

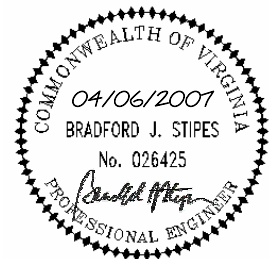
Traffic Impact Study

Harrington Waddell Elementary Relocation
City of Lexington, Virginia



Prepared for:
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April 6, 2007



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Executive Summary

Overview

This study was prepared for Oliver, Webb, Pappas, & Rhudy, Inc. by Anderson & Associates, Inc. (A&A) to evaluate the potential traffic impacts from relocating Harrington Waddell Elementary School in the City of Lexington, Virginia. This study involves reviewing two relocation scenarios: 1) relocation of the school to a site immediately adjacent to the existing school, and 2) relocation of the school to a site directly across Jordan Street from the existing school. At the time of this study, a site plan has not yet been prepared for the proposed school, although it is not expected that the number of students at the school will significantly change. It is our understanding that the results of this study will be used to assist in determining the relocation site which results in the least traffic impact to the surrounding streets.

Discussion

Based on afternoon peak hour traffic counts collected by A&A in January 2007, analyses were performed to determine the impact of relocating Harrington Waddell Elementary School to one of the two currently proposed sites. Average Daily Traffic (ADT) data from the Virginia Department of Transportation (VDOT) shows negative growth rates for all roads within the study area where ADT counts were available, with exception of White Street. To be conservative in the analysis, a positive growth rate of 3% annually was applied to the turning movement counts collected by A&A. Site trips to and from the school were extrapolated from the turning movement counts, and determined to be roughly double the trip generation projections from the Institute of Transportation Engineers (ITE) Trip Generation Manual, in large part due to the lack of school buses being used in the City of Lexington. Summary Table 1 shows analysis results for the peak hour traffic volumes that result in the longest delay and highest LOS for each intersection.

Summary Table 1 Intersection	2007 Existing Traffic		2011 Background Traffic		2011 Build-out Site #1		2011 Build-out Site #2	
	Delay	LOS	Delay	Delay	LOS	LOS	Delay	LOS
Jordan St./Houston St. & South Main St.*	13.7	B	15.4	B	15.4	B	13.3	B
White St. & South Main St.**	--	--	--	--	--	--	--	--
White St. & South Jefferson St.	18.6	C	22.1	C	22.1	C	29.4	D
White St. & Jackson Ave.	12.9	B	13.9	B	13.9	B	16.4	C
White St. & Highland Rd./Myers St.	9.9	A	10.0	A	10.0	A	11.5	B
Jordan St. & Jackson Ave.	12.0	B	12.7	B	12.7	B	13.3	B
Jordan St. & Highland Rd.	9.6	A	9.7	A	9.7	A	10.4	B
Jordan St. & Pendleton Pl.**	--	--	--	--	--	--	--	--
Jackson Ave. & Pendleton Pl.	10.3	B	10.6	B	10.6	B	9.4	A
Pendleton Pl. & Highland Rd.	9.5	A	9.6	A	9.6	A	8.6	A
Jordan St. & Entrance to Site #2**	--	--	--	--	--	--	--	--
White St. & Exit from Site #2	--	--	--	--	--	--	10.5	B

*Analysis results shown based on analysis performed in Synchro.

**Uncontrolled intersections, not able to analyze delay or level of service

Conclusions

Results show that the intersections analyzed as part of this study currently operate at an acceptable LOS C or better, and will continue to do so in the background traffic conditions and for either of the two site locations, with the exception of the White Street & South Jefferson Street intersection, which will operate at a LOS of D for Site #2. However, the change in LOS of the intersection corresponds to a delay increase of less than 10 seconds per vehicle for traffic traveling eastbound, most of which occurs in the peak period of time during school pick-up, which should last no more than 15 minutes. It may be possible to further reduce vehicular traffic congestion around the school by providing additional on-site parking and encouraging parents to walk or bike with students by improving sidewalks, crosswalks, and bike trails in the vicinity of the school.

Introduction

This report summarizes potential traffic impacts that may result from the relocation of Harrington Waddell Elementary within the City of Lexington, Virginia. This study was prepared by Anderson & Associates, Inc. for Oliver, Webb, Pappas, & Rhudy, Inc. to assist in determining the best site location for the relocated school. This study was performed in accordance with the Land Development Guidelines (Virginia Department of Transportation, 1995) and the Highway Capacity Manual (Transportation Research Board, 2000 edition).

Site Description

There are two sites being considered for the relocation of the school, both adjacent to the existing school site. One site is located on what is currently used as a ball field adjacent to the existing school (Proposed Site #1). The other site alternative is located on a vacant lot across Jordan Street from the existing school, near the school system administrative offices (Proposed Site #2). Existing development surrounding the proposed sites is residential. Figure 1 shows the proposed site locations in relationship to the existing school site. The projected opening date for the new school (Design Year) is September 2011.

Access to both proposed site locations will utilize the existing roadway network. Pendleton Place is proposed to be the main ingress and egress for traffic to the school for Proposed Site #1, and will be almost identical to the existing traffic patterns at the school. For Proposed Site #2, Jordan Street is proposed to be the ingress and White Street will be the egress for traffic to access the school.

Adjacent to the school site locations, all nearby roadways are narrow, neighborhood roads with speed limits of 25 mph or less. White Street, Pendleton Place, South Jefferson Street, and South Main Street are predominantly one-way streets. All other roads accommodate two-way traffic, and most allow some on street parking, which further restricts the travel way. All intersections are stop-controlled, with the exception of the signalized intersection of Jordan Street and Houston Street with South Main Street, and the intersection of White Street and South Main Street, which is an uncontrolled intersection.

Based on peak hour traffic counts collected by A&A in January 2007, analyses were performed to determine which proposed school site would result in a better flow of vehicular traffic to and from the school. See Figure 2 for a map of the area showing where traffic counts were obtained.

Analysis Methodology

Conclusions and recommendations for improvements are based on requirements outlined in the following resources:

- Acceptable traffic performance is LOS "C" for signalized intersections as well as each lane group as defined in the VDOT Land Development Guidelines (1995). The VDOT Land Development Guidelines do not define an acceptable traffic LOS for unsignalized intersections.
- Turn lane warrants are based on the VDOT Road Design Manual (2001).
- Traffic signal warrants, if required, are based on the Manual of Uniform Traffic Control Devices (MUTCD), Millennium Edition.

- Capacity analysis for unsignalized intersections was performed using Highway Capacity Software, version 5.2 (HCS+). HCS+ is a product of the McTrans Center, University of Florida, and is based on principles of the Highway Capacity Manual (Transportation Research Board, 2000 edition).
- Signalized intersection analysis was performed using Synchro 6 Traffic Signal Coordination Software (Synchro). Synchro is a product of Trafficware Corporation of Albany, California.
- Report recommendations are based on Synchro analysis for signalized intersections and HCS for unsignalized intersections.
- Recommendations in this report are based on traffic analysis only and do not consider the feasibility of improvements based on existing site conditions, right of way requirements, and impacts to existing development.

Analysis of Pre-Relocation Conditions

The VDOT Land Development Guidelines require analysis of Existing Year and Design Year traffic conditions to determine the scope of improvements warranted by future traffic alone, without considering the impact of additional site traffic. Analysis of 2007 Existing Conditions and 2011 No-Build Conditions are addressed in this section. Analysis results are summarized in Tables 2, 3, and 4.

Development of Traffic Conditions without School Relocation

Manual turning movement counts were collected from 2:30 – 4:00 PM from January 17-19, 2007 at the following intersections: Jordan Street/Houston Street & South Main Street, Jordan Street & Jackson Avenue, Jordan Street & Highland Road, Jordan Street & Pendleton Place, Pendleton Place & Highland Road, Pendleton Place & Jackson Avenue, White Street & Highland Road/Myers Street, White Street & Jackson Avenue, White Street & South Jefferson Street, and White Street & South Main Street. To our knowledge, these counts are representative of a typical afternoon of traffic conditions in the area, and were conducted to coincide with the PM school pick-up time period. Existing 2007 PM Peak Hour Volumes for the intersections are shown in Figure 3, with estimated school site trips depicted in Figure 4.

VDOT Historical traffic data for South Main Street, Jackson Avenue, and Houston Street shows a decrease in traffic volumes from 2001 to 2004, while data for White Street shows an increase in traffic. The variance in traffic data could be attributed to obtaining the counts at different times during the year, resulting in seasonal variations in the data due to the schedule of the schools and universities located within the City. It is not expected that traffic would significantly differ due to the area surrounding the counts being largely established and built out; therefore a 3% annual growth rate was conservatively used to generate traffic volumes in the traffic study.

Counts obtained by A&A in 2007 were grown by 3% per year to obtain 2011 Background traffic. Background 2011 PM Peak Hour Volumes without changes in the traffic patterns due to the proposed school relocation are shown in Figures 5 and 6.

Roadway Capacity Analysis

Capacity analysis cannot be performed on the roadways included in this study since the roadways are local neighborhood streets that do not fall within Highway Capacity guidelines for

roadway capacity analysis; therefore, recommendations for this study are based on results of the intersection analyses. Information about LOS and Delays can be found in Appendix C.

Signalized Intersection Analysis

The table below summarizes overall delay and LOS results based on Synchro analysis for the signalized intersection of Jordan Street/Houston Street at South Main Street:

PM Peak Hour	2007 Existing Traffic		2011 Background Traffic	
	Delay (s)	LOS	Delay (s)	LOS
Jordan St./Houston St. & South Main St.	13.7	B	15.4	B

Based on analysis results, the intersection operates at LOS B during PM peak hours in the Existing Year (2007) and will continue to do so through the Design Year (2011) without considering impacts from the school relocation.

Turn lane warrants were reviewed based on Synchro analysis, and it was determined that no additional turn lanes are required.

Unsignalized Intersection Analyses

The table below summarizes overall delay and LOS results based on HCS analysis for the unsignalized intersections within the study area:

PM Peak Hour	2007 Existing Traffic		2011 Background Traffic	
	Delay (s)	LOS	Delay (s)	LOS
White St. & South Main St.**	--	--	--	--
White St. & South Jefferson St.	18.6	C	22.1	C
White St. & Jackson Ave.	12.9	B	13.9	B
White St. & Highland Rd./Myers St.	9.9	A	10.0	A
Jordan St. & Jackson Ave.	12.0	B	12.7	B
Jordan St. & Highland Rd.	9.6	A	9.7	A
Jordan St. & Pendleton Pl.**	--	--	--	--
Jackson Ave. & Pendleton Pl.	10.3	B	10.6	B
Pendleton Pl. & Highland Rd.	9.5	A	9.6	A

**Uncontrolled intersections, not able to analyze delay or level of service

Based on analysis results, it was determined that these intersections operate at LOS C or better during the PM peak hour in the Existing Year (2007) and will continue to do so through the Design Year (2011) without considering impacts from the school relocation.

Turn lane warrants were reviewed based on the VDOT Road Design Manual, and it was determined that traffic volumes are not sufficient to warrant turn lanes at these intersections.

Analysis of 2011 Relocation Conditions

Based on the VDOT Land Development Guidelines, analysis of buildout traffic conditions may be used to determine what specific improvements the additional site traffic warrants on the local roads above and beyond the improvements necessary to accommodate the projected background traffic. Analysis of Buildout Conditions for both proposed site location are addressed in this section and the analysis results are summarized in Tables 2, 5, and 6.

Development of Site-Generated Traffic

Traffic volumes anticipated by the relocated Harrington Waddell Elementary School were generated based on the Institute of Transportation Engineers Trip Generation Manual (Seventh Edition) and are shown in Table 1. These numbers are significantly lower than the actual traffic volumes recorded by A&A in January 2007. As a result, site trips to and from the school were extrapolated from the traffic count data to estimate the actual number of trips associated with the school. To be conservative in the analysis, estimated school trips were also grown by 3% per year to account for potentially higher proportions of students being driven to school.

Additionally, it was noted during the traffic counts that students were walking one or more blocks away from the school to meet their vehicular transportation on adjacent streets. Trips of this nature are more difficult to estimate than direct site trips; however, they have been included in the traffic counts and projections. It is expected that similar traffic patterns will be present regardless of the site selected for school reconstruction.

Trip Generation Assumptions:

1. ITE Land Use Type 520 (Elementary School) for Harrington Waddell Elementary, used as a baseline to estimate the number of trips. This estimate considers that the schools utilize a school bus system, and results in lower site trips than were observed during the traffic counts.
2. Extrapolated trips were developed from 2007 existing traffic counts to account for the actual traffic generated by the existing Harrington Waddell Elementary School. This indicated roughly double the ITE expected number of trips going to and from the school site. This was accomplished by comparing traffic volumes before and after the school pick-up, and estimating that the majority of the additional trips recorded were associated with the school.

Traffic Assignment to the Adjacent Roadways

For the purpose of site trip distribution and based on general observations during the traffic counts, trips to and from the school were estimated as shown in Figure 4. These volumes were then grown 3% per year to estimate school site trips in 2011. See Figure 6 for 2011 estimated site trips.

Anticipated traffic volumes for Proposed Site #1 are shown in Figures 7 and 8. The anticipated traffic volumes developed for this site location are identical to existing traffic patterns, due to the fact that the site will utilize the same points of access as the existing school and result in no

significant change in traffic patterns. Anticipated traffic volumes for Proposed Site #2 are shown in Figures 9 and 10. This site location may be able to utilize a circular traffic flow pattern for the school site, with traffic primarily entering the site from Jordan Street and exiting on White Street, utilizing a one-way street flow similar to existing school traffic circulation patterns on Pendleton Place.

