TECHNICAL MEMORANDUM

STANTONSBURG ROAD / TENTH STREET CONNECTOR FROM MEMORIAL DRIVE TO SR 1702 (EVANS STREET) GREENVILLE, PITT COUNTY, NORTH CAROLINA

TIP NO. U-3315

TRAFFIC CAPACITY ANALYSIS REPORT



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KHA Project #012654002

April 14, 2008



Summary

North Carolina Department of Transportation (NCDOT) *Transportation Improvement Program* (TIP) Project U-3315 proposes the extension of and improvements to SR 1598 (W. Tenth Street) from Memorial Drive to SR 1702 (Evans Street) in Greenville, Pitt County. The typical cross-section for the project is anticipated to be a four-lane curb and gutter facility with a 23-foot wide median and a posted speed limit of 40 mph.

The intersection analyses show that the corridor experiences unacceptable levels of service (LOS) at certain locations under existing conditions and throughout the study area under No Build conditions in the Design Year 2030. The evaluation also shows that the proposed design would allow the study area intersections to operate at acceptable levels in Design Year 2030 at most locations. At the intersections of SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive and SR 1598 (W. Tenth Street) at SR 1702 (Evans Street), long cycle lengths and heavy left-turn and through volumes prevent the intersections from operating at acceptable levels of service even with significant geometric and signal improvements. The analysis projects LOS E under Build conditions at these locations. However, a LOS E is common in urban areas, and no feasible additional improvements were identified at either of these intersections to mitigate to LOS D. No queuing issues were identified at either location with the recommended improvements and turn lane storages.

The following improvements are recommended based on the capacity analyses presented herein:

SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive

- An additional eastbound left-turn lane and an exclusive eastbound right-turn lane on Stantonsburg Road
- Restriping the existing eastbound shared left-through lane to an exclusive through lane
- Exclusive westbound left- and right-turn lanes on Farmville Boulevard
- Exclusive northbound and southbound right-turn lanes on Memorial Drive
- An additional 125' of storage for the existing southbound left-turn lane on Memorial Drive
- Modifying the traffic signal to remove the split phasing for the Stantonsburg Road and Farmville Boulevard approaches

Farmville Boulevard at Line Avenue / Bancroft Avenue

• Exclusive left-turn lanes on all four approaches

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Farmville Boulevard / W. Tenth Street Connector at W. Fourteenth Street

- Restriping and additional lanes to provide one exclusive left-turn lane, dual through lanes, and an exclusive right-turn lane on eastbound Farmville Boulevard
- One exclusive left-turn lane, one exclusive through lane, and a shared throughright lane on the westbound W. Tenth Street Connector
- Restriping and additional lanes to provide dual exclusive left-turn lanes, an exclusive through lane, and an exclusive right-turn lane on northbound W. Fourteenth Street
- Restriping and additional lanes to provide an exclusive left-turn lane and a shared through-right lane on southbound W. Fourteenth Street

SR 1598 (W. Tenth Street) at SR 1702 (Evans Street)

- An additional 350' of storage for the existing eastbound left-turn lane on W. Tenth Street
- An exclusive eastbound right-turn lane on W. Tenth Street
- An additional westbound left-turn lane and an exclusive westbound right-turn lane on W. Tenth Street (not part of the U-3315 project)
- An additional northbound left-turn lane, an additional southbound left-turn lane, and an exclusive southbound right-turn lane on Evans Street
- An exclusive northbound right-turn lane on Evans Street (not part of the U-3315 project)

SR 1598 (Dickinson Avenue) at E. Fourteenth Street (Not part of U-3315 Project)

- An exclusive eastbound right-turn lane on Dickinson Avenue
- An additional 175' of storage for the existing northbound left-turn lane on E. Fourteenth Street

Figure 9 outlines the recommended laneage, traffic control, and storage lengths based on the capacity analyses.

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1.0 Introduction

1.1 PROJECT DESCRIPTION

The Stantonsburg Road / Tenth Street Connector project is listed as U-3315 in the North Carolina Department of Transportation (NCDOT) *Draft 2009-2015 State Transportation Improvement Program* (TIP). TIP Project U-3315 proposes the extension of and improvements to SR 1598 (W. Tenth Street) from Memorial Drive to SR 1702 (Evans Street), including a grade separation with the CSX railroad, in Greenville, Pitt County. The project location is shown in **Figure 1**. The typical cross-section for the project is anticipated to be a four-lane curb and gutter facility with a 23-foot median with a posted speed limit of 40 miles per hour (mph). Planning and design efforts are underway for this project, and right of way acquisition is programmed in the TIP for federal fiscal year (FFY) 2009. Construction is scheduled for FFY 2011.

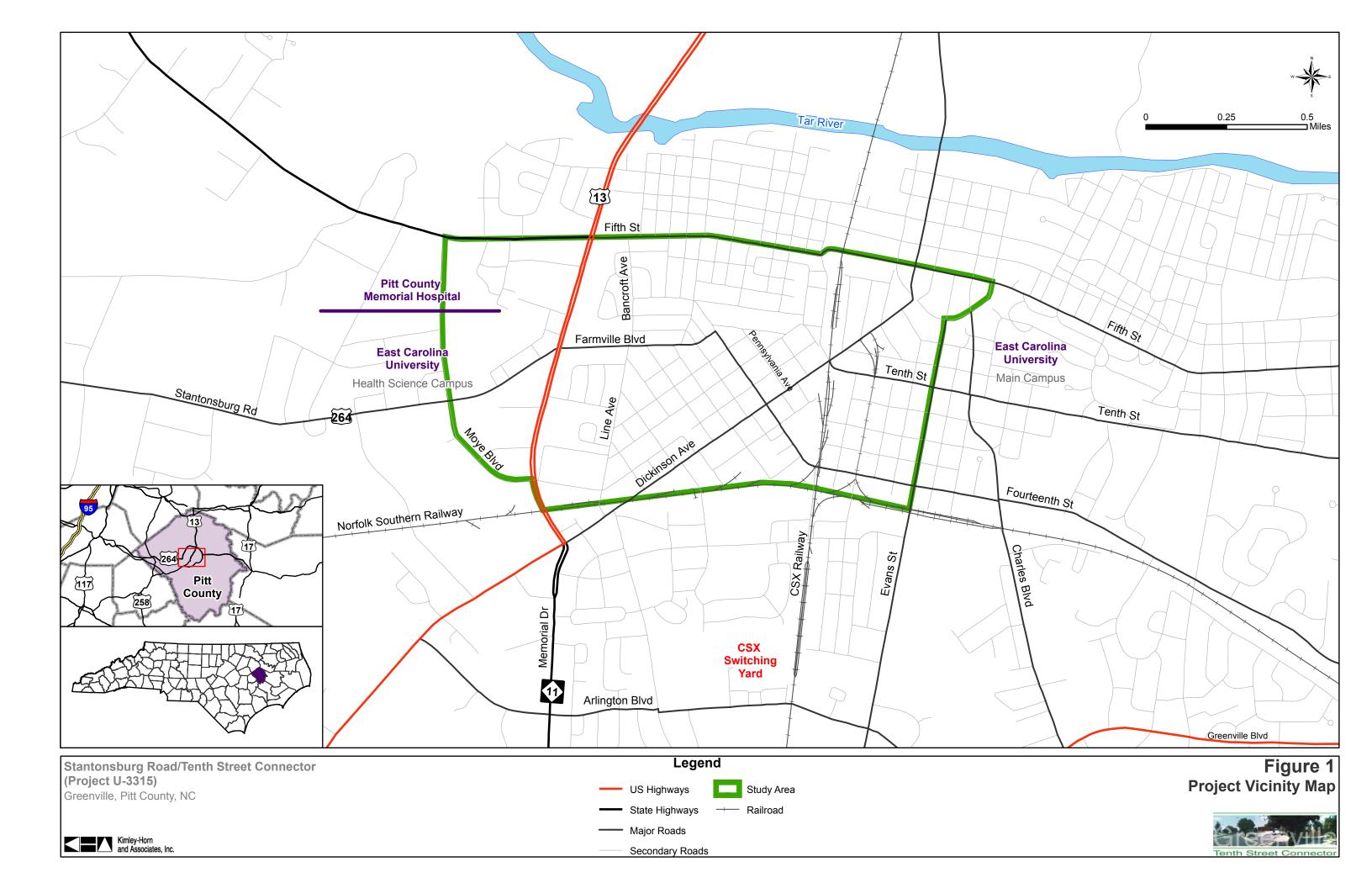
1.2 STUDY AREA

The project study area is located in the City of Greenville and encompasses residential, commercial, and institutional land uses. The study area is generally bounded by Martin Luther King, Jr. Drive/Fifth Street to the north, Reade Circle/Evans Street to the east, the Norfolk-Southern Railway to the south, and Moye Boulevard to the west. The westernmost section of the study area (between Moye Boulevard and Memorial Drive) contains mostly medical facilities and county governmental offices. The section of the study area between Farmville Boulevard and Fleming Street is a predominantly residential area and also contains Sadie Saulter Elementary School, several churches, and community parks. The Tobacco Warehouse area, located in the easternmost section of the study area, contains a mix of commercial, governmental, office, and industrial uses.

The Stantonsburg Road / Tenth Street Connector project was first proposed in the 1994 Greenville Urban Area Thoroughfare Plan. It is currently included in the 2005 Greenville Urban Area Thoroughfare Plan, the 2004 Horizons Plan, and the 2005/2006 Center City – West Greenville Revitalization Plan. Additionally, this project was identified as funded in the NCDOT 2004-2010 TIP and remains on the Draft 2009-2015 TIP.

The existing network of primary roadways consists of both undivided and mediandivided facilities. Secondary roadways in the study area consist mostly of urban undivided roads with varying cross-sections. **Figure 2** shows the existing roadway laneage along major streets in the study area.

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TENTH STREET CONNECTOR CAPACITY ANALYSIS REPORT

2.0 Description of Analysis

Capacity analyses were performed for at-grade intersections in the study area. KHA performed an intersection analysis using the 2005, 2010, and 2030 design year traffic projections to determine existing and projected intersection operations on this corridor. Signal plans are included in Appendix A, and the forecasts for this project are provided in Appendix B.

Analyses were performed for the following scenarios: 2005, 2010, and 2030 No Build Conditions with the existing roadway network and 2005, 2010, and 2030 Build conditions with the proposed multi-lane section. A total of six (6) key intersections were evaluated for proposed improvements. The study intersections are listed below, and these roadways are illustrated in **Figure 1**. Existing lane geometry and traffic control conditions are shown for the study intersections in **Figure 2**.

- SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive
- Farmville Boulevard at Line Avenue / Bancroft Avenue
- Farmville Boulevard / W. Tenth Street Connector at W. Fourteenth Street
- W. Tenth Street Connector at Pennsylvania Avenue (Build only)
- SR 1598 (W. Tenth Street) at SR 1598 / SR 1610 (Dickinson Avenue) (No Build only)
- SR 1598 (W. Tenth Street) at SR 1702 (Evans Street)
- SR 1598 (Dickinson Avenue) at E. Fourteenth Street

Level of service (LOS) is a measure used to describe operational conditions on a roadway segment, ramp junction, or at an intersection. The grades for LOS range from A through F and are based on average vehicle delay with respect to intersections, or vehicular density with respect to roadway segments. LOS D is the typical target threshold for urban settings during the peak hours of operation. LOS E and F represent near failing and failing conditions respectively, and may occur frequently in urban conditions during peak hours. LOS values are most important at signalized intersections, since adjustments to timing and lane geometry have the potential to alleviate problems and distribute delay more evenly over all approaches. Poor LOS values at unsignalized intersections that do not warrant a signal may be more difficult to improve. The AM peak hour typically falls between 7 AM and 9 AM, and the PM peak hour typically falls between 4 PM and 6 PM. An analysis of both the AM and PM periods was performed to capture the expected worst case condition.

3.0 Analysis Methodology

Recommendations for improvements to Stantonsburg Road / Tenth Street were developed based on the capacity analyses described in this section.

3.1 TRAFFIC FORECAST PROJECTIONS

The traffic projections for the project area in the 2005 Base Year, 2010 Build Year, and 2030 Design Year were presented in the *Traffic Forecast Technical Memorandum* (Kimley-Horn, December 2006). Traffic volumes were revised to reflect the proposed grade separation (with no access) between Tenth Street and Dickinson Avenue and reported in the *TIP Project No. U-3315 Volume/Break-Out Clarification Memorandum*, dated September 25, 2007. Figures A-8 through A-10 were revised based on this memorandum and are included in this report in Appendix B. Using the traffic projections developed in the technical memorandum, base, build, and design year turning movement volumes were determined for the key intersections along the project corridor. The average annual daily traffic (AADT) was converted to peak hour volumes, based on the design hour factors, directional distributions, and turning movement AADT volumes. Turning movement volumes were reviewed and balanced between adjacent intersections to within 10% of the one-way volume and 5% of the projected directional split.

Figures 3 through **8** show the balanced No Build 2005, No Build 2010, No Build 2030, Build 2005, Build 2010, and Build 2030 AM and PM peak hour traffic volumes at each of the study intersections. The traffic forecasts, analysis spreadsheets, and volume balancing adjustments are located in **Appendix B**.

3.2 PEAK HOUR INTERSECTION LEVEL-OF-SERVICE ANALYSIS

At-grade intersection analyses were performed in Synchro[©] (version 7) using methodologies prescribed in the *Highway Capacity Manual* (HCM) (2000) to compute level of service (LOS) and delay for each intersection under current and future scenarios. The general assumptions included an uncoordinated network with signal phasing for the No Build 2005 scenario. For the No Build 2010 and 2030 scenarios, the NCDOT Congestion Management Capacity Analysis Guidelines were applied to the existing uncoordinated network through the study corridor. For all Build scenarios, the NCDOT Congestion Management Capacity Analysis Guidelines were followed (unless otherwise noted) to create a coordinated network through the study corridor (excluding the intersection of SR 1598 (Dickinson Avenue) at E. Fourteenth Street). **Table 1** details the results of the intersection analyses.

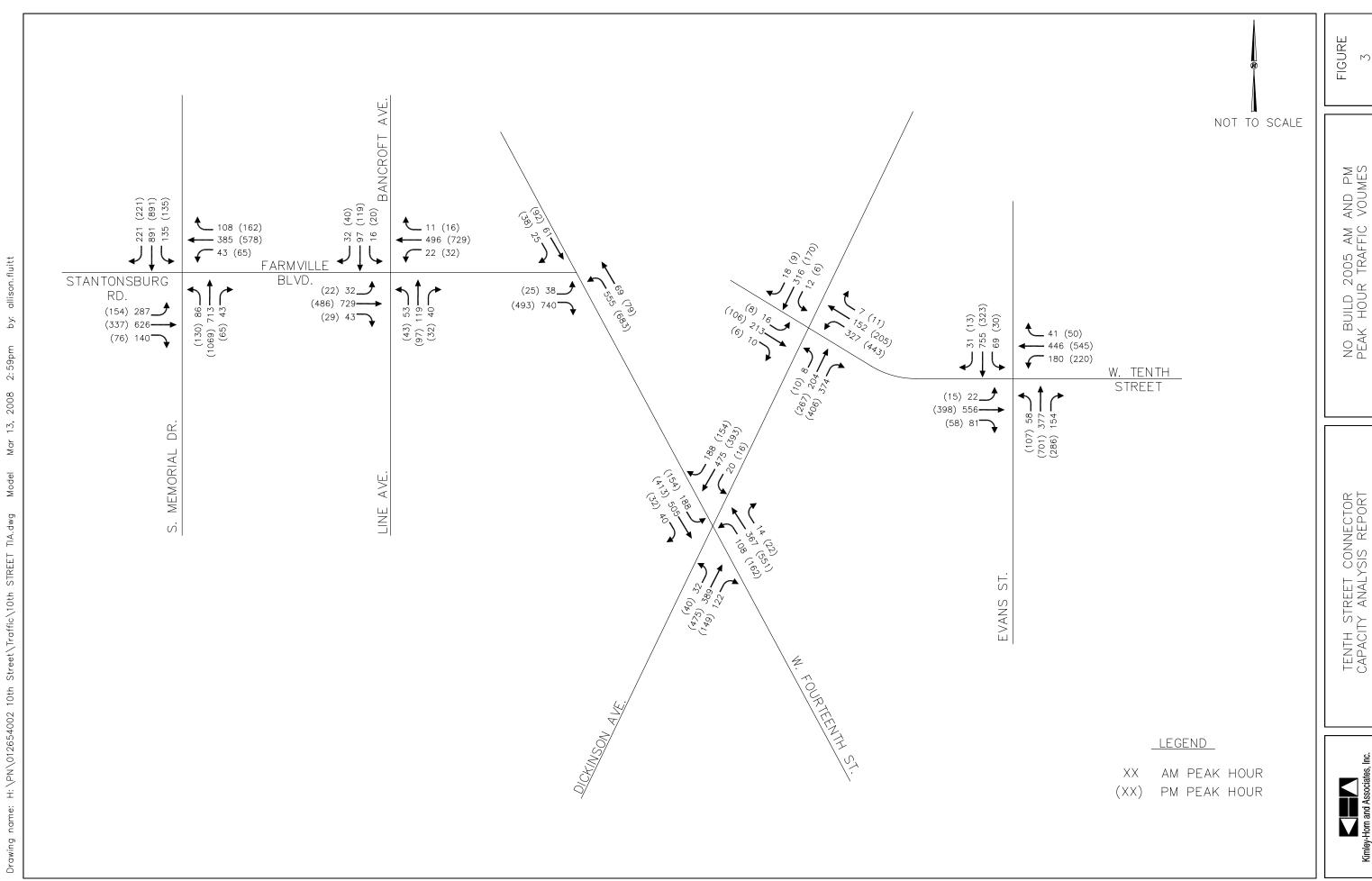
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Existing cycle lengths were used for the No Build 2005 scenario, and NCDOT Congestion Management recommended minimum cycle lengths or longer were used for all intersections in the 2010 and 2030 No Build scenarios. Except for the intersection of Farmville Boulevard at Line Avenue / Bancroft Avenue, which was run at a half cycle, a 140-second cycle length was used for all intersections in the 2005 and 2010 Build scenarios, and a 180-second cycle length was used for all intersections in the 2030 Build scenario.

Lagging, protected-only left-turn phasing was utilized for some left-turn movements at the intersections of SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive and SR 1598 (W. Tenth Street) at SR 1702 (Evans Street) to optimize network operations. Lagging left-turn phases are currently utilized at both of these intersections.

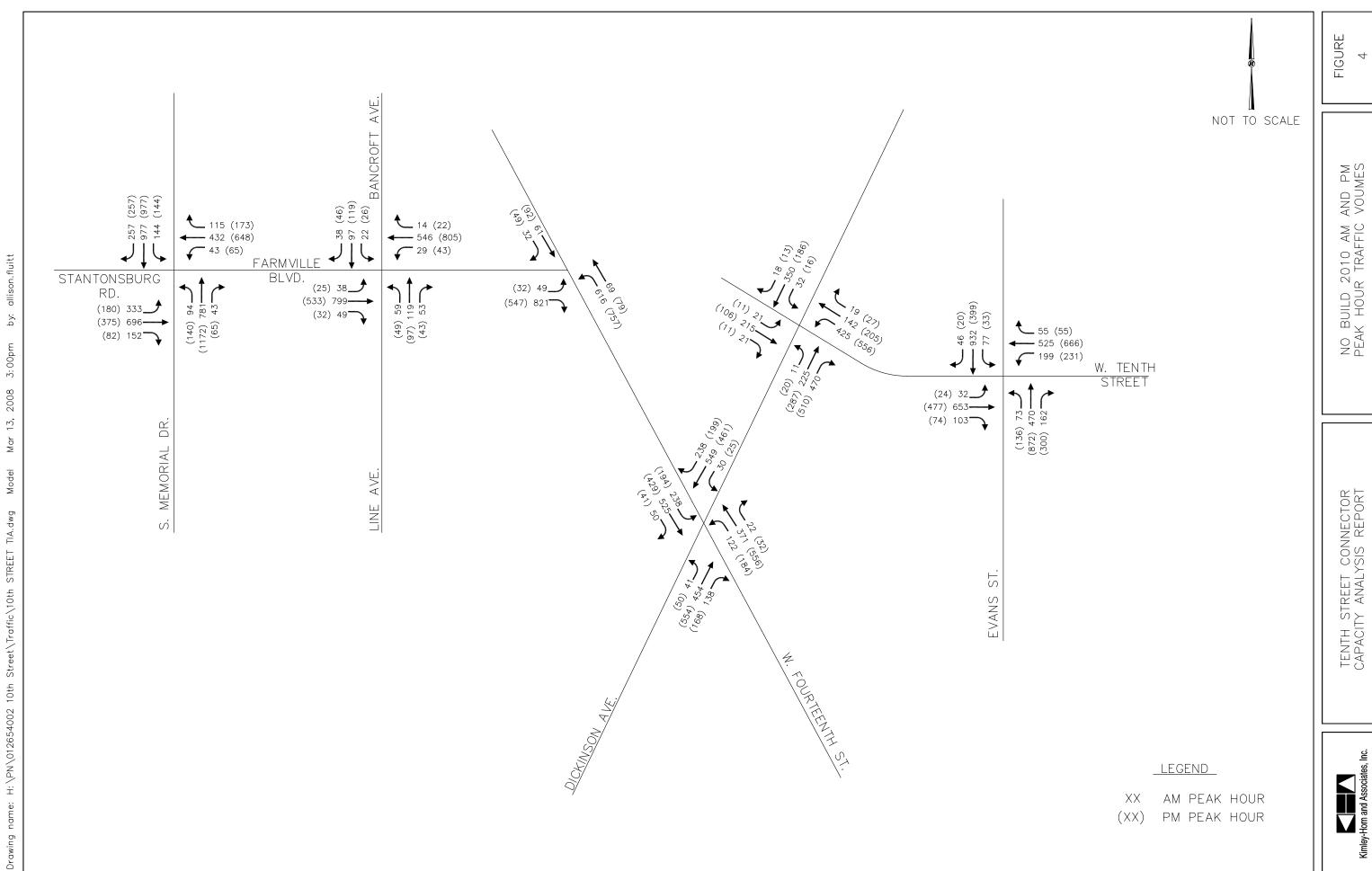
Synchro[©] queue analysis was used to evaluate the average and 95th percentile queue lengths at the study intersections. In addition, the data was transferred to SimTraffic[©] to create a representative simulation of traffic conditions. The simulation helped to identify areas where queuing and congestion would present potential problems at the network level, as opposed to intersection performance alone, including the appropriateness of recommended storage lengths. Turn bay length recommendations were developed based on the 95th percentile queue lengths reported in Synchro and were confirmed using SimTraffic[©]. The Synchro LOS reports are located in **Appendix C**.

¹ 95th percentile queue length (average queue length experienced with 95th percentile traffic arriving) was used to determine storage lengths. When 95th percentile traffic volumes at an intersection exceed capacity, the queue shown will rarely be exceeded and is acceptable for the design of storage bays (*Synchro 6 User Guide*, 2003).



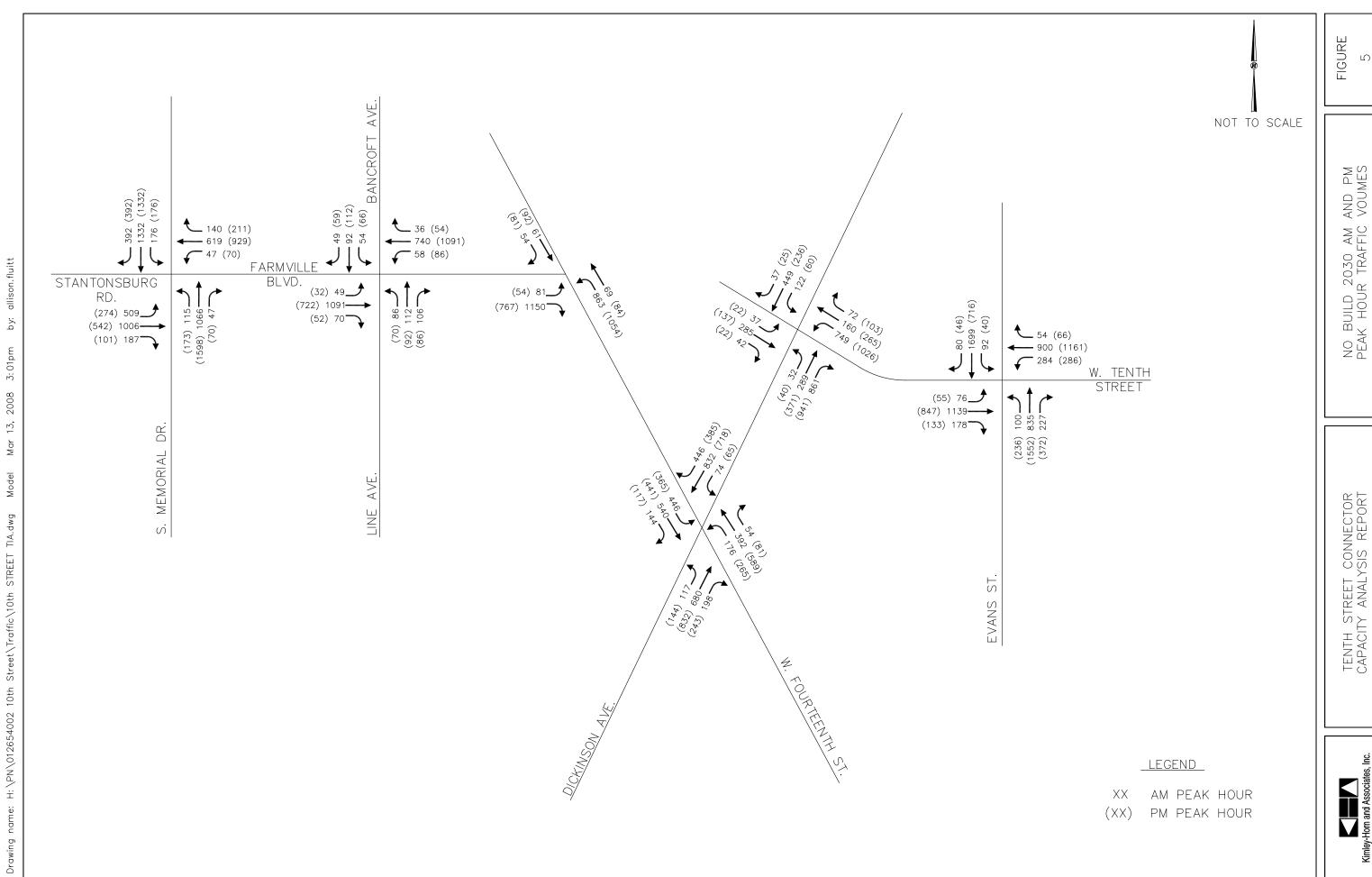
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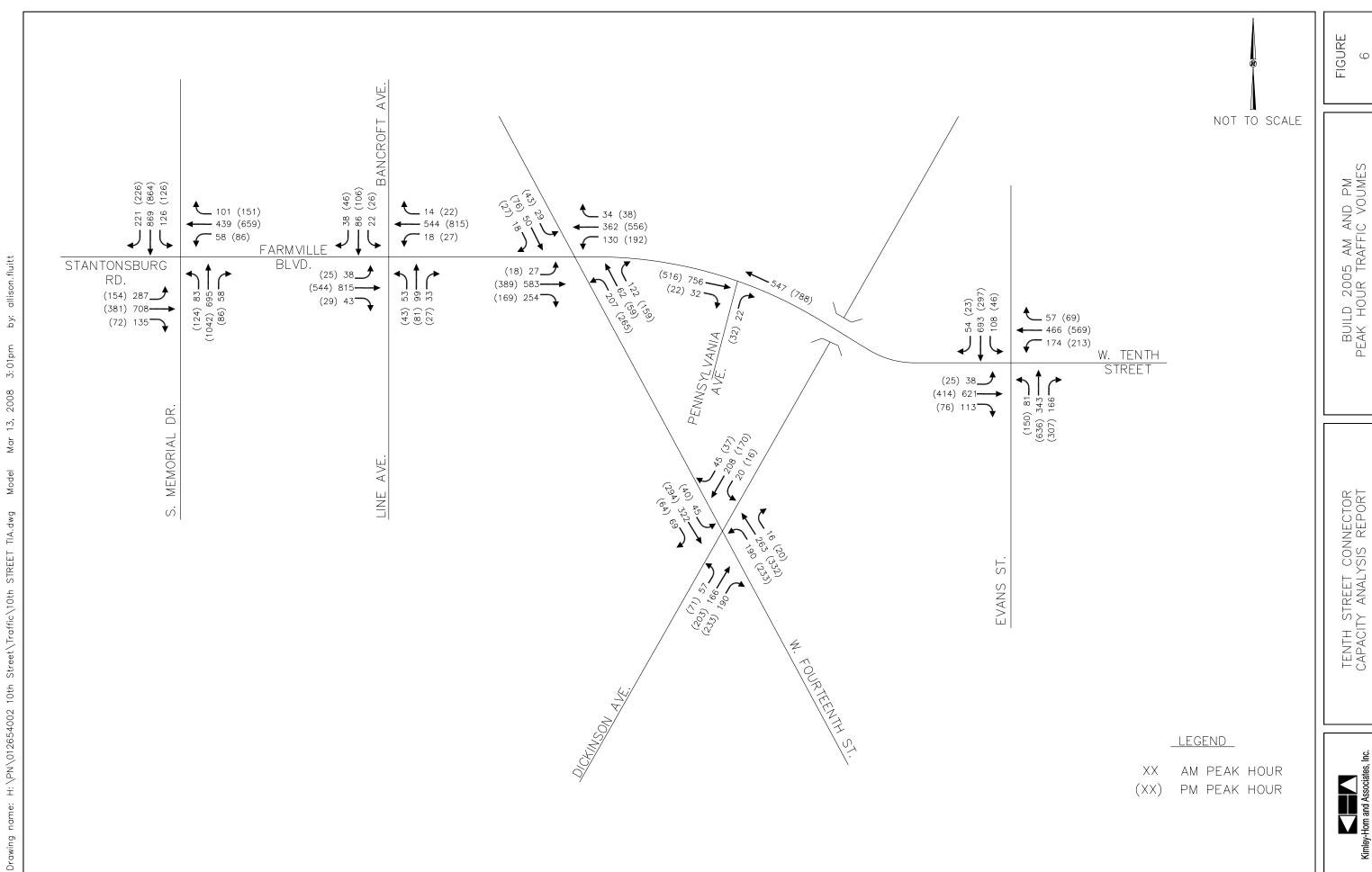
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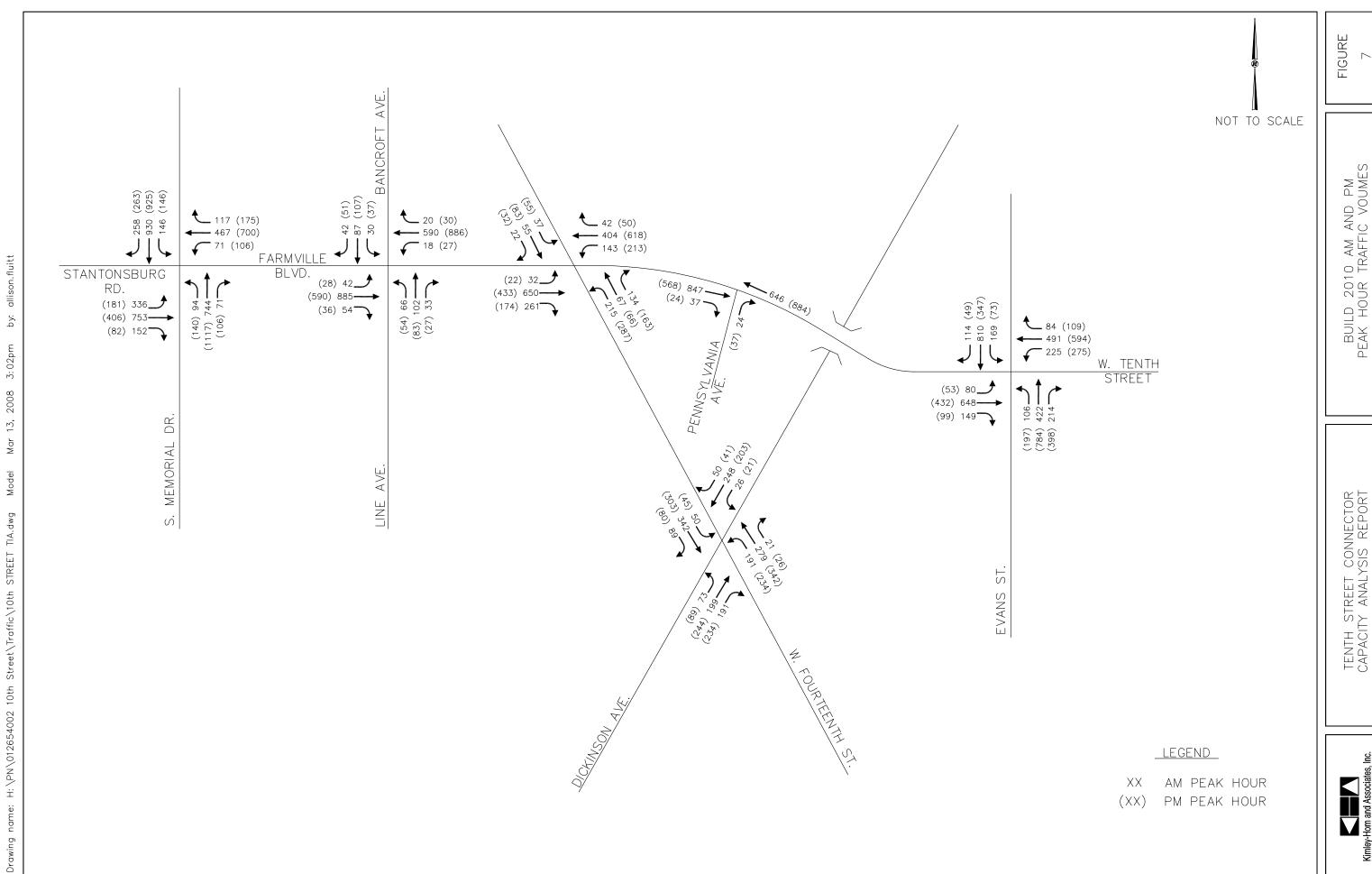
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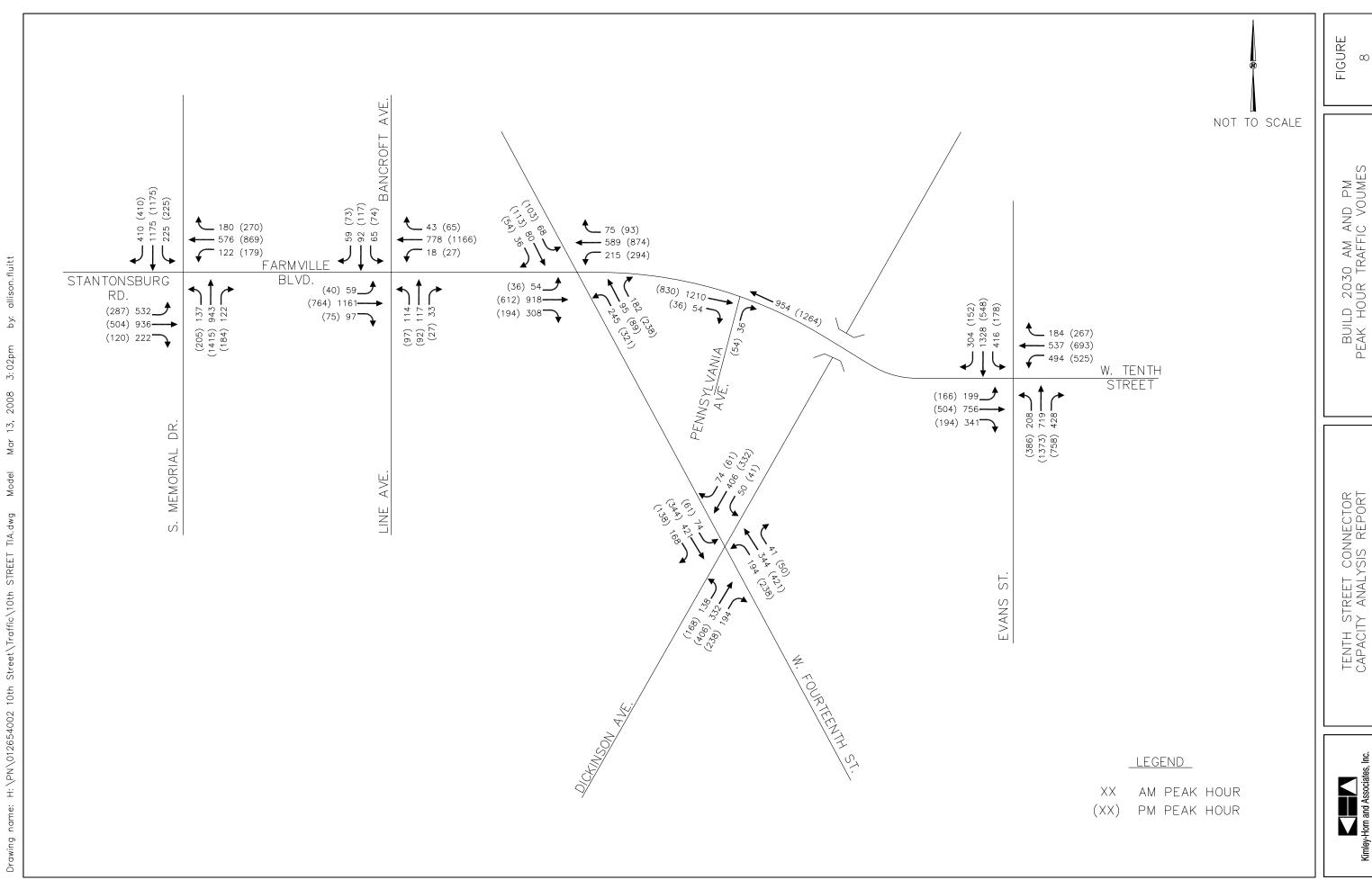
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Int	Talersection Level-o	ole 1 of-Service Summ	ıary								
Condition		Build v in seconds)		ild in seconds)							
	AM Peak-Hr	PM Peak-Hr	AM Peak-Hr	PM Peak-Hr							
SR 1467 (Stantonsbur	g Road)/ Farmville	Boulevard at Memo	orial Drive (Signalize	ed)							
Existing Traffic (2005)	E (65.7)	E (64.1)	D (41.2)	D (39.0)							
Interim Year (2010)	E (69.5)	E (67.6)	D (42.7)	D (40.3)							
Design Year (2030)	F (166.8)	F (155.6)	E (59.7)	E (59.8)							
Farmville Bou	llevard at Line Aver	ue / Bancroft Aven	ue (Signalized)								
Existing Traffic (2005)	B (11.8)	B (11.3)	A (7.8)	A (7.6)							
Interim Year (2010)	B (12.4)	B (11.8)	A (7.7)	B (10.2)							
Design Year (2030)	B (18.7)	B (20.0)	B (11.1)	B (14.0)							
Farmville Boulevard/W. Tenth Street Connector at W. Fourteenth Street (Signalized)											
Existing Traffic (2005)	B (12.7)	B (16.1)	C (22.6)	C (27.4)							
Interim Year (2010)	B (13.6)	B (14.9)	C (25.6)	C (30.1)							
Design Year (2030)	B (16.7)	B (18.0)	D (38.1)	D (46.8)							
SR 1598 (W. Tenth S	Street) at SR 1598 /	SR 1610 (Dickinson	Avenue) (Signalized	l)							
Existing Traffic (2005)	C (22.1)	C (23.6)									
Interim Year (2010)	D (38.4)	C (33.6)									
Design Year (2030)	F (91.4)	F (93.4)									
W. Tenth Street Connect	or at Pennsylvania A	Avenue - <i>Northbound</i>	d Approach (Unsigna	alized)							
Existing Traffic (2005)			A (9.6)	A (9.2)							
Interim Year (2010)			A (9.7)	A (9.2)							
Design Year (2030)			A (10.0)	A (9.5)							
SR 1598 (W.	Tenth Street) at SR	1702 (Evans Street) (Signalized)								
Existing Traffic (2005)	C (29.0)	C (26.6)	D (35.2)	C (34.4)							
Interim Year (2010)	D (47.2)	D (43.1)	D (40.2)	D (40.8)							
Design Year (2030)	F (171.3)	F (158.5)	E (67.7)	E (59.3)							
SR 1598 (Di	ckinson Avenue) at	E. Fourteenth Stree	t (Signalized)								
Existing Traffic (2005)	D (51.2)	D (46.2)	D (38.3)	D (36.7)							
Interim Year (2010)	E (65.0)	E (62.9)	D (39.9)	D (40.4)							
Design Year (2030)	F (199.4)	F (203.1)	D (52.3)	D (48.9)							

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SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive – Signalized Under the existing geometry and signal timings, this intersection operates at LOS E during both peak periods in the No Build 2005 scenario. With the projected traffic growth, the 2005 average vehicular delay (65.7 seconds in the AM peak hour, 64.1 seconds (s) in the PM peak hour) is expected to increase by approximately 5% by 2010 (69.5 s AM, 67.6 s PM) and by approximately 150% by 2030 to operate at LOS F (166.8 s AM, 155.6 s PM). Heavy through movements on all approaches are likely to result in extensive queuing and congestion.

The following roadway improvements are recommended in conjunction with this project:

- An additional eastbound left-turn lane and an exclusive eastbound right-turn lane on Stantonsburg Road
- Restriping the existing eastbound shared left-through lane to an exclusive through lane
- Exclusive westbound left- and right-turn lanes on Farmville Boulevard
- Exclusive northbound and southbound right-turn lanes on Memorial Drive
- An additional 125' of storage for the existing southbound left-turn lane on Memorial Drive
- Modifying the traffic signal to remove the split phasing for the Stantonsburg Road and Farmville Boulevard approaches

With these improvements in place, the intersection is projected to operate at LOS D in the AM and PM peak hours for both the 2005 (41.2 s AM, 39.0 s PM) and 2010 (42.7 s AM, 40.3 s PM) Build scenarios. For the 2030 Build scenario, the intersection is projected to operate at LOS E (59.7 s AM, 59.8 s PM) with the eastbound and northbound through movements also operating at LOS E in the AM and PM peak hours. The westbound through movement is expected to operate at LOS F in the AM peak hour and at LOS E in the PM peak hour. However, no queuing issues were observed at this intersection based on SimTraffic® simulations with the recommended turn lane storage lengths. The future operations also offer an improvement in average delay over current conditions.

Farmville Boulevard at Line Avenue / Bancroft Avenue – Signalized

Under the existing geometry and signal timings, this intersection operates at LOS B (11.8 s AM, 11.3 s PM) during both peak periods in the No Build 2005 scenario and is expected to continue to operate at LOS B in the AM and PM peak hours for both the No Build 2010 (12.4 s AM, 11.8 s PM) and 2030 (18.7 s AM, 20.0 s PM) conditions.



The following roadway improvements are recommended in conjunction with this project:

• Exclusive left-turn lanes on all four approaches

With these improvements in place, the intersection is projected to operate at LOS A in the AM and PM peak hours for the 2005 (7.8 s AM, 7.6 s PM) Build scenario. In the 2010 Build scenario, the intersection is expected to operate at LOS A (7.7 s) in the AM peak hour and LOS B (10.2 s) in the PM peak hour. For the 2030 Build scenario, the intersection is projected to operate at LOS B (11.1 s AM, 14.0 s PM) in both peak hours.

Farmville Boulevard / W. Tenth Street Connector at W. Fourteenth Street – Signalized

Under the existing geometry and signal timings, this intersection operates at LOS B (12.7 s AM, 16.1 s PM) during both peak periods in the No Build 2005 scenario and is expected to continue to operate at LOS B during both peak periods for the No Build 2010 (13.6 s AM, 14.9 s PM) and 2030 (16.7 s AM, 18.0 s PM) conditions.

As part of this project, W. Tenth Street will be extended to align with Farmville Boulevard at W. Fourteenth Street. The following roadway laneage is recommended at this intersection:

- Restriping and additional lanes to provide one exclusive left-turn lane, dual through lanes, and an exclusive right-turn lane on eastbound Farmville Boulevard
- One exclusive left-turn lane, one exclusive through lane, and a shared throughright lane on the westbound W. Tenth Street Connector
- Restriping and additional lanes to provide dual exclusive left-turn lanes, an exclusive through lane, and an exclusive right-turn lane on northbound W. Fourteenth Street
- Restriping and additional lanes to provide an exclusive left-turn lane and a shared through-right lane on southbound W. Fourteenth Street

With these improvements in place, the intersection is projected to operate at LOS C in the AM and PM peak hours for both the 2005 (22.6 s AM, 27.4 s PM) and 2010 (25.6 s AM, 30.1 s PM) Build scenarios. For the 2030 Build scenario, the intersection is projected to operate at an overall LOS D in the AM and PM peak hours (38.1 s AM, 46.8 s PM).

However, due to the long cycle length (140 seconds) and the low volumes, the southbound through movement is expected to operate at **LOS E** in the AM and PM peak hours for both the 2005 and 2010 scenarios. In 2030 the northbound through movement is expected to operate at **LOS E** in both peak hours, and the southbound through

movement is expected to operate at **LOS F** in both peak hours. No reasonable improvements were identified to mitigate these delays, and no queuing issues were observed based on SimTraffic[©] simulations with the recommended turn lane storage lengths.

SR 1598 (W. Tenth Street) at SR 1598 / SR 1610 (Dickinson Avenue) – Signalized

Under the existing geometry and signal timings, this intersection operates at LOS C during both peak periods (22.1 s AM, 23.6 s PM) in the No Build 2005 scenario. With the projected traffic growth, the intersection is expected to fall to LOS D (38.4 s) in the AM peak hour but remain at LOS C (33.6 s) in the PM peak hour in 2010. In 2030 the intersection is projected to operate at **LOS F** (91.4 s AM, 93.4 s PM) in both peak hours.

As part of this project, this intersection is currently planned to be grade-separated with no direct access from W. Tenth Street to/from Dickinson Avenue, therefore no Build analyses were performed for this intersection.

W. Tenth Street Connector at Pennsylvania Avenue – Unsignalized

Analysis indicates that the future right-in/right-out intersection of the W. Tenth Street Connector at Pennsylvania Avenue is expected to operate at LOS A for the northbound approach of Pennsylvania Avenue in the AM and PM peak hours for all Build scenarios. No turn lanes are recommended at this intersection due to the low traffic volumes.

SR 1598 (W. Tenth Street) at SR 1702 (Evans Street) – Signalized

Under the existing geometry and signal timings, this intersection operates at LOS C during both peak periods in the No Build 2005 scenario. With the projected traffic growth, the 2005 average vehicular delay (29.0 seconds in the AM peak, 26.6 seconds PM) is expected to increase by over 60% by 2010, resulting in an overall LOS D (47.2 s AM, 43.1 s PM), and by almost 500% by 2030 to operate at LOS F (171.3 s AM, 158.5 s PM).

Based on the capacity analysis presented herein, the following roadway improvements are recommended to be in place by the year 2030:

- An additional 350' of storage for the existing eastbound left-turn lane on W.
 Tenth Street
- An exclusive eastbound right-turn lane on W. Tenth Street
- An additional westbound left-turn lane and an exclusive westbound right-turn lane on W. Tenth Street
- An additional left-turn lane and an exclusive right-turn lane on both the northbound and southbound approaches of Evans Street

With these improvements in place, the intersection is projected to operate at LOS D (35.2 s) in the AM peak hour and LOS C (34.4 s) in the PM peak hour for the 2005 Build scenario and at LOS D (40.2 s AM, 40.8 s PM) for the 2010 Build scenario. For the 2030 Build scenario, the intersection is projected to operate at LOS E (67.7 s AM, 59.3 s PM) with multiple through movements also operating at LOS E. However, LOS E is often considered to be acceptable in urbanized areas. The only improvements capable of improving this intersection to LOS D are additional through lanes on both W. Tenth Street and Evans Street, which are not constructible due to the historic districts in the area. In addition, no queuing issues were observed at this intersection based on SimTraffic[©] simulations with the recommended turn lane storage lengths.

SR 1598 (Dickinson Avenue) at E. Fourteenth Street – Signalized

Under the existing geometry and signal timings, this intersection operates at LOS D (51.2 s AM, 46.2 s PM) in the No Build 2005 scenario. With the projected traffic growth, the intersection is expected to fall to LOS E (65.0 s AM, 62.9 s PM) in 2010 and to LOS F (199.4 s AM, 203.1 s PM) in 2030.

The following roadway improvements are needed by 2030. This intersection is not part of this project, however.

- An exclusive eastbound right-turn lane on Dickinson Avenue
- An additional 175' of storage for the existing northbound left-turn lane on E. Fourteenth Street

With these improvement in place, the intersection is projected to operate at LOS D in the AM and PM peak hours for all Build scenarios with only the westbound through movement on Dickinson Avenue operating at **LOS E** in some scenarios.

4.0 Conclusions and Recommendations

The intersection analyses indicate that this corridor experiences unacceptable delays at certain locations under existing conditions and throughout the study area under No Build conditions. The evaluation also shows that the proposed design would allow the study area intersections to operate at acceptable levels in Design Year 2030 at most locations. At the intersections of SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive, SR 1598 (W. Tenth Street) at SR 1702 (Evans Street) long cycle lengths and heavy left-turn and through volumes prevent the intersections from operating at an acceptable level of service even with significant geometric and signal improvements. The analysis projects **LOS E** under Build conditions at these locations. However, a LOS E is common in urban areas, and no feasible additional improvements were identified at either of these intersections to mitigate to LOS D. No queuing issues were identified at either location with the recommended improvements and turn lane storages.

The following improvements are recommended based on the capacity analyses presented herein:

SR 1467 (Stantonsburg Road) / Farmville Boulevard at Memorial Drive

- An additional eastbound left-turn lane and an exclusive eastbound right-turn lane on Stantonsburg Road
- Restriping the existing eastbound shared left-through lane to an exclusive through lane
- Exclusive westbound left- and right-turn lanes on Farmville Boulevard
- Exclusive northbound and southbound right-turn lanes on Memorial Drive
- An additional 125' of storage for the existing southbound left-turn lane on Memorial Drive
- Modifying the traffic signal to remove the split phasing for the Stantonsburg Road and Farmville Boulevard approaches

Farmville Boulevard at Line Avenue / Bancroft Avenue

• Exclusive left-turn lanes on all four approaches

Farmville Boulevard / W. Tenth Street Connector at W. Fourteenth Street

• Restriping and additional lanes to provide one exclusive left-turn lane, dual through lanes, and an exclusive right-turn lane on eastbound Farmville Boulevard

- One exclusive left-turn lane, one exclusive through lane, and a shared throughright lane on the westbound W. Tenth Street Connector
- Restriping and additional lanes to provide dual exclusive left-turn lanes, an exclusive through lane, and an exclusive right-turn lane on northbound W.
 Fourteenth Street
- Restriping and additional lanes to provide an exclusive left-turn lane and a shared through-right lane on southbound W. Fourteenth Street

SR 1598 (W. Tenth Street) at SR 1702 (Evans Street)

- An additional 350' of storage for the existing eastbound left-turn lane on W. Tenth Street
- An exclusive eastbound right-turn lane on W. Tenth Street
- An additional westbound left-turn lane and an exclusive westbound right-turn lane on W. Tenth Street (not part of the U-3315 project)
- An additional northbound left-turn lane, an additional southbound left-turn lane, and an exclusive southbound right-turn lane on Evans Street
- An exclusive northbound right-turn lane on Evans Street (not part of the U-3315 project)

SR 1598 (Dickinson Avenue) at E. Fourteenth Street (Not part of U-3315 Project)

- An exclusive eastbound right-turn lane on Dickinson Avenue
- An additional 175' of storage for the existing northbound left-turn lane on E. Fourteenth Street

Figure 9 outlines the recommended laneage, traffic control, and storage lengths based on the capacity analyses.

