CAFRITZ PROPERTY
AT RIVERDALE PARK
TRAFFIC IMPACT STUDY
PRINCE GEORGE'S COUNTY, MARYLAND

Prepared for:

Cafritz

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July 10, 2012

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TABLE OF CONTENTS

	Page
Introduction	1
Background Data	5
Definition of Study Area	5
Public Road Network	5
Transit Services	7
Site Access Concept	9
Existing Traffic Volumes	9
Analysis	12
Level of Service Standard	12
Existing Levels of Service	12
Background Traffic Growth	15
Background Traffic Forecasts	17
Site Generated Traffic	26
Site Traffic Distribution	26
Total Future Traffic Forecasts	28
Future Levels of Service With the Cafritz Property at Riverdale Park	35
Recommended Intersection Improvements	38
Queuing Analysis	40
Signal Warrant Analysis	42
Traffic Counts	42
Existing Conditions	42
Road Network	42
13-Hour Traffic Forecasts	43
Traffic Signal Warrant Analysis	44

CAFRITZ PROPERTY
AT RIVERDALE PARK
TRAFFIC IMPACT STUDY
PRINCE GEORGE'S COUNTY, MARYLAND

TABLE OF CONTENTS

Transportation Demand Management 47

Evaluation of TDM and Potential Measures 47
TDM Program Impacts 48
Office 49
Residential 50
Arlington County 52
City of Rockville 53
Fairfax County Application/Experience 53
Cafritz TDM Program 55
Site Wide TDM Program Management 55
TDM Program Branding 57
Program Website 57
Promote Real-time Transit Information 57
Site Based Transportation Access Guide 58
Live Work Play Marketing 58
Bicycle Accommodations 58
Car Sharing Placement and Services 59
Vehicle Parking Management 59
Commuter Cafe 59
Other Site Wide Elements 60
Residential 60
Residential Transportation Coordinators 60
Business Center 61
Metro Rail Preloaded Pass Cards and Try Transit Campaign 61
Office TDM Strategies 61
Onsite Transportation Coordinators 62
Metro Rail Preloaded Pass Cards and Try Transit Campaign for Office Employees 62
Pretax Metrorail, Vanpool and Bicycle Benefit Programs 62
Guaranteed Ride Home Program 62
Carpool Matching Program 63
Telework and Flextime 63

Conclusions 64

CAFRITZ PROPERTY
AT RIVERDALE PARK
TRAFFIC IMPACT STUDY
PRINCE GEORGE'S COUNTY, MARYLAND

LIST OF FIGURES

Figure	Title	Page
1	Site Location Map	3
2	Site Plan	4
3	Existing Lane Use and Traffic Control	8
4	Existing Peak Hour Traffic Volumes - AM and PM Peak	10
5	Existing Peak Hour Traffic Volumes - Saturday and Mid-day Peak	11
6	Combined Approved Development Peak Hour Traffic Forecasts without CSX – AM and PM Peak	19
7	Combined Approved Development Peak Hour Traffic Forecasts without CSX – Saturday & Mid-Day Peak	20
8	Background Peak Hour Traffic Forecasts – AM and PM Peak	21
9	Background Peak Hour Traffic Forecasts – Saturday and Mid-day Peak	22
10	Background Lane Use and Traffic Control	23
11	Site Generated New Peak Hour Traffic Forecasts With CSX – AM and PM	29
12	Site Generated Passby Peak Hour Traffic Forecasts With CSX – AM and PM	30
13	Site Generated New Peak Hour Traffic Forecasts With CSX – Saturday and Mid-day	31
14	Site Generated Pass-by Peak Hour Traffic Forecasts With CSX – Saturday and Mid-day	32
15	Total Future Peak Hour Traffic Forecasts With CSX – AM and PM	33
16	Total Future Peak Hour Traffic Forecasts With CSX – Saturday and Mid-day	34
17	Recommended Lane Use and Traffic Control	39
18	US /Van Buren Street – Proposed Lane Use	45