Signalized Intersection Analysis

The table below summarizes overall delay and LOS results based on Synchro analysis for the signalized intersection of Jordan Street/Houston Street at South Main Street:

PM Peak Hour	2011 Site #1 Traffic		2011 Site #2 Traffic	
	Delay (s)	LOS	Delay (s)	LOS
Jordan St./Houston St. & South Main St.	15.4	B	13.3	B

Based on analysis results, the intersection operates at LOS B in the Design Year (2011) with the redistributed site trips from the school with signal timing optimization.

Turn lane warrants were reviewed based on Synchro analysis, and it was determined that no additional turn lanes are required.

Unsignalized Intersection Analyses

The table below summarizes overall delay and LOS results based on HCS analysis for the unsignalized intersections within the study area:

PM Peak Hour	2011 Site #1 Traffic		2011 Site #2 Traffic	
	Delay (s)	LOS	Delay (s)	LOS
White St. & South Main St.**	--	--	--	--
White St. & South Jefferson St.	22.1	C	29.4	D
White St. & Jackson Ave.	13.9	B	16.4	C
White St. & Highland Rd./Myers St.	10.0	A	11.5	B
Jordan St. & Jackson Ave.	12.7	B	13.3	B
Jordan St. & Highland Rd.	9.7	A	10.4	B
Jordan St. & Pendleton Pl.**	--	--	--	--
Jackson Ave. & Pendleton Pl.	10.6	B	9.4	A
Pendleton Pl. & Highland Rd.	9.6	A	8.6	A
Jordan Street at Entrance to Site #2**	--	--	--	--
White Street at Exit from Site #2	--	--	10.5	B

**Uncontrolled intersections, not able to analyze delay or level of service

Based on analysis results, the intersection of White Street and South Jefferson Street will operate at a LOS D with an increase in delay of 7.3 seconds over Background 2011 analysis results if Site Location #2 is chosen. The delay increase for the intersection is minimal, and would be limited to a short 15-minute period in the afternoons. All other unsignalized intersections analyzed function at a LOS of C or better for either of the proposed school sites.

Turn lane warrants were reviewed based on the VDOT Road Design Manual, and it was determined that traffic volumes are not sufficient to warrant additional turn lanes at these intersections.

Given right-of-way limitations at the intersection of White Street & South Jefferson Street, physical improvements to reduce delays and improve level of service are not likely feasible.

Roadway Capacity Analysis

As previously discussed in Analysis of Pre-Development Conditions, analysis could not be performed on the roadways.

Conclusions and Recommendations

Existing Year 2007:

South Main Street at Jordan Street / Houston Street

Based on this study, no improvements are recommended.

Unsignalized Intersections Included in this Study

Based on this study, no improvements are recommended.

Design Year 2011 Background Traffic (Excluding School Relocation):

South Main Street at Jordan Street / Houston Street

Based on this study, no improvements are recommended.

Unsignalized Intersections Included in this Study

Based on this study, no improvements are recommended.

Design Year 2011 Relocation Traffic (Proposed Site #1):

South Main Street at Jordan Street / Houston Street

Based on this study, no improvements are recommended.

Unsignalized Intersection Included in this Study

Based on this study, no improvements are recommended.

Design Year 2011 Relocation Traffic (Proposed Site #2):

South Main Street at Jordan Street / Houston Street

Based on this study, no improvements are recommended.

Unsignalized Intersections Included in this Study

Based on this study, no improvements are recommended.

Based on this study, the LOS is within VDOT acceptable guidelines for all the intersections analyzed. Proposed Site #1 for the relocation of Harrington Waddell Elementary results in traffic patterns nearly identical to the existing school site, primarily due to the utilized roadways being the same as current conditions. The resulting traffic flow will most likely have similar congestion problems as existing traffic conditions in the area.

Proposed Site #2 for the relocation does result in the intersection of White Street and South Jefferson Street having a LOS of D; however, Site #2 would provide for a more efficient movement of vehicular traffic by utilizing a circular flow of traffic to and from the school site. The more efficient circular flow of traffic should help to reduce neighborhood congestion and improve overall traffic flow around the school. Based on the results of this study, Proposed Site #2, across Jordan Street from the existing Harrington Waddell Elementary, is the preferred site based on the ability of this site to accommodate circular traffic flow.

To help reduce the traffic congestion associated with school traffic, additional parking at the school site should be provided, if possible, to provide a location for students to be picked up without parents having to park on adjacent streets. Also, encouraging parents to walk or bike to school with students would assist in helping to reduce vehicular traffic. This could be accomplished through improving sidewalks and bike trails near the school and adding crosswalks.

Figures

Figure 1	Proposed School Locations
Figure 2	Map of Count Area
Figures 3 to 4	Intersection Turning Movements and Estimated School Site Trips (Existing Year 2007)
Figures 5 to 6	Intersection Turning Movements and Estimated School Site Trips (Background Year 2011, without relocation)
Figures 7 to 8	Intersection Turning Movements and Estimated School Site Trips (Buildout Year 2011, Site Location #1)
Figures 9 to 10	Intersection Turning Movements and Estimated School Site Trips (Buildout Year 2011, Site Location #2)