RECOMMENDED ROADWAY LANEAGE

TENTH STREET CONNECTOR CAPACITY ANALYSIS REPORT

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSES, INC. SHALL BE WITHOUT LIABILITY TO KIMLEY-HORN AND ASSOCIATES, INC

Appendix A

Existing Traffic Signal Plans

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PHASING DIAGRAM

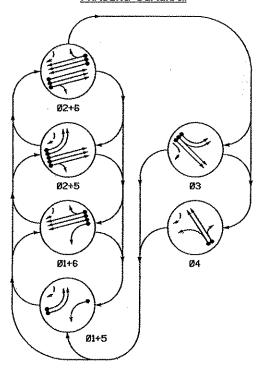
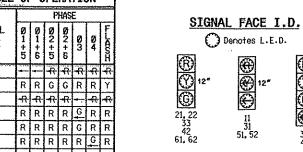


TABLE	TABLE OF OPERATION										
			P	HAŞ	E						
SIGNAL FACE	Ø1+5	Ø 1 6	Ø2+5	\$2+B	9 3	Ø 4	L JOUR				
11	+	*******	4	#	4	R	+				
21,22	R.	R	G	G	R	R.	Υ				
31	#	\$	4	₽		₩.	#				
32	R	R	R	R	Ç	R	R				
33	R	R	R	R	G	R	R				
41	R	R	R	R	R	G	R				
42	R	ĸ	R	R	R	G.	R				
51,52	-	-1 ₹-		#1	#	-4₹-	4				
61,62	R	G	R	G	R	R	Υ				



	INDUCT	IVE LOOP	l			DETECT	OR L	NIT	S				
100° NO.	SIZE	TURNS	DIST. FROM STOPMAR	≥	EXISTENCE	NEMA PHASE	¥	EXISTING	TIM	ING		PLACE	ENHIBIT
LOUI NO.	(ft)	IONES	(fs)	ž	EXS	PHASE	ž	¥.	FEATURE	TIME		PHASE	DURING GREENS
1A	6X60	2-4-2	+5	Г	Χ	1	Х		-	-	SEC.	ALL	NO
* 2A	6X27	EXISTING	330		Х	2	х		-	-	SEC.	ALL	NO
3 A	6X60	2-4-2	+5		X	3	Х		-	-	ŞEC.	ALL	NO
3B	6X60	2-4-2	+5		X.	3	Х		-	-	SEC.	ALL	NO
3C	6X60	2-4-2	+5		Χ	3	Х		DELAY	3	SEC.	ALL	YES
4A	6X60	2-4-2	+5		Х	4	X		-	-	SEC,	ALL	NO
4B	6X60	2-4-2	+5		Х	4	X		DELAY	10	SEC.	ALL	YES
5A	6X6Q	2-4-2	+5		Х	5	х		1	-	SEC.	ALL	NO
5B	6X60	2-4-2	+5		х	5	X		-	-	SEC.	ALL	NO
 ₩6A	6X29	EXISTING	330		X	6	X		-		SEC.	ALL	NO

-					
¥	k Unable	to	field	verify	loops.

US 19- NC 11-49-903 (Nemorial Dr)

6 Phase Fully Actuated (Greenville City System)

NOTES

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- 2. Pavement markings are existing.
- 3. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- 4. During coordination, phase 1 or phase 5 may be lagged.
- 5. During coordination, the order of phase 3 and phase 4 may be reversed.
- 6. Set all detector units to presence mode.
- 7. In the event of loop replacement refer to current Signals & Geometrics Design Manual.
- 8. Intersection Zone Number: 11 System Address Number: 53

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT UNDETECTED MOVEMENT (OVERLAP)

UNSIGNALIZED MOVEMENT

PEDESTRIAN MOVEMENT

PLAN QUANT	ITIES
Pay Item	Feet
* Signal Cable	1140
Messenger Cable	
** Lead-in Cable	690

* Replace signal cable for all signal heads. ** Replace all lead-in cable within risers and on wessenger cable.

PROPOSE	<u>(D</u>	EXISTING
○->	Traffic Signal Head	
0->-	Modified Signal Head	N/A
	Sign	_
¢	Pedestrian Signal Head With Push Button & Sign	*
<u></u>	Signal Pole with Guy	•)
J	Signal Pole with Sidewalk Guy	
	D Inductive Loop Detector	CITTID
\boxtimes	Controller & Cabinet	(XX)
O	Junction Box	
	··· 2—in Underground Conduit -	···· · · · · · · · · · · · · · · · · ·
N/A	Right of Yay with Marker -	
>	Directional Arrow	\longrightarrow
	Pavement Marking Arrow	-
(A)	Combined Through and Left Arrow Sign (R3-6L)	Ø
(B) (C)	Left Arrow "ONLY" Sign (R3-5L)	u (O
©	Through Arrow "ONLY" Sign (R3-5/	() ()
(Combined Through and Right Arrow Sign (R3-6R)	0
(Ē)	"YIELD" Sign (Rt-2)	(E)

LEGEND

Signal Upgrade



US 13-NC 11-43-903(Memorial Dr)

SR 1200 (Stantonsburg Rd.)/ Farmville Blvd.

Division 02 Pitt County Greenville
PLAN DATE: March 2003 REVIEWED ST: S T Franklin
PREPARED ST: L A Elliott REVIEWED ST:

SEAL	
CARO TA	1
STATES OF THE	
SA STATES OF THE SAME OF THE S	ı
23089	ı
WZ W	ł
WOTEN -	
(Indianiania	,
SIGNATURE DATE	1
5. INVENTORY NO. 02-0053	٦

					G CHA							
PHASE	Ø1		Ø	2	Ø3		04		Ø5		Ø 6	
MINIMUM GREEN*	7	SEC.	14	SEC.	7	SEC.	7	SEC.	7	SEC.	14	SEC
PASSAGE/GAP*	1.0	SEC.	6.0	SEC.	1.0	SEC.	1.0	SEC.	1.0	SEC.	6.0	SEC
ARTOM CHYMCE PAIL	4.0	SEC.	4.7	SEC.	4.7	SEC.	4.0	SEC.	4.0	SEC.	4.7	SEC
RED CLEARANCE	2.0	SEC.	2.0	SEC.	2.5	SEC_	3.0	SEC.	2.0	SEC.	2.0	SEC
MAX. I"	30	SEC.	90	SEC.	45	SEC.	45	SEC.	30	SEC.	90	SEC.
RECASE POSITION	NONE		MIN. RECALL NO		lE.	E NONE		NONE		MIN. RECALL		
VEH), CALL MEMORY	NONLO	ЮX	1.00	ĸ	HONE	ж	NONE	CK	NONE	ж	EOC	K
WALK	-	SEC.		SEC.		SEC.	_	SEC.		SEC.	-	SEC.
FLASHING DON'T WALK		SEC.	_	SEC.		SEC.	-	SEC.		SEC.	-	SEC
YOLUME DENSITY	OFF		40	1	OH		OFF		OF	:	4O	
ACTUATION B4 ADD	-	VEH.	0	уы.		VEHL		Vert.		VEH.	0	VEH
SEC. PER ACTUATION?	· :	SEC.	1.0	SEC.		SEC.	-	SEC.	-	SEC.	1.0	SEC.
MAX. INITIAL*	-	SEC.	37	SEC.		SEC.		SEC.		SEC.	37	SEC.
TIME B4 REDUCTION*	-	SEC.	15	SEC.		SEC.		SEC.		SEC.	15	SEC.
TIME TO REDUCE	_ :	SEC.	30	SEC.		SEC.	here	sec.		SEC.	30	SEC.
minumum gap		SEC.	3.5	SEC.		SEC.		SEC.		SEC.	3,5	SEC.

* These values may be field adjusted. Do not adjust Min Green and Passage /Gap firms for phases 2 and 6 lower than what is shown. Min Green for all other phases should not be lower than 4 seconds.

Lanes, Volumes, Timings

53: Stantonsburg Rd & Memorial Dr.

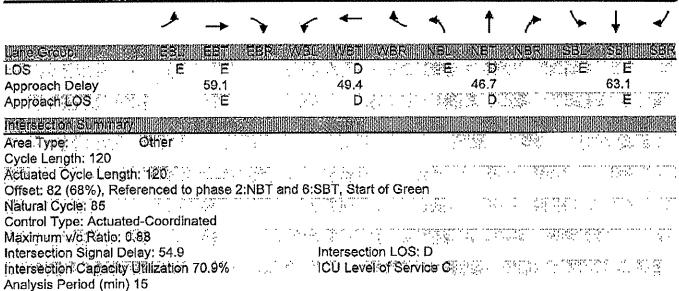
2/27/2007

)		•	•	←	Ł	*	↑	1	>	↓	4
Dare Cysus III is not in the			MEB 78			®W/BR	N NBI	NET	NER	(85)E E		SER
Lane Configurations	편 4555	₫₽	V JABAN	1000	ન ી 1900	* 22888	1900	77 P	1900	์ 1900 1900	ተተቡ 1900	1900
	1900	1900 12	1900 12	1900 12	12	1900 12	12	1900	12	11	ب ۱ ۵۵۵ ۰۰ 11	12
Lane Width (ft)	12	_اح	0	· ; · ; ;	12	6	300	maari ilda	· .	- 450 ·	m,	ั้
Storage Lefigth (ft) Storage Lanes	1		0	0		0	2	., `=,	0	1		. 0
Total Lost Time (s)	4.0	4.0	4.0	3.0	4.0	3.0	4.0	3:0	3.0	3.0	3.0	4.0
Leading Detector (ft)	50	50	, 49.56	50	50	0.0	50	50		50	50	,
Trailing Detector (ft)	Ö			Ö	Ö		· · · ŏ			0	5	
Turning Speed (mph)	15	, , ,	9	15	. •	9	15	, ,	9	15	_	9
Lane Util. Factor	0,91	0:91	.0.95	0.95	0.95	0.95	0.97	0.91	0.91	4.00	0.91	0.91
Frt	•,•	0.992	,		0.980		-,, -, ,	0.997		.,	0.960	
	950	7	:		0.993		0.950		71. T	0.950	٦	7
	1610	3363	0	0	3444	Ó	3433	4732	0	1711	4719	0
	7.950				0.993		0.950		qq . , <u></u>	0.950	,,	
	1610	3363	0	0	3444	. 0	3433	4732	0	1711	4719	0
Right Turn on Red	77		Yes			Yes			Yes		ith	Yes
Satd. Flow (RTOR)		4	·		14			2			72	
Pleadway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	1.00	1.04	1.04	1.00
Link Speed (mph)		45			45	,		45			45	
Link Distance (ft)		1983			1174	•		2186		•		
Travel Time (s)	• gq. u.e.ga • q	30.0	eman angary.	11.12.02	17.8		era mon	33.1	ar regio an	* @ 33:02:.**	28.5	1907 350 S.A.
The state of the s	183	450	24		541		169	* 184	4	162	651	240
	0.92	0.92	0.92	0.90	0.92	0.90	0.92	0.90	0.90	0.90	0.90	0.92
	199	489	26	121	588	108	184	751	16	180	723	261
Lane Group Flow (vph)	199	515		0	817	, 0	184	767	0	180	984	
	Split'			Split	10 to 10 d	· . ·	Prot			Prot	e.	1.00
Protected Phases Permitted Phases	3	3		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	4	·:::::	0		r, mayer, in	J Santagan		1,250
Detector Phases	3	3			1	٠,		4 CAST 2		4	. ·	` 3.
	7.0	7.0	n n şesii s vin s	7.0	7.0		7.0	14.0	• ••••,••,••,••• • ••,•	7.0	14.0	*****
	20.0	20.0	**	20.0	20.0		13.0	21.0	1 21 71	22.0	21.0	
	27.0	27.0	Ó,Ó	38.0	38.0	0.0	22.0		0.0		33.0	0.0
		22.5%			31.7%	0.0%	18.3%			18.3%		0.0%
	19,8	19.8	0.070	31.0	31.0			26.3		16.0		
Yellow Time (s)	4.7	4.7	• • •	4.0	4.0	•	4.0	4.7	٠,	4.0	4,7	
All-Red Time (s)	2.5	2.5	77 4	3.0	3.0		2.0	2.0	· · · · · · · · · · · · · · · · · · ·	2.0	2.0	
Lead/Lag	Lag	Lag	•	Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes	•	Yes	Yes		Yës	Yes:	1 : " 1 #1899	Yes	Yes	4
Vehicle Extension (s)	1.0	1.0		1.0	1.0		1.0	6,0		1.0	6.0	
Minimum Sap (s)	Ĩ.0	1.0	•	1.0	1.0	, , , , , , , , , , , , , , , , , , ,	100	3.5		4.0	3.5	4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4
Time Before Reduce (s)	0.0	0.0		0.0	0.0		0.0	15.0	•	0.0	15.0	
Time To Reduce (s)	0.0	0.0	•	0.0	0.0		0.0	30.0	aradan taribi	0.0	30.0	
Recall Mode N	lone	None		None	None		None		•	None (
	22.2	22.2	· • • • • • • • • • • • • • • • • • • •		32.1	e ^{ng} F, T.		34.5		17.2	32.7	
	0.18	0.18			0.27		0.15	0.29		0.14	0.27	0.54
		0.82			. 88,0		0.36			0.73	0.73	
	58.2	59.4			49.4		55.9	44.5	. V* 1888**	71.2	61.6	· p
Queue Delay	0.0	0.0		•	0.0		0.0	0.0	A. aftirit		0.0	
Total Delay	58.2	59.4			49.4		55.9	44.5		71.2	61.6	

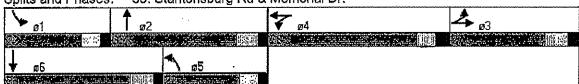
Lanes, Volumes, Timings

53: Stantonsburg Rd & Memorial Dr.

2/27/2007



Splits and Phases: 53: Stantonsburg Rd & Memorial Dr.



02/27/2007 09:30

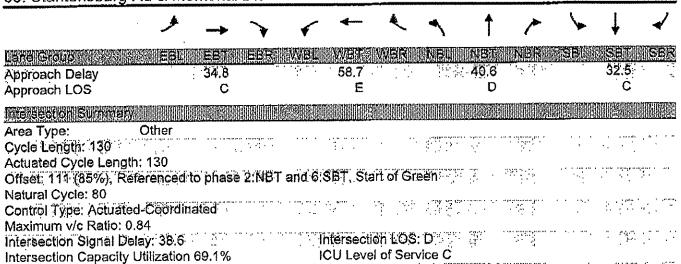
Lane Configurations	<u> </u>	٨	->	•	•	←	•	4	1	<i>*</i>	>	Ţ	✓.
Ideal Flow (Wphpi)	LanetGraup	V EBU	TEET	EBR:			IWER!	WELL		NER'	(USBL)	(SET	SER
Ideal Flow (tychell) 1900		ካ	ৰ্					77			ሻ		
Storage Length (fit) 0		1900		1900	1900	1900	1900		1900	1900	1900	1900	1900
Storage Laines		0		0	0		-	300		0			0
Total Lost Time (s)		1	. , , .	0	-	4		2	Ha Hiji	0.0		: r.	
Trailing Detector (ft) 10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				4.0			4.0			3.0			4.0
Training Speed (mph) Lane Util. Factor 0.91 0.98 0.98 0.98 0.992 0.990 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.9000 0.90000 0.9	Leading Detector (ft)	50	50	1. 17.	50		, v		.,			. "	eti, '
Lane Util Factor			0	> 1 2.50		0		-	0	· (** 6899£*			
Fit Protected 0.950 0.982 0.996 0.995 0.950 0.950 0.950 0.950 0.950 0.992 0.996 0.995 0.9950 0.99	, -							41 1 mm		ः (व. 9 -		0.04	
Fit Protected		0.91		0.95	0.95			0.97		0.91	1.00		0,91
Salid. Flow (prior)	•		0.989				F .	. ():	ିଉ:ଅପ୍			0.981	
File Permitted 0.950 Satat, Flow (perm) 1610 3353 0 0.992 0.950 0.950 0.950 0.950 Satat, Flow (perm) 1610 3353 0 0.3448 0 3433 5665 0.9770 4989 0 Neght Turn on Red Yes Yes Yes Yes Yes Yes			1.2.2022						TE THOUGHT !			"A656"	
Satol Flow (perm) 1610 3353 70 0 3448 0 3433 5086 0 1770 4989 798 79		•	3353	, 0	. 0		· · · · ·		. ၁၈၈៦	₽#		4309	;., U
Right Turn on Red Yes Yes Yes Yes Yes Yes Yes Yes Yes Satd, Flow (RTCIR) 6 6 10 1.00				٠					· ····································			**************************************	· /**** A
Satu, Flow (RTOR)		1610	3353		Ü	3448		3433	2002		- 117U	:4909	
Headway Factor		£ 1954, 117	ر،	Yes			Yes			Yes	oggananyen ili	11 36	
Link Speed (riph)								m - 132		4.00	4.00	4.00	
Link Distance (it) 1987 1174 2185 1875 Travel Time (s) 36.1 22.9 3.1 138 699 20 186 934 135 Peiak Hour Factor 0.92 6.92 0.92 0.90 0.92 0.92 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.92 0.90 0.90		1,00		1.00	1,00		1.00				1.00		
Travel Time (s) Volume (vph) 181								Sala i sa		÷. ;			···.
Volume (vph) 181 578 47 73 321 54 138 699 20 186 934 135 Peak Hour Factor 0.92 0.92 0.90 0.92 0.02 0.92 <t< td=""><td></td><td></td><td></td><td>:</td><td></td><td></td><td>.,</td><td>1 4 113</td><td></td><td>T 275.</td><td>";"</td><td></td><td>·,: ··· ···</td></t<>				:			.,	1 4 113		T 275.	";"		·,: ··· ···
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Adj. Flow (vph)													
Lane Group Flow (vph) 197 679 0 0 489 0 150 782 0 202 1162 0 Turn Type Split Split Prot Prot Prot Prot Protected Phases 3 3 3 4 4 5 2 1 6 Permitted Phases Detector Phases 3 3 3 4 4 4 5 2 1 6 Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 14.0 7.0 14.0 Minimum Split (s) 20.0 20.0 23.0 23.0 23.0 130 21.0 14.0 21.2 Total Split (s) 38.0 38.0 0.0 28.0 28.0 29.0 0.0 22.0 36.0 0.0 28.0 42.0 0.0 Total Split (%) 29.2% 29.2% 0.0% 21.5% 21.5% 0.0% 16.0 29.3 22.0 35.3 Yellow Time (s) 4.7 4.7 4.0 4.0 4.0 4.0 4.7 4.0 4.7 All-Red Time (s) 2.5 2.5 3.0 3.0 3.0 2.0 2.0 2.0 2.0 2.0 Lead/Lag (Detimize? Yes										111			**
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Defector Phases 3		. 3	3		,4,	. 4		. w.;	gara ar ≱r 🚄	1,000	ı	. 0	, ,
Minimum Initial (s) 7.0 7.0 7.0 7.0 7.0 7.0 14.0 7.0 14.0 Minimum Split (s) 20.0 20.0 23.0 23.0 23.0 21.0 14.0 21.2 Total Split (s) 38.0 38.0 0.0 28.0 28.0 0.0 22.0 36.0 0.0 28.0 42.0 0.0 Total Split (s) 29.2% 29.2% 0.0% 21.5% 21.5% 0.0% 16.9% 27.7% 0.0% 21.5% 32.3% 0.0% Maximum Green (s) 30.8 30.8 21.0 21.0 16.0 29.3 22.0 35.3 Yellow Time (s) 4.7 4.7 4.0 4.0 4.0 4.0 4.7 4.0 4.7 All-Red Time (s) 2.5 2.5 3.0 3.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0 <td></td> <td>e e .</td> <td></td> <td>1 200</td> <td></td> <td></td> <td>**** * ** ***</td> <td>- E</td> <td>arter target</td> <td></td> <td>१९७७ व्यवस</td> <td>A</td> <td>, ,</td>		e e .		1 200			**** * ** ***	- E	arter target		१९७७ व्यवस	A	, ,
Minimum Split (s) 20.0 20.0 23.0 23.0 23.0 23.0 21.0 14.0 21.2 Total Split (s) 38.0 38.0 0.0 28.0 28.0 0.0 22.0 36.0 0.0 28.0 42.0 0.0 Total Split (%) 29.2% 29.2% 0.0% 21.5% 21.5% 0.0% 16.0 29.3 22.0 35.3 Maximum Green (s) 30.8 30.8 21.0 21.0 16.0 29.3 22.0 35.3 Yellow Time (s) 4.7 4.7 4.0 4.0 4.0 4.7 4.0 4.7 All-Red Time (s) 2.5 2.5 3.0 3.0 2.0 2.0 2.0 2.0 Lead/Lag Lag Lag Lead Lead Lag Lag Lead Lead </td <td></td> <td>•</td> <td></td> <td></td> <td>70</td> <td>, ¥1. 7 ∩</td> <td></td> <td>70</td> <td>4/0</td> <td></td> <td>70</td> <td>, -</td> <td></td>		•			70	, ¥1. 7 ∩		70	4/0		70	, -	
Total Split (s) 38.0 38.0 0.0 28.0 28.0 0.0 22.0 36.0 0.0 28.0 42.0 0.0 Total Split (%) 29.2% 29.2% 0.0% 21.5% 21.5% 0.0% 16.9% 27.7% 0.0% 21.5% 32.3% 0.0% Maximum Green (s) 30.8 30.8 21.0 21.0 16.0 29.3 22.0 35.3 Yellow Time (\$\frac{1}{2}\$) 4.7 4.7 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0				.,							, , -		(40,44,44,44,44,44,44,44,44,44,44,44,44,4
Total Split (%) 29.2% 29.2% 0.0% 21.5% 21.5% 0.0% 16.9% 27.7% 0.0% 21.5% 32.3% 0.0% Maximum Green (s) 30.8 30.8 21.0 21.0 16.0 29.3 22.0 35.3 Yellow Time (s) 4.7 4.7 4.0 4.0 4.0 4.7 4.0 4.7 All-Red Time (s) 2.5 2.5 3.0 3.0 2.0 2.0 2.0 2.0 Lead/Lag Lag Lead Lead Lag Lag Lead Lag Lag Lead Lag Lag Lead Lag Lag <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0</td><td>1</td><td></td><td>nη</td><td></td><td></td><td>nn</td></t<>							0.0	1		nη			nn
Maximum Green (s) 30.8 30.8 21.0 21.0 16.0 29.3 22.0 35.3 Yellow Time (s) 4.7 4.7 4.0 4.0 4.0 4.7 4.0 4.7 All-Red Time (s) 2.5 2.5 3.0 3.0 2.0 2.0 2.0 2.0 Lead/Lag Lag Lag Lead Lag Lag Lead Lead Lag Lead	Total Spin (5)												
Yellow Time (\$) 4.7 4.7 4.0 4.0 4.0 4.7 4.0 4.7 All-Red Time (\$) 2.5 2.5 3.0 3.0 2.0 2.0 2.0 2.0 Lead/Lag Lag Lag Lead Lead Lag Lag Lead Lag Lead Lead Lead Lead Lead <td< td=""><td></td><td></td><td></td><td>. 0.070</td><td></td><td></td><td>9.0,70</td><td>,</td><td></td><td>0.0.0</td><td></td><td></td><td>0,0,70</td></td<>				. 0.070			9.0,70	,		0.0.0			0,0,70
All-Red Time (s) 2.5 2.5 3.0 3.0 2.0 2.0 2.0 2.0 Lead/Lag Lag Lag Lead Lead Lag Lag Lead Lead Lead-Lag Optimize? Yes Ye							٠.						
Lead/Lag Lag Lead Lead Lag Lag Lead Lead Lag Lag Lead Lead Lead Lead Lag Lag Lead Lag Lag Lead				•		1 1	•		_ ' _ '	, , ,	"		
Lead-Lag Optimize? Yes							. , .,,						
Vehicle Extension (s) 1.0 1.0 1.0 1.0 1.0 6.0 1.0 6.0 Minimum Gap (s) 1.0 1.0 1.0 1.0 1.0 3.5 1.0 3.5 Time Before Reduce (s) 0.0 0.0 0.0 0.0 0.0 0.0 15.0 0.0 15.0 Time To Reduce (s) 0.0 0.0 0.0 0.0 0.0 30.0 0.0 30.0 Recall Mode None None None None None None None None C-Max Act Effet Green (s) 31.1 31.1 22.5 18.0 41.1 19.3 42.4 Actuated g/C Ratio 0.24 0.24 0.17 0.14 0.32 0.15 0.33 v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0				٠,,			; ,		. , .		•		• •
Minimum Gap (s) 1.0 1.0 1.0 1.0 1.0 3.5 1.0 3.5 Time Before Reduce (s) 0.0 0.0 0.0 0.0 0.0 15.0 0.0 15.0										gration to			and the second
Time Before Reduce (s) 0.0 0.0 0.0 0.0 0.0 15.0 0.0 15.0 Time To Reduce (s) 0.0 0.0 0.0 0.0 0.0 30.0 0.0 30.0 Recall Mode None None None None None None C-Max Act Effct Green (s) 31.1 31.1 22.5 18.0 41.1 19.3 42.4 Actuated g/C Ratio 0.24 0.24 0.17 0.14 0.32 0.15 0.33 v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 29.8 36.3 58.7 52.1 38.3 40.8 81.0							137 7						
Time To Reduce (s) 0.0 0.0 0.0 0.0 0.0 30.0 0.0 30.0 Recall Mode None None None None None None C-Max Act Effct Green (s) 31.1 31.1 22.5 18.0 41.1 19.3 42.4 Actuated g/C Ratio 0.24 0.24 0.17 0.14 0.32 0.15 0.33 v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 29.8 36.3 58.7 52.1 38.3 40.8 81.0													2.
Recall Mode None None None None C-Max Act Effct Green (s) 31.1 31.1 22.5 18.0 41.1 19.3 42.4 Actuated g/C Ratio 0.24 0.24 0.17 0.14 0.32 0.15 0.33 v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 29.8 36.3 58.7 52.1 38.3 40.8 81.0	• •	<i>*</i> .								:			1
Act Effct Green (s) 31.1 31.1 22.5 18.0 41.1 19.3 42.4 Actuated g/C Ratio 0.24 0.24 0.17 0.14 0.32 0.15 0.33 v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 29.8 36.3 38.7 52.1 38.3 40.8 81.0													%51E1
Actuated g/C Ratio 0.24 0.24 0.17 0.14 0.32 0.15 0.33 v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 29.8 36.3 58.7 52.1 38.3 40.8 81.0				i. ,	110110			· ·	.: '	a' '			;·
v/c Ratio 0.51 0.84 0.81 0.32 0.49 0.77 0.71 Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Total Delay 29.8 36.3 58.7 52.1 38.3 40.8 81.0										F73 .			mran e :
Control Delay 29.8 36.3 58.7 52.1 38.3 40.8 31.0 Queue Delay 0.0										. ·" .			•
Queue Delay 0.0				•	aray saray			52 T	38.3				reer legs
Total Delay 29.6 36.3 58.7 52.1 38.3 40.8 61.0							11.			2 244 (2			
					••	58.7				<u> </u>			nantaidi. Garataidi
	LOS	C	D			E			, "	**	Ď	C	. • •

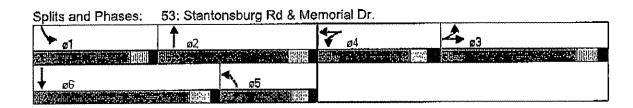
COG

Lanes, Volumes, Timings 53: Stantonsburg Rd & Memorial Dr.

Analysis Period (min) 15

2/27/2007





Signal#: 91 - Farmville/Line

2. CONTROLLER SUBMENU

1.	CONTROL	LER	TIMING	DATA
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,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			***	•								
PHASE	1	2	3	4	5	6	7	.8	9	10	11	12
MIN GRN	0	7	q	7	0	7	0	7	5	5	5	5
BIKE GRN	0	Q.	a	0	0	0	0	0	0	0	0	0
CS MGRN	0	! D	a a	Q	Ö	o'	ō	Q	Ō	Ö	ō	D
WALK	0	Ô	ٔ ۵	Ø	0	0	Ü	0	O	10	0	10
PED CLR	0	16	o	16	0	16	0	16	0	16	ō	16
VEH EXT	5.0	1,0	5.0	1.0	5,0	1,0	5.0	1.0	5.0	5,0	5.0	5.0
VEH EXT 2	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0
MAX EXT	0	0	0	0	0	0	0	0	0	0	0	0
MAX1	35	35	35	25	35	35	35	25	35	35	35	35
MAX2	40	40	40	40	40	40	40	40	40	40	40	40
MAX3	0	0	٥	٥	Ω	0	٥	0	à	0	Ò	0
DET MAX	0	0	0	٥	۵	0	0	0	0	0	0	٥
YELLOW	3,0	4,0	3,0	4.0	3,0	4,0	3.0	4,0	3,0	3.0	3,0	3,0
RED CLR	0,0	1.5	0.0	1.5	0,0	1.5	0.0	1.5	1.0	1.0	1.0	1.0
RED RVT	2.0	2,0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
ACT 84	0	0	0	0	0	0	0	0	0	0	٥	0
SEC/ACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX INI	0	0	0	0	0	0	0	٥	30	30	30	30
TIME B4	0	Ó	۵	۵	0	0	0	0	0	O	ŋ	ņ
CARS WT	0	0	0	0	0	0	0	0	0	0	0	0
TTREDUC	٥	0	0	Ö	0	0	o o	a	0	0	0	0
MIN GAP	0,0	0,0	0,0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0,0

2. PHASE OVERLAP ASSIGNMENTS

	C	VER	LAP	CON	SIST	S OF	PHA	SES	:			
OVLP PHASE	1	2	3	á	5	6	7	B	9	10	11	1,2
1	Х				["		ĺ				, <u>-</u> 	i
2		X						1				İ
3			X					Ī]	-	
4 :			ĺ	Х	<u> </u>							
5					Х	<u> </u>						, ,,,
6			***************************************	•	<u> </u>	X	-	T	'''			
7						ļ. "	Х		'	ľ "·		
8			· -	,,		Ì	1	Х	İ			
9									ΙX			
10								1		X		
11							1	***			Х	
12							Ī				<u> </u>	Х

3, PED TIMING CARRYOVER

PHASE	CARRYOVR PHS	PHASE	CARRYOVR PHS
1	0	7	0
2	0	8	Ō
3	0	þ	0
4	0	10	0
5	0	11	0
6	0	12	0

-Zphase -Z+C Farmville

4. CONTROLLER RECALL DATA

COG

PHASE	1	2	3	4	5	Ĝ	7	8	9	10	11	12
LOCKING MEMORY	'		"									
VEHICLE RECALL	,	X		[Ï	X	,					
PED RECALL			·									
RECALL TO MAX		<u> </u>										
SOFT RECALL		i	ľ				-					
DON'T REST HERE					`							
PED DARK N/CALL				"	i .	r'''						ļ

5. CONTROLLER OVERLAP DATA

5. CONTROLLER OVE					F	^	7	1 6	٦ ا	140	44	142
OVERLAP A	1	2	3	: 4	5	6	7	8	8	10	11	12
STANDARD		 	<u> </u>	-	Ļ.	ļ	ļ		ļ			!
PROTECTED		1	ļ	 	<u> </u>		ļ	<u>!</u>	 	 	ļ	<u> </u>
PERMITTED	-		 	<u> </u>	<u> </u>		ļ <u> </u>	,	_	├		├
ENABLE LAG			!	***************************************		! !	,		ŀ	ļ.		١.
ENABLE LEAD	<u> </u>	ļ	ļ		ļ	<u> </u>		١.	,	ļ		
SPARE	1		<u> </u>	<u> </u>				L			<u> </u>	<u> </u>
ADVANCE GREEN T											<u>. </u>	.0
LAG/LEAD GREEN T	FD F 107F	***									ļ., .	,0
LAG/LEAD YELLOW	N 1997 11	R 										,0
LAG/LEAD RED TIME		, .		ŗ	· · · ·	r	, <i></i>	Γ.	r	1 77.7		,0
OVERLAPE	, 1	2	3	4	5	6	7	B	9	10	11	12
STANDARD		<u> </u>	<u> </u>	· •	<u> </u>					<u> </u>		<u> </u>
PROTECTED		<u> </u>		<u> </u>	<u> </u>							•
PERMITTED		<u> </u>	<u> </u>	ļ	<u></u>			<u> </u>				<u></u>
ENABLE LAG		<u></u>		ļ	<u> </u>							
ENABLE LEAD	.,	Ĺ		<u></u>	,							
SPARE					<u> </u>							
ADVANCE GREEN T	MER										0.	.0
LAG/LEAD GREEN T	IMER										O,	.0
LAG/LEAD YELLOW	TIME	R									0.	0
LAG/LEAD RED TIME	R										0.	.0
OVERLAP C	1	2	3	4	5	6	7	8	9	10	11	12
STANDARD												Ĺ
PROTECTED	1											
PERMITTED												
ENABLE LAG	1										-,	i
ENABLE LEAD	1	 			i	,						
SPARE		i	************			**********						
ADVANCE GREEN T	MER	I	l	·	l			'	·,	_	0.	0
LAG/LEAD GREEN T	MER			••••							Ô,	0
LAG/LEAD YELLOW	TIME	₹			***********						0.	0
LAG/LEAD RED TIME	R					***********	~~~~		~		0,	0
OVERLAP D	1	2	3	4	5	e	7	8	9	10	11	12
STANDARD	1	•					-m rin					
PROTECTED	I		•	• •							—	
PERMITTED	T			-								
						j		-				
	1					1	- 1	ł				
ENABLE LAG											:	
ENABLE LEAD												
ENABLE LAG ENABLE LEAD SPARE	MER											
ENABLE LEAD SPARE ADVANCE GREEN TI											a,	
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI	MER										0.	0
ENABLE LEAD SPARE ADVANCE GREEN TI	MER TIME					A Land Pub		J			********	0

2/27/2007

Signal#: 90 - 14th/Farmville

2. CONTROLLER SUBMENU

		###		ZZ.		Eß						
1. CONTROLLE	R TIM	IING	DAT	4		KADK	:					
PHASE	1	2	3	4	5	6	7	8	8	10	11	12
MIN GRN	7	10	0	7	0	10	0	0	7	0	0	0
BIKE GRN	0	0	0	0	0	0	0	0	0	0	0	0
CS MGRN	0	0	0	0	0	0	0	0	0	0	0	D
WALK	0	0	0	0	0	0	0	0	5	0	0	0
PED CLR	0	٥	0	۵	0	0	Ω	0	15	0	0	0
VEH EXT	1,0	3,0	0,0	1,0	0.0	3,0	0,0	0.0	0.0	0,0	0.0	0.0
VEH EXT 2	0.0	0.0	0.0	0.0	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0.0
MAX EXT	0	0	0	0	0	0	Ū	0	0	a	D	٥
MAX1	15	30	0	20	0	30	0	0	0	Ö	ő	0
MAX2	0	0	0	0	0	0	ō	0	0	0	σ	0
МАХЗ	0	0	0	Q	0	Ö	0	0	0	0	ū	Ω
DET MAX	0	0	0	0	0	0	0	D	٥	0	۵	۵
YELLOW	4.0	4.0	3.0	4.0	3.0	4.0	3.0	3.0	3.0	4,0	4.0	4.0
RED CLR	2,0	2.0	2,0	2,0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
RED RVT	2.0	2.0	2,0	2.0	2,0	2,0	2,0	2.0	2,0	2,0	2,0	2.0
ACT B4	O	ō	0	D	D	0	0	٥	0	0	0	0
SEC/ACT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0,0	D,0
MAX INI	0	0	0	0	0	0	0	0	Ø	0	Ö	0
TIME 84	0	0	0	0	0	0	0	0	0	0	0	0
CARS WT	0	0	0	0	0	0	0	o	٥	0	0	0
TTREDUC	0	0	0	0	Ū	0	0	0	Q	0	0	0
MIN GAP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Z. PHASE OVERLAP ASSIGNMENTS

	Ċ	VER	LAP	CON	SIST	S OF	PHA	SES	:			
OVLP PHASE	1	2	3	4	5	В	7	8	9	10	11	12
1	X							i				
2		X						j			1	
3			х									
. 4				Х								
5					X							
в						Х						
7							X					
8 ;					1			Х				
9									X			
10		•						ľ	•	,	`	
11		I		·		,						
12	•				***		<u>"</u>	·		' '	٠.	,

3, PED TIMING CARRYOVER

ĺ	PHASE	CARRYOVR PHS		CARRYOVR PHS
	· 1	0 "	7 7	0
	2	0	В	0
	3	Ö	9	0
Ì	4	0	10	0
1	5	0	11	0
1	6	0	12	Ô

1 NB phase 1 H6 run together

4, CONTROLLER RECALL DATA

PHASE	1	2	3	4	5	6	7	8	8	10	11	12
LOCKING MEMORY		х				Х		"			İ	
VEHICLE RECALL		Х				Х	1	١	L			
PED RECALL	1									1		
RECALL TO MAX												
SOFT RECALL							ļ .					_
DON'T REST HERE								ľ		İ		
PED DARK N/CALL	Ì .	-					Γ					

5. CONTROLLER OVERLAP DATA

OVERLAP A		,,_,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		_	,							
OVERLAPIA	1	2	3	4	5	б	7	8	9	10	11	12
STANDARD			<u> </u>							;		
PROTECTED				<u> </u>							,.	ļ. <u>.</u> .
PERMITTED	<u> </u>			<u> </u>			. ,					<u> </u>
ENABLE LAG	:											
ENABLE LEAD				1			!					
SPARE	1											
ADVANCE GREEN TI	MER										0.	.0
LAG/LEAD GREEN TI	MER										0.	0.
LAG/LEAD YELLOW	IME	₹							****	•	0,	0,
LAG/LEAD RED TIME	R								**********		0.	0
OVERLAP B	1	2	3	4	5	6	7	8	9	10	11	12
STANDARD			 									
PROTECTED	1					ļ				Г		
PERMITTED	·											
ENABLE LAG		,									V	
ENABLE LEAD	1		! !	١.		,	•					
SPARE			_		_					, I		
ADVANCE GREEN TI	MER	L		1	L	L	I	L	·	L	0.	0
LAG/LEAD GREEN TI	MER			u			·····				0.	0
LAG/LEAD YELLOW		₹ .	•	** ****							0.	.0
LAG/LEAD RED TIME	***	•			• •	/1 ** **					O.	0
OVERLAP C	1	2	3	4	5	8	7	a	. 8	10	11	12
STANDARD				'	,	,		·	 			<u> </u>
			1									
PROTECTED	1			,			ì				****	· · · · · ·
							,	-		-		
PERMITTED					· ,							- 11 m
PERMITTED ENABLE LAG								-				
PERMITTED ENABLE LAG ENABLE LEAD												
PERMITTED ENABLE LAG ENABLE LEAD SPARE	MER										0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TIL		F121818									0.	
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILLAG/LEAD GREEN TI	MER	2									0.	.0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW T	MER TIMES	3									0.	.0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW TI LAG/LEAD RED TIME	MER TIMES R		3		5	è	7	A		10	0. 0. 0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW T LAG/LEAD RED TIME OVERLAP D	MER TIMES	2	3	4	5	è	7	8	9	10	0.	.0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILLAG/LEAD GREEN TILLAG/LEAD YELLOW TILLAG/LEAD RED TIME OVERLAP D STANDARD	MER TIMES R		3	4	5	ė	7	8	9	10	0. 0. 0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILLAG/LEAD GREEN TILLAG/LEAD YELLOW TILLAG/LEAD RED TIME OVERLAP O STANDARD PROTECTED	MER TIMES R		3	4	5	ė	7	8	9	10	0. 0. 0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW TI LAG/LEAD RED TIME OVERLAP O STANDARO PROTECTED PERMITTED	MER TIMES R		3	4	5	ė	7	8	9	10	0. 0. 0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW T LAG/LEAD RED TIME OVERLAP O STANDARO PROTECTED PERMITTED ENABLE LAG	MER TIMES R		3	4	5	ė	7	8	9	10	0. 0. 0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILAG/LEAD GREEN TILAG/LEAD GREEN TILAG/LEAD TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD	MER TIMES R		3	4	5	ė	7	8	9	10	0. 0. 0.	0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILAG/LEAD GREEN TILAG/LEAD TELLOW TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LEAD SPARE	MER TIMEF R		3	4	5	ė	7	8	9	10	0.	0 0 0 12
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILAG/LEAD GREEN TILAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI	MER TIMES TIMES	2	3	4	5	ė	7	8	9	10	0. 0. 11	0 0 0 12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILLAG/LEAD GREEN TILLAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILLAG/LEAD GREEN TILLAG/LEAD GREEN TILLAG/LEAD GREEN TILLAG/LEAD GREEN TILLAG/LEAD GREEN TILLAG/LEAD GREEN TI	MER R 1 MER MER	2	3	4	5	ė	7	8	9	10	0. 0. 11	0 0 0 12 0 0 0 0 0
PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TILAG/LEAD GREEN TILAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI	MER R 1 1 MER MER	2	3	4	5	ė	7	8	9	10	0. 0. 11	0 0 0 12 0 0 0 0 0

2/27/2007

Signal#: 89 - 10th/Dickinson

2. CONTROLLER SUBMENU

1	CONTROL	LER	TIMING	DATA
١.	CONTRACT	.i	Lithing Arm	WMIM

0.400			r 🚊	1 2		1	1 -	T 2		7 40	4.4	40
PHASE	1	2	3	4	5	6	7	8	9	10	11	12
MIN GRN	, 0	' 7	7	7	0	7	0	7	5	5	5	5
BIKE GRN	0	Ď	Ü	Q	0	0	0	0	0	0	0	0
CS MGRN	0	0	۵	a	0	o	a	0	0	Q	Ø	0
WALK	0	0	٥	0	0	0	0	0	0	0	0	0
PED CLR	D	0	0	0	0	0	0	0	0	16	0	16
VEH EXT	0.0	1,0	1.0	1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
VEH EXT 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0,0	0.0	0.0	0.0
MAX EXT	0	0,	0	0	0	0	! 0	0	0	0	0	٥
MAX1	0	30	30	15	0	30	0	15	D	Đ	0	0
MAX2	0	0	٥	0	0	G	0	0	0	0	0	0
МАХЭ	0	0	0	0	0	0	0	٥	0	a	0	0
DET MAX	0	0	0	0	0	0	D	0	Q.	Q	0	O
YELLOW	3.0	4.0	4,0	4,0	3,0	4,0	3.0	4.0	3.0	3.0	3.0	3.0
RED CLR	0.0	3.0	2.0	3.0	0,0	3.0	0.0	2.0	1.0	1.0	1.0	1.0
RED RVT	2.0	2.0	2.0	2.0	2.0	2.0	2,0	2.0	2.0	2.0	2,0	2.0
ACT B4	0	0	0	0	0	0	0	ū	0	0	0	0
SEC/ACT	0.0	0,0	0.0	0,0	۵,۵	0,0	0.0	0.0	0,0	0,0	0.0	D,0
MAX INI	0	0	٥	0	٥	0	٥	Ü	30	30	30	30
TIME B4	0	0	0	0	0	0	0	0	0	Ö	0	0
CARS WT	0	0	0	٥	0	D	Ó	, D	D	0	0	0
TTREDUC	0	0	0	O	0	Ď	0	٥	٥	ø	0	0
MIN GAP	0.0	0.0	0.0	0,0	0,0	2,0	0,0	0.0	0,0	0,0	0.0	0.0

2, PHASE OVERLAP ASSIGNMENTS

	Ò	VER	LAP	CON	SIST	SOF	PHA	SES	:			
OVLP PHASE	1	2	3	4	5	6	7	8	9	10	11	12
1	Х						Ċ		i	j		
2		X								Ī	l —	
3			X			T				-		
4				X			!					
5 1					Х					Γ		
5				1		X					************	
7					i	'"	Х					
8				- HOUSE		1		Х			***********	***************************************
9							•••••		X	ļ		
. 10									411,000	X		
11						,		,,,,,			Х	
12						l .		' "				Х

3. PED TIMING CARRYOVER

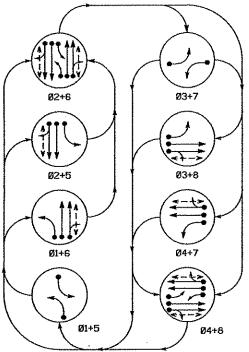
PHAS		PHASE	CARRYOVR PHS
1	0	7	0 ,
2	0	8	0
3	0	9	0
4	0	10	0
5	0	11	0
в	0	12	0

WB LOST PM+PT

4. CONTROLLER RECALL DATA

PHASE	1	2	3	4	5	8	7	ð	9	10	11	12
LOCKING MEMORY		Х				Х						
VEHICLE RECALL		X				Х		Г				
PED RECALL												
RECALL TO MAX												
SOFT RECALL		***************************************										
DON'T REST HERE												
PED DARK N/CALL						-						

OVERLAP A	i	2	3	4	5	В	7	6	9	10	11	12
STANDARD		 	<u> </u>	·	┪	1	1	1		1		-
PROTECTED	1		 		<u> </u>	1	1	╁	i			_
PERMITTED		-			1		1		 	1	!	┢
ENABLE LAG	1	 	1	†	T-	1	1	†	1-			
ENABLE LEAD		-		T		1		1	1	Î		
SPARE				1			!		<u> </u>			
ADVANCE GREEN T	IMER		• •	•	'	1		•	'	'	Ö	, .0
LAG/LEAD GREEN T	MER									***************************************	0	.0
LAG/LEAD YELLOW	TIME	R					-				Q	.0
LAG/LEAD RED TIME	ER				······································	···				~ ~~	۵	Ď
OVERLAP B	1	2	3	4	5	6	7	8	9	10	11	12
STANDARD			!						 			_
PROTECTED	1							<u> </u>				
PERMITTED								l				<u> </u>
ENABLE LAG		<u> </u>		·····		1	<i>'</i>	ľ		ļ ,		
ENABLE LEAD		•						-		i		
SPARÉ	<u> </u>						 					-
ADVANCE GREEN T	IMER	_		•				·	·	L	0,	a.
LAG/LEAD GREEN T	IMER								Maki 84 - 4		٥,	D
LAG/LEAD YELLOW	TIME	3						****	•		Ö.	Ò.
LAG/LEAD RED TIME	R								••		0.	Ö
OVERLAP C	1	2	3	4	5	6	7	8	9	10	11	12
STANDARD									i			
PROTECTED		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		,,,	ı				` <i>'</i>		_	
PERMITTED			•					***************************************				
ENABLE LAG	ĺ									1		
ENABLE LEAD	1										<u>-</u>	
SPARE	1	•	V 17 4 100mm		l						$\neg \uparrow$	
ADVANCE GREEN TO	MER	. (ا, ا	-,		اـــــا		II		0,	Ó
LAG/LEAD GREEN T	MER										0.	0
LAG/LEAD YELLOW	TIMES	₹	, -			**	•				0,	0
LAG/LEAD RED TIME	R					the shows	******				0,	0
OVERLAP D	11	2	3	4	5 .	6	7	8	9	10	11	12
STANDARD	1											
PROTECTED												
PERMITTED	: 1									<u>'</u>		
ENABLE LAG	1					T					*********	
ENABLE LEAD	1		ĺ				- ''			ľ		
SPARE	1	\neg		ĺ								
ADVANCE GREEN TI	MER					1	'	ŧ	.1	• • • • •	Q,0	
LACE EAD ODEELLE	MED					~~~~					0.0)
LAG/LEAD GREEN TI	Install.									- 1		
LAG/LEAD YELLOW		·								_	D.C	



PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP) UNSIGNALIZED MOVEMENT PEDESTRIAN MOVEMENT

TABLE OF OPERATION											
				Pl	HASE	:					
SIGNAL FACE	Ø 1 + 5	Ø 1 + 6	Ø2+5	Ø2+6	Ø3+7	Ø3+8	Ø 4 7	Ø4+8	EOD!		
21	71	R	76	Ģ	R	R	R	R	Υ		
22	R	R	G	G	R	R	R	R	Υ		
41	R	R	R	R	X	R	2	G	R		
42	R	R	R	R	R	R	Ĝ	G	R		
61	Z	Zc	R	G	R	R	R	R	Υ		
62	R	Ģ	R	G	R	R	R	R	Y		
81	R	R	R	R	R	\mathbb{Z}	R	Ģ	R		
82	R	R	R	R	R	G	R	G	R		
P21, P22	D₩	D₩	W	₩	D₩	₽₩	DW	DW	DRK		
P61, P62	D₩	W	DW	₩	DA	DW	DW	ĐΨ	DRK		
P41, P42	DW	DW	Đ₩	D₩	D₩	DW	3	₩	DRK		
P81, P82	D₩	DW	DW.	DW	D₩	W	DW	₩	DRK		

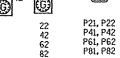
SIGNAL FACE I.D.

O Denotes L.E.D.









SR 1702 (Evans Street) → (A)

→ (B)

→ (B)

→ (B)

→ (B)

→ (B)

→ (B)

→ (B)

20 SEC. 45 SEC.

NONLOCK NONLOCK

- sec. 10 sec.

5 SEC.

- SEC.

- SEC.

- SEC.

-- SEC.

OFF

- VEH.

-- SEC.

- SEC.

- SEC.

188/	(West 1					
J 4 4 13	Ϋ́₽					
1						
	P41 P41	25 mph	0% Grade			
	2P62		§== 3 ==	=====		==
- 41 •®		=======================================	A) <u>←</u> 1(TA) √			
,	31-49					-
P22 22 21 0)	P61	7== 5			Sidowalk	
A 6 5 11 P	82 1	SR 1702 (E	vans Street	,		
41 🔡	1				<u></u>	PLA

LOOP & DETECTOR UNIT INSTALLATION CHART

STOPLAR Z PHASE Z

(ft)

+5

70

DETECTOR UNITS

1 X DELAY 15 SEC ALL YES

8 X DELAY 2 SEC ALL YES

X 2 X - SEC ALL NO

X 3 X DELAY 15 SEC. ALL YES

X 2 X - - SEC ALL NO 5 X DELAY 15 SEC ALL YES

X 6 X - - SEC ALL NO

+5 X 4 X - - SEC ALL NO

6X60 2-4-2 +5 | X 4 | X | DELAY 10 SEC. ALL | YES

7A 6X60 2-4-2 +5 X 4 X DELAY 2 SC ALL YES

**8A 6X60 EXISTING +5 X 8 X - - - SC ALL NO

**8B 6X60 EXISTING +5 X 8 X DELAY 10 SC ALL YES

TIMING PLACE INHIBIT CALL DELAY DURING DURING PHASE GREEN TIMING PLACE CALL

INDICTIVE LOOPS

6X60 2-4-2

6X6 EXISTING

EXEC PEXISTING

6X60 2-4-2

6X60 2-4-2

6X6 EXISTING 55

(ft)

TURNS

LOOP NO

2A,2B

* 4A

∗48

6A,6B

10

*See Note 13.

PLAN QUAN	TITIES
Pay Item	Feet
Signal Cable	1560
Wessenger Cable	-
Lead-in Cable	1230

8 Phase Fully Actuated (Greenville City System)

NOTES

SHEET NO.

120

PROJECT REFERENCE NO.

U-3852B

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- 2. Pavement markings are existing.
- 3. Omit phase 1 during phase 2 on.
- 4. Omit phase 5 during phase 6 on. 5. Omit phase 3 during phase 4 on.
- 6. Omit phase 7 during phase 8 on-
- 7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- 8. Omit "WALK" and flashing "DON'T WALK" with no pedestrian calls.
- 9. Thirty days after implementation of the revised signal operation. signs D and/or orange flags may be removed at the discretion of the Regional Traffic Engineer.
- 10. Remove existing "Left Turn Signal" signs - (R10-10L).
- 11. Set all detector units to presence
- 12. Program phase 4 and phase 8 for dual entry.
- 13. Run new lead-in cable to each of the following existing loops: 4A, 4B, 8A, and 8B. Wire these loops on separate detectors.
- 14. In the event of loop replacement, refer to current Signals & Geometrics Design Manual.
- 15. Intersection Zone Number: 3 System Address Number: 23

P+ 25 ***

PROPOSE	<u>D</u>	EXISTING
○-> -	Traffic Signal Head	•>
0	Modified Signal Head	N/A
	Sign	
₽	Pedestrian Signal Head With Push Button & Sign	•
0	Signal Pole with Guy	•
J	Signal Pole with Sidewalk Guy	•
C	☐ Inductive Loop Detector	CITIO
\boxtimes	Controller & Cabinet	K
	Junction Box	
**** * * * * * * * * * * * * * * * * * *	2-in linderground Conduit	
N/A	Right of Way with Marker	
>	Directional Arrow	>
	Pavement Marking Arrow	-
A	Left Arrow "CNLY" Sign (R3-5L)	(A)
®	Through Arrow "ONLY" Sign (R3-5#	U B
©	Combined Through and Right Arrow Sign (R3-6R)	©
()	"LEFT TURN YIELD ON GREEN" Sign With Flags (R10-12)	0



SR 1598 (10th Street) at

•

SR 1702 (Evans Street) Division D2 Pitt County PLAN DATE: March 2003 REVIEWED SY: \$ T Franklin PREPARED BY: L A Elliott REVIEWED BY:

Greenville

SEAL

MINIMUM GAP	-	SEC.	–	SEC.	-	SEC.		SEC.		SEC,	-	SEC.	-	SEC.	seen.	SEC
* These values may be field	odjusted	. Do n	ot adjust	Min Gn	oen end	Passgo	/Gap t	imes for	phoses :	2 and 6	lawer	than wh	ot is sho	wn. Mîn	Green	for all
other phases should not be	lower th	nan 4 1	seconds.				-									

TIMING CHART

7 SEC. 10 SEC. 7 SEC.

1.0 SEC. 3.0 SEC. 1.0 SEC.

4.0 SEC. 4.0 SEC. 4.0 SEC.

1.5 SEC. 1.5 SEC. 2.0 SEC.

25 SEC. 60 SEC. 20 SEC.

5 SEC.

10 sec.

