shared Lane Traffic (%)												
Lane Group Flow (vph)	48	108	0	80	46	0	132	969	0	33	893	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	20.0	20.0	0.0	27.0	27.0	0.0	133.0	133.0	0.0	133.0	133.0	0.0
Total Split (%)	11.1%	11.1%	0.0%	15.0%	15.0%	0.0%	73.9%	73.9%	0.0%	73.9%	73.9%	0.0%
Maximum Green (s)	14.4	14.4		21.1	21.1		127.2	127.2		127.5	127.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	22.1	22.1		10.3	10.3		132.6	132.6		132.6	132.6	
Actuated g/C Ratio	0.12	0.12		0.06	0.06		0.74	0.74		0.74	0.74	
v/c Ratio	0.27	0.68		0.42	0.52		0.33	0.40		0.09	0.35	
Control Delay	75.4	97.0		88.2	102.5		13.8	12.4		8.2	9.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	75.4	97.0		88.2	102.5		13.8	12.4		8.2	9.1	
LOS	E	F		F	F		B	B		A	A	
Approach Delay		90.4			93.4			12.6			9.1	
Approach LOS		F			F			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 60			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 20.8		Intersection LOS: C	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

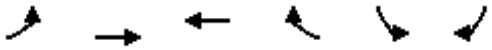
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	177	202	19	258	230	278	37	534	155	256	488	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				1.00		0.98	1.00	0.99				
Frt			0.850			0.850		0.966			0.957	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3384	0	1787	3421	0
Flt Permitted	0.215			0.204			0.342			0.297		
Satd. Flow (perm)	400	1863	1583	377	1853	1549	633	3384	0	559	3421	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			860			1052			543	
Travel Time (s)		17.2			16.8			17.9			9.3	
Confl. Peds. (#/hr)				6		6	1		1			
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	190	217	20	287	256	309	39	562	163	284	542	218
Shared Lane Traffic (%)												
Lane Group Flow (vph)	190	217	20	287	256	309	39	725	0	284	760	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	21.0	43.0	16.0	24.0	46.0	35.0	16.0	78.0	0.0	35.0	97.0	0.0
Total Split (%)	11.7%	23.9%	8.9%	13.3%	25.6%	19.4%	8.9%	43.3%	0.0%	19.4%	53.9%	0.0%
Maximum Green (s)	16.1	37.5	10.2	18.6	40.5	29.2	10.2	72.0		29.2	91.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	41.3	25.9	38.7	48.3	29.6	45.6	106.8	99.0		120.1	109.8	
Actuated g/C Ratio	0.23	0.14	0.22	0.27	0.16	0.25	0.59	0.55		0.67	0.61	
v/c Ratio	0.91	0.81	0.06	1.16	0.84	0.78	0.09	0.39		0.59	0.36	
Control Delay	96.4	96.3	53.4	155.7	95.8	71.7	13.0	25.5		26.6	25.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	96.4	96.3	53.4	155.7	95.8	71.7	13.0	25.5		26.6	25.2	
LOS	F	F	D	F	F	E	B	C		C	C	
Approach Delay		94.3			107.3			24.8			25.6	
Approach LOS		F			F			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 2 (1%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.16			
Intersection Signal Delay: 57.4		Intersection LOS: E	
Intersection Capacity Utilization 79.1%		ICU Level of Service D	
Analysis Period (min) 15			

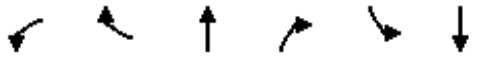
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	8	570	677	6	4	3
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	9	633	752	7	4	3
Pedestrians					1	
Lane Width (ft)					12.0	
Walking Speed (ft/s)					4.0	
Percent Blockage					0	
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	760				1408	757
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	760				1408	757
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				97	99
cM capacity (veh/h)	851				151	407

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	642	759	8
Volume Left	9	0	4
Volume Right	0	7	3
cSH	851	1700	207
Volume to Capacity	0.01	0.45	0.04
Queue Length 95th (ft)	1	0	3
Control Delay (s)	0.3	0.0	23.1
Lane LOS	A		C
Approach Delay (s)	0.3	0.0	23.1
Approach LOS			C

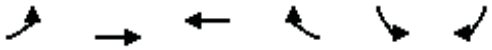
Intersection Summary			
Average Delay	0.3		
Intersection Capacity Utilization	46.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	1	968	18	0	940
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	1	1076	20	0	1044
Pedestrians						12
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.94	0.90			0.90	
vC, conflicting volume	1608	560			1096	
vC1, stage 1 conf vol	1086					
vC2, stage 2 conf vol	522					
vCu, unblocked vol	1116	282			879	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	316	635			686	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	1	717	379	522	522
Volume Left	0	0	0	0	0
Volume Right	1	0	20	0	0
cSH	635	1700	1700	1700	1700
Volume to Capacity	0.00	0.42	0.22	0.31	0.31
Queue Length 95th (ft)	0	0	0	0	0
Control Delay (s)	10.7	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.7	0.0		0.0	
Approach LOS	B				

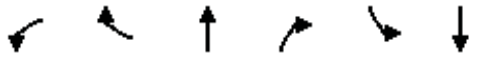
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	40.6%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	47	574	673	4	4	50
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	52	638	748	4	4	56
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		860				
pX, platoon unblocked					0.82	
vC, conflicting volume	752				1492	750
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	752				1491	750
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	94				96	86
cM capacity (veh/h)	857				105	411

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	690	752	60
Volume Left	52	0	4
Volume Right	0	4	56
cSH	857	1700	338
Volume to Capacity	0.06	0.44	0.18
Queue Length 95th (ft)	5	0	16
Control Delay (s)	1.6	0.0	17.9
Lane LOS	A		C
Approach Delay (s)	1.6	0.0	17.9
Approach LOS			C

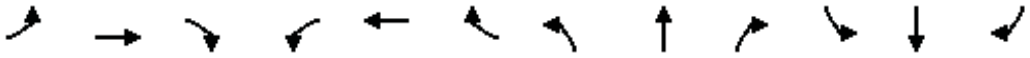
Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	79.0%	ICU Level of Service	D
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	19	967	22	0	940
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	21	1074	24	0	1044
Pedestrians						12
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			543			963
pX, platoon unblocked	0.94	0.89			0.89	
vC, conflicting volume	1609	561			1099	
vC1, stage 1 conf vol	1087					
vC2, stage 2 conf vol	522					
vCu, unblocked vol	1112	275			875	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	317	640			686	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	21	716	383	522	522
Volume Left	0	0	0	0	0
Volume Right	21	0	24	0	0
cSH	640	1700	1700	1700	1700
Volume to Capacity	0.03	0.42	0.23	0.31	0.31
Queue Length 95th (ft)	3	0	0	0	0
Control Delay (s)	10.8	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.8	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.7%	ICU Level of Service	A
Analysis Period (min)	15		

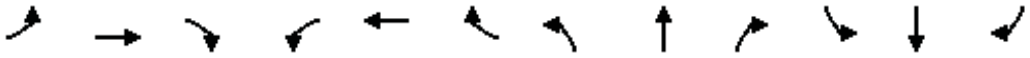


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	119	642	5	8	803	39	8	4	2	29	2	147
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			0%			0%	
Storage Length (ft)	300		0	200		0	0		0	125		0
Storage Lanes	1		0	1		0	0		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor		1.00		1.00	1.00			1.00		0.99	0.97	
Frt		0.999			0.993			0.982			0.852	
Flt Protected	0.950			0.950				0.971		0.950		
Satd. Flow (prot)	1770	1860	0	1761	1838	0	0	1771	0	1770	1536	0
Flt Permitted	0.230			0.340				0.763		0.748		
Satd. Flow (perm)	428	1860	0	629	1838	0	0	1390	0	1375	1536	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			6			2			155	
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		2540			1330			807			1182	
Travel Time (s)		49.5			25.9			22.0			32.2	
Confl. Peds. (#/hr)	5		5	3		3	1		1	6		6
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	132	713	6	9	892	43	9	4	2	32	2	163
Shared Lane Traffic (%)												
Lane Group Flow (vph)	132	719	0	9	935	0	0	15	0	32	165	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm			Perm			Perm			Perm		

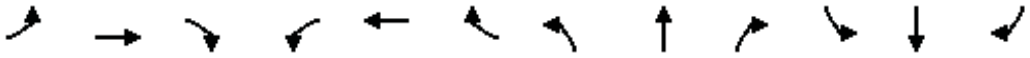
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases		2			6			8			4	
Permitted Phases	2			6			8			4		
Detector Phase	2	2		6	6		8	8		4	4	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.6	21.6		21.6	21.6		20.9	20.9		21.4	21.4	
Total Split (s)	48.0	48.0	0.0	48.0	48.0	0.0	22.0	22.0	0.0	22.0	22.0	0.0
Total Split (%)	68.6%	68.6%	0.0%	68.6%	68.6%	0.0%	31.4%	31.4%	0.0%	31.4%	31.4%	0.0%
Maximum Green (s)	42.4	42.4		42.4	42.4		17.1	17.1		16.6	16.6	
Yellow Time (s)	4.0	4.0		3.8	3.8		3.0	3.0		3.5	3.5	
All-Red Time (s)	1.6	1.6		1.8	1.8		1.9	1.9		1.9	1.9	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	5.6	5.6	4.0	5.6	5.6	4.0	4.9	4.9	4.0	5.4	5.4	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	2.0	2.0		2.0	2.0		1.0	1.0		1.0	1.0	
Recall Mode	C-Min	C-Min		C-Min	C-Min		None	None		None	None	
Walk Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Flash Dont Walk (s)	11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0		0	0	
Act Effct Green (s)	51.4	51.4		51.4	51.4			8.1		7.6	7.6	
Actuated g/C Ratio	0.73	0.73		0.73	0.73			0.12		0.11	0.11	
v/c Ratio	0.42	0.53		0.02	0.69			0.09		0.21	0.54	
Control Delay	8.8	5.9		3.0	8.7			26.6		31.7	13.6	
Queue Delay	0.0	0.0		0.0	0.0			0.0		0.0	0.0	
Total Delay	8.8	5.9		3.0	8.7			26.6		31.7	13.6	
LOS	A	A		A	A			C		C	B	
Approach Delay		6.3			8.6			26.6			16.5	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 70			
Actuated Cycle Length: 70			
Offset: 0 (0%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 8.6		Intersection LOS: A	
Intersection Capacity Utilization 77.3%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Estes Drive & Clayton Road



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	52	11	111	126	4	40	61	1547	132	39	1143	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			4%			-1%			0%	
Storage Length (ft)	100		0	250		150	250		0	250		0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor				0.98	0.98						1.00	
Frt		0.864			0.863			0.988			0.997	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1444	1313	0	3300	1510	0	1778	3514	0	1752	3493	0
Flt Permitted	0.950			0.950			0.177			0.055		
Satd. Flow (perm)	1444	1313	0	3242	1510	0	331	3514	0	101	3493	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		273			580			910			2487	
Travel Time (s)		5.3			11.3			15.5			42.4	
Confl. Peds. (#/hr)				6		6				1		1
Peak Hour Factor	0.79	0.79	0.79	0.91	0.91	0.91	0.88	0.88	0.88	0.94	0.94	0.94
Heavy Vehicles (%)	25%	25%	25%	4%	4%	4%	2%	2%	2%	3%	3%	3%
Adj. Flow (vph)	66	14	141	138	4	44	69	1758	150	41	1216	29
Shared Lane Traffic (%)												
Lane Group Flow (vph)	66	155	0	138	48	0	69	1908	0	41	1245	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.03	1.03	1.03	0.99	0.99	0.99	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2		1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru		Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100		20	100	
Trailing Detector (ft)	0	0		0	0		0	0		0	0	
Detector 1 Position(ft)	0	0		0	0		0	0		0	0	
Detector 1 Size(ft)	20	6		20	6		20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Turn Type	Split			Split			Perm			Perm		
Protected Phases	4	4		3	3			2			6	
Permitted Phases							2			6		
Detector Phase	4	4		3	3		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		12.0	12.0		12.0	12.0	
Minimum Split (s)	13.0	13.0		13.0	13.0		28.0	28.0		18.0	18.0	
Total Split (s)	20.0	20.0	0.0	30.0	30.0	0.0	130.0	130.0	0.0	130.0	130.0	0.0
Total Split (%)	11.1%	11.1%	0.0%	16.7%	16.7%	0.0%	72.2%	72.2%	0.0%	72.2%	72.2%	0.0%
Maximum Green (s)	14.4	14.4		24.1	24.1		124.2	124.2		124.5	124.5	
Yellow Time (s)	3.0	3.0		3.6	3.6		4.2	4.2		4.2	4.2	
All-Red Time (s)	2.6	2.6		2.3	2.3		1.6	1.6		1.3	1.3	
Lost Time Adjust (s)	-0.6	-0.6	-0.6	-0.9	-0.9	-0.9	-0.8	-0.8	0.0	-0.5	-0.5	0.0
Total Lost Time (s)	5.0	5.0	3.4	5.0	5.0	3.1	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lag	Lag		Lead	Lead							
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0		1.0	1.0		6.0	6.0		6.0	6.0	
Recall Mode	None	None		None	None		C-Max	C-Max		C-Max	C-Max	
Walk Time (s)							7.0	7.0				
Flash Dont Walk (s)							15.0	15.0				
Pedestrian Calls (#/hr)							0	0				
Act Effct Green (s)	28.1	28.1		11.9	11.9		125.0	125.0		125.0	125.0	
Actuated g/C Ratio	0.16	0.16		0.07	0.07		0.69	0.69		0.69	0.69	
v/c Ratio	0.29	0.76		0.64	0.48		0.30	0.78		0.59	0.51	
Control Delay	72.3	94.9		94.8	96.4		10.3	20.0		52.4	14.0	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	72.3	94.9		94.8	96.4		10.3	20.0		52.4	14.0	
LOS	E	F		F	F		B	C		D	B	
Approach Delay		88.2			95.2			19.7			15.2	
Approach LOS		F			F			B			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 45 (25%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.78			
Intersection Signal Delay: 26.1		Intersection LOS: C	
Intersection Capacity Utilization 76.5%		ICU Level of Service D	
Analysis Period (min) 15			

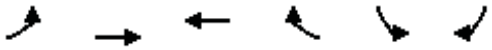
Splits and Phases: 10: Piney Mountain Road & M.L.K. Jr. Blvd