* Image from Rockbridge County WebGIS website

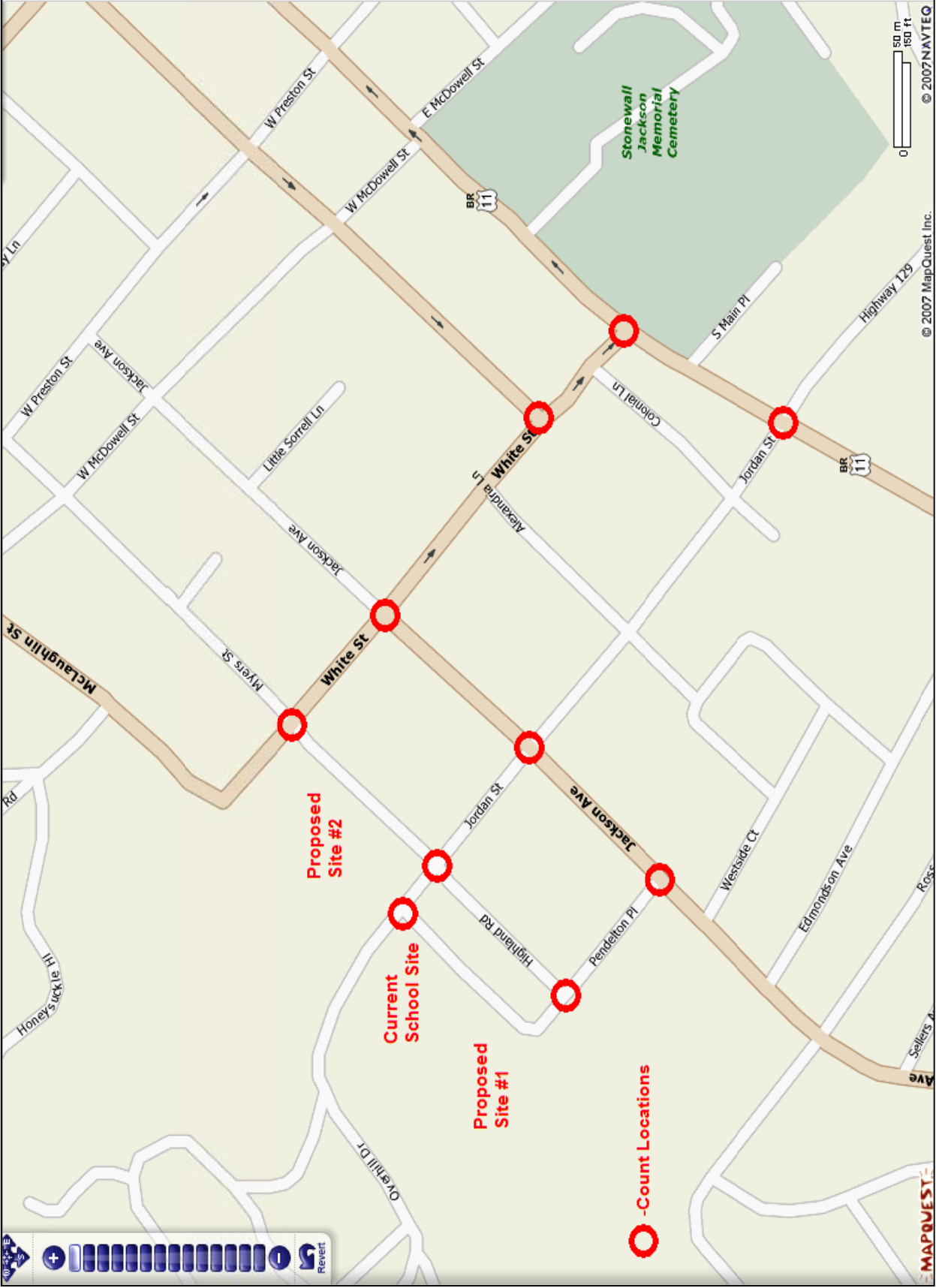


Anderson & Associates,
Inc. Blacksburg, VA

Date: 6-Apr-07
JN: 25742.00
Scale: NTS

Harrington Waddell Elementary School
Relocation
City of Lexington, VA

Figure 1: Proposed School Locations



* Image from Mapquest, Inc. website

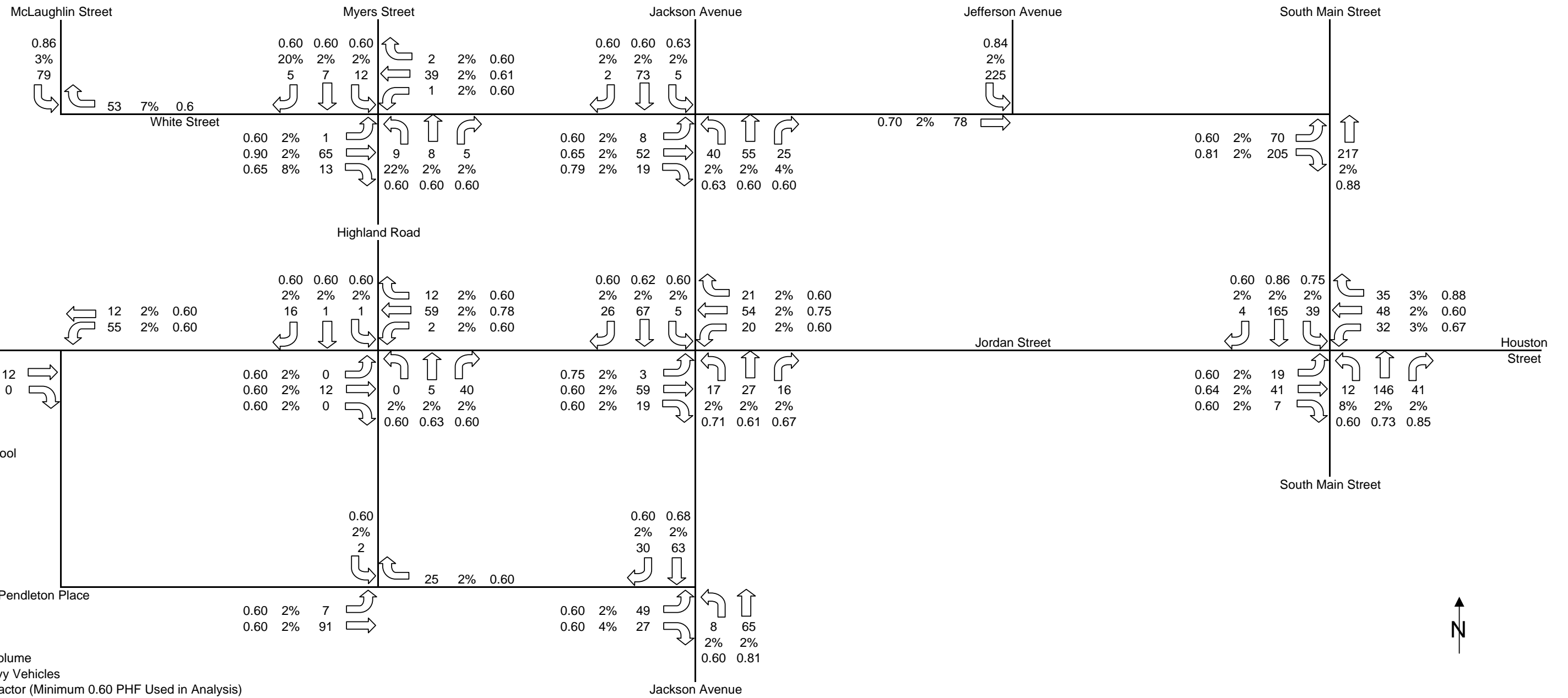


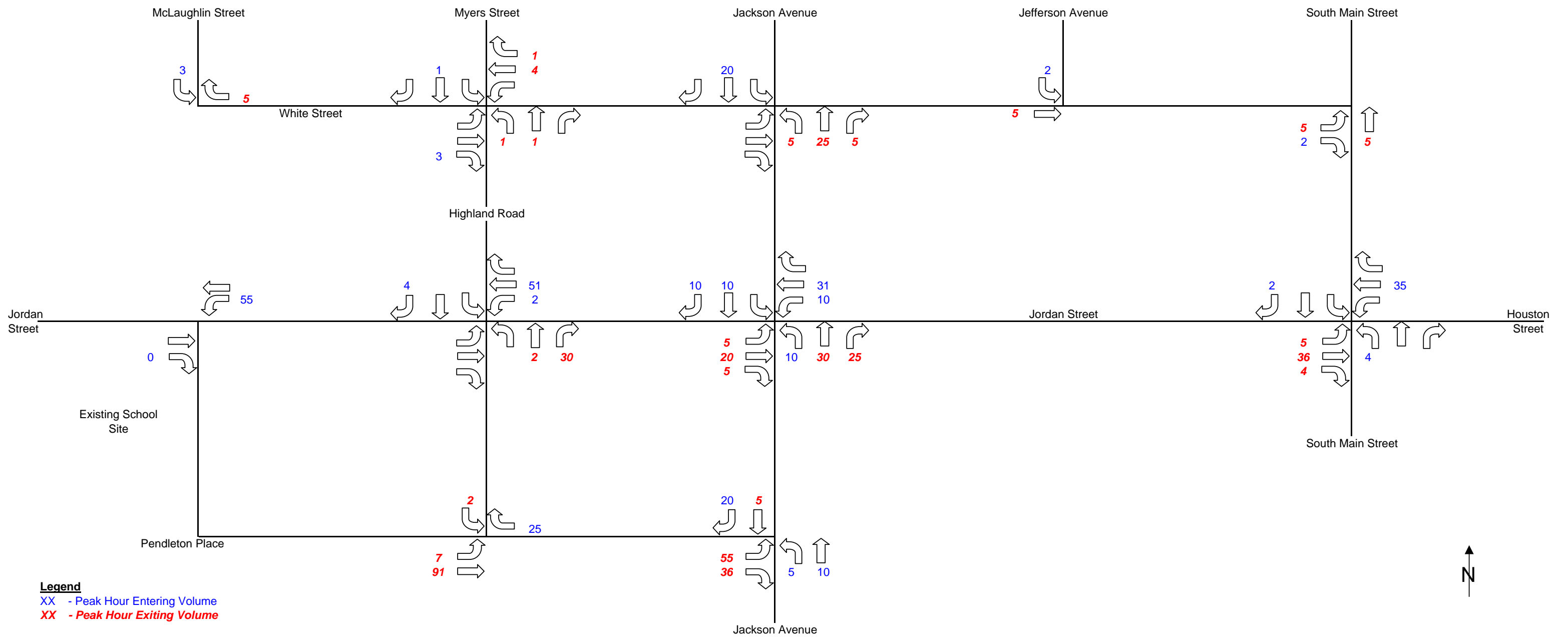
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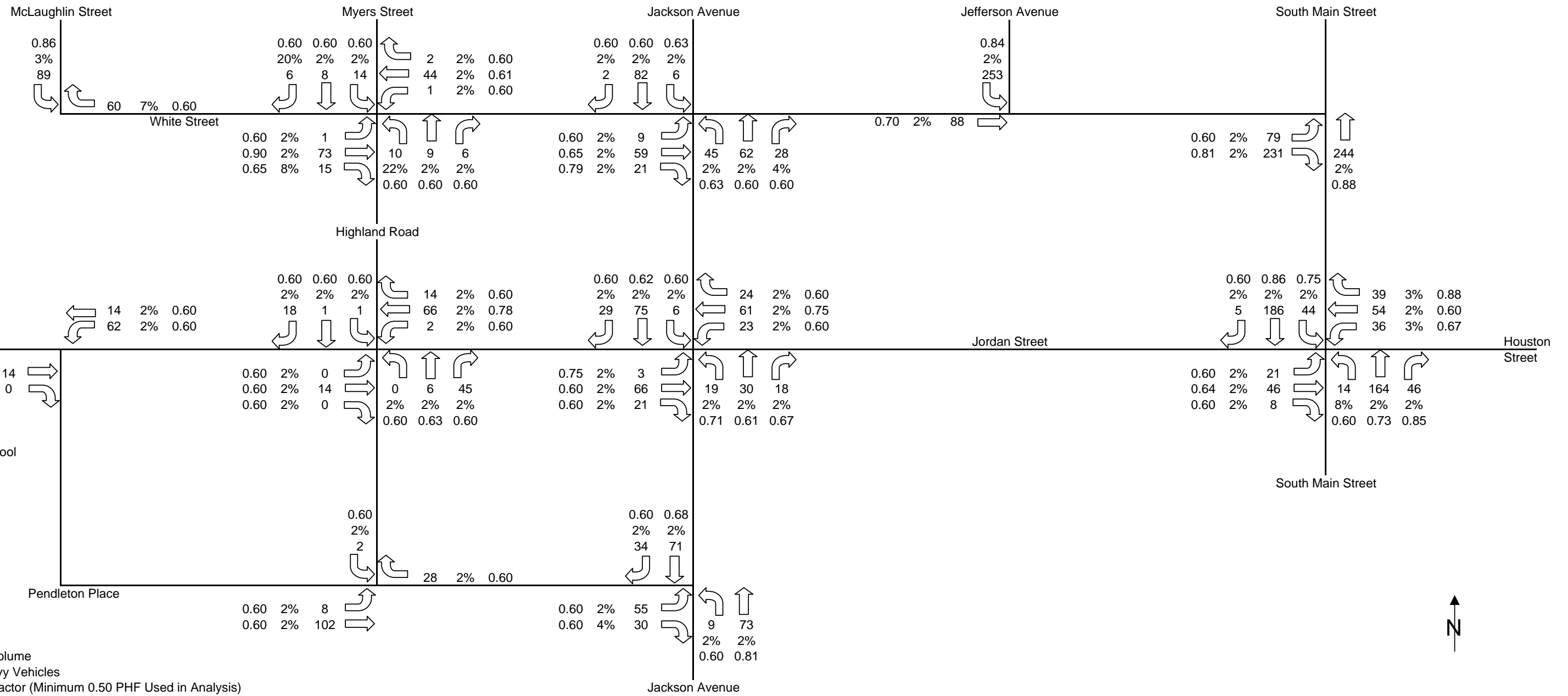
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City of Lexington, VA

Figure 2: Map of Count Area

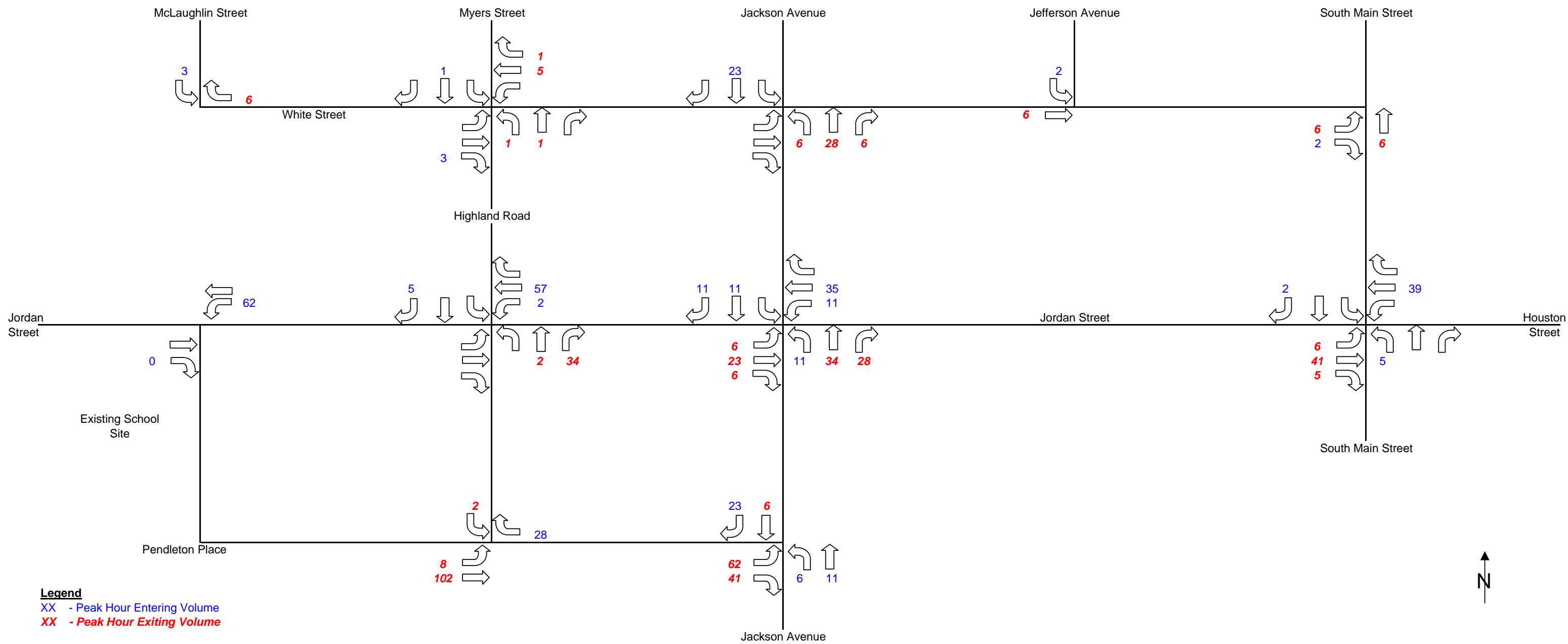


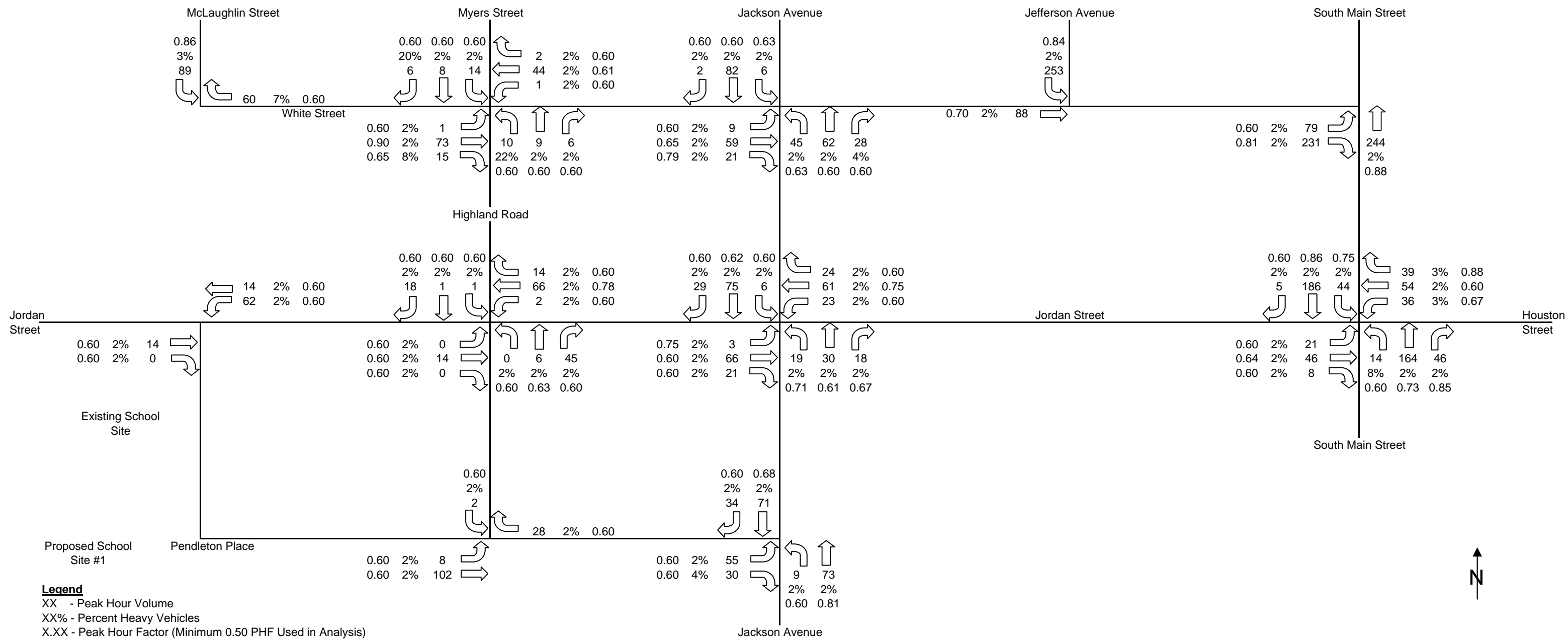


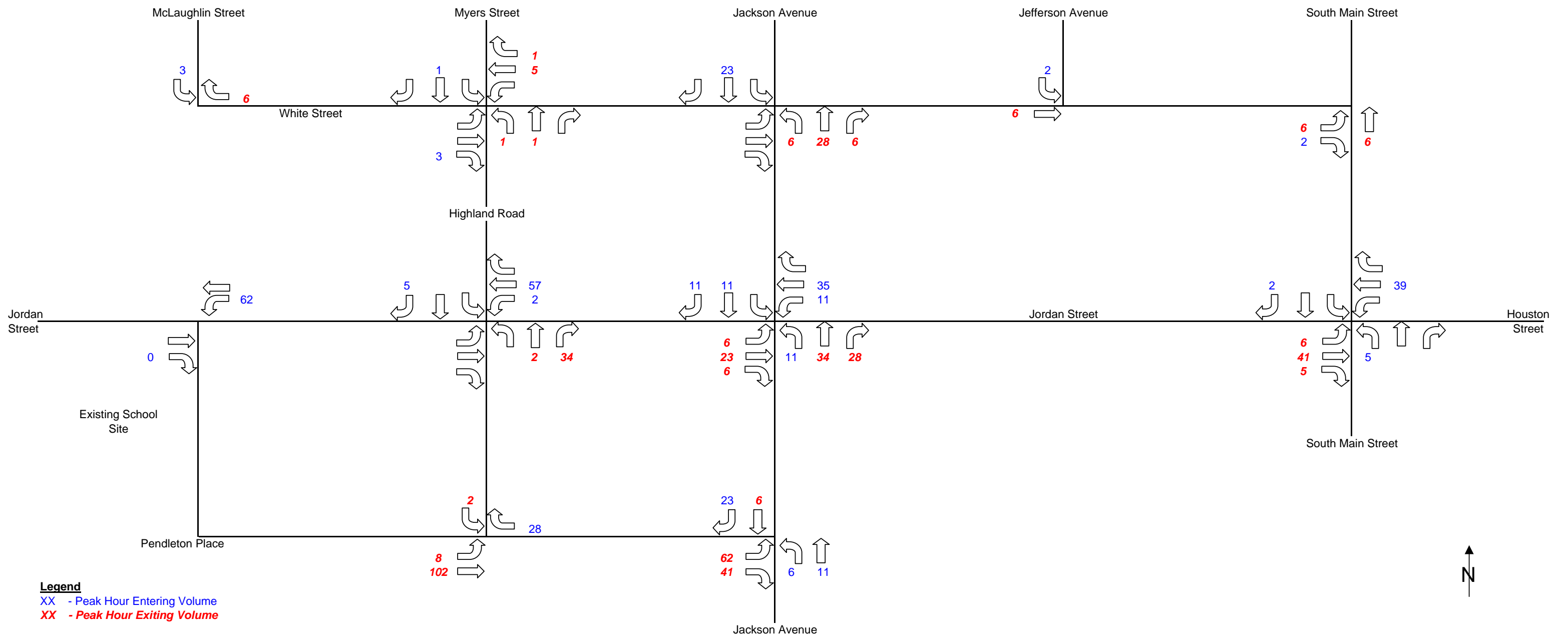


Legend
 XX - Peak Hour Volume
 XX% - Percent Heavy Vehicles
 X.XX - Peak Hour Factor (Minimum 0.50 PHF Used in Analysis)

* Due to rounding and count day variances, discrepancies in volume balancing may exist.