-- VEH.

- SEC.

- SEC.

- SEC.

-- SEC.

OFF

LOCK NONLOCK

-- SEC.

- SEC.

-- SEC.

-- SEC.

- SEC.

- 5EC.

NONE MIN. RECALL NONE

NONLOCK

- SEC.

- SEC.

-- SEC.

- SEC.

- SEC.

– SEC.

VEH.

04

5 **SEC.**

10 SEC.

- SEC.

- SEC.

-- SEC.

– \$€C.

OFF

7 SEC. 7 SEC. 10 SEC.

45 sec. 25 sec. 60 sec.

NONLOCK NONLOCK LOCK

- SEC.

- SEC.

- SEC.

- SEC.

NONE MIN. RECALL

- sec. 10 sec.

1.0 SEC. 1.0 SEC. 3.0 SEC. 1.0 SEC. 1.0 SEC. 4.0 SEC. 4.0 SEC. 4.0 SEC. 4.0 SEC. 4.0 SEC.

2.0 sec. 1.5 sec. 1.5 sec. 2.0 sec. 2.0 sec.

5 sec.

- SEC.

-- SEC.

-- SEC.

PHASE MINIMUM GREEN

MAX. 1º RECALL POSITION

WALK*

PASSAGEGAP

YELLOW CHANGE INT. RED CLEARANCE

VEHIL CALL MEMORY

FLASHING DON'T WALK

ACTUATION B4 ADD

SEC. PER ACTUATIONS

TIME B4 REDUCTION

TIME TO REDUCE

YOLUME DENSITY

MAX. INITIAL*

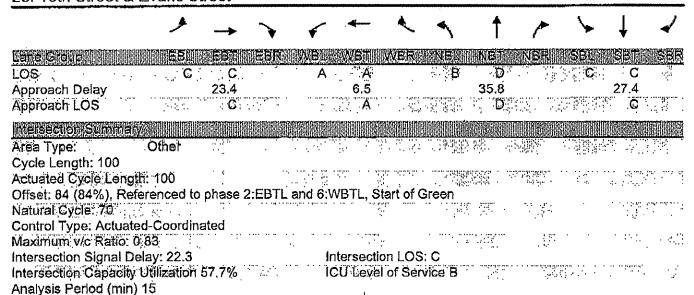
Lanes, Volumes, Timings 23: 10th Street & Evans Street

2/27/2007

	٠	>	*	•	-	Ł	4	†	/	>	ļ	4
			III EBRI	W.Eil	I WYETT		N NAM	e fyl e if	NER		Set	SBR
Lane Configurations	e ensemblin	₽	on the secretary	4000	1	TP 4866	ቸ ∶6001 ።	ት ቤ 1900	1900	୍ୟଞ୍ଚ ି	1900	1900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900 11	1900. 10	. 19.00 11	11	10	11	11
Lane Width (ft)	. 9	10	11 80	9 	10	ne elo	- 6	Sadalia	11111	ំ តំ	4 44	i i
Storage Length (ft)	1	Ī	1	, 0		0	1	11 44	0	1	` 55 - 4**	0
Storage Lanes Total Lost Time (s)	4.0	40.	4.0	4.0.	4.0	4.0	17436	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50	·*F.Q	50	50		50	50	-3-11 · · · ·	50	50	
Trailing Detector (ft)	0.			Ö	ő		0.	0		arut o		,***,7****
Turning Speed (mph)	15	•	9	15	Ψ.	9	15	, , , , , , , , , , , , , , , , , , ,	9	15	•	9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95		0.95	0.95	1.00	0,95	0.95
Frt		0.991			0.979		1.*	0.966			0.993	
Fit Protected	Ö.950	» ~		0.950	;	:," .	0.950		Latabayan	0.950	* * * * * * * * * * * * * * * * * * * *	
Satd. Flow (prot)	1593	3274	0	1593	3234	0	1652	3305	0	1652	3397	0
Fit Permitted	0.182		٠٠. "	0,403		,,, , ,,,	0.576			0.197		
Satd. Flow (perm)	305	3274	0	676	3234	0	1001	3305	0	342	3397	0
Right Turn on Red		,	Yes	,	1 1/1 1/2 11	Yes			Yes			Yes
Satd. Flow (RTOR)		7			19	rarabunganga	· . "PT BANKE	39		·· · · · · · · · · · · · · · · · · · ·	5	njaranga ggr g.
Headway Factor	1.14	1/09	1.04	1.14	1,09	1.04	1.09		1.04	1.09	1.04	1:04
Link Speed (mph)		35			35		milii ifahan in si	35	5,,75	e stantanoi end	35	p+.,
Link Distance (ft)	,; " ·	: 318			630	;	. 1	362	```		416	.:
Travel Time (s)		6.2	00		12.3		" A88	7.1 7.241		36	8.1 187	10
Volume (vph)	14	435	29	111	503		28	0.78	128 0.78	0.81	0.81	0,81
Peak Hour Factor	0.71	0.71	0.71	0.88 126	0.88 572	0.88 91	0.78 36			24		12
Adj. Flow (vph)	20	613 654	0	126	663	18.		729	, ⊪⊚4. 0	44	243	
Lane Group Flow (vph)		654	v	pm+pt	77 11 63 3	Á	pm [#] pt	120	V y	pm+pt		
Turn Type Protected Phases	⊕m+pt	2		pitirpt 1	R		34,1114	Ŕ	. •	7	À	•
Permitted Phases	5 ◇ 2	<u>د</u> .		··· · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·	7.53	100	4	· · · · · · · · · · · · · · · · · · ·	
Detector Phases	5	. 2	٠,	1	6		3	8		7	4	••
Minimum Initial (s)	7.Ö	10.0		7.0	10.0		7.0	_		7.0	720	**************************************
Minimum Split (s)	13.0	21.5		13.0	21.5	•	13.0	22.0		13.0	22.0	
Total Split (s)	14.0	36.0	0.0	15.0	37.0	0.0		35.0	0.0	14.0	35:0	0.0
Total Split (%)	14.0%	36.0%		15.0%	37.0%	0.0%			0.0%	14.0%	35.0%	0.0%
Maximum Green (s)	8.5	30.5		9,5	31.5	* * * * *		29.0	a et prope	8.0	29.0	4. ·
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	_	4.0	4.0	
All-Red Time (s)	`⊹:1.5			1.5	1.5	1 7 7	2.0	2.0	· : : :	20	, 🔆 2.0	
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?		"", ",""	· - 456	,	, , , ,			1.				"
Vehicle Extension (s)	1.0	3.0		1.0	3.0		1.0	1.0		1.0	1.0	, , , , , ,
Recal Mode	None			None	C-Max		None	None	, a	None		*** _p ***
Walk Time (s)		5.0			5.0			5.0		\$\$00 \$00 14 1 1 1	5.0	
Flash Dont Walk (s)		10.0	1.		10.0	•	: •	10.0		<i>h</i> ,	10:0	
Pedestrian Calls (#/hr)	P + 2 to 21	0		sin d a da da da da da da da da da da da da da da	0	·	المستوالية الم		· 54743865.	. AAX.	0	···.
Act Effct Green (s)	43.5	43.5		53.5	53.5			25.6		31.3	25.7.	
Actuated g/C Ratio	0.44	0.44		0.54	0.54		0.31	0,26		0.31 מאריאייני	0.26	
v/c Ratio	0.08		•	0,27	0.38	, 1,	0.10	0.83		0.19		, ,
Control Delay	22.1	23.4	ar againg	8.5	6.1 0.0		18.9 0.0	36.6		20.3	28.7 0:0	
Queue Delay	22.1	0.0° 23.4	•	0.0 8.5	6.1	•	18.9	0.0 36.6	, 25	20.3	28.7	, ,
Total Delay	22.1	۷٥.4		0,0	V. I		10.3	50,0		۷,0	۲۷.۱	

Lanes, Volumes, Timings 23: 10th Street & Evans Street

2/27/2007



COG

23: 10th Street & Evans Street Splits and Phases:



COG

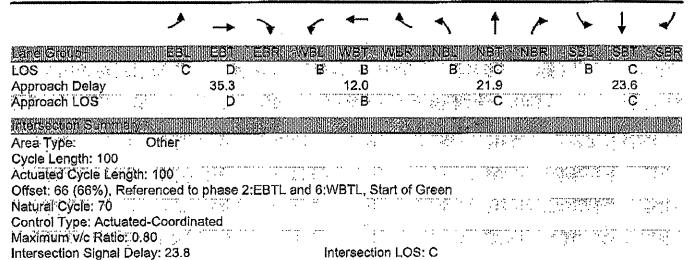
Lanes, Volumes, Timings 23: 10th Street & Evans Street

2/27/2007

	هر	→	•	•	4-	· A	4	†	<i>></i>	1	↓	4
Lane Grovo	W E84	EE	HEBR	WELL	TWET	WBR	I NBLT	NET	, NEK	SEL	₹75ET	SER
Lane Configurations	J.	<u>ተ</u> ቡ		14	ሳ ጭ		74	1		ħ	1 10	
ideal Flow (vphpl)	1900	1900	1900	1900		1900	1900	1900	1900	1900		1900
Lane Width (ft)	9	10	11	9	10	11	10	11	11	10	•	11
Storage Length (ft)	0		80	. 0	:	. 0	. "0"	i ita i mgan	Ö.	0		0
Storage Lanes	1		1	1		0	1		0	1		0
Total Lost Time (s)	4.0	4.0	4,0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Leading Detector (ft)	50	50		50	50	` .	50	50		50	50	
Trailing Detector (ft)	. 0	., 0		Ö	6		10	· 0		Ö		
Turning Speed (mph)	15		9	15	;	9	15		9	15		9
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	0.95	1:00	0.95	0.95	1.00	0.95	70.95
Frt		0.993			0.982			0.947	W 7,4		0.995	
Fit Protected	0,950		•	0.950	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	· · · · · · · · · · · · · · · · · · ·	0.950		2007	0.950		
Satd. Flow (prot)	1593	3280	0	1593	3244	0	1652	3240	· 0	1652		0
Fit Permitted	0.271	•		0.349		* * ** ***	0.238	**************************************		0.321		1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
Satd. Flow (perm)	454	3280	. 0	585	3244	o o	414	3240	0	558	3404	0
Right Turn on Red			Yes	• •		Yes			Yes		n nenggapa april	Yes
Satd. Flow (RTOR)		6	• •		18		, ».	99			3	•
Headway Factor	1.14	1.09	1.04	1.14	1.09	1.04	1.09		1.04	1.09	1.04	1.04
Link Speed (mph)		35	, ,,,,,,,		35		'," " ", _}	35			35	
Link Distance (ft)		318			632			4.5 99999 5	,,,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, , , , , , , , ,	352	1 1 *** DITE :
Travel Time (s)	•	6.2			12.3	4 7	U 4	7.1	* ****		6.9	••
Volume (vph)	- 8	608	32	144	367	. 52	25		170			15
Peak Hour Factor	0.84	0.84	0.84	0,86	0.86	0.86	0.98	0.98	0.98	0.82	0.82	0.82
Adj. Flow (vph)	10	724	38	167	427		. 26	317		98.		
Lane Group Flow (vph)		762	0	167	487	0	26	490	0	98	594	0
Turn Type	pm∓pt			pm+pt	,		pm+pt			pm+pt	, Y X	
Protected Phases	5	2	, , ,	1	6	•	7 - 1951 3	8	** **	7	4	, ,,
Permitted Phases	·	,	. , ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	6			8 :	177 199,5				., ""
Detector Phases	5		. '	1	: 6		3	8	-	7	4	
Minimum Initial (s)	7.0	10.0		7.0			.7.0°			(3.03/26)	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	71. te
Minimum Split (s)	13.0	21.5		13.0	21.5	`;	13.0	22.0		13.0	22.0	i
Total Split (s)	14.0	38.0	` `Ö,Ö`	18:0	42.0	·· 0.ö	14.0		0.0		30.0	0,0
Total Split (%)	14.0%			18.0%			14.0%			14.0%		0.0%
Maximum Green (s)			0,0,0				8.0	207 5 0 4 4 4 4 4 4	r i julija min muniti	8.0	24.0	** '}'
Yellow Time (s)	4.0	4.0		4.0	4.0	• `	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.5	1.5		1.5	1.5		2.0	2.0		2.0	2.0	. , .,
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?				9					, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	caa	-09	. 44 + 444
Vehicle Extension (s)	1.0	3.0		1.0	3.0	,	1.0	1.0		1.0	1.0	
Recall Mode	***	C-Min	· . ·	None	G-Min	arrigi	None		ar more	None	Max	. , , , , , , , , , , , , , , , , , , ,
Walk Time (s)	, 110,10	5.0	•	110,10	5.0	•	140110	5.0	L.	THEFT	5.0	•••
Flash Dont Walk (s)	, hasanda m	10.0	(*** * ** **** * * *		10.0			10.0	· ···	ng repert	10.0	. = 35
Pedestrian Calls (#/hr)	•••	0.00		¥	, 0.0	•	•	10,0	;			11.5
Act Effet Green (s)	29.0	29.0		42.4	42,4		43.5	36.3	mag :	46.0	0 41.9	
Actuated g/C Ratio	0.29	0.29		0.42	0.42					٠.		• •
v/c Ratio	0.04	0.80	n 1 r mp	0.42	0.35	***************************************	0.44	0.36 70.76	THE PARTY OF THE P	0.46	0.42	
	23.2	35.5	•				0.09	0.40	7.1-, .1	0.27	0.42	٤.
Control Delay Queue Delay				15.2	10.9		17.7	22.1		18.9	24.3	2.7
Total Delay	23.2	70,0	• •	0.0	10.0		,		1 1 (1.1	(0,0	0.0	<i>;</i> '
TOTAL DEIBY	23.2	35.5		15.2	10,9		17.7	22.1		18,9	24.3	

Lanes, Volumes, Timings 23: 10th Street & Evans Street

2/27/2007



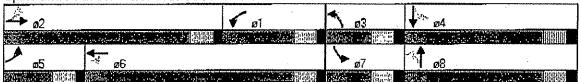
ICU Level of Service B

 $\{c_i\}_{i=1}^n$

Analysis Period (min) 15

Intersection Capacity Utilization 59.0%

Splits and Phases: 23: 10th Street & Evans Street



8 Phase **Fully Actuated** (Greenville City System)

NOTES

- 1. Refer to "Roadway Standard Drawings NCDOT" dated January 2002 and "Standard Specifications for Roads and Structures" dated January 2002.
- 2. Pavement markings are existing. 3. Omit phase 1 during phase 2 on.
- 4. Omit phase 5 during phase 6 on. 5. Omit phase 3 during phase 4 on.
- 6. Omit phase 7 during phase 8 on.
- 7. Maximum times shown in timing chart are for free-run operation only. Coordinated signal system timing values shall supersede these values.
- 8. Existing "Left Turn Yield on Green" ball signs-(R10-12) may be removed at the discretion of the Regional Traffic Engineer.
- 9. Set all detector units to presence mode.

LEGEND

Traffic Signal Head

Modified Signal Head

Sign Pedestrian Signal Head With Push Button & Sign Signal Pole with Guy Signal Pole with Sidewalk Guy Inductive Loop Detector

Controller & Cabinet Junction Box 2-in Underground Conduit

Directional Arrow Pavement Marking Arrow "LEFT TURN YIELD ON GREEN" Sign (R10-12)

Right of May with Marker ---

- 10. Program phase 4 and phase 8 for dual entry.
- 11. Intersection Zone Number: 4 System Address Number: 88

PROPOSED

0-->-

 \boxtimes

--->

L.00	LOOP & DETECTOR UNIT INSTALLATION CHART NEMA CONTROLLER WITH 1S-2 CABINET															
	INDUCT	IVE LOOP	PS			DETECTOR UNITS										
100F NO.	OF NO. SIZE TURNS STORMS								TIM	ING		PLACE	INHIBIT DELAY			
	{ft}	10000	(ft)	Z	EXISTING	PHASE	¥3N	EXIS7	FEATURE	TI	A.E.	PHASE	DURING GREENS			
1A	6X40	2-4-2	+5		Х	1	Χ		DELAY	15	SEC.	ALL	YES			
2A,2B,2C	6X6	EXISTING	70		Х	`2	X		-	-	SEC.	ALL	NO			
3A	6X15	EXISTING	50		Х	3	Х	Г	DELAY	15	SEC.	ALL	YES			
4A	6X40	2-4-2	+5		Х	4	Х		~	-	SEC.	ALL	NO			
4B	6X60	2-4-2	+5		Χ	4	X		-	-	SEC.	ALL	NO			
5A	6X40	2-4-2	+5		Х	5	X		DELAY	15	SEC.	ALL	YES			
6A,68,6C	6X6	EXISTING	70		X	6	X			_	SEC.	ALL	NO			
7A	6X15	EXISTING	50		X	7	X	П	DELAY	15	SEC.	ALL	YES			
8A	6X40	2-4-2	+5		Χ	8	Χ			-	ZEC.	ALL	NO			
88	6X60	2-4-2	+5		Х	8	Χ			-	SEC.	ALL	NO			

25 mph +2% Grade

SR 1598 (Dickinson Ave.)

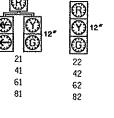
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TAE									
				Ρ	HAS	E			
SIGNAL FACE	Ø1+5	Ø 1 + 6	Ø2+5	\$2+6	Ø3+7	\$3+8	Ø 4 7	Ø 4 8	TG:OIL
21	\mathbb{Z}	R	76	G	R	R	R	R	Υ
22	R	R	G	G	R	R	R	R	Υ
41	R	R	R	R	3	R	\sim	G	R
42	R	R	R	R	R	R	Ç	G	R
61	$\frac{7}{8}$	$\frac{1}{2}$	œ	G	R	R	R	R	Υ
62	œ	G	R	G	R	R	œ	R	Υ
81	R	R	R	R	3/	Z	R	G	R
82	R	R	3	R	R	G	R	Ģ	R

SIGNAL FACE I.D.

(Denotes L.E.D.





SR 1598 (Dickinson Ave.)

25 mph -1% Grade

							G CH.									
MASE	01	1	Ø	2	03	}	Ø4		Ø5		Ø6		07	,	Ø8	,
MANUMUM GREEN	7	SEC.	10	SEC.	10	SEC.	7	SEC.	7	SEC.	10	SEC.	10	SEC.	7	SEC
PASSAGEGAP	1.0	SEC.	3.0	SEC.	3.0	SEC.	1.0	SEC.	1.0	SEC.	3.0	SEC.	3.0	SEC.	1.0	5£C
YELOW CHANGE INT.	4.0	SEC.	4.0	SEC.	4.0	SEC.	4.0	SEC.	4.0	SEC.	4.0	SEC.	4.0	SEC.	4.0	SEC
RED CLEARANCE	2.0	SEC.	2.0	SEC.	2.5	SEC.	2.0	SEC.	2.0	SEC.	2.0	SEC.	2.0	SEC.	2.0	SEC
MAX. 1°	15	SEC.	45	SEC.	15	SEC.	35	SEC.	15	SEC.	45	SEC.	15	SEC.	35	SEC
RECALL POSTEON	Ю	NE	MIN. R	ECALL	NO	¥E	ЮИ	Æ	NON	₩:	MIN. RE	CALL	NON	Æ	NO	Æ
VEHIL CALL MEMORY	NON	OCK	TOC	X.	NON!	оск	NON	ж	МОИП	OCK	1.00	ж	NONL	оск	NONL	ОСК
WALK*	-	SEC.	-	SEC.		SEC.	-	SEC.	-	SEC.		SEC.	_	SEC.		SEC
FLASHING DON'T WALK	-	SEC.	-	SEC.	-	SEC.	-	SEC.	_	SEC.		SEC.	*** ,	SEC.	_	SEC
VOLUME DENSITY	OF	ŧ	OF	Ŧ	OF	F	OF		OFI	:	OF	F	Off	F	OF	F
ACTUATION B4 ADD	-	VEH.	_	VEH.	-	VEH,		YEH.		VEH.	-	VEH.	_	VEH.		VEH.
SEC. PER ACTUATION	lua .	SEC.	14,	SEC.	-	SEC.	***	SEC.	<u> </u>	SEC.	·	SEC.		SEC.	ð-i-	SEC.
HAX INMAL*	-	SEC.		SEC.	-	SEC.	-	SEC.		SEC.		2EC	-	SEC.	·	SEC.
TIME 84 REDUCTION*		SEC.	_	SEC.		SEC.		SEC.	-	SEC.	***	SEC.		SEC.	······································	SEC.
TIME TO REDUCE		SEC.		SEC.	***************************************	SEC.		SEC.		SEC.	_	SEC.		SEC.	_	SEC.
MINIMUM GAP	_	SEC.	****	SEC.	_	SEC.		SEC.		SEC.		SEC.	_	SEC.		SEC.

PHASING DIAGRAM

PHASING DIAGRAM DETECTION LEGEND

DETECTED MOVEMENT

✓ - - > PEDESTRIAN MOVEMENT

UNSIGNALIZED MOVEMENT

UNDETECTED MOVEMENT (OVERLAP)

Ø3+7

Ø3+8

04+7

Ø2+6

02+5

Ø1+6

" These values may be field adjusted. Do not adjust Min (Green and Passage /Gap times for phases 2 and 6 lower than what is shown. Min Green for all
other phases should not be lower than 4 seconds.	

Plan Quant	ITIES
Pay Item	Feet
* Signal Cable	540
Wessenger Cable	-
** Lead-in Cable	540

** Replace all lead-in cable within watal poles and on messenger cable.



14th Street at SR 1598 (Dickinson Avenue)

Division 02 Pitt County
PLAN DATE: January 2003 REVIEWED BY:
PREPARED BY: Any Hambright REVIEWED BY:

EXISTING

N/A

--->

2/27/2007

Signal#: 88 - 14th/ Dickinson

2. CONTROLLER SUBMENU

1. CONTROLLER TIMING DATA

I. CONTROLLE	T. (8)	ALLEY CO.	DAI	m								
PHASE	1	2	3	4	5	6	7	8	8	10	11	12
MIN GRN	7	10	10	7	7	10	10	7	5	5	5	5
BIKE GRN	0	0	0	0	0	0	0	0	0	0	0	0
CS MGRN	0	0	0	0	0	0	0	0	0	0	0	0
WALK	0	0	0	0	0	0	0	0	0	10	0	10
PED CLR	0	16	0	18	٥	16	0	16	0	16	0	16
VEH EXT	1.0	3.0	3.0	1.0	1.0	3.0	3.0	1,0	5,0	5,0	5,0	5.0
VEH EXT 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
MAX EXT	0	0	0	0	0	0	0	0	0	0	0	0
MAX1	15	45	15	35	15	45	15	35	35	35	35	35
MAX2	40	40	40	45	40	40	40	45	40	40	40	40
MAX3	٥	0	0	0	0	0	0	, 0	٥	0	0	0
DET MAX	0	0	0	0	0	0	0	0	0	0	0	0
YELLOW	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	3.0	3.0	3.0	3.0
RED CLR	2.0	2.0	2.5	2.0	2.0	2.0	2.0	2,0	1.0	1.0	1.0	1.0
RED RVT	2,0	2.0	2,0	2,0	2,0	2,0	2.0	2.0	2.0	2.0	2.0	2.0
ACT B4	0	0	0	0	0	û	0	0	0	٥	٥	0
SEC/ACT	0,0	0.0	0,0	0.0	0.0	0,0	0.0	0.0	0.0	0.0	D.D	0,0
MAX INI	- 30	0	0	0	0	0	0	0	30	30	30	30
TIME 84	0	0	0	0	0	0	0	0	0	0	0	Ū
CARS WT	0	0	0	0	0	0	0	0	0	0	0	0
TTREDUC	0	0	0	٥	0	0	0	0	0	0	0	0
MIN GAF	0.0	0,0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

2. PHASE OVERLAP ASSIGNMENTS

		VER	LAP	CON	SIST	S OF	PH/	ASES	:			
OVLP PHASE	1	2	3	4	5	6	7	ð	9	10	11	12
1	Х			*								-
2		X				1						
3			х		1		1		1			
4				Х		<u> </u>	<u> </u>				,	
5				-	X		1					
6						X	ļ —	!				_
7							X					
8	ra b	- 111	• •			,		Х				
9	A. 1. manus	4.7	1.84						X			
10				* 1004 10*1000						Х		
11		,	********	1415-467-4	~ ^~~				<u> </u>		x	
12			'	٠.	• •	• • •	1					×

3. PED TIMING CARRYOVER

PHASE	CARRYOVE PHS	PHASE	CARRYOVR PHS
. 1 ^{**}	0	7	0
2	. 0	6	0
3	0	9	0
4	0	10	0
5	O	11	0
6	0	12	0

Dichinson 468 (4-EB) 14th 266 (2-SB)

4. CONTROLLER RECALL DATA

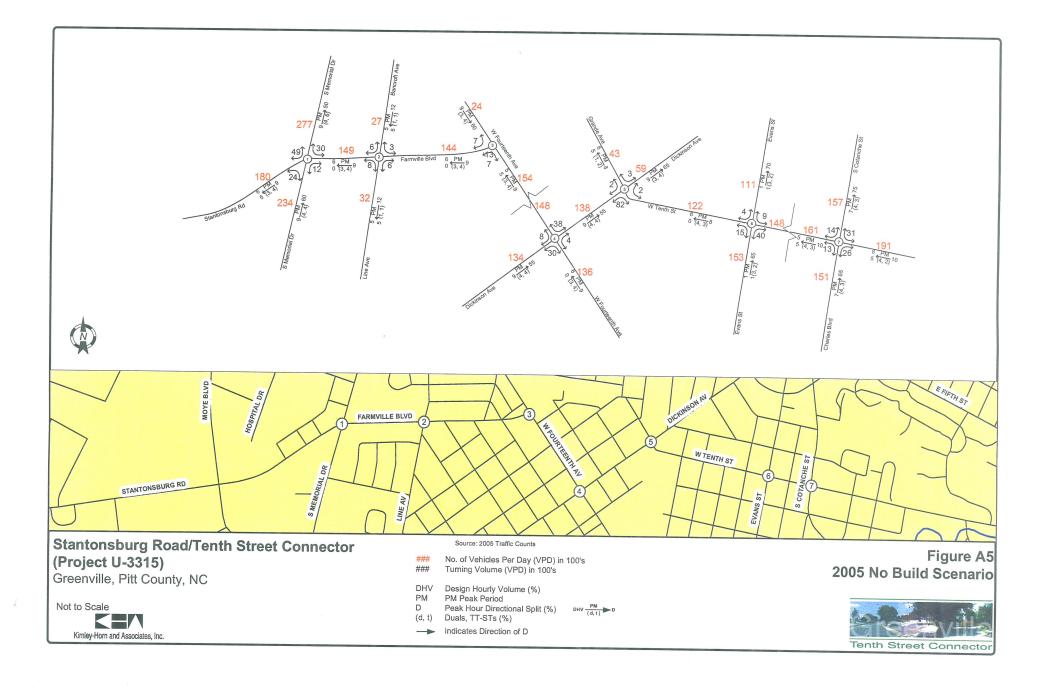
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PHASE	1	2	а	4	5	e	7	8	. 9	10	11	12
LOCKING MEMORY	****	Х				х			Î			
VEHICLE RECALL			ļ									
PED RECALL	***											-
RECALL TO MAX			,			 						<u> </u>
SOFT RECALL												·····
DON'T REST HERE			- /									
PED DARK N/CALL				. ,	,							

5, CONTROLLER OV	ERLA	P D/	ATA									
OVERLAP A	1	2	3	4	5	6	7	B	9	10	; 11	12
STANDARD		-	1					<u> </u>		1		
PROTECTED	L,	-	Ì		'	'	ļ	1	1	 	······································	1
PERMITTED	 -	1		-		,	1 11//	1	-	-	:	╁
ENABLE LAG		\vdash	┪~~		<u> </u>					 - -	- !	 -
ENABLE LEAD		1 -1						-	1	<u>.</u>	- 1	
SPARE		-	†	'				1			ļ	1
ADVANCE GREEN T	IMER	 }		J,	٠., ـ	l	ŧ	Ι.	1	•		.),[)
LAG/LEAD GREEN T						-						0.0
LAG/LEAD YELLOW	TIME	R										0.0
LAG/LEAD RED TIM	ER		··									0.0
OVERLAP B	1 1	2	3	4	5	в	7	8	8	10	11	12
STANDARD	1 .	"	1				l	 -	╁		 ```	╁
PROTECTED	-	┼┈	╫	 	!		[· · · · · · · · · · · · · · · · · · ·			├	-	
PERMITTED		-	 	Ì		.		ŀ		1	1	<i>:</i> .
ENABLE LAG	-	-	 						į			
ENABLE LEAD			┢	 	ļ			. -	1 "	٠		
SPARE		 	┼			-			 -			├
ADVANCE GREEN T	IMER	<u> </u>	<u> </u>	ļ	<u> </u>				<u></u>	<u> </u>		,0 ,0
LAG/LEAD GREEN T					····		,		•		Į.	,0 ,0
LAG/LEAD YELLOW												.0
LAG/LEAD RED TIME					-						.0	
OVERLAP C	1	2	3	4	5	6	7	В	9	10	<u> </u>	12
STANDARD			 			-			ļ-"			
PROTECTED	-	 	 						<u> </u>		:	<u> </u>
	1				: 1	- 1						
PERMITTED								ļ			<u>. </u>	
PERMITTED					,							
ENABLE LAG		, .			,							
ENABLE LAG ENABLE LEAD		, ,										
ENABLE LAG ENABLE LEAD SPARE	Mess											
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TO											0.	
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TO LAG/LEAD GREEN TO	MER										0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW	MER			71 - 414							0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME	MER TIMEF	3	2					9			0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D	MER		3	4	5	6	7	8	9	10	0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TO LAG/LEAD GREEN TO LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD	MER TIMEF	3	3	4	5		7	8	9	10	0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TO LAG/LEAD GREEN TO LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED	MER TIMEF	3	3	4	5		7	8	9	10	0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED	MER TIMEF	3		4	5		7	8	9	10	0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG	MER TIMEF	2		4	5		7	8	9	10	0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG GNABLE LEAD	MER TIMEF	2		4	5		7	8	9	10	0.	0
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE	MER TIMEF	2		4	5		7	8	9	10	0.0.11	0 0 12
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI	MER TIMES R 1	2		4	5		7	8	9	10	0.	0 0 12
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TII LAG/LEAD GREEN TII LAG/LEAD GREEN TII	MER TIMEF R 1	2		4	5		7	8	9	10	0.00.00.000	0 0 12
ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI LAG/LEAD GREEN TI LAG/LEAD YELLOW LAG/LEAD RED TIME OVERLAP D STANDARD PROTECTED PERMITTED ENABLE LAG ENABLE LEAD SPARE ADVANCE GREEN TI	MER R 1 1 MER MER	2		4	5		7	8	9	10	0.	0 0 0 12

Appendix B

a) Traffic Forecasts and Analysis Spreadsheets

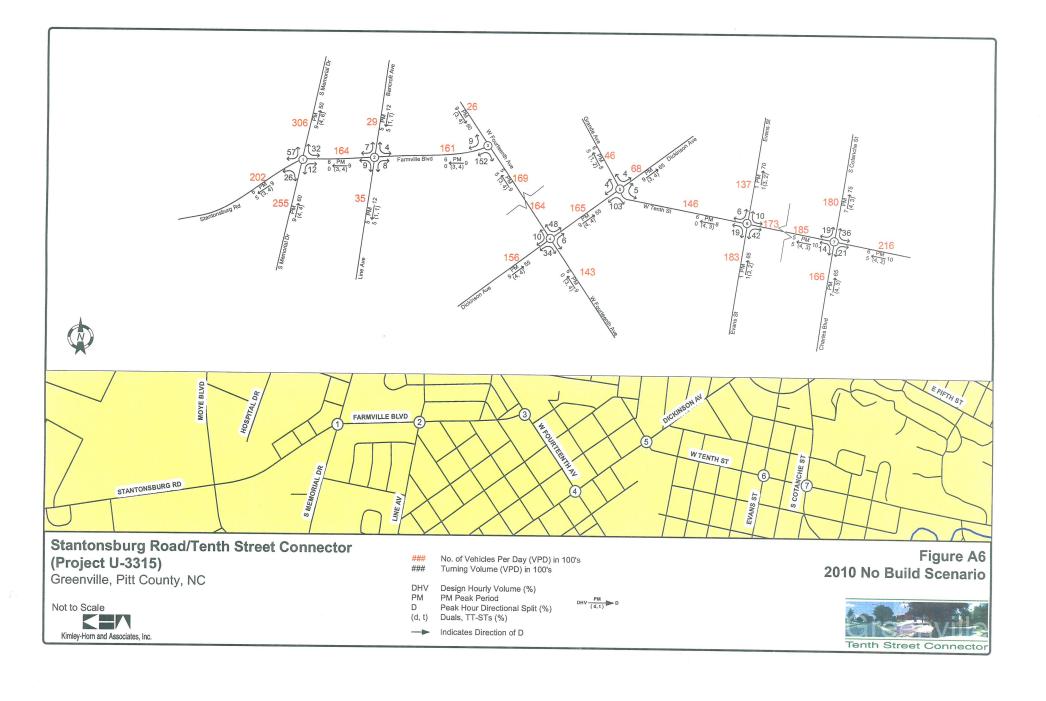


108 367 14

162 551 22

A

Fourteenth Ave. 14800 | 2-way



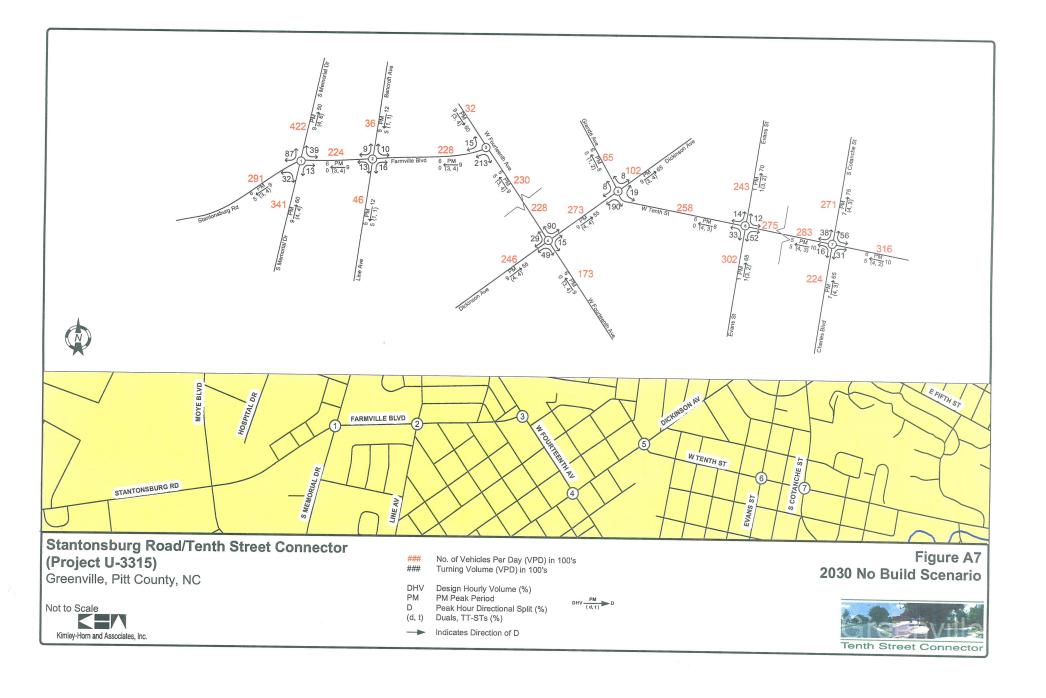
122 371 22

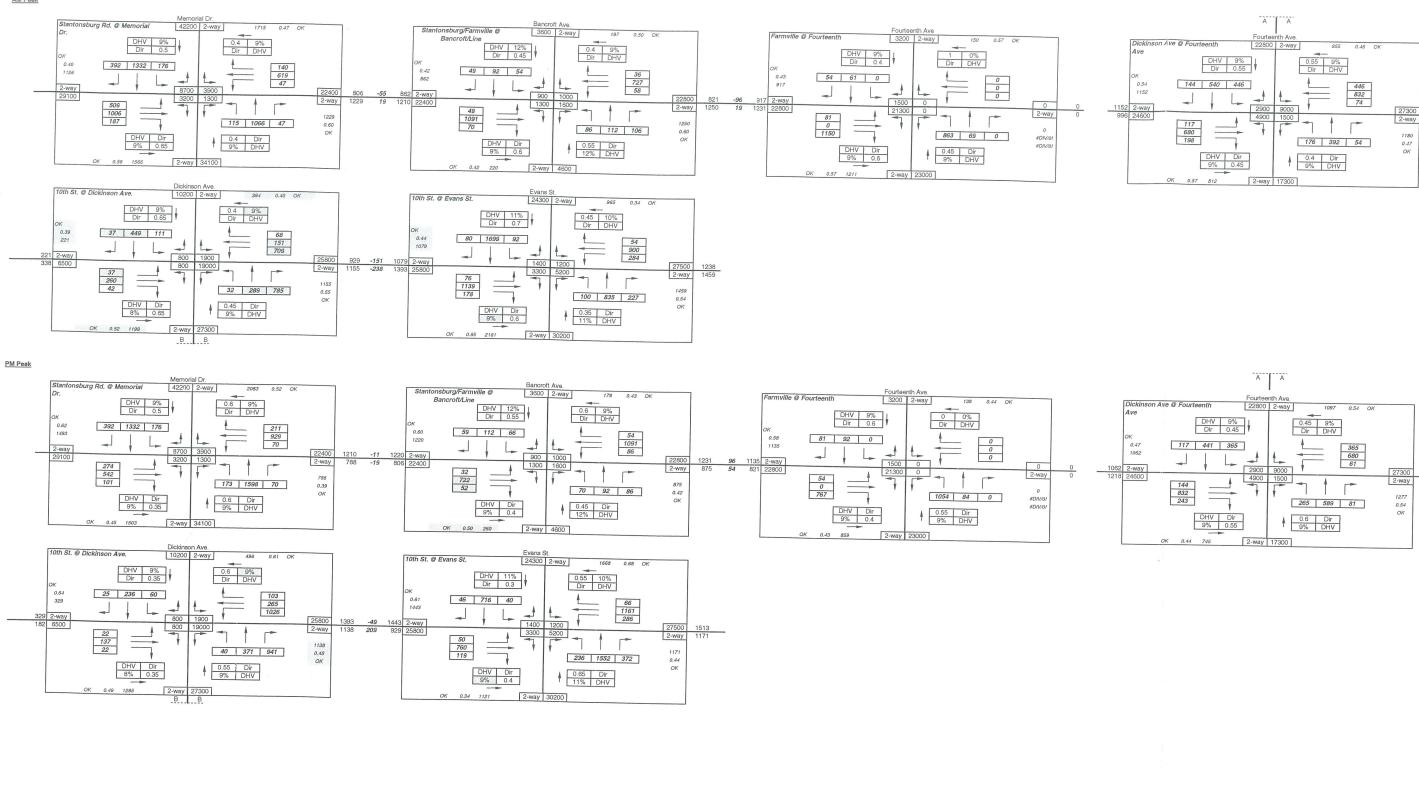
184 556 32

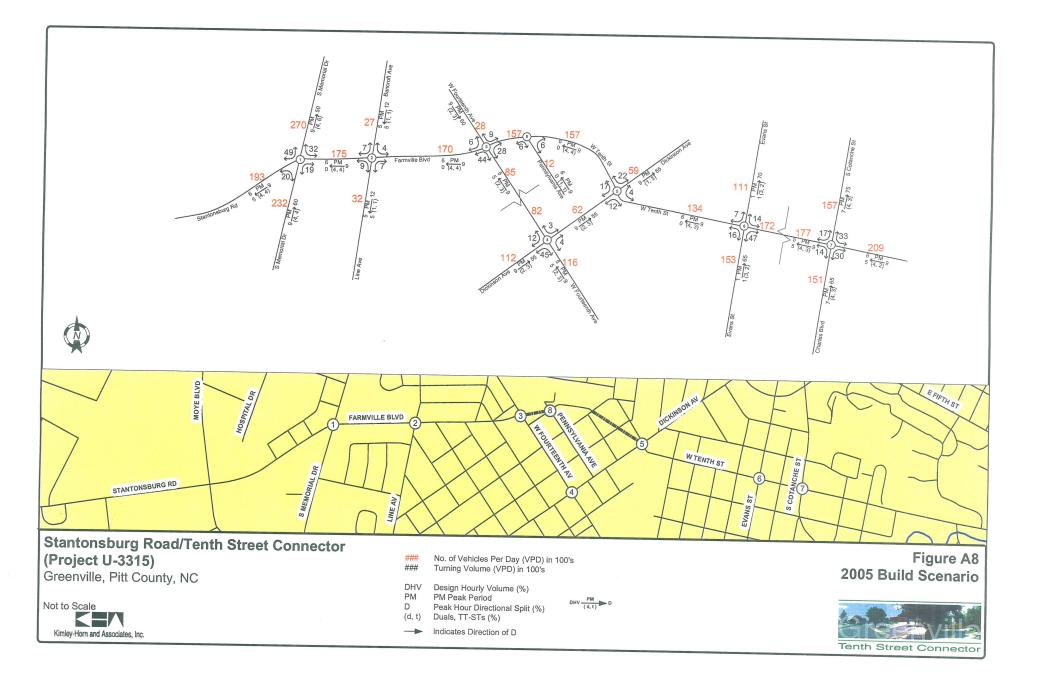
A

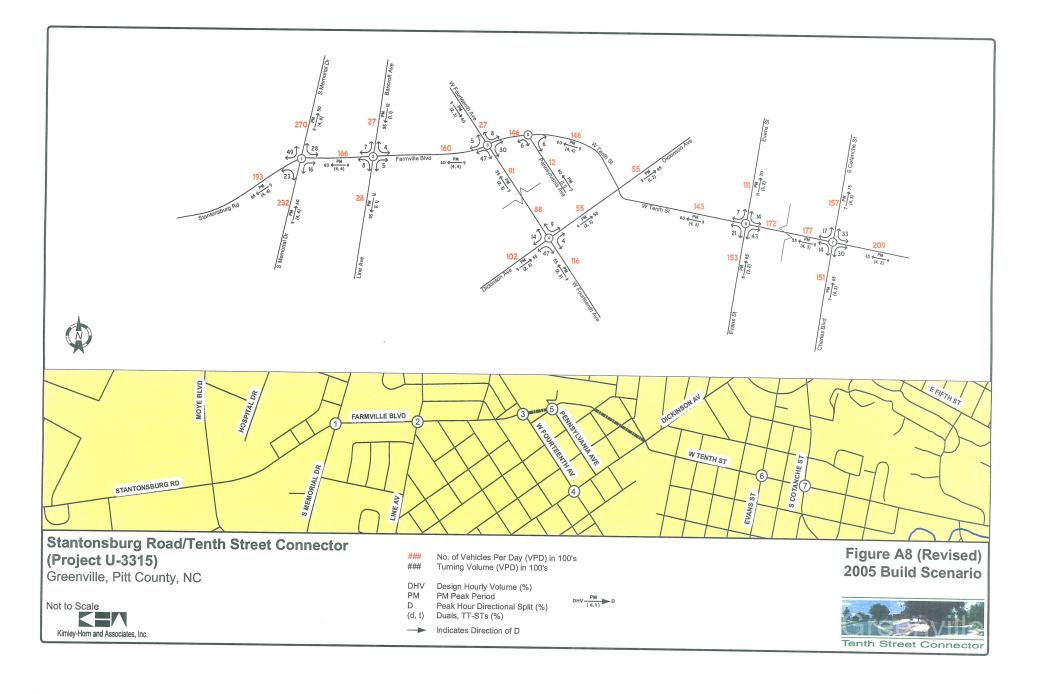
DHV 9% Dir 0.45

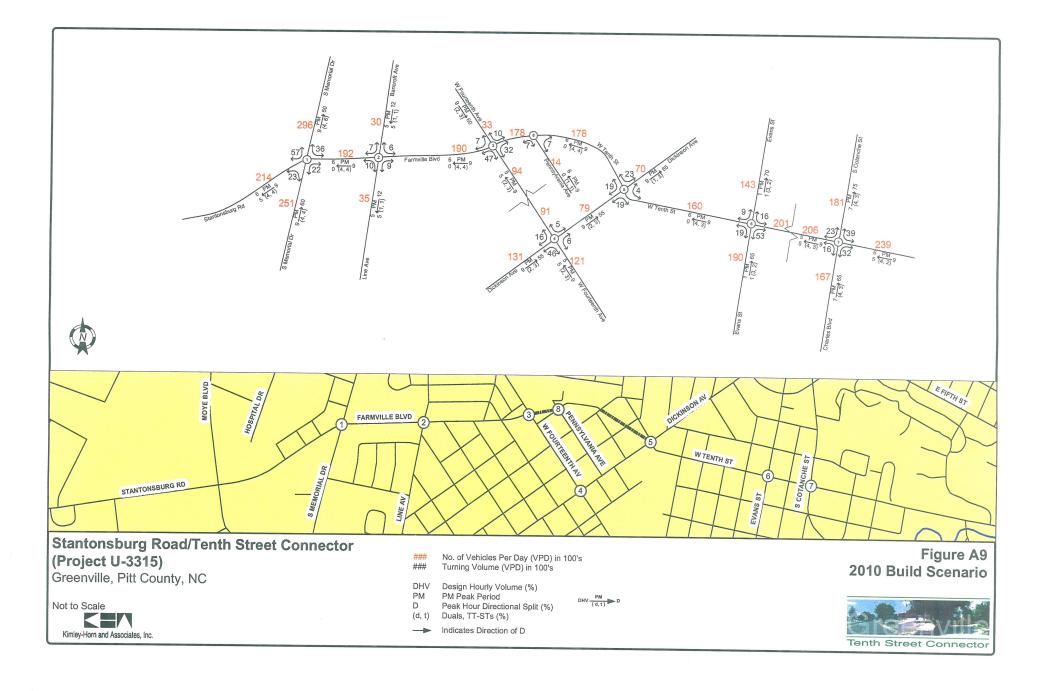
41 429 194

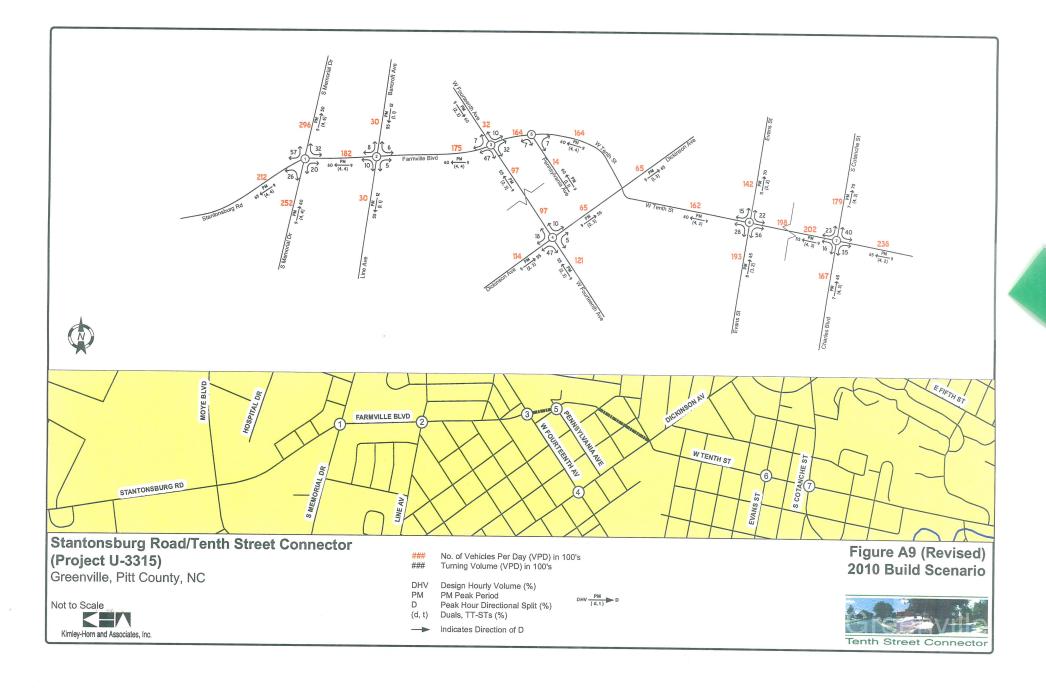




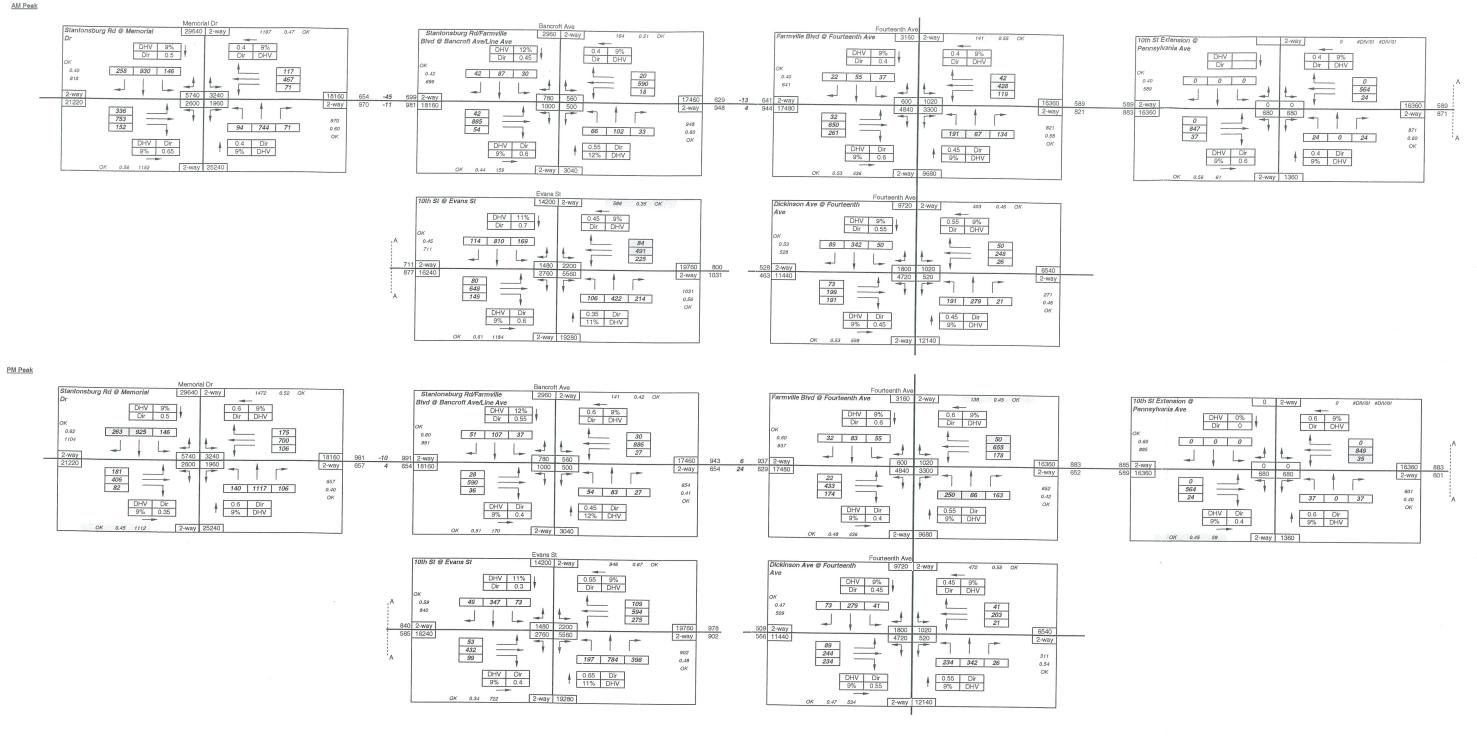


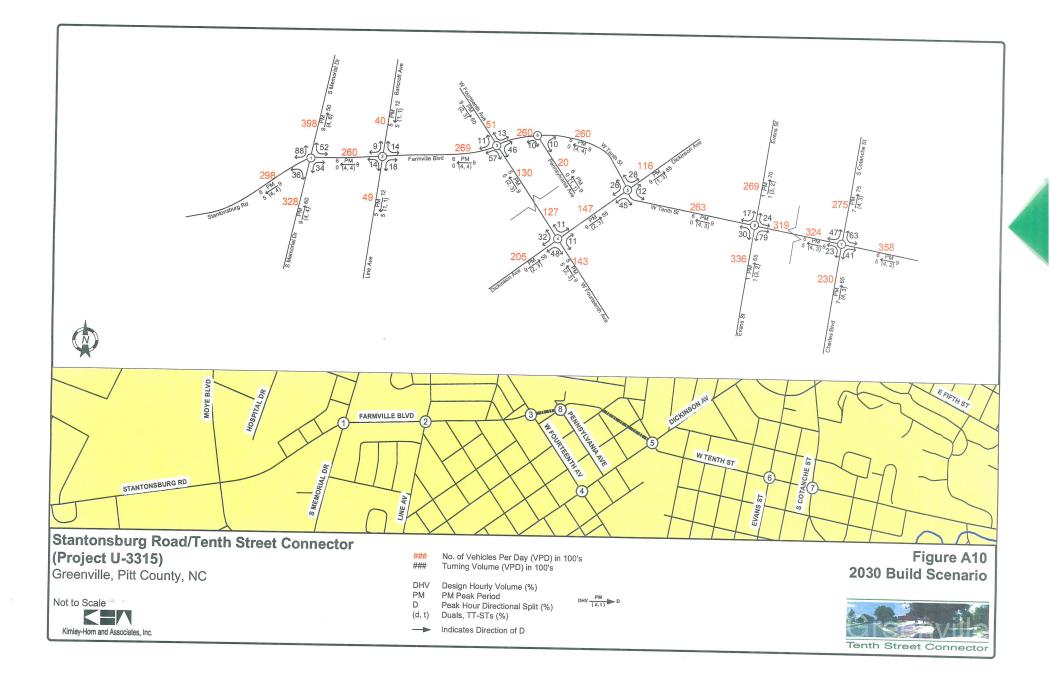


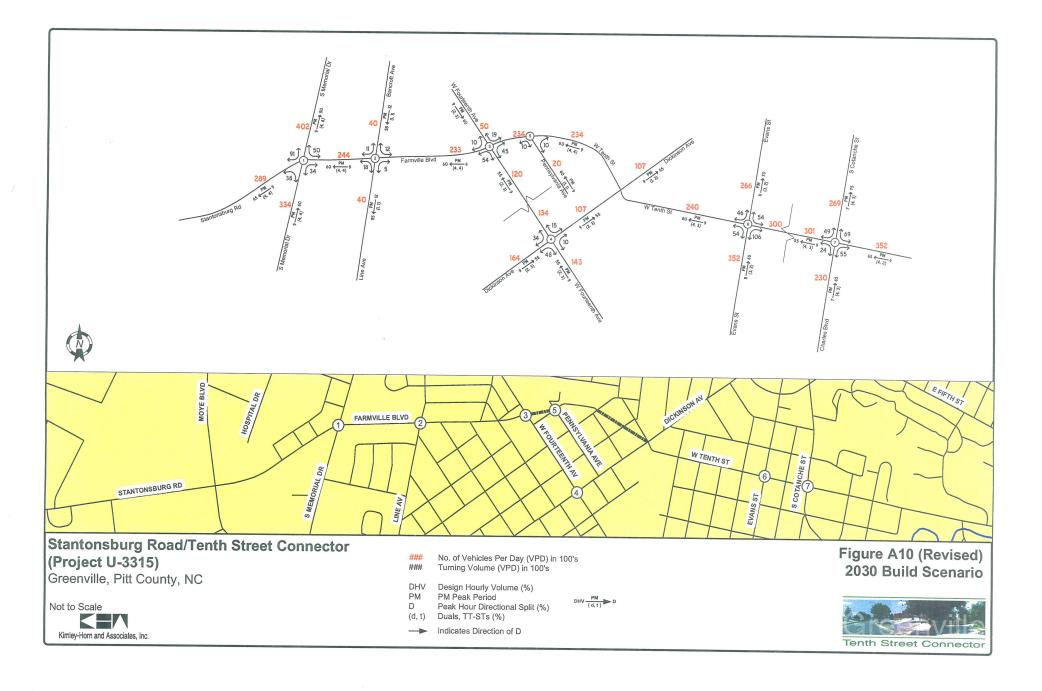




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AM Peak Stantonsburg Rd/Farmville
Blvd @ Bancroft Ave/Line Ave