CAFRITZ PROPERTY
AT RIVERDALE PARK
TRAFFIC IMPACT STUDY
PRINCE GEORGE'S COUNTY, MARYLAND

LIST OF TABLES

Table	Title	Page
1	Existing Intersection Levels of Service – AM and PM Peak hour	13
2	Existing Intersection Levels of Service – Saturday and Mid-day peak hour	14
3	Background Development Trip Generation	16
4	Background Intersection Levels of Service – AM and PM Peak hour	24
5	Background Intersection Levels of Service – Saturday and Mid-day Peak hour	25
6	Site Trip Generation	27
7	Future Intersection Levels of Service – AM and PM Peak hour	36
8	Future Intersection Levels of Service – Saturday and Mid-day Peak hour	37
9	Queuing Analysis for SBL at the Intersection of US 1/Van Buren Street	41
10	US Route 1/Van Buren Street -Highest 8-Hour Vehicular Volume	43
11	US Route 1/Van Buren Street –Traffic Signal Warrant Summary	46
12	TDM Measures by Type	48

LIST OF CHARTS

Chart	Title	Page
1	Trip Reduction from TDM Measures for Office	50
2	North Portland Interstate Change in Travel Behavior	51
3	North Portland Interstate Relative Change by Mode	52
4	Commuting Patterns	54

CAFRITZ PROPERTY
AT RIVERDALE PARK
TRAFFIC IMPACT STUDY
PRINCE GEORGE'S COUNTY, MARYLAND

APPENDICES

A	Scoping Letter and Correspondence
B	Existing Peak Hour Traffic Counts, CTP listing, Transit Information
C	Existing Intersection Levels of Service Analysis
D	Traffic Forecasting Worksheets and ITE Internal Capture Analysis
E	Diurnal Rates and Transit Ridership Information
F	Background Intersection Levels of Service Analysis
G	Combined Approved Development and Background Traffic with CSX
H	Future Intersection Levels of Service Analysis with Cafritz and with CSX
I	Signal Warrant Analysis - Existing Intersection Data (Vehicle and Pedestrian Counts)
J	Signal Warrant Analysis - US 1/Van Buren Intersection Traffic Forecasts
K	Signal Warrant Analysis - MUTCD Signal Warrant Guidelines
L	Signal Warrant Analysis - TEAPAC Signal Warrant Analysis Results

INTRODUCTION

This report presents the results of a traffic impact analysis for the proposed Cafritz Property at Riverdale Park preliminary plan application. The Cafritz Property at Riverdale Park is located on the east side of US 1 south of Albion Road and north of MD 410, in the Town of Riverdale Park, Maryland, as shown in Figure 1.

The proposed development will include 981 dwelling units, a 120-room hotel, 22,000 square feet of office space, and 168,200 square feet of retail space. As shown in Figure 2, three vehicular access points are proposed along US 1 that will create two new intersections on US 1 and modify and existing intersection. The two new intersections will be limited to right-in, right-out turning movements only. The existing intersection of Van Buren Street/US 1 will be modified from a "T" intersection to a four-legged intersection with the construction of the main entrance directly across from Van Buren Street. Through traffic between Van Buren Street and the main entrance into the Cafritz Property at Riverdale will be prohibited. Access will also be provided via a crossing of the CSX railroad connecting to Rivertech Court to the east and with a secondary southern access connection to Maryland Avenue connecting the site with Riverdale Park Town Center, also shown on Figure 2.

This impact study has been conducted in accordance with, Maryland-National Capital Park and Planning Commission (MNCPPC) and Maryland State Highway Administration (SHA) guidelines for traffic impact studies. Conversations outlining the study area and study assumptions were held with the MNCPPC staff. A copy of the scoping letter and related correspondence is contained in Appendix A.

Tasks undertaken in this study included the following:

1. Review of the proposed site plan and other background data.

2. A field reconnaissance of the area and observation of current weekday and weekend peak period traffic conditions.

3. Conversations with the MNCPPC staff outlining the study scope of work.

4. Identification of a study area, approved pipeline developments, and the anticipated growth in vehicular traffic within the study area.