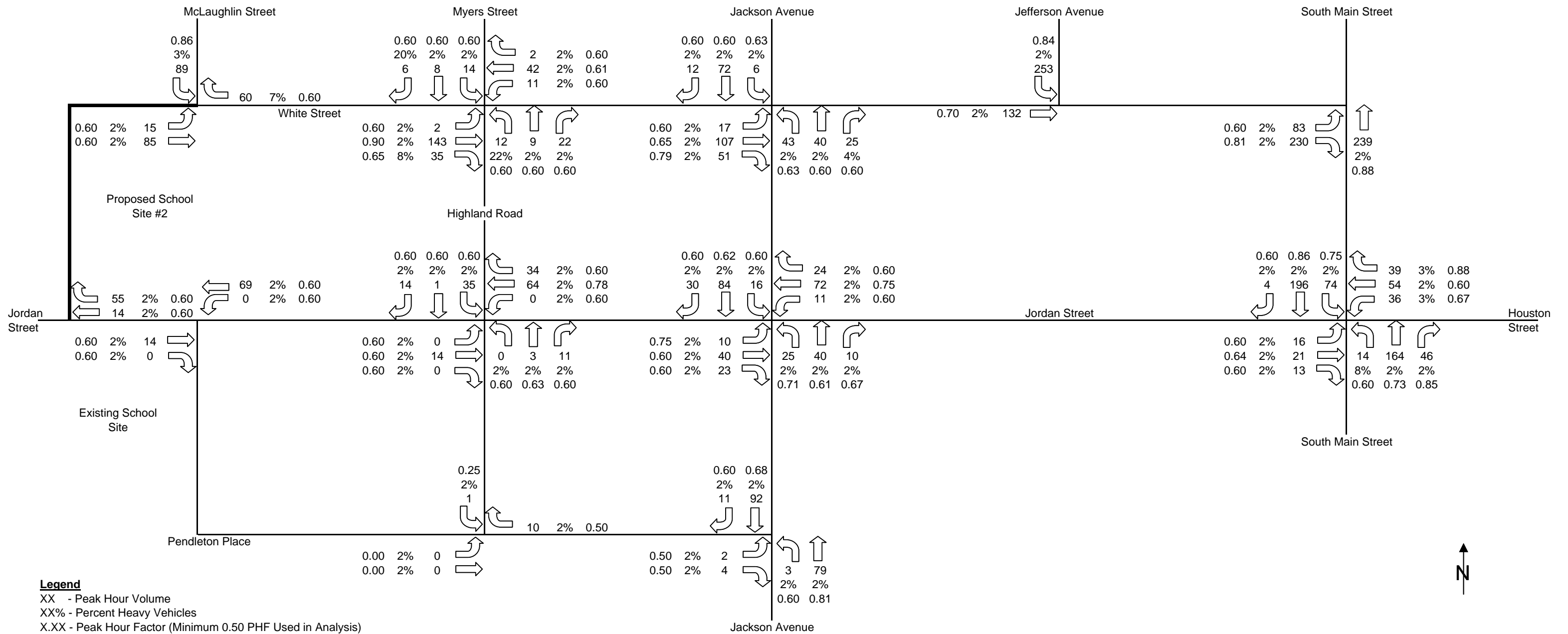


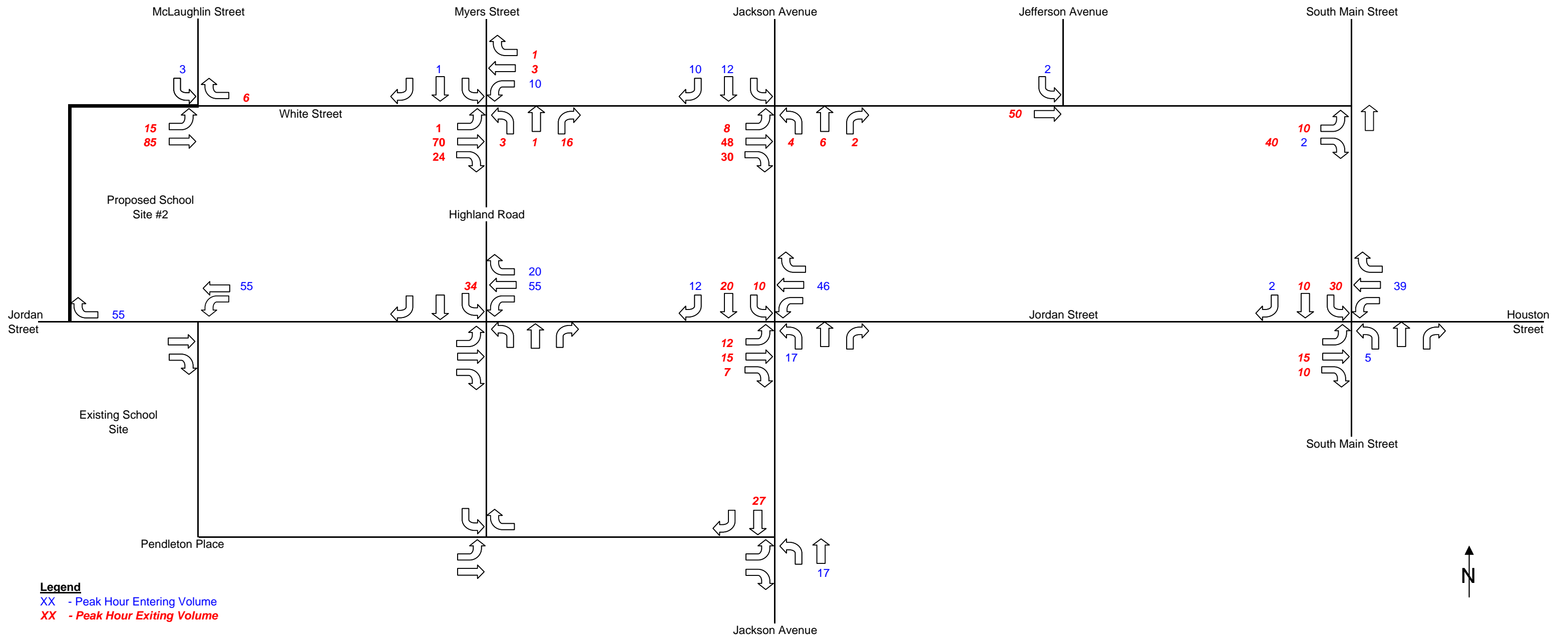




Legend
 XX - Peak Hour Entering Volume
 XX - Peak Hour Exiting Volume

* Due to rounding and count day variances, discrepancies in volume balancing may exist.





Tables

Table 1	Trip Generation for School from ITE Trip Generation Manual
Table 2	Level of Service Summary for Signalized Intersections
Table 3	Level of Service Summary for Unsignalized Intersections, Existing
Table 4	Level of Service Summary for Unsignalized Intersections, Background
Table 5	Level of Service Summary for Unsignalized Intersections, Site #1
Table 6	Level of Service Summary for Unsignalized Intersections, Site #2

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Table 1 - Trip Generation

Description	ITE Land Use Type	Independent Variable	Variable	Quantity	Weekday, PM Peak Hour of Generator, PM Traffic	Directional Distribution	
						Entering	Exiting
Elementary School	ITE Code 520 - Elementary School	Students	350	350	98	44	54

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Table 2: Signalized Intersection Analysis

Analysis Period	Intersection	Peak Hour	Approach	SYNCHRO	
				Delay (s/veh)	LOS
2007 - Existing Traffic	Jordan Street/Houston Street at South Main Street	PM	EB	23.3	C
			WB	27.6	C
			NB	7.4	A
			SB	7.4	A
			OVERALL	13.7	B
2011 - Background Traffic	Jordan Street/Houston Street at South Main Street	PM	EB	26.5	C
			WB	32.3	C
			NB	7.9	A
			SB	7.5	A
			OVERALL	15.4	B
2011 - Proposed Site #1	Jordan Street/Houston Street at South Main Street	PM	EB	26.5	C
			WB	32.3	C
			NB	7.9	A
			SB	7.5	A
			OVERALL	15.4	B
2011 - Proposed Site #2	Jordan Street/Houston Street at South Main Street	PM	EB	21.6	C
			WB	30.7	C
			NB	7.3	A
			SB	7.0	A
			OVERALL	13.3	B

LOS	Delay (s/veh)
A	0-10
B	>10-20
C	>20-35
D	>35-55
E	>55-80
F	>80

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Table 3: Unsignalized Intersection Analysis

Analysis Period	Intersection	Peak Hour	Approach	HCS+	
				Delay (s/veh)	LOS
2007 - Existing Traffic	White Street at South Main Street	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2007 - Existing Traffic	White Street at South Jefferson Street	PM	EB	18.6	C
			WB	*	*
			NB	*	*
			SB	*	*
2007 - Existing Traffic	White Street at Jackson Avenue	PM	EB	12.9	B
			WB	*	*
			NB	*	*
			SB	*	*
2007 - Existing Traffic	White Street at Highland Road/Myers Street	PM	EB	*	*
			WB	*	*
			NB	9.9	A
			SB	9.8	A
2007 - Existing Traffic	Jordan Street at Jackson Avenue	PM	EB	11.6	B
			WB	12.0	B
			NB	*	*
			SB	*	*
2007 - Existing Traffic	Jordan Street at Highland Road	PM	EB	*	*
			WB	*	*
			NB	9.6	A
			SB	9.0	A
2007 - Existing Traffic	Jordan Street at Pendleton Place	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2007 - Existing Traffic	Pendleton Place at Jackson Avenue	PM	EB	10.3	B
			WB	*	*
			NB	*	*
			SB	*	*
2007 - Existing Traffic	Pendleton Place at Highland Road	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	9.5	A

LOS	Delay (s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

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Table 4: Unsignalized Intersection Analysis

Analysis Period	Intersection	Peak Hour	Approach	HCS+	
				Delay (s/veh)	LOS
2011 - Background Traffic	White Street at South Main Street	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Background Traffic	White Street at South Jefferson Street	PM	EB	22.1	C
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Background Traffic	White Street at Jackson Avenue	PM	EB	13.9	B
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Background Traffic	White Street at Highland Road/Myers Street	PM	EB	*	*
			WB	*	*
			NB	10.0	A
			SB	10.0	A
2011 - Background Traffic	Jordan Street at Jackson Avenue	PM	EB	12.2	B
			WB	12.7	B
			NB	*	*
			SB	*	*
2011 - Background Traffic	Jordan Street at Highland Road	PM	EB	*	*
			WB	*	*
			NB	9.7	A
			SB	9.0	A
2011 - Background Traffic	Jordan Street at Pendleton Place	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Background Traffic	Pendleton Place at Jackson Avenue	PM	EB	10.6	B
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Background Traffic	Pendleton Place at Highland Road	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	9.6	A

LOS	Delay (s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

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Table 5: Unsignalized Intersection Analysis

Analysis Period	Intersection	Peak Hour	Approach	HCS+	
				Delay (s/veh)	LOS
2011 - Build Site # 1	White Street at South Main Street	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 1	White Street at South Jefferson Street	PM	EB	22.1	C
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 1	White Street at Jackson Avenue	PM	EB	13.9	B
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 1	White Street at Highland Road/Myers Street	PM	EB	*	*
			WB	*	*
			NB	10.0	A
			SB	10.0	A
2011 - Build Site # 1	Jordan Street at Jackson Avenue	PM	EB	12.2	B
			WB	12.7	B
			NB	*	*
			SB	*	*
2011 - Build Site # 1	Jordan Street at Highland Road	PM	EB	*	*
			WB	*	*
			NB	9.7	A
			SB	9.0	A
2011 - Build Site # 1	Jordan Street at Pendleton Place	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 1	Pendleton Place at Jackson Avenue	PM	EB	10.6	B
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 1	Pendleton Place at Highland Road	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	9.6	A