DHV 12%
Dir 0.45 10th St Extension @ Pennsylvania Ave 0.4 9% Dir DHV 410 | 1175 | 225 59 92 65 36 76 68 0 0 0 137 943 122 114 | 117 | 33 209 95 182 36 0 36 9% DHV 304 | 1328 | 416 168 | 421 | 74 208 719 428 194 344 41 PM Peak Memorial Dr 40200 2-way Bancroft Ave 4000 2-way Stantonsburg Rd/Farmville 10th St Extension @ 0.6 9% Dir DHV DHV 9% Dir 0.6 0.6 9% Dir DHV 410 | 1175 | 225 73 | 117 | 74 54 | 113 | 103 205 | 1415 | 184 97 92 27 860 0.41 OK 267 89 238 54 0 54 DHV Dir 9% 0.35 Evans St 26600 2-way 10th St @ Evans St 1806 0.67 OK 0.55 9% Dir DHV DHV 9% Dir 0.45 267 693 525 138 | 344 | 61 386 | 1373 | 758 238 | 421 | 50 0.65 Dir 11% DHV

Appendix B

b) Volume Balancing Adjustments

Volume Balancing
4/26/07

-81/ -23-1 No Build 2030 1130 955 AM Peak Memorial Dr. 42200 | 2-way DHV 9% Dir 0.4 1 0% Dir DHV 49 92 54 54 61 0 144 540 446 -83 863 69 0 176 | 392 | 54 1211 932 10th St. @ Evans St. 0.4 9% Dir DHV 0.45 10% Dir DHV DHV 11% Dir 0.7 80 | 1699 | 92 100 835 227 2-way 27300 +64~ 1246 1182 PM Peak 923 7 1098 DHV 9% Dir 0.6 0 0% Dir DHV 81 92 0 117 441 365 -116 2478 54 0 767 +75~ 173 | 1598 | 70 70 92 86 1054 84 0 265 589 81 Evans St. 24300 2-way 859 1138 10th St. @ Dickinson Ave. 1668 0.68 OK 25 | 236 | 60 -40 371 941 -103 236 | 1552 | 372 1352 1284

0.4 9% Dir DHV

22 0 22

778 0.60 OK

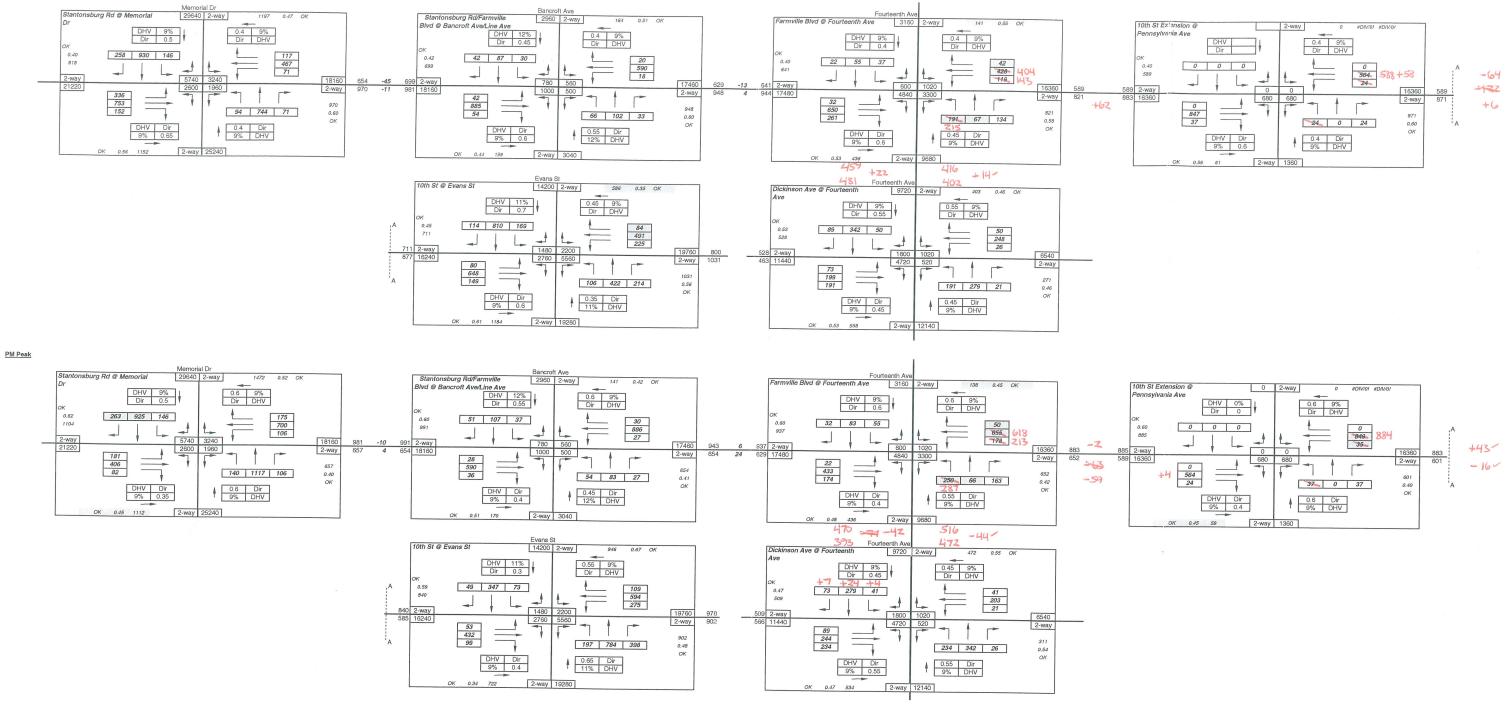
536 0.40 OK

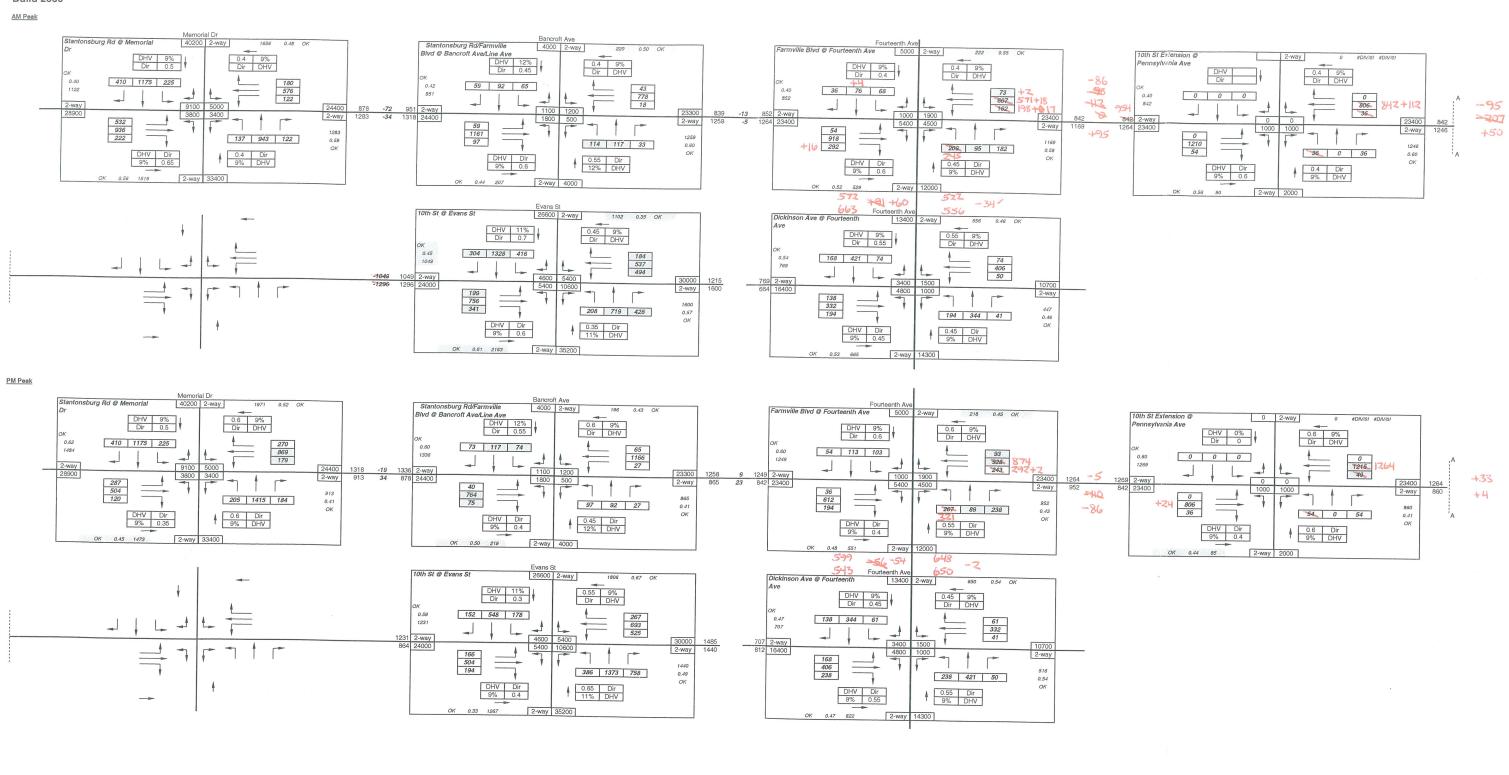
32 0 32

+451

-21

AM Peak





Appendix C

Intersection Analysis Output Reports

a) No Build 2005

	•	→	*	*	←	4	4	†	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť	वीक			र्क		N'N	ተተቡ		ħ	ተተጉ	I, early and the
Volume (vph)	287	626	140	43	385	108	86	713	43	135	891	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	0		0	300		0	350		0
Storage Lanes	1		0	0		0	2		0	1		0
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	1579	3232	0	0	3354	0	3367	4943	0	1719	4792	0
Flt Permitted	0.950	0.998			0.996		0.950			0.950		
Satd. Flow (perm)	1579	3232	0	0	3354	0	3367	4943	0	1719	4792	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			35			45			45	
Link Distance (ft)		631			1145			1101			1010	
Travel Time (s)		9.6			22.3	1 (2)		16.7			15.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	10%											
Lane Group Flow (vph)	287	884	0	0	596	0	96	840	0	150	1236	0
Turn Type	Split			Split			Prot			Prot		
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Detector Phase	4	4		3	3		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	14.0		7.0	14.0	
Minimum Split (s)	23.0	23.0		23.2	23.2		13.0	22.7		13.0	22.7	
Total Split (s)	39.0	39.0	0.0	29.0	29.0	0.0	13.0	33.0	0.0	19.0	39.0	0.0
Total Split (%)	32.5%	32.5%	0.0%	24.2%	24.2%	0.0%	10.8%	27.5%	0.0%	15.8%	32.5%	0.0%
Yellow Time (s)	4.0	4.0		4.7	4.7		4.0	4.7		4.0	4.7	
All-Red Time (s)	3.0	3.0		2.5	2.5		2.0	2.0		2.0	2.0	
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)	7.0	7.0	4.0	7.2	7.2	4.0	6.0	6.7	4.0	6.0	6.7	4.0
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag		Lead	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	32.0	32.0			21.8		7.0	26.7		12.6	32.3	
Actuated g/C Ratio	0.27	0.27			0.18		0.06	0.22		0.10	0.27	
v/c Ratio	0.68	1.03			0.98		0.49	0.76		0.83	0.96	
Control Delay	48.9	80.8			80.7		63.7	49.1		87.4	60.3	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	48.9	80.8			80.7		63.7	49.1		87.4	60.3	
LOS	D	F			F		Е	D		F	Е	

	♪	\rightarrow	1	1	-	*	1	†	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		73.0			80.7			50.6			63.2	
Approach LOS		Ε			F			D			Е	
Queue Length 50th (ft)	219	~401			244		37	225		115	346	
Queue Length 95th (ft)	330	#536			#364		67	276		#227	#444	
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	100						300			350		
Base Capacity (vph)	421	862			609		196	1100		186	1290	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.68	1.03			0.98		0.49	0.76		0.81	0.96	

Intersection Summary

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 82 (68%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.03 Intersection Signal Delay: 65.7

Intersection Capacity Utilization 85.8%

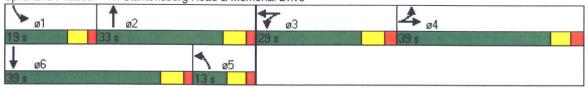
Intersection LOS: E ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



	*	→	*	•	—	*	4	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		€Î.Þ			વીક			4			4	
Volume (vph)	32	729	43	22	496	11	53	119	40	16	97	32
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		and the second	0%	Burne Dr. Fo	The second second	0%	
Storage Length (ft)	0		0	0		0	0		0	0	070	0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	0	3436	0	0	3454	0	0	1812	0	0	1814	0
Flt Permitted		0.915	VEDE		0.904			0.889	FRESE/IE		0.953	
Satd. Flow (perm)	0	3151	0	0	3129	0	0	1631	0	0	1739	0
Right Turn on Red			No	472000		No		1001	No		1700	No
Satd. Flow (RTOR)									110			110
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1145			1538			989			307	
Travel Time (s)		22.3			30.0	W States		19.3			6.0	
Confl. Peds. (#/hr)					00.0			10.0			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			0	0	0	0	0	0	U	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0.0			070			070			070	
Lane Group Flow (vph)	0	894	0	0	587	0	0	235	0	0	162	0
Turn Type	Perm		Cheminator)	Perm			Perm	200	J	Perm	102	U
Protected Phases		2		ZO ELGAV	6		T OTHER	4		1 01111	8	
Permitted Phases	2	-		6	MESHER WALL		4			8	0	
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase		Carried by Carried								O	0	
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		21.5	21.5		21.5	21.5	
Total Split (s)	36.0	36.0	0.0	36.0	36.0	0.0	24.0	24.0	0.0	24.0	24.0	0.0
Total Split (%)	60.0%	60.0%	0.0%	60.0%	60.0%	0.0%	40.0%	40.0%	0.0%	40.0%	40.0%	0.0%
Yellow Time (s)	4.0	4.0	A-7444A-3	4.0	4.0	0.070	4.0	4.0	0.070	4.0	4.0	0.076
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
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)	5.5	5.5	4.0	5.5	5.5	4.0	5.5	5.5	4.0	5.5	5.5	4.0
Lead/Lag	0.0	0.0	4.0	0.0	3.0	4.0	0.0	5.5	4.0	3.5	5.5	4.0
Lead-Lag Optimize?												
Recall Mode	Max	Max		None	None		None	None		None	None	
Act Effct Green (s)		31.8		10110	31.8		140116	13.1		140116	13.1	
Actuated g/C Ratio		0.57			0.57			0.23			0.23	
v/c Ratio		0.50			0.33			0.62			0.23	
Control Delay		9.2			7.7			25.9			20.2	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		9.2			7.7			25.9			20.2	
LOS		9.2 A			A							
		М			А			С			C	

5/8/2007

	1	\rightarrow	*	1	4	*	1	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		9.2			7.7			25.9			20.2	
Approach LOS		Α			Α			С			С	
Queue Length 50th (ft)		82			47			68			44	
Queue Length 95th (ft)		155			93			125			87	
Internal Link Dist (ft)		1065			1458			909			227	
Turn Bay Length (ft)												
Base Capacity (vph)		1794			1782			493			526	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.50			0.33			0.48			0.31	
Intersection Summary												The said
Area Type:	Other								15 (C. 15) (A. 16)			Mind and

Cycle Length: 60

Actuated Cycle Length: 55.9

Natural Cycle: 45

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 11.8 Intersection Capacity Utilization 72.6%

Analysis Period (min) 15

Intersection LOS: B ICU Level of Service C

Splits and Phases: 2: Farmville Boulevard & Line Avenue



	×	2		×	7	a
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	1 >	100.0.0.0	ሻ	ન	ሻ	717
Volume (vph)	61	25	555	69	38	740
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%	12	12	0%	0%	12
	070	0	0	0%		0
Storage Length (ft)		0	0		175	0
Storage Lanes		0	1		1	2
Taper Length (ft)		100	100		100	100
Satd. Flow (prot)	1756	0	1649	1671	1736	2733
Flt Permitted			0.950	0.963	0.950	
Satd. Flow (perm)	1756	0	1649	1671	1736	2733
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	35			35	35	
Link Distance (ft)	782			1306	1538	
Travel Time (s)	15.2			25.4	30.0	
Confl. Peds. (#/hr)	10.1			20.7	00.0	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.00	0.00	0.00
Growth Factor	100%			0.90	0.90	0.90
		100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)			44%			
Lane Group Flow (vph)	96	0	346	348	42	822
Turn Type			custom			pt+ov
Protected Phases	4		6	6	1	16
Permitted Phases			6		, ,	10
Detector Phase	4		6	6	- 1	16
Switch Phase	क्किन्न । विकास । इ.स.च्या		U	U		10
Minimum Initial (s)	7.0		10.0	10.0	7.0	
Minimum Split (s)	22.0		10.0	10.0	7.0	
		0.0	22.0	22.0	22.0	07/0
Total Split (s)	23.0	0.0	43.0	43.0	24.0	67.0
Total Split (%)	25.6%	0.0%	47.8%	47.8%	26.7%	74.4%
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	4.0	6.0	6.0	6.0	6.0
Lead/Lag						
Lead-Lag Optimize?						
Recall Mode	None		Max	Max	None	
Act Effct Green (s)	9.9		37.9	37.9	14.2	59.9
Actuated g/C Ratio	0.12		0.49	0.49	0.18	0.78
v/c Ratio	0.44		0.43	0.43	0.13	0.78
Control Delay	39.7		17.4			
				17.3	28.6	4.8
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	39.7		17.4	17.3	28.6	4.8
LOS	D		В	В	С	Α

3: W. Fourteenth Street & Farmville Boulevard

	×	1	1	K	7	4
Lane Group	SET	SER	NWL	NWT	NEL	NER
Approach Delay	39.7			17.4	5.9	
Approach LOS	D			В	Α	
Queue Length 50th (ft)	46		120	121	18	73
Queue Length 95th (ft)	93		222	223	46	125
Internal Link Dist (ft)	702			1226	1458	
Turn Bay Length (ft)	DOI: 23/21				175	
Base Capacity (vph)	346		813	823	392	2139
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.28		0.43	0.42	0.11	0.38
Intersection Summary						
Control of the second s	Other					
Cycle Length: 90						18.1
Actuated Cycle Length: 77						
Natural Cycle: 70						
Control Type: Actuated-Unco	oordinated					
Maximum v/c Ratio: 0.44						
Intersection Signal Delay: 12					tersection	
Intersection Capacity Utilizat	tion 41.7%			IC	U Level o	of Service
Analysis Period (min) 15						

Splits and Phases: 3: W. Fourteenth Street & Farmville Boulevard

Ju 01	₩ ø6	≥ ø4
24 s	43 \$	23 s

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	Ť	1		ዃ	ન		Ť	4		ň	ĵ.	
Volume (vph)	16	213	10	327	152	7	8	204	0	12	316	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%		THE PARK NAME	0%	
Storage Length (ft)	50		0	0		0	0		0	200	HIEROTT	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	100		100	100		100	100		100
Satd. Flow (prot)	1770	1850	0	1736	1814	0	1736	1827	0	1736	1812	0
Flt Permitted	0.646			0.416		PEOTEN.	0.424			0.617		Messi
Satd. Flow (perm)	1203	1850	0	760	1814	0	775	1827	0	1127	1812	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)						HE CHINESE						110
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		543			147			189			707	
Travel Time (s)		14.8			4.0			5.2			19.3	
Confl. Peds. (#/hr)											.0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			1	The second second								0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								0,0			070	
Lane Group Flow (vph)	18	248	0	363	177	0	9	227	0	13	371	0
Turn Type	Perm			pm+pt			Perm			Perm	OII	
Protected Phases		4		3	8			2			6	
Permitted Phases	4	4		8	an assignation		2			6	INGS SALES	
Detector Phase	4	4		3	8		2	2		6	6	
Switch Phase								recension		02110091		
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
Minimum Split (s)	23.0	23.0		10.0	22.0		23.0	23.0		23.0	23.0	
Total Split (s)	23.0	23.0	0.0	14.0	37.0	0.0	23.0	23.0	0.0	23.0	23.0	0.0
Total Split (%)	38.3%	38.3%	0.0%	23.3%	61.7%	0.0%	38.3%	38.3%	0.0%	38.3%	38.3%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	0.070	4.0	4.0	0.070
All-Red Time (s)	3.0	3.0		2.0	2.0		3.0	3.0		3.0	3.0	
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)	7.0	7.0	4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0	4.0
Lead/Lag	Lag	Lag	HEELEN	Lead		2018						4.0
Lead-Lag Optimize?	Yes	Yes		Yes								
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	12.3	12.3		27.3	27.3		16.0	16.0		16.0	16.0	
Actuated g/C Ratio	0.22	0.22		0.48	0.48		0.28	0.28		0.28	0.28	
v/c Ratio	0.07	0.62		0.72	0.20		0.04	0.20		0.20	0.72	
Control Delay	17.5	26.9		19.3	8.8		16.8	20.5		16.5	29.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.5	26.9		19.3	8.8		16.8	20.5		16.5	29.3	
LOS	В	C		В	Α		В	20.5 C		10.5 B	29.5 C	
	U	U		D	7		D	U		D	U	

	V	×	1	1	×		7	A	74	6	K	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		26.2			15.9			20.4			28.9	
Approach LOS		С			В			С			С	
Queue Length 50th (ft)	5	76		73	31		2	62		3	112	
Queue Length 95th (ft)	18	136		#138	60		12	126		15	#243	
Internal Link Dist (ft)		463			67			109			627	
Turn Bay Length (ft)	50									200		
Base Capacity (vph)	321	493		507	937		221	519		321	515	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.06	0.50		0.72	0.19		0.04	0.44		0.04	0.72	

Intersection Summary

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 56.4

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

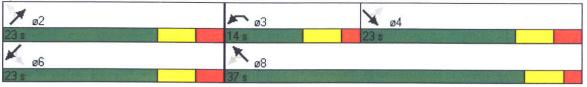
Maximum v/c Ratio: 0.72

Intersection Signal Delay: 22.1 Intersection Capacity Utilization 64.3% Intersection LOS: C
ICU Level of Service C

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 4: W. Tenth Street & Dickinson Avenue



^{# 95}th percentile volume exceeds capacity, queue may be longer.

	1	\rightarrow	*	1	←	*	1	†	-	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1		19	1		ħ	1		19	1	
Volume (vph)	22	556	81	180	446	41	58	377	154	69	755	31
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%	SAUTHER ST.		0%	
Storage Length (ft)	50		0	125		0	125	PARTIE I	0	125	070	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3405	0	1736	3426	0	1752	3354	0	1752	3484	0
FIt Permitted	0.258			0.319			0.135	NEW YEAR	MARKET IN	0.303	0101	
Satd. Flow (perm)	471	3405	0	583	3426	0	249	3354	0	559	3484	0
Right Turn on Red			No		CENTRAL	No	TORREST.	0001	No	000	0101	No
Satd. Flow (RTOR)			Nacional Control			1,0			110			140
Link Speed (mph)		25			35			35			25	
Link Distance (ft)		1633			628			931			570	
Travel Time (s)		44.5			12.2	at Aug		18.1			15.5	
Confl. Peds. (#/hr)					12.2			10.1			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	3%
Parking (#/hr)		U	U	U	U	U	U	U	U	U	U	0
Mid-Block Traffic (%)		0%			0%			0%			00/	
Shared Lane Traffic (%)		0 70			0 70			U /0			0%	
Lane Group Flow (vph)	24	708	0	200	542	0	64	590	0	77	873	0
Turn Type	pm+pt	100	O	pm+pt	072	U	pm+pt	330	U		013	0
Protected Phases	5	2		1	6		7	4		pm+pt	0	
Permitted Phases	2			6	U		4	4		3	8	
Detector Phase	5	2		1	6		7	4		8	8	
Switch Phase	U	4			U			4		3	0	
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.5	21.5		12.5	21.5		13.0	22.0		7.0	7.0	
Total Split (s)	12.5	35.0	0.0	16.0	38.5	0.0	13.0	36.0	0.0	13.0	22.0	0.0
Total Split (%)	12.5%	35.0%	0.0%	16.0%	38.5%	0.0%	13.0%		0.0	13.0	36.0	0.0
Yellow Time (s)	4.0	4.0	0.076	4.0	4.0	0.076	4.0	36.0%	0.0%	13.0%	36.0%	0.0%
All-Red Time (s)	1.5	1.5		1.5	1.5			4.0		4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	0.0	2.0	2.0	0.0
Total Lost Time (s)	5.5	5.5	4.0	5.5	5.5	4.0	0.0	0.0	0.0	0.0	0.0	0.0
Lead/Lag	Lead	Lead	4.0			4.0	6.0	6.0	4.0	6.0	6.0	4.0
Lead-Lag Optimize?	Yes	Yes		Lag Yes	Lag		Lead	Lag		Lead	Lag	
Recall Mode	None	C-Max			Yes		Yes	Yes		Yes	Yes	
Act Effct Green (s)	34.4	34.4		None 43.2	None 43.2		None	None		None	None	
Actuated g/C Ratio	0.34	0.34					35.5	29.6		35.6	29.6	
v/c Ratio	0.34			0.43	0.43	Control of	0.36	0.30		0.36	0.30	
Control Delay	26.1	0.61		0.58	0.37		0.32	0.59		0.27	0.85	
Queue Delay		31.5		17.7	7.5		21.3	32.8		19.6	41.9	
COLUMN TO THE PROPERTY OF THE	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay LOS	26.1	31.5		17.7	7.5		21.3	32.8		19.6	41.9	
	С	С		В	А		С	С		В	D	

	1	-	-	6	←	*	4	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		31.3	LUIX	WDL	10.3	WDK	NDL	31.6	NDIX	ODL	40.0	ODN
Approach LOS		С			В			С			D	
Queue Length 50th (ft)	11	210		30	43		22	160		27	261	
Queue Length 95th (ft)	30	277		m69	m52		49	224		57	#353	
Internal Link Dist (ft)		1553			548			851			490	
Turn Bay Length (ft)	50			125			125			125		
Base Capacity (vph)	250	1170		385	1483		198	1023		286	1063	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.10	0.61		0.52	0.37		0.32	0.58		0.27	0.82	

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.85

Intersection Signal Delay: 29.0

Intersection LOS: C
ICU Level of Service D

Intersection Capacity Utilization 74.8%

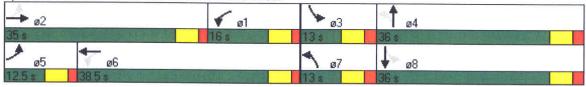
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	2	-	K	ť	7	×	74	Ĺ	×	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	47>		ሻ	۴ĵ»		ሻ	13	-	ሻ	ĵ»	
Volume (vph)	188	505	40	108	367	14	32	389	122	20	475	188
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%	estinas metal		0%	
Storage Length (ft)	100		0	175		0	50	THE PERIOD	0	50		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1736	3433	0	1736	3450	0	1736	1761	0	1736	1748	0
Flt Permitted	0.373			0.221			0.097			0.240		
Satd. Flow (perm)	681	3433	0	404	3450	0	177	1761	0	438	1748	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												Water State
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787			902			1042	
Travel Time (s)		25.4			15.3	VIEW BE		24.6			28.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	605	0	120	424	0	36	568	0	22	737	0
Turn Type	pm+pt			pm+pt			pm+pt			pm+pt		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	. 5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	7.0		10.0	7.0	
Minimum Split (s)	16.0	22.0		16.5	22.0		16.0	22.0		16.5	22.0	
Total Split (s)	16.0	23.0	0.0	17.0	24.0	0.0	16.0	43.0	0.0	17.0	44.0	0.0
Total Split (%)	16.0%	23.0%	0.0%	17.0%	24.0%	0.0%	16.0%	43.0%	0.0%	17.0%	44.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.5	2.0		2.0	2.0		2.5	2.0	
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)	6.0	6.0	4.0	6.5	6.0	4.0	6.0	6.0	4.0	6.5	6.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Max		None	Max		None	None		None	None	
Act Effct Green (s)	27.4	17.4		28.0	18.1		45.0	41.1		43.6	38.3	
Actuated g/C Ratio	0.29	0.19		0.30	0.19		0.45	0.44		0.42	0.41	
v/c Ratio	0.67	0.95		0.45	0.63		0.15	0.73		0.07	1.03	
Control Delay	36.4	65.4		28.5	40.8		13.4	30.6		13.4	72.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.4	65.4		28.5	40.8		13.4	30.6		13.4	72.2	
LOS	D	Е		С	D		В	С	- VIII (VIII)	В	Е	

	V	X)	1	K	₹	ን	×	1	4	1	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		57.9			38.1			29.6			70.5	
Approach LOS		Е			D			С			Е	
Queue Length 50th (ft)	99	~218		54	134		10	233		6	~540	
Queue Length 95th (ft)	#183	#331		98	187		25	#524		18	#764	
Internal Link Dist (ft)		1226			707			822			962	
Turn Bay Length (ft)	100			175			50			50		
Base Capacity (vph)	313	637		271	668		235	773		316	715	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.67	0.95		0.44	0.63		0.15	0.73		0.07	1.03	

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 93.6

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.03

Intersection Signal Delay: 51.2 Intersection Capacity Utilization 75.4% Intersection LOS: D
ICU Level of Service D

Analysis Period (min) 15

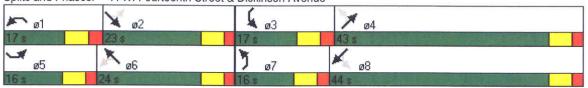
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



	*	\rightarrow	*	1	—	1	1	†	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	की कि			र्वी के		ايراير	ተተ _ጉ		Ϋ́	ተተቡ	
Volume (vph)	154	337	76	65	578	162	130	1069	65	135	891	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	0		0	300		0	350		0
Storage Lanes	1		0	0		0	2		0	1		0
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	1579	3229	0	0	3354	0	3367	4943	0	1719	4792	0
Flt Permitted	0.950	0.998			0.996		0.950			0.950		
Satd. Flow (perm)	1579	3229	0	0	3354	0	3367	4943	0	1719	4792	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			35			45			45	
Link Distance (ft)		631			1145			1101			1010	
Travel Time (s)		9.6			22.3			16.7			15.3	
Confl. Peds. (#/hr)								The second second				
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						10.00	ALL DALLES					
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	10%							0.00			070	
Lane Group Flow (vph)	154	475	0	0	894	0	144	1260	0	150	1236	0
Turn Type	Split			Split			Prot			Prot	1200	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases										- ALTON CONTRACTOR		
Detector Phase	4	4		3	3		5	2		o) our la	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	14.0		7.0	14.0	
Minimum Split (s)	23.0	23.0		23.2	23.2		13.0	22.7		13.0	22.7	
Total Split (s)	24.0	24.0	0.0	40.0	40.0	0.0	13.0	40.0	0.0	16.0	43.0	0.0
Total Split (%)	20.0%	20.0%	0.0%	33.3%	33.3%	0.0%	10.8%	33.3%	0.0%	13.3%	35.8%	0.0%
Yellow Time (s)	4.0	4.0		4.7	4.7	W REST	4.0	4.7		4.0	4.7	0.070
All-Red Time (s)	3.0	3.0		2.5	2.5		2.0	2.0		2.0	2.0	
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)	7.0	7.0	4.0	7.2	7.2	4.0	6.0	6.7	4.0	6.0	6.7	4.0
Lead/Lag	Lag	Lag		Lead	Lead	CT 20 / 10	Lag	Lag	ules and	Lead	Lead	7.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	17.0	17.0		110110	32.8		7.0	33.3		10.0	36.3	
Actuated g/C Ratio	0.14	0.14			0.27		0.06	0.28		0.08	0.30	
v/c Ratio	0.69	1.04			0.97		0.73	0.20		1.05	0.85	
Control Delay	65.7	102.7			67.7		77.5	53.6		141.8	46.2	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	65.7	102.7			67.7		77.5	53.6		141.8	46.2	
LOS	E	F			E		11.5 E	55.0 D		141.0 F	40.2 D	
	-	74,0					L	U		L.	U	

	_	\rightarrow	-	6	4		4	1	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NDD	SBL	CDT	CDD
	EDL		EDN	WDL		Won	INDL		NBR	ODL	SBT	SBR
Approach Delay		93.6			67.7			56.1			56.5	
Approach LOS		F			E			Е			Ε	
Queue Length 50th (ft)	126	~218			362		57	347		~126	328	
Queue Length 95th (ft)	#225	#332			#499		#107	#434		#262	390	
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	100						300			350		
Base Capacity (vph)	224	457			917		196	1372		143	1450	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.69	1.04			0.97		0.73	0.92		1.05	0.85	

Area Type: Other

Cycle Length: 120

Actuated Cycle Length: 120

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 115

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.05 Intersection Signal Delay: 64.1 Intersection Capacity Utilization 85.8%

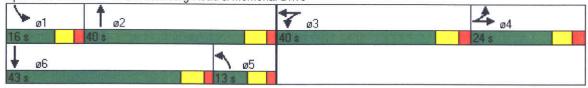
Intersection LOS: E ICU Level of Service E

Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



	Þ	→	*	1	—	*	1	†	-	1	Ų.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		4P			વીક			4			4	
Volume (vph)	22	486	29	32	729	16	43	97	32	20	119	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	With the last
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	0	3436	0	0	3454	0	0	1812	0	0	1814	0
Flt Permitted		0.907			0.914			0.862			0.954	
Satd. Flow (perm)	0	3123	0	0	3163	0	0	1581	0	0	1741	0
Right Turn on Red			No			No			No		arvio di re	No
Satd. Flow (RTOR)												110
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1145			1538			989			307	
Travel Time (s)		22.3			30.0			19.3			6.0	
Confl. Peds. (#/hr)					00.0			10.0			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)					0	0	0	O	0	U	0	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0,70			070			070			0 70	
Lane Group Flow (vph)	0	596	0	0	864	0	0	192	0	0	198	0
Turn Type	Perm	pielina a a co		Perm	001		Perm	102	0	Perm	100	O
Protected Phases		2		THE LAND	6			4		1 01111	8	
Permitted Phases	2	5. 4. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		6	•		4			8	0	
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase					ŭ			MINESTAL PRO		O	O	
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	21.5	21.5		21.5	21.5		21.5	21.5		21.5	21.5	
Total Split (s)	37.0	37.0	0.0	37.0	37.0	0.0	23.0	23.0	0.0	23.0	23.0	0.0
Total Split (%)	61.7%	61.7%	0.0%	61.7%	61.7%	0.0%	38.3%	38.3%	0.0%	38.3%	38.3%	0.0%
Yellow Time (s)	4.0	4.0	U.070	4.0	4.0	0.070	4.0	4.0	0.070	4.0	4.0	0.076
All-Red Time (s)	1.5	1.5		1.5	1.5		1.5	1.5		1.5	1.5	
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)	5.5	5.5	4.0	5.5	5.5	4.0	5.5	5.5	4.0	5.5	5.5	4.0
Lead/Lag	Na Selection	0.0	7.0	0.0	0.0	7.0	0.0	0.0	4.0	5.5	3.3	4.0
Lead-Lag Optimize?												
Recall Mode	Max	Max		None	None		None	None		None	None	
Act Effct Green (s)	WILL	33.0		NOTIC	33.0		None	11.7		MOHE	11.7	
Actuated g/C Ratio		0.59			0.59			0.21			0.21	
v/c Ratio		0.39			0.39			0.58			0.21	
Control Delay		7.0			8.1			26.2				
Queue Delay		0.0			0.0						24.4	
Total Delay		7.0			8.1			0.0			0.0	
LOS		7.0 A						26.2			24.4	
LOG		А			Α			C			C	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		7.0			8.1			26.2			24.4	
Approach LOS		Α			Α			С			C	
Queue Length 50th (ft)		44			72			55			57	
Queue Length 95th (ft)		88			138			106			107	
Internal Link Dist (ft)		1065			1458			909			227	
Turn Bay Length (ft)												
Base Capacity (vph)		1849			1873			451			496	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.32			0.46			0.43			0.40	
Intersection Summary												
	her											
Cycle Length: 60												
Actuated Cycle Length: 55.8												
Natural Cycle: 45												
Control Type: Actuated-Uncoo	rdinated											
Maximum v/c Ratio: 0.58												
Intersection Signal Delay: 11.3				In	ersection	LOS: B						
Intersection Capacity Utilizatio	n 67.9%			IC	U Level o	f Service	C					

Splits and Phases: 2: Farmville Boulevard & Line Avenue

Analysis Period (min) 15



	×	1	1	×	7	74
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	f)		'n	र्स	ħ	7171
Volume (vph)	92	38	683	79	25	493
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	1900	1900	1900	1900
		12	12			12
Grade (%)	0%	0	0	0%	0%	
Storage Length (ft)		0	0		175	0
Storage Lanes		0	1		1	2
Taper Length (ft)		100	100		100	100
Satd. Flow (prot)	1756	0	1649	1670	1736	2733
Flt Permitted			0.950	0.962	0.950	
Satd. Flow (perm)	1756	0	1649	1670	1736	2733
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	35			35	35	
Link Distance (ft)	782			1306	1538	
Travel Time (s)	15.2			25.4	30.0	NA YEAR
Confl. Peds. (#/hr)	10.2			20.4	00.0	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.00	0.00	0.00
Growth Factor				0.90	0.90	0.90
	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)			44%			
Lane Group Flow (vph)	144	0	425	422	28	548
Turn Type			custom			pt+ov
Protected Phases	4		2	2	1	12
Permitted Phases			2			
Detector Phase	4		2	2	1	12
Switch Phase			-	-	service series	
Minimum Initial (s)	7.0		7.0	7.0	7.0	
Minimum Split (s)	22.0		13.0	13.0	22.0	
Total Split (s)	22.0	0.0			22.0	600
			46.0	46.0		68.0
Total Split (%)	24.4%	0.0%	51.1%	51.1%	24.4%	75.6%
Yellow Time (s)	4.0		4.0	4.0	4.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	-11-12-12
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	4.0	6.0	6.0	6.0	6.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Max	Max	None	
Act Effct Green (s)	11.8		40.2	40.2	11.7	58.0
Actuated g/C Ratio	0.14		0.49	0.49	0.14	0.71
v/c Ratio	0.57		0.52	0.51	0.11	0.28
Control Delay	42.4		18.5	18.2	32.2	5.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	42.4					
LOS			18.5	18.2	32.2	5.1
LUS	D		В	В	С	Α

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Lane Group	SET	SER	NWL	NWT	NEL	NER
Approach Delay	42.4			18.3	6.4	
Approach LOS	D			В	Α	
Queue Length 50th (ft)	69		148	146	13	48
Queue Length 95th (ft)	133		284	280	37	83
Internal Link Dist (ft)	702			1226	1458	
Turn Bay Length (ft)	THE STREET				175	
Base Capacity (vph)	328		811	821	324	1975
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.44		0.52	0.51	0.09	0.28
Intersection Summary	ELES A					
A STATE OF THE PROPERTY OF STREET AND ADDRESS OF THE PROPERTY	Other					
Cycle Length: 90						3
Actuated Cycle Length: 81.8	3					
Natural Cycle: 70						
Control Type: Actuated-Unco	oordinated					
Maximum v/c Ratio: 0.57						
Intersection Signal Delay: 16					ersection	
Intersection Capacity Utilizat	tion 49.0%			IC	U Level c	of Service
Analysis Period (min) 15						

Splits and Phases: 3: W. Fourteenth Street & Farmville Boulevard



	4	×	2	1	×	*	7	1	a	Ĺ	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	ĵ»		7	ĥ		ř	1		ሻ	Þ	
Volume (vph)	8	106	6	443	205	11	10	267	0	6	170	9
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	mana samata
Storage Length (ft)	50		0	0		0	0	THE KIND	0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	100		100	100		100	100		100
Satd. Flow (prot)	1770	1848	0	1736	1812	0	1736	1827	0	1736	1812	0
Flt Permitted	0.610			0.420			0.633			0.520		ACTU IN
Satd. Flow (perm)	1136	1848	0	767	1812	0	1156	1827	0	950	1812	0
Right Turn on Red		WAYNER	No	THE THE		No		Name of Street	No	MARIE E	NEED TO LE	No
Satd. Flow (RTOR)			4						110			110
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		543			147			189			707	
Travel Time (s)		14.8			4.0			5.2			19.3	
Confl. Peds. (#/hr)		11.0			4.0			0.2			13.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	4%
Parking (#/hr)	0	0	U	0	U	U	U	0	U	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		070			0 70			0 /0			0 /0	
Lane Group Flow (vph)	9	125	0	492	240	0	11	297	0	7	199	0
Turn Type	Perm	120	U	pm+pt	240	U	Perm	231	U	Perm	199	U
Protected Phases	1 01111	4		3	8		1 CIIII	2		reiiii	6	
Permitted Phases	4	4		8	0		2	2		G	0	
Detector Phase	4	4		3	8		2	2		6	6	
Switch Phase	T.			U	O		2	2		0	0	
Minimum Initial (s)	4.0	4.0		4.0	4.0		4.0	4.0		10	10	
Minimum Split (s)	23.0	23.0		10.0	22.0		23.0	23.0		4.0	4.0	
Total Split (s)	23.0	23.0	0.0	33.0	56.0	0.0	34.0	34.0	0.0		23.0	0.0
Total Split (%)	25.6%	25.6%	0.0%	36.7%	62.2%	0.0%			0.0	34.0	34.0	0.0
Yellow Time (s)	4.0	4.0	0.0 /6	4.0	4.0	0.0%	37.8%	37.8%	0.0%	37.8%	37.8%	0.0%
All-Red Time (s)	3.0	3.0		2.0			4.0	4.0		4.0	4.0	
Lost Time Adjust (s)	0.0	0.0	0.0		2.0	0.0	3.0	3.0	0.0	3.0	3.0	0.0
Total Lost Time (s)	7.0	7.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lead/Lag	Lag		4.0	6.0	6.0	4.0	7.0	7.0	4.0	7.0	7.0	4.0
Lead-Lag Optimize?		Lag		Lead								
Recall Mode	Yes	Yes		Yes	Maria							
Act Effct Green (s)	None 10.6	None		None	None		Max	Max		Max	Max	
. /		10.6		35.0	35.0		27.8	27.8		27.8	27.8	
Actuated g/C Ratio v/c Ratio	0.13	0.13		0.46	0.46		0.36	0.36		0.36	0.36	
	0.06	0.50		0.80	0.29		0.03	0.44		0.02	0.30	
Control Delay	31.8	39.9		24.8	12.6		21.0	24.4		21.0	22.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.8	39.9		24.8	12.6		21.0	24.4		21.0	22.5	
LOS	С	D		С	В		C	C		C	C	

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		39.3			20.8			24.3			22.4	
Approach LOS		D			С			С			С	
Queue Length 50th (ft)	4	58		162	65		4	113		2	71	
Queue Length 95th (ft)	18	117		246	107		17	221		13	148	
Internal Link Dist (ft)		463			67			109			627	
Turn Bay Length (ft)	50									200		
Base Capacity (vph)	217	353		681	1007		422	668		347	662	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.04	0.35		0.72	0.24		0.03	0.44		0.02	0.30	
Intersection Summary						NI ST						
Area Type:	Other											
Cycle Length: 90												
Actuated Cycle Length: 76	3.2											
Natural Cycle: 60												

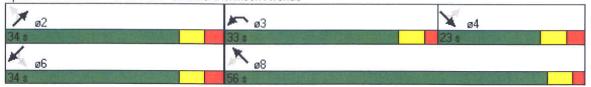
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 23.6 Intersection Capacity Utilization 56.1% Intersection LOS: C ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4: W. Tenth Street & Dickinson Avenue



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	T	1		ሻ	1		ሻ	1		79	1	
Volume (vph)	15	398	58	220	545	50	107	701	286	30	323	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%		liner with	0%	14
Storage Length (ft)	50		0	125	OF WHITE	0	125		0	125	070	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3405	0	1736	3426	0	1752	3354	0	1752	3484	0
Flt Permitted	0.201			0.466		THE STATE	0.450	0001		0.119	0404	
Satd. Flow (perm)	367	3405	0	851	3426	0	830	3354	0	220	3484	0
Right Turn on Red	CERTIFICATION OF THE PERSON OF		No	TOTAL SERVICE		No		0001	No	220	0101	No
Satd. Flow (RTOR)						110			110			140
Link Speed (mph)		25			35			35			25	
Link Distance (ft)		1633			628			931			570	
Travel Time (s)		44.5			12.2	SENUE		18.1			15.5	
Confl. Peds. (#/hr)		11.0			12.2			10.1			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	3%
Parking (#/hr)		U	O	U	U	U	U	U	U	U	U	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		070			070			0 /0			0 /0	
Lane Group Flow (vph)	17	506	0	244	662	0	119	1097	0	33	373	0
Turn Type	pm+pt			pm+pt	002	· ·	pm+pt	1007	0	pm+pt	010	U
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2	ALTONOMY PROPERTY.		6	0		4	ent on Tax		8	0	
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase				THE SAIN TAN	9			- T		J	0	
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	12.5	21.5		12.5	21.5		13.0	22.0		13.0	22.0	
Total Split (s)	13.0	26.0	0.0	18.0	31.0	0.0	13.0	43.0	0.0	13.0	43.0	0.0
Total Split (%)	13.0%	26.0%	0.0%	18.0%	31.0%	0.0%	13.0%	43.0%	0.0%	13.0%	43.0%	0.0%
Yellow Time (s)	4.0	4.0	0.070	4.0	4.0	0.070	4.0	4.0	0.070	4.0	4.0	0.076
All-Red Time (s)	1.5	1.5		1.5	1.5		2.0	2.0		2.0	2.0	
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)	5.5	5.5	4.0	5.5	5.5	4.0	6.0	6.0	4.0	6.0	6.0	4.0
Lead/Lag	Lead	Lead	1.0	Lag	Lag	7.0	Lead	Lag	4.0	Lead	Lag	4.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	28.5	28.5		38.4	38.4		41.7	37.2		38.3	31.3	
Actuated g/C Ratio	0.28	0.28		0.38	0.38		0.42	0.37		0.38	0.31	
v/c Ratio	0.08	0.52		0.59	0.50		0.42	0.88		0.30	0.34	
Control Delay	32.6	34.8		12.3	7.7		16.7	39.0		15.4	26.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	32.6	34.8		12.3	7.7		16.7	39.0		15.4	26.3	
LOS	C	C		12.5 B	A		В	D D		13.4 B	20.3 C	
Jungan arts					(0)		U	D		D	U	

	•	\rightarrow	1	1	4	*	1	†	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		34.8			8.9			36.8			25.4	
Approach LOS		С			Α			D			С	
Queue Length 50th (ft)	9	159		34	48		36	317		9	84	
Queue Length 95th (ft)	27	217		m22	m23		71	#464		26	123	
Internal Link Dist (ft)		1553			548			851			490	
Turn Bay Length (ft)	50			125			125			125		
Base Capacity (vph)	207	970		463	1317		417	1270		191	1302	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.52		0.53	0.50		0.29	0.86		0.17	0.29	

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 100

Offset: 0 (0%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 26.6

Intersection LOS: C

Intersection Capacity Utilization 78.6%

ICU Level of Service D

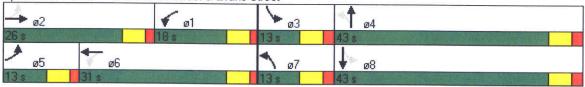
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	2	<i>p</i>	×	*	7	×	a	4	×	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	1		ሻ	44		ሻ	ĵ.		75	£	
Volume (vph)	154	413	32	162	551	22	40	475	149	16	393	154
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%	an spirite		0%	· ·	A CONTRACTOR	0%	
Storage Length (ft)	100		0	175		0	50		0	50		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1736	3433	0	1736	3450	0	1736	1761	0	1736	1750	0
Flt Permitted	0.231			0.257			0.166	130170		0.113		
Satd. Flow (perm)	422	3433	0	470	3450	0	303	1761	0	206	1750	0
Right Turn on Red			No			No		Double State	No		MINASTER PROPERTY.	No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787			902			1042	
Travel Time (s)		25.4			15.3			24.6			28.4	
Confl. Peds. (#/hr)											20.7	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	171	495	0	180	636	0	44	694	0	18	608	0
Turn Type	pm+pt			pm+pt			pm+pt	7,800		pm+pt	in the second	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases	2			6			4			8		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		10.0	7.0		10.0	7.0	
Minimum Split (s)	16.0	22.0		16.5	22.0		16.0	22.0		16.5	22.0	
Total Split (s)	16.0	23.0	0.0	17.0	24.0	0.0	17.0	43.0	0.0	17.0	43.0	0.0
Total Split (%)	16.0%	23.0%	0.0%	17.0%	24.0%	0.0%	17.0%	43.0%	0.0%	17.0%	43.0%	0.0%
Yellow Time (s)	4.0	4.0		4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0		2.5	2.0		2.0	2.0		2.5	2.0	
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)	6.0	6.0	4.0	6.5	6.0	4.0	6.0	6.0	4.0	6.5	6.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Max		None	Max		None	None		None	None	
Act Effct Green (s)	27.4	17.3		28.0	18.1		44.2	40.3		42.7	37.5	
Actuated g/C Ratio	0.30	0.19		0.30	0.20		0.45	0.43		0.42	0.40	
v/c Ratio	0.64	0.77		0.64	0.94		0.16	0.91		0.08	0.86	
Control Delay	35.5	46.6		34.8	62.4		13.4	44.1		13.4	41.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	35.5	46.6		34.8	62.4		13.4	44.1		13.4	41.2	
LOS	D	D		С	Е		В	D		В	D	

7: W. Fourteenth Street & Dickinson Avenue

	1	X)	1	×	7	T	A	74	6	×	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		43.7			56.3			42.3			40.4	
Approach LOS		D			Е			D			D	
Queue Length 50th (ft)	78	160		83	~217		13	318		5	362	
Queue Length 95th (ft)	#145	#244		#153	#338		29	#707		16	#580	
Internal Link Dist (ft)		1226			707			822			962	
Turn Bay Length (ft)	100			175			50			50		
Base Capacity (vph)	268	642		287	674		292	765		242	707	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.64	0.77		0.63	0.94		0.15	0.91		0.07	0.86	

Intersection Summary

Area Type: Other

Cycle Length: 100

Actuated Cycle Length: 92.8

Natural Cycle: 100

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.94

Intersection Signal Delay: 46.2 Intersection Capacity Utilization 73.5% Intersection LOS: D
ICU Level of Service D

Analysis Period (min) 15

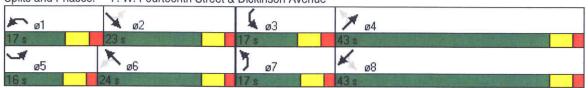
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



Appendix C

Intersection Analysis Output Reports

b) No Build 2010

	No Bui		O AM 5/8/2007
*	1	Ţ	1
NBR	SBL	SBT	SBR
	T	ተ ተጉ	
43	144	977	257
1900	1900	1900	1900
12	12	12	12
		0%	
0	350		0
0	1		0
100	50		100
0	1719	4787	0
	0.950		
0	1719	4787	0
No			No
		45	
		1010	
		15.3	
0.00	0.00	0.00	
0.90	0.90	0.90	0.90
100%	100%	100%	100%
4%	5%	5%	5%
0	0	0	0
		00/	
		0%	
0	160	1372	0
U	Prot	13/2	U
	1	6	
		0	
	1	6	
	HE TOWN	0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	414			476		44	44 \$		T	ተ ተጉ	
Volume (vph)	333	696	152	43	432	115	94	781	43	144	977	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	0		0	300		0	350		0
Storage Lanes	1		0	0		0	2		0	1		0
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	1579	3232	0	0	3357	0	3367	4948	0	1719	4787	0
Flt Permitted	0.950	0.998			0.996		0.950			0.950		
Satd. Flow (perm)	1579	3232	0	0	3357	0	3367	4948	0	1719	4787	0
Right Turn on Red		DOWNERS OF THE	No		METERS OF	No	0007	1010	No	1710	4707	No
Satd. Flow (RTOR)			110			110			110			140
Link Speed (mph)		45			35			45			45	
Link Distance (ft)		631			1145			1101			1010	
Travel Time (s)		9.6			22.3			16.7				
Confl. Peds. (#/hr)		5.0			22.3			10.7			15.3	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Growth Factor		0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								er i Se er version				
Mid-Block Traffic (%)	100/	0%			0%			0%			0%	
Shared Lane Traffic (%)	10%					NO SECURIO DE LA COMP						
Lane Group Flow (vph)	333	979	0	0	656	0	104	916	0	160	1372	0
Turn Type	Split	Mestingo Materia		Split			Prot			Prot		
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases	COLONIA DE LA CASA DE											
Detector Phase	4	4		3	3		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	14.0		7.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	21.0		14.0	21.0	
Total Split (s)	47.0	47.0	0.0	32.0	32.0	0.0	14.0	39.0	0.0	22.0	47.0	0.0
Total Split (%)	33.6%	33.6%	0.0%	22.9%	22.9%	0.0%	10.0%	27.9%	0.0%	15.7%	33.6%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead	Lead	Meles.	Lag	Lag	MERCHAN	Lead	Lead	RE-OVER
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	42.0	42.0		110110	27.0		9.0	34.5		16.5	42.0	
Actuated g/C Ratio	0.30	0.30			0.19		0.06	0.25		0.12	0.30	
v/c Ratio	0.70	1.01			1.01		0.48	0.25		0.12	0.30	
Control Delay	52.8	79.5			94.2		71.1	53.4				
Queue Delay	0.0	0.0			0.0					86.4	63.3	
Total Delay	52.8	79.5					0.0	0.0		0.0	0.0	
LOS	52.6 D				94.2		71.1	53.4		86.4	63.3	
LOG	U	Е			F		Е	D		F	E	

	•	\rightarrow	-	6	4	1	4	†	1	1	1	1
A CONTRACT OF THE STATE OF THE				*			,		•		*	
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		72.8			94.2			55.2			65.7	
Approach LOS		E			F			Ε			Е	
Queue Length 50th (ft)	296	~500			~324		47	286		143	450	
Queue Length 95th (ft)	424	#655			#456		79	339		#254	#550	
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	100						300			350		
Base Capacity (vph)	474	970			647		216	1221		209	1436	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.70	1.01			1.01		0.48	0.75		0.77	0.96	

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 130

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.01

Intersection Signal Delay: 69.5

Intersection LOS: E ICU Level of Service E

Intersection Capacity Utilization 86.5%

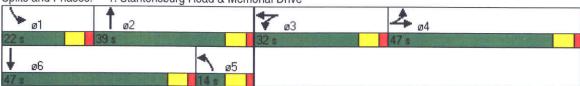
Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.