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	250	246	61	238	342	405	84	1132	238	308	794	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			1%			1%			-2%	
Storage Length (ft)	250		275	175		400	250		0	250		0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (ft)	25		25	25		25	25		25	25		25
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.98		1.00				
Frt			0.850			0.850		0.974			0.961	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1770	1863	1583	1761	1853	1575	1761	3416	0	1787	3435	0
Flt Permitted	0.109			0.293			0.144			0.047		
Satd. Flow (perm)	203	1863	1563	541	1853	1548	267	3416	0	88	3435	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		885			860			1052			543	
Travel Time (s)		17.2			16.8			17.9			9.3	
Confl. Peds. (#/hr)	1		1	6		6	1		1			
Peak Hour Factor	0.93	0.93	0.93	0.90	0.90	0.90	0.95	0.95	0.95	0.90	0.90	0.90
Adj. Flow (vph)	269	265	66	264	380	450	88	1192	251	342	882	309
Shared Lane Traffic (%)												
Lane Group Flow (vph)	269	265	66	264	380	450	88	1443	0	342	1191	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane								Yes			Yes	
Headway Factor	1.00	1.00	1.00	1.01	1.01	1.01	1.01	1.01	1.01	0.99	0.99	0.99
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2		1	2	
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru		Left	Thru	
Leading Detector (ft)	20	100	20	20	100	20	20	100		20	100	
Trailing Detector (ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Position(ft)	0	0	0	0	0	0	0	0		0	0	
Detector 1 Size(ft)	20	6	20	20	6	20	20	6		20	6	
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt		pm+ov	pm+pt		pm+ov	pm+pt			pm+pt		

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Protected Phases	7	4	5	3	8	1	5	2		1	6	
Permitted Phases	4		4	8		8	2			6		
Detector Phase	7	4	5	3	8	1	5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	12.0		7.0	12.0	
Minimum Split (s)	12.0	13.0	13.0	13.0	13.0	13.0	13.0	34.0		13.0	18.0	
Total Split (s)	29.0	40.0	25.0	30.0	41.0	25.0	25.0	85.0	0.0	25.0	85.0	0.0
Total Split (%)	16.1%	22.2%	13.9%	16.7%	22.8%	13.9%	13.9%	47.2%	0.0%	13.9%	47.2%	0.0%
Maximum Green (s)	24.1	34.5	19.2	24.6	35.5	19.2	19.2	79.0		19.2	79.0	
Yellow Time (s)	3.0	3.8	3.0	3.0	3.8	3.0	3.0	4.3		3.0	4.3	
All-Red Time (s)	1.9	1.7	2.8	2.4	1.7	2.8	2.8	1.7		2.8	1.7	
Lost Time Adjust (s)	0.1	-0.5	-0.8	-0.4	-0.5	-0.8	-0.8	-1.0	0.0	-0.8	-1.0	0.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	4.0	5.0	5.0	4.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	2.0		1.0	2.0	
Recall Mode	None	None	None	None	None	None	None	C-Max		None	C-Max	
Walk Time (s)								7.0				
Flash Dont Walk (s)								21.0				
Pedestrian Calls (#/hr)								0				
Act Effct Green (s)	61.0	37.4	46.2	58.6	36.0	56.0	88.8	80.0		105.0	91.2	
Actuated g/C Ratio	0.34	0.21	0.26	0.33	0.20	0.31	0.49	0.44		0.58	0.51	
v/c Ratio	0.97	0.68	0.16	0.80	1.02	0.93	0.43	0.95		1.43	0.68	
Control Delay	100.3	76.8	50.2	62.7	121.3	82.7	24.2	61.9		251.2	51.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	100.3	76.8	50.2	62.7	121.3	82.7	24.2	61.9		251.2	51.4	
LOS	F	E	D	E	F	F	C	E		F	D	
Approach Delay		84.4			91.3			59.8			96.0	
Approach LOS		F			F			E			F	

Intersection Summary			
Area Type:	Other		
Cycle Length: 180			
Actuated Cycle Length: 180			
Offset: 176 (98%), Referenced to phase 2:NBTL and 6:SBTL, Start of Green			
Natural Cycle: 120			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 1.43			
Intersection Signal Delay: 81.8		Intersection LOS: F	
Intersection Capacity Utilization 104.5%		ICU Level of Service G	
Analysis Period (min) 15			

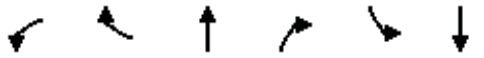
Splits and Phases: 11: Estes Drive & M.L.K. Jr. Blvd



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	11	723	936	11	5	6
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	12	803	1040	12	6	7
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1052				1874	1046
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1052				1874	1046
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	98				93	98
cM capacity (veh/h)	662				77	277

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	816	1052	12
Volume Left	12	0	6
Volume Right	0	12	7
cSH	662	1700	128
Volume to Capacity	0.02	0.62	0.10
Queue Length 95th (ft)	1	0	8
Control Delay (s)	0.5	0.0	36.2
Lane LOS	A		E
Approach Delay (s)	0.5	0.0	36.2
Approach LOS			E

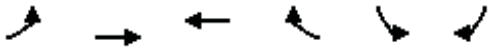
Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	59.9%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	14	1726	41	0	1380
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	16	1918	46	0	1533
Pedestrians						14
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			596			910
pX, platoon unblocked	0.69	0.60			0.60	
vC, conflicting volume	2707	996			1963	
vC1, stage 1 conf vol	1941					
vC2, stage 2 conf vol	767					
vCu, unblocked vol	1451	0			1286	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	98			100	
cM capacity (veh/h)	137	648			324	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	16	1279	685	767	767
Volume Left	0	0	0	0	0
Volume Right	16	0	46	0	0
cSH	648	1700	1700	1700	1700
Volume to Capacity	0.02	0.75	0.40	0.45	0.45
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.7	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.7	0.0		0.0	
Approach LOS	B				

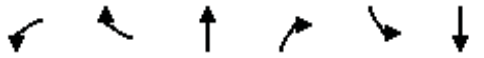
Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	66	734	931	5	4	52
Sign Control		Free	Free		Stop	
Grade		0%	1%		0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	73	816	1034	6	4	58
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		860				
pX, platoon unblocked					0.76	
vC, conflicting volume	1040				1999	1037
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1040				2161	1037
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	89				87	79
cM capacity (veh/h)	669				35	281

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	889	1040	62
Volume Left	73	0	4
Volume Right	0	6	58
cSH	669	1700	187
Volume to Capacity	0.11	0.61	0.33
Queue Length 95th (ft)	9	0	34
Control Delay (s)	3.0	0.0	33.6
Lane LOS	A		D
Approach Delay (s)	3.0	0.0	33.6
Approach LOS			D

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	103.4%	ICU Level of Service	G
Analysis Period (min)	15		



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	18	1749	38	0	1380
Sign Control	Stop		Free			Free
Grade	0%		-1%			-2%
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	0	20	1943	42	0	1533
Pedestrians						14
Lane Width (ft)						12.0
Walking Speed (ft/s)						4.0
Percent Blockage						1
Right turn flare (veh)						
Median type			TWLTL			TWLTL
Median storage veh)			2			2
Upstream signal (ft)			543			963
pX, platoon unblocked	0.69	0.60			0.60	
vC, conflicting volume	2731	1007			1986	
vC1, stage 1 conf vol	1964					
vC2, stage 2 conf vol	767					
vCu, unblocked vol	1479	0			1315	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)	5.8					
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	97			100	
cM capacity (veh/h)	132	645			314	

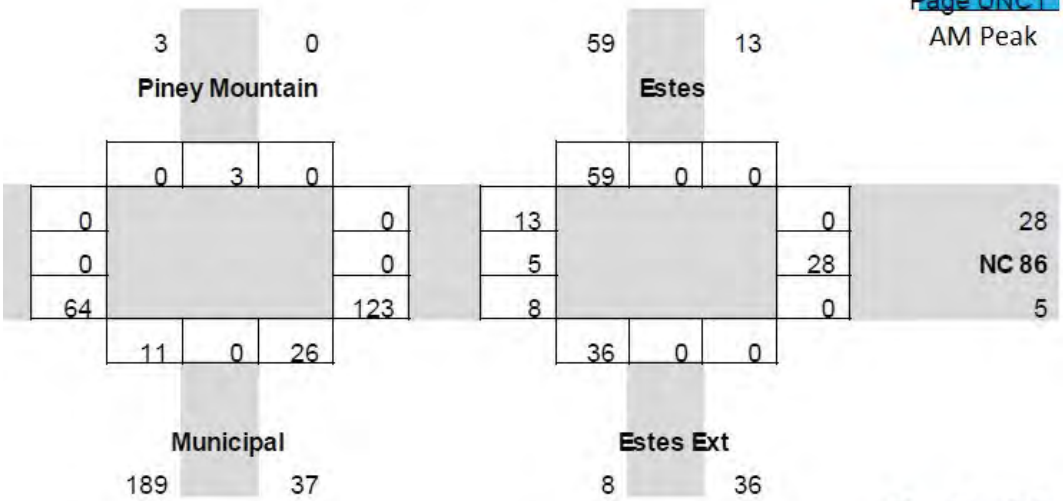
Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	20	1296	690	767	767
Volume Left	0	0	0	0	0
Volume Right	20	0	42	0	0
cSH	645	1700	1700	1700	1700
Volume to Capacity	0.03	0.76	0.41	0.45	0.45
Queue Length 95th (ft)	2	0	0	0	0
Control Delay (s)	10.8	0.0	0.0	0.0	0.0
Lane LOS	B				
Approach Delay (s)	10.8	0.0		0.0	
Approach LOS	B				

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

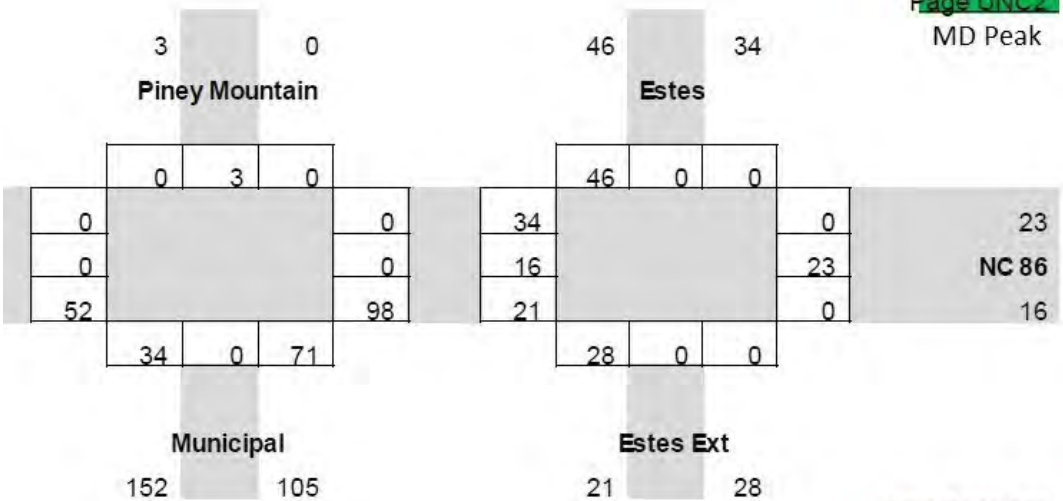
Appendix D: Background Volumes

Carolina North Background Traffic

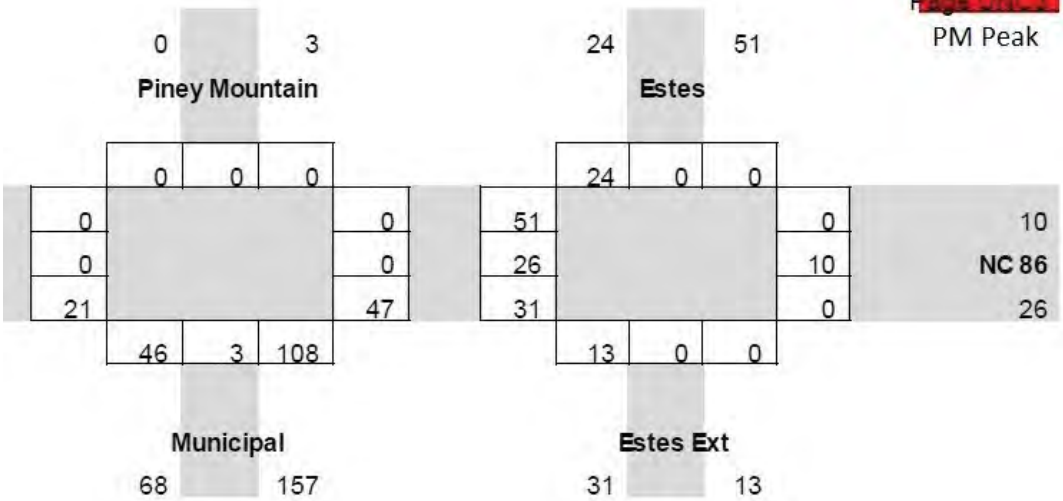
The Edge TIS
5/12/2012
Page UNC1
AM Peak