LOS	Delay (s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

**Harrington Waddell Elementary Relocation
Lexington, Virginia**

Table 6: Unsignalized Intersection Analysis

Analysis Period	Intersection	Peak Hour	Approach	HCS+	
				Delay (s/veh)	LOS
2011 - Build Site # 2	White Street at South Main Street	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 2	White Street at South Jefferson Street	PM	EB	29.4	D
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 2	White Street at Jackson Avenue	PM	EB	16.4	C
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 2	White Street at Highland Road/Myers Street	PM	EB	*	*
			WB	*	*
			NB	11.0	B
			SB	11.5	B
2011 - Build Site # 2	Jordan Street at Jackson Avenue	PM	EB	12.5	B
			WB	13.3	B
			NB	*	*
			SB	*	*
2011 - Build Site # 2	Jordan Street at Highland Road	PM	EB	*	*
			WB	*	*
			NB	9.2	A
			SB	10.4	B
2011 - Build Site # 2	Jordan Street at Pendleton Place	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 2	Pendleton Place at Jackson Avenue	PM	EB	9.4	A
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 2	Pendleton Place at Highland Road	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	8.6	A
2011 - Build Site # 2	Jordan Street at Site Entrance	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	*	*
2011 - Build Site # 2	White Street at Site Exit	PM	EB	*	*
			WB	*	*
			NB	*	*
			SB	10.5	B

LOS	Delay (s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Appendix A

HCS Analysis Results

Existing Year 2007

Unsignalized Intersections within Study Area

Design Year 2011 (without relocation)

Unsignalized Intersections within Study Area

Design Year 2011 (Proposed Site #1)

Unsignalized Intersections within Study Area

Design Year 2008 (Proposed Site #2)

Unsignalized Intersections within Study Area

Entrance to School from Jordan Street

Exit from School onto White Street

TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Jefferson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2007 Existing			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: South Jefferson Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)				225				
Peak-Hour Factor, PHF	0.38	0.29	0.31	0.84	0.44	0.42		
Hourly Flow Rate, HFR (veh/h)	0	111	0	0	0	0		
Percent Heavy Vehicles	22	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)		78						
Peak-Hour Factor, PHF	0.25	0.70	0.65	0.25	0.61	0.25		
Hourly Flow Rate, HFR (veh/h)	267	0	0	0	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	0	0		
Configuration		T						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L					T	
v (veh/h)		267					111	
C (m) (veh/h)		1623					375	
v/c		0.16					0.30	
95% queue length		0.59					1.22	
Control Delay (s/veh)		7.7					18.6	
LOS		A					C	
Approach Delay	--	--					18.6	

(s/veh)				
Approach LOS	--	--		C

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2007 Existing			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	40	55	25	5	73	2		
Peak-Hour Factor, PHF	0.63	0.60	0.60	0.63	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	11	80	24	0	0	0		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	8	52	19					
Peak-Hour Factor, PHF	0.67	0.65	0.79	1.00	0.75	1.00		
Hourly Flow Rate, HFR (veh/h)	7	121	3	63	91	41		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	0	0		
Configuration		LTR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR					LTR	
v (veh/h)	63	7					115	
C (m) (veh/h)	1455	1453					572	
v/c	0.04	0.00					0.20	
95% queue length	0.14	0.01					0.75	
Control Delay (s/veh)	7.6	7.5					12.9	
LOS	A	A					B	
Approach Delay	--	--					12.9	

(s/veh)				
Approach LOS	--	--		<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Highland/Myers			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2007 Existing			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: Highland Road/Myers Street				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	65	13	1	39	2		
Peak-Hour Factor, PHF	0.60	0.90	0.65	0.60	0.61	0.60		
Hourly Flow Rate, HFR (veh/h)	1	72	20	1	63	3		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	9	8	5	12	7	5		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	14	13	8	19	11	8		
Percent Heavy Vehicles	22	2	2	2	2	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	1	1		35			38	
C (m) (veh/h)	1528	1493		774			786	
v/c	0.00	0.00		0.05			0.05	
95% queue length	0.00	0.00		0.14			0.15	
Control Delay (s/veh)	7.4	7.4		9.9			9.8	
LOS	A	A		A			A	
Approach Delay	--	--		9.9			9.8	

(s/veh)				
Approach LOS	--	--	A	A

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	John Holst			Intersection	Jordan at Jackson		
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington		
Date Performed	04/06/2007			Analysis Year	2007 Existing		
Analysis Time Period	PM Peak Hour						
Project Description JN 25742.00 Waddell Elementary School Relocation TIS							
East/West Street: Jordan Street				North/South Street: Jackson Avenue			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	17	27	16	5	67	26	
Peak-Hour Factor, PHF	0.71	0.61	0.67	0.60	0.62	0.60	
Hourly Flow Rate, HFR (veh/h)	4	98	31	33	72	34	
Percent Heavy Vehicles	2	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	3	59	19	20	54	21	
Peak-Hour Factor, PHF	0.75	0.60	0.60	0.60	0.75	0.60	
Hourly Flow Rate, HFR (veh/h)	8	108	43	23	44	23	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (veh/h)	23	8		139			133
C (m) (veh/h)	1430	1529		654			676
v/c	0.02	0.01		0.21			0.20
95% queue length	0.05	0.02		0.80			0.73
Control Delay (s/veh)	7.6	7.4		12.0			11.6
LOS	A	A		B			B
Approach Delay	--	--		12.0			11.6

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Jordan at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2007 Existing			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Jordan Street				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	12	0	2	59	12		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.78	0.60		
Hourly Flow Rate, HFR (veh/h)	0	19	0	3	75	19		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	5	40	1	1	16		
Peak-Hour Factor, PHF	0.60	0.63	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	0	7	66	1	1	26		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	0	3		73			28	
C (m) (veh/h)	1500	1506		853			939	
v/c	0.00	0.00		0.09			0.03	
95% queue length	0.00	0.01		0.28			0.09	
Control Delay (s/veh)	7.4	7.4		9.6			9.0	
LOS	A	A		A			A	
Approach Delay	--	--		9.6			9.0	

(s/veh)				
Approach LOS	--	--	A	A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2007 Existing			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	8	65			63	30		
Peak-Hour Factor, PHF	0.60	0.81	1.00	1.00	0.68	0.60		
Hourly Flow Rate, HFR (veh/h)	81	0	44	0	0	0		
Percent Heavy Vehicles	2	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT			TR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	49		27					
Peak-Hour Factor, PHF	0.60	1.00	0.60	1.00	1.00	1.00		
Hourly Flow Rate, HFR (veh/h)	0	92	49	13	80	0		
Percent Heavy Vehicles	2	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	13						125	
C (m) (veh/h)	1442						806	
v/c	0.01						0.16	
95% queue length	0.03						0.55	
Control Delay (s/veh)	7.5						10.3	
LOS	A						B	
Approach Delay	--	--					10.3	

(s/veh)				
Approach LOS	--	--		<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2007 Existing			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	7	91				25		
Peak-Hour Factor, PHF	0.60	0.60	1.00	0.57	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	11	151	0	0	0	41		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	0	1		
Configuration	LT					R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				2				
Peak-Hour Factor, PHF	1.00	0.63	0.27	0.60	0.25	0.44		
Hourly Flow Rate, HFR (veh/h)	0	0	0	3	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		
v (veh/h)	11					3		
C (m) (veh/h)	1568					803		
v/c	0.01					0.00		
95% queue length	0.02					0.01		
Control Delay (s/veh)	7.3					9.5		
LOS	A					A		
Approach Delay	--	--					9.5	

(s/veh)				
Approach LOS	--	--		A

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	John Holst			Intersection	White at Jefferson		
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington		
Date Performed	04/06/2007			Analysis Year	2011 Background		
Analysis Time Period	PM Background						
Project Description JN 25742.00 Waddell Elementary School Relocation TIS							
East/West Street: White Street				North/South Street: South Jefferson Street			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)				253			
Peak-Hour Factor, PHF	0.38	0.29	0.31	0.84	0.44	0.42	
Hourly Flow Rate, HFR (veh/h)	0	125	0	0	0	0	
Percent Heavy Vehicles	22	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	0	0	1	0	0	
Configuration				L			
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)		88					
Peak-Hour Factor, PHF	0.25	0.70	0.65	0.25	0.61	0.25	
Hourly Flow Rate, HFR (veh/h)	301	0	0	0	0	0	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)		0			0		
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0				0
Lanes	0	1	0	0	0	0	
Configuration		T					
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11 12
Lane Configuration		L					T
v (veh/h)		301					125
C (m) (veh/h)		1623					334
v/c		0.19					0.37
95% queue length		0.68					1.69
Control Delay (s/veh)		7.7					22.1
LOS		A					C
Approach Delay	--	--					22.1

(s/veh)				
Approach LOS	--	--		C

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Background			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	45	62	28	6	82	2		
Peak-Hour Factor, PHF	0.63	0.60	0.60	0.63	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	13	90	26	0	0	0		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	9	59	21					
Peak-Hour Factor, PHF	0.67	0.65	0.79	1.00	0.75	1.00		
Hourly Flow Rate, HFR (veh/h)	9	136	3	71	103	46		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	0	0		
Configuration		LTR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR					LTR	
v (veh/h)	71	9					129	
C (m) (veh/h)	1437	1432					532	
v/c	0.05	0.01					0.24	
95% queue length	0.16	0.02					0.94	
Control Delay (s/veh)	7.6	7.5					13.9	
LOS	A	A					B	
Approach Delay	--	--					13.9	

(s/veh)				
Approach LOS	--	--		<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Highland/Myers			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Background			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: Highland Road/Myers Street				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	73	15	1	44	2		
Peak-Hour Factor, PHF	0.60	0.90	0.65	0.60	0.61	0.60		
Hourly Flow Rate, HFR (veh/h)	1	81	23	1	72	3		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	10	9	6	14	8	6		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	16	14	9	23	13	9		
Percent Heavy Vehicles	22	2	2	2	2	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	1	1		39			45	
C (m) (veh/h)	1516	1478		754			764	
v/c	0.00	0.00		0.05			0.06	
95% queue length	0.00	0.00		0.16			0.19	
Control Delay (s/veh)	7.4	7.4		10.0			10.0	
LOS	A	A		B			B	
Approach Delay	--	--		10.0			10.0	

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Jordan at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Background			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Jordan Street				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	19	30	18	6	75	29		
Peak-Hour Factor, PHF	0.71	0.61	0.67	0.60	0.62	0.60		
Hourly Flow Rate, HFR (veh/h)	4	109	34	38	81	39		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	3	66	21	23	61	24		
Peak-Hour Factor, PHF	0.75	0.60	0.60	0.60	0.75	0.60		
Hourly Flow Rate, HFR (veh/h)	9	120	48	26	49	26		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	26	9		158			147	
C (m) (veh/h)	1410	1519		622			649	
v/c	0.02	0.01		0.25			0.23	
95% queue length	0.06	0.02		1.00			0.87	
Control Delay (s/veh)	7.6	7.4		12.7			12.2	
LOS	A	A		B			B	
Approach Delay	--	--		12.7			12.2	

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Jordan at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Background			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Jordan Street				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	14	0	2	66	14		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.61	0.78	0.60		
Hourly Flow Rate, HFR (veh/h)	0	23	0	3	84	23		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	6	45	1	1	18		
Peak-Hour Factor, PHF	0.60	0.63	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	0	9	74	1	1	29		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	0	3		83			31	
C (m) (veh/h)	1484	1501		844			926	
v/c	0.00	0.00		0.10			0.03	
95% queue length	0.00	0.01		0.33			0.10	
Control Delay (s/veh)	7.4	7.4		9.7			9.0	
LOS	A	A		A			A	
Approach Delay	--	--		9.7			9.0	

(s/veh)				
Approach LOS	--	--	A	A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Background			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	9	73			71	34		
Peak-Hour Factor, PHF	0.60	0.81	1.00	1.00	0.68	0.60		
Hourly Flow Rate, HFR (veh/h)	91	0	49	0	0	0		
Percent Heavy Vehicles	2	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT			TR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	55		30					
Peak-Hour Factor, PHF	0.60	1.00	0.60	1.00	1.00	1.00		
Hourly Flow Rate, HFR (veh/h)	0	104	56	14	90	0		
Percent Heavy Vehicles	2	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	14						140	
C (m) (veh/h)	1419						781	
v/c	0.01						0.18	
95% queue length	0.03						0.65	
Control Delay (s/veh)	7.6						10.6	
LOS	A						B	
Approach Delay	--	--					10.6	

(s/veh)				
Approach LOS	--	--		<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Background			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	8	102				28		
Peak-Hour Factor, PHF	0.60	0.60	1.00	0.57	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	13	169	0	0	0	46		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	0	1		
Configuration	LT					R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				2				
Peak-Hour Factor, PHF	1.00	0.63	0.27	0.60	0.25	0.44		
Hourly Flow Rate, HFR (veh/h)	0	0	0	3	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		
v (veh/h)	13					3		
C (m) (veh/h)	1562					779		
v/c	0.01					0.00		
95% queue length	0.03					0.01		
Control Delay (s/veh)	7.3					9.6		
LOS	A					A		
Approach Delay	--	--				9.6		