2: Farmville Boulev	vard & E	Bancro	ft Ave	nue								5/8/2007
	Þ	-	*	1	←	•	4	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		474		h,	4Th			4			4	
Volume (vph)	38	799	49	29	546	14	59	119	53	22	97	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	and the same
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	0	3436	0	0	3450	0	0	1799	0	0	1806	0
Flt Permitted		0.903			0.876	TO SERVE		0.881			0.936	
Satd. Flow (perm)	0	3109	0	0	3029	0	0	1606	0	0	1703	0
Right Turn on Red			No	a second		No	MELLER		No		1100	No
Satd. Flow (RTOR)												140
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1145			1538			989			307	
Travel Time (s)		22.3			30.0			19.3			6.0	
Confl. Peds. (#/hr)					00.0			10.0			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	Marie Revenue	O	0	0	U	U	U	U	0	U	0	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0.70			070			0 /0			0 /0	
Lane Group Flow (vph)	0	984	0	0	655	0	0	257	0	0	174	0
Turn Type	Perm	001	0	Perm	000	0	Perm	201	0	Perm	1/4	U
Protected Phases		2		T OITH	6		2011	4		1 Gilli	8	
Permitted Phases	2	The state of the s		6	0		4			8	0	
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase	necellings	-		0	0		-			0	O	
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	36.0	36.0	0.0	36.0	36.0	0.0	24.0	24.0	0.0	24.0	24.0	0.0
Total Split (%)	60.0%	60.0%	0.0%	60.0%	60.0%	0.0%	40.0%	40.0%	0.0%	40.0%	40.0%	0.0%
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.076
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag		0.0		0.0	0.0	2.0	0.0	0.0	2.0	5.0	3.0	2.0
Lead-Lag Optimize?												
Recall Mode	Max	Max		None	None		None	None		None	None	
Act Effct Green (s)	History	31.1		110110	31.1		HONG	15.5		140116	15.5	
Actuated g/C Ratio		0.55			0.55			0.27			0.27	
v/c Ratio		0.58			0.39			0.59			0.27	
Control Delay		10.7			8.8			23.6			18.9	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		10.7			8.8			23.6			18.9	
LOS		В			Α.			C C			10.9	
100 (100 (100 (100 (100 (100 (100 (100								U			D	

	_	\rightarrow	*	1	-	-	1	Ī	1	-	4	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		10.7			8.8			23.6			18.9	
Approach LOS		В			Α			С			В	
Queue Length 50th (ft)		105			61			75			47	
Queue Length 95th (ft)		175			105			136			91	
Internal Link Dist (ft)		1065			1458			909			227	
Turn Bay Length (ft)												
Base Capacity (vph)		1709			1665			509			539	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.58			0.39			0.50			0.32	

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 56.6

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.59 Intersection Signal Delay: 12.4 Intersection Capacity Utilization 75.4%

Intersection LOS: B
ICU Level of Service D

Analysis Period (min) 15

Splits and Phases: 2: Farmville Boulevard & Bancroft Avenue



	×	1	1	×	7	134
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	ĵ.		7	ર્ન	ħ	7171
Volume (vph)	61	32	616	69	49	821
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%	12	12	0%	0%	12
	0 %	0	0	0%		0
Storage Length (ft)		0	0		175	0
Storage Lanes		0	1		1	2
Taper Length (ft)	NEW YORK STREET	100	100		100	100
Satd. Flow (prot)	1741	0	1649	1670	1736	2733
Flt Permitted			0.950	0.962	0.950	
Satd. Flow (perm)	1741	0	1649	1670	1736	2733
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	35			35	35	
Link Distance (ft)	782			1306	1538	
Travel Time (s)	15.2			25.4	30.0	
Confl. Peds. (#/hr)	10.2			20.4	30.0	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.00
	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)			45%			
Lane Group Flow (vph)	104	0	376	385	54	912
Turn Type			custom			pt+ov
Protected Phases	4		2	2	1	12
Permitted Phases			2	_		-
Detector Phase	4		2	2	1	12
Switch Phase	4		2	2		12
	7.0		40.0	40.0	7.0	
Minimum Initial (s)	7.0		10.0	10.0	7.0	
Minimum Split (s)	14.0		17.0	17.0	14.0	
Total Split (s)	19.0	0.0	46.0	46.0	25.0	71.0
Total Split (%)	21.1%	0.0%	51.1%	51.1%	27.8%	78.9%
Yellow Time (s)	5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	2.0	5.0	5.0	5.0	5.0
Lead/Lag	Windles Haller		Lag	Lag	Lead	- O.O
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		None	None	None	
Act Effct Green (s)	12.0		32.8	32.8		57.0
The state of the s					17.4	57.9
Actuated g/C Ratio	0.16		0.44	0.44	0.24	0.78
v/c Ratio	0.38		0.52	0.52	0.13	0.43
Control Delay	37.6		19.6	19.7	27.9	4.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	37.6		19.6	19.7	27.9	4.9
LOS	D		В	В	C	Α

Lanes, Volumes, Timings 3: W. Fourteenth Street & Farmville Boulevard

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			5/8	/2007

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Lane Group	SET	SER	NWL	NWT	NEL	NER
Approach Delay	37.6			19.6	6.2	
Approach LOS	D			В	Α	
Queue Length 50th (ft)	50		146	150	22	88
Queue Length 95th (ft)	103		238	244	56	131
Internal Link Dist (ft)	702			1226	1458	
Turn Bay Length (ft)					175	
Base Capacity (vph)	320		841	852	480	2175
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.33		0.45	0.45	0.11	0.42
Intersection Summary						
Area Type: (Other					
Cycle Length: 90						
Actuated Cycle Length: 74						
Natural Cycle: 50						
Control Type: Actuated-Unco	ordinated					
Maximum v/c Ratio: 0.52						
Intersection Signal Delay: 13	.6			Int	ersection	LOS: B
Intersection Capacity Utilizati	on 42.9%			IC	U Level o	of Service A
Analysis Period (min) 15						

Splits and Phases: 3: W. Fourteenth Street & Farmville Boulevard

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	ĵ.		Pr.	4		ሻ	4		ħ	ĵ.	Oilli
Volume (vph)	21	215	21	425	142	19	11	225	0	32	350	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	Olly and a second		0%		Art Washington	0%	Eliza de	-	0%	14
Storage Length (ft)	50		0	0		0	0		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	100		100	100		100	100		100
Satd. Flow (prot)	1770	1839	0	1736	1794	0	1736	1827	0	1736	1814	0
Flt Permitted	0.644			0.950			0.295			0.499		
Satd. Flow (perm)	1200	1839	0	1736	1794	0	539	1827	0	912	1814	0
Right Turn on Red			No			No	78 (P. 17) (P. 17)		No	25 1195		No
Satd. Flow (RTOR)									110			110
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		543			147	SAME TO A SECURE		189			707	
Travel Time (s)		14.8			4.0			5.2			19.3	
Confl. Peds. (#/hr)								0.1			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								· ·	O	0	O	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)					0.70			070			070	
Lane Group Flow (vph)	23	262	0	472	179	0	12	250	0	36	409	0
Turn Type	Perm			Prot			Perm	200		Perm	400	O
Protected Phases		4		3	8			2		T OILL	6	
Permitted Phases	4	4			Maria I and Maria		2			6	U	
Detector Phase	4	4		3	8		2	2		6	6	
Switch Phase							11. 11. 11.					
Minimum Initial (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		17.0	17.0		17.0	17.0	
Total Split (s)	27.0	27.0	0.0	44.0	71.0	0.0	39.0	39.0	0.0	39.0	39.0	0.0
Total Split (%)	24.5%	24.5%	0.0%	40.0%	64.5%	0.0%	35.5%	35.5%	0.0%	35.5%	35.5%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	SHEND	5.0	5.0	0.070	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead	and the	100		0.0	2.0	3.0	5.0	2.0
Lead-Lag Optimize?	Yes	Yes		Yes								
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	19.7	19.7		33.1	57.8		34.3	34.3		34.3	34.3	
Actuated g/C Ratio	0.19	0.19		0.32	0.57		0.34	0.34		0.34	0.34	
v/c Ratio	0.10	0.74		0.84	0.18		0.07	0.41		0.12	0.67	
Control Delay	36.9	53.5		46.7	10.8		28.1	30.6		28.1	37.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	36.9	53.5		46.7	10.8		28.1	30.6		28.1	37.5	
LOS	D	D		D	В		C	C		20.1 C	57.5 D	

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		52.1			36.8			30.5			36.8	
Approach LOS		D			D			С			D	
Queue Length 50th (ft)	13	168		293	53		6	135		17	246	
Queue Length 95th (ft)	37	#271		422	86		22	217		44	373	
Internal Link Dist (ft)		463			67			109			627	
Turn Bay Length (ft)	50									200		
Base Capacity (vph)	254	389		628	1076		181	613		306	609	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.67		0.75	0.17		0.07	0.41		0.12	0.67	

Area Type:

Other

Cycle Length: 110

Actuated Cycle Length: 102.2

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

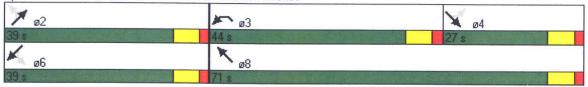
Maximum v/c Ratio: 0.84 Intersection Signal Delay: 38.4 Intersection Capacity Utilization 75.2%

Intersection LOS: D
ICU Level of Service D

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 4: W. Tenth Street & Dickinson Avenue



^{# 95}th percentile volume exceeds capacity, queue may be longer.

	٦	-	~		-	4	4	†	<i>></i>	-	1	1
Lane Group	EBL	EBT	EDD	WDI	WOT	WDD)	NOT.	/		*	
Lane Configurations	COL.		EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
I Through the company to the control of the control	32	Annual Control of the	400	100	^		ሻ	†		٦	the same of the sa	
Volume (vph)		653	103	199	525	55	73	470	162	77	932	46
Ideal Flow (vphpl) Lane Width (ft)	1900 12	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)	12	12	12	12	12	12	12	12	12	12	12	12
Storage Length (ft)	50	0%	0	405	0%	0	105	0%	•	40-	0%	
Storage Lanes	1		0	125		0	125		0	125		0
Taper Length (ft)	50		0	1		0	1		0	1		0
Satd. Flow (prot)	1736	3402	100	50	0.400	100	50	0070	100	50		100
Flt Permitted	0.950	3402	0	1736	3423	0	1752	3372	0	1752	3480	0
Satd. Flow (perm)	1736	2402	0	0.950	0.400		0.950	2070		0.950		
Right Turn on Red	1730	3402	0	1736	3423	0	1752	3372	0	1752	3480	0
Satd. Flow (RTOR)			No			No			No			No
Link Speed (mph)		25			0.5			0.0			Mar dan everana	
Link Distance (ft)		25			35	Series Contraction of the Contra		35			25	
Travel Time (s)		1633			628			931			570	
Confl. Peds. (#/hr)		44.5			12.2			18.1			15.5	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.00	0.00	0.00	0.00	0.00						
Growth Factor	100%	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Bus Blockages (#/hr)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		00/			00/			00/				
Shared Lane Traffic (%)		0%			0%			0%			0%	
Lane Group Flow (vph)	36	840	0	224	CAA	0	04	700	0	00		CONTRACTOR OF THE PARTY OF THE
Turn Type	Prot	040	U	221	644	0	81	702	0	86	1087	0
Protected Phases	5	2		Prot	0		Prot	michanish (septemb		Prot	Districted (1201)	
Permitted Phases	J	2		1	6		7	4		3	8	
Detector Phase	5	2		W COMPANY	•							
Switch Phase	3	4		1	6		7	4		3	8	
Minimum Initial (s)	7.0	10.0		7.0	40.0		7.0	7.0				
Minimum Split (s)	14.0	10.0 22.0		7.0	10.0		7.0	7.0		7.0	7.0	
Total Split (s)	14.0	ATTENDED TO STATE OF THE PERSON NAMED IN COLUMN TO STATE	0.0	14.0	22.0	0.0	14.0	22.0		14.0	22.0	
Total Split (%)	10.0%	46.0	0.0	27.0	59.0	0.0	14.0	49.0	0.0	18.0	53.0	0.0
Yellow Time (s)		32.9%	0.0%	19.3%	42.1%	0.0%	10.0%	35.0%	0.0%	12.9%	37.9%	0.0%
All-Red Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
Lost Time Adjust (s)	2.0 -2.0	2.0	0.0	2.0	2.0	0.0	2.0	2.0		2.0	2.0	
Total Lost Time (s)	5.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Lead/Lag		5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead-Lag Optimize?	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Recall Mode	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Act Effct Green (s)	None	C-Max		None	None		None	None		None	None	
	9.0	42.0		21.2	57.0		9.1	44.6		12.1	47.6	
Actuated g/C Ratio v/c Ratio	0.06	0.30		0.15	0.41		0.06	0.32		0.09	0.34	
	0.32	0.82		0.84	0.46		0.70	0.65		0.57	0.92	
Control Delay	70.7	53.7		53.8	10.5		95.0	44.6		75.9	57.1	
Queue Delay	0.0	0.8		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	70.7	54.6		53.8	10.5		95.0	44.6		75.9	57.1	
LOS	Е	D		D	В		F	D		Е	E	

	-	\rightarrow	V	1	-	*	1	Ť	1	-	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		55.2			21.5			49.8			58.5	
Approach LOS		Е			С			D			Е	
Queue Length 50th (ft)	32	379		204	72		74	291		76	496	
Queue Length 95th (ft)	70	464	1	m#295	m87		#158	362		135	#625	
Internal Link Dist (ft)		1553			548			851			490	
Turn Bay Length (ft)	50			125			125			125		
Base Capacity (vph)	112	1020		273	1394		115	1075		163	1193	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	43		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.32	0.86		0.81	0.46		0.70	0.65		0.53	0.91	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.92 Intersection Signal Delay: 47.2 Intersection Capacity Utilization 82.1%

Intersection LOS: D
ICU Level of Service E

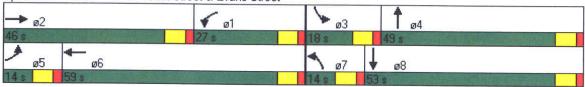
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	U	×)	100	K	*	7	A	a	4	×	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	A \$	0011	ħ	† \$		ሻ	ĵ.	1 4 bed 1	ሻ	λ	OWIT
Volume (vph)	238	525	50	122	371	22	41	454	138	30	549	238
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	·-	0%	12	12	0%	12	12	0%	12	14	0%	12
Storage Length (ft)	100	070	0	175	0 70	0	50	0 70	0	50	0 /0	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1736	3426	0	1736	3443	0	1736	1763	0	1736	1745	0
Flt Permitted	0.950	0420	· ·	0.950	0440		0.950	1700	U	0.950	1740	U
Satd. Flow (perm)	1736	3426	0	1736	3443	0	1736	1763	0	1736	1745	0
Right Turn on Red	1700	0420	No	1700	0440	No	1750	1700	No	1730	1745	0 No
Satd. Flow (RTOR)			110			110			110			INU
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	ALE STEP		902			1042	
Travel Time (s)		25.4			15.3			24.6			28.4	
Confl. Peds. (#/hr)		20.4			10.0			24.0			20.4	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	4%	4%
Parking (#/hr)	U	0	U	U	U	U	U	0	U	U	0	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0 /0			070			0 /0			0 /0	
Lane Group Flow (vph)	264	639	0	136	436	0	46	657	0	33	874	0
Turn Type	Prot	000	0	Prot	100		Prot	007	U	Prot	0/4	U
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases		-			•		Rein and Commission of the	S. THESE MAN		J	O	
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase		ADMINISTRAÇÃO DE TRACTO								0	0	
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0		14.0	23.0	
Total Split (s)	27.0	33.0	0.0	17.0	23.0	0.0	14.0	76.0	0.0	14.0	76.0	0.0
Total Split (%)	19.3%	23.6%	0.0%	12.1%	16.4%	0.0%	10.0%	54.3%	0.0%	10.0%	54.3%	0.0%
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.076
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag	2.0	Lead	Lag	SEAR PROPERTY.	Lead	Lag	2.0	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Max		None	Max		None	None		None	None	
Act Effct Green (s)	22.1	28.1		12.0	18.1		9.0	73.1		9.0	70.3	
Actuated g/C Ratio	0.16	0.21		0.09	0.13		0.06	0.54		0.06	0.52	
v/c Ratio	0.94	0.91		0.89	0.96		0.41	0.70		0.30	0.97	
Control Delay	97.2	71.0		109.6	91.5		74.3	29.5		70.7	56.9	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	97.2	71.0		109.6	91.5		74.3	29.5		70.7	56.9	
LOS	57.2 F	71.0 E		F	91.5 F		74.3 E	29.5 C		70.7 E	50.9 E	
	1	L		F	ı			C				

	W	X	2	1	K	*	7	×	0	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		78.6			95.8			32.4			57.4	
Approach LOS		Е			F			C			Е	
Queue Length 50th (ft)	242	304		125	211		41	458		29	766	
Queue Length 95th (ft)	#423	#420		#256	#325		85	618		66	#1071	
Internal Link Dist (ft)		1226			707			822			962	
Turn Bay Length (ft)	100			175			50			50		
Base Capacity (vph)	281	705		153	456		113	949		110	905	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.94	0.91		0.89	0.96		0.41	0.69		0.30	0.97	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 136.4

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

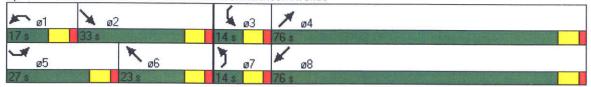
Maximum v/c Ratio: 0.97 Intersection Signal Delay: 65.0 Intersection Capacity Utilization 80.0%

Intersection LOS: E
ICU Level of Service D

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



^{# 95}th percentile volume exceeds capacity, queue may be longer.

	*	→	*	1	4	4	4	†	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	र्दी			ৰাচ		N'N	ተተ _ጉ		ሻ	ተተጉ	Market Market
Volume (vph)	180	375	82	65	648	173	140	1172	65	144	977	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		Service Company	0%	THE PARTY OF		0%	observat.
Storage Length (ft)	100		0	0		0	300	ACOVER 18	0	350		0
Storage Lanes	1		0	0		0	2		0	1		0
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	1579	3232	0	0	3357	0	3367	4948	0	1719	4787	0
Flt Permitted	0.950	0.998			0.996		0.950		7/4/11/25	0.950		
Satd. Flow (perm)	1579	3232	0	0	3357	0	3367	4948	0	1719	4787	0
Right Turn on Red		MARKET IN	No		Sept.	No	PERMIT	0/70/07/07	No		1707	No
Satd. Flow (RTOR)									1,0			110
Link Speed (mph)		45			35			45			45	
Link Distance (ft)		631			1145	Company of the last		1101			1010	
Travel Time (s)		9.6			22.3			16.7			15.3	
Confl. Peds. (#/hr)					4210			10.1			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		· ·	0	0	0	U	U	U	0	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	10%	070			070			070			0 /0	
Lane Group Flow (vph)	180	528	0	0	984	0	156	1374	0	160	1372	0
Turn Type	Split	020	0	Split	001	O	Prot	1074	U	Prot	1012	U
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases				O	U		J	_			0	
Detector Phase	4	4		3	3		5	2		1	6	
Switch Phase				0	A HOAR C		J	4			0	
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	14.0		7.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	21.0		14.0	21.0	
Total Split (s)	28.0	28.0	0.0	47.0	47.0	0.0	14.0	46.0	0.0	19.0	51.0	0.0
Total Split (%)	20.0%	20.0%	0.0%	33.6%	33.6%	0.0%	10.0%	32.9%	0.0%	13.6%	36.4%	0.0%
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.076	5.0	5.0	0.0 %
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag	2.0	Lead	Lead	2.0	Lag	Lag	2.0	Lead	Lead	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	23.0	23.0		NOTIC	42.0		9.0	41.0		14.0		
Actuated g/C Ratio	0.16	0.16			0.30		0.06	0.29		0.10	46.0	
v/c Ratio	0.10	0.10			0.30		0.06				0.33	
Control Delay	70.3	95.6			71.7			0.95		0.93	0.87	
Queue Delay	0.0	0.0					83.2	62.6		114.2	51.5	
Total Delay	70.3				0.0		0.0	0.0		0.0	0.0	
LOS	70.3 E	95.6			71.7		83.2	62.6		114.2	51.5	
LUU		F			E		F	Е		F	D	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		89.2			71.7			64.7			58.0	
Approach LOS		F			Е			Ε			Е	
Queue Length 50th (ft)	172	267			467		73	450		147	430	
Queue Length 95th (ft)	#271	#397			#614		#122	#547		#289	495	
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	100						300			350		
Base Capacity (vph)	259	531			1007		216	1449		172	1573	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.69	0.99			0.98		0.72	0.95		0.93	0.87	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

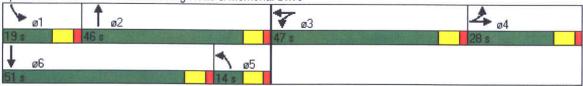
Maximum v/c Ratio: 0.99 Intersection Signal Delay: 67.6 Intersection Capacity Utilization 86.2%

Intersection LOS: E ICU Level of Service E

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



^{# 95}th percentile volume exceeds capacity, queue may be longer.

	٠	→	7	1	4-	4	4	†	<i>p</i>	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		414	LUIT		413	TIDIT	NUL	4	NOT	ODL	4	ODIT
Volume (vph)	25	533	32	43	805	22	49	97	43	26	119	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Lane Width (ft)	12	12	12	12	12	12	12	1900	1900	1900	1900	1900
Grade (%)	12	0%	12	12	0%	12	12	0%	12	12		12
Storage Length (ft)	0	0 /6	0	0	U /o	٥	0	076	0	0	0%	0
Storage Lanes	0					0	0		0	0		0
Taper Length (ft)	100		100	100		100	0		0	0		0
Satd. Flow (prot)		0.400	100	100	0.450	100	100	4700	100	100	1000	100
Flt Permitted	0	3436	0	0	3450	0	0	1799	0	0	1808	0
	0	0.890			0.893			0.858			0.938	
Satd. Flow (perm)	0	3065	0	0	3087	0	0	1564	0	0	1708	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1145			1538			989			307	
Travel Time (s)		22.3			30.0			19.3			6.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	656	0	0	966	0	0	210	0	0	212	0
Turn Type	Perm			Perm			Perm	37217		Perm	BITTO STATE	
Protected Phases		2			6			4			8	
Permitted Phases	2			6	Mademon (35)		4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase	- CO										•	
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	36.0	36.0	0.0	36.0	36.0	0.0	24.0	24.0	0.0	24.0	24.0	0.0
Total Split (%)	60.0%	60.0%	0.0%	60.0%	60.0%	0.0%	40.0%	40.0%	0.0%	40.0%	40.0%	0.0%
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.076	5.0	5.0	0.076
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0		
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0		20		2.0	0.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0		-2.0	-2.0	-2.0	-2.0	-2.0
Lead/Lag	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead-Lag Optimize?												
	Mov	May		Mana	Mana		Massa	Mana		Massa	N. Carrier	
Recall Mode	Max	Max		None	None		None	None		None	None	
Act Effct Green (s)		31.1			31.1			14.1			14.1	
Actuated g/C Ratio		0.56			0.56			0.25			0.25	
v/c Ratio		0.38			0.56			0.52			0.49	
Control Delay		8.2			9.9			22.6			21.3	
Queue Delay		0.0			0.0			0.0			0.0	
Total Delay		8.2			9.9			22.6			21.3	
LOS		Α			Α			C			C	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		8.2			9.9			22.6			21.3	
Approach LOS		Α			Α			С			С	
Queue Length 50th (ft)		55			94			59			59	
Queue Length 95th (ft)		104			171			112			110	
Internal Link Dist (ft)		1065			1458			909			227	
Turn Bay Length (ft)												
Base Capacity (vph)		1725			1737			495			541	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.38			0.56			0.42			0.39	
Internation Commons						Charles and Control of the				dominanerski	on the later of th	THE PROPERTY OF

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 55.3

Natural Cycle: 50

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.56 Intersection Signal Delay: 11.8 Intersection Capacity Utilization 71.3%

Intersection LOS: B
ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 2: Farmville Boulevard & Bancroft Avenue



	×	1		×	7	a
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	1>		ሻ	4	ሻ	77
Volume (vph)	92	49	757	79	32	547
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	1900	1900	1900	12
Grade (%)	0%	12	12	0%	0%	12
	076	0	0	0%		0
Storage Length (ft)		0	0		175	0
Storage Lanes		0	1		1	2
Taper Length (ft)		100	100		100	100
Satd. Flow (prot)	1741	0	1649	1668	1736	2733
Flt Permitted			0.950	0.961	0.950	
Satd. Flow (perm)	1741	0	1649	1668	1736	2733
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	35			35	35	
Link Distance (ft)	782			1306	1538	
Travel Time (s)	15.2			25.4	30.0	
Confl. Peds. (#/hr)	10.2			25.4	30.0	
Confl. Bikes (#/hr)						
Peak Hour Factor	0.00	0.00	0.00	0.00	0.00	0.00
	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)						
Mid-Block Traffic (%)	0%			0%	0%	
Shared Lane Traffic (%)			45%			
Lane Group Flow (vph)	156	0	463	466	36	608
Turn Type			Split			pt+ov
Protected Phases	4		2	2	1	12
Permitted Phases				- 	T 5 5 7 5 1 5	
Detector Phase	4		2	2	1	12
Switch Phase			2	2	March 18	12
Minimum Initial (s)	7.0		100	100	7.0	
Committee and security and production and the Committee and the Co	7.0		10.0	10.0	7.0	
Minimum Split (s)	14.0	0.0	17.0	17.0	14.0	20.0
Total Split (s)	22.0	0.0	52.0	52.0	16.0	68.0
Total Split (%)	24.4%	0.0%	57.8%	57.8%	17.8%	75.6%
Yellow Time (s)	5.0		5.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	2.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		Max	Max	None	
Act Effct Green (s)	14.3		47.0	47.0	11.0	63.1
Actuated g/C Ratio	0.16		0.54	0.54	0.13	0.72
v/c Ratio	0.16					
			0.52	0.52	0.16	0.31
Control Delay	41.1		16.1	16.0	37.2	5.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	41.1		16.1	16.0	37.2	5.1
LOS	D		В	В	D	Α

	×	1	1	K	7	4
Lane Group	SET	SER	NWL	NWT	NEL	NER
Approach Delay	41.1			16.1	6.9	
Approach LOS	D			В	Α	
Queue Length 50th (ft)	80		165	166	18	59
Queue Length 95th (ft)	140		267	268	47	90
Internal Link Dist (ft)	702			1226	1458	
Turn Bay Length (ft)					175	
Base Capacity (vph)	329		888	898	219	1972
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.47		0.52	0.52	0.16	0.31
Intersection Summary						
Area Type:	Other					
Cycle Length: 90						
Actuated Cycle Length: 87.4						
Natural Cycle: 60						
Control Type: Actuated-Unco	ordinated					
Maximum v/c Ratio: 0.55						
Intersection Signal Delay: 14				Int	ersection	LOS: B
Intersection Capacity Utilizati	on 49.2%			IC	U Level o	f Service /

Splits and Phases: 3: W. Fourteenth Street & Farmville Boulevard

Analysis Period (min) 15



	¥	×	2	1	K	*	7	×	74	4	K	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ħ	1		ħ	f)		*	A	Make National	7	T ₂	
Volume (vph)	11	106	11	556	205	27	20	287	0	16	186	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	eleans states	CHICANI II	0%	15	16	0%	16	12	0%	14
Storage Length (ft)	50		0	0	THE WAY	0	0	0 70	0	200	070	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	100		100	100		100	100		100
Satd. Flow (prot)	1770	1837	0	1736	1796	0	1736	1827	0	1736	1809	0
Flt Permitted	0.600	1007		0.950	1700		0.528	1027		0.387	1003	U
Satd. Flow (perm)	1118	1837	0	1736	1796	0	965	1827	0	707	1809	0
Right Turn on Red		1007	No	1700	1700	No	303	1027	No	101	1003	No
Satd. Flow (RTOR)			110			110			110			INU
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		543			147	a lange sweet		189			707	
Travel Time (s)		14.8			4.0			5.2			19.3	
Confl. Peds. (#/hr)		14.0			4.0			5.2			13.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						0	U	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								070			070	
Lane Group Flow (vph)	12	130	0	618	258	0	22	319	0	18	221	0
Turn Type	Perm			Prot		interesting to	Perm	0.10		Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4	4					2			6		
Detector Phase	4	4		3	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		17.0	17.0		17.0	17.0	
Total Split (s)	18.0	18.0	0.0	57.0	75.0	0.0	35.0	35.0	0.0	35.0	35.0	0.0
Total Split (%)	16.4%	16.4%	0.0%	51.8%	68.2%	0.0%	31.8%	31.8%	0.0%	31.8%	31.8%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	12.1	12.1		40.8	57.9		30.3	30.3		30.3	30.3	
Actuated g/C Ratio	0.12	0.12		0.41	0.59		0.31	0.31		0.31	0.31	
v/c Ratio	0.09	0.57		0.86	0.24		0.07	0.57		0.08	0.40	
Control Delay	43.7	53.7		39.0	9.9		29.2	35.5		29.8	31.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	43.7	53.7		39.0	9.9		29.2	35.5		29.8	31.8	
LOS	D	D		D	Α		С	D	W	С	С	

	4	×	2		K	₹	ን	A	0	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		52.8			30.4			35.1			31.7	
Approach LOS		D			C			D			С	
Queue Length 50th (ft)	7	79		347	71		10	172		8	112	
Queue Length 95th (ft)	27	152		497	110		32	296		29	204	
Internal Link Dist (ft)		463			67			109			627	
Turn Bay Length (ft)	50									200		
Base Capacity (vph)	148	243		828	1143		298	563		218	558	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.53		0.75	0.23		0.07	0.57		0.08	0.40	

Area Type: Other

Cycle Length: 110

Actuated Cycle Length: 98.4

Natural Cycle: 65

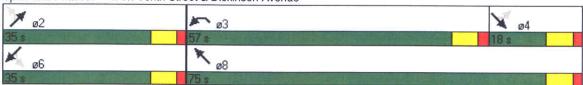
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86 Intersection Signal Delay: 33.6 Intersection Capacity Utilization 62.4%

Intersection LOS: C
ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 4: W. Tenth Street & Dickinson Avenue



	J	→	*	1	4	*	1	†	1	1		1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	1		ħ	† \$		19	† \$		75	1	
Volume (vph)	24	477	74	231	666	55	136	872	300	33	399	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	Marie Chin	MARKET PROPERTY.	0%			0%	1	14	0%	12
Storage Length (ft)	50		0	125		0	125		0	125	070	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3402	0	1736	3433	0	1752	3372	0	1752	3480	0
Flt Permitted	0.950		TO THE S	0.950			0.950	2012		0.950	3400	
Satd. Flow (perm)	1736	3402	0	1736	3433	0	1752	3372	0	1752	3480	0
Right Turn on Red			No		New York	No	1702	OOTE	No	1102	0400	No
Satd. Flow (RTOR)			110			110			INU			140
Link Speed (mph)		25			35			35			25	
Link Distance (ft)		1633			628	-		931			570	
Travel Time (s)		44.5			12.2			18.1			15.5	
Confl. Peds. (#/hr)		11.0			12.2			10.1			15.5	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%		0.90	0.90
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%		100%	100%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	3%	3%	3%	3%
Parking (#/hr)	U.	0	U	U	U	U	U	U	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			00/	
Shared Lane Traffic (%)		0 /0			070			0%			0%	
Lane Group Flow (vph)	27	612	0	257	801	0	151	1302	0	37	465	0
Turn Type	Prot			Prot	414141-15,000,001	200	Prot			Prot	100	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases								STATE OF THE SECOND				
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase											0	
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	22.0		14.0	22.0		14.0	22.0		14.0	22.0	
Total Split (s)	14.0	36.0	0.0	32.0	54.0	0.0	26.0	68.0	0.0	14.0	56.0	0.0
Total Split (%)	9.3%	24.0%	0.0%	21.3%	36.0%	0.0%	17.3%	45.3%	0.0%	9.3%	37.3%	0.0%
Yellow Time (s)	5.0	5.0	AREA	5.0	5.0	5.070 5.070	5.0	5.0	0.070	5.0	5.0	0.076
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lead		Lag	Lag	MELSIER	Lead	Lag	2.0	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	9.0	35.6		25.9	58.1		18.7	62.3		9.0	49.9	
Actuated g/C Ratio	0.06	0.24		0.17	0.39		0.12	0.42		0.06	0.33	
v/c Ratio	0.26	0.76		0.17	0.60		0.12	0.42		0.06	0.33	
Control Delay	73.9	61.4		27.6	8.4		79.5	54.1		77.3	39.5	
Queue Delay	0.0	0.0		0.0	0.4		0.0	0.0		0.0		
Total Delay	73.9	61.4		27.6	8.6		79.5	54.1			0.0	Sellie
LOS	75.5 E	01.4 E		C C	Α		79.5 E	54.1 D		77.3	39.5	
				C	A			U		Е	D	

	1	\rightarrow	7	-	*	1	†	1	1	+	1
Lane Group	EBL	EBT	EBR WB	L WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		62.0		13.2			56.8			42.3	
Approach LOS		Е		В			Е			D	
Queue Length 50th (ft)	26	308	21	2 139		142	628		35	180	
Queue Length 95th (ft)	60	#404	m19	2 m115		221	#755		75	234	
Internal Link Dist (ft)		1553		548			851			490	
Turn Bay Length (ft)	50		12	5		125			125	,00	
Base Capacity (vph)	104	807	31	2 1329		245	1416		105	1205	
Starvation Cap Reductn	0	0		0 87		0	0		0	0	
Spillback Cap Reductn	0	1		0 0		0	0		0	0	
Storage Cap Reductn	0	0		0 0		0	0		0	0	
Reduced v/c Ratio	0.26	0.76	0.8	2 0.64		0.62	0.92		0.35	0.39	

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 100

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.93

Intersection Signal Delay: 43.1 Intersection Capacity Utilization 84.5%

Intersection LOS: D
ICU Level of Service E

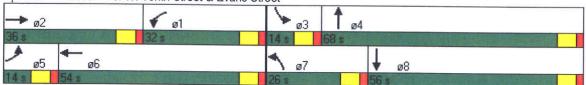
Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	9	×	1	1	×	*	7	×	4	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	476		ሻ	†		ሻ	f)		ሻ	ĵ»	
Volume (vph)	194	429	41	184	556	32	50	554	168	25	461	199
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		A SECOND PROPERTY OF THE PARTY	0%		A CONTRACTOR OF THE CONTRACTOR	0%	
Storage Length (ft)	100		0	175		0	50		0	50		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1736	3426	0	1736	3443	0	1736	1763	0	1736	1745	0
Flt Permitted	0.950			0.950			0.950			0.950		eterni.
Satd. Flow (perm)	1736	3426	0	1736	3443	0	1736	1763	0	1736	1745	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	3		902			1042	
Travel Time (s)		25.4			15.3			24.6			28.4	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												special and
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	216	523	0	204	654	0	56	803	0	28	733	0
Turn Type	Prot			Prot			Prot			Prot		
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases											Proceedings where	
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0		14.0	23.0	
Total Split (s)	23.0	31.0	0.0	25.0	33.0	0.0	14.0	70.0	0.0	14.0	70.0	0.0
Total Split (%)	16.4%	22.1%	0.0%	17.9%	23.6%	0.0%	10.0%	50.0%	0.0%	10.0%	50.0%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	With the same	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag		Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Max		None	Max		None	None		None	None	
Act Effct Green (s)	18.1	26.9		19.3	28.1		9.0	66.2		9.0	63.4	
Actuated g/C Ratio	0.13	0.20		0.14	0.21		0.07	0.49		0.06	0.47	
v/c Ratio	0.94	0.77		0.83	0.92		0.50	0.93		0.25	0.90	
Control Delay	103.0	61.0		83.7	71.7		78.5	52.0		68.8	49.1	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	103.0	61.0		83.7	71.7		78.5	52.0		68.8	49.1	
LOS	F	E		F	Е		E	D		E	D	

	7	×	1	1	K		7	A	0	Q.	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		73.3			74.6			53.7			49.8	
Approach LOS		Ε			Е			D			D	
Queue Length 50th (ft)	199	243		183	312		50	707		25	606	
Queue Length 95th (ft)	#366	#316		#316	#433		98	#993		59	#865	
Internal Link Dist (ft)		1226			707			822			962	
Turn Bay Length (ft)	100			175			50			50		
Base Capacity (vph)	231	680		255	714		113	869		111	828	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.94	0.77		0.80	0.92		0.50	0.92		0.25	0.89	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 135.5

Natural Cycle: 120

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.94 Intersection Signal Delay: 62.9 Intersection Capacity Utilization 81.2%

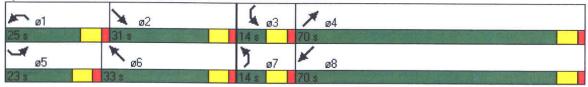
Intersection LOS: E
ICU Level of Service D

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



Appendix C

Intersection Analysis Output Reports

c) No Build 2030

	۶	-	*	1	-	1	4	†	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	414			र्वा		ሻሻ	ተላሱ		*	ተተጉ	
Volume (vph)	509	1006	187	47	619	140	115	1066	47	176	1332	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	0		0	300	DATE:	0	350		0
Storage Lanes	1		0	0		0	2		0	1		0
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	1579	3242	0	0	3371	0	3367	4958	0	1719	4772	0
Flt Permitted	0.950	0.998			0.997		0.950			0.950		
Satd. Flow (perm)	1579	3242	0	0	3371	0	3367	4958	0	1719	4772	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			35			45			45	
Link Distance (ft)		631			1145	3		1101			1010	
Travel Time (s)		9.6			22.3			16.7			15.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)									WINNESS ST	Mr. A. Harrison U.T. H		Zanich
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	10%											
Lane Group Flow (vph)	509	1383	0	0	896	0	128	1236	0	196	1916	0
Turn Type	Split			Split			Prot			Prot		
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases												
Detector Phase	4	4		3	3		5	2		1	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	14.0		7.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	21.0		14.0	21.0	
Total Split (s)	51.0	51.0	0.0	34.0	34.0	0.0	14.0	43.0	0.0	22.0	51.0	0.0
Total Split (%)	34.0%	34.0%	0.0%	22.7%	22.7%	0.0%	9.3%	28.7%	0.0%	14.7%	34.0%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead	Lead		Lag	Lag	est nin	Lead	Lead	MERKE.
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	46.0	46.0			29.0		9.0	38.0		17.0	46.0	
Actuated g/C Ratio	0.31	0.31			0.19		0.06	0.25		0.11	0.31	
v/c Ratio	1.05	1.39			1.37		0.63	0.98		1.01	1.31	
Control Delay	104.4	221.3			221.9		83.5	77.1		130.5	185.5	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	104.4	221.3			221.9		83.5	77.1		130.5	185.5	
LOS	F	F			F		F	Е		F	F	

5/8/2007

1: Stantonsburg Road & Memorial Drive

EBL

~594

#847

100

484

0

0

0

1.05

EBT

189.9

~987

#1134

551

994

0

0

0

1.39

F

EBR

WBL

WBT

221.9

~608

#744

1065

652

0

0

0

1.37

F

WBR

0

0

0.63

0

0

0.98

				11720	
1	†	-	1	1	1
NBL	NBT	NBR	SBL	SBT	SBR
	77.7			180.4	
	E			F	
64	443		~197	~879	
101	#549		#366	#973	
	1021			930	
300			350		
202	1256		195	1463	
0	0		0	0	

0

0

1.01

0

0

1.31

Intersection Summary

Area Type: Other

Cycle Length: 150

Lane Group

Approach Delay

Approach LOS

Queue Length 50th (ft)

Queue Length 95th (ft)

Internal Link Dist (ft)

Turn Bay Length (ft)

Base Capacity (vph)

Starvation Cap Reductn

Spillback Cap Reductn

Storage Cap Reductn

Reduced v/c Ratio

Actuated Cycle Length: 150

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.39

Intersection Signal Delay: 166.8 Intersection Capacity Utilization 112.3% Intersection LOS: F
ICU Level of Service H

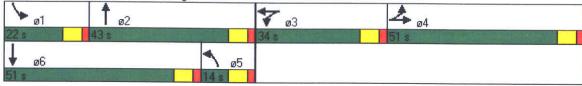
Analysis Period (min) 15

Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



-1	01	0	20	\-
5/	K /	71	и	1/

Lane Group		*	-	*	1	4	*	4	†	1	1	Ţ	1
Configurations	Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Volume (vphp)	Lane Configurations		वीक		12							100000000000000000000000000000000000000	ODI
Lane Width (ft)	Volume (vph)	49		70	58		36	86		106	54		40
Lane Width (ft)	Ideal Flow (vphpl)	1900											
Grade (%)													
Storage Length (ft)	Grade (%)				1110000		otto il dive			Metal Co.	The second second		12
Storage Lanes	Storage Length (ft)	0		0	0		0	0	Anny	0	0	Marie Series	0
Taper Length (ft)													
Satd. Flow (prot) 0 3433 0 0 3440 0 0 1768 0 0 1792 0 Filt Permitted 0.873 0.718 0.718 0.829 0.789 - Satd. Flow (perm) 0 3003 0 2477 0 0 1486 0 0 1434 0 Right Turn on Red No No No No No No No Satd. Flow (RTOR) Link Speed (mph) 35 35 35 35 35 35 153 1538 1538 193 300 193 300 193 300 193 300 193 300 193 300 300 193 300 300 193 300 300 193 300 300 300 193 300 300 193 300 300 193 300 300 300 190 0.90 0.90 0.90 0.90 0.90 <	Taper Length (ft)	100											
Fit Permitted	Satd. Flow (prot)	0	3433			3440			1768			1792	
Satd. Flow (perm) 0 3003 0 0 2477 0 0 1486 0 0 1434 0 Right Turn on Red No 10 No 10 No 10	Flt Permitted		0.873										
No No No No No No No No	Satd. Flow (perm)	0	3003	0	0		0	0		0	0		0
Satd. Flow (RTOR) Link Speed (mph)	Right Turn on Red							William I					
Link Distance (ft) 1145 1538 989 307 Travel Time (s) 22.3 30.0 19.3 50.0 Confl. Peds. (#hr) Confl. Bikes (#hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Satd. Flow (RTOR)									110			140
Link Distance (ft) 1145 1538 989 307 Travel Time (s) 22.3 30.0 19.3 19.3 6.0 Confl. Peds. (#/hr) Confl. Bikes (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Link Speed (mph)		35			35			35			35	
Travel Time (s)	Link Distance (ft)						15						
Confl. Peds. (#/hr) Confl. Bikes (#/hr) Peak Hour Factor 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.9	Travel Time (s)												
Peak Hour Factor 0.90 100%	Confl. Peds. (#/hr)											0.0	
Growth Factor 100% 100% 100% 100% 100% 100% 100% 100	Confl. Bikes (#/hr)												
Growth Factor 100% 100% 100% 100% 100% 100% 100% 100	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
Heavy Vehicles (%)	Growth Factor	100%											
Bus Blockages (#/hr) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Heavy Vehicles (%)	4%											
Parking (#/hr) Mid-Block Traffic (%) 0%	Bus Blockages (#/hr)												
Shared Lane Traffic (%) Lane Group Flow (vph)	Parking (#/hr)								S. C. C. C. C. C. C. C. C. C. C. C. C. C.				
Shared Lane Traffic (%) Lane Group Flow (vph) 0 1344 0 0 926 0 0 338 0 0 216 0 Turn Type Perm Perm Perm Perm Perm Protected Phases 2 6 4 8 Permitted Phases 2 6 4 8 Detector Phase 2 2 6 6 4 4 4 8 8 8 Switch Phase Minimum Initial (s) 10.0 10.0 10.0 10.0 7.0 7.0 7.0 7.0 Minimum Split (s) 23.0 23.0 23.0 23.0 23.0 23.0 23.0 23.0	Mid-Block Traffic (%)		0%			0%			0%			0%	
Turn Type Perm Perm Perm Perm Protected Phases 2 6 4 8 Permitted Phases 2 6 4 8 Detector Phase 2 2 6 4 8 8 Switch Phase 2 2 6 6 4 4 8 8 Switch Phase 8 5 5 6 7 0 3	Shared Lane Traffic (%)												
Turn Type Perm Perm Perm Perm Protected Phases 2 6 4 8 Permitted Phases 2 6 4 8 Detector Phase 2 2 6 4 4 8 Switch Phase Minimum Initial (s) 10.0 10.0 10.0 7.0 7.0 7.0 7.0 Minimum Split (s) 23.0	Lane Group Flow (vph)	0	1344	0	0	926	0	0	338	0	0	216	0
Protected Phases 2 6 4 8 Permitted Phases 2 6 4 8 Detector Phase 2 2 6 6 6 4 4 8 Switch Phase Minimum Initial (s) 10.0 10.0 10.0 10.0 7.0 7.0 7.0 7.0 7.0 7.0 Minimum Split (s) 23.0 23.0 23.0 23.0 23.0 23.0 23.0 23.0		Perm			Perm			Perm					
Permitted Phases 2 6 4 8 Detector Phase 2 2 6 6 4 4 8 8 Switch Phase Switch Phase 8 8 8 8 8 9 Minimum Initial (s) 10.0 10.0 10.0 7.0			2			6			4			8	
Detector Phase 2 2 2 6 6 4 4 4 8 8 Switch Phase Minimum Initial (s) 10.0 10.0 10.0 10.0 7.0 7.0 7.0 7.0 7.0 7.0 Minimum Initial (s) 23.0		2			6			4			8		
Minimum Initial (s) 10.0 10.0 10.0 10.0 10.0 7.0 7.0 7.0 7.0 Minimum Split (s) 23.0		2	2		6	6		4	4			8	
Minimum Split (s) 23.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>													
Minimum Split (s) 23.0 <td>To A to A supplied to the supplied of the supp</td> <td></td> <td>10.0</td> <td></td> <td>10.0</td> <td>10.0</td> <td></td> <td>7.0</td> <td>7.0</td> <td></td> <td>7.0</td> <td>7.0</td> <td></td>	To A to A supplied to the supplied of the supp		10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Total Split (s) 37.0 37.0 0.0 37.0 0.0 23.0 23.0 0.0 23.0 23.0 0.0 23.0 23.0 0.0 23.0 23.0 0.0 23.0 23.0 23.0 23.0 0.0 23.0 23.0 0.0 23.0 23.0 23.0 23.0 0.0 23.0 <			23.0		23.0	23.0		23.0	23.0		23.0		
Total Split (%) 61.7% 61.7% 0.0% 61.7% 61.7% 0.0% 38.3% 38.3% 0.0% 38.3% 38.3% 0.0% Yellow Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 All-Red Time (s) 2.0 2.0 2.0 2.0 2.0 2.0 2.0 2.0		37.0	37.0	0.0	37.0	37.0	0.0	23.0	23.0	0.0	23.0		0.0
Yellow Time (s) 5.0 5.0 5.0 5.0 5.0 5.0 All-Red Time (s) 2.0 2.0 2.0 2.0 2.0 2.0		61.7%	61.7%	0.0%	61.7%	61.7%	0.0%						
All-Red Time (s) 2.0 2.0 2.0 2.0 2.0 2.0 2.0			5.0		5.0	5.0		5.0	5.0				
		2.0	2.0		2.0	2.0		2.0	2.0				
		-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s) 5.0 5.0 2.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5		5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0		
Lead/Lag													
Lead-Lag Optimize?													
Recall Mode Max Max None None None None None None		Max			None	None		None	None		None	None	
Act Effct Green (s) 32.0 17.1 17.1			32.0			32.0			17.1				
Actuated g/C Ratio 0.54 0.54 0.29 0.29			0.54			0.54			0.29			0.29	
v/c Ratio 0.83 0.69 0.79 0.52						0.69							
Control Delay 17.5 13.6 34.9 22.8						13.6			34.9				
Queue Delay 0.0 0.0 0.0 0.0			0.0			0.0							
Total Delay 17.5 13.6 34.9 22.8			17.5			13.6							
LOS B B C C	LOS		В			В							