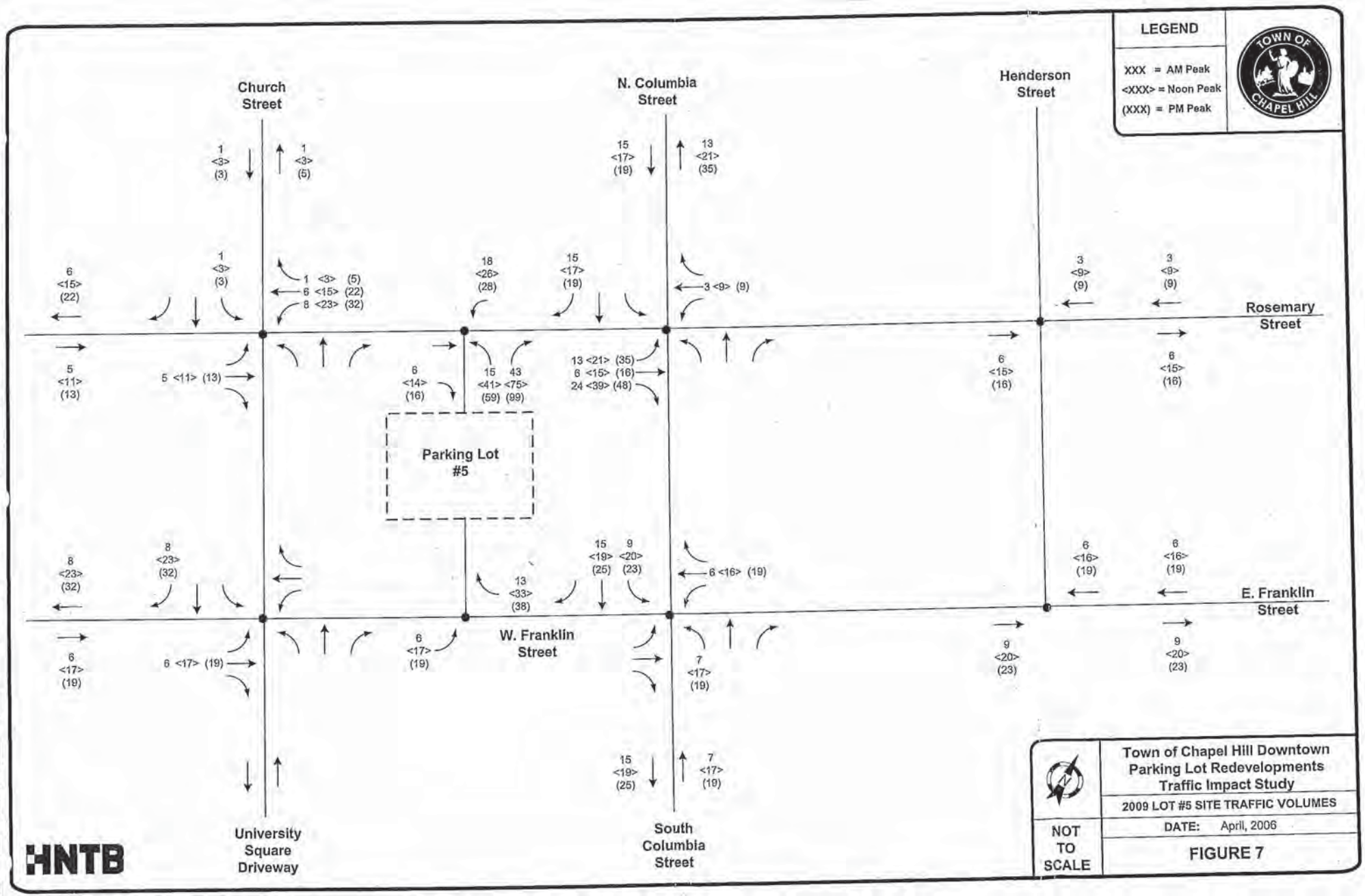


The Edge TIS
5/12/2012
Page UNC2
MD Peak



The Edge TIS
5/12/2012
Page UNC3
PM Peak




LEGEND
XXX = AM Peak
<XXX> = Noon Peak
(XXX) = PM Peak
TOWN OF CHAPEL HILL
Church Street
N. Columbia Street
Henderson Street
Rosemary Street
E. Franklin Street
W. Franklin Street
Parking Lot #5
University Square Driveway
South Columbia Street
1 <3> (3)
1 <3> (5)
15 <17> (19)
13 <21> (35)
6 <15> (22)
1 <3> (3)
1 <3> (5)
6 <15> (22)
8 <23> (32)
18 <26> (28)
15 <17> (19)
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3 <9> (9)
3 <9> (9)
5 <11> (13)
5 <11> (13)
6 <14> (16)
15 <41> <75> (59) (99)
43 <75> (99)
13 <21> (35)
6 <15> (16)
24 <39> (48)
6 <15> (16)
6 <15> (16)
8 <23> (32)
8 <23> (32)
15 <19> (25)
9 <20> (23)
6 <16> (19)
6 <16> (19)
6 <16> (19)
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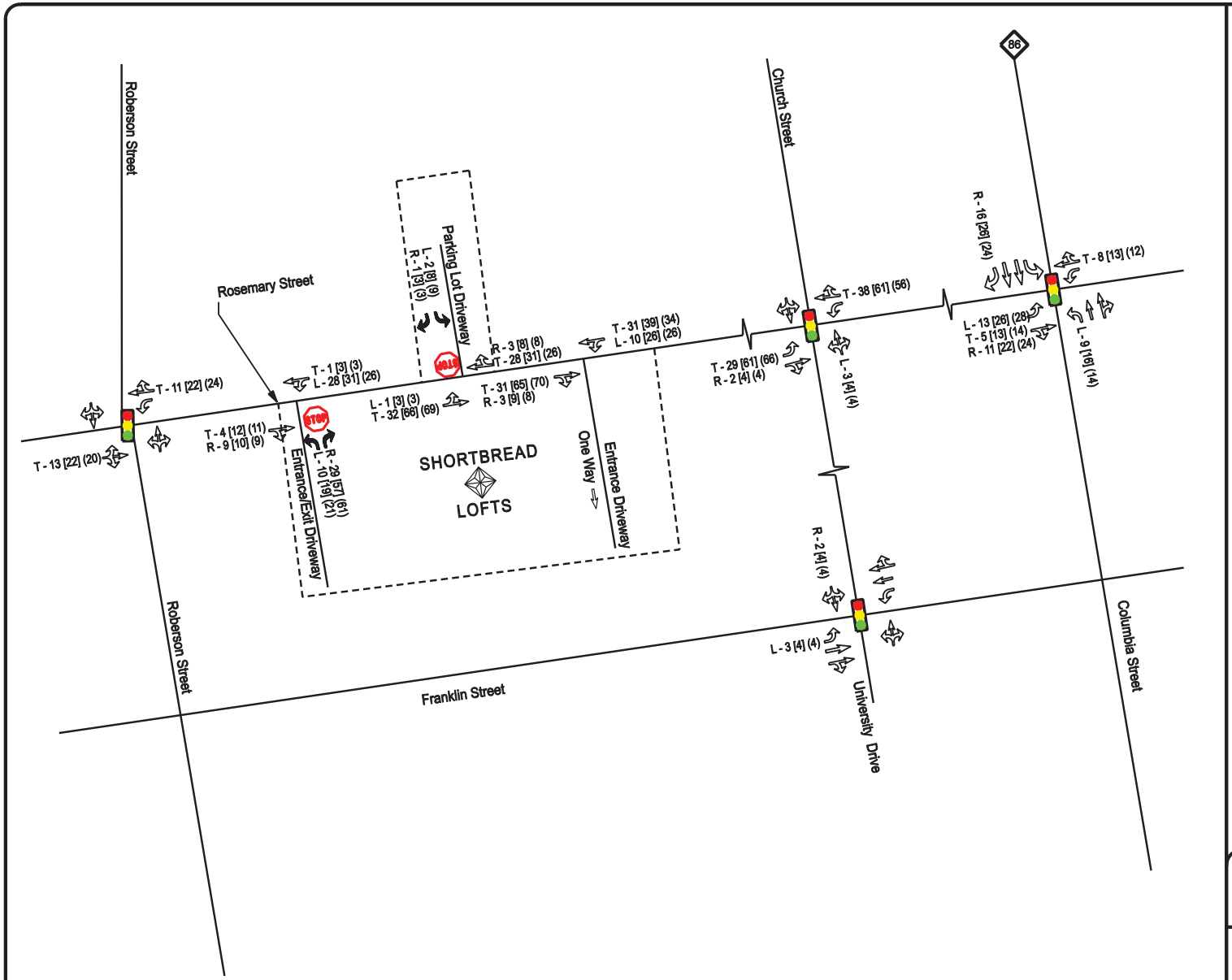
6 <17> (19)
6 <17> (19)
6 <17> (19)
7 <17> (19)
9 <20> (23)
9 <20> (23)
15 <19> (25)
7 <17> (19)
HNTB
NOT TO SCALE
Town of Chapel Hill Downtown Parking Lot Redevelopments Traffic Impact Study
2009 LOT #5 SITE TRAFFIC VOLUMES
DATE: April, 2006
FIGURE 7



LEGEND

Traffic Volumes

00	AM Peak Hour Volume (vph)
[00]	Mid-Day Peak Hour Volume (vph)
(00)	PM Peak Hour Volume (vph)
L	Left Turn Volume
T	Through Volume
R	Right Turn Volume

Lane Use

- Existing Lane Use
- Proposed Lane Use

Traffic Control Devices

- Traffic Signal
- Stop Sign

Not To Scale

SHORTBREAD LOFTS - 2009 MODIFICATION TRAFFIC IMPACT ANALYSIS

RS&H Architects - Engineers - Planners, Inc.

TOWN OF CHAPEL HILL

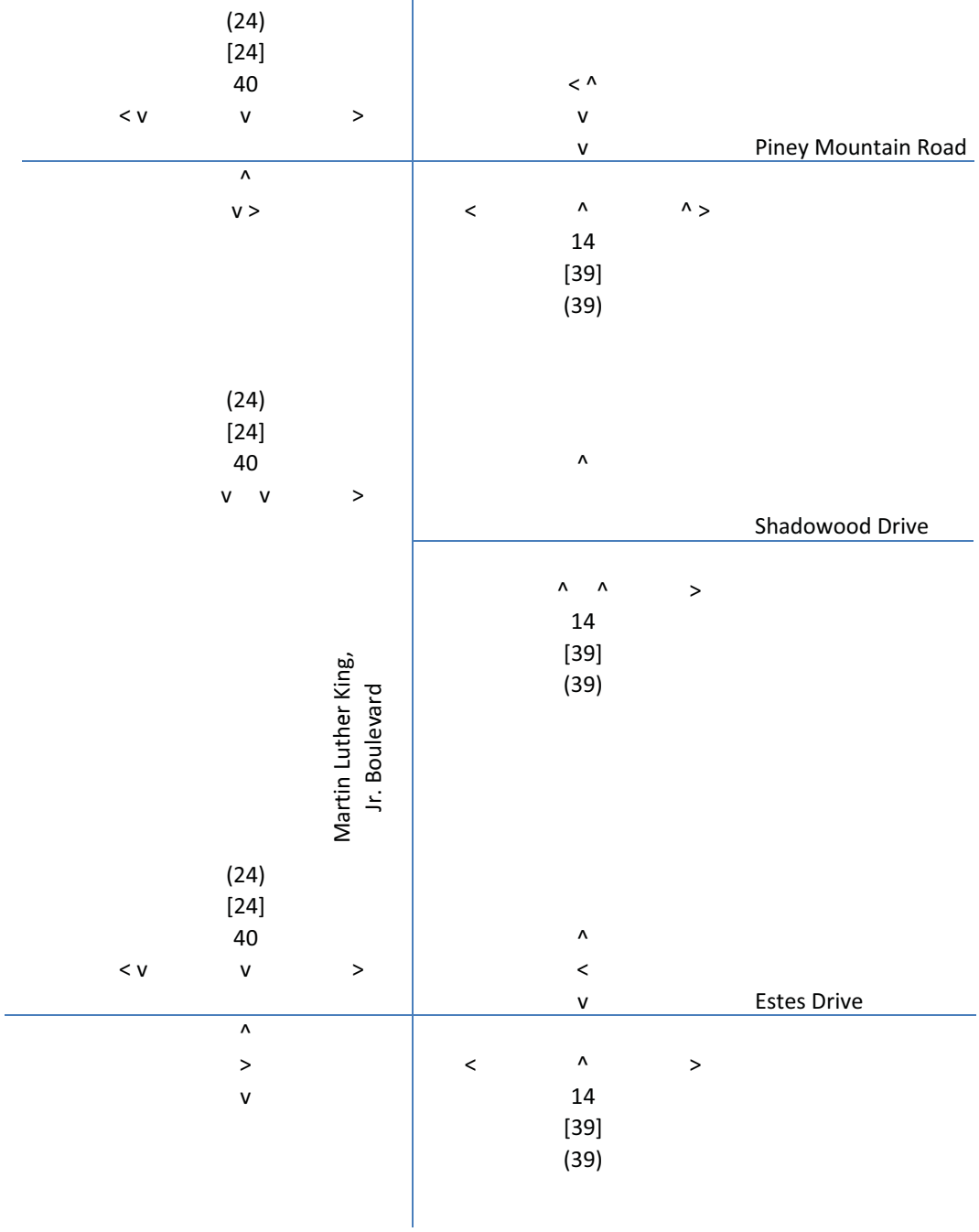
2013 Site Traffic Assignment

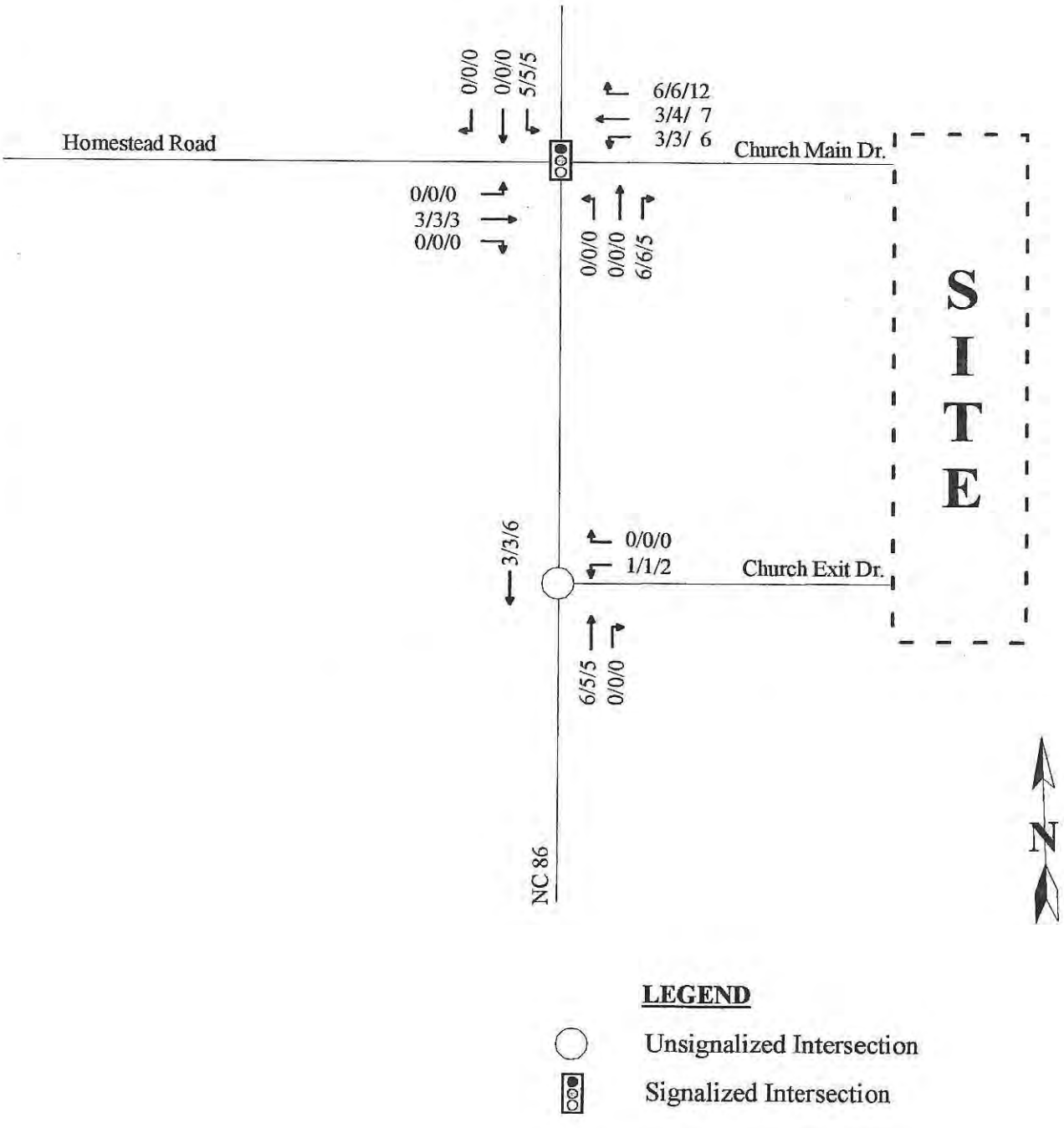
FIGURE 7

UNC Campus Development Plan Background Trips	AM [MD] (PM)