(s/veh)				
Approach LOS	--	--		A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Jefferson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: South Jefferson Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)				253				
Peak-Hour Factor, PHF	0.38	0.29	0.31	0.84	0.44	0.42		
Hourly Flow Rate, HFR (veh/h)	0	125	0	0	0	0		
Percent Heavy Vehicles	22	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)		88						
Peak-Hour Factor, PHF	0.25	0.70	0.65	0.25	0.61	0.25		
Hourly Flow Rate, HFR (veh/h)	301	0	0	0	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	0	0		
Configuration		T						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L					T	
v (veh/h)		301					125	
C (m) (veh/h)		1623					334	
v/c		0.19					0.37	
95% queue length		0.68					1.69	
Control Delay (s/veh)		7.7					22.1	
LOS		A					C	
Approach Delay	--	--					22.1	

(s/veh)				
Approach LOS	--	--		C

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	John Holst			Intersection	White at Jackson		
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington		
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1		
Analysis Time Period	PM Background						
Project Description JN 25742.00 Waddell Elementary School Relocation TIS							
East/West Street: White Street				North/South Street: Jackson Avenue			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	45	62	28	6	82	2	
Peak-Hour Factor, PHF	0.63	0.60	0.60	0.63	0.60	0.60	
Hourly Flow Rate, HFR (veh/h)	13	90	26	0	0	0	
Percent Heavy Vehicles	2	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	9	59	21				
Peak-Hour Factor, PHF	0.67	0.65	0.79	1.00	0.75	1.00	
Hourly Flow Rate, HFR (veh/h)	9	136	3	71	103	46	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	0	0	
Configuration		LTR					
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR					LTR
v (veh/h)	71	9					129
C (m) (veh/h)	1437	1432					532
v/c	0.05	0.01					0.24
95% queue length	0.16	0.02					0.94
Control Delay (s/veh)	7.6	7.5					13.9
LOS	A	A					B
Approach Delay	--	--					13.9

(s/veh)				
Approach LOS	--	--		<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Highland/Myers			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: Highland Road/Myers Street				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	1	73	15	1	44	2		
Peak-Hour Factor, PHF	0.60	0.90	0.65	0.60	0.61	0.60		
Hourly Flow Rate, HFR (veh/h)	1	81	23	1	72	3		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	10	9	6	14	8	6		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	16	14	9	23	13	9		
Percent Heavy Vehicles	22	2	2	2	2	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	1	1		39			45	
C (m) (veh/h)	1516	1478		754			764	
v/c	0.00	0.00		0.05			0.06	
95% queue length	0.00	0.00		0.16			0.19	
Control Delay (s/veh)	7.4	7.4		10.0			10.0	
LOS	A	A		B			B	
Approach Delay	--	--		10.0			10.0	

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	John Holst			Intersection	Jordan at Jackson		
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington		
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1		
Analysis Time Period	PM Background						
Project Description JN 25742.00 Waddell Elementary School Relocation TIS							
East/West Street: Jordan Street				North/South Street: Jackson Avenue			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	19	30	18	6	75	29	
Peak-Hour Factor, PHF	0.71	0.61	0.67	0.60	0.62	0.60	
Hourly Flow Rate, HFR (veh/h)	4	109	34	38	81	39	
Percent Heavy Vehicles	2	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	3	66	21	23	61	24	
Peak-Hour Factor, PHF	0.75	0.60	0.60	0.60	0.75	0.60	
Hourly Flow Rate, HFR (veh/h)	9	120	48	26	49	26	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (veh/h)	26	9		158			147
C (m) (veh/h)	1410	1519		622			649
v/c	0.02	0.01		0.25			0.23
95% queue length	0.06	0.02		1.00			0.87
Control Delay (s/veh)	7.6	7.4		12.7			12.2
LOS	A	A		B			B
Approach Delay	--	--		12.7			12.2

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Jordan at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Jordan Street				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	14	0	2	66	14		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.78	0.60		
Hourly Flow Rate, HFR (veh/h)	0	23	0	3	84	23		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	6	45	1	1	18		
Peak-Hour Factor, PHF	0.60	0.63	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	0	9	74	1	1	29		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	0	3		83			31	
C (m) (veh/h)	1484	1501		844			926	
v/c	0.00	0.00		0.10			0.03	
95% queue length	0.00	0.01		0.33			0.10	
Control Delay (s/veh)	7.4	7.4		9.7			9.0	
LOS	A	A		A			A	
Approach Delay	--	--		9.7			9.0	

(s/veh)				
Approach LOS	--	--	A	A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	9	73			71	34		
Peak-Hour Factor, PHF	0.60	0.81	1.00	1.00	0.68	0.60		
Hourly Flow Rate, HFR (veh/h)	91	0	49	0	0	0		
Percent Heavy Vehicles	2	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT			TR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	55		30					
Peak-Hour Factor, PHF	0.60	1.00	0.60	1.00	1.00	1.00		
Hourly Flow Rate, HFR (veh/h)	0	104	56	14	90	0		
Percent Heavy Vehicles	2	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	14						140	
C (m) (veh/h)	1419						781	
v/c	0.01						0.18	
95% queue length	0.03						0.65	
Control Delay (s/veh)	7.6						10.6	
LOS	A						B	
Approach Delay	--	--					10.6	

(s/veh)				
Approach LOS	--	--		<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 1			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	8	102				28		
Peak-Hour Factor, PHF	0.60	0.60	1.00	0.57	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	13	169	0	0	0	46		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	0	1		
Configuration	LT					R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				2				
Peak-Hour Factor, PHF	1.00	0.63	0.27	0.60	0.25	0.44		
Hourly Flow Rate, HFR (veh/h)	0	0	0	3	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		
v (veh/h)	13					3		
C (m) (veh/h)	1562					779		
v/c	0.01					0.00		
95% queue length	0.03					0.01		
Control Delay (s/veh)	7.3					9.6		
LOS	A					A		
Approach Delay	--	--				9.6		

(s/veh)				
Approach LOS	--	--		A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	White at Jefferson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street				North/South Street: South Jefferson Street				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)				253				
Peak-Hour Factor, PHF	0.38	0.29	0.31	0.84	0.44	0.42		
Hourly Flow Rate, HFR (veh/h)	0	188	0	0	0	0		
Percent Heavy Vehicles	22	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)		132						
Peak-Hour Factor, PHF	0.25	0.70	0.65	0.25	0.61	0.25		
Hourly Flow Rate, HFR (veh/h)	301	0	0	0	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)		0			0			
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	0	0		
Configuration		T						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration		L					T	
v (veh/h)		301					188	
C (m) (veh/h)		1623					330	
v/c		0.19					0.57	
95% queue length		0.68					3.34	
Control Delay (s/veh)		7.7					29.4	
LOS		A					D	
Approach Delay	--	--					29.4	

(s/veh)				
Approach LOS	--	--		<i>D</i>

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	John Holst			Intersection	White at Jackson		
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington		
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2		
Analysis Time Period	PM Background						
Project Description JN 25742.00 Waddell Elementary School Relocation TIS							
East/West Street: White Street				North/South Street: Jackson Avenue			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	43	40	25	6	72	12	
Peak-Hour Factor, PHF	0.63	0.60	0.60	0.63	0.60	0.60	
Hourly Flow Rate, HFR (veh/h)	25	164	64	0	0	0	
Percent Heavy Vehicles	2	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0				0
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	17	107	51				
Peak-Hour Factor, PHF	0.67	0.65	0.79	1.00	0.75	1.00	
Hourly Flow Rate, HFR (veh/h)	9	119	19	68	66	41	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	0	0	
Configuration		LTR					
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR					LTR
v (veh/h)	68	9					253
C (m) (veh/h)	1422	1459					566
v/c	0.05	0.01					0.45
95% queue length	0.15	0.02					2.29
Control Delay (s/veh)	7.7	7.5					16.4
LOS	A	A					C
Approach Delay	--	--					16.4

(s/veh)				
Approach LOS	--	--		C

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TWO-WAY STOP CONTROL SUMMARY								
General Information			Site Information					
Analyst	John Holst		Intersection	White at Highland/Myers				
Agency/Co.	Anderson & Associates		Jurisdiction	City of Lexington				
Date Performed	04/06/2007		Analysis Year	2011 Build Option 2				
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street			North/South Street: Highland Road/Myers Street					
Intersection Orientation: East-West			Study Period (hrs): 0.25					
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	2	143	35	11	42	2		
Peak-Hour Factor, PHF	0.60	0.90	0.65	0.60	0.61	0.60		
Hourly Flow Rate, HFR (veh/h)	3	158	53	18	68	3		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	12	9	22	14	8	6		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	19	14	36	23	13	9		
Percent Heavy Vehicles	22	2	2	2	2	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	3	18		69			45	
C (m) (veh/h)	1522	1350		664			597	
v/c	0.00	0.01		0.10			0.08	
95% queue length	0.01	0.04		0.35			0.24	
Control Delay (s/veh)	7.4	7.7		11.0			11.5	
LOS	A	A		B			B	
Approach Delay	--	--		11.0			11.5	

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY							
General Information				Site Information			
Analyst	John Holst			Intersection	Jordan at Jackson		
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington		
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2		
Analysis Time Period	PM Background						
Project Description JN 25742.00 Waddell Elementary School Relocation TIS							
East/West Street: Jordan Street				North/South Street: Jackson Avenue			
Intersection Orientation: North-South				Study Period (hrs): 0.25			
Vehicle Volumes and Adjustments							
Major Street	Northbound			Southbound			
Movement	1	2	3	4	5	6	
	L	T	R	L	T	R	
Volume (veh/h)	25	40	10	16	84	30	
Peak-Hour Factor, PHF	0.71	0.61	0.67	0.60	0.62	0.60	
Hourly Flow Rate, HFR (veh/h)	13	66	38	18	96	39	
Percent Heavy Vehicles	2	--	--	2	--	--	
Median Type	Undivided						
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration	LTR			LTR			
Upstream Signal		0			0		
Minor Street	Eastbound			Westbound			
Movement	7	8	9	10	11	12	
	L	T	R	L	T	R	
Volume (veh/h)	10	40	23	11	72	24	
Peak-Hour Factor, PHF	0.75	0.60	0.60	0.60	0.75	0.60	
Hourly Flow Rate, HFR (veh/h)	26	135	49	35	65	14	
Percent Heavy Vehicles	2	2	2	2	2	2	
Percent Grade (%)	0			0			
Flared Approach		N			N		
Storage		0			0		
RT Channelized			0			0	
Lanes	0	1	0	0	1	0	
Configuration		LTR			LTR		
Delay, Queue Length, and Level of Service							
Approach	Northbound	Southbound	Westbound			Eastbound	
Movement	1	4	7	8	9	10	11
Lane Configuration	LTR	LTR		LTR			LTR
v (veh/h)	35	26		153			117
C (m) (veh/h)	1391	1514		584			596
v/c	0.03	0.02		0.26			0.20
95% queue length	0.08	0.05		1.04			0.72
Control Delay (s/veh)	7.7	7.4		13.3			12.5
LOS	A	A		B			B
Approach Delay	--	--		13.3			12.5

(s/veh)				
Approach LOS	--	--	<i>B</i>	<i>B</i>

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Jordan at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Jordan Street				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	14	0	0	64	34		
Peak-Hour Factor, PHF	0.60	0.60	0.60	0.60	0.78	0.60		
Hourly Flow Rate, HFR (veh/h)	0	23	0	0	82	56		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LTR			LTR				
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	0	3	11	35	1	14		
Peak-Hour Factor, PHF	0.60	0.63	0.60	0.60	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	0	4	18	58	1	23		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration		LTR			LTR			
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LTR	LTR		LTR			LTR	
v (veh/h)	0	0		22			82	
C (m) (veh/h)	1446	1578		880			743	
v/c	0.00	0.00		0.03			0.11	
95% queue length	0.00	0.00		0.08			0.37	
Control Delay (s/veh)	7.5	7.3		9.2			10.4	
LOS	A	A		A			B	
Approach Delay	--	--		9.2			10.4	

(s/veh)				
Approach LOS	--	--	A	B

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Jackson			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Jackson Avenue				
Intersection Orientation: North-South				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Northbound			Southbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	3	79			92	11		
Peak-Hour Factor, PHF	0.60	0.81	1.00	1.00	0.68	0.60		
Hourly Flow Rate, HFR (veh/h)	3	0	6	0	0	0		
Percent Heavy Vehicles	2	--	--	0	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	1	0		
Configuration	LT			TR				
Upstream Signal		0			0			
Minor Street	Eastbound			Westbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)	2		4					
Peak-Hour Factor, PHF	0.60	1.00	0.60	1.00	1.00	1.00		
Hourly Flow Rate, HFR (veh/h)	0	135	18	4	97	0		
Percent Heavy Vehicles	2	0	4	0	0	0		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	0	0	0		
Configuration		LR						
Delay, Queue Length, and Level of Service								
Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT						LR	
v (veh/h)	4						9	
C (m) (veh/h)	1428						833	
v/c	0.00						0.01	
95% queue length	0.01						0.03	
Control Delay (s/veh)	7.5						9.4	
LOS	A						A	
Approach Delay	--	--					9.4	

(s/veh)				
Approach LOS	--	--		A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	Pendleton at Highland			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2			
Analysis Time Period	PM Peak Hour							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: Pendleton Place				North/South Street: Highland Road				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	0	0				10		
Peak-Hour Factor, PHF	0.60	0.60	1.00	0.57	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	16		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	0	1		
Configuration	LT					R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				1				
Peak-Hour Factor, PHF	1.00	0.63	0.27	0.60	0.25	0.44		
Hourly Flow Rate, HFR (veh/h)	0	0	0	1	0	0		
Percent Heavy Vehicles	2	2	2	2	2	2		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		
v (veh/h)	0					1		
C (m) (veh/h)	1588					1002		
v/c	0.00					0.00		
95% queue length	0.00					0.00		
Control Delay (s/veh)	7.3					8.6		
LOS	A					A		
Approach Delay	--	--					8.6	