5. Counts of existing peak hour traffic volumes at 18 study intersections.

6. Analyses of existing Weekday AM and PM peak hour levels of service at all study intersections, and weekday Mid-day and Saturday peak hour

levels of service at selected study intersections.

7. Background future traffic volumes were forecasted based on existing traffic counts and local and regional background traffic growth.

8. Background levels of service were calculated at the 18 study intersections based on background traffic forecasts, existing traffic controls, and existing intersection geometrics.

9. The number of weekday AM, Mid-day, and PM peak hour trips as well as Saturday peak hour trips that will be generated by the Cafritz Property at Riverdale Park and the approved pipeline developments were estimated based on the MNCPPC and ITE Trip Generation equations and rates.

10. Total future levels of service were calculated at the 18 study intersections based on total future traffic forecasts, planned lane use and traffic controls, and intersection geometrics.

11. Recommendations for road improvements and other transportation options to offset the development impact in accordance with the MNCPPC guidelines for a Transportation Facilities Mitigation Plan (TFMP).

12. A queuing analysis was performed for the south-bound left turn movement at US Route 1/Van Buren Street/Site Access intersection for total future conditions (i.e., with project)

13. Preparation of signal warrant analysis for the proposed site access onto US Route 1.

14. Development of a Transportation Demand management Program for Cafritz at Riverdale Park.

Sources of data for this analysis included traffic counts conducted by Wells & Associates, the Highway Capacity Manual (HCM), the Institute of Transportation Engineers (ITE), MNCPPC Guidelines, Maryland State Highway Administration (SHA), the files of Wells & Associates, Inc., and Cafritz.