* Note: PM trips assumed for Mid-day; no Mid-day trips supplied in the Development Plan

	Volumes	Rt	Thru	Lt
	Lane Configurations	<	v	>





LEGEND

Unsignalized Intersection

Signalized Intersection

PROPOSED CHURCH EXPANSION CHAPEL HILL, NORTH CAROLINA		
Weekday Primary Site Trips		
	SCALE: Not to Scale	Figure 13

Appendix E: 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: 04/01/2009 **to** 03/31/2012 **Study:** 41000019353
Location: NC 86-Martin Luther King Boulevard from Ashley Forest Road to Airport Drive

Report Details

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
1	**102579674**	2.882	04/22/2009 16:11	SIDESWIPE, SAME DIRECTION	$ 3200	0	0	0	0	1	1	1	1	0	0	
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:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
2	**102831927**	2.901	03/27/2010 02:34	RAN OFF ROAD - RIGHT	$ 2500	0	0	1	0	1	4	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 1	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 33										
3	**103409436**	2.901	03/12/2012 16:49	REAR END, SLOW OR STOP	$ 450	0	0	0	1	1	1	1	1	12	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
4	**103089686**	2.906	02/04/2011 16:59	REAR END, SLOW OR STOP	$ 3000	0	0	0	0	2	2	3	3	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
5	**103295009**	2.906	10/19/2011 16:30	REAR END, SLOW OR STOP	$ 1900	0	0	0	3	2	1	3	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** NE	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
6	**102736946**	2.920	11/19/2009 15:47	SIDESWIPE, SAME DIRECTION	$ 4000	0	0	0	0	2	1	3	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 5	**Obj Strk:**										
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
7	**102816929**	2.929	02/22/2010 17:42	REAR END, SLOW OR STOP	$ 2350	0	0	0	0	2	2	2	1	0		
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
8	**103391921**	2.929	02/14/2012 18:04	REAR END, SLOW OR STOP	$ 3100	0	0	0	0	1	4	2	1	0		
Unit	**1 :** 1	**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
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
9	**103295004**	2.939	10/19/2011 16:21	REAR END, SLOW OR STOP	$ 5100	0	0	0	2	2	1	3	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 4	**Alchl/Drgs:**	0	**Speed:** 20 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
10	**102799397**	2.948	02/03/2010 16:16	REAR END, SLOW OR STOP	$ 5500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
11	**103015149**	2.958	11/07/2010 16:06	REAR END, SLOW OR STOP	$ 2000	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
12	**103367199**	2.958	01/12/2012 09:06	RAN OFF ROAD - RIGHT	$ 8250	0	0	0	1	2	1	1	1	0		2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**		64	
13	**102887150**	2.960	06/14/2010 17:03	REAR END, SLOW OR STOP	$ 2800	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 31	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
14	**102571160**	2.980	04/14/2009 15:46	REAR END, SLOW OR STOP	$ 750	0	0	0	1	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 3	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
15	**103365314**	2.982	01/06/2012 14:30	REAR END, SLOW OR STOP	$ 0	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	7	**Speed:** 5 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
16	**102901030**	2.985	06/16/2010 18:04	LEFT TURN, DIFFERENT ROADWAYS	$ 5000	0	0	0	1	2	1	2	1	0	13	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** SW		**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
17	**103041981**	2.985	12/08/2010 17:18	ANGLE	$ 1800	0	0	0	0	1	4	1	1	12	1	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				8			**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	**103076055**	2.985	01/13/2011 13:34	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
19	**103219319**	2.985	07/28/2011 16:41	LEFT TURN, SAME ROADWAY	$ 7200	0	0	0	2	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
20	**102931049**	3.023	07/28/2010 17:48	REAR END, SLOW OR STOP	$ 3000	0	0	0	0	1	1	1	1	0		
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
21	**102715853**	3.042	10/29/2009 16:39	LEFT TURN, SAME ROADWAY	$ 4350	0	0	0	0	1	1	2	1	0		
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:** E	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
22	**102678288**	3.075	08/10/2009 13:26	REAR END, SLOW OR STOP	$ 1900	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 2 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:**			
23	**103204764**	3.075	06/28/2011 16:17	REAR END, SLOW OR STOP	$ 7850	0	0	0	0	2	1	3	1	1	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:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
24	**102742875**	3.080	11/23/2009 19:40	LEFT TURN, SAME ROADWAY	$ 6000	0	0	0	0	2	4	3	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
25	**102757998**	3.080	12/06/2009 14:45	LEFT TURN, DIFFERENT ROADWAYS	$ 19500	0	0	0	3	1	1	2	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** NE	**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:**			
26	**102824246**	3.080	03/17/2010 17:34	REAR END, SLOW OR STOP	$ 1050	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 20	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**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	**102835582**	3.080	04/03/2010 11:38	REAR END, TURN	$ 3000	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			5		**Obj Strk:**					
Unit	**2 :** 5	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**			7		**Obj Strk:**					
28	**102888919**	3.080	05/25/2010 22:52	ANGLE	$ 1500	0	0	0	0	1	4	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 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
29	**102955866**	3.080	08/31/2010 18:56	ANGLE	$ 2500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**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:**					
30	**103032633**	3.080	11/24/2010 17:22	LEFT TURN, SAME ROADWAY	$ 2300	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	2	**Speed:** 15 MPH	**Dir:** SE	**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:**					
31	**103036595**	3.080	12/05/2010 19:09	LEFT TURN, SAME ROADWAY	$ 4000	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**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:**					
32	**103068914**	3.080	01/04/2011 21:11	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			16		**Obj Strk:**					
33	**103107522**	3.080	02/27/2011 13:26	ANGLE	$ 6500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 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:**			4		**Obj Strk:**					
34	**103199833**	3.080	06/23/2011 08:09	RIGHT TURN, DIFFERENT ROADWAYS	$ 1900	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			7		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
35	**103233990**	3.080	08/17/2011 22:45	LEFT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8		**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
36	**102758900**	3.082	12/07/2009 11:21	REAR END, TURN	$ 7500	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			7		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1		**Obj Strk:**					
37	**102584701**	3.085	04/26/2009 13:40	RIGHT TURN, DIFFERENT ROADWAYS	$ 3900	0	0	0	0	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 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			7		**Obj Strk:**					
38	**102918364**	3.085	07/12/2010 22:59	REAR END, SLOW OR STOP	$ 3900	0	0	0	1	3	4	3	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 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:**					
39	**103351827**	3.085	12/19/2011 17:30	REAR END, SLOW OR STOP	$ 10200	0	0	0	0	1	4	1	1	0	3	1
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:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			1		**Obj Strk:**					
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
Unit	**4 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
40	**103174352**	3.089	05/23/2011 17:24	REAR END, SLOW OR STOP	$ 1100	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:**			1		**Obj Strk:**					
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
41	**102568817**	3.090	04/06/2009 15:24	REAR END, SLOW OR STOP	$ 11000	0	0	0	0	1	1	2	1	0	0	
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:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
42	**103327261**	3.108	11/22/2011 08:00	REAR END, SLOW OR STOP	$ 4300	0	0	0	0	1	1	2	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:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4		**Obj Strk:**					
43	**102670062**	3.109	08/18/2009 14:35	REAR END, SLOW OR STOP	$ 11000	0	0	0	3	1	1	1	1	0	13	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:** S	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			11		**Obj Strk:**					
Unit	**4 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			1		**Obj Strk:**					
44	**103282606**	3.137	10/13/2011 09:26	REAR END, SLOW OR STOP	$ 2800	0	0	0	0	1	1	1	1	0	14	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			11		**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 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
45	**102913564**	3.151	06/30/2010 16:06	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	1	1	2	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 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:**			
46	**102572495**	3.193	04/15/2009 08:42	LEFT TURN, DIFFERENT ROADWAYS	$ 4700	0	0	0	0	1	1	2	1	0	14	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 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:**			
47	**103324165**	3.207	11/16/2011 08:32	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	2	1	0	10	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:** 20 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**3 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
48	**103077607**	3.213	01/14/2011 13:49	REAR END, SLOW OR STOP	$ 1250	0	0	0	0	1	1	1	1	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:** 30 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
49	**102946766**	3.217	08/18/2010 14:18	REAR END, SLOW OR STOP	$ 4150	0	0	0	0	1	1	1	1	0	14	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**4 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
50	**102855355**	3.243	04/27/2010 16:01	REAR END, SLOW OR STOP	$ 3500	0	0	0	1	1	1	2	1	0	13	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:** 0 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
51	**102962652**	3.269	09/10/2010 16:55	REAR END, SLOW OR STOP	$ 9000	0	0	0	0	1	1	1	1	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:** 35 MPH **Dir:** S		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
52	**103199540**	3.319	06/28/2011 16:11	REAR END, SLOW OR STOP	$ 1200	0	0	0	1	2	1	3	1	0	13	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 25 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 2	**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	**103164930**	3.360	05/07/2011 17:17	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	2	1	0	13	1
Unit	**1 :** 4	**Alchl/Drgs:**	1	**Speed:** 20 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:**				
54	**103384119**	3.360	01/31/2012 20:15	SIDESWIPE, SAME DIRECTION	$ 1500	0	0	0	0	1	5	1	1	0		
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:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			5			**Obj Strk:**				
55	**102678650**	3.364	09/03/2009 15:06	REAR END, SLOW OR STOP	$ 14250	0	0	0	2	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 :** 3	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
56	**102826802**	3.364	03/18/2010 13:14	REAR END, SLOW OR STOP	$ 800	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			7			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
57	**103250111**	3.367	09/06/2011 08:45	REAR END, SLOW OR STOP	$ 12000	0	0	0	1	2	1	3	3	0	3	1
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:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
58	**102975171**	3.369	09/28/2010 11:12	LEFT TURN, DIFFERENT ROADWAYS	$ 9500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
59	**103150017**	3.369	04/24/2011 12:59	ANGLE	$ 5000	0	0	0	1	1	1	1	1	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:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
60	**103409438**	3.369	03/13/2012 14:00	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	1	1	1	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:** E	**Veh Mnvr/Ped Actn:**			8			**Obj Strk:**				
61	**102581028**	3.378	04/25/2009 07:51	REAR END, SLOW OR STOP	$ 6500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 45 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:**				

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
62	**103164706**	3.378	05/04/2011 16:34	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	1	1	2	1	0	3	1
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:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
63	**102826813**	3.383	03/18/2010 17:46	REAR END, SLOW OR STOP	$ 7600	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				11			**Obj Strk:**			
Unit	**2 :** 28	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
64	**102683375**	3.388	09/17/2009 07:20	REAR END, SLOW OR STOP	$ 8650	0	0	1	0	2	1	3	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 3 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				16			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
65	**103382669**	3.388	01/24/2012 09:13	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	2	1	2	1	0	0	2
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
66	**103217137**	3.404	07/22/2011 14:14	REAR END, SLOW OR STOP	$ 3050	0	0	0	2	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 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
67	**102834236**	3.425	03/26/2010 16:04	REAR END, SLOW OR STOP	$ 6002	0	0	0	1	1	1	1	1	0	0	
Unit	**1 :** 1	**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:**			
68	**102997460**	3.426	10/22/2010 16:55	REAR END, SLOW OR STOP	$ 10850	0	0	0	1	1	1	1	1	0	14	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 31	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
69	**103266894**	3.431	09/26/2011 10:25	LEFT TURN, SAME ROADWAY	$ 4500	0	0	0	0	1	1	1	3	12	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 3	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
70	**102902074**	3.440	06/20/2010 21:36	FIXED OBJECT	$ 2000	0	0	0	0	1	5	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				16			**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
71	**102689597**	3.473	09/09/2009 17:35	REAR END, SLOW OR STOP	$ 40000	0	0	1	1	1	1	1	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**3 :** 2	**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:**										
72	**102736947**	3.491	11/19/2009 09:15	REAR END, SLOW OR STOP	$ 1800	0	0	0	0	2	1	2	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 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:**										
73	**103096782**	3.491	02/16/2011 08:49	REAR END, SLOW OR STOP	$ 1600	0	0	0	1	1	1	2	3	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 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:**										
74	**102675734**	3.503	09/03/2009 12:49	REAR END, SLOW OR STOP	$ 1300	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**2 :** 10	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
75	**102597123**	3.504	05/12/2009 12:07	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	1	1	2	0		
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:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
76	**102856852**	3.530	04/28/2010 08:22	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	1	1	1	3	0		2
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:** 4	**Obj Strk:**										
77	**103351930**	3.530	12/20/2011 07:18	ANIMAL	$ 2000	0	0	1	0	1	1	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 17										
78	**103335768**	3.542	11/30/2011 14:13	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
79	**102607585**	3.633	05/27/2009 16:15	REAR END, SLOW OR STOP	$ 6000	0	0	0	2	1	1	1	1	0	0	
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:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**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 F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
80	**102945534**	3.663	08/15/2010 16:55	OVERTURN/ROLLOVER	$ 1200	0	0	1	0	1	1	1	3	0	0	2
Unit 1 : 20	**Alchl/Drgs:** 0	**Speed:** 45 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 12	**Obj Strk:**											
81	**103149886**	3.671	04/21/2011 16:00	REAR END, SLOW OR STOP	$ 13500	0	0	0	3	1	1	1	3	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 2 : 5	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**											
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
82	**102672226**	3.709	08/28/2009 02:16	LEFT TURN, DIFFERENT ROADWAYS	$ 10500	0	0	0	0	1	4	2	1	0	1	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**											
Unit 2 : 1	**Alchl/Drgs:** 1	**Speed:** 10 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:** 8	**Obj Strk:**											
83	**102893592**	3.709	06/14/2010 21:39	LEFT TURN, SAME ROADWAY	$ 2700	0	0	0	1	1	4	1	1	0		
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**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:**											
84	**103365817**	3.709	01/07/2012 14:33	RIGHT TURN, DIFFERENT ROADWAYS	$ 2800	0	0	0	0	1	1	1	1	0	1	1
Unit 1 : 2	**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:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**											

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	84	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	33	39.29
Total Injury Crashes	33	39.29
Property Damage Only Crashes	51	60.71
Night Crashes	13	15.48
Wet Crashes	15	17.86
Alcohol/Drugs Involvement Crashes	4	4.76

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	84	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	5	5.95
Class C Crashes	28	33.33
Property Damage Only Crashes	51	60.71

Vehicle Exposure Statistics

Annual ADT = 27100

Total Length = 0.827 (Miles) **1.331 (Kilometers)**

Total Vehicle Exposure = 24.56 (MVMT) **39.53 (MVKMT)**

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	341.97	212.49
Fatal Crash Rate	0.00	0.00
Non Fatal Crash Rate	134.35	83.48
Night Crash Rate	52.92	32.89
Wet Crash Rate	61.07	37.95
EPDO Rate	1336.14	830.24