(s/veh)				
Approach LOS	--	--		A

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TWO-WAY STOP CONTROL SUMMARY								
General Information				Site Information				
Analyst	John Holst			Intersection	School Exit			
Agency/Co.	Anderson & Associates			Jurisdiction	City of Lexington			
Date Performed	04/06/2007			Analysis Year	2011 Build Option 2			
Analysis Time Period	PM Background							
Project Description JN 25742.00 Waddell Elementary School Relocation TIS								
East/West Street: White Street/School Exit				North/South Street: McLaughlin Street				
Intersection Orientation: East-West				Study Period (hrs): 0.25				
Vehicle Volumes and Adjustments								
Major Street	Eastbound			Westbound				
Movement	1	2	3	4	5	6		
	L	T	R	L	T	R		
Volume (veh/h)	15	85				60		
Peak-Hour Factor, PHF	0.60	0.60	0.65	0.25	0.60	0.60		
Hourly Flow Rate, HFR (veh/h)	24	141	0	0	0	99		
Percent Heavy Vehicles	2	--	--	2	--	--		
Median Type	Undivided							
RT Channelized			0			0		
Lanes	0	1	0	0	0	1		
Configuration	LT					R		
Upstream Signal		0			0			
Minor Street	Northbound			Southbound				
Movement	7	8	9	10	11	12		
	L	T	R	L	T	R		
Volume (veh/h)				89				
Peak-Hour Factor, PHF	0.38	0.29	0.31	0.85	0.44	0.42		
Hourly Flow Rate, HFR (veh/h)	0	0	0	104	0	0		
Percent Heavy Vehicles	22	2	2	3	2	20		
Percent Grade (%)	0			0				
Flared Approach		N			N			
Storage		0			0			
RT Channelized			0			0		
Lanes	0	0	0	1	0	0		
Configuration				L				
Delay, Queue Length, and Level of Service								
Approach	Eastbound	Westbound	Northbound			Southbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration	LT					L		
v (veh/h)	24					104		
C (m) (veh/h)	1482					760		
v/c	0.02					0.14		
95% queue length	0.05					0.47		
Control Delay (s/veh)	7.5					10.5		
LOS	A					B		
Approach Delay	--	--						10.5

(s/veh)				
Approach LOS	--	--		<i>B</i>

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Appendix B

Synchro Analysis Results

Existing Year 2007

South Main Street at Jordan Street / Houston Street

Design Year 2011 (without relocation)

South Main Street at Jordan Street / Houston Street

Design Year 2011 (Proposed Site #1)

South Main Street at Jordan Street / Houston Street




















Design Year 2011 (Proposed Site #2)

South Main Street at Jordan Street / Houston Street

HCM Signalized Intersection Capacity Analysis




















7: South Main Street & Jordan Street

4/6/2007

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frbp, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.99			0.98			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1668	1809		1770	1851			1799			1768	
Flt Permitted	0.63	1.00		0.60	1.00			0.99			0.99	
Satd. Flow (perm)	1111	1809		1123	1851			1799			1768	
Volume (vph)	12	146	41	39	165	4	19	41	7	32	48	35
Peak-hour factor, PHF	0.60	0.73	0.85	0.75	0.86	0.60	0.60	0.64	0.60	0.67	0.60	0.88
Adj. Flow (vph)	20	200	48	52	192	7	32	64	12	48	80	40
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	20	248	0	52	199	0	0	108	0	0	168	0
Confl. Peds. (#/hr)	3					8			6	6		
Heavy Vehicles (%)	8%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	3%
Turn Type	Perm			Perm				Split			Split	
Protected Phases		2			6			4	4		8	8
Permitted Phases	2			6								
Actuated Green, G (s)	26.4	26.4		26.4	26.4			6.2			7.4	
Effective Green, g (s)	26.4	26.4		26.4	26.4			6.2			7.4	
Actuated g/C Ratio	0.51	0.51		0.51	0.51			0.12			0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	564	918		570	940			214			252	
v/s Ratio Prot		c0.14			0.11			c0.06			c0.10	
v/s Ratio Perm	0.02			0.05								
v/c Ratio	0.04	0.27		0.09	0.21			0.50			0.67	
Uniform Delay, d1	6.4	7.3		6.6	7.1			21.5			21.1	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.2		0.1	0.1			1.9			6.5	
Delay (s)	6.4	7.5		6.7	7.2			23.3			27.6	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		7.4			7.1			23.3			27.6	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM Average Control Delay			13.7			HCM Level of Service					B	
HCM Volume to Capacity ratio			0.38									
Actuated Cycle Length (s)			52.0			Sum of lost time (s)			12.0			
Intersection Capacity Utilization			37.0%			ICU Level of Service					A	
Analysis Period (min)			15									
c Critical Lane Group												




















HCM Signalized Intersection Capacity Analysis
 7: South Main Street & Jordan Street

4/6/2007

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frbp, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.99			0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1668	1809		1770	1851			1800			1769	
Flt Permitted	0.62	1.00		0.57	1.00			0.99			0.99	
Satd. Flow (perm)	1086	1809		1057	1851			1800			1769	
Volume (vph)	14	164	46	44	186	5	21	46	8	36	54	39
Peak-hour factor, PHF	0.60	0.73	0.85	0.75	0.86	0.60	0.60	0.64	0.60	0.67	0.60	0.88
Adj. Flow (vph)	23	225	54	59	216	8	35	72	13	54	90	44
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	23	279	0	59	224	0	0	120	0	0	188	0
Confl. Peds. (#/hr)	3					8			6	6		
Heavy Vehicles (%)	8%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	3%
Turn Type	Perm		Perm		Split		Split					
Protected Phases	2		6		4		4		8		8	
Permitted Phases	2		6									
Actuated Green, G (s)	29.9	29.9		29.9	29.9			7.0			8.5	
Effective Green, g (s)	29.9	29.9		29.9	29.9			7.0			8.5	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.12			0.15	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	566	942		551	964			220			262	
v/s Ratio Prot	c0.15				0.12				c0.07		c0.11	
v/s Ratio Perm	0.02		0.06									
v/c Ratio	0.04	0.30		0.11	0.23			0.55			0.72	
Uniform Delay, d1	6.7	7.8		7.0	7.5			23.7			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.2		0.1	0.1			2.8			9.0	
Delay (s)	6.8	8.0		7.1	7.6			26.5			32.3	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)	7.9				7.5				26.5		32.3	
Approach LOS	A				A				C		C	
Intersection Summary												
HCM Average Control Delay			15.4		HCM Level of Service						B	
HCM Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			57.4		Sum of lost time (s)						12.0	
Intersection Capacity Utilization			39.3%		ICU Level of Service						A	
Analysis Period (min)			15									
c Critical Lane Group												




















HCM Signalized Intersection Capacity Analysis
7: South Main Street & Jordan Street

4/6/2007

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frbp, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	0.99			0.99			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.99			0.99	
Satd. Flow (prot)	1668	1809		1770	1851			1800			1769	
Flt Permitted	0.62	1.00		0.57	1.00			0.99			0.99	
Satd. Flow (perm)	1086	1809		1057	1851			1800			1769	
Volume (vph)	14	164	46	44	186	5	21	46	8	36	54	39
Peak-hour factor, PHF	0.60	0.73	0.85	0.75	0.86	0.60	0.60	0.64	0.60	0.67	0.60	0.88
Adj. Flow (vph)	23	225	54	59	216	8	35	72	13	54	90	44
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	23	279	0	59	224	0	0	120	0	0	188	0
Confl. Peds. (#/hr)	3					8			6	6		
Heavy Vehicles (%)	8%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	3%
Turn Type	Perm			Perm				Split			Split	
Protected Phases		2			6			4	4		8	8
Permitted Phases	2			6								
Actuated Green, G (s)	29.9	29.9		29.9	29.9			7.0			8.5	
Effective Green, g (s)	29.9	29.9		29.9	29.9			7.0			8.5	
Actuated g/C Ratio	0.52	0.52		0.52	0.52			0.12			0.15	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	566	942		551	964			220			262	
v/s Ratio Prot		c0.15			0.12			c0.07			c0.11	
v/s Ratio Perm	0.02			0.06								
v/c Ratio	0.04	0.30		0.11	0.23			0.55			0.72	
Uniform Delay, d1	6.7	7.8		7.0	7.5			23.7			23.3	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.2		0.1	0.1			2.8			9.0	
Delay (s)	6.8	8.0		7.1	7.6			26.5			32.3	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		7.9			7.5			26.5			32.3	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM Average Control Delay			15.4			HCM Level of Service					B	
HCM Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			57.4			Sum of lost time (s)				12.0		
Intersection Capacity Utilization			39.3%			ICU Level of Service					A	
Analysis Period (min)			15									
c Critical Lane Group												

HCM Signalized Intersection Capacity Analysis
 7: South Main Street & Jordan Street

4/6/2007

												
Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Lane Util. Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Frbp, ped/bikes	1.00	1.00		1.00	1.00			0.99			1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00			1.00	
Frt	1.00	0.97		1.00	1.00			0.96			0.97	
Flt Protected	0.95	1.00		0.95	1.00			0.98			0.99	
Satd. Flow (prot)	1668	1809		1770	1853			1744			1769	
Flt Permitted	0.61	1.00		0.58	1.00			0.98			0.99	
Satd. Flow (perm)	1075	1809		1076	1853			1744			1769	
Volume (vph)	14	164	46	74	196	4	16	21	13	36	54	39
Peak-hour factor, PHF	0.60	0.73	0.85	0.75	0.86	0.60	0.60	0.64	0.60	0.67	0.60	0.88
Adj. Flow (vph)	23	225	54	99	228	7	27	33	22	54	90	44
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	23	279	0	99	235	0	0	82	0	0	188	0
Confl. Peds. (#/hr)	3					8			6	6		
Heavy Vehicles (%)	8%	2%	2%	2%	2%	2%	2%	2%	2%	3%	2%	3%
Turn Type	Perm		Perm		Split		Split					
Protected Phases	2		6		4		4		8		8	
Permitted Phases	2		6									
Actuated Green, G (s)	23.9	23.9		23.9	23.9			5.2			6.9	
Effective Green, g (s)	23.9	23.9		23.9	23.9			5.2			6.9	
Actuated g/C Ratio	0.50	0.50		0.50	0.50			0.11			0.14	
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0			4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0			3.0	
Lane Grp Cap (vph)	535	901		536	923			189			254	
v/s Ratio Prot		c0.15			0.13			c0.05			c0.11	
v/s Ratio Perm	0.02			0.09								
v/c Ratio	0.04	0.31		0.18	0.25			0.43			0.74	
Uniform Delay, d1	6.2	7.2		6.7	6.9			20.0			19.7	
Progression Factor	1.00	1.00		1.00	1.00			1.00			1.00	
Incremental Delay, d2	0.0	0.2		0.2	0.1			1.6			11.0	
Delay (s)	6.2	7.3		6.8	7.1			21.6			30.7	
Level of Service	A	A		A	A			C			C	
Approach Delay (s)		7.3			7.0			21.6			30.7	
Approach LOS		A			A			C			C	
Intersection Summary												
HCM Average Control Delay			13.3	HCM Level of Service				B				
HCM Volume to Capacity ratio			0.41									
Actuated Cycle Length (s)			48.0	Sum of lost time (s)				12.0				
Intersection Capacity Utilization			38.8%	ICU Level of Service				A				
Analysis Period (min)			15									
c Critical Lane Group												

Appendix C

Historical Traffic Information

Virginia Department of Transportation
 Mobility Management Division
 2002
 Annual Average Daily Traffic Volume Estimates By Section of Route
 City of Lexington

Route	Length	AADT	QA	4Tire	Bus	Truck				QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year	
						2Axle	3+Axle	1Trail	2Trail								
City of Lexington																	
11	0.59	9400	G	93%	1%	From: SCL Lexington				C	0.09	F	0.518	9800	G	2002	
						To: Main St											
11	0.04	9400	G	93%	1%	From: Main St				F	0.088	F	0.515	9800	G	2002	
						To: Bus US 11											
11	0.08	17000	G	95%	1%	From: Bus US 11				F	0.092	F	0.52	18000	G	2002	
						To: NCL Lexington											
Bus 11	Main St	0.39	3500	G	97%	1%	From: SCL Lexington				C	0.100	F	0.608	3600	G	2002
							To: Thornhill Rd										
Bus 11	Main St	0.16	5800	G	97%	1%	From: Thornhill Rd				F	0.096	F	0.651	6100	G	2002
							To: Wallace St										
Bus 11	Main St	0.31	5400	G	97%	1%	From: Wallace St				F	0.103	F	0.661	5600	G	2002
							To: White St										
Bus 11	Main St	0.31	3600	G	98%	0%	From: White St				F	0.115	F	0.557	3800	G	2002
							Combined Traffic:		6300	G							
Bus 11	Main St	0.24	5700	G	98%	0%	From: Nelson St				F	0.082	F	5900	G	2002	
							Combined Traffic:		13000	G							
Bus 11	Main St	0.37	8300	G	98%	0%	From: Jefferson St				F	0.084	F	0.558	8600	G	2002
							To: Letcher St										
Bus 11	Main St	0.34	8700	G	98%	0%	From: Letcher St				C	0.084	F	0.515	9000	G	2002
							To: US 11										
Bus 11	Main St	0.35	2700	G	98%	0%	From: Bus US 11 Main St				C	0.122	F	2700	G	2002	
							Combined Traffic:		16000	G							
Bus 11	Main St	0.24	4600	G	98%	0%	From: US 60 Nelson St				C	0.108	F	4600	G	2002	
							Combined Traffic:		10000	G							
60	Nelson Street	0.25	4400	G	97%	1%	From: WCL Lexington				C	0.081	F	0.641	4600	G	2002
							To: Woods Creek										
60	Nelson Street	0.33	7700	G	97%	1%	From: Woods Creek				F	0.083	F	0.542	8000	G	2002
							To: Glasgow Street										
60	Nelson Street	0.14	8300	G	97%	1%	From: Glasgow Street				F	0.081	F	0.526	8600	G	2002
							To: Lee Street										
60	Nelson Street	0.17	8000	G	96%	0%	From: Lee Street				F	0.077	F	0.505	8300	G	2002
							To: Randolph Street										
60	Nelson Street	0.21	11000	G	96%	0%	From: Randolph Street				F	0.086	F	0.547	12000	G	2002
							To: Lewis Street										
60	Nelson Street	0.35	11000	G	96%	0%	From: Lewis Street				C	0.088	F	0.582	11000	G	2002
							To: ECL Lexington										
251	Thornhill Rd	0.38	4700	G	95%	1%	From: McCormick Ave				C	0.103	F	0.636	4900	G	2002
							To: Link Rd										
251	Link Rd	0.24	4200	G	95%	1%	From: Thornhill Rd				F	0.101	F	0.641	4300	G	2002
							To: Main St										