	-	→	1	6	4	*	4	†	1	-	Ţ	1
		-					1		,		•	Ann Parket and
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		17.5			13.6			34.9			22.8	
Approach LOS		В			В			С			С	
Queue Length 50th (ft)		195			118			110			64	
Queue Length 95th (ft)		#298			182			#227			122	
Internal Link Dist (ft)		1065			1458			909			227	
Turn Bay Length (ft)												
Base Capacity (vph)		1627			1341			446			430	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.83			0.69			0.76			0.50	

Area Type:

Cycle Length: 60

Actuated Cycle Length: 59.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 18.7
Intersection Capacity Utilization 92.5%

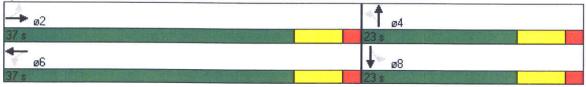
Intersection LOS: B

ICU Level of Service F

Analysis Period (min) 15

Splits and Phases: 2: Farmville Boulevard & Bancroft Avenue

Other



^{# 95}th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

	×)	100	×	7	4
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	7.		75	4	7	77
Volume (vph)	61	54	863	69	81	1150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%	14	12	0%	0%	12
Storage Length (ft)	0 70	0	0	0 /0	175	0
Storage Lanes						0
		0	1		1	2
Taper Length (ft)	4740	100	100		100	100
Satd. Flow (prot)	1712	0	1649	1664	1736	2733
Flt Permitted			0.950	0.959	0.950	
Satd. Flow (perm)	1712	0	1649	1664	1736	2733
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	35			35	35	
Link Distance (ft)	782			1306	1538	X
Travel Time (s)	15.2			25.4	30.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0			
	U	U	0	0	0	0
Parking (#/hr)	00/			00/	00/	
Mid-Block Traffic (%)	0%		The Talk	0%	0%	
Shared Lane Traffic (%)	140 ± 120	and the real	46%	20100		No. Walkers
Lane Group Flow (vph)	128	0	518	518	90	1278
Turn Type			custom			pt+ov
Protected Phases	4		2	2	1	12
Permitted Phases			2			
Detector Phase	4		2	2	1	12
Switch Phase						
Minimum Initial (s)	7.0		10.0	10.0	7.0	
Minimum Split (s)	14.0		17.0	17.0	14.0	
Total Split (s)	17.0	0.0	47.0	47.0	26.0	73.0
Total Split (%)	18.9%	0.0%	52.2%	52.2%	28.9%	81.1%
Yellow Time (s)	5.0	0.070	5.0	5.0	5.0	01.170
All-Red Time (s)	2.0					
		0.0	2.0	2.0	2.0	0.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	2.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?			Yes	Yes	Yes	
Recall Mode	None		None	None	None	
Act Effct Green (s)	11.4		39.9	39.9	20.7	65.7
Actuated g/C Ratio	0.13		0.46	0.46	0.24	0.75
v/c Ratio	0.57		0.69	0.68	0.22	0.62
Control Delay	47.4		24.3	24.1	29.6	6.6
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	47.4		24.3	24.1	29.6	6.6
LOS	D		C C	C	C C	Α
	U	-	U	-	U	А

3: W. Fourteenth Street & Farmville Boulevard

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		1	5/8	12	00	7

	×)	1	X	7	1
Lane Group	SET	SER	NWL	NWT	NEL	NER
Approach Delay	47.4			24.2	8.1	
Approach LOS	D			С	Α	
Queue Length 50th (ft)	69		231	230	42	152
Queue Length 95th (ft)	127		355	353	82	205
Internal Link Dist (ft)	702			1226	1458	
Turn Bay Length (ft)					175	
Base Capacity (vph)	235		778	785	419	2079
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.54		0.67	0.66	0.21	0.61
Intersection Summary	Mary and	WE TO			120	
Area Type:	Other					
Cycle Length: 90						3
Actuated Cycle Length: 87.	1					
Natural Cycle: 60						
Control Type: Actuated-Und	coordinated					

Intersection LOS: B

ICU Level of Service B

Intersection Capacity Utilization 55.1% Analysis Period (min) 15

Maximum v/c Ratio: 0.69 Intersection Signal Delay: 16.7

Splits and Phases: 3: W. Fourteenth Street & Farmville Boulevard

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	4	×	2	1	K	7	7	×	74	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	J.	ĵ.)j	Þ		7	^		ሻ	1	
Volume (vph)	37	285	42	749	160	72	32	289	0	122	449	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	100		100	100		100	100		100
Satd. Flow (prot)	1770	1827	0	1736	1741	0	1736	1827	0	1736	1807	0
Flt Permitted	0.600			0.950			0.105			0.311		
Satd. Flow (perm)	1118	1827	0	1736	1741	0	192	1827	0	568	1807	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		543			147	000		189			707	
Travel Time (s)		14.8			4.0			5.2			19.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	41	364	0	832	258	0	36	321	0	136	540	0
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4	4					2			6		
Detector Phase	4	4		3	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		17.0	17.0		17.0	17.0	
Total Split (s)	31.0	31.0	0.0	66.0	97.0	0.0	43.0	43.0	0.0	43.0	43.0	0.0
Total Split (%)	22.1%	22.1%	0.0%	47.1%	69.3%	0.0%	30.7%	30.7%	0.0%	30.7%	30.7%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead								
Lead-Lag Optimize?	Yes	Yes		Yes								
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	26.0	26.0		61.0	92.0		38.0	38.0		38.0	38.0	
Actuated g/C Ratio	0.19	0.19		0.44	0.66		0.27	0.27		0.27	0.27	
v/c Ratio	0.20	1.07		1.10	0.23		0.69	0.65		0.88	1.10	
Control Delay	51.2	122.7		101.2	10.3		105.6	52.2		96.6	118.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	51.2	122.7		101.2	10.3		105.6	52.2		96.6	118.2	
LOS	D	F		F	В	31134	F	D		F	F	

	-	×)		M	ť	7	*	734	Ĺ	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NED	CIMI	CMT	CIAID
	OLL		JEN	INVVL		INVVI	INCL	NET	NER	SWL	SWT	SWR
Approach Delay		115.5			79.7			57.6			113.9	
Approach LOS		F			E			Е			F	
Queue Length 50th (ft)	32	~367		~858	88		30	260		119	~557	
Queue Length 95th (ft)	69	#569	1	#1111	129		#96	367		#251	#786	
Internal Link Dist (ft)		463			67			109			627	
Turn Bay Length (ft)	50									200		
Base Capacity (vph)	208	339		756	1144		52	496		154	490	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.20	1.07		1.10	0.23		0.69	0.65		0.88	1.10	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Natural Cycle: 130

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.10 Intersection Signal Delay: 91.4 Intersection Capacity Utilization 109.9%

Intersection LOS: F ICU Level of Service H

Analysis Period (min) 15

- ~ Volume exceeds capacity, queue is theoretically infinite. Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 4: W. Tenth Street & Dickinson Avenue



	1	-	*	1	←	*	4	1	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	^1 >		ሻ	† î>		ሻ	^		ሻ		
Volume (vph)	76	1139	178	284	900	54	100	835	227	92	1699	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		in the last transfer	0%			0%	12
Storage Length (ft)	50		0	125		0	125		0	125	SEA STREET	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3402	0	1736	3443	0	1752	3393	0	1752	3480	0
Flt Permitted	0.950			0.950			0.950			0.950	0100	TICENCE!
Satd. Flow (perm)	1736	3402	0	1736	3443	0	1752	3393	0	1752	3480	0
Right Turn on Red			No			No			No	1102	0100	No
Satd. Flow (RTOR)												110
Link Speed (mph)		25			35			35			25	
Link Distance (ft)		1633			628			931			570	
Travel Time (s)		44.5			12.2			18.1			15.5	
Confl. Peds. (#/hr)											10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)									•	and a line	0	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								070			070	
Lane Group Flow (vph)	84	1464	0	316	1060	0	111	1180	0	102	1977	0
Turn Type	Prot			Prot		No. of Concession, Spinster, Spinste	Prot	1100		Prot	10/1	part year
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases								MICROSOFF TO A STATE OF THE STA			0	
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase							In Section 1982	AND DOUGHT OF				
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	22.0		14.0	22.0		14.0	22.0		14.0	22.0	
Total Split (s)	15.0	51.0	0.0	24.0	60.0	0.0	14.0	61.0	0.0	14.0	61.0	0.0
Total Split (%)	10.0%	34.0%	0.0%	16.0%	40.0%	0.0%	9.3%	40.7%	0.0%	9.3%	40.7%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	0.070	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lead	a de la constantina	Lag	Lag		Lead	Lag	2.0	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	10.0	46.0		19.0	55.0		9.0	56.0		9.0	56.0	
Actuated g/C Ratio	0.07	0.31		0.13	0.37		0.06	0.37		0.06	0.37	
v/c Ratio	0.72	1.40		1.44	0.84		1.06	0.93		0.00	1.52	
Control Delay	100.8	226.1		229.6	16.9		168.4	58.7		148.7	272.6	
Queue Delay	0.0	0.0		0.0	5.8		0.0	0.0		0.0	0.0	
Total Delay	100.8	226.1		229.6	22.7		168.4	58.7		148.7	272.6	
LOS	F	F		F	C		F					
	Г	F		۲	C		F	E		F	F	

	A	\rightarrow	*	1	-	*	1	1	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		219.3			70.2			68.2			266.6	
Approach LOS		F			Е			Е			F	
Queue Length 50th (ft)	82	~1006		~430	163		~119	582		102	~1417	
Queue Length 95th (ft)	#171	#1145		m#353	m133		#250	#723		#228	#1550	
Internal Link Dist (ft)		1553			548			851		11 220	490	
Turn Bay Length (ft)	50			125			125	001		125	400	
Base Capacity (vph)	116	1043		220	1262		105	1267		105	1299	
Starvation Cap Reductn	0	0		0	157		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.72	1.40		1.44	0.96		1.06	0.93		0.97	1.52	

Area Type:

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 146 (97%), Referenced to phase 2:EBT, Start of Green

Other

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.52

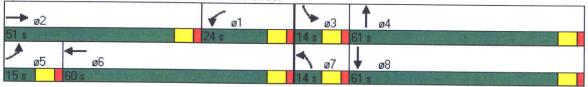
Intersection Signal Delay: 171.3
Intersection Capacity Utilization 124.9%

Intersection LOS: F
ICU Level of Service H

Analysis Period (min) 15

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	2	<i>)</i> (**)	×	7	7	×	74	Ĺ	×	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	T	47>		7	4 %		T	ĵ.		ħ	ĵ.	
Volume (vph)	446	540	144	176	392	54	117	680	198	74	832	446
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		SIN SOLICE	0%			0%	
Storage Length (ft)	100		0	175		0	50		0	50		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1736	3360	0	1736	3409	0	1736	1765	0	1736	1732	0
Flt Permitted	0.950			0.950			0.950		entro A	0.950	A A TEST	
Satd. Flow (perm)	1736	3360	0	1736	3409	0	1736	1765	0	1736	1732	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787			902			1042	
Travel Time (s)		25.4			15.3			24.6			28.4	
Confl. Peds. (#/hr)					100 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A 1						2011	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								nassana santa ya				
Lane Group Flow (vph)	496	760	0	196	496	0	130	976	0	82	1420	0
Turn Type	Prot			Prot			Prot			Prot	,,=0	
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases								THE STATE OF THE S		the state of the		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase							TARREST CA					
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0		14.0	23.0	
Total Split (s)	38.0	47.0	0.0	20.0	29.0	0.0	16.0	99.0	0.0	14.0	97.0	0.0
Total Split (%)	21.1%	26.1%	0.0%	11.1%	16.1%	0.0%	8.9%	55.0%	0.0%	7.8%	53.9%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	1125	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag	WWW.	Lead	Lag		Lead	Lag	2.0	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Max		None	Max		None	None		None	None	
Act Effct Green (s)	33.0	42.0		15.0	24.0		11.0	94.0		9.0	92.0	
Actuated g/C Ratio	0.18	0.23		0.08	0.13		0.06	0.52		0.05	0.51	
v/c Ratio	1.56	0.97		1.35	1.09		1.23	1.06		0.03	1.60	
Control Delay	310.8	92.8		252.8	138.0		224.0	87.4		162.8	308.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	310.8	92.8		252.8	138.0		224.0	87.4		162.8	308.5	
LOS	F	F		F	F		F	67.4 F		F	500.5 F	

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		178.9			170.5			103.4		NEW T	300.5	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~824	474		~302	~345		~188	~1260		99	~2390	
Queue Length 95th (ft)	#1063	#611		#481	#472		#342	#1526		#222	#2652	
Internal Link Dist (ft)		1226			707			822			962	
Turn Bay Length (ft)	100			175			50			50		
Base Capacity (vph)	318	784		145	455		106	922		87	885	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.56	0.97		1.35	1.09		1.23	1.06		0.94	1.60	

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180 Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.60

Intersection Signal Delay: 199.4 Intersection Capacity Utilization 131.4% Intersection LOS: F
ICU Level of Service H

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
 - Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



1: Stantonsburg Road & Memorial Drive

	1	\rightarrow	*	1	←	1	1	1	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	476		100	473		44	ተተ _ጉ		ř	ተተጉ	
Volume (vph)	274	542	101	70	929	211	173	1598	70	176	1332	392
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	Digital Colonia
Storage Length (ft)	100		0	0		0	300		0	350		0
Storage Lanes	1		0	0		0	2		0	1		0
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	1579	3242	0	0	3371	0	3367	4958	0	1719	4772	0
Flt Permitted	0.950	0.998			0.997		0.950			0.950		RANGE I
Satd. Flow (perm)	1579	3242	0	0	3371	0	3367	4958	0	1719	4772	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			35			45			45	
Link Distance (ft)		631			1145	38		1101			1010	
Travel Time (s)		9.6			22.3			16.7			15.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)											•	· ·
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)	10%										070	
Lane Group Flow (vph)	274	744	0	0	1344	0	192	1854	0	196	1916	0
Turn Type	Split			Split			Prot			Prot	10.10	
Protected Phases	4	4		3	3		5	2		1	6	
Permitted Phases							and in the 1900	AMERICA DESCRIPTION OF THE PERSON OF THE PER				
Detector Phase	4	4		3	3		5	2		1	6	
Switch Phase							January 1970					
Minimum Initial (s)	7.0	7.0		7.0	7.0		7.0	14.0		7.0	14.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		14.0	21.0		14.0	21.0	
Total Split (s)	37.0	37.0	0.0	60.0	60.0	0.0	14.0	61.0	0.0	22.0	69.0	0.0
Total Split (%)	20.6%	20.6%	0.0%	33.3%	33.3%	0.0%	7.8%	33.9%	0.0%	12.2%	38.3%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	AL MERI	5.0	5.0		5.0	5.0	10.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead	Lead	KO SETEN	Lag	Lag		Lead	Lead	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max		None	C-Max	
Act Effct Green (s)	32.0	32.0		110110	55.0		9.0	56.0		17.0	64.0	
Actuated g/C Ratio	0.18	0.18			0.31		0.05	0.31		0.09	0.36	
v/c Ratio	0.98	1.29			1.30		1.14	1.20		1.21	1.13	
Control Delay	119.3	198.7			191.7		183.4	148.8		201.4	117.7	
Queue Delay	0.0	0.0			0.0		0.0	0.0		0.0	0.0	
Total Delay	119.3	198.7			191.7		183.4	148.8		201.4	117.7	
LOS	F	F			F		F	F		201.4 F	F	
		0.57	-		1		(II)			187	1	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	CDI	CDT	CDD
	EDL		EDN	WDL		Won	NDL	INDI	NDH	SBL	SBT	SBR
Approach Delay		177.3			191.7			152.0			125.5	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	359	~612			~1066		~136	~969		~281	~956	
Queue Length 95th (ft)	#579	#756			#1207		#227	#1059		#459	#1043	
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	100						300			350		
Base Capacity (vph)	281	576			1030		168	1542		162	1697	
Starvation Cap Reductn	0	0			0		0	0		0	0	
Spillback Cap Reductn	0	0			0		0	0		0	0	
Storage Cap Reductn	0	0			0		0	0		0	0	
Reduced v/c Ratio	0.98	1.29			1.30		1.14	1.20		1.21	1.13	

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.30

Intersection Signal Delay: 155.6

Intersection Capacity Utilization 110.7%

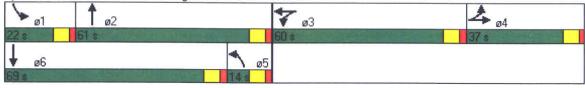
Intersection LOS: F

ICU Level of Service H

Analysis Period (min) 15

- Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
- # 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		476			र्नी के			4			4	
Volume (vph)	32	722	52	86	1091	54	70	92	86	66	112	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	0		0	0		0	0		0	0		0
Storage Lanes	0		0	0		0	0		0	0		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	0	3430	0	0	3437	0	0	1768	0	0	1792	0
Flt Permitted		0.840			0.801			0.798			0.798	
Satd. Flow (perm)	0	2887	0	0	2761	0	0	1431	0	0	1450	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1145			1538	35.5		989			307	
Travel Time (s)		22.3			30.0			19.3			6.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)											Acand 18—501/5(III	
Lane Group Flow (vph)	0	896	0	0	1368	0	0	276	0	0	263	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8	Committee of the	
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	10.0	10.0		10.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	37.0	37.0	0.0	37.0	37.0	0.0	23.0	23.0	0.0	23.0	23.0	0.0
Total Split (%)	61.7%	61.7%	0.0%	61.7%	61.7%	0.0%	38.3%	38.3%	0.0%	38.3%	38.3%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag		W SER			Markey.		esta como		A YARE DE		12 127	
Lead-Lag Optimize?												
Recall Mode	Max	Max		None	None		None	None		None	None	
Act Effct Green (s)		32.1		110110	32.1		Hono	16.0		Hono	16.0	
Actuated g/C Ratio		0.55			0.55			0.28			0.28	
v/c Ratio		0.56			0.90			0.70			0.66	
Control Delay		10.6			22.8			29.6			27.3	
Queue Delay		0.0			0.0			0.0			0.0	
					22.8			29.6				
Total Delay		10.6			// 8			/ M D			27.3	

	*	\rightarrow	-	6	4		4	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		10.6			22.8		, inde	29.6		ODL	27.3	OUI
Approach LOS		В			С			С			С	
Queue Length 50th (ft)		104			217			86			80	
Queue Length 95th (ft)		153			#376			#164			149	
Internal Link Dist (ft)		1065			1458			909			227	
Turn Bay Length (ft)												
Base Capacity (vph)		1594			1524			429			435	
Starvation Cap Reductn		0			0			0			0	
Spillback Cap Reductn		0			0			0			0	
Storage Cap Reductn		0			0			0			0	
Reduced v/c Ratio		0.56			0.90			0.64			0.60	

Area Type: Other

Cycle Length: 60

Actuated Cycle Length: 58.1

Natural Cycle: 60

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

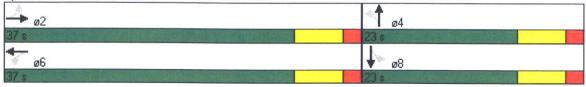
Intersection Signal Delay: 20.0

Intersection LOS: B
ICU Level of Service E

Intersection Capacity Utilization 88.1%

Analysis Period (min) 15

Splits and Phases: 2: Farmville Boulevard & Bancroft Avenue



^{# 95}th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

	×	7		×	7	1
Lane Group	SET	SER	NWL	NWT	NEL	NER
Lane Configurations	ĵ.		7	ન	ħ	77
Volume (vph)	92	81	1054	84	54	767
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12
Grade (%)	0%		12	0%	0%	14
Storage Length (ft)	ABITACH LESON	0	0	0 70	175	0
Storage Lanes		0	1		1/3	2
Taper Length (ft)		100	100		100	100
Satd. Flow (prot)	1712	0		1004		
Flt Permitted	1/12	U	1649	1664	1736	2733
	1710		0.950	0.959	0.950	
Satd. Flow (perm)	1712	0	1649	1664	1736	2733
Right Turn on Red		No				No
Satd. Flow (RTOR)						
Link Speed (mph)	35			35	35	
Link Distance (ft)	782			1306	1538	18
Travel Time (s)	15.2			25.4	30.0	
Confl. Peds. (#/hr)						
Confl. Bikes (#/hr)						
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Growth Factor	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0
Parking (#/hr)		U	U	U	U	0
Mid-Block Traffic (%)	0%			0%	0%	
	070		400/	0%	0%	
Shared Lane Traffic (%)	100	0	46%	000	00	050
Lane Group Flow (vph)	192	0	632	632	60	852
Turn Type			custom			pt+ov
Protected Phases	4		2	2	1	12
Permitted Phases			2			
Detector Phase	4		2	2	1	12
Switch Phase						
Minimum Initial (s)	7.0		10.0	10.0	7.0	
Minimum Split (s)	14.0		17.0	17.0	14.0	
Total Split (s)	22.0	0.0	54.0	54.0	14.0	68.0
Total Split (%)	24.4%	0.0%	60.0%	60.0%	15.6%	75.6%
Yellow Time (s)	5.0	RESIDENT.	5.0	5.0	5.0	
All-Red Time (s)	2.0		2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	2.0				
THE RESIDENCE OF THE PARTY OF T	5.0	2.0	5.0	5.0	5.0	5.0
Lead/Lag			Lag	Lag	Lead	
Lead-Lag Optimize?	entre Mariane		Yes	Yes	Yes	
Recall Mode	None		None	None	None	EUR LE
Act Effct Green (s)	15.1		44.4	44.4	9.2	58.7
Actuated g/C Ratio	0.18		0.53	0.53	0.11	0.70
v/c Ratio	0.62		0.72	0.72	0.32	0.45
Control Delay	42.8		20.9	20.6	42.5	6.5
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	42.8		20.9	20.6	42.5	6.5

Intersection Signal Delay: 18.0

Analysis Period (min) 15

Intersection Capacity Utilization 59.5%

	×	1	100	×	7	1
Lane Group	SET	SER	NWL	NWT	NEL	NER
Approach Delay	42.8			20.7	8.9	
Approach LOS	D			С	Α	
Queue Length 50th (ft)	101		262	261	32	102
Queue Length 95th (ft)	171		403	398	71	139
Internal Link Dist (ft)	702			1226	1458	
Turn Bay Length (ft)					175	
Base Capacity (vph)	342		917	926	190	1954
Starvation Cap Reductn	0		0	0	0	0
Spillback Cap Reductn	0		0	0	0	0
Storage Cap Reductn	0		0	0	0	0
Reduced v/c Ratio	0.56		0.69	0.68	0.32	0.44
Intersection Summary				To the		
Area Type:	Other	(100 m) (100 m) (100 m)		THE REAL PROPERTY.		W. British
Cycle Length: 90						*
Actuated Cycle Length: 83.	9					
Natural Cycle: 60						
Control Type: Actuated-Und	coordinated					
Maximum v/c Ratio: 0.72						

Intersection LOS: B

ICU Level of Service B

Splits and Phases: 3: W. Fourteenth Street & Farmville Boulevard



	4	×	2	1	×	₹	ን	×	a	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	J.	B		Ť	f)		ሻ	4		ሻ	f)	
Volume (vph)	22	137	22	1026	265	103	40	371	0	60	236	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	50		0	0		0	0		0	200		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	50		100	100		100	100		100	100		100
Satd. Flow (prot)	1770	1825	0	1736	1750	0	1736	1827	0	1736	1801	0
Flt Permitted	0.523			0.950			0.348			0.161		
Satd. Flow (perm)	974	1825	0	1736	1750	0	636	1827	0	294	1801	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		25			25			25			25	
Link Distance (ft)		543			147	35		189			707	
Travel Time (s)		14.8			4.0			5.2			19.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	2%	2%	2%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)									rosti me Sili			cellular (For sta
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	24	176	0	1140	408	0	44	412	0	67	290	0
Turn Type	Perm			Prot			Perm			Perm		
Protected Phases		4		3	8			2			6	
Permitted Phases	4	4					2			6		
Detector Phase	4	4		3	8		2	2		6	6	
Switch Phase										Ball Colorador		
Minimum Initial (s)	7.0	7.0		7.0	7.0		10.0	10.0		10.0	10.0	
Minimum Split (s)	14.0	14.0		14.0	14.0		17.0	17.0		17.0	17.0	
Total Split (s)	17.0	17.0	0.0	88.0	105.0	0.0	45.0	45.0	0.0	45.0	45.0	0.0
Total Split (%)	11.3%	11.3%	0.0%	58.7%	70.0%	0.0%	30.0%	30.0%	0.0%	30.0%	30.0%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	WASTE	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead		ENAN	ALL STATE		1951.95/			
Lead-Lag Optimize?	Yes	Yes		Yes								
Recall Mode	None	None		None	None		Max	Max		Max	Max	
Act Effct Green (s)	12.0	12.0		83.0	100.0		40.0	40.0		40.0	40.0	
Actuated g/C Ratio	0.08	0.08		0.55	0.67		0.27	0.27		0.27	0.27	
v/c Ratio	0.31	1.21		1.19	0.35		0.26	0.85		0.86	0.60	
Control Delay	76.1	195.4		126.1	11.9		48.4	68.9		121.5	54.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	76.1	195.4		126.1	11.9		48.4	68.9		121.5	54.3	
LOS	70.1 E	F		F	В		D	00.9 E		121.5 F	D D	
	L	L.		F	D		U	L		Г	U	

OU		1 4 1	
5/8	12	007	

	Y	×			X	7	7	×	1	Ĺ	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		181.1			96.0			66.9			66.9	
Approach LOS		F			F			Е			Е	
Queue Length 50th (ft)	23	~209		~1338	163		34	384		63	250	
Queue Length 95th (ft)	55	#369		#1604	223		73	#557		#164	353	
Internal Link Dist (ft)		463			67			109			627	
Turn Bay Length (ft)	50									200		
Base Capacity (vph)	78	146		961	1167		170	487		78	480	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.31	1.21		1.19	0.35		0.26	0.85		0.86	0.60	

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Natural Cycle: 110

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.21 Intersection Signal Delay: 93.4

Intersection LOS: F ICU Level of Service H

Intersection Capacity Utilization 109.9%

Analysis Period (min) 15

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 4: W. Tenth Street & Dickinson Avenue



	1	→	*	1	4	*	1	†	-	1		1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť			ħ	† }		ħ	1	11011	T	1	ODIT
Volume (vph)	55		133	286	1161	66	236	1552	372	40	716	46
Ideal Flow (vphpl)	1900		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12		12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	-		0%	12	mediand 4	0%	12	12	0%	12
Storage Length (ft)	50	HARAMA	0	125		0	125	070	0	125	0 70	0
Storage Lanes	1		0	1		0	1		0	123		0
Taper Length (ft)	50		100	50		100	50		100	50		0
Satd. Flow (prot)	1736	3402	0	1736	3443	0	1752	3403	0	1752	3473	100
Flt Permitted	0.950	0102	Reaction St	0.950	0770		0.950	3403	U		3473	0
Satd. Flow (perm)	1736	3402	0	1736	3443	0	1752	2402	0	0.950	0.470	HERE
Right Turn on Red	1700	3402	No	1730	3443	No	1752	3403	0	1752	3473	0
Satd. Flow (RTOR)			140			140			No			No
Link Speed (mph)		25			35			25			05	
Link Distance (ft)		1633			628	ESPONE AND		35			25	
Travel Time (s)		44.5						931			570	
Confl. Peds. (#/hr)		44.0			12.2			18.1			15.5	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.00	0.00	0.00	0.00	0.00	0.00	0.00		MATERIAL STREET		
Growth Factor	100%	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Bus Blockages (#/hr)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr) Mid-Block Traffic (%)		00/			00/							
Shared Lane Traffic (%)		0%			0%			0%			0%	
Lane Group Flow (vph)	01	4000	•	040	1000		Consultation of the last of th	odn sås permeter	FW-01-070-1			
Turn Type	61	1089	0	318	1363	0	262	2137	0	44	847	0
Protected Phases	Prot	0		Prot	en (oten Liveragina		Prot	SERVICE FOR THE PROPERTY.		Prot		
Permitted Phases	5	2		1	6		7	4		3	8	
Detector Phase	-							- Elizabeta de la composición				
Switch Phase	5	2		1	6		7	4		3	8	
	7.0	40.0		7.0	10.0							
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	22.0		14.0	22.0	DE II DEMESIA	14.0	22.0		14.0	22.0	
Total Split (s)	14.0	43.0	0.0	24.0	53.0	0.0	32.0	69.0	0.0	14.0	51.0	0.0
Total Split (%)	9.3%	28.7%	0.0%	16.0%	35.3%	0.0%	21.3%	46.0%	0.0%	9.3%	34.0%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lead		Lag	Lag		Lead	Lag		Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	9.0	38.0		19.0	50.8		26.0	66.8		9.0	47.0	
Actuated g/C Ratio	0.06	0.25		0.13	0.34		0.17	0.45		0.06	0.31	
v/c Ratio	0.59	1.26		1.45	1.17		0.86	1.41		0.42	0.78	
Control Delay	91.1	172.8		228.3	93.6		86.3	221.7		80.6	53.0	
Queue Delay	0.0	2.0		0.0	21.6		0.0	0.0		0.0	0.0	
Total Delay	91.1	174.7		228.3	115.2		86.3	221.7		80.6	53.0	
LOS	F	F		F	F		F	F		F		

	۶	\rightarrow	*	1	4	*	1	†	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		170.3			136.6			206.9			54.3	
Approach LOS		F			F			F			D	
Queue Length 50th (ft)	59	~702		~416	~851		250	~1506		42	401	
Queue Length 95th (ft)	#122	#842		m189	m158		#396	#1636		86	485	
Internal Link Dist (ft)		1553			548			851			490	
Turn Bay Length (ft)	50			125	The second second		125			125	100	
Base Capacity (vph)	104	862		220	1166		315	1516		105	1088	
Starvation Cap Reductn	0	0		0	47		0	0		0	0	
Spillback Cap Reductn	0	3		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.59	1.27		1.45	1.22		0.83	1.41		0.42	0.78	

Area Type: Other

Cycle Length: 150

Actuated Cycle Length: 150

Offset: 4 (3%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 150

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.45

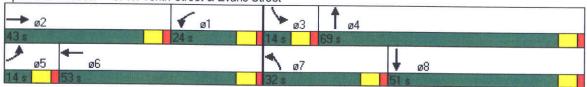
Intersection Signal Delay: 158.5 Intersection Capacity Utilization 120.8%

Intersection LOS: F
ICU Level of Service H

Analysis Period (min) 15

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	2	1	×	*	ን	×	a	Ĺ	K	100
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	1		ሻ	4 %		Ť	f)		*	f)	
Volume (vph)	365	441	117	265	589	81	144	832	243	65	718	385
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	1.4
Storage Length (ft)	100		0	175		0	50	SUCTOR	0	50		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1736	3364	0	1736	3409	0	1736	1765	0	1736	1732	0
Flt Permitted	0.950			0.950			0.950			0.950	Mary I.A.	CHARGE.
Satd. Flow (perm)	1736	3364	0	1736	3409	0	1736	1765	0	1736	1732	0
Right Turn on Red			No		国际	No			No		1702	No
Satd. Flow (RTOR)									110			140
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	SHASIM PA		902			1042	
Travel Time (s)		25.4			15.3			24.6			28.4	
Confl. Peds. (#/hr)					10.0			21.0			20.7	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						N-I-IO		U	O	O	0	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)					0 /0			070			0 70	
Lane Group Flow (vph)	406	620	0	294	744	0	160	1194	0	72	1226	0
Turn Type	Prot			Prot			Prot	1101		Prot	1220	O
Protected Phases	5	2		1	6		7	4		3	8	
Permitted Phases					III DA DE COMPA					Table 1		
Detector Phase	5	2		1	6		7	4		3	8	
Switch Phase							State State (1974)	The state of the s				
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0		14.0	23.0	
Total Split (s)	34.0	39.0	0.0	33.0	38.0	0.0	18.0	94.0	0.0	14.0	90.0	0.0
Total Split (%)	18.9%	21.7%	0.0%	18.3%	21.1%	0.0%	10.0%	52.2%	0.0%	7.8%	50.0%	0.0%
Yellow Time (s)	5.0	5.0	HARRE	5.0	5.0		5.0	5.0	0.070	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag	2.0	Lead	Lag	2.0	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes		Yes	Yes	
Recall Mode	None	Max		None	Max		None	None		None	None	
Act Effct Green (s)	29.0	34.0		28.0	33.0		13.0	89.0		9.0	85.0	
Actuated g/C Ratio	0.16	0.19		0.16	0.18		0.07	0.49		0.05	0.47	
v/c Ratio	1.45	0.98		1.09	1.19		1.28	1.37		0.03	1.50	
Control Delay	270.2	101.6		147.6	160.6		233.9	208.9		139.3	265.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	270.2	101.6		147.6	160.6		233.9	208.9		139.3		
LOS	F	F									265.3	
100	E,	Г		F	F		F	F		F	F	

	4	×)		K	7	7	×	a	4	K	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		168.3			157.0			211.9			258.4	
Approach LOS		F			F			F			F	
Queue Length 50th (ft)	~651	388		~389	~555		~238	~1853		86	~1998	
Queue Length 95th (ft)	#878	#521		#594	#693		#404	#2119		#190	#2267	
Internal Link Dist (ft)		1226			707			822			962	
Turn Bay Length (ft)	100			175			50			50		
Base Capacity (vph)	280	635		270	625		125	873		87	818	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	1.45	0.98		1.09	1.19		1.28	1.37		0.83	1.50	

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Natural Cycle: 150

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 1.50 Intersection Signal Delay: 203.1 Intersection Capacity Utilization 125.0%

Intersection LOS: F
ICU Level of Service H

Analysis Period (min) 15

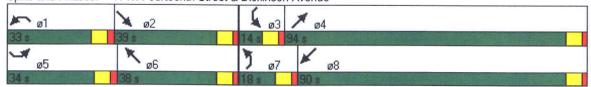
~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



Appendix C

Intersection Analysis Output Reports

d) Build 2005

1: Stantonsburg Road & Memorial Drive

	۶	-	7	1	4	4	1	†	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ارار	^	7	1	ተተ	7	ሻሻ	ተተተ	7	ሻ	ተ ተተ	7
Volume (vph)	287	708	135	58	439	101	83	695	58	126	869	221
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	<i>3.</i> ₩	0%	3/55		0%	\$ =		0%	<u> 10 mai - </u>	100	0%	
Storage Length (ft)	425	7.4	200	350		200	300	0,0	125	475	0,70	350
Storage Lanes	2		1	1		1	2		1	1		1
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Flt Permitted	0.950		1000	0.950	4	1000	0.950	1000	1000	0.950	10 10	1000
Satd. Flow (perm)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Right Turn on Red	0007	0471	No	1700	0471	No	0007	4000	No	1713	7070	No
Satd. Flow (RTOR)			110			140			140			140
Link Speed (mph)		45			40			45			45	
Link Distance (ft)		631			1145	N.		1101			1010	
Travel Time (s)		9.6			19.5			16.7			15.3	
Confl. Peds. (#/hr)		3.0			19.5			10.7			15.5	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Heavy Vehicles (%)				4%	4%	4%						100%
	4%	4%	4%				4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr) Parking (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	319	787	150	64	488	112	92	772	64	140	966	246
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	14.0	7.0
Minimum Split (s)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	21.0	14.0	14.0	21.0	14.0
Total Split (s)	28.0	54.0	16.0	17.0	43.0	27.0	16.0	42.0	17.0	27.0	53.0	28.0
Total Split (%)	20.0%	38.6%	11.4%	12.1%	30.7%	19.3%	11.4%	30.0%	12.1%	19.3%	37.9%	20.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	20.0	40.5	56.4	11.2	31.7	54.9	10.9	50.1	66.2	18.3	57.4	82.4
Actuated g/C Ratio	0.14	0.29	0.40	0.08	0.23	0.39	0.08	0.36	0.47	0.13	0.41	0.59
v/c Ratio	0.66	0.29	0.40	0.46	0.23	0.39	0.08	0.43	0.47	0.13	0.41	0.59
Control Delay	63.5	51.4	27.4	71.3	40.6	27.4	64.7	36.9	23.9	69.5	32.4	16.0
Queue Delay	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 Delay LOS	63.5 E	51.4	27.4	71.3	40.6	27.4	64.7	36.9	23.9	69.5	32.4	16.0
	E	D	С	Е	D	С	Е	D	С	Е	С	В

	1	-	-	6	-	1	4	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		51.6			41.3			38.8			33.3	
Approach LOS		D			D			D			C	
Queue Length 50th (ft)	143	346	89	60	165	61	41	198	32	122	238	107
Queue Length 95th (ft)	191	392	127	112	195	103	71	272	71	190	310	175
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	425		200	350		200	300		125	475		350
Base Capacity (vph)	553	1215	632	149	942	653	276	1784	744	272	2026	939
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.65	0.24	0.43	0.52	0.17	0.33	0.43	0.09	0.51	0.48	0.26

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 28 (20%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 70

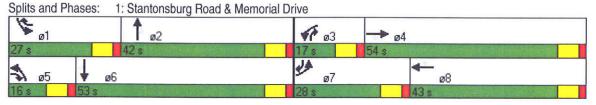
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 41.2 Intersection Capacity Utilization 64.7% Intersection LOS: D ICU Level of Service C

Analysis Period (min) 15

Splits and Phases:



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	1	\rightarrow	*	1	+	1	1	1	1	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ቫ	♠ ∱		7	47>		ሻ	f)		ħ	B	
Volume (vph)	38	815	43	18	544	14	53	99	33	22	86	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	125		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1736	3443	0	1736	3457	0	1787	1810	0	1787	1795	0
Flt Permitted	0.417			0.279			0.669			0.652		
Satd. Flow (perm)	762	3443	0	510	3457	0	1259	1810	0	1227	1795	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1145			1535			989			307	
Travel Time (s)		19.5			26.2			19.3			6.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	954	0	20	620	0	59	147	0	24	138	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase	1981	10/2/1.001		7804000	1 promise in							
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	43.0	43.0	0.0	43.0	43.0	0.0	27.0	27.0	0.0	27.0	27.0	0.0
Total Split (%)	61.4%	61.4%	0.0%	61.4%	61.4%	0.0%	38.6%	38.6%	0.0%	38.6%	38.6%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	50.8	50.8		50.8	50.8		13.0	13.0		13.0	13.0	
Actuated g/C Ratio	0.73	0.73		0.73	0.73		0.19	0.19		0.19	0.19	
v/c Ratio	0.08	0.38		0.05	0.25		0.25	0.44		0.11	0.41	
Control Delay	2.4	2.6		3.3	4.7		25.9	28.7		23.1	28.2	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	2.4	2.6		3.3	4.7		25.9	28.7		23.1	28.2	
LOS	Α	Α		Α	Α		C	C		C	C	

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U	O	4	v	U	1

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay	- 41	2.5		1 + 7	4.6			27.9			27.4	
Approach LOS		Α			Α			C			С	
Queue Length 50th (ft)	5	83		6	127		22	57		9	53	
Queue Length 95th (ft)	m8	96		m3	28		49	99		26	94	
Internal Link Dist (ft)		1065			1455			909			227	
Turn Bay Length (ft)	100			100			125			100		
Base Capacity (vph)	553	2499		370	2509		396	569		386	564	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.38		0.05	0.25		0.15	0.26		0.06	0.24	

Area Type:

Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 33 (47%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.44

Intersection Signal Delay: 7.8 Intersection Capacity Utilization 57.1% Intersection LOS: A ICU Level of Service B

Analysis Period (min) 15

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

2: Farmville Boulevard & Line Avenue Splits and Phases:



10/25/2007

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ħ	1>		أبرابر	^	7	7	44	7	ħ	44	
Volume (vph)	29	50	18	207	62	122	27	583	254	130	362	34
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%		144	0%	12
Storage Length (ft)	200		0	275	101	250	125	070	275	400	0 70	0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	1773	0	3400	1845	1568	1736	3471	1553	1736	3426	0
Flt Permitted	0.712		7 - 7	0.950			0.950	0171	1000	0.950	0120	U
Satd. Flow (perm)	1313	1773	0	3400	1845	1568	1736	3471	1553	1736	3426	0
Right Turn on Red			No			No	1100	0111	No	1700	0420	No
Satd. Flow (RTOR)			33,00						110			110
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		782			1306			1535			385	
Travel Time (s)		15.2			25.4			26.2			6.6	
Confl. Peds. (#/hr)					20.1			20.2			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						0	U	U	U	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		-5/3/5/						070			0 / 0	
Lane Group Flow (vph)	32	76	0	230	69	136	30	648	282	144	440	0
Turn Type	Perm			Prot		pm+ov	Prot		pm+ov	Prot	110	U
Protected Phases		4		3	8	1	5	2	3	1	6	
Permitted Phases	4					8			2			
Detector Phase	4	4		3	8	1	5	2	3	1	6	
Switch Phase								_		,	U	
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	12.0	
Minimum Split (s)	23.0	23.0		14.0	23.0	14.0	14.0	23.0	14.0	14.0	23.0	
Total Split (s)	26.0	26.0	0.0	26.0	52.0	32.0	16.0	56.0	26.0	32.0	72.0	0.0
Total Split (%)	18.6%	18.6%	0.0%	18.6%	37.1%	22.9%	11.4%	40.0%	18.6%	22.9%	51.4%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead		Lead	Lead	Lag	Lead	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	
Act Effct Green (s)	13.3	13.3		16.7	35.1	58.9	10.3	71.1	92.8	18.9	85.2	
Actuated g/C Ratio	0.10	0.10		0.12	0.25	0.42	0.07	0.51	0.66	0.14	0.61	
v/c Ratio	0.26	0.45		0.57	0.15	0.21	0.23	0.37	0.27	0.62	0.21	
Control Delay	62.4	67.5		63.4	39.7	24.6	94.1	7.2	4.6	61.3	4.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	62.4	67.5		63.4	39.7	24.6	94.1	7.2	4.6	61.3	4.1	
LOS	Е	Е		Е	D	С	F	A	A	E	A	

	4	X	1	1	K	1	7	A	a	4	K	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		66.0		100	47.5		18 Z-17 S	9.2		*581	18.2	
Approach LOS		E			D			Α			В	
Queue Length 50th (ft)	28	67		103	49	78	29	20	14	88	17	
Queue Length 95th (ft)	61	117		143	84	102	66	290	233	99	157	
Internal Link Dist (ft)		702			1226			1455			305	
Turn Bay Length (ft)	200			275		250	125		275	400		
Base Capacity (vph)	197	266		510	619	751	140	1762	1077	335	2086	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.16	0.29		0.45	0.11	0.18	0.21	0.37	0.26	0.43	0.21	

Area Type:

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 14 (10%), Referenced to phase 2:NET and 6:SWT, Start of Green

Other

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 22.6

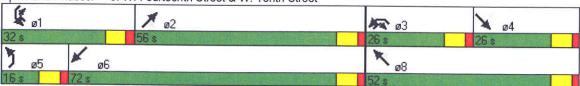
Intersection Capacity Utilization 48.4%

Intersection LOS: C

ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: W. Fourteenth Street & W. Tenth Street



	-	-	4	-	4	4
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	1			44		77
Volume (veh/h)	756	32	0	547	0	22
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	840	36	0	608	0	24
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	385					
pX, platoon unblocked			0.89		0.89	0.89
vC, conflicting volume			876		1162	438
vC1, stage 1 conf vol			0,0		1102	100
vC2, stage 2 conf vol						
vCu, unblocked vol			611		933	119
tC, single (s)			4.2		6.8	6.9
tC, 2 stage (s)			1,12		0.0	0.0
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			845		236	810
	ED.4	ED 0		WD 0		010
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NW 1	
Volume Total	560	316	304	304	24	
Volume Left	0	0	0	0	0	
Volume Right	0	36	0	0	24	
cSH	1700	1700	1700	1700	810	
Volume to Capacity	0.33	0.19	0.18	0.18	0.03	
Queue Length 95th (ft)	0	0	0	0	2	
Control Delay (s)	0.0	0.0	0.0	0.0	9.6	
Lane LOS					Α	
Approach Delay (s)	0.0		0.0		9.6	
Approach LOS					Α	
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utiliza	ation		31.9%	IC	CU Level o	of Service
Analysis Period (min)			15			
110000000000000000000000000000000000000			V R 1			

	1	-	*	1	-	•	1	Ť	1	-	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	^	7"	77	^ ^	7	1/4	^	7	الرابر	个个	7
Volume (vph)	38	621	113	174	466	57	81	343	166	108	693	54
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	400		425	475		300	325		650	350	أتري	275
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			35			25	
Link Distance (ft)		3235			628	8		931			570	
Travel Time (s)		55.1			12.2			18.1			15.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)											3/4	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	690	126	193	518	63	90	381	184	120	770	60
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	5	2	7	1	6	3	7	4	1	3	8	5
Permitted Phases			2			6			4			8
Detector Phase	5	2	7	1	6	3	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0
Total Split (s)	15.0	52.0	16.0	20.0	57.0	15.0	16.0	53.0	20.0	15.0	52.0	15.0
Total Split (%)	10.7%	37.1%	11.4%	14.3%	40.7%	10.7%	11.4%	37.9%	14.3%	10.7%	37.1%	10.7%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	10.3	54.8	65.3	14.5	61.9	76.8	10.4	40.7	55.3	9.9	40.2	55.5
Actuated g/C Ratio	0.07	0.39	0.47	0.10	0.44	0.55	0.07	0.29	0.40	0.07	0.29	0.40
v/c Ratio	0.33	0.51	0.17	0.55	0.34	0.07	0.36	0.37	0.30	0.50	0.76	0.10
Control Delay	93.5	21.2	8.9	56.1	18.1	8.9	65.5	39.8	19.1	70.2	50.7	25.2
Queue Delay	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 Delay	93.5	21.2	8.9	56.1	18.1	8.9	65.5	39.8	19.1	70.2	50.7	25.2
LOS	F	C	Α	Ε	В	Α	Е	D	В	Ε	D	С

-					10/2	5/2007
	1	†	~	1	Į.	1
R	NBL	NBT	NBR	SBL	SBT	SBR
	, RIA	37.5		0.00	51.6	
		D				

	1	\rightarrow	-	1	-	-	1	T	1	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		23.0		70.5	26.8			37.5		Allega,	51.6	11-11-1
Approach LOS		C			C			D			D	
Queue Length 50th (ft)	40	140	25	89	149	11	40	144	83	55	337	34
Queue Length 95th (ft)	82	173	39	131	164	21	70	178	114	89	385	61
Internal Link Dist (ft)		3155			548			851			490	
Turn Bay Length (ft)	400		425	475		300	325		650	350		275
Base Capacity (vph)	131	1360	730	361	1535	853	267	1202	624	243	1177	625
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.32	0.51	0.17	0.53	0.34	0.07	0.34	0.32	0.29	0.49	0.65	0.10

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 48 (34%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

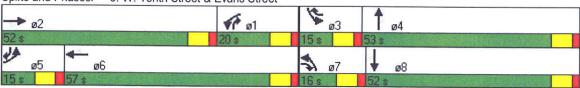
Intersection Signal Delay: 35.2

Intersection Capacity Utilization 64.7%

Intersection LOS: D ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: W. Tenth Street & Evans Street



1	0	25	/20	00	7
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	4	×	1	1	K	₹	7	×	74	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	F	1		ħ	1		ሻ	^	7	Ť		OTT
Volume (vph)	45	322	69	190	263	16	57	166	190	20	208	45
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%	1.50		0%	14	12	0%	12
Storage Length (ft)	100		0	350	7.3.4.3	0	275	070	175	100	070	0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1752	3410	0	1752	3473	0	1752	1845	1568	1752	1795	0
Flt Permitted	0.950			0.950			0.950			0.950	The Sec	
Satd. Flow (perm)	1752	3410	0	1752	3473	0	1752	1845	1568	1752	1795	0
Right Turn on Red			No			No		7-15-	No			No
Satd. Flow (RTOR)												110
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	8		902			1147	
Travel Time (s)		25.4			15.3			24.6			31.3	
Confl. Peds. (#/hr)											0110	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								11.00	_			
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	50	435	0	211	310	0	63	184	211	22	281	0
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		7	4	1	3	8	
Permitted Phases									4			
Detector Phase	5	2		1	6		7	4	1	3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0	14.0	14.0	23.0	
Total Split (s)	16.0	40.0	0.0	37.0	61.0	0.0	16.0	47.0	37.0	16.0	47.0	0.0
Total Split (%)	11.4%	28.6%	0.0%	26.4%	43.6%	0.0%	11.4%	33.6%	26.4%	11.4%	33.6%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	10.5	42.9		21.4	57.9		10.6	29.2	55.8	9.8	25.6	
Actuated g/C Ratio	0.09	0.37		0.18	0.49		0.09	0.25	0.48	0.08	0.22	
v/c Ratio	0.32	0.35		0.66	0.18		0.40	0.40	0.28	0.15	0.72	
Control Delay	61.5	31.7		56.8	20.6		63.8	41.2	19.9	58.4	54.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	61.5	31.7		56.8	20.6		63.8	41.2	19.9	58.4	54.5	
LOS	Е	C		Е	С		Е	D	В	E	D	

7: W. Fourteenth Street & Dickinson Avenue

	4	×	2		K		7	A	1	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay	27 - 19 - 1	34.7	217		35.2		The same	34.5	W. S. C. C. C. C. C. C. C. C. C. C. C. C. C.	500 200 0	54.8	
Approach LOS		C			D			C			D	
Queue Length 50th (ft)	38	134		161	77		49	128	107	17	213	
Queue Length 95th (ft)	85	218		248	123		103	202	148	47	310	
Internal Link Dist (ft)		1226			707			822			1067	
Turn Bay Length (ft)	100			350			275		175	100		
Base Capacity (vph)	170	1249		495	1715		170	684	903	170	665	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.29	0.35		0.43	0.18		0.37	0.27	0.23	0.13	0.42	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 117.2

Natural Cycle: 75

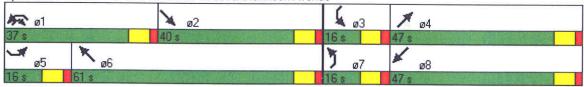
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.72 Intersection Signal Delay: 38.3 Intersection Capacity Utilization 57.8%

Intersection LOS: D
ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



	*	→	7	1	4	1	1	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	ተተ	7	ሻ	ተተ	7	إرار	ተተተ	7	ሻ	444	7"
Volume (vph)	154	381	72	86	659	151	124	1042	86	126	864	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	425		200	350		200	300		125	475		350
Storage Lanes	2		1	1		1	2		1	1		1
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Flt Permitted	0.950			0.950			0.950			0.950	- 73 E	
Satd. Flow (perm)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Right Turn on Red			No			No		2,10	No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			40			45			45	
Link Distance (ft)		631			1145	-		1101			1010	
Travel Time (s)		9.6			19.5			16.7			15.3	
Confl. Peds. (#/hr)		0.0			10.0			10.7			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	U	0	U	U	U	U	U	U	U	0	U	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		0 70			0 70			0 /0			0 /0	
Lane Group Flow (vph)	171	423	80	96	732	168	138	1158	96	140	960	251
Turn Type	Prot	420	pm+ov	Prot	102	pm+ov	Prot	1130	pm+ov	Prot	900	
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	pm+ov 7
Permitted Phases	1	4	4	3	0	8	3	2	2	- 1	0	
Detector Phase	7	4	5	3	8	1	5	2	3	- 1	6	6
Switch Phase	1	4	J	9	0		3	2	3		0	I
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	14.0	7.0
Minimum Split (s)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	21.0	14.0	14.0		7.0
Lighter to add the state of the											21.0	14.0
Total Split (s) Total Split (%)	17.0	43.0	15.0	20.0	46.0	25.0	15.0	52.0	20.0	25.0	62.0	17.0
	12.1%		10.7%	14.3%	32.9%	17.9%	10.7%	37.1%	14.3%	17.9%	44.3%	12.1%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	11.8	35.2	51.2	13.6	37.0	59.6	11.0	53.6	72.2	17.5	60.2	77.0
Actuated g/C Ratio	0.08	0.25	0.37	0.10	0.26	0.43	0.08	0.38	0.52	0.12	0.43	0.55
v/c Ratio	0.60	0.48	0.14	0.57	0.80	0.25	0.52	0.61	0.12	0.65	0.45	0.30
Control Delay	71.2	46.4	29.9	76.6	38.5	24.9	69.6	37.5	19.4	72.4	29.6	18.8
Queue Delay	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 Delay	71.2	46.4	29.9	76.6	38.5	24.9	69.6	37.5	19.4	72.4	29.6	18.8
LOS	E	D	C	E	D	C	Е	D	В	Е	C	В