Miscellaneous Statistics

Severity Index =	3.91
EPDO Crash Index =	328.20
Estimated Property Damage Total = $	425452.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	5	5.95
ANIMAL	1	1.19
FIXED OBJECT	1	1.19
LEFT TURN, DIFFERENT ROADWAYS	6	7.14
LEFT TURN, SAME ROADWAY	9	10.71
OVERTURN/ROLLOVER	1	1.19
RAN OFF ROAD - RIGHT	2	2.38
REAR END, SLOW OR STOP	51	60.71
REAR END, TURN	2	2.38
RIGHT TURN, DIFFERENT ROADWAYS	3	3.57
SIDESWIPE, SAME DIRECTION	3	3.57

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	5	10.64
Class C Injuries	42	89.36
Total Non-Fatal Injuries	47	100.00
Total Injuries	47	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	8	9.52
Feb	6	7.14
Mar	7	8.33
Apr	11	13.10
May	6	7.14
Jun	8	9.52
Jul	4	4.76
Aug	7	8.33
Sep	8	9.52
Oct	5	5.95
Nov	8	9.52
Dec	6	7.14

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	12	14.29
Tue	17	20.24
Wed	20	23.81
Thu	14	16.67
Fri	8	9.52
Sat	5	5.95
Sun	8	9.52

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	2	2.38
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	3	3.57
0800-0859	7	8.33
0900-0959	4	4.76
1000-1059	1	1.19
1100-1159	3	3.57
1200-1259	3	3.57
1300-1359	6	7.14
1400-1459	8	9.52
1500-1559	4	4.76
1600-1659	20	23.81
1700-1759	11	13.10
1800-1859	3	3.57
1900-1959	2	2.38
2000-2059	1	1.19
2100-2159	3	3.57
2200-2259	3	3.57
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	56	11	0	67
Dark	11	2	0	13
Other	2	2	0	4
Total	69	15	0	84

Object Struck Summary

Object Type	Times Struck	Percent of Total
ANIMAL	1	33.33
OTHER FIXED OBJECT	1	33.33
TREE	1	33.33

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
FIRETRUCK	1	0.55
LIGHT TRUCK (MINI-VAN, PANEL)	6	3.30
MOTORCYCLE	2	1.10
PASSENGER CAR	116	63.74
PICKUP	18	9.89
POLICE	2	1.10
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	1	0.55
SPORT UTILITY	31	17.03
VAN	5	2.75

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	21	0	8	13
2010	28	0	11	17
2011	27	0	11	16
2012	8	0	3	5
Total	84	0	33	51

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	15
2010	0	11
2011	0	18
2012	0	3
Total	0	47

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 168300	80.20
2010	$ 105702	109.40
2011	$ 121350	108.40
2012	$ 30100	30.20
Total	$ 425452	328.20

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	5	1	13	0	0	2	0
2010	5	0	17	2	3	0	1
2011	4	1	19	0	2	0	1
2012	1	1	4	1	0	1	0
Total	15	3	53	3	5	3	2

Strip Diagram

Features	Milepost	Crash IDs
AIRPORT	2.880	102579674
	2.890	
	2.900	102831927 | 103409436
	2.910	103089686 | 103295009
	2.920	102736946
	2.930	102816929 | 103391921
	2.940	103295004
	2.950	102799397
	2.960	103015149 | 103367199 | 102887150
	2.970	
	2.980	102571160 | 103365314 | 102901030 | 103041981 | 103076055 | 103219319
	2.990	
	3.000	
	3.010	
	3.020	102931049
	3.030	
	3.040	102715853
	3.050	
	3.060	
	3.070	
SR 1750 | SR 1780 | ESTES	3.080	102678288 | 103204764 | 102742875 | 102757998 | 102824246 | 102835582 | 102888919 | 102955866 | 103032633 | 103036595 | 103068914 | 103107522 | 103199833 | 103233990 | 102758900
	3.090	102584701 | 102918364 | 103351827 | 103174352 | 102568817
	3.100	
	3.110	103327261 | 102670062
	3.120	
	3.130	
	3.140	103282606
	3.150	102913564
	3.160	
	3.170	
	3.180	
MISTYWOOD | SHADOWWOOD	3.190	102572495
	3.200	
	3.210	103324165 | 103077607
	3.220	102946766
	3.230	
	3.240	102855355

Features	Milepost	Crash IDs
	3.250	
	3.260	
	3.270	102962652
	3.280	
	3.290	
	3.300	
	3.310	
	3.320	103199540
	3.330	
	3.340	
	3.350	
	3.360	103164930 | 103384119 | 102678650 | 102826802
PINEY MOUNTAIN	3.370	103250111 | 102975171 | 103150017 | 103409438
	3.380	102581028 | 103164706 | 102826813
	3.390	102683375 | 103382669
	3.400	103217137
	3.410	
	3.420	102834236
MUNICIPAL	3.430	102997460 | 103266894
	3.440	102902074
	3.450	
	3.460	
	3.470	102689597
	3.480	
	3.490	102736947 | 103096782
	3.500	102675734 | 102597123
	3.510	
TIMBER HOLLOW	3.520	
	3.530	102856852 | 103351930
	3.540	103335768
	3.550	
	3.560	
	3.570	
	3.580	
	3.590	
	3.600	
	3.610	
	3.620	
	3.630	102607585
	3.640	
	3.650	
	3.660	102945534
	3.670	103149886
	3.680	
	3.690	

Features	Milepost	Crash IDs
	3.700	
ASHLEY FOREST	3.710	102672226 | 102893592 | 103365817

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019353	41000019353			76.8	8.4	27100	30000086

Request Date	Courier Service	Phone No.	Ext.	Fax No.
05/14/2012		704-940-3686		704-541-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		0	04/01/2009	03/31/2012	3.00

Location Text

NC 86-Martin Luther King Boulevard from Ashley Forest Road to Airport Drive

Requestor

Tyler Risdon, EI
RS&H
Charlotte,NC

Included Accidents	Old MP	New MP	Type
103295009	2.858	2.906	I
102568817	3.07	3.09	R
102581028	3.44	3.378	R
102678288	3.08	3.075	R
102678650	3.436	3.364	R
102683375	3.45	3.388	R
102826802	3.369	3.364	R
102856852	3.523	3.53	R
102901030	3.08	2.985	R
102902074	3.523	3.44	R
102918364	3.08	3.085	R
102962652	3.331	3.269	R
103041981	3.08	2.985	R
103076055	3.08	2.985	R
103164706	3.44	3.378	R
103174352	3.08	3.089	R
103204764	3.365	3.075	R
103217137	3.466	3.404	R
103219319	3.08	2.985	R
103250111	3.429	3.367	R
103335768	3.504	3.542	R
103351827	3.08	3.085	R
103351930	3.523	3.53	R

Excluded Accidents

102770503

Excluded Accidents
102855360
103186280

Fiche Roads

Name	Code
NC 86	30000086
MARTIN LUTHER KING	50019060

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
NC 86	30000086	2.882	3.709	0.827	1.331

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

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 4/1/2009 **to** 3/31/2012 **Study:** 41000019357
Location: Secondary Route 1750 (Estes Drive) from Halifax Road to Airport Drive

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	**103085482**	1.470	01/27/2011 07:48	REAR END, SLOW OR STOP	$ 16000	0	0	0	0	1	1	2	3	0	0	2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
2	**103268908**	1.470	09/28/2011 14:25	LEFT TURN, DIFFERENT ROADWAYS	$ 1900	0	0	0	0	1	1	1	1	0	1	1
Unit	**1 :** 6	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:**		8		**Obj Strk:**						
Unit	**2 :** 7	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
3	**102882949**	1.474	05/19/2010 15:20	REAR END, SLOW OR STOP	$ 3900	0	0	0	0	1	1	2	1	0	13	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**3 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
4	**103076055**	1.508	01/13/2011 13:34	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
5	**102599032**	1.565	05/15/2009 08:20	REAR END, SLOW OR STOP	$ 1400	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
6	**102624321**	1.683	06/19/2009 11:22	LEFT TURN, SAME ROADWAY	$ 6000	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** SW	**Veh Mnvr/Ped Actn:**		9		**Obj Strk:**						
7	**103082849**	1.720	01/24/2011 15:43	REAR END, SLOW OR STOP	$ 9000	0	0	0	0	1	1	2	3	0	3	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
8	**102786695**	1.721	01/18/2010 07:42	RIGHT TURN, DIFFERENT ROADWAYS	$ 3000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** SW	**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
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
9	**102960539**	1.721	09/08/2010 12:58	REAR END, SLOW OR STOP	$ 3200	0	0	0	2	1	1	2	1	0	13	1
Unit	**1 :** 5	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				12			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
Unit	**3 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				1			**Obj Strk:**			
10	**103405222**	1.723	03/01/2012 13:38	SIDESWIPE, SAME DIRECTION	$ 1000	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 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:**			
11	**102770503**	1.725	12/12/2009 11:12	REAR END, SLOW OR STOP	$ 250	0	0	0	3	1	1	2	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:** 3 MPH **Dir:** NW		**Veh Mnvr/Ped Actn:**				12			**Obj Strk:**			
12	**103186280**	1.725	06/06/2011 18:13	SIDESWIPE, SAME DIRECTION	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
13	**102573155**	1.730	04/16/2009 22:34	LEFT TURN, DIFFERENT ROADWAYS	$ 2500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	7	**Speed:** 40 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
14	**102626851**	1.730	06/28/2009 17:10	LEFT TURN, SAME ROADWAY	$ 12000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH **Dir:** E		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 50 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
15	**102742875**	1.730	11/23/2009 19:40	LEFT TURN, SAME ROADWAY	$ 6000	0	0	0	0	2	4	3	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 10 MPH **Dir:** N		**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH **Dir:** W		**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
16	**102757998**	1.730	12/06/2009 14:45	LEFT TURN, DIFFERENT ROADWAYS	$ 19500	0	0	0	3	1	1	2	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 5 MPH **Dir:** NE		**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:**			
17	**102855360**	1.730	04/25/2010 08:55	RIGHT TURN, DIFFERENT ROADWAYS	$ 14000	0	0	0	1	2	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH **Dir:** NE		**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH **Dir:** W		**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
18	**102888919**	1.730	05/25/2010 22:52	ANGLE	$ 1500	0	0	0	0	1	4	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 :** 4	**Alchl/Drgs:**	0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
19	**102955866**	1.730	08/31/2010 18:56	ANGLE	$ 2500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** N	**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:**			
20	**103032633**	1.730	11/24/2010 17:22	LEFT TURN, SAME ROADWAY	$ 2300	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	2	**Speed:** 15 MPH	**Dir:** SE	**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:**			
21	**103036595**	1.730	12/05/2010 19:09	LEFT TURN, SAME ROADWAY	$ 4000	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** N	**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:**			
22	**103068914**	1.730	01/04/2011 21:11	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				16			**Obj Strk:**			
23	**103107522**	1.730	02/27/2011 13:26	ANGLE	$ 6500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 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:**				4			**Obj Strk:**			
24	**103199833**	1.730	06/23/2011 08:09	RIGHT TURN, DIFFERENT ROADWAYS	$ 1900	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**				7			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
25	**103233990**	1.730	08/17/2011 22:45	LEFT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:**				4			**Obj Strk:**			
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				8			**Obj Strk:**			
26	**102923787**	1.733	07/20/2010 15:10	REAR END, TURN	$ 500	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**				12			**Obj Strk:**			
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**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
27	**102595850**	1.738	05/11/2009 11:21	REAR END, SLOW OR STOP	$ 2000	0	0	0	1	2	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
28	**103226160**	1.738	08/08/2011 16:04	REAR END, SLOW OR STOP	$ 4000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
29	**102941622**	1.739	08/10/2010 18:35	REAR END, SLOW OR STOP	$ 900	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
30	**102989109**	1.785	10/12/2010 12:58	SIDESWIPE, SAME DIRECTION	$ 2200	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			6			**Obj Strk:**				
31	**103414224**	1.787	03/23/2012 10:28	REAR END, SLOW OR STOP	$ 14500	0	0	0	0	1	1	1	3	0		
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**			20	
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
32	**103167476**	1.787	05/09/2011 16:26	REAR END, SLOW OR STOP	$ 4850	0	0	0	2	1	1	1	1	0	13	1
Unit	**1 :** 3	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**2 :** 2	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**3 :** 7	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
33	**102820881**	1.973	03/08/2010 15:18	REAR END, SLOW OR STOP	$ 3000	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
34	**102775269**	2.006	12/30/2009 17:15	REAR END, SLOW OR STOP	$ 3500	0	0	0	1	1	5	1	3	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			4			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			1			**Obj Strk:**				
35	**103248168**	2.022	09/02/2011 15:51	REAR END, SLOW OR STOP	$ 3700	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**			11			**Obj Strk:**				
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 35 MPH	**Dir:** W	**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
36	**103345882**	2.025	12/15/2011 17:31	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	5	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
37	**103341279**	2.049	12/08/2011 17:56	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	6	1	1	0		
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
38	**103218367**	2.110	07/26/2011 17:22	REAR END, SLOW OR STOP	$ 10000	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** NW	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
39	**102612264**	2.181	06/01/2009 10:56	REAR END, SLOW OR STOP	$ 5500	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
40	**102734320**	2.190	11/12/2009 15:25	LEFT TURN, DIFFERENT ROADWAYS	$ 5300	0	0	0	0	2	1	3	1	0	9	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:** 8					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
41	**103322368**	2.190	11/14/2011 18:36	REAR END, SLOW OR STOP	$ 10500	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
42	**102651152**	2.213	08/04/2009 11:36	REAR END, SLOW OR STOP	$ 13500	0	0	1	0	1	1	1	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 4					**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
43	**102658646**	2.220	08/10/2009 05:35	RAN OFF ROAD - RIGHT	$ 5000	0	0	0	0	1	4	1	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 15					**Obj Strk:** 34						
44	**103154596**	2.228	05/04/2011 16:21	REAR END, SLOW OR STOP	$ 5500	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 1					**Obj Strk:**						
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**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
45	**102806153**	2.282	02/15/2010 09:13	RAN OFF ROAD - RIGHT	$ 15000	0	0	0	0	1	1	2	3	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	7	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**		34				
46	**102703411**	2.313	10/07/2009 08:07	REAR END, TURN	$ 5000	0	0	0	0	2	1	3	3	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**3 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
47	**103209295**	2.313	07/07/2011 16:33	REAR END, SLOW OR STOP	$ 4200	0	0	0	0	2	1	2	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
48	**102839170**	2.315	04/11/2010 16:53	REAR END, SLOW OR STOP	$ 2500	0	0	0	0	1	1	1	4	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
49	**103350536**	2.315	12/16/2011 12:10	REAR END, SLOW OR STOP	$ 4100	0	0	0	0	1	1	2	1	0	1	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:** 0 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
50	**103122487**	2.319	03/22/2011 16:17	REAR END, SLOW OR STOP	$ 5500	0	0	0	1	1	1	1	3	0	1	1
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 4	**Alchl/Drgs:**	0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
51	**102996707**	2.393	10/21/2010 20:05	RAN OFF ROAD - RIGHT	$ 4500	0	0	0	0	1	4	1	5	0	0	
Unit	**1 :** 4	**Alchl/Drgs:**	0	**Speed:** 45 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		16		**Obj Strk:**		33				
52	**102775400**	2.400	12/31/2009 16:58	REAR END, SLOW OR STOP	$ 250	0	0	0	0	2	2	3	1	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		4		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
53	**102573205**	2.412	04/16/2009 12:07	REAR END, SLOW OR STOP	$ 2200	0	0	0	0	1	1	1	3	0		2
Unit	**1 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**2 :** 1	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**Veh Mnvr/Ped Actn:**		1		**Obj Strk:**						
Unit	**3 :** 5	**Alchl/Drgs:**	0	**Speed:** 20 MPH	**Dir:** W	**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
54	**102734328**	2.436	11/12/2009 13:02	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	2	1	3	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
55	**102867902**	2.446	05/12/2010 16:48	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
56	**102690633**	2.450	09/26/2009 09:50	ANGLE	$ 10000	0	0	1	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 7	**Obj Strk:**										
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
57	**103017066**	2.450	11/10/2010 08:49	ANGLE	$ 12000	0	0	0	1	1	1	1	6	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
58	**103274457**	2.454	09/30/2011 17:10	REAR END, SLOW OR STOP	$ 3300	0	0	0	0	2	1	1	1	0		
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
Unit	**3 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 11	**Obj Strk:**										
59	**102730855**	2.478	11/14/2009 21:36	RAN OFF ROAD - RIGHT	$ 3000	0	0	0	0	1	4	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 1	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 34										
60	**103026551**	2.478	11/19/2010 11:37	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	1	1	3	0	9	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
61	**102572498**	2.491	04/16/2009 10:49	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	2	0	9	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:**										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** SE	**Veh Mnvr/Ped Actn:** 1	**Obj Strk:**										
62	**102782030**	2.498	01/06/2010 09:26	PARKED MOTOR VEHICLE	$ 8300	0	0	1	0	1	1	1	2	0	13	1
Unit	**1 :** 10	**Alchl/Drgs:** 7	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 3	**Obj Strk:** 20										
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**Obj Strk:** 20										
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** S	**Veh Mnvr/Ped Actn:** 4	**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
63	**102609009**	2.500	05/29/2009 15:26	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	1	1	0	3	1