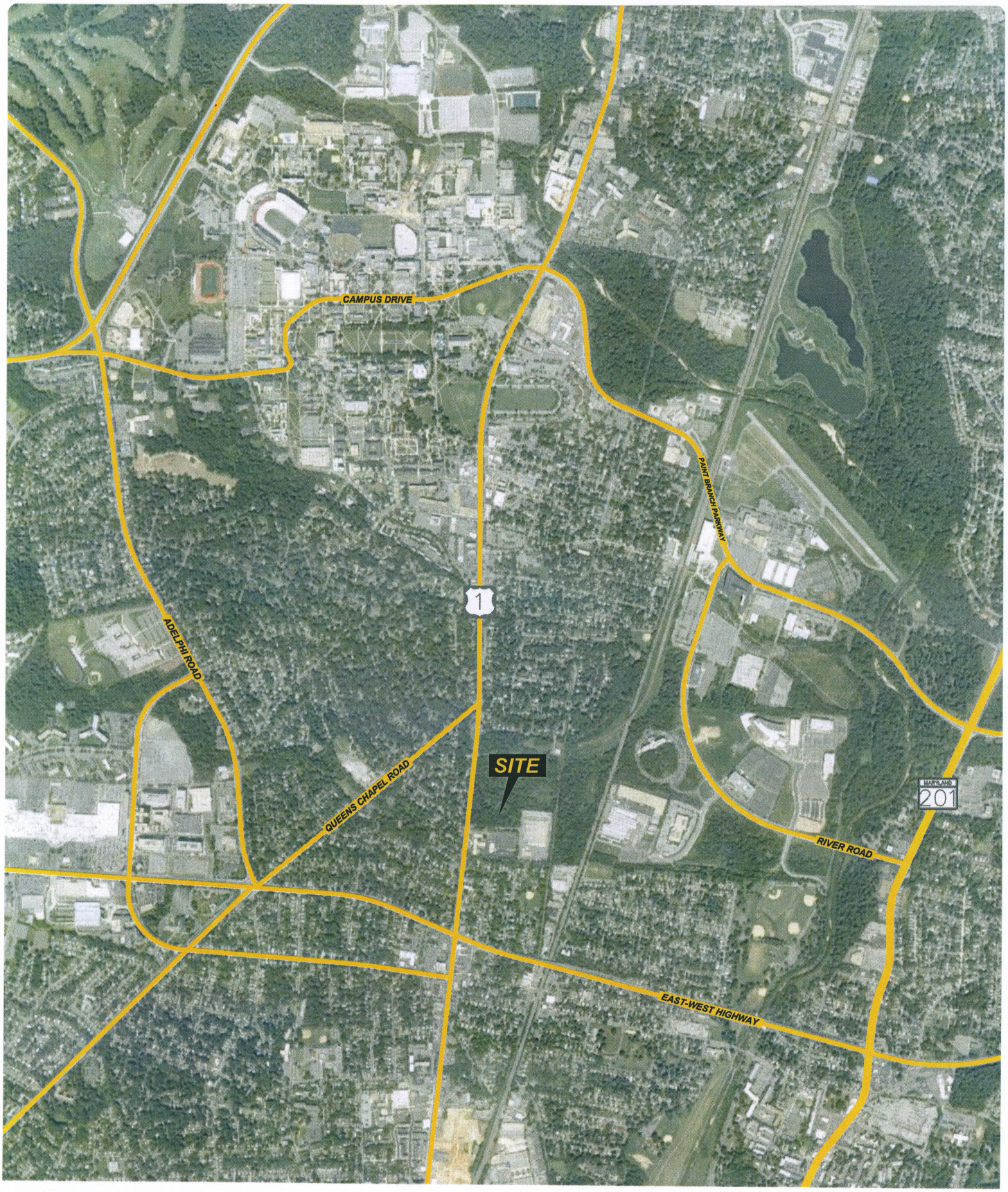

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Figure 1
Site Location Map

North

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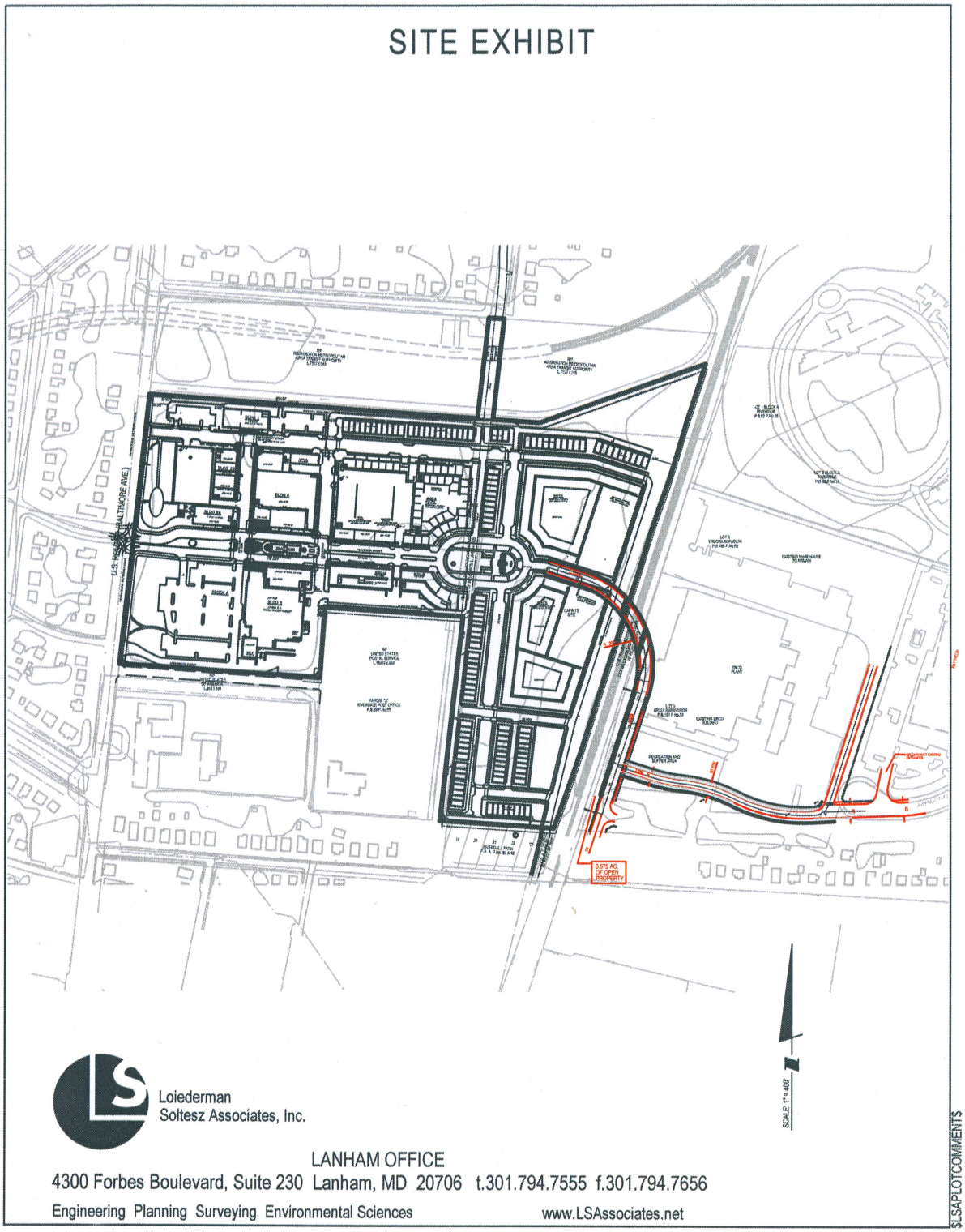