1: Stantonsburg Road & Memorial Drive

	1	-	*	1	-	*	1	†	1	-	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		50.7	-		39.8		900	39.4		THE S	32.1	
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	78	174	47	89	217	88	62	317	45	122	233	125
Queue Length 95th (ft)	119	222	87	153	261	131	100	388	83	195	275	185
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	425		200	350		200	300		125	475		350
Base Capacity (vph)	289	942	568	186	1017	689	264	1911	817	247	2123	848
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.59	0.45	0.14	0.52	0.72	0.24	0.52	0.61	0.12	0.57	0.45	0.30

Intersection Summary

Area Type:

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 132 (94%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 39.0 Intersection Capacity Utilization 67.8% Intersection LOS: D ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Stantonsburg Road & Memorial Drive

Other



	٠	→	*	1	4	4	1	1	1	1		1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ħ	1		ሻ	A D		ħ	ĵ.		ħ	f)	
Volume (vph)	25	544	29	27	815	22	43	81	27	26	106	46
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	100		0	125		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1736	3443	0	1736	3457	0	1787	1810	0	1787	1797	0
Flt Permitted	0.281			0.407			0.611			0.680		
Satd. Flow (perm)	513	3443	0	744	3457	0	1149	1810	0	1279	1797	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1145			1535			989			307	
Travel Time (s)		19.5			26.2			19.3			6.0	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	636	0	30	930	0	48	120	0	29	169	0
Turn Type	Perm			Perm			Perm			Perm		
Protected Phases		2			6			4			8	
Permitted Phases	2			6			4			8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase												
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	43.0	43.0	0.0	43.0	43.0	0.0	27.0	27.0	0.0	27.0	27.0	0.0
Total Split (%)	61.4%	61.4%	0.0%	61.4%	61.4%	0.0%	38.6%	38.6%	0.0%	38.6%	38.6%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0		5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag												
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	46.2	46.2		46.2	46.2		13.8	13.8		13.8	13.8	
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.20	0.20		0.20	0.20	
v/c Ratio	0.08	0.28		0.06	0.41		0.21	0.34		0.11	0.48	
Control Delay	2.7	2.7		2.2	3.7		24.3	25.7		22.3	28.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	2.7	2.7		2.2	3.7		24.3	25.7		22.3	28.6	
LOS	Α	Α		Α	Α		С	С		C	С	

	1	\rightarrow	*	1	←	*	1	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		2.7			3.7			25.3		-5.427	27.7	
Approach LOS		Α			Α			C			C	
Queue Length 50th (ft)	2	25		2	76		18	45		10	65	
Queue Length 95th (ft)	m6	54		m8	90		41	81		29	110	
Internal Link Dist (ft)		1065			1455			909			227	
Turn Bay Length (ft)	100			100			125			100		
Base Capacity (vph)	339	2270		491	2280		361	569		402	565	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.08	0.28		0.06	0.41		0.13	0.21		0.07	0.30	

Area Type:

Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 64 (91%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.48

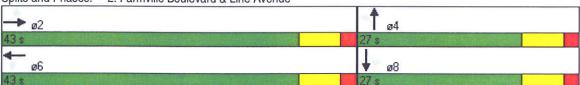
Intersection Signal Delay: 7.6 Intersection Capacity Utilization 49.9%

Intersection LOS: A ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 2: Farmville Boulevard & Line Avenue



	4	×	1	100	K	₹	7	×	74	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	7	ß		ሻሻ	^	7	ħ	44	7	W _j	1	Onk
Volume (vph)	43	76	27	265	59	159	18	389	169	192	556	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)	,_	0%			0%		12	0%	12	12	0%	12
Storage Length (ft)	200	0,0	0	275	070	250	125	070	275	400	0 70	0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	1773	0	3400	1845	1568	1736	3471	1553	1736	3436	0
FIt Permitted	0.714	1110		0.950	1010	1000	0.950	0471	1000	0.950	3430	U
Satd. Flow (perm)	1317	1773	0	3400	1845	1568	1736	3471	1553	1736	3436	0
Right Turn on Red	1011	1110	No	0100	1040	No	1700	3471	No	1730	3430	No
Satd. Flow (RTOR)			110			140			NO			INO
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		782			1306	*		1535			385	
Travel Time (s)		15.2			25.4			26.2				
Confl. Peds. (#/hr)		10.2			20.4			20.2			6.6	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00	0.00	0.00
Growth Factor	100%	100%	100%	100%	100%	100%			0.90	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	3%	3%		100%	100%	100%	100%	100%	100%
Bus Blockages (#/hr)	0	0	0	0	0	3%	4%	4%	4%	4%	4%	4%
Parking (#/hr)	0	U	U	0	U	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			00/			00/	
Shared Lane Traffic (%)		0 /0			0 %			0%			0%	
Lane Group Flow (vph)	48	114	0	294	66	177	20	432	188	213	660	0
Turn Type	Perm	3.1.1	U	Prot	00	pm+ov	Prot	402	pm+ov	Prot	000	U
Protected Phases	1 01111	4		3	8	1	5	2	3	1	6	
Permitted Phases	4	- CT		U	0	8	J	2	2	1.3	0	
Detector Phase	4	4		3	8	1	5	2	3	1	6	
Switch Phase				J	U		J	2	3		0	
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	12.0	
Minimum Split (s)	23.0	23.0		14.0	23.0	14.0	14.0	23.0	14.0	7.0	23.0	
Total Split (s)	29.0	29.0	0.0	29.0	58.0	41.0				14.0		0.0
Total Split (%)	20.7%	20.7%	0.0%	20.7%	41.4%	29.3%	16.0	41.0	29.0	41.0	66.0	0.0
Yellow Time (s)	5.0	5.0	0.076	5.0	5.0		11.4%	29.3%	20.7%	29.3%	47.1%	0.0%
All-Red Time (s)	2.0	2.0		2.0		5.0	5.0	5.0	5.0	5.0	5.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	0.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Lead/Lag			2.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead-Lag Optimize?	Lag Yes	Lag		Lead		Lead	Lead	Lag	Lead	Lead	Lag	
Recall Mode		Yes		Yes	Mana	Yes	Yes	Yes	Yes	Yes	Yes	
Act Effct Green (s)	None	None		None	None	None	None	C-Max	None	None	C-Max	
	16.3	16.3		19.3	40.6	70.1	9.7	59.9	84.2	24.5	80.3	
Actuated g/C Ratio	0.12	0.12		0.14	0.29	0.50	0.07	0.43	0.60	0.18	0.57	
v/c Ratio	0.31	0.55		0.63	0.12	0.23	0.17	0.29	0.20	0.70	0.33	
Control Delay	60.7	67.9		62.7	34.8	18.7	88.6	13.8	8.2	65.3	4.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	60.7	67.9		62.7	34.8	18.7	88.6	13.8	8.2	65.3	4.0	
LOS	E	Е		E	С	В	F	В	А	Е	Α	

4	X	1	1	K	7	7	×	74	6	K	*
SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
A STATE	65.8			44.8		-	14.5			19.0	HUT HE
	E			D			В			В	
41	100		131	44	89	19	49	16	133	20	
80	159		175	75	100	48	193	159	158	45	
	702			1226			1455			305	
200			275		250	125		275	400		
226	304		583	698	914	137	1485	986	446	1971	
0	0		0	0	0	0	0	0	0	0	
0	0		0	0	0	0	0	0	0	0	
0	0		0	0	0	0	0	0	0	0	
0.21	0.38		0.50	0.09	0.19	0.15	0.29	0.19	0.48	0.33	
	41 80 200 226 0 0	65.8 E 41 100 80 159 702 200 226 304 0 0 0 0	65.8 E 41 100 80 159 702 200 226 304 0 0 0 0	65.8 E 41 100 131 80 159 175 702 200 275 226 304 583 0 0 0 0 0 0 0 0 0	65.8	65.8	65.8	65.8 44.8 14.5 E D B 41 100 131 44 89 19 49 80 159 175 75 100 48 193 702 1226 1455 200 275 250 125 226 304 583 698 914 137 1485 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	65.8	65.8	65.8 44.8 14.5 19.0 E D B B 41 100 131 44 89 19 49 16 133 20 80 159 175 75 100 48 193 159 158 45 702 1226 1455 305 200 275 250 125 275 400 226 304 583 698 914 137 1485 986 446 1971 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 137 (98%), Referenced to phase 2:NET and 6:SWT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.70

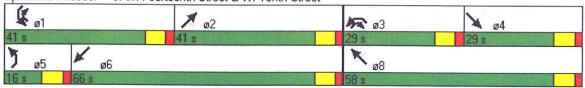
Intersection Signal Delay: 27.4

Intersection Capacity Utilization 49.1%

Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: W. Fourteenth Street & W. Tenth Street



	-	74	~	-	*	4
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	1			44		7
Volume (veh/h)	516	22	0	788	0	32
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	573	24	0	876	0	36
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)				110110		
Upstream signal (ft)	385					
pX, platoon unblocked	000		0.93		0.93	0.93
vC, conflicting volume			598		1023	299
vC1, stage 1 conf vol			550		1020	233
vC2, stage 2 conf vol						
vCu, unblocked vol			411		870	89
tC, single (s)			4.2		6.8	6.9
tC, 2 stage (s)			4.2		0.0	0.9
tF (s)			2.2		2 5	2.2
p0 queue free %					3.5	3.3
· Carrier and Carr			100		100	96
cM capacity (veh/h)			1049		270	883
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NW 1	
Volume Total	382	216	438	438	36	
Volume Left	0	0	0	0	0	
Volume Right	0	24	0	0	36	
cSH	1700	1700	1700	1700	883	
Volume to Capacity	0.22	0.13	0.26	0.26	0.04	
Queue Length 95th (ft)	0	0	0	0	3	
Control Delay (s)	0.0	0.0	0.0	0.0	9.2	
Lane LOS					Α	
Approach Delay (s)	0.0		0.0		9.2	
Approach LOS					Α	
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utiliz	ation		25.1%	IC	CU Level o	f Service
Analysis Period (min)	2000-200		15			3011100
,			10			

	1	→	*	1	+	4	4	1	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ħ	ተተ	7	ሻሻ	44	71	ሻሻ	44	7	ሻሻ	44	7"
Volume (vph)	25	414	76	213	569	69	150	636	307	46	297	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	14
Storage Length (ft)	400		425	475		300	325		650	350		275
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Flt Permitted	0.950			0.950			0.950			0.950	1 × 7 ps	
Satd. Flow (perm)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			35			25	
Link Distance (ft)		3235			628			931			570	
Travel Time (s)		55.1			12.2			18.1			15.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	28	460	84	237	632	77	167	707	341	51	330	26
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	5	2	7	1	6	3	7	4	1	3	8	5
Permitted Phases			2			6			4			8
Detector Phase	5	2	7	1	6	3	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0
Total Split (s)	16.0	42.0	19.0	31.0	57.0	16.0	19.0	51.0	31.0	16.0	48.0	16.0
Total Split (%)	11.4%	30.0%	13.6%	22.1%	40.7%	11.4%	13.6%	36.4%	22.1%	11.4%	34.3%	11.4%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	10.2	48.8	62.0	24.4	65.9	80.6	13.2	37.0	61.4	9.8	33.6	48.8
Actuated g/C Ratio	0.07	0.35	0.44	0.17	0.47	0.58	0.09	0.26	0.44	0.07	0.24	0.35
v/c Ratio	0.22	0.38	0.12	0.40	0.39	0.09	0.52	0.76	0.50	0.22	0.39	0.05
Control Delay	85.8	33.5	10.1	35.1	10.7	4.2	66.4	52.9	19.5	63.5	45.3	27.9
Queue Delay	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 Delay	85.8	33.5	10.1	35.1	10.7	4.2	66.4	52.9	19.5	63.5	45.3	27.9
LOS	F	С	В	D	В	Α	Ε	D	В	Е	D	С

19	010-1000-	_
1	0/25/2007	7

	1	\rightarrow	*	1	4	*	1	†	-	-	Į.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		32.6		7	16.2			45.4	2 / 100	Valley III.	46.5	RB T
Approach LOS		С			В			D			D	
Queue Length 50th (ft)	27	121	15	101	46	5	75	313	156	23	135	16
Queue Length 95th (ft)	60	181	40	143	130	10	114	360	185	45	167	34
Internal Link Dist (ft)		3155			548			851			490	
Turn Bay Length (ft)	400		425	475		300	325		650	350		275
Base Capacity (vph)	139	1210	697	625	1633	908	341	1152	706	267	1077	558
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	. 0
Reduced v/c Ratio	0.20	0.38	0.12	0.38	0.39	0.08	0.49	0.61	0.48	0.19	0.31	0.05

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 28 (20%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 75

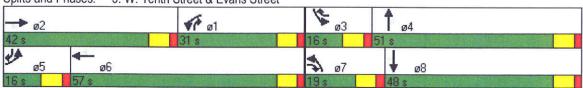
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.76

Intersection Signal Delay: 34.4 Intersection Capacity Utilization 61.6% Intersection LOS: C
ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 5: W. Tenth Street & Evans Street



7: W. Fourteenth S	h Street & Dickinson Avenue 10/2											
	4	×	1	1	K		7	A	74	Q.	×	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	T	↑ ₽		7	1		Ŋ	1	7	ħ	1>	
Volume (vph)	40	294	64	233	332	20	71	203	233	16	170	37
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	100		0	350		0	275		175	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1752	3410	0	1752	3477	0	1752	1845	1568	1752	1795	0
FIt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1752	3410	0	1752	3477	0	1752	1845	1568	1752	1795	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787			902			1147	
Travel Time (s)		25.4			15.3			24.6			31.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	44	398	0	259	391	0	79	226	259	18	230	0
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		7	4	1	3	8	
Permitted Phases									4			
Detector Phase	5	2		1	6		7	4	1	3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0	14.0	14.0	23.0	
Total Split (s)	16.0	34.0	0.0	44.0	62.0	0.0	18.0	42.0	44.0	20.0	44.0	0.0
Total Split (%)	11.4%	24.3%	0.0%	31.4%	44.3%	0.0%	12.9%	30.0%	31.4%	14.3%	31.4%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag	8474	Lead	Lag		Lead	Lag	Lead	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	10.3	40.3		24.8	58.8		11.8	30.1	60.1	9.7	22.5	
Actuated g/C Ratio	0.09	0.35		0.21	0.51		0.10	0.26	0.52	0.08	0.19	
//c Ratio	0.28	0.34		0.69	0.22		0.44	0.47	0.32	0.12	0.19	
Control Delay	59.9	32.8		53.8	19.8		62.1	41.5	17.4	57.2	54.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	59.9	32.8		53.8	19.8		62.1	41.5	17.4	57.2	54.7	
LOS	E	C		D	В		02.1 E	41.5 D	17.4 B	57.2 E		
	-	0			D			U	D		D	

1	0/2	5/2	200	7
	UIL	UI Z	·U	,,,

1	X)		K	*	7	A	4	6	K	K
SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWI	SWT	SWR
Had East	35.5			33.3							Omi
	D			С			С			D	
33	123		195	97		60	137	100	14	173	
77	204		285	149		120	250	170	40		
	1226			707			822			1067	
100			350			275		175	100		
171	1183		607	1761		202	618	1019	234	622	
0	0		0	0		0	0	0	0	0	
0	0		0	0		0	0	0	0	0	
0	0		0	0		0	0	0	0	0	
0.26	0.34		0.43	0.22		0.39	0.37	0.25	0.08	0.37	
	33 77 100 171 0 0	35.5 D 33 123 77 204 1226 100 171 1183 0 0 0 0 0 0	35.5 D 33 123 77 204 1226 100 171 1183 0 0 0 0 0 0	35.5 D 33 123 195 77 204 285 1226 100 350 171 1183 607 0 0 0 0 0 0 0 0 0	35.5 33.3 D C 33 123 195 97 77 204 285 149 1226 707 100 350 171 1183 607 1761 0 0 0 0 0 0 0 0 0 0 0 0 0	35.5 33.3 D C 33 123 195 97 77 204 285 149 1226 707 100 350 171 1183 607 1761 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	35.5	35.5 33.3 33.3 D C C 33 123 195 97 60 137 77 204 285 149 120 250 1226 707 822 100 350 275 171 1183 607 1761 202 618 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	35.5 33.3 33.3 D C C 33 123 195 97 60 137 100 77 204 285 149 120 250 170 1226 707 822 100 350 275 175 171 1183 607 1761 202 618 1019 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	35.5	35.5 33.3 33.3 54.9 D C C D 33 123 195 97 60 137 100 14 173 77 204 285 149 120 250 170 40 261 1226 707 822 1067 100 350 275 175 100 171 1183 607 1761 202 618 1019 234 622 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 116.1

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.69 Intersection Signal Delay: 36.7 Intersection Capacity Utilization 56.8%

Intersection LOS: D ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



Appendix C

Intersection Analysis Output Reports

e) Build 2010

	A	-	•	1	4	4	1	†	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	1,1	^	7	ሻ	ተተ	7	ሻሻ	444	7	ሻ	444	77
Volume (vph)	336	753	152	71	467	117	94	744	71	146	930	258
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%	Managara (T	in on adams	0%	
Storage Length (ft)	425		200	350		200	300	Harris Marie	125	475		350
Storage Lanes	2		1	1		1	2		1	1		1
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			40			45			45	
Link Distance (ft)		631			1145	35		1101			1010	
Travel Time (s)		9.6			19.5			16.7			15.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	373	837	169	79	519	130	104	827	79	162	1033	287
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	14.0	7.0
Minimum Split (s)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	21.0	14.0	14.0	21.0	14.0
Total Split (s)	30.0	53.0	14.0	18.0	41.0	29.0	14.0	40.0	18.0	29.0	55.0	30.0
Total Split (%)	21.4%	37.9%	10.0%	12.9%	29.3%	20.7%	10.0%	28.6%	12.9%	20.7%	39.3%	21.4%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	22.2	42.1	57.4	12.0	31.9	56.7	10.4	46.2	63.1	19.8	55.6	82.8
Actuated g/C Ratio	0.16	0.30	0.41	0.09	0.23	0.40	0.07	0.33	0.45	0.14	0.40	0.59
v/c Ratio	0.70	0.80	0.27	0.53	0.66	0.21	0.42	0.50	0.11	0.67	0.53	0.32
Control Delay	63.0	51.4	27.7	64.2	42.9	26.8	67.3	40.8	25.6	70.1	34.4	16.1
Queue Delay	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 Delay	63.0	51.4	27.7	64.2	42.9	26.8	67.3	40.8	25.6	70.1	34.4	16.1
LOS	Ε	D	С	Е	D	С	Е	D	C	Е	С	В

1: Stantonsburg Road & Memorial Drive

	1	-	7	1	-	*	4	†	-	-	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		51.6			42.3			42.3	TENTAL.		34.7	410000
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	167	368	98	71	187	76	46	226	42	141	269	131
Queue Length 95th (ft)	219	423	148	124	233	122	79	299	85	214	328	193
Internal Link Dist (ft)		551			1065			1021			930	STEW (STEEL)
Turn Bay Length (ft)	425		200	350		200	300		125	475		350
Base Capacity (vph)	601	1190	637	161	893	675	249	1645	712	295	1961	940
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.62	0.70	0.27	0.49	0.58	0.19	0.42	0.50	0.11	0.55	0.53	0.31

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 135 (96%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 70

Control Type: Actuated-Coordinated

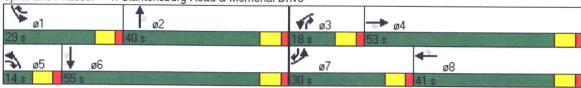
Maximum v/c Ratio: 0.80

Intersection Signal Delay: 42.7 Intersection Capacity Utilization 67.1%

Intersection LOS: D
ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



	*	→	*	•	4	*	1	†	~	1	ļ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	1		7	4 %		ሻ	7.		ħ	f)	
Volume (vph)	42	885	54	18	590	20	66	102	33	30	87	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		M. Historia	0%	· -		0%	14
Storage Length (ft)	100		0	100		0	125		0	100		0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1736	3440	0	1736	3454	0	1787	1812	0	1787	1789	0
Flt Permitted	0.391			0.249			0.661	MANUFACTURE OF THE PARTY OF THE		0.645	E STREET	SERVICE OF THE PERSON NAMED IN
Satd. Flow (perm)	714	3440	0	455	3454	0	1243	1812	0	1213	1789	0
Right Turn on Red			No	HAT VIEW AND AND AND AND AND AND AND AND AND AND		No			No	AUGUST IN		No
Satd. Flow (RTOR)												110
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1145			1535	N.		989			307	
Travel Time (s)		19.5			26.2			19.3			6.0	
Confl. Peds. (#/hr)								10.0			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)					es al el se	Na decision	× 1	- M			0	O
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								0.70			070	
Lane Group Flow (vph)	47	1043	0	20	678	0	73	150	0	33	144	0
Turn Type	Perm			Perm			Perm	100		Perm		0
Protected Phases		2			6			4			8	
Permitted Phases	2			6	Walter - 1974		4	1001 1102013		8		
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase							1000					
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	44.0	44.0	0.0	44.0	44.0	0.0	26.0	26.0	0.0	26.0	26.0	0.0
Total Split (%)	62.9%	62.9%	0.0%	62.9%	62.9%	0.0%	37.1%	37.1%	0.0%	37.1%	37.1%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	ENERIE ME	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	Marketin William		WILLIAM.		4-akota	DU HAS		Acquiring the	2.0		0.0	2.0
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	50.7	50.7		50.7	50.7		13.1	13.1		13.1	13.1	
Actuated g/C Ratio	0.72	0.72		0.72	0.72		0.19	0.19		0.19	0.19	
v/c Ratio	0.09	0.42		0.06	0.72		0.13	0.19		0.15	0.19	
Control Delay	2.4	2.6		3.0	4.3		27.1	28.6		23.7	28.4	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	2.4	2.6		3.0	4.3		27.1	28.6		23.7	28.4	
LOS	Α.4	Α		3.0 A	4.5 A		C C	20.0 C		23.7 C	20.4 C	
		Л		М	М		U	U		U	U	

2: Farmville Boulevard & Line Avenue

	1	-	7	1	-	*	1	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		2.5			4.3			28.1			27.5	
Approach LOS		Α			Α			С			С	
Queue Length 50th (ft)	6	86		5	111		27	58		12	55	
Queue Length 95th (ft)	m8	101		m5	145		58	101		32	97	
Internal Link Dist (ft)		1065			1455			909			227	
Turn Bay Length (ft)	100			100			125			100		
Base Capacity (vph)	517	2491		330	2502		373	544		364	537	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.09	0.42		0.06	0.27		0.20	0.28		0.09	0.27	

Intersection Summary

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 3 (4%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

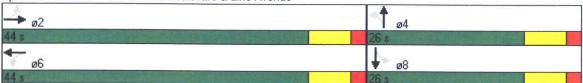
Maximum v/c Ratio: 0.44

Intersection Signal Delay: 7.7 Intersection Capacity Utilization 60.6% Intersection LOS: A ICU Level of Service B

Analysis Period (min) 15

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





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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	f)		ሻሻ	^	71	79	44	74	ሻ	1	
Volume (vph)	37	55	22	215	67	134	32	650	261	143	404	42
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	The latest and	1	0%		-	0%	12	12	0%	12
Storage Length (ft)	200		0	275	0,0	250	125	070	275	400	0 70	0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	1767	0	3400	1845	1568	1736	3471	1553	1736	3423	0
FIt Permitted	0.709	All Parks	Marie S	0.950	1040	1000	0.950	3471	1000	0.950	3423	U
Satd. Flow (perm)	1308	1767	0	3400	1845	1568	1736	3471	1553	1736	3423	0
Right Turn on Red		SCHOOL STATE	No	0400	1040	No	1730	3471	No	1730	3423	No
Satd. Flow (RTOR)			110			110			140			INO
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		782			1306	A STATE OF THE PARTY OF THE PAR		1535			385	
Travel Time (s)		15.2			25.4			26.2				
Confl. Peds. (#/hr)		10.2			20.4			20.2			6.6	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00	0.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	0.90	0.90	0.90
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%				100%	100%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0	4%	4%	4%	4%	4%	4%
Parking (#/hr)	0	U	U	U	U	U	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			0%			00/	
Shared Lane Traffic (%)		0 70			0 /0			0%			0%	
Lane Group Flow (vph)	41	85	0	239	74	149	36	722	290	159	496	0
Turn Type	Perm	00	O	Prot		pm+ov	Prot	122		Prot	490	0
Protected Phases	MARKET STATE	4		3	8	1	5	2	pm+ov 3		C	
Permitted Phases	4	The state of the s		J	U	8	J	4	2	1	6	
Detector Phase	4	4		3	8	1	5	2	3	1	C	
Switch Phase		District Tea		J	0		J	2	3	ASSAULT OF THE	6	
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	12.0	
Minimum Split (s)	23.0	23.0		14.0	23.0	14.0	14.0	23.0	14.0	14.0	12.0 23.0	
Total Split (s)	26.0	26.0	0.0	24.0	50.0	31.0	THE PERSON NAMED IN					0.0
Total Split (%)	18.6%	18.6%	0.0%	17.1%	35.7%	22.1%	15.0 10.7%	59.0 42.1%	24.0 17.1%	31.0 22.1%	75.0	0.0
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	5.0	5.0	5.0	5.0		53.6%	0.0%
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		5.0	5.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	2.0	2.0	2.0	0.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	-2.0	-2.0	-2.0	-2.0
Lead/Lag	Lag	Lag	2.0	Lead	3.0				5.0	5.0	5.0	2.0
Lead-Lag Optimize?	Yes	Yes		Yes		Lead Yes	Lead	Lag	Lead	Lead	Lag	
Recall Mode	None	None		None	None		Yes	Yes	Yes	Yes	Yes	
Act Effct Green (s)	14.1	14.1		16.6	35.7	None 60.8	None 10.4	C-Max	None	None	C-Max	
Actuated g/C Ratio	0.10	0.10		0.12	0.26		10.4	69.2	90.9	20.1	81.7	
v/c Ratio	0.10	0.10				0.43	0.07	0.49	0.65	0.14	0.58	
Control Delay	63.4	67.7		0.59	0.16	0.22	0.28	0.42	0.29	0.64	0.25	
Queue Delay	0.0			64.5	39.5	23.8	95.7	10.4	6.3	73.8	7.7	
Total Delay	63.4	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
LOS	63.4 E	67.7		64.5	39.5	23.8	95.7	10.4	6.3	73.8	7.7	
	E	Е		Е	D	С	F	В	Α	Е	Α	

3: W. Fourteenth Street & W. Tenth Street

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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay	OLL	66.3	JEIX	INVVL	47.3	INVVIX	UNLL	12.2	NER	SVVL	23.8	SWK
Approach LOS		Ε			D			В			C	
Queue Length 50th (ft)	35	74		107	52	83	35	95	44	133	95	
Queue Length 95th (ft)	73	127		151	89	110	73	357	268	210	122	
Internal Link Dist (ft)		702			1226			1455			305	
Turn Bay Length (ft)	200			275		250	125		275	400		
Base Capacity (vph)	196	265		461	593	748	135	1717	1034	323	1997	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.21	0.32		0.52	0.12	0.20	0.27	0.42	0.28	0.49	0.25	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 120 (86%), Referenced to phase 2:NET and 6:SWT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 25.6 Intersection Capacity Utilization 51.2% Intersection LOS: C
ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: W. Fourteenth Street & W. Tenth Street



	\rightarrow	74	4	—	4	4
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	1			^		7
Volume (veh/h)	847	37	0	646	0	24
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	941	41	0	718	0	27
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	385					
pX, platoon unblocked			0.87		0.87	0.87
vC, conflicting volume			982		1321	491
vC1, stage 1 conf vol			002		1021	101
vC2, stage 2 conf vol						
vCu, unblocked vol			678		1068	113
tC, single (s)			4.2		6.8	6.9
tC, 2 stage (s)			7:1		0.0	0.0
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	97
cM capacity (veh/h)			779		188	798
		All Description				730
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NW 1	
Volume Total	627	355	359	359	27	
Volume Left	0	0	0	0	0	
Volume Right	0	41	0	0	27	
cSH	1700	1700	1700	1700	798	
Volume to Capacity	0.37	0.21	0.21	0.21	0.03	
Queue Length 95th (ft)	0	0	0	0	3	
Control Delay (s)	0.0	0.0	0.0	0.0	9.7	
Lane LOS					Α	
Approach Delay (s)	0.0		0.0		9.7	
Approach LOS					Α	
Intersection Summary						
Average Delay			0.1			
Intersection Capacity Utiliz	ation		34.6%	IC	U Level o	f Service
Analysis Period (min)			15			
THE MERITAN SPANNED						

	*	-	*	1	-	1	4	†	1	1	+	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	F.	44	7	ሻሻ	^	7	ሻሻ	^ ^	7	44	^	74
Volume (vph)	80	648	149	225	491	84	106	422	214	169	810	114
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	on the contract of the contrac	ar a market to the	0%		12	0%	12	14	0%	12
Storage Length (ft)	400		425	475		300	325	070	650	350	070	275
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
FIt Permitted	0.950			0.950			0.950	0000	1000	0.950	3303	1300
Satd. Flow (perm)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Right Turn on Red		CALL NAME OF STREET	No		THE SEC	No		0000	No	3400	3303	No
Satd. Flow (RTOR)						110			110			INU
Link Speed (mph)		40			35			35			25	
Link Distance (ft)		3235			628	A STATE OF THE PARTY OF THE PAR		931			570	
Travel Time (s)		55.1			12.2			18.1			15.5	
Confl. Peds. (#/hr)								10.1			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)		es suite a s				•	•	· ·	0		U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)											070	
Lane Group Flow (vph)	89	720	166	250	546	93	118	469	238	188	900	127
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	5	2	7	1	6	3	7	4	1	3	8	5
Permitted Phases			2			6			4	antico de la Tale		8
Detector Phase	5	2	7	1	6	3	7	4	1	3	8	5
Switch Phase											and the same of th	and the summer
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0
Total Split (s)	18.0	49.0	14.0	23.0	54.0	18.0	14.0	50.0	23.0	18.0	54.0	18.0
Total Split (%)	12.9%	35.0%	10.0%	16.4%	38.6%	12.9%	10.0%	35.7%	16.4%	12.9%	38.6%	12.9%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	12.5	49.6	63.6	16.6	53.7	71.4	9.0	41.1	62.7	12.7	44.8	62.3
Actuated g/C Ratio	0.09	0.35	0.45	0.12	0.38	0.51	0.06	0.29	0.45	0.09	0.32	0.44
v/c Ratio	0.57	0.58	0.24	0.63	0.41	0.12	0.54	0.46	0.34	0.61	0.80	0.18
Control Delay	91.0	24.7	19.3	74.3	24.2	14.3	73.1	41.4	25.9	70.2	49.4	23.1
Queue Delay	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 Delay	91.0	24.7	19.3	74.3	24.2	14.3	73.1	41.4	25.9	70.2	49.4	23.1
LOS	F	С	В	E	С	В	Е	D	С	Е	D	С

	1	-	*	1	←	*	4	†	-	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		29.8			37.2			41.5			49.9	ODIN
Approach LOS		С			D			D			TO.0	
Queue Length 50th (ft)	84	145	60	122	126	31	54	182	135	86	389	66
Queue Length 95th (ft)	145	182	83	169	157	52	89	228	191	128	456	106
Internal Link Dist (ft)		3155			548			851			490	
Turn Bay Length (ft)	400		425	475		300	325		650	350	100	275
Base Capacity (vph)	165	1231	706	433	1331	795	219	1127	718	316	1227	706
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.58	0.24	0.58	0.41	0.12	0.54	0.42	0.33	0.59	0.73	0.18

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 24 (17%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 75

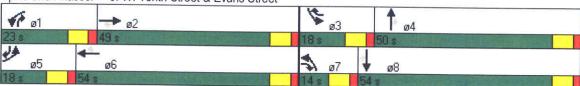
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.80

Intersection Signal Delay: 40.2 Intersection Capacity Utilization 69.2% Intersection LOS: D ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	1	1	×	*	7	×	O4	Ĺ	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	Ť	1		ሻ	1) ^N j	^	7	ሻ	ĵ.	
Volume (vph)	50	342	89	191	279	21	73	199	191	26	248	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	The second
Storage Length (ft)	100		0	350		0	275		175	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1752	3396	0	1752	3470	0	1752	1845	1568	1752	1799	0
Flt Permitted	0.950			0.950			0.950		100	0.950		
Satd. Flow (perm)	1752	3396	0	1752	3470	0	1752	1845	1568	1752	1799	0
Right Turn on Red			No			No			No	THE REST		No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	8		902			1147	
Travel Time (s)		25.4			15.3			24.6			31.3	
Confl. Peds. (#/hr)											01.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								CRIS AMENSAS				· ·
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								0 70			070	
Lane Group Flow (vph)	56	479	0	212	333	0	81	221	212	29	332	0
Turn Type	Prot			Prot			Prot	ACCURATION AND ADDRESS OF THE PARTY OF THE P	pm+ov	Prot	002	0
Protected Phases	5	2		1	6		7	4	1	3	8	
Permitted Phases				A STATE OF THE STA			2012	recolling to the	4	divining of Sec		
Detector Phase	5	2		1	6		7	4	1	3	8	
Switch Phase									Man Color Park	and the same of the		
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0	14.0	14.0	23.0	
Total Split (s)	17.0	38.0	0.0	35.0	56.0	0.0	19.0	53.0	35.0	14.0	48.0	0.0
Total Split (%)	12.1%	27.1%	0.0%	25.0%	40.0%	0.0%	13.6%	37.9%	25.0%	10.0%	34.3%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	ACCOUNT.
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	11.0	38.2		21.9	53.2		12.4	35.7	62.8	9.4	29.9	
Actuated g/C Ratio	0.09	0.32		0.18	0.45		0.10	0.30	0.53	0.08	0.25	
v/c Ratio	0.34	0.44		0.66	0.40		0.45	0.40	0.26	0.00	0.73	
Control Delay	63.1	37.5		57.8	25.0		63.8	36.6	16.3	62.7	52.7	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	63.1	37.5		57.8	25.0		63.8	36.6	16.3	62.7	52.7	
LOS	E	D		57.0 E	C		03.0 E	D	10.3 B	02.1 E	D D	
		U			0		L	U	U		D	

7: W. Fourteenth Street & Dickinson Avenue

	4	×	2	1	K	1	5	×	~	6	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		40.1			37.8			32.5			53.5	
Approach LOS		D			D			С			D.00	
Queue Length 50th (ft)	44	163		163	92		63	149	99	23	254	
Queue Length 95th (ft)	96	264		261	150		126	223	132	60	364	
Internal Link Dist (ft)		1226			707			822	102		1067	
Turn Bay Length (ft)	100			350			275	0	175	100	1007	
Base Capacity (vph)	184	1090		459	1552		214	773	950	138	676	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0,0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.30	0.44		0.46	0.21		0.38	0.29	0.22	0.21	0.49	

Intersection Summary

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 119

Natural Cycle: 75

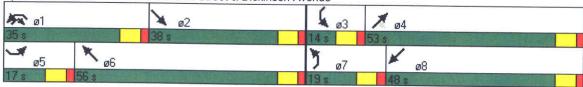
Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73 Intersection Signal Delay: 39.9 Intersection Capacity Utilization 61.5%

Intersection LOS: D ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



	٠	→	*	1	4	4	4	†	1	1	+	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻሻ	^	7	7	^	7	77	^ ^	7"	ħ		7
Volume (vph)	181	406	82	106	700	175	140	1117	106	146	925	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%	12	16	0%	12	14	0%	14
Storage Length (ft)	425		200	350	0 /0	200	300	0 70	125	475	0 /0	350
Storage Lanes	2		1	1		1	2		123	1		330
Taper Length (ft)	100		100	100		100	200		100	50		100
Satd. Flow (prot)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Flt Permitted	0.950	0471	1000	0.950	0471	1000	0.950	4300	1000	0.950	4340	1330
Satd. Flow (perm)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Right Turn on Red	0007	2471	No	1700	0471	No	3307	4300	No	1713	4340	No
Satd. Flow (RTOR)			140			110			INO			140
Link Speed (mph)		45			40			45			45	
Link Distance (ft)		631			1145	SCHOOL VESSEL		1101			1010	
Travel Time (s)		9.6			19.5			16.7			15.3	
Confl. Peds. (#/hr)		0.0			10.0			10.7			10.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	0		O	V	O	U	U	U	U	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		070			0 70			0 70			0 70	
Lane Group Flow (vph)	201	451	91	118	778	194	156	1241	118	162	1028	292
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot	-	pm+ov	Prot	1020	pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases	HIT IN THE PERSONS		4		9	8	0		2	a programa	U	6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase				AND THE RESIDENCE				-				
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	14.0	7.0
Minimum Split (s)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	21.0	14.0	14.0	21.0	14.0
Total Split (s)	19.0	42.0	16.0	22.0	45.0	26.0	16.0	50.0	22.0	26.0	60.0	19.0
Total Split (%)	13.6%	30.0%	11.4%	15.7%	32.1%	18.6%	11.4%	35.7%	15.7%	18.6%	42.9%	13.6%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lag	Lag	Lead	Lead	Lead	Lead	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	14.3	36.7	52.9	15.3	37.7	56.4	11.2	49.2	69.5	18.8	56.8	71.2
Actuated g/C Ratio	0.10	0.26	0.38	0.11	0.27	0.40	0.08	0.35	0.50	0.13	0.41	0.51
v/c Ratio	0.58	0.50	0.16	0.62	0.83	0.31	0.58	0.71	0.15	0.70	0.51	0.37
Control Delay	67.4	45.9	29.6	73.2	37.4	17.1	71.3	42.7	20.7	74.3	32.7	14.6
A CONTRACTOR OF THE PROPERTY O												
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	().()	().()	().()	() ()	() ()	()()
Queue Delay Total Delay	0.0 67.4	0.0 45.9	0.0 29.6	0.0 73.2	0.0 37.4	0.0	0.0 71.3	0.0 42.7	0.0 20.7	0.0 74.3	0.0 32.7	0.0 14.6

	1	\rightarrow	*	1	-	*	4	†	1	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		49.7			37.7			44.0	TIES!		33.7	
Approach LOS		D			D			D			С	
Queue Length 50th (ft)	91	183	54	87	291	10	72	371	59	141	260	110
Queue Length 95th (ft)	134	239	96	153	296	100	110	432	100	220	306	161
Internal Link Dist (ft)		551			1065			1021			930	
Turn Bay Length (ft)	425		200	350		200	300		125	475		350
Base Capacity (vph)	349	924	588	211	992	651	272	1754	790	258	2006	784
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.58	0.49	0.15	0.56	0.78	0.30	0.57	0.71	0.15	0.63	0.51	0.37

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 111 (79%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 80

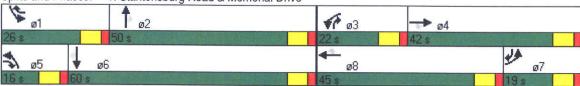
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 40.3 Intersection Capacity Utilization 71.5% Intersection LOS: D ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



	*	→	*	1	-	*	1	†	-	1	ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	Ť	47>		75	46		ħ	f)		ħ	f)	
Volume (vph)	28	590	36	27	886	30	54	83	27	37	107	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%	active in the latest		0%			0%	_		0%	a news !
Storage Length (ft)	100		0	100		0	125		0	100	THE RESE	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1736	3440	0	1736	3454	0	1787	1812	0	1787	1789	0
Flt Permitted	0.250	NEW T	National Parties	0.377	A MARKET IN	TOK THE	0.598		STIME	0.679	A SALES	
Satd. Flow (perm)	457	3440	0	689	3454	0	1125	1812	0	1277	1789	0
Right Turn on Red			No			No			No		1700	No
Satd. Flow (RTOR)									110			110
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1145			1535	19		989			307	
Travel Time (s)		19.5			26.2			19.3			6.0	
Confl. Peds. (#/hr)		, , , ,			20.2			10.0			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)						•		O	O	U	U.S.	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)					0 /0			070			0 /0	
Lane Group Flow (vph)	31	696	0	30	1017	0	60	122	0	41	176	0
Turn Type	Perm	000	Lands Mar	Perm	1017		Perm	166	0	Perm	170	0
Protected Phases		2		1 01111	6		1 01111	4		1 01111	8	
Permitted Phases	2	-		6			4			8	0	
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase										0	0	
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	43.0	43.0	0.0	43.0	43.0	0.0	27.0	27.0	0.0	27.0	27.0	0.0
Total Split (%)	61.4%	61.4%	0.0%	61.4%	61.4%	0.0%	38.6%	38.6%	0.0%	38.6%	38.6%	0.0%
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.076
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag	THE PARTY OF		2.0	0.0		2.0	0.0	0.0	2.0	0.0	3.0	2.0
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		None	None		None	None		None	None	
Act Effct Green (s)	45.9	45.9		45.9	45.9		14.1	14.1		14.1	14.1	
Actuated g/C Ratio	0.66	0.66		0.66	0.66		0.20	0.20		0.20	0.20	
v/c Ratio	0.10	0.31		0.07	0.45		0.20	0.20		0.20	0.20	
Control Delay	7.9	9.6		3.7	4.5		25.2	25.3		22.9	28.6	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	7.9	9.6		3.7	4.5		25.2	25.3		22.9		
LOS	7.9 A	9.0 A									28.6	
	М	А		Α	Α		С	С		С	С	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		9.6			4.5	/		25.3			27.5	
Approach LOS		Α			Α			С			С	
Queue Length 50th (ft)	9	198		4	66		22	45		15	68	
Queue Length 95th (ft)	m32	251		m10	178		49	81		36	113	
Internal Link Dist (ft)		1065			1455			909			227	
Turn Bay Length (ft)	100			100			125			100		
Base Capacity (vph)	300	2254		451	2263		354	569		401	562	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.10	0.31		0.07	0.45		0.17	0.21		0.10	0.31	

Area Type: Other

Cycle Length: 70

Actuated Cycle Length: 70

Offset: 12 (17%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 50

Control Type: Actuated-Coordinated

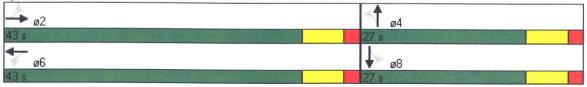
Maximum v/c Ratio: 0.49

Intersection Signal Delay: 10.2 Intersection Capacity Utilization 52.5% Intersection LOS: B
ICU Level of Service A

Analysis Period (min) 15

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

Splits and Phases: 2: Farmville Boulevard & Line Avenue



	3	×	1	10	K	7	7	×	a	4	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	J.	ß		ሻሻ	A	74	ሻ	^	7	75		<u> </u>
Volume (vph)	55	83	32	287	66	163	22	433	174	213	618	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12		12
Grade (%)		0%			0%		_	0%		12	0%	
Storage Length (ft)	200		0	275		250	125		275	400		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	1767	0	3400	1845	1568	1736	3471	1553	1736	3433	0
Flt Permitted	0.709			0.950		230115	0.950		454.8	0.950	0400	
Satd. Flow (perm)	1308	1767	0	3400	1845	1568	1736	3471	1553	1736	3433	0
Right Turn on Red			No	a constant		No	1100		No	1700	0400	No
Satd. Flow (RTOR)									110			140
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		782			1306	1		1535			385	
Travel Time (s)		15.2			25.4			26.2			6.6	
Confl. Peds. (#/hr)								20.2			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)					•	•		•	O	U	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)					9.70			0.70			0 70	
Lane Group Flow (vph)	61	128	0	319	73	181	24	481	193	237	743	0
Turn Type	Perm			Prot		pm+ov	Prot	101	pm+ov	Prot	140	O
Protected Phases		4		3	8	1	5	2	3	1	6	
Permitted Phases	4			-		8			2		U	
Detector Phase	4	4		3	8	1	5	2	3	1	6	
Switch Phase					WILLIAM SANCE AND SANCE AND	(mellepingelin	STATE OF THE PARTY				O	
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	12.0	
Minimum Split (s)	23.0	23.0		14.0	23.0	14.0	14.0	23.0	14.0	14.0	23.0	
Total Split (s)	27.0	27.0	0.0	29.0	56.0	41.0	16.0	43.0	29.0	41.0	68.0	0.0
Total Split (%)	19.3%	19.3%	0.0%	20.7%	40.0%	29.3%	11.4%	30.7%	20.7%	29.3%	48.6%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lag	Lag		Lead		Lead	Lead	Lag	Lead	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes		Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	
Act Effct Green (s)	17.2	17.2		20.2	42.3	73.7	9.7	56.3	81.5	26.3	78.5	
Actuated g/C Ratio	0.12	0.12		0.14	0.30	0.53	0.07	0.40	0.58	0.19	0.56	
v/c Ratio	0.38	0.59		0.65	0.13	0.22	0.20	0.40	0.30	0.19	0.39	
Control Delay	62.2	68.7		62.9	34.0	16.8	68.5	22.2	7.5	75.2	5.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	62.2	68.7		62.9	34.0	16.8	68.5	22.2	7.5	75.2		
LOS	02.2 E	E		02.9 E	04.0 C	10.0 B	00.5 E	22.2 C			5.0	
	L.,			L	U	D		U	Α	Е	Α	

	4	×	2	1	K	*	7	×	7	4	×	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		66.6			44.6			19.7	Selen A		22.0	
Approach LOS		E			D			В			С	
Queue Length 50th (ft)	52	112		143	48	85	23	86	27	183	30	
Queue Length 95th (ft)	96	175		189	81	97	55	125	62	203	135	
Internal Link Dist (ft)		702			1226			1455			305	
Turn Bay Length (ft)	200			275		250	125		275	400		
Base Capacity (vph)	206	278		583	672	933	136	1397	947	446	1926	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.30	0.46		0.55	0.11	0.19	0.18	0.34	0.20	0.53	0.39	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 95 (68%), Referenced to phase 2:NET and 6:SWT, Start of Green

Natural Cycle: 75

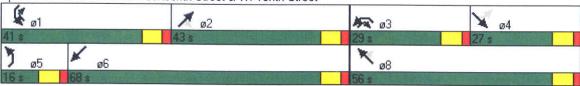
Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.73

Intersection Signal Delay: 30.1 Intersection Capacity Utilization 51.9% Intersection LOS: C ICU Level of Service A

Analysis Period (min) 15

Splits and Phases: 3: W. Fourteenth Street & W. Tenth Street



	\rightarrow	-34	~	4-	4	4
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	♠ %			个 个		7
Volume (veh/h)	568	24	0	884	0	37
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	631	27	0	982	0	41
Pedestrians	Town No. 12			THE R. P. LEWIS CO., LANSING	MATERIAL PROPERTY.	
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)	110110			INOITE		
Upstream signal (ft)	385					
pX, platoon unblocked	000		0.91		0.91	0.91
vC, conflicting volume			658		1136	329
vC1, stage 1 conf vol			000		1130	329
vC2, stage 2 conf vol						
vCu, unblocked vol			400		057	70
			433		957	73
tC, single (s)			4.2		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			1012		233	889
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NW 1	
Volume Total	421	237	491	491	41	
Volume Left	0	0	0	0	0	
Volume Right	0	27	0	0	41	
cSH	1700	1700	1700	1700	889	
Volume to Capacity	0.25	0.14	0.29	0.29	0.05	
Queue Length 95th (ft)	0	0	0	0	4	
Control Delay (s)	0.0	0.0	0.0	0.0	9.2	
Lane LOS					A	
Approach Delay (s)	0.0		0.0		9.2	
Approach LOS			0.0		A	
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utiliza	ation		27.8%	IC	U Level o	f Service
Analysis Period (min)			15	10	O LOVEI C	OCI VICE
That you i onou (min)			10			

	١	-	*	1	4	*	4	†	1	1	ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ħ	44	7	777	ተተ	7	ሻሻ	ተተ	7	ሻሻ	44	7
Volume (vph)	53	432	99	275	594	109	197	784	398	73	347	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	_
Storage Length (ft)	400		425	475		300	325		650	350		275
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			35			35			25	
Link Distance (ft)		3235			628	3		931			570	
Travel Time (s)		55.1			12.2			18.1			15.5	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	59	480	110	306	660	121	219	871	442	81	386	54
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	5	2	7	1	6	3	7	4	1	3	8	5
Permitted Phases			2			6			4			8
Detector Phase	5	2	7	1	6	3	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0
Total Split (s)	16.0	39.0	21.0	31.0	54.0	14.0	21.0	56.0	31.0	14.0	49.0	16.0
Total Split (%)	11.4%	27.9%	15.0%	22.1%	38.6%	10.0%	15.0%	40.0%	22.1%	10.0%	35.0%	11.4%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	11.3	46.6	66.6	20.5	58.6	72.6	15.0	43.9	69.4	9.0	37.9	54.1
Actuated g/C Ratio	0.08	0.33	0.48	0.15	0.42	0.52	0.11	0.31	0.50	0.06	0.27	0.39
v/c Ratio	0.42	0.42	0.15	0.62	0.45	0.15	0.60	0.79	0.57	0.37	0.41	0.09
Control Delay	88.1	28.8	12.5	89.6	19.2	11.2	66.8	49.4	27.0	67.9	42.6	26.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
The state of the s												
Total Delay	88.1	28.8	12.5	89.6	19.2	11.2	66.8	49.4	27.0	67.9	42.6	26.0

	1	-	*	1	-	4	4	†	<i>p</i>	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		31.4			38.2			45.4			44.8	ODIN.
Approach LOS		С			D			D			D	
Queue Length 50th (ft)	56	153	37	153	98	24	98	378	272	37	153	31
Queue Length 95th (ft)	106	195	43	203	123	38	143	427	314	65	189	57
Internal Link Dist (ft)		3155			548			851	STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET, STREET,		490	
Turn Bay Length (ft)	400		425	475		300	325		650	350	100	275
Base Capacity (vph)	146	1156	750	625	1454	806	389	1277	839	219	1102	612
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.42	0.15	0.49	0.45	0.15	0.56	0.68	0.53	0.37	0.35	0.09

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 140

Offset: 17 (12%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 75

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.79

Intersection Signal Delay: 40.8

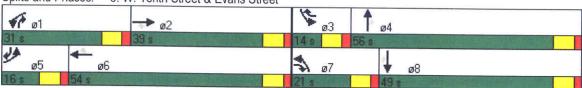
Intersection Capacity Utilization 66.4%

Intersection LOS: D

ICU Level of Service C

Analysis Period (min) 15

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	2	1	×	ť	7	×	a	Ĺ	×	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	44		75	ተ ጮ		ħ	^	7	*1	1>	
Volume (vph)	45	303	80	234	342	26	89	244	234	21	203	41
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%	an same	CONTRACTOR DE	0%	2/1/2
Storage Length (ft)	100		0	350		0	275		175	100	HOLENSA	0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1752	3396	0	1752	3466	0	1752	1845	1568	1752	1799	0
Flt Permitted	0.950			0.950			0.950	PER PE		0.950		
Satd. Flow (perm)	1752	3396	0	1752	3466	0	1752	1845	1568	1752	1799	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												110
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	X.		902			1147	
Travel Time (s)		25.4			15.3			24.6			31.3	
Confl. Peds. (#/hr)								2110			01.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)			300					•	× .			0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								070			070	
Lane Group Flow (vph)	50	426	0	260	409	0	99	271	260	23	272	0
Turn Type	Prot			Prot		Marie Control of the	Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		7	4	1	3	8	
Permitted Phases							ON DEPTHATE		4		MARCH VI	
Detector Phase	5	2		1	6		7	4	1	3	8	
Switch Phase					12.00		and the second	and the same of the same of	and the same of			
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0	14.0	14.0	23.0	
Total Split (s)	14.0	36.0	0.0	41.0	63.0	0.0	22.0	49.0	41.0	14.0	41.0	0.0
Total Split (%)	10.0%	25.7%	0.0%	29.3%	45.0%	0.0%	15.7%	35.0%	29.3%	10.0%	29.3%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	NEW TOTAL	5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag	HANNE	Lead	Lag	MARKET AND A	Lead	Lag	Lead	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	9.1	38.8		25.7	58.9		13.8	37.1	67.8	9.1	26.0	
Actuated g/C Ratio	0.07	0.31		0.21	0.47		0.11	0.30	0.54	0.07	0.21	
v/c Ratio	0.39	0.40		0.72	0.25		0.51	0.49	0.30	0.07	0.73	
Control Delay	69.3	38.4		58.6	22.5		64.3	41.3	16.7	63.0	58.5	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	69.3	38.4		58.6	22.5		64.3	41.3	16.7	63.0	58.5	
LOS	Е	D		Ε	С		Е	D	В	Е	Е	

	-	×	2		K		7	A	a	4	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		41.7			36.6			34.8			58.8	A DESCRIPTION OF THE PERSON OF
Approach LOS		D			D			С			Е	
Queue Length 50th (ft)	40	144		203	108		78	199	128	18	212	
Queue Length 95th (ft)	90	241		304	170		147	286	157	51	316	
Internal Link Dist (ft)		1226			707			822			1067	
Turn Bay Length (ft)	100			350			275		175	100		
Base Capacity (vph)	128	1057		514	1638		243	661	990	128	528	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.39	0.40		0.51	0.25		0.41	0.41	0.26	0.18	0.52	

Area Type: Other

Cycle Length: 140

Actuated Cycle Length: 124.6

Natural Cycle: 75

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.73 Intersection Signal Delay: 40.4 Intersection Capacity Utilization 59.6%

Intersection LOS: D
ICU Level of Service B

Analysis Period (min) 15

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



Appendix C

Intersection Analysis Output Reports

f) Build 2030

	*	-	7	1	+	4	1	†	1	1	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	44	ተ ተ	7	ሻ	44	7	N/N	444	7"	N,	^	7
Volume (vph)	532	936	222	122	576	180	137	943	122	225	1175	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%	CHE UI		0%			0%	
Storage Length (ft)	425		200	350		200	300		125	475		350
Storage Lanes	2		1	1		1	2		1	1		1
Taper Length (ft)	100		100	100		100	200		100	200		100
Satd. Flow (prot)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Flt Permitted	0.950			0.950			0.950		NEW WILL	0.950		
Satd. Flow (perm)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Right Turn on Red			No			No			No	Striet	Make the	No
Satd. Flow (RTOR)												10,000
Link Speed (mph)		45			40			45			45	
Link Distance (ft)		1021			1145	- 1		1101			1010	
Travel Time (s)		15.5			19.5			16.7			15.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)								ALL DESCRIPTION OF THE PARTY OF			W-115-4-5-5	WIE S
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	591	1040	247	136	640	200	152	1048	136	250	1306	456
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	14.0	7.0
Minimum Split (s)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	21.0	14.0	14.0	21.0	14.0
Total Split (s)	45.0	71.0	17.0	21.0	47.0	36.0	17.0	52.0	21.0	36.0	71.0	45.0
Total Split (%)	25.0%	39.4%	9.4%	11.7%	26.1%	20.0%	9.4%	28.9%	11.7%	20.0%	39.4%	25.0%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	37.6	62.0	74.0	16.0	40.4	71.4	12.0	51.0	67.0	31.0	70.0	107.6
Actuated g/C Ratio	0.21	0.34	0.41	0.09	0.22	0.40	0.07	0.28	0.37	0.17	0.39	0.60
v/c Ratio	0.84	0.87	0.39	0.88	0.82	0.32	0.68	0.74	0.24	0.84	0.68	0.50
Control Delay	79.8	63.9	28.1	113.2	81.8	22.0	97.8	63.0	22.8	96.3	48.5	14.2
Queue Delay	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 Delay	79.8	63.9	28.1	113.2	81.8	22.0	97.8	63.0	22.8	96.3	48.5	14.2
LOS	Е	Е	С	F	F	С	F	Е	С	F	D	В

5/	18	19	0	0	7
U	U	-	v	v	

	1	-	7	1	-	4	1	†	-	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		64.2			74.0	Min/AS		62.9			46.7	Marks by
Approach LOS		Е			Е			Е			D	
Queue Length 50th (ft)	345	595	146	147	379	85	92	423	71	291	480	203
Queue Length 95th (ft)	418	678	201	#293	486	122	135	486	112	#443	544	275
Internal Link Dist (ft)		941			1065			1021			930	
Turn Bay Length (ft)	425		200	350		200	300		125	475		350
Base Capacity (vph)	748	1273	638	154	810	616	224	1413	578	296	1921	940
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.79	0.82	0.39	0.88	0.79	0.32	0.68	0.74	0.24	0.84	0.68	0.49

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 179 (99%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 90

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.88

Intersection Signal Delay: 59.7

Intersection Capacity Utilization 80.0%

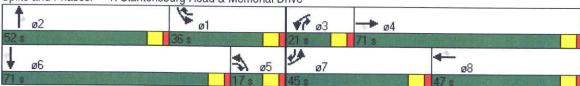
Intersection LOS: E

ICU Level of Service D

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



^{# 95}th percentile volume exceeds capacity, queue may be longer.