Unit 1 : 1 **Alchl/Drgs:** 0 **Speed:** 20 MPH **Dir:** SE **Veh Mnvr/Ped Actn:** 4 **Obj Strk:**

Unit 2 : 1 **Alchl/Drgs:** 0 **Speed:** 0 MPH **Dir:** SE **Veh Mnvr/Ped Actn:** 1 **Obj Strk:**

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	63	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	18	28.57
Total Injury Crashes	18	28.57
Property Damage Only Crashes	45	71.43
Night Crashes	12	19.05
Wet Crashes	9	14.29
Alcohol/Drugs Involvement Crashes	2	3.17

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	63	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	3	4.76
Class C Crashes	15	23.81
Property Damage Only Crashes	45	71.43

Vehicle Exposure Statistics

Annual ADT = 155000

Total Length = 1.13 (Miles) **1.819 (Kilometers)**

Total Vehicle Exposure = 191.96 (MVMT) **308.94 (MVKMT)**

Crash Rate	Crashes Per 100 Million Vehicle Miles	Crashes Per 100 Million Vehicle Kilometers
Total Crash Rate	32.82	20.39
Fatal Crash Rate	0.00	0.00
Non Fatal Crash Rate	9.38	5.83
Night Crash Rate	6.25	3.88
Wet Crash Rate	4.69	2.91
EPDO Rate	102.21	63.51

Miscellaneous Statistics

Severity Index =	3.11
EPDO Crash Index =	196.20
Estimated Property Damage Total = $	327150.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	5	7.94
LEFT TURN, DIFFERENT ROADWAYS	5	7.94
LEFT TURN, SAME ROADWAY	6	9.52
PARKED MOTOR VEHICLE	1	1.59
RAN OFF ROAD - RIGHT	4	6.35
REAR END, SLOW OR STOP	34	53.97
REAR END, TURN	2	3.17
RIGHT TURN, DIFFERENT ROADWAYS	3	4.76
SIDESWIPE, SAME DIRECTION	3	4.76

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	3	12.50
Class C Injuries	21	87.50
Total Non-Fatal Injuries	24	100.00
Total Injuries	24	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	6	9.52
Feb	2	3.17
Mar	4	6.35
Apr	5	7.94
May	8	12.70
Jun	5	7.94
Jul	3	4.76
Aug	6	9.52
Sep	5	7.94
Oct	3	4.76
Nov	8	12.70
Dec	8	12.70

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	12	19.05
Tue	9	14.29
Wed	11	17.46
Thu	14	22.22
Fri	8	12.70
Sat	3	4.76
Sun	6	9.52

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	1	1.59
0600-0659	0	0.00
0700-0759	2	3.17
0800-0859	5	7.94
0900-0959	3	4.76
1000-1059	3	4.76
1100-1159	5	7.94
1200-1259	4	6.35
1300-1359	4	6.35
1400-1459	2	3.17
1500-1559	7	11.11
1600-1659	8	12.70
1700-1759	7	11.11
1800-1859	4	6.35
1900-1959	2	3.17
2000-2059	1	1.59
2100-2159	2	3.17
2200-2259	3	4.76
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	41	7	0	48
Dark	11	1	0	12
Other	2	1	0	3
Total	54	9	0	63

Object Struck Summary

Object Type	Times Struck	Percent of Total
PARKED MOTOR VEHICLE	3	42.86
TREE	1	14.29
UTILITY POLE	3	42.86

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
COMMERCIAL BUS	1	0.76
LIGHT TRUCK (MINI-VAN, PANEL)	3	2.27
PASSENGER CAR	88	66.67
PICKUP	10	7.58
SCHOOL BUS	2	1.52
SINGLE UNIT TRUCK (2-AXLE, 6-TIRE)	1	0.76
SPORT UTILITY	23	17.42
VAN	4	3.03

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	21	0	7	14
2010	19	0	7	12
2011	21	0	4	17
2012	2	0	0	2
Total	63	0	18	45

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	11
2010	0	8
2011	0	5
2012	0	0
Total	0	24

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 110100	72.80
2010	$ 86400	70.80
2011	$ 115150	50.60
2012	$ 15500	2.00
Total	$ 327150	196.20

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	6	0	12	2	1	0	0
2010	2	2	8	2	3	1	1
2011	3	1	15	0	1	1	0
2012	0	0	1	0	0	1	0
Total	11	3	36	4	5	3	1

Strip Diagram

Features	Milepost	Crash IDs
AIRPORT	1.470	103085482 | 103268908 | 102882949
	1.480	
	1.490	
	1.500	
	1.510	103076055
	1.520	
	1.530	
	1.540	
	1.550	
	1.560	
	1.570	102599032
	1.580	
	1.590	
	1.600	
	1.610	
	1.620	
	1.630	
	1.640	
	1.650	
	1.660	
	1.670	
	1.680	102624321
	1.690	
	1.700	
	1.710	
	1.720	103082849 | 102786695 | 102960539 | 103405222
NC 86 | SR 1750 | SR 1780 | MARTIN	1.730	102770503 | 103186280 | 102573155 | 102626851 |
LUTHER KING		102742875 | 102757998 | 102855360 | 102888919 |
		102955866 | 103032633 | 103036595 | 103068914 |
		103107522 | 103199833 | 103233990 | 102923787
	1.740	102595850 | 103226160 | 102941622
	1.750	
	1.760	
	1.770	
	1.780	102989109
	1.790	103414224 | 103167476
	1.800	
	1.810	
	1.820	
	1.830	
	1.840	
	1.850	
	1.860	

Features	Milepost	Crash IDs
	1.870	
	1.880	
	1.890	
	1.900	
	1.910	
	1.920	
	1.930	
	1.940	
	1.950	
	1.960	
	1.970	102820881
	1.980	
	1.990	
	2.000	
	2.010	102775269
	2.020	103248168
SOMERSET	2.030	103345882
	2.040	
	2.050	103341279
	2.060	
	2.070	
	2.080	
	2.090	
	2.100	
	2.110	103218367
	2.120	
	2.130	
	2.140	
	2.150	
	2.160	
	2.170	
	2.180	102612264
CASWELL	2.190	102734320 | 103322368
	2.200	
	2.210	102651152
	2.220	102658646
	2.230	103154596
	2.240	
	2.250	
	2.260	
	2.270	
	2.280	102806153
	2.290	
	2.300	
CUMBERLAND	2.310	102703411 | 103209295

Features	Milepost	Crash IDs
	2.320	102839170 | 103350536 | 103122487
	2.330	
	2.340	
	2.350	
	2.360	
	2.370	
	2.380	
	2.390	102996707
	2.400	102775400
	2.410	102573205
	2.420	
	2.430	
	2.440	102734328
CASWELL | CLAYTON	2.450	102867902 | 102690633 | 103017066 | 103274457
	2.460	
	2.470	
	2.480	102730855 | 103026551
	2.490	102572498
	2.500	102782030 | 102609009
	2.510	
	2.520	
	2.530	
	2.540	
	2.550	
	2.560	
	2.570	
	2.580	
	2.590	
HALIFAX	2.600	

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019357	41000019357			76.8	8.4	155000	40001750

Request Date	Courier Service	Phone No.	Ext.	Fax No.
5/15/2012		704-940-3686		704-541-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		0	4/1/2009	3/31/2012	3.00

Location Text

Secondary Route 1750 (Estes Drive) from Halifax Road to Airport Drive

Requestor

Tyler Risdon, EI
RS&H
Charlotte,NC

Included Accidents	Old MP	New MP	Type
102573155	1.47	1.73	R
102609009	2.45	2.5	R
102770503	1.73	1.725	R
102839170	2.31	2.315	R
102989109	2.03	1.785	R
103076055	1.73	1.508	R
103186280	1.73	1.725	R
103341279	2.011	2.049	R
103345882	2.03	2.025	R
103350536	2.31	2.315	R
102734328		2.436	I
103414224		1.787	I
102626851		1.73	I
103218367		2.11	I
102690633		2.45	I
102651152		2.213	I
102658646		2.22	I
103154596		2.228	I
102573205		2.412	I
102782030		2.498	I
102775400		2.4	I
102996707		2.393	I

Excluded Accidents

102678288

102824246

Excluded Accidents
102835582
102901030
102918364
103041981
103139397
103174352
103219319
103351827

Fiche Roads

Name	Code
ESTES	50009903
SR 1780	40001780
SR 1750	40001750
HILLCREST	50014034
ESTES HILL SCHL	50009904

Strip Road

Name	Code	Begin MP	End MP	Miles	Kilometers
ESTES	50009903	1.470	2.600	1.130	1.819

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

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 4/1/2009 **to** 3/31/2012 **Study:** 41000019334
Location: NC 86-Martin Luther King Boulevard and Piney Mountain Road

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**102581028**	04/25/2009 07:51	REAR END, SLOW OR STOP	$ 6500	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 45 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:**										
2	**102678650**	09/03/2009 15:06	REAR END, SLOW OR STOP	$ 14250	0	0	0	2	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 : 3	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 1	**Obj Strk:**										
Unit 3 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4	**Obj Strk:**										
3	**102683375**	09/17/2009 07:20	REAR END, SLOW OR STOP	$ 8650	0	0	1	0	2	1	3	1	0	3	1
Unit 1 : 4	**Alchl/Drgs:** 0	**Speed:** 3 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 16	**Obj Strk:**										
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 1	**Obj Strk:**										
Unit 3 : 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4	**Obj Strk:**										
4	**102760002**	12/11/2009 19:20	REAR END, SLOW OR STOP	$ 3000	0	0	0	0	1	4	1	1	0	3	1
Unit 1 : 2	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 10	**Obj Strk:**										
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1	**Obj Strk:**										
5	**102826802**	03/18/2010 13:14	REAR END, SLOW OR STOP	$ 800	0	0	0	1	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7	**Obj Strk:**										
Unit 2 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4	**Obj Strk:**										
6	**102826813**	03/18/2010 17:46	REAR END, SLOW OR STOP	$ 7600	0	0	0	0	1	1	1	1	0	0	
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 11	**Obj Strk:**										
Unit 2 : 28	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4	**Obj Strk:**										
7	**102975171**	09/28/2010 11:12	LEFT TURN, DIFFERENT ROADWAYS	$ 9500	0	0	0	0	1	1	1	1	0	3	1
Unit 1 : 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8	**Obj Strk:**										
Unit 2 : 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4	**Obj Strk:**										

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
8	**103150017**	04/24/2011 12:59	ANGLE	$ 5000	0	0	0	1	1	1	1	1	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:** 10 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8			**Obj Strk:**							
9	**103164706**	05/04/2011 16:34	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	1	1	2	1	0	3	1
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:** 10 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
10	**103164930**	05/07/2011 17:17	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	2	1	0	13	1
Unit	**1 :** 4	**Alchl/Drgs:** 1	**Speed:** 20 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:**							
11	**103250111**	09/06/2011 08:45	REAR END, SLOW OR STOP	$ 12000	0	0	0	1	2	1	3	3	0	3	1
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:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
12	**103266894**	09/26/2011 10:25	LEFT TURN, SAME ROADWAY	$ 4500	0	0	0	0	1	1	1	3	12	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** SW	**Veh Mnvr / Ped Actn:** 8			**Obj Strk:**							
Unit	**2 :** 3	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
13	**103382669**	01/24/2012 09:13	REAR END, SLOW OR STOP	$ 4000	0	0	0	0	2	1	2	1	0	0	2
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
14	**103384119**	01/31/2012 20:15	SIDESWIPE, SAME DIRECTION	$ 1500	0	0	0	0	1	5	1	1	0		
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:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 5			**Obj Strk:**							
15	**103409438**	03/13/2012 14:00	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	1	1	1	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:** E	**Veh Mnvr / Ped Actn:** 8			**Obj Strk:**							

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

Acc No	Crash ID	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	15	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	5	33.33
Total Injury Crashes	5	33.33
Property Damage Only Crashes	10	66.67
Night Crashes	2	13.33
Wet Crashes	3	20.00
Alcohol/Drugs Involvement Crashes	1	6.67

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	15	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	1	6.67
Class C Crashes	4	26.67
Property Damage Only Crashes	10	66.67

Vehicle Exposure Statistics

Annual ADT = 29100

Total Vehicle Exposure = 31.89 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	47.03
Fatal Crash Rate	0.00
Non Fatal Crash Rate	15.68
Night Crash Rate	6.27
Wet Crash Rate	9.41
EPDO Rate	163.04