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Route	Length	AADT	QA	4Tire	Bus	Truck				QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
						2Axle	3+Axle	1Trail	2Trail							
City of Lexington																
① Diamond St	0.36	1500	G	96%	0%	1%	2%	0%	0%	C	0.144	F	0.556	1500	G	2002
				From: Lewis St												
				To: Main St												
② Lee St	0.08	2000	G	98%	0%	1%	1%	0%	0%	C	0.106	F	0.604	2000	G	2002
				From: Nelson St												
				To: Washington St												
④251 Thornhill Rd	0.38	2100	G	98%	0%	0%	1%	0%	0%	C	0.099	F	0.639	2100	G	2002
				From: Link Rd												
				To: Main St												
④252 Enfield Rd	0.43	1300	G	97%	0%	1%	1%	0%	0%	F	0.103	F	0.595	1300	G	2002
				From: WCL Lexington												
				To: Lime Kiln Rd												
④252 Lime Kiln Rd	0.32	1800	G	97%	0%	1%	1%	0%	0%	C	0.100	F	0.775	1900	G	2002
				From: Enfield Rd												
				To: McLaughlin St												
④254 Ross Rd	0.31	900	G	99%	0%	1%	0%	0%	0%	F	0.114	F	0.648	940	G	2002
				From: WCL Lexington												
				To: Jackson Ave												
④254 Jackson Ave	0.27	2000	G	99%	0%	1%	0%	0%	0%	C	0.127	F	0.878	2100	G	2002
				From: Ross Rd												
				To: White St												
④255 Houston St	0.40	2200	G	97%	0%	1%	2%	0%	0%	C	0.103	F	0.554	2300	G	2002
				From: SCL Lexington												
				To: Taylor St												
④255 Houston St	0.15	2400	G	97%	0%	1%	2%	0%	0%	F	0.096	F	0.529	2500	G	2002
				From: Taylor St												
				To: Main St												
④256 McDowell St	0.05	590	G	96%	0%	1%	1%	0%	0%	C	0.141	F	0.816	620	G	2002
				From: Main St												
				To: Jefferson St												
④257 Walker St	0.40	2500	G	96%	1%	1%	2%	0%	0%	C	0.104	F	0.517	2600	G	2002
				From: Houston St												
				To: Nelson St												
④258 Preston St	0.05	1900	G	96%	0%	1%	2%	1%	0%	C	0.104	F	0.549	2000	G	2002
				From: Main St												
				To: Jefferson St												
④260 Henry St	0.05	1200	G	98%	0%	1%	1%	0%	0%	C	0.093	F	0.536	1200	G	2002
				From: Main St												
				To: Jefferson St												
④261 Lewis St	0.08	3500	G	98%	0%	1%	1%	0%	0%	C	0.101	F	0.508	3700	G	2002
				From: Nelson St												
				To: Washington St												
④261 Washington St	0.30	3800	G	98%	0%	1%	1%	0%	0%	F	0.091	F	0.503	3900	G	2002
				From: Lewis St												
				To: Main St												
④261 Washington St	0.06	4800	G	98%	0%	1%	1%	0%	0%	F	0.088	F	0.517	5000	G	2002
				From: Main St												
				To: Jefferson St												
④261 Washington St	0.06	5300	G	98%	0%	1%	1%	0%	0%	F	0.089	F	0.565	5500	G	2002
				From: Jefferson St												
				To: Lee St												
④261 Washington St	0.21	4300	G	98%	0%	1%	1%	0%	0%	F	0.088	F	0.567	4500	G	2002
				From: Lee St												
				To: Nelson St												
④262 Borden Rd	0.34	720	G	96%	0%	1%	2%	0%	0%	C	0.11	F	0.667	750	G	2002
				From: WCL Lexington												
				To: Nelson St												
④263 Lewis St	0.33	1300	G	98%	0%	1%	0%	0%	0%	C	0.133	F	0.511	1400	G	2002
				From: Washington St												
				To: Diamond St												

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Route	Length	AADT	QA	4Tire	Bus	Truck				QC	Peak Hour	QK	Dir Factor	AAWDT	QW	Year
						2Axle	3+Axle	1Trail	2Trail							
City of Lexington																
(4266) Spottswood Dr	0.40	2200	G	99%	0%	1%	0%	0%	0%	C	0.099	F	0.5	2300	G	2002
				From:	Houston St											
				To:	Nelson St											
(4267) White St	0.18	900	G	99%	0%	1%	0%	0%	0%	F	0.129	F		940	G	2002
				From:	Jefferson St											
				To:	McLaughlin St											
(4267) McLaughlin St	0.28	2000	G	98%	0%	1%	1%	0%	0%	C	0.097	F	0.579	2000	G	2002
				From:	White St											
				To:	Glasgow St											
(4267) Glasgow St	0.06	1100	G	94%	0%	1%	4%	0%	0%	C	0.098	F	0.537	1200	G	2002
				From:	McLaughlin St											
				To:	Nelson St											
Edmondson Ave		200	G								0.153	F	0.559	200	G	2002
				From:	Jackson Ave											
				To:	Main St											
Taylor St		1400	G								0.104	F	0.528	1500	G	2002
				From:	Wallace St											
				To:	Houston St											
Tucker St		240	G								0.104	F		250	G	2002
				From:	Washington St											
				To:	Massie St											

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Route	Jurisdiction	Length	AADT	QA	4Tire	Bus	2Axle 3+Axle	1Trail	2Trail	QC	K Factor	QK	Dir Factor	AAWDT	QW
11 S Lee Highway	From: SCL Lexington	0.59	9300	G	96%	1%	1%	2%	1%	0%	0.097	F	0.505	10000	G
	To: Main St														
11 N Lee Highway	From: Main St	0.04	9600	G	96%	1%	1%	2%	1%	0%	0.088	F	0.508	11000	G
	To: Bus US 11														
11 N Lee Highway	From: Bus US 11	0.08	19000	G	97%	0%	1%	1%	0%	0%	0.085	N	0.508	20000	G
	To: NCL Lexington														
BUS 11 Main St	From: SCL Lexington	0.39	3400	G	98%	0%	1%	1%	0%	0%	0.083	F	0.533	3700	G
	To: Thornhill Rd														
BUS 11 Main St	From: Thornhill Rd	0.16	5200	G	98%	0%	1%	1%	0%	0%	0.093	F	0.56	5700	G
	To: Wallace St														
BUS 11 Main St	From: Wallace St	0.31	4600	G	98%	0%	1%	1%	0%	0%	0.092	F	0.588	5100	G
	To: White St														
BUS 11 Main St	From: White St	0.31	3600	G	99%	0%	1%	0%	0%	0%	0.108	F		3900	G
	To: Nelson St													7100	G
Combined Traffic Estimates for 2 Parallel Roadways on this Route: 6500															
BUS 11 Main St	From: Nelson St	0.24	4500	G	99%	0%	1%	0%	0%	0%	0.094	F		4900	G
	To: Jefferson St													11000	G
Combined Traffic Estimates for 2 Parallel Roadways on this Route: 9700															
BUS 11 Main St	From: Jefferson St	0.37	8900	G	99%	0%	1%	0%	0%	0%	0.092	F	0.536	9700	G
	To: Lecher St														
BUS 11 Main St	From: Lecher St	0.34	9400	G	99%	0%	1%	0%	0%	0%	0.095	F	0.545	10000	G
	To: US 11														
BUS 11 Main St	From: US 11	0.35	2800	G	99%	0%	1%	0%	0%	0%	0.111	F		3100	G
	To: Bus US 11 Main St													7100	G
Combined Traffic Estimates for 2 Parallel Roadways on this Route: 6500															
BUS 11 Main St	From: Bus US 11 Main St	0.24	5300	G	99%	0%	1%	0%	0%	0%	0.096	F		5800	G
	To: US 60 Nelson St													11000	G
Combined Traffic Estimates for 2 Parallel Roadways on this Route: 9700															
BUS 60 Nelson Street	From: US 60 Nelson St	0.25	5000	G	98%	0%	1%	0%	0%	0%	0.094	F	0.657	5500	G
	To: WCL Lexington														
BUS 60 Nelson Street	From: WCL Lexington	0.33	5600	G	98%	0%	1%	0%	0%	0%	0.088	F	0.624	6100	G
	To: Woods Creek														
Combined Traffic Estimates for 2 Parallel Roadways on this Route: 6100															

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						2Axle	3+Axle	1Trail	2Trail							
City of Lexington																
① Diamond St	0.36	1400	G	99%	0%	1%	0%	0%	0%	C	0.127	F	0.638	1600	G	2005
② Lee St	0.08	1900	G	98%	0%	1%	0%	0%	0%	C	0.109	F	0.545	2000	G	2005
④251 Thornhill Rd	0.38	2200	G	99%	0%	0%	1%	0%	0%	C	0.107	F	0.78	2400	G	2005
④252 Enfield Rd	0.43	1200	G	98%	0%	1%	0%	1%	0%	F	0.098	F	0.516	1300	G	2005
④252 Lime Kiln Rd	0.32	1900	G	98%	0%	1%	0%	1%	0%	C	0.101	F	0.554	2000	G	2005
④254 Ross Rd	0.31	1400	G	99%	0%	0%	0%	0%	0%	F	0.111	F	0.636	1500	G	2005
④254 Jackson Ave	0.27	1900	G	99%	0%	0%	0%	0%	0%	C	0.129	F	0.862	2100	G	2005
④255 Houston St	0.40	2100	G	99%	0%	1%	0%	0%	0%	C	0.104	F	0.5	2300	G	2005
④255 Houston St	0.15	2300	G	99%	0%	1%	0%	0%	0%	F	0.102	F	0.536	2500	G	2005
④256 McDowell St	0.05	470	G	98%	0%	2%	0%	0%	0%	C	0.129	F	0.603	510	G	2005
④257 Walker St	0.40	2700	G	98%	0%	1%	0%	0%	0%	C	0.102	F	0.505	2900	G	2005
④258 Preston St	0.05	2100	G	98%	0%	2%	0%	0%	0%	F	0.106	F	0.915	2300	G	2005
④260 Henry St	0.05	1200	G	98%	1%	1%	0%	0%	0%	C	0.093	F	0.538	1300	G	2005
④261 Lewis St	0.08	3300	G	98%	0%	0%	0%	1%	0%	C	0.099	F	0.560	3600	G	2005
④261 Washington St	0.30	3200	G	98%	0%	0%	0%	1%	0%	F	0.1	F	0.537	3600	G	2005
④261 Washington St	0.06	3900	G	98%	0%	0%	0%	1%	0%	F	0.092	F	0.684	4200	G	2005
④261 Washington St	0.06	5300	G	98%	0%	0%	0%	1%	0%	F	0.093	F	0.606	5800	G	2005
④261 Washington St	0.21	3200	G	98%	0%	0%	0%	1%	0%	F	0.086	F	0.669	3500	G	2005
④262 Borden Rd	0.34	700	G	98%	0%	1%	0%	1%	0%	C	0.108	F	0.605	770	G	2005
④263 Lewis St	0.33	1500	G	99%	0%	0%	0%	0%	0%	C	0.127	F	0.558	1600	G	2005

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						2Axle	3+Axle	1Trail	2Trail							
City of Lexington																
④266 Spottswood Dr	0.40	2600	G	99%	0%	From: Houston St				C	0.093	F	0.552	2800	G	2005
						To: Nelson St										
④267 White St	0.18	1400	G	99%	0%	From: Jefferson St				F	0.118	F	0.524	1500	G	2005
						To: McLaughlin St										
④267 McLaughlin St	0.28	2100	G	98%	0%	From: White St				C	0.097	F	0.647	2300	G	2005
						To: Glasgow St										
④267 Glasgow St	0.06	1200	G	93%	0%	From: McLaughlin St				C	0.12	F	0.531	1300	G	2005
						To: Nelson St										
Edmondson Ave		450	G			From: Jackson Ave					0.121	F	0.658	450	G	2005
						To: Main St										
Taylor St		1400	G			From: Wallace St					0.116	F	0.528	1600	G	2005
						To: Houston St										
Tucker St		500	G			From: Washington St					0.093	F		550	G	2005
						To: Massie St										