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Figure 2
Site Plan

North

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BACKGROUND DATA

Definition of Study Area

In accordance with the MNCPPC scoping letter, the study area for the subject analysis includes the following intersections:

1. US 1/Paint Branch Parkway/Campus Drive,
2. US 1/Rossborough Lane,
3. US 1/College Avenue/Regents Drive,
4. US 1/Knox Road,
5. US 1/Calvert Road,
6. US 1/Guilford Road,
7. US1/Amherst Road/Pine Way/Queens Chapel Road,
8. US 1/Site Access right-in/right-out, north of Van Buren Street,
9. US 1/Van Buren Street/main Site Access,
10. US 1/Site Access right-in/right-out, south of Van Buren Street.
11. US 1/MD 410,
12. US 1/Queensbury Road,
13. Rivertech Court/River Road,
14. River Road/Paint Branch Parkway,
15. MD 201/River Road,
16. Rhode Island Avenue/Maryland Avenue/Queensbury Road (off-set intersection),
17. Queensbury Road/Lafayette Avenue, and
18. Queensbury Road/Natoli Place.

Public Road Network

Regional vehicular access to the proposed property is provided by MD 410, MD 201 and US 1. Local access will be provided by US 1, Maryland Avenue, and Rivertech Court via a proposed CSX crossing.

US 1 (Baltimore Avenue), in the general vicinity of the site, is a north-south five lane arterial roadway that extends from north of I-495 into the District of Columbia. The posted speed limit is 30 miles per hour (MPH). Turn lanes and signals are provided at the major intersections along US 1.

MD 410 (East West Highway) extends from Bethesda MD eastward through Montgomery County into Prince George's County ending east of US 50 in the Landover area of Prince George's County. In the vicinity of the site, MD 410 is a six-lane divided roadway. The posted speed limit is 35 MPH.

MD 201 in the general vicinity of the site, is a north-south four lane arterial roadway that extends from north of I-495 into the District of Columbia.

Paint Branch Parkway is generally an east-west, four-lane divided roadway that extends US 1 to MD 201. The speed limit is 35 MPH. Turn lanes are provided at major intersections along the roadway.

Rossborough Lane and Regents Drive are two-lane roadways serving the University of Maryland campus intersecting with US 1. Both roadways have a posted speed of 20 MPH.

College Avenue, Knox Road, Calvert Road, and Guilford Road are generally two lane roadways that provide access to the local residential communities within College Park east and west of US 1. Calvert Road also provides access to the College Park Metro Station and the Marc Rail Station.