Miscellaneous Statistics

Severity Index =	3.47
EPDO Crash Index =	52.00
Estimated Property Damage Total = $	89500.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	1	6.67
LEFT TURN, DIFFERENT ROADWAYS	1	6.67
LEFT TURN, SAME ROADWAY	2	13.33
REAR END, SLOW OR STOP	10	66.67
SIDESWIPE, SAME DIRECTION	1	6.67

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	1	16.67
Class C Injuries	5	83.33
Total Non-Fatal Injuries	6	100.00
Total Injuries	6	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	2	13.33
Feb	0	0.00
Mar	3	20.00
Apr	2	13.33
May	2	13.33
Jun	0	0.00
Jul	0	0.00
Aug	0	0.00
Sep	5	33.33
Oct	0	0.00
Nov	0	0.00
Dec	1	6.67

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	1	6.67
Tue	5	33.33
Wed	1	6.67
Thu	4	26.67
Fri	1	6.67
Sat	2	13.33
Sun	1	6.67

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	2	13.33
0800-0859	1	6.67
0900-0959	1	6.67
1000-1059	1	6.67
1100-1159	1	6.67
1200-1259	1	6.67
1300-1359	1	6.67
1400-1459	1	6.67
1500-1559	1	6.67
1600-1659	1	6.67
1700-1759	2	13.33
1800-1859	0	0.00
1900-1959	1	6.67
2000-2059	1	6.67
2100-2159	0	0.00
2200-2259	0	0.00
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	10	3	0	13
Dark	2	0	0	2
Other	0	0	0	0
Total	12	3	0	15

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
FIRETRUCK	1	3.12
LIGHT TRUCK (MINI-VAN, PANEL)	2	6.25
PASSENGER CAR	18	56.25
PICKUP	3	9.38
SPORT UTILITY	8	25.00

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	4	0	2	2
2010	3	0	1	2
2011	5	0	2	3
2012	3	0	0	3
Total	15	0	5	10

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	3
2010	0	1
2011	0	2
2012	0	0
Total	0	6

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 32400	18.80
2010	$ 17900	10.40
2011	$ 23700	19.80
2012	$ 15500	3.00
Total	$ 89500	52.00

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	0	0	4	0	0	0	0
2010	1	0	2	0	0	0	0
2011	1	0	3	0	1	0	0
2012	1	0	1	0	0	1	0
Total	3	0	10	0	1	1	0

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019334	41000019334			76.8	8.4	29100	

Request Date	Courier Service	Phone No.	Ext.	Fax No.
5/9/2012		704-940-3686		704-541-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		150	4/1/2009	3/31/2012	3.00

Location Text

NC 86-Martin Luther King Boulevard and Piney Mountain Road

Requestor

Tyler Risdon, EI
RS&H
Charlotte,NC

Excluded Accidents

103204764

Fiche Roads

Name	Code
NC 86	30000086
MARTIN LUTHER KING	50019060
PINEY MOUNTAIN	50024260

Intersection Road Combinations

Name	Code	Code	Name
NC 86	30000086	50024260	PINEY MOUNTAIN
MARTIN LUTHER KING	50019060	50024260	PINEY MOUNTAIN
NC 86	30000086	50020880	MUNICIPAL
MARTIN LUTHER KING	50019060	50020880	MUNICIPAL

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

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 4/1/2009 **to** 3/31/2012 **Study:** 41000019390
Location: Secondary Route 1750 (Estes Drive) and Somerset Drive.

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**102775269**	12/30/2009 17:15	REAR END, SLOW OR STOP	$ 3500	0	0	0	1	1	5	1	3	0	13	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
2	**103248168**	09/02/2011 15:51	REAR END, SLOW OR STOP	$ 3700	0	0	0	0	1	1	1	1	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 11		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
3	**103341279**	12/08/2011 17:56	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	6	1	1	0		
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
4	**103345882**	12/15/2011 17:31	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	5	2	1	0		
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								

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	4	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	1	25.00
Total Injury Crashes	1	25.00
Property Damage Only Crashes	3	75.00
Night Crashes	3	75.00
Wet Crashes	0	0.00
Alcohol/Drugs Involvement Crashes	0	0.00

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	4	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	0	0.00
Class C Crashes	1	25.00
Property Damage Only Crashes	3	75.00

Vehicle Exposure Statistics

Annual ADT = 16200

Total Vehicle Exposure = 17.76 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	22.53
Fatal Crash Rate	0.00
Non Fatal Crash Rate	5.63
Night Crash Rate	16.90
Wet Crash Rate	0.00
EPDO Rate	64.21

Miscellaneous Statistics

Severity Index =	2.85
EPDO Crash Index =	11.40
Estimated Property Damage Total = $	10400.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
REAR END, SLOW OR STOP	4	100.00

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	0	0.00
Class C Injuries	1	100.00
Total Non-Fatal Injuries	1	100.00
Total Injuries	1	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	0	0.00
Feb	0	0.00
Mar	0	0.00
Apr	0	0.00
May	0	0.00
Jun	0	0.00
Jul	0	0.00
Aug	0	0.00
Sep	1	25.00
Oct	0	0.00
Nov	0	0.00
Dec	3	75.00

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	0	0.00
Tue	0	0.00
Wed	1	25.00
Thu	2	50.00
Fri	1	25.00
Sat	0	0.00
Sun	0	0.00

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	0	0.00
0800-0859	0	0.00
0900-0959	0	0.00
1000-1059	0	0.00
1100-1159	0	0.00
1200-1259	0	0.00
1300-1359	0	0.00
1400-1459	0	0.00
1500-1559	1	25.00
1600-1659	0	0.00
1700-1759	3	75.00
1800-1859	0	0.00
1900-1959	0	0.00
2000-2059	0	0.00
2100-2159	0	0.00
2200-2259	0	0.00
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	1	0	0	1
Dark	3	0	0	3
Other	0	0	0	0
Total	4	0	0	4

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
PASSENGER CAR	6	75.00
SPORT UTILITY	2	25.00

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	1	0	1	0
2010	0	0	0	0
2011	3	0	0	3
2012	0	0	0	0
Total	4	0	1	3

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	1
2010	0	0
2011	0	0
2012	0	0
Total	0	1

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 3500	8.40
2010	$ 0	0.00
2011	$ 6900	3.00
2012	$ 0	0.00
Total	$ 10400	11.40

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	0	0	1	0	0	0	0
2010	0	0	0	0	0	0	0
2011	0	0	3	0	0	0	0
2012	0	0	0	0	0	0	0
Total	0	0	4	0	0	0	0

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019390	41000019390			76.8	8.4	16200	

Request Date	Courier Service	Phone No.	Ext.	Fax No.
5/11/2012		704-940-3686		704-547-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		150	4/1/2009	3/31/2012	3.00

Location Text

Secondary Route 1750 (Estes Drive) and Somerset Drive.

Requestor

Tyler Risdon, EI
RS&H
Charlotte, NC

Excluded Accidents

102989109

103139397

Fiche Roads

Name	Code
SR 1750	40001750
ESTES	50009903
SOMERSET	50028579

Intersection Road Combinations

Name	Code	Code	Name
SR 1750	40001750	50028579	SOMERSET
ESTES	50009903	50028579	SOMERSET

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

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 04/01/2009 **to** 03/31/2012 **Study:** 41000019345
Location: NC 86-Martin Luther King Jr. Boulevard and Secondary Route 1780 (Estes Drive)

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**102568817**	04/06/2009 15:24	REAR END, SLOW OR STOP	$ 11000	0	0	0	0	1	1	2	1	0	0	
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:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 11		**Obj Strk:**								
2	**102584701**	04/26/2009 13:40	RIGHT TURN, DIFFERENT ROADWAYS	$ 3900	0	0	0	0	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 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7		**Obj Strk:**								
3	**102595850**	05/11/2009 11:21	REAR END, SLOW OR STOP	$ 2000	0	0	0	1	2	1	2	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
4	**102626851**	06/28/2009 17:10	LEFT TURN, SAME ROADWAY	$ 12000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 50 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8		**Obj Strk:**								
5	**102678288**	08/10/2009 13:26	REAR END, SLOW OR STOP	$ 1900	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 2 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:**								
6	**102742875**	11/23/2009 19:40	LEFT TURN, SAME ROADWAY	$ 6000	0	0	0	0	2	4	3	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 8		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
7	**102757998**	12/06/2009 14:45	LEFT TURN, DIFFERENT ROADWAYS	$ 19500	0	0	0	3	1	1	2	1	0	3	1
Unit	**1 :** 3	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** NE	**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:**								
8	**102758900**	12/07/2009 11:21	REAR END, TURN	$ 7500	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
9	**102770503**	12/12/2009 11:12	REAR END, SLOW OR STOP	$ 250	0	0	0	3	1	1	2	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:** 3 MPH	**Dir:** NW	**Veh Mnvr / Ped Actn:** 12			**Obj Strk:**							
10	**102786695**	01/18/2010 07:42	RIGHT TURN, DIFFERENT ROADWAYS	$ 3000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** SW	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
11	**102824246**	03/17/2010 17:34	REAR END, SLOW OR STOP	$ 1050	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
Unit	**2 :** 20	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
12	**102835582**	04/03/2010 11:38	REAR END, TURN	$ 3000	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 5			**Obj Strk:**							
Unit	**2 :** 5	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** SW	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
13	**102855360**	04/25/2010 08:55	RIGHT TURN, DIFFERENT ROADWAYS	$ 14000	0	0	0	1	2	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** NE	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
14	**102888919**	05/25/2010 22:52	ANGLE	$ 1500	0	0	0	0	1	4	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 :** 4	**Alchl/Drgs:** 0	**Speed:** 40 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
15	**102918364**	07/12/2010 22:59	REAR END, SLOW OR STOP	$ 3900	0	0	0	1	3	4	3	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 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:**							
16	**102923787**	07/20/2010 15:10	REAR END, TURN	$ 500	0	0	0	1	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 12			**Obj Strk:**							
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
17	**102941622**	08/10/2010 18:35	REAR END, SLOW OR STOP	$ 900	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
18	**102955866**	08/31/2010 18:56	ANGLE	$ 2500	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** N	**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:**							
19	**102960539**	09/08/2010 12:58	REAR END, SLOW OR STOP	$ 3200	0	0	0	2	1	1	2	1	0	13	1
Unit	**1 : 5**	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 12			**Obj Strk:**							
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**3 : 4**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
20	**103032633**	11/24/2010 17:22	LEFT TURN, SAME ROADWAY	$ 2300	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 : 1**	**Alchl/Drgs:** 2	**Speed:** 15 MPH	**Dir:** SE	**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:**							
21	**103036595**	12/05/2010 19:09	LEFT TURN, SAME ROADWAY	$ 4000	0	0	0	0	1	2	1	1	0	3	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** N	**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:**							
22	**103041981**	12/08/2010 17:18	ANGLE	$ 1800	0	0	0	0	1	4	1	1	12	1	1
Unit	**1 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 : 4**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8			**Obj Strk:**							
23	**103068914**	01/04/2011 21:11	LEFT TURN, SAME ROADWAY	$ 10000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 : 2**	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 : 4**	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 16			**Obj Strk:**							
24	**103076055**	01/13/2011 13:34	REAR END, SLOW OR STOP	$ 5000	0	0	0	0	1	1	1	1	0	13	1
Unit	**1 : 2**	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 : 2**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
25	**103082849**	01/24/2011 15:43	REAR END, SLOW OR STOP	$ 9000	0	0	0	0	1	1	2	3	0	3	1
Unit	**1 : 5**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 : 1**	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
26	**103107522**	02/27/2011 13:26	ANGLE	$ 6500	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 : 4**	**Alchl/Drgs:** 0	**Speed:** 30 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:** 4			**Obj Strk:**							

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
27	**103174352**	05/23/2011 17:24	REAR END, SLOW OR STOP	$ 1100	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:** 1			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
28	**103186280**	06/06/2011 18:13	SIDESWIPE, SAME DIRECTION	$ 4000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
29	**103199833**	06/23/2011 08:09	RIGHT TURN, DIFFERENT ROADWAYS	$ 1900	0	0	0	0	1	1	2	1	0	3	1
Unit	**1 :** 2	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
30	**103226160**	08/08/2011 16:04	REAR END, SLOW OR STOP	$ 4000	0	0	0	1	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 :** 4	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
31	**103233990**	08/17/2011 22:45	LEFT TURN, DIFFERENT ROADWAYS	$ 2000	0	0	0	0	1	4	1	1	0	3	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 10 MPH	**Dir:** W	**Veh Mnvr / Ped Actn:** 8			**Obj Strk:**							
32	**103327261**	11/22/2011 08:00	REAR END, SLOW OR STOP	$ 4300	0	0	0	0	1	1	2	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:** 25 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
33	**103351827**	12/19/2011 17:30	REAR END, SLOW OR STOP	$ 10200	0	0	0	0	1	4	1	1	0	3	1
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:** 0 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
Unit	**4 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
34	**103405222**	03/01/2012 13:38	SIDESWIPE, SAME DIRECTION	$ 1000	0	0	0	0	1	1	1	3	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 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:**							

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

Acc No	Crash ID	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	34	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	14	41.18
Total Injury Crashes	14	41.18
Property Damage Only Crashes	20	58.82
Night Crashes	7	20.59
Wet Crashes	4	11.76
Alcohol/Drugs Involvement Crashes	1	2.94

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	34	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	0	0.00
Class C Crashes	14	41.18
Property Damage Only Crashes	20	58.82

Vehicle Exposure Statistics

Annual ADT = 39700

Total Vehicle Exposure = 43.51 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	78.14
Fatal Crash Rate	0.00
Non Fatal Crash Rate	32.18
Night Crash Rate	16.09
Wet Crash Rate	9.19
EPDO Rate	316.24

Miscellaneous Statistics

Severity Index =	4.05
EPDO Crash Index =	137.60
Estimated Property Damage Total = $	164700.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	4	11.76
LEFT TURN, DIFFERENT ROADWAYS	2	5.88
LEFT TURN, SAME ROADWAY	5	14.71
REAR END, SLOW OR STOP	14	41.18
REAR END, TURN	3	8.82
RIGHT TURN, DIFFERENT ROADWAYS	4	11.76
SIDESWIPE, SAME DIRECTION	2	5.88

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	0	0.00
Class C Injuries	19	100.00
Total Non-Fatal Injuries	19	100.00
Total Injuries	19	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	4	11.76
Feb	1	2.94
Mar	2	5.88
Apr	4	11.76
May	3	8.82
Jun	3	8.82
Jul	2	5.88
Aug	5	14.71
Sep	1	2.94
Oct	0	0.00
Nov	3	8.82
Dec	6	17.65

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	12	35.29
Tue	6	17.65
Wed	5	14.71
Thu	3	8.82
Fri	0	0.00
Sat	2	5.88
Sun	6	17.65