	•	-	*	•	-	*	1	†	-	1	↓	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	44		ሻ	4 1>		ሻ	B		75	f)	
Volume (vph)	59	1161	97	18	778	43	114	117	33	65	92	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%	35. U.S. 1		0%	-
Storage Length (ft)	100		0	100		0	125		0	100	TIO AN	0
Storage Lanes	1		0	1		0	1		0	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1736	3429	0	1736	3443	0	1787	1819	0	1787	1770	0
Flt Permitted	0.289			0.150	NAME OF THE		0.556		NATION AND	0.558		
Satd. Flow (perm)	528	3429	0	274	3443	0	1046	1819	0	1050	1770	0
Right Turn on Red			No		6811	No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		40			40			35			35	
Link Distance (ft)		1145			1535	ARREST MALESTON		709			307	
Travel Time (s)		19.5			26.2			13.8			6.0	
Confl. Peds. (#/hr)								10.0			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	1%	1%	1%	1%	1%	1%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	Language III II W	and an area	U		0	0	· ·	0	0	O	U	U
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)		070			070			0 / 0			0 /0	
Lane Group Flow (vph)	66	1398	0	20	912	0	127	167	0	72	168	0
Turn Type	Perm	1000		Perm	0,12		Perm	107	0	Perm	100	0
Protected Phases	MARKER	2		BRAS	6		a Luceia	4			8	
Permitted Phases	2	_		6			4			8	O	
Detector Phase	2	2		6	6		4	4		8	8	
Switch Phase		-		0	· ·					0	0	
Minimum Initial (s)	12.0	12.0		12.0	12.0		7.0	7.0		7.0	7.0	
Minimum Split (s)	23.0	23.0		23.0	23.0		23.0	23.0		23.0	23.0	
Total Split (s)	62.0	62.0	0.0	62.0	62.0	0.0	28.0	28.0	0.0	28.0	28.0	0.0
Total Split (%)	68.9%	68.9%	0.0%	68.9%	68.9%	0.0%	31.1%	31.1%	0.0%	31.1%	31.1%	0.0%
Yellow Time (s)	5.0	5.0	0.070	5.0	5.0	0.070	5.0	5.0	0.076	5.0	5.0	0.076
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead/Lag		7.64	2.0	3.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	2.0
Lead-Lag Optimize?												
Recall Mode	C-Max	C-Max		None	None		Mono	None		None	None	
Act Effct Green (s)	62.9	62.9		62.9	62.9		None 17.1	None 17.1		None	None	
Actuated g/C Ratio	0.70	0.70		0.70	0.70					17.1	17.1	
v/c Ratio	0.70	0.70		0.70			0.19	0.19		0.19	0.19	
Control Delay	2.8				0.38		0.64	0.48		0.36	0.50	
The state of the s		5.4		5.4	4.4		47.3	36.2		35.2	36.8	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	2.8	5.4		5.4	4.4		47.3	36.2		35.2	36.8	
LOS	Α	Α		Α	Α		D	D		D	D	

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Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		5.3			4.4			41.0			36.3	V. Britan
Approach LOS		Α			Α			D			D	
Queue Length 50th (ft)	5	54		3	73		67	85		36	86	
Queue Length 95th (ft)	m7	347		m9	200		118	135		71	137	
Internal Link Dist (ft)		1065			1455			629			227	
Turn Bay Length (ft)	100			100			125			100		
Base Capacity (vph)	369	2395		191	2405		267	465		268	452	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.18	0.58		0.10	0.38		0.48	0.36		0.27	0.37	

Area Type: Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 43 (48%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 55

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.64

Intersection Signal Delay: 11.1

Intersection Capacity Utilization 76.3%

Intersection LOS: B

ICU Level of Service D

Analysis Period (min) 15

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

Splits and Phases: 2: Farmville Boulevard & Line Avenue



	4	×	2	1	K	7	7	×	74	Ĺ	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	ħ		77	4	74	'n	44	79	ኻ	1	Marie Alexa
Volume (vph)	68	80	36	245	95	182	54	918	308	215	589	75
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%		The state of the s	0%			0%	paragrap 12
Storage Length (ft)	200		0	275		250	125		275	400	MATERIA	0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	1758	0	3400	1845	1568	1736	3471	1553	1736	3412	0
Flt Permitted	0.950			0.950			0.950		100000	0.950	VAVAGE	
Satd. Flow (perm)	1752	1758	0	3400	1845	1568	1736	3471	1553	1736	3412	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												110
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		782			1306	*		1535			385	
Travel Time (s)		15.2			25.4			26.2			6.6	
Confl. Peds. (#/hr)											0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)							A CONTRACTOR OF THE PARTY OF TH					0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)											970	
Lane Group Flow (vph)	76	129	0	272	106	202	60	1020	342	239	737	0
Turn Type	Prot			Prot		pm+ov	Prot		pm+ov	Prot		
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases						8			2			
Detector Phase	7	4		3	8	1	5	2	3	1	6	
Switch Phase								in the second				
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	12.0	
Minimum Split (s)	14.0	23.0		14.0	23.0	14.0	23.0	23.0	14.0	14.0	23.0	
Total Split (s)	21.0	28.0	0.0	28.0	35.0	45.0	23.0	79.0	28.0	45.0	101.0	0.0
Total Split (%)	11.7%	15.6%	0.0%	15.6%	19.4%	25.0%	12.8%	43.9%	15.6%	25.0%	56.1%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	
Act Effct Green (s)	14.1	19.6		20.8	26.3	63.1	13.6	87.8	113.6	31.8	106.0	
Actuated g/C Ratio	0.08	0.11		0.12	0.15	0.35	0.08	0.49	0.63	0.18	0.59	
v/c Ratio	0.55	0.67		0.69	0.39	0.37	0.46	0.60	0.35	0.78	0.33	
Control Delay	95.0	94.0		86.1	73.2	44.1	95.1	18.3	10.7	115.2	8.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	95.0	94.0		86.1	73.2	44.1	95.1	18.3	10.7	115.2	8.4	
LOS	F	F		F	F	D	95.1 F	10.3 B	В	F	0.4 A	
	,	1			L	U	L	Ь	D	Г	A	

10/25/200	7
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	4	×	1	1	K		7	×	1	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		94.4			69.1	Tell (e.2		19.7	- CHA!		34.6	O I I I
Approach LOS		F			Е			В			C	
Queue Length 50th (ft)	88	148		161	115	177	69	200	91	292	77	
Queue Length 95th (ft)	149	226		213	180	230	m119	465	209	m360	m106	
Internal Link Dist (ft)		702			1226			1455		Malford	305	
Turn Bay Length (ft)	200			275		250	125		275	400	000	
Base Capacity (vph)	156	225		434	308	621	174	1693	999	386	2010	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.49	0.57		0.63	0.34	0.33	0.34	0.60	0.34	0.62	0.37	

Area Type:

Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 150 (83%), Referenced to phase 2:NET and 6:SWT, Start of Green

Natural Cycle: 85

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.78

Intersection Signal Delay: 38.1

Intersection Capacity Utilization 63.4%

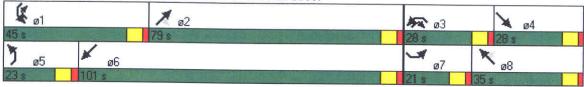
Intersection LOS: D

ICU Level of Service B

Analysis Period (min) 15

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

Splits and Phases: 3: W. Fourteenth Street & W. Tenth Street



	\rightarrow	-	~	-	4	4
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	1			44		7
Volume (veh/h)	1210	54	0	954	0	36
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	1344	60	0	1060	0	40
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	385					
pX, platoon unblocked			0.79		0.79	0.79
vC, conflicting volume			1404		1904	702
vC1, stage 1 conf vol					1001	
vC2, stage 2 conf vol						
vCu, unblocked vol			971		1607	77
tC, single (s)			4.2		6.8	6.9
tC, 2 stage (s)			A CONTRACTOR		0.0	0.0
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	95
cM capacity (veh/h)			545		75	761
			and the second	7710		701
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NW 1	
Volume Total	896	508	530	530	40	
Volume Left	0	0	0	0	0	
Volume Right	0	60	0	0	40	
cSH	1700	1700	1700	1700	761	
Volume to Capacity	0.53	0.30	0.31	0.31	0.05	
Queue Length 95th (ft)	0	0	0	0	4	
Control Delay (s)	0.0	0.0	0.0	0.0	10.0	
Lane LOS					Α	
Approach Delay (s)	0.0		0.0		10.0	
Approach LOS					Α	
Intersection Summary					4.5	
Average Delay			0.2			
Intersection Capacity Utilization	on		45.2%	IC	U Level o	f Service
Analysis Period (min)	Service Control		15			

	*	→	*	1	—	1	1	†	-	1	↓	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	ሻ	ተ ተ	7	ሻሻ	44	79	ሻሻ	ተተ	7	44	44	7"
Volume (vph)	199	756	341	494	537	184	208	719	428	416	1328	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	12
Storage Length (ft)	400		425	475		300	325	CALL SERVICE	700	350	070	275
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	50		100	50		100	50		100	50		100
Satd. Flow (prot)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Flt Permitted	0.950			0.950			0.950	Name of	I STOLE	0.950	Edit Sela	1000
Satd. Flow (perm)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Right Turn on Red			No			No		kin il	No	MENTE	riche III.	No
Satd. Flow (RTOR)												1,0
Link Speed (mph)		40			35			35			25	
Link Distance (ft)		943			628	3		1142			874	
Travel Time (s)		16.1			12.2			22.2			23.8	
Confl. Peds. (#/hr)											20.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)								0 70			070	
Lane Group Flow (vph)	221	840	379	549	597	204	231	799	476	462	1476	338
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot	- NOT - TO 1	pm+ov	Prot		pm+ov
Protected Phases	5	2	7	1	6	3	7	4	1	3	8	5
Permitted Phases			2			6			4			8
Detector Phase	5	2	7	1	6	3	7	4	1	3	8	5
Switch Phase										BONG SAME		
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0
Total Split (s)	33.0	49.0	16.0	35.0	51.0	37.0	16.0	59.0	35.0	37.0	80.0	33.0
Total Split (%)	18.3%	27.2%	8.9%	19.4%	28.3%	20.6%	8.9%	32.8%	19.4%	20.6%	44.4%	18.3%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	26.7	44.0	55.0	30.0	47.3	82.2	11.0	56.1	86.1	29.9	75.0	106.7
Actuated g/C Ratio	0.15	0.24	0.31	0.17	0.26	0.46	0.06	0.31	0.48	0.17	0.42	0.59
v/c Ratio	0.86	0.99	0.80	0.98	0.66	0.29	1.11	0.73	0.40	0.17	1.01	0.36
Control Delay	85.5	74.0	33.7	92.7	51.3	35.3	167.4	60.4	23.2	84.7	77.4	20.2
Queue Delay	0.0	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total Delay	85.5	78.6	33.7	92.7	51.3	35.3	167.4	60.4	23.8	84.7	77.4	20.2
LOS	F	E	C	F	D	D D	F	E	23.0 C	64.7 F	77.4 E	20.2 C
Oran Company					D	D	Į-	L	C	T		C

	1	-	*	1	-		1	†	-	1	Ţ	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		67.8			65.7			65.2		002	70.4	ODIX
Approach LOS		Е			Е			E			70.4 F	
Queue Length 50th (ft)	240	531	307	334	341	193	~160	452	228	272	~939	198
Queue Length 95th (ft)	#388	#670	426	#466	419	273	#258	535	301	339	#1097	268
Internal Link Dist (ft)		863			548		vicales.	1062		000	794	200
Turn Bay Length (ft)	400		425	475		300	325	1002	700	350	704	275
Base Capacity (vph)	270	848	475	561	911	727	208	1092	750	604	1460	941
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	16	0	0	0	0	0	0	75	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.82	1.01	0.80	0.98	0.66	0.28	1.11	0.73	0.71	0.76	1.01	0.36

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 49 (27%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 140

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.11

Intersection Signal Delay: 67.7 Intersection Capacity Utilization 94.3%

Intersection LOS: E ICU Level of Service F

Analysis Period (min) 15

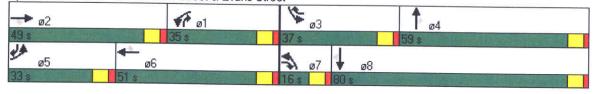
Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 5: W. Tenth Street & Evans Street



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Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	1/4	1		ř	↑ ↑		M	^	7	79	ĵ.	
Volume (vph)	74	421	168	194	344	41	138	332	194	50	406	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	San Inches de Constitution de la constitution de la
Storage Length (ft)	100		0	350		0	275	Web.	175	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100		100	25		100	50		100	50		100
Satd. Flow (prot)	1752	3354	0	1752	3449	0	1752	1845	1568	1752	1802	0
Flt Permitted	0.950			0.950			0.950			0.950		MANA S
Satd. Flow (perm)	1752	3354	0	1752	3449	0	1752	1845	1568	1752	1802	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												110
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	. 4		902			1147	
Travel Time (s)		25.4			15.3			24.6			31.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)									MINISTER STATE		TANK DESIGNATION OF THE PERSON	
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	82	655	0	216	428	0	153	369	216	56	533	0
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		7	4	1	3	8	
Permitted Phases									4		**************************************	
Detector Phase	5	2		1	6		7	4	1	3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0	14.0	14.0	23.0	
Total Split (s)	18.0	40.0	0.0	26.0	48.0	0.0	21.0	59.0	26.0	15.0	53.0	0.0
Total Split (%)	12.9%	28.6%	0.0%	18.6%	34.3%	0.0%	15.0%	42.1%	18.6%	10.7%	37.9%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	11.9	35.2		20.1	43.4		15.4	53.0	78.1	9.8	44.2	
Actuated g/C Ratio	0.09	0.26		0.15	0.32		0.11	0.39	0.58	0.07	0.33	
v/c Ratio	0.53	0.75		0.83	0.39		0.76	0.51	0.24	0.44	0.90	
Control Delay	73.1	53.0		82.0	37.8		83.5	35.2	15.4	73.4	63.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	73.1	53.0		82.0	37.8		83.5	35.2	15.4	73.4	63.3	
LOS	Е	D		F	D		F	D	В	Е	E	- All Indias

7: W. Fourteenth Street & Dickinson Avenue

	4	×)		×	1	T	A	0	<u>C</u>	K	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	CIMP
Approach Delay		55.3			52.6		N	39.4	INLIX	SVVL	64.3	SWR
Approach LOS		Е			D			D			F	
Queue Length 50th (ft)	72	294		193	162		137	256	94	50	452	
Queue Length 95th (ft)	130	368		#328	213		#245	357	142	97	#650	
Internal Link Dist (ft)		1226			707			822	rinisa.	A STATE OF	1067	
Turn Bay Length (ft)	100			350			275		175	100		
Base Capacity (vph)	170	876		274	1108		208	741	918	130	643	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.48	0.75		0.79	0.39		0.74	0.50	0.24	0.43	0.83	

Intersection Summary

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 135

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.90

Intersection Signal Delay: 52.3

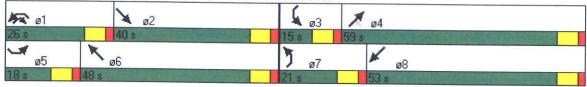
Intersection Capacity Utilization 77.9%

Intersection LOS: D
ICU Level of Service D

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



^{# 95}th percentile volume exceeds capacity, queue may be longer.

	A	→	7	*	-	*	1	†	~	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	44	44	7	ሻ	44	7	ሻሻ	444	71	*5	^ ^	7
Volume (vph)	287	504	120	179	869	270	205	1415	184	225	1175	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	v.
Storage Length (ft)	425		200	350		200	300		125	475		350
Storage Lanes	2		1	1		1	2		1	1		1
Taper Length (ft)	100		100	100		100	200		100	200		100
Satd. Flow (prot)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	3367	3471	1553	1736	3471	1553	3367	4988	1553	1719	4940	1538
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		45			40			45			45	
Link Distance (ft)		1148			1145	3		1101			1010	
Travel Time (s)		17.4			19.5			16.7			15.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	5%	5%	5%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	319	560	133	199	966	300	228	1572	204	250	1306	456
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	7	4	5	3	8	1	5	2	3	1	6	7
Permitted Phases			4			8			2			6
Detector Phase	7	4	5	3	8	1	5	2	3	1	6	7
Switch Phase												
Minimum Initial (s)	7.0	7.0	7.0	7.0	7.0	7.0	7.0	14.0	7.0	7.0	14.0	7.0
Minimum Split (s)	14.0	14.0	14.0	14.0	14.0	14.0	14.0	21.0	14.0	14.0	21.0	14.0
Total Split (s)	23.0	47.0	21.0	33.0	57.0	33.0	21.0	67.0	33.0	33.0	79.0	23.0
Total Split (%)	12.8%	26.1%	11.7%	18.3%	31.7%	18.3%	11.7%	37.2%	18.3%	18.3%	43.9%	12.8%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	None	None	C-Max	None
Act Effct Green (s)	18.0	44.3	60.3	25.7	52.0	80.0	16.0	62.0	87.7	28.0	74.0	92.0
Actuated g/C Ratio	0.10	0.25	0.34	0.14	0.29	0.44	0.09	0.34	0.49	0.16	0.41	0.51
v/c Ratio	0.95	0.65	0.26	0.80	0.96	0.43	0.76	0.92	0.27	0.94	0.64	0.58
Control Delay	115.7	65.8	27.0	101.9	64.9	12.1	96.9	65.6	14.8	114.5	44.2	21.3
Queue Delay	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 Delay	115.7	65.8	27.0	101.9	64.9	12.1	96.9	65.6	14.8	114.5	44.2	21.3
LOS	F	E	С	F	E	В	F	Е	В	F	D	C

1: Stantonsburg Road & Memorial Drive

	1	\rightarrow	*	1	-		1	†	1	1	Į.	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		76.4			59.1			64.0	E.C. III		47.8	
Approach LOS		Ε			Е			Е			D	
Queue Length 50th (ft)	196	322	79	238	626	109	138	654	75	297	451	252
Queue Length 95th (ft)	#298	393	121	#341	#727	190	#195	720	108	#478	504	335
Internal Link Dist (ft)		1068			1065			1021	200		930	NE POS
Turn Bay Length (ft)	425		200	350		200	300		125	475	000	350
Base Capacity (vph)	337	855	520	270	1003	690	299	1718	777	267	2031	786
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.95	0.65	0.26	0.74	0.96	0.43	0.76	0.92	0.26	0.94	0.64	0.58

Intersection Summary

Area Type: Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 61 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green

Natural Cycle: 110

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.96

Intersection Signal Delay: 59.8

Intersection Capacity Utilization 88.7%

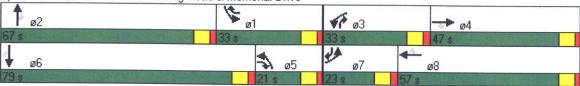
Intersection LOS: E ICU Level of Service E

Analysis Period (min) 15

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Splits and Phases: 1: Stantonsburg Road & Memorial Drive



SBT	SBR
1>	OUIT
117	73
1900	1900
12	12
0%	-
	0
	0
	100
1772	0
	PARTIES OF THE PARTIE
1772	0
	No
	Mary Control
35	
0.90	0.90
	100%
	1%
	0
0%	
211	0
8	
8	
7.0	
	0.0
	0.0%
	34 JULY
	-2.0
	2.0
1945	Banlai I
None	
	1772 1772 1772 35 307 6.0 0.90 100% 1% 0 0% 211 8 8 7.0 23.0 29.0 32.2% 5.0 2.0 -2.0 5.0 None 18.0 0.20 0.60 39.2 0.0 39.2 D

	*	\rightarrow	*	1	4	*	4	†	1	1	1	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		10.0		WW I	7.5	THE PR		39.3		Mar V	37.6	
Approach LOS		В			Α			D			D	
Queue Length 50th (ft)	14	155		0	413		57	65		40	110	
Queue Length 95th (ft)	m24	m203		m11	412		104	108		76	167	
Internal Link Dist (ft)		1065			1455			611			227	
Turn Bay Length (ft)	100			100			125	e su a staru		100		
Base Capacity (vph)	195	2362		352	2373		234	485		324	473	
Starvation Cap Reductn	0	0		0	0		0	0		0	0	
Spillback Cap Reductn	0	0		0	0		0	0		0	0	
Storage Cap Reductn	0	0		0	0		0	0		0	0	
Reduced v/c Ratio	0.23	0.39		0.09	0.58		0.46	0.27		0.25	0.45	

Area Type:

Other

Cycle Length: 90

Actuated Cycle Length: 90

Offset: 1 (1%), Referenced to phase 2:EBTL, Start of Green

Natural Cycle: 60

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.62

Intersection Signal Delay: 14.0

Intersection Capacity Utilization 63.2%

Intersection LOS: B

ICU Level of Service B

Analysis Period (min) 15

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





	4	×	2	1	K	7	7	×	74	Ĺ	K	*
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	ሻ	B		44	^	7	J.	ተተ	74	ሻ	1	
Volume (vph)	103	113	54	321	89	238	36	612	194	294	874	93
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%			0%	
Storage Length (ft)	200		0	275		250	125		275	400		0
Storage Lanes	1		0	1		1	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	1756	0	3400	1845	1568	1736	3471	1553	1736	3423	0
Flt Permitted	0.950			0.950			0.950			0.950		Mach
Satd. Flow (perm)	1752	1756	0	3400	1845	1568	1736	3471	1553	1736	3423	0
Right Turn on Red			No			No		MASSES !	No			No
Satd. Flow (RTOR)									H II MIREA			1.0
Link Speed (mph)		35			35			40			40	
Link Distance (ft)		782			1306	3		1535			385	
Travel Time (s)		15.2			25.4			26.2			6.6	
Confl. Peds. (#/hr)								20.2			0.0	
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	4%	4%	4%	4%	4%	4%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)	Transfer of the Party of								V	· ·	U	0
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)					0.70			070			070	
Lane Group Flow (vph)	114	186	0	357	99	264	40	680	216	327	1074	0
Turn Type	Prot			Prot		pm+ov	Prot	000	pm+ov	Prot	1011	0
Protected Phases	7	4		3	8	1	5	2	3	1	6	
Permitted Phases	The state of the s					8		-	2		0	
Detector Phase	7	4		3	8	1	5	2	3	1	6	
Switch Phase						ARCON CHICKSON CARD		HEDELER VARIABLE				
Minimum Initial (s)	7.0	7.0		7.0	7.0	7.0	7.0	12.0	7.0	7.0	12.0	
Minimum Split (s)	14.0	23.0		14.0	23.0	14.0	14.0	23.0	14.0	14.0	23.0	
Total Split (s)	26.0	36.0	0.0	34.0	44.0	55.0	14.0	55.0	34.0	55.0	96.0	0.0
Total Split (%)	14.4%	20.0%	0.0%	18.9%	24.4%	30.6%	7.8%	30.6%	18.9%	30.6%	53.3%	0.0%
Yellow Time (s)	5.0	5.0	30.070	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	0.070
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag	2.0	Lead	Lag	Lead	Lead	Lag	Lead	Lead	Lag	2.0
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None	None	None	C-Max	None	None	C-Max	
Act Effct Green (s)	18.1	25.7		25.5	33.1	79.2	10.1	67.8	98.3	41.0	101.5	
Actuated g/C Ratio	0.10	0.14		0.14	0.18	0.44	0.06	0.38	0.55	0.23	0.56	
v/c Ratio	0.65	0.74		0.74	0.10	0.44	0.00	0.52	0.35	0.23	0.56	
Control Delay	94.7	91.5		83.6	64.5	34.3	103.0	39.9	31.8	106.7	10.4	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total Delay	94.7	91.5		83.6	64.5	34.3	103.0	39.9	31.8	106.7	0.0	
LOS	54.7 F	91.5 F		65.0 F	04.5 E	34.3 C	103.0 F	39.9 D	31.0 C	106.7 F		
	I.	F		F	E	U	Г	U	C	Ε.	В	

4	0/25/2007	
п	1/23/2007	

	4	×	1	1	K	1	7	×	a	6	K	×
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		92.7			62.9			40.7			32.9	
Approach LOS		F			Е			D			C.	
Queue Length 50th (ft)	131	213		211	102	208	48	364	208	383	99	
Queue Length 95th (ft)	205	299		266	159	247	96	483	253	m390	165	
Internal Link Dist (ft)		702			1226		San All Marie	1455			305	
Turn Bay Length (ft)	200			275		250	125		275	400	000	
Base Capacity (vph)	204	302		548	400	768	98	1307	878	482	1930	
Starvation Cap Reductn	0	0		0	0	0	0	0	0,0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0	
Reduced v/c Ratio	0.56	0.62		0.65	0.25	0.34	0.41	0.52	0.25	0.68	0.56	

Area Type:

Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 99 (55%), Referenced to phase 2:NET and 6:SWT, Start of Green

Natural Cycle: 80

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 0.83

Intersection Signal Delay: 46.8

Intersection LOS: D

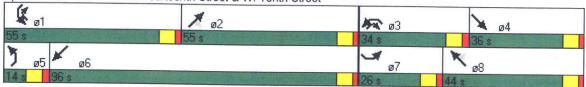
Intersection Capacity Utilization 68.3%

ICU Level of Service C

Analysis Period (min) 15

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





	-	-	~	-	4	4
Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations	1			44		7
Volume (veh/h)	830	36	0	1264	0	54
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	922	40	0	1404	0	60
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type	None			None		
Median storage veh)	110110			110110		
Upstream signal (ft)	385					
pX, platoon unblocked	000		0.85		0.85	0.85
vC, conflicting volume			962		1644	481
vC1, stage 1 conf vol			302		1044	401
vC2, stage 2 conf vol						
vCu, unblocked vol			615		1413	52
tC, single (s)			4.2		6.8	6.9
tC, 2 stage (s)			4.2		0.0	0.5
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	93
cM capacity (veh/h)						
			809		110	858
Direction, Lane #	EB 1	EB 2	WB 1	WB 2	NW 1	
Volume Total	615	347	702	702	60	
Volume Left	0	0	0	0	0	
Volume Right	0	40	0	0	60	
cSH	1700	1700	1700	1700	858	
Volume to Capacity	0.36	0.20	0.41	0.41	0.07	
Queue Length 95th (ft)	0	0	0	0	6	
Control Delay (s)	0.0	0.0	0.0	0.0	9.5	
Lane LOS					Α	
Approach Delay (s)	0.0		0.0		9.5	
Approach LOS					Α	
Intersection Summary						
Average Delay			0.2			
Intersection Capacity Utilizat	ion		38.3%	IC	U Level o	of Service
Analysis Period (min)			15			
missississississississississississississ						

	A	→	*	1	4	4	4	†	1	1	Į.	4
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	7	44	7	ሻሻ	44	77	ሻሻ	44	7	ሻሻ	44	77
Volume (vph)	166	504	194	525	693	267	386	1373	758	178	548	152
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%		BOLKING!	0%	14	12	0%	12	12	0%	12
Storage Length (ft)	400	Tarket Market	425	475	070	300	325	070	700	350	0 /0	275
Storage Lanes	1		1	2		1	2		1	2		1
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
FIt Permitted	0.950		1000	0.950	14 to 14 to	1000	0.950	3303	1300	0.950	3303	1000
Satd. Flow (perm)	1736	3471	1553	3367	3471	1553	3400	3505	1568	3400	3505	1568
Right Turn on Red	1100		No	3007	3471	No	3400	3303	No	3400	3303	No
Satd. Flow (RTOR)			110			110			IVU			INO
Link Speed (mph)		40			35			35			25	
Link Distance (ft)		934			628			1175			781	
Travel Time (s)		15.9			12.2			22.9				
Confl. Peds. (#/hr)		10.0			12.2			22.9			21.3	
Confl. Bikes (#/hr)												
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.00	0.00	0.00	0.00	0.00
Growth Factor	100%	100%	100%	100%	100%	100%	100%	0.90	0.90	0.90	0.90	0.90
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%		100%	100%	100%	100%	100%
Bus Blockages (#/hr)	0	0	0	0	0	0	3%	3%	3%	3%	3%	3%
Parking (#/hr)	U	U	U	U	U	0	0	0	0	0	0	0
Mid-Block Traffic (%)		0%			0%			00/			00/	
Shared Lane Traffic (%)					0 /0			0%			0%	
Lane Group Flow (vph)	184	560	216	583	770	297	429	1526	842	198	609	169
Turn Type	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov	Prot		pm+ov
Protected Phases	5	2	7	1	6	3	7	4	1	3	8	5
Permitted Phases			2			6			4			8
Detector Phase	5	2	7	1	6	3	7	4	1	3	8	5
Switch Phase												
Minimum Initial (s)	7.0	10.0	7.0	7.0	10.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0
Minimum Split (s)	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0	14.0	22.0	14.0
Total Split (s)	26.0	43.0	36.0	37.0	54.0	17.0	36.0	83.0	37.0	17.0	64.0	26.0
Total Split (%)	14.4%	23.9%	20.0%	20.6%	30.0%	9.4%	20.0%	46.1%	20.6%	9.4%	35.6%	14.4%
Yellow Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lead	Lag	Lag	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	C-Max	None	None	None	None	None	None	None	None	None	None
Act Effct Green (s)	21.0	38.0	66.6	32.0	49.0	66.0	28.6	78.0	110.0	12.0	61.4	87.4
Actuated g/C Ratio	0.12	0.21	0.37	0.18	0.27	0.37	0.16	0.43	0.61	0.07	0.34	0.49
v/c Ratio	0.91	0.76	0.38	0.97	0.81	0.52	0.79	1.00	0.88	0.87	0.51	0.22
Control Delay	101.0	58.3	16.2	67.9	38.6	27.8	84.3	74.1	34.4	115.9	49.5	28.2
Queue Delay	0.0	16.4	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
			- Lewise					0.0	0.0	0.0	0.0	0.0
Total Delay	101.0	74.8	16.2	67.9	39.9	27.8	84.3	74.1	34.4	115.9	49.5	28.2

	*	→	*	1	4	*	4	†	1	1	Ţ	1
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Approach Delay		66.6			47.6			63.7			59.3	
Approach LOS		Е			D			Е			F	
Queue Length 50th (ft)	221	363	162	361	459	282	253	~956	531	121	306	116
Queue Length 95th (ft)	#369	321	63	m#454	m481	m299	316	#1123	704	#200	375	174
Internal Link Dist (ft)		854			548			1095	343.70		701	AL HOUSE
Turn Bay Length (ft)	400		425	475		300	325		700	350	, , ,	275
Base Capacity (vph)	203	733	595	599	945	569	586	1519	958	227	1196	762
Starvation Cap Reductn	0	0	0	0	58	0	0	0	0	0	0	0
Spillback Cap Reductn	0	168	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.91	0.99	0.36	0.97	0.87	0.52	0.73	1.00	0.88	0.87	0.51	0.22

Area Type:

Other

Cycle Length: 180

Actuated Cycle Length: 180

Offset: 166 (92%), Referenced to phase 2:EBT, Start of Green

Natural Cycle: 120

Control Type: Actuated-Coordinated

Maximum v/c Ratio: 1.00

Intersection Signal Delay: 59.3

Intersection Capacity Utilization 89.4%

Intersection LOS: E

ICU Level of Service E

Analysis Period (min) 15

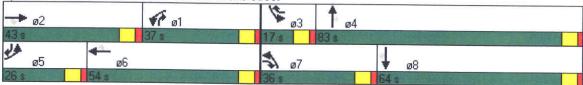
Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

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

Splits and Phases: 5: W. Tenth Street & Evans Street



	4	×	1	1	×	*	7	×	a	Ĺ	K	100
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations	T	4%		ř	1		ħ	^	7	7	ĵ.	
Volume (vph)	61	344	138	238	421	50	168	406	238	41	332	61
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lane Width (ft)	12	12	12	12	12	12	12	12	12	12	12	12
Grade (%)		0%			0%			0%		HISTORY POSSIBILITION OF THE	0%	Call Williams
Storage Length (ft)	100		0	350		0	275		175	100		0
Storage Lanes	1		0	1		0	1		1	1		0
Taper Length (ft)	100		100	100		100	100		100	100		100
Satd. Flow (prot)	1752	3354	0	1752	3449	0	1752	1845	1568	1752	1802	0
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1752	3354	0	1752	3449	0	1752	1845	1568	1752	1802	0
Right Turn on Red			No			No			No			No
Satd. Flow (RTOR)												
Link Speed (mph)		35			35			25			25	
Link Distance (ft)		1306			787	3		902			1147	
Travel Time (s)		25.4			15.3			24.6			31.3	
Confl. Peds. (#/hr)												
Confl. Bikes (#/hr)												
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
Growth Factor	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	0	0	0	0	0	0	0	0	0	0	0	0
Parking (#/hr)												Edy Co.
Mid-Block Traffic (%)		0%			0%			0%			0%	
Shared Lane Traffic (%)												
Lane Group Flow (vph)	68	535	0	264	524	0	187	451	264	46	437	0
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	5	2		1	6		7	4	1	3	8	
Permitted Phases									4			
Detector Phase	5	2		1	6		7	4	1	3	8	
Switch Phase												
Minimum Initial (s)	7.0	10.0		7.0	10.0		7.0	7.0	7.0	7.0	7.0	
Minimum Split (s)	14.0	23.0		14.0	23.0		14.0	23.0	14.0	14.0	23.0	
Total Split (s)	16.0	34.0	0.0	33.0	51.0	0.0	26.0	59.0	33.0	14.0	47.0	0.0
Total Split (%)	11.4%	24.3%	0.0%	23.6%	36.4%	0.0%	18.6%	42.1%	23.6%	10.0%	33.6%	0.0%
Yellow Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
All-Red Time (s)	2.0	2.0		2.0	2.0		2.0	2.0	2.0	2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0	-2.0
Total Lost Time (s)	5.0	5.0	2.0	5.0	5.0	2.0	5.0	5.0	5.0	5.0	5.0	2.0
Lead/Lag	Lead	Lag		Lead	Lag		Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes	Yes		Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	Max		None	Max		None	None	None	None	None	
Act Effct Green (s)	10.6	30.1		24.9	47.9		19.0	50.5	80.5	9.1	37.1	
Actuated g/C Ratio	0.08	0.23		0.19	0.36		0.14	0.38	0.61	0.07	0.28	
v/c Ratio	0.48	0.70		0.80	0.42		0.74	0.64	0.27	0.38	0.86	
Control Delay	73.0	54.0		69.8	35.0		73.1	38.9	13.1	71.9	62.3	
Queue Delay	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay	73.0	54.0		69.8	35.0		73.1	38.9	13.1	71.9	62.3	
LOS	Е	D		E	D		Е	D	В	Е	Е	

4	011	20	10	00	7
1	0/2	20/	2	UU	1

	1	×	1	1	X		7	×	0	6	K	K
Lane Group	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Approach Delay		56.1			46.7			38.5			63.3	
Approach LOS		Е			D			D			E	
Queue Length 50th (ft)	61	244		229	198		164	332	104	41	369	
Queue Length 95th (ft)	113	312		#349	254		#264	453	152	85	#529	
Internal Link Dist (ft)		1226			707			822		V-25-15-20	1067	
Turn Bay Length (ft)	100			350			275		175	100		
Base Capacity (vph)	149	768		377	1257		283	767	1001	122	583	
Starvation Cap Reductn	0	0		0	0		0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0		0	0	0	0	0	
Storage Cap Reductn	0	0		0	0		0	0	0	0	0	
Reduced v/c Ratio	0.46	0.70		0.70	0.42		0.66	0.59	0.26	0.38	0.75	

Area Type:

Other

Cycle Length: 140

Actuated Cycle Length: 131.4

Natural Cycle: 90

Control Type: Actuated-Uncoordinated

Maximum v/c Ratio: 0.86

Intersection Signal Delay: 48.9

Intersection LOS: D

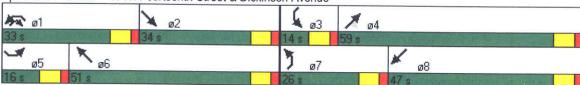
Intersection Capacity Utilization 74.3%

ICU Level of Service D

Analysis Period (min) 15

Queue shown is maximum after two cycles.

Splits and Phases: 7: W. Fourteenth Street & Dickinson Avenue



⁹⁵th percentile volume exceeds capacity, queue may be longer.

Appendix D

SimTraffic° 2030 Build Queuing and Blocking Reports

Intersection: 1: Stantonsburg F	Road & Memorial Drive
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Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	L	L	T	T	R	L	T	Т	R	L	L	Т	Т	Т	R	1	Т	Т	Т	R
Maximum Queue (ft)	305	486	663	686	300	278	427	437	298	132	138	363	545	568	225	376	403	426	414	280
Average Queue (ft)	206	240	387	419	82	131	262	281	143	57	56	209	234	253	49	216	259	275	283	113
95th Queue (ft)	289	372	585	633	298	250	374	405	303	114	116	324	391	413	189	358	392	408	400	227
Link Distance (ft)			909	909			1013	1013				994	994	994	1,00	000	923	923	923	441
Upstream Blk Time (%)													0	0			ESSESSE.	THE REAL PROPERTY.	020	
Queuing Penalty (veh)													0	0						
Storage Bay Dist (ft)	425	425			200	350			200	300	300				125	475				350
Storage Blk Time (%)			4	32	0	0	2	25	1			1		34	120	0	0		2	000
Queuing Penalty (veh)			22	72	0	0	2	45	2			1		41		0	0		10	

Intersection: 2: Farmville Boulevard & Line Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	Т	TR	L	TR	L	TR
Maximum Queue (ft)	78	250	306	50	183	223	173	152	120	184
Average Queue (ft)	24	80	109	12	63	96	80	72	46	78
95th Queue (ft)	58	203	249	34	142	189	146	138	93	153
Link Distance (ft)		1013	1013		1430	1430		654		247
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	100			100			125		100	
Storage Blk Time (%)	0	5			2		3	2	1	6
Queuing Penalty (veh)	0	3			0		4	2	2	4

Intersection: 3: W. Fourteenth Street & W. Tenth Street

Movement	SE	SE	NW	NW	NW	NW	NE	NE	NE	NE	SW	SW	SW
Directions Served	L	TR	L	L	Т	R	L	Т	Т	R	L	Т	TR
Maximum Queue (ft)	150	268	208	225	199	272	174	332	331	241	297	281	172
Average Queue (ft)	69	125	112	123	95	124	58	158	163	98	209	75	71
95th Queue (ft)	132	221	191	204	169	222	123	282	283	205	305	198	136
Link Distance (ft)		737		1212	1212			1430	1430			310	310
Upstream Blk Time (%)											1	1	
Queuing Penalty (veh)											0	5	
Storage Bay Dist (ft)	200		275			250	125			275	400		
Storage Blk Time (%)	0	3		0	0	1	3	15	1		1	1	
Queuing Penalty (veh)	0	2		0	0	1	12	8	3		3	2	

Intersection: 4: W. Tenth Street & Pennsylvania Avenue

Movement	EB	WB	NW
Directions Served	TR	Т	R
Maximum Queue (ft)	11	47	53
Average Queue (ft)	0	3	19
95th Queue (ft)	7	31	42
Link Distance (ft)	310	2200	280
Upstream Blk Time (%)			
Queuing Penalty (yeh)			

Queuing Penalty (veh) Storage Bay Dist (ft)

Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 5: W. Tenth Street & Evans Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	NB	NB	SB	CD	CD	On	00	
Directions Served		Т	Т	R	1	1	Т	Т	D	IND	IND	T	T	IND	OB	SB	SB	SB	SB	
Maximum Queue (ft)	429	690	694	439	478	489	525	420	273	323	374	746	757	FOE	077	L	005	1	R	
Average Queue (ft)	227	335	347	205	385	397	346	244	127	222	The same of the sa	A 121 (25 cm)	757	525	277	400	825	832	375	
95th Queue (ft)	390	576	581	392	547	564	600	374	229		245	359	367	219	180	256	612	630	202	
Link Distance (ft)	330	851	851	332	347	304	495	495	229	351	398	648	629	434	259	422	935	938	433	
Upstream Blk Time (%)		001	001		0	0	490					1078	1078				810	810		
Queuing Penalty (veh)		0	0		0	0	46	0				0	0				2	2		
Storage Bay Dist (ft)	400	U	0	425	475	475	46	1	000	005	005	0	0	2272			0	0		
Storage Blk Time (%)	400	A CONTRACTOR	4	425	475	475		SALES AND S	300	325	325			700	350	350			275	
Queuing Penalty (veh)	0	0	4	0	3	11	0	4		2	11	6	0	1			21	30	0	
Queuing Fenalty (Vell)	0	8	13		8	29	0	7		5	38	13	0	2			86	92	1	

Intersection: 6: W. Tenth Street & Cotanche Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB	
Directions Served	L	L	Т	Т	R	L	Т	T	R	L	Т	T	R	00	00	Т	Т	D	
Maximum Queue (ft)	198	249	501	508	200	370	538	451	231	150	288	298	166	251	399	749	748	375	
Average Queue (ft)	122	157	373	391	67	152	313	240	60	72	163	179	50	144	211	540	550	212	
95th Queue (ft)	187	257	533	543	190	295	512	409	144	136	262	271	117	229	389	866	860	428	
Link Distance (ft)			495	495			559	559			871	871		LLU	000	731	731	420	
Upstream Blk Time (%)			1	4			3	0								10	11		
Queuing Penalty (veh)			9	34			0	0								0	0		
Storage Bay Dist (ft)	200	200			100	475			400	275			225	300	300	oral View	ALCOHOL:	275	
Storage Blk Time (%)	0	1	28	46	1		5	1			0	5		0	0	35	42	0	
Queuing Penalty (veh)	2	6	69	70	7		6	2			0	5		0	0	127	108	1	

Intersection: 7: W. Fourteenth Street & Dickinson Avenue

Movement	SE	SE	SE	NW	NW	NW	NE	NE	NE	SW	SW
Directions Served	L	Т	TR	L	Т	TR	L	Т	R	L	TR
Maximum Queue (ft)	199	327	370	314	260	238	270	563	272	138	846
Average Queue (ft)	82	200	238	166	111	120	132	219	112	60	501
95th Queue (ft)	169	319	353	286	217	202	239	398	244	126	802
Link Distance (ft)		1212	1212		741	741		856			1101
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	100			350			275		175	100	
Storage Blk Time (%)	8	34		1			0	13	1	5	57
Queuing Penalty (veh)	16	25		1			1	45	3	26	28

Network Summary

Network wide Queuing Penalty: 1187

Intersection: 1: Stantonsburg Road & Memorial Drive

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB	115
Directions Served	L	L	Т	T	R	L	T	T	R	L	L	Т	Т	Т	R	L	Т	Т	Т	R	
Maximum Queue (ft)	394	411	477	511	237	377	687	724	300	177	353	554	589	611	225	500	543	450	399	323	
Average Queue (ft)	249	269	256	250	20	163	315	346	156	92	97	337	363	397	53	319	261	262	268	147	
95th Queue (ft)	446	482	564	468	141	301	511	565	313	156	219	487	512	552	195	533	447	381	371	258	
Link Distance (ft)			1036	1036			1012	1012				994	994	994			923	923	923	200	
Upstream Blk Time (%)			1	0													0	A South			
Queuing Penalty (veh)			0	0													0				
Storage Bay Dist (ft)	425	425			200	350			200	300	300				125	475	Same and			350	
Storage Blk Time (%)	6	9	0	15		0	6	30	2			10		41	0	5			1	0	
Queuing Penalty (veh)	15	23	0	18		2	11	82	10			20		75	1	20			6	0	

Intersection: 2: Farmville Boulevard & Line Avenue

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	Т	TR	L	TR	L	TR
Maximum Queue (ft)	73	226	262	46	212	255	136	124	136	206
Average Queue (ft)	22	109	147	9	88	117	61	58	45	90
95th Queue (ft)	56	188	223	30	172	212	115	109	98	164
Link Distance (ft)		1012	1012		1430	1430		636		247
Upstream Blk Time (%)										0
Queuing Penalty (veh)										0
Storage Bay Dist (ft)	100			100			125		100	
Storage Blk Time (%)	0	7		0	3		1	0	1	8
Queuing Penalty (veh)	0	3		0	1		1	0	1	6

Intersection: 3: W. Fourteenth Street & W. Tenth Street

Movement	SE	SE	NW	NW	NW	NW	NE	NE	NE	NE	SW	SW	SW
Directions Served	L	TR	L	L	Т	R	L	T	T	R	L	Т	TR
Maximum Queue (ft)	284	354	267	276	240	313	200	354	354	240	302	366	286
Average Queue (ft)	110	177	152	159	85	147	38	195	201	106	231	163	137
95th Queue (ft)	203	297	235	242	175	271	109	330	331	205	331	340	248
Link Distance (ft)		737		1212	1212			1430	1430			310	310
Upstream Blk Time (%)											6	6	0
Queuing Penalty (veh)											.0	36	0
Storage Bay Dist (ft)	200		275			250	125			275	400		
Storage Blk Time (%)	2	8	0	0	0	2	0	17	3	0	6	6	
Queuing Penalty (veh)	3	9	0	1	0	2	0	6	6	0	28	17	

Intersection: 4: W. Tenth Street & Pennsylvania Avenue

Movement	WB	WB	NW	
Directions Served	Т	Т	R	
Maximum Queue (ft)	135	87	63	
Average Queue (ft)	15	4	23	
95th Queue (ft)	82	45	44	
Link Distance (ft)	2209	2209	285	
Upstream Blk Time (%)				

Queuing Penalty (veh)

Storage Blk Time (%)

Queuing Penalty (veh)

Intersection: 5: W. Tenth Street & Evans Street

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB	
Directions Served	L	T	T	R	L	L	Т	T	R		1	Т	Т	R	1	1	Т	Т	D	- Calletonia
Maximum Queue (ft)	329	291	312	186	390	406	435	377	356	191	421	637	640	381	264	281	366	380	341	
Average Queue (ft)	168	145	146	56	235	251	187	179	127	120	147	332	350	195	164	175	214	224	95	
95th Queue (ft)	307	255	260	128	397	406	361	338	275	179	288	535	541	332	312	323	340	347	215	
Link Distance (ft)		842	842				494	494			200	1111	1111	002	012	020	717	717	210	
Upstream Blk Time (%)					0	0	0	recently.					STEELS .				e anni de la colonia de la col			
Queuing Penalty (veh)					0	0	1													
Storage Bay Dist (ft)	400			425	475	475			300	325	325			700	350	350			275	
Storage Blk Time (%)	0				0	0	0	1	0	020	020	11	0	700	000	0.00	0	6	2/0	
Queuing Penalty (veh)	0				0	1	0	3	2			44	0		0	1	4	0		

Intersection: 6: W. Tenth Street & Cotanche Street

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	NB	SB	SB	SB	SB	SB	A STATE OF THE STA	BELLIE
Directions Served	L	L	Т	Т	R	L	T	Т	R	L	Т	Т	R	1	1	Т	Т	D		e (please
Maximum Queue (ft)	179	274	474	472	200	536	574	578	452	374	641	673	325	122	153	211	231	140		
Average Queue (ft)	107	131	227	250	57	214	392	369	178	141	376	393	157	61	83	118	137	60		
95th Queue (ft)	178	236	386	415	192	367	595	571	344	281	581	604	338	117	142	185	203	117		
Link Distance (ft)			494	494			559	559			871	871	000		172	731	731	111		
Upstream Blk Time (%)			0	0		0	2	1								701	NAME OF THE PARTY IS			
Queuing Penalty (veh)			1	2		0	0	0												
Storage Bay Dist (ft)	200	200			100	475			400	275			225	300	300			275		
Storage Blk Time (%)	1	1	12	37			4	6		0	23	36	0	000	000		0	210		
Queuing Penalty (veh)	5	7	26	51			10	22		0	32	65	1				0			

Intersection: 7: W. Fourteenth Street & Dickinson Avenue

Movement	SE	SE	SE	NW	NW	NW	NE	NE	NE	SW	SW	9415
Directions Served	L	Т	TR	L	T	TR	L	Т	R	L	TR	
Maximum Queue (ft)	178	291	346	378	247	263	320	705	275	199	617	
Average Queue (ft)	62	157	193	208	120	133	148	302	131	59	341	
95th Queue (ft)	131	272	312	328	196	217	261	578	281	155	569	
Link Distance (ft)		1212	1212		741	741		856			1101	
Upstream Blk Time (%)								0				
Queuing Penalty (veh)								0				
Storage Bay Dist (ft)	100			350			275		175	100		
Storage Blk Time (%)	7	27		1			0	21	1	4	52	
Queuing Penalty (veh)	11	17		2			0	84	4	14	21	

Network Summary

Network wide Queuing Penalty: 839