Pine Way, Queens Chapel Road, Van Buren Street and Amherst Road provide access into the residential neighborhoods in University Park and College Park. They are generally two-lane roadways with posted speed limits of 25 MPH.

Rhode Island Avenue, Maryland Avenue, Lafayette Avenue, and Natoli Place are generally two-lane roadways with posted speed limits of 25 MPH. The roadways are located in the Town of Riverdale Park and they provide access to and from residential and commercial properties within the Town of Riverdale Park.

Queensbury Road is generally an east-west, two-lane roadway that extends from Taylor Road east of the railroad westward to MD 500 (Queens Chapel Road). The posted speed limit is 25 MPH.

Rivertech Court is a 48 foot wide two lane roadway serving industrial and office uses and terminates as a cul-de-sac east of the CSX railroad at the edge of the Erico Property.

River Road is a four lane divided roadway that extends from MD 201 westward to Paint Branch Parkway, with a posted speed limit of 35 MPH.

The existing lane use and traffic control for each study intersection is shown on Figure 3.

Transit Services

Along US 1 there are five existing bus routes and one planned route that serve the Route 1 corridor in the vicinity of the site. These include "THE BUS" Route TB17, Metro Bus Routes 81, 83, and 86, the University of Maryland shuttle and the proposed circulator Bus.

The area is also served by Metro Rail Green line with stations in College Park to the north of the site as well as the Prince Georges Plaza station to the west of the site. MARC stations are also located north and south of the subject site, the College Park station and the Riverdale station, respectively. Maps showing the location of the bus and rail routes near and within the subject study area are contained in Appendix B.

In addition to the existing rail and bus services, the Maryland Department of Transportation has proposed to construct the Purple Line Light rail system that will extend from New Carrollton in Prince Georges County to Bethesda in Montgomery County, Maryland. Stops/stations are proposed at three locations in the vicinity of the study area; (1) Riverdale Park Station to be located south and east of the property, (2) M Square Station, located east of the subject property on River Road, and (3) College Park Station located north of the site On Paint Branch Parkway near the University of Maryland. A map and project description for the Purple Line is contained in Appendix B.