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	1	2.94
0800-0859	3	8.82
0900-0959	0	0.00
1000-1059	0	0.00
1100-1159	4	11.76
1200-1259	1	2.94
1300-1359	5	14.71
1400-1459	1	2.94
1500-1559	3	8.82
1600-1659	1	2.94
1700-1759	6	17.65
1800-1859	3	8.82
1900-1959	2	5.88
2000-2059	0	0.00
2100-2159	1	2.94
2200-2259	3	8.82
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	23	2	0	25
Dark	5	2	0	7
Other	2	0	0	2
Total	30	4	0	34

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
LIGHT TRUCK (MINI-VAN, PANEL)	2	2.82
MOTORCYCLE	1	1.41
PASSENGER CAR	46	64.79
PICKUP	5	7.04
SPORT UTILITY	14	19.72
VAN	3	4.23

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	9	0	5	4
2010	13	0	7	6
2011	11	0	2	9
2012	1	0	0	1
Total	34	0	14	20

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	9
2010	0	8
2011	0	2
2012	0	0
Total	0	19

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 64050	46.00
2010	$ 41650	64.80
2011	$ 58000	25.80
2012	$ 1000	1.00
Total	$ 164700	137.60

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	3	1	5	0	0	0	0
2010	2	2	6	0	3	0	0
2011	2	1	6	0	1	1	0
2012	0	0	0	0	0	1	0
Total	7	4	17	0	4	2	0

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019345	41000019345			76.8	8.4	39700	

Request Date	Courier Service	Phone No.	Ext.	Fax No.
05/10/2012		704-490-3686		704-541-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		150	04/01/2009	03/31/2012	3.00

Location Text

NC 86-Martin Luther King Jr. Boulevard and Secondary Route 1780 (Estes Drive)

Requestor

Tyler Risdon, EI
RS&H
Charlotte,NC

Included Accidents

102626851

Excluded Accidents

102901030
103219319

Fiche Roads

Name	Code
NC 86	30000086
SR 1780	40001780
SR 1750	40001750
ESTES	50009903
MARTIN LUTHER KING	50019060

Intersection Road Combinations

Name	Code	Code	Name
SR 1780	40001780	30000086	NC 86
SR 1780	40001780	50019060	MARTIN LUTHER KING
SR 1780	40001780	40001750	SR 1750
SR 1780	40001780	50009903	ESTES
ESTES DR EXT	50009903	30000086	NC 86
ESTES DR EXT	50009903	50019060	MARTIN LUTHER KING
ESTES DR EXT	50009903	40001750	SR 1750
NC 86	30000086	40001750	SR 1750
MARTIN LUTHER KING	50019060	40001750	SR 1750

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

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 4/1/2009 **to** 3/31/2012 **Study:** 41000019338
Location: NC 86-Martin Luther King Boulevard and Shadowood Drive

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**102572495**	04/15/2009 08:42	LEFT TURN, DIFFERENT ROADWAYS	$ 4700	0	0	0	0	1	1	2	1	0	14	1
Unit	**1 :** 4	**Alchl/Drgs:** 0	**Speed:** 30 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:**								
2	**102946766**	08/18/2010 14:18	REAR END, SLOW OR STOP	$ 4150	0	0	0	0	1	1	1	1	0	14	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
Unit	**3 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 1		**Obj Strk:**								
Unit	**4 :** 1	**Alchl/Drgs:** 0	**Speed:** 25 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								
3	**103077607**	01/14/2011 13:49	REAR END, SLOW OR STOP	$ 1250	0	0	0	0	1	1	1	1	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:** 30 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4		**Obj Strk:**								

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	3	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	0	0.00
Total Injury Crashes	0	0.00
Property Damage Only Crashes	3	100.00
Night Crashes	0	0.00
Wet Crashes	0	0.00
Alcohol/Drugs Involvement Crashes	0	0.00

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	3	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	0	0.00
Class C Crashes	0	0.00
Property Damage Only Crashes	3	100.00

Vehicle Exposure Statistics

Annual ADT = 29300

Total Vehicle Exposure = 32.11 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	9.34
Fatal Crash Rate	0.00
Non Fatal Crash Rate	0.00
Night Crash Rate	0.00
Wet Crash Rate	0.00
EPDO Rate	9.34

Miscellaneous Statistics

Severity Index =	1.00
EPDO Crash Index =	3.00
Estimated Property Damage Total = $	10100.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
LEFT TURN, DIFFERENT ROADWAYS	1	33.33
REAR END, SLOW OR STOP	2	66.67

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	0	0.00
Class C Injuries	0	0.00
Total Non-Fatal Injuries	0	0.00
Total Injuries	0	0.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	1	33.33
Feb	0	0.00
Mar	0	0.00
Apr	1	33.33
May	0	0.00
Jun	0	0.00
Jul	0	0.00
Aug	1	33.33
Sep	0	0.00
Oct	0	0.00
Nov	0	0.00
Dec	0	0.00

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	0	0.00
Tue	0	0.00
Wed	2	66.67
Thu	0	0.00
Fri	1	33.33
Sat	0	0.00
Sun	0	0.00

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	0	0.00
0800-0859	1	33.33
0900-0959	0	0.00
1000-1059	0	0.00
1100-1159	0	0.00
1200-1259	0	0.00
1300-1359	1	33.33
1400-1459	1	33.33
1500-1559	0	0.00
1600-1659	0	0.00
1700-1759	0	0.00
1800-1859	0	0.00
1900-1959	0	0.00
2000-2059	0	0.00
2100-2159	0	0.00
2200-2259	0	0.00
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	3	0	0	3
Dark	0	0	0	0
Other	0	0	0	0
Total	3	0	0	3

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
PASSENGER CAR	6	75.00
SPORT UTILITY	2	25.00

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	1	0	0	1
2010	1	0	0	1
2011	1	0	0	1
2012	0	0	0	0
Total	3	0	0	3

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	0
2010	0	0
2011	0	0
2012	0	0
Total	0	0

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 4700	1.00
2010	$ 4150	1.00
2011	$ 1250	1.00
2012	$ 0	0.00
Total	$ 10100	3.00

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	1	0	0	0	0	0	0
2010	0	0	1	0	0	0	0
2011	0	0	1	0	0	0	0
2012	0	0	0	0	0	0	0
Total	1	0	2	0	0	0	0

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019338	41000019338			76.8	8.4	29300	

Request Date	Courier Service	Phone No.	Ext.	Fax No.
5/10/2012		704-940-3686		704-541-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		150	4/1/2009	3/31/2012	3.00

Location Text	Requestor
NC 86-Martin Luther King Boulevard and Shadowood Drive	Tyler Risdon, EI RS&H Charlotte,NC

Fiche Roads

Name	Code
NC 86	30000086
MARTIN LUTHER KING	50019060
SHADOWOOD	50027669

Intersection Road Combinations

Name	Code	Code	Name
NC 86	30000086	50027669	SHADOWOOD
MARTIN LUTHER KING	50019060	50027669	SHADOWOOD

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

Study Criteria Summary

County: ORANGE **City:** All and Rural
Date: 4/1/2009 **to** 3/31/2012 **Study:** 41000019399
Location: Secondary Route 1750 (Estes Drive) and Clayton Road-Caswell Road

Report Details

Acc No	Crash ID	Date	Accident Type	Total Damage	Injuries F	A	B	C	Condition R	L	W	Road Ch	Ci	Trfc Ctl Dv	Op
1	**102609009**	05/29/2009 15:26	REAR END, SLOW OR STOP	$ 1000	0	0	0	0	1	1	1	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** SE	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** SE	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
2	**102690633**	09/26/2009 09:50	ANGLE	$ 10000	0	0	1	0	1	1	2	1	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 7			**Obj Strk:**							
Unit	**2 :** 2	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
3	**102734328**	11/12/2009 13:02	REAR END, SLOW OR STOP	$ 1200	0	0	0	0	2	1	3	5	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
4	**102730855**	11/14/2009 21:36	RAN OFF ROAD - RIGHT	$ 3000	0	0	0	0	1	4	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 1	**Speed:** 35 MPH	**Dir:** N	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:** 34							
5	**102867902**	05/12/2010 16:48	REAR END, SLOW OR STOP	$ 1600	0	0	0	0	1	1	1	3	0	0	
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 20 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 5 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
6	**103017066**	11/10/2010 08:49	ANGLE	$ 12000	0	0	0	1	1	1	1	6	0	3	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 35 MPH	**Dir:** S	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
7	**103026551**	11/19/2010 11:37	REAR END, SLOW OR STOP	$ 1500	0	0	0	0	1	1	1	3	0	9	1
Unit	**1 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 1			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
8	**103274457**	09/30/2011 17:10	REAR END, SLOW OR STOP	$ 3300	0	0	0	0	2	1	1	1	0		
Unit	**1 :** 5	**Alchl/Drgs:** 0	**Speed:** 30 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 4			**Obj Strk:**							
Unit	**2 :** 1	**Alchl/Drgs:** 0	**Speed:** 15 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							
Unit	**3 :** 2	**Alchl/Drgs:** 0	**Speed:** 0 MPH	**Dir:** E	**Veh Mnvr / Ped Actn:** 11			**Obj Strk:**							

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

Acc No	Crash ID	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	8	100.00
Fatal Crashes	0	0.00
Non-Fatal Injury Crashes	2	25.00
Total Injury Crashes	2	25.00
Property Damage Only Crashes	6	75.00
Night Crashes	1	12.50
Wet Crashes	2	25.00
Alcohol/Drugs Involvement Crashes	1	12.50

Crash Severity Summary

Crash Type	Number of Crashes	Percent of Total
Total Crashes	8	100.00
Fatal Crashes	0	0.00
Class A Crashes	0	0.00
Class B Crashes	1	12.50
Class C Crashes	1	12.50
Property Damage Only Crashes	6	75.00

Vehicle Exposure Statistics

Annual ADT = 32900

Total Vehicle Exposure = 36.06 (MEV)

Crash Rate	Crashes Per 100 Million Vehicles Entered
Total Crash Rate	22.19
Fatal Crash Rate	0.00
Non Fatal Crash Rate	5.55
Night Crash Rate	2.77
Wet Crash Rate	5.55
EPDO Rate	63.23

Miscellaneous Statistics

Severity Index =	2.85
EPDO Crash Index =	22.80
Estimated Property Damage Total = $	33600.00

Accident Type Summary

Accident Type	Number of Crashes	Percent of Total
ANGLE	2	25.00
RAN OFF ROAD - RIGHT	1	12.50
REAR END, SLOW OR STOP	5	62.50

Injury Summary

Injury Type	Number of Injuries	Percent of Total
Fatal Injuries	0	0.00
Class A Injuries	0	0.00
Class B Injuries	1	50.00
Class C Injuries	1	50.00
Total Non-Fatal Injuries	2	100.00
Total Injuries	2	100.00

Monthly Summary

Month	Number of Crashes	Percent of Total
Jan	0	0.00
Feb	0	0.00
Mar	0	0.00
Apr	0	0.00
May	2	25.00
Jun	0	0.00
Jul	0	0.00
Aug	0	0.00
Sep	2	25.00
Oct	0	0.00
Nov	4	50.00
Dec	0	0.00

Daily Summary

Day	Number of Crashes	Percent of Total
Mon	0	0.00
Tue	0	0.00
Wed	2	25.00
Thu	1	12.50
Fri	3	37.50
Sat	2	25.00
Sun	0	0.00

Hourly Summary

Hour	Number of Crashes	Percent of Total
0000-0059	0	0.00
0100-0159	0	0.00
0200-0259	0	0.00
0300-0359	0	0.00
0400-0459	0	0.00
0500-0559	0	0.00
0600-0659	0	0.00
0700-0759	0	0.00
0800-0859	1	12.50
0900-0959	1	12.50
1000-1059	0	0.00
1100-1159	1	12.50
1200-1259	0	0.00
1300-1359	1	12.50
1400-1459	0	0.00
1500-1559	1	12.50
1600-1659	1	12.50
1700-1759	1	12.50
1800-1859	0	0.00
1900-1959	0	0.00
2000-2059	0	0.00
2100-2159	1	12.50
2200-2259	0	0.00
2300-2359	0	0.00

Light and Road Conditions Summary

Condition	Dry	Wet	Other	Total
Day	5	2	0	7
Dark	1	0	0	1
Other	0	0	0	0
Total	6	2	0	8

Object Struck Summary

Object Type	Times Struck	Percent of Total
UTILITY POLE	1	100.00

Vehicle Type Summary

Vehicle Type	Number Involved	Percent of Total
PASSENGER CAR	13	81.25
PICKUP	2	12.50
VAN	1	6.25

Yearly Totals Summary

Accident Totals

Year	Total Accidents	Fatal Accidents	Injury Accidents	Property Damage Only Accidents
2009	4	0	1	3
2010	3	0	1	2
2011	1	0	0	1
2012	0	0	0	0
Total	8	0	2	6

Injury Totals

Year	Fatal Injuries	Class A, B, or C Injuries
2009	0	1
2010	0	1
2011	0	0
2012	0	0
Total	0	2

Miscellaneous Totals

Year	Property Damage	EPDO Index
2009	$ 15200	11.40
2010	$ 15100	10.40
2011	$ 3300	1.00
2012	$ 0	0.00
Total	$ 33600	22.80

Type of Accident Totals

Year	Left Turn	Right Turn	Rear End	Run Off Road & Fixed Object	Angle	Side Swipe	Other
2009	0	0	2	1	1	0	0
2010	0	0	2	0	1	0	0
2011	0	0	1	0	0	0	0
2012	0	0	0	0	0	0	0
Total	0	0	5	1	2	0	0

Study Criteria

Study Name	Log No.	PH No.	TIP No.	K/A Cf.	B/C Cf.	ADT	ADT Route
41000019399	41000019399			76.8	8.4	32900	

Request Date	Courier Service	Phone No.	Ext.	Fax No.
5/14/2012		704-940-3686		704-541-3081

County			Municipality					
Name	Code	Div.	Name	Code	Y-Line Ft.	Begin Date	End Date	Years
ORANGE	67	7	All and Rural		150	4/1/2009	3/31/2012	3.00

Location Text

Secondary Route 1750 (Estes Drive) and Clayton Road-Caswell Road

Requestor

Tyler Risdon, EI
RS&H
Charlotte,NC

Included Accidents

102734328

Excluded Accidents

102612264
102651152
102734320
103218367
103322368

Fiche Roads

Name	Code
SR 1750	40001750
ESTES	50009903
CLAYTON ROAD	50006238
CASWELL ROAD	50005317

Intersection Road Combinations

Name	Code	Code	Name
SR 1750	40001750	50006238	CLAYTON ROAD
SR 1750	40001750	50005317	CASWELL ROAD
ESTES	50009903	50006238	CLAYTON ROAD
ESTES	50009903	50005317	CASWELL ROAD
CLAYTON ROAD	50006238	50005317	CASWELL ROAD