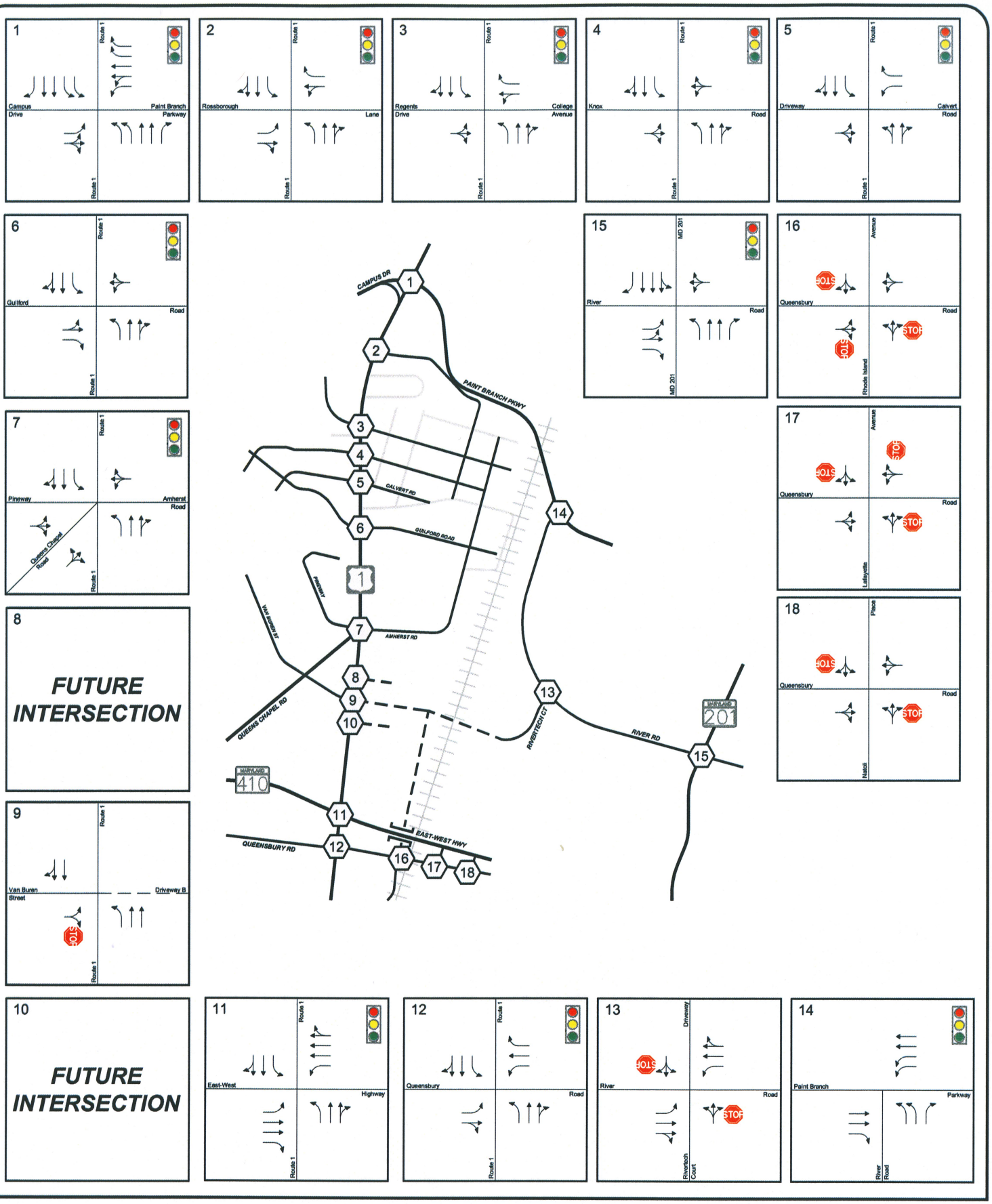

Figure 3
Existing Lane Use and Traffic Control

Represents One Travel Lane
Signalized Intersection
Stop Sign

North

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Site Access Concept

The vehicular access to the site will be provided on US 1, Maryland Avenue, and Rivertech Court via a CSX crossing from the property to Rivertech Court. The main entrance will be located directly across from Van Buren Street, and two right-in, right-out entrances are proposed on US 1, one north and one south of the main entrance. A southern access is proposed from the property to Maryland Avenue and an eastern access crossing the CSX railroad from the property to Rivertech Court is also proposed. No vehicular access is proposed from the property into the Calvert Hills residential neighborhood located north of the subject property. A proposed pedestrian/bike trail will traverse the site connecting the Town of Riverdale Park to the south with Calvert Hills and College Park to the north.

Existing Traffic Volumes

Existing AM and PM peak hour traffic counts were conducted from 6:00 to 9:00 AM and 4:00 to 7:00 PM on (Tuesday) November 8, 2011, (Saturday) November 12, 2011 and (Wednesday) February 29, 2012 by Wells & Associates at the following existing study intersections:

1. US 1/Paint Branch Parkway/Campus Drive,
2. US 1/Rossborough Lane,
3. US 1/College Avenue/Regents Drive,
4. US 1/Knox Road,
5. US 1/Calvert Road,
6. US 1/Guilford Road,
7. US1/Amherst Road/Pine Way/Queens Chapel Road,
8. US 1/North Site Access,
9. US 1/Van Buren Street,
10. US 1/South Site Access,
11. US 1/MD 410,
12. US 1/Queensbury Road,
13. Rivertech Court/River Road,
14. River Road/Paint Branch Parkway,
15. MD 201/River Road,
16. Rhode Island Avenue/Maryland Avenue/Queensbury Road,
17. Queensbury Road/Lafayette Avenue, and
18. Queensbury Road/Natoli Place.

The weekday AM, PM, and Mid-day peak hour counts summaries and the Saturday count summaries are contained in Appendix B and summarized on Figures 4 and 5. Per the scope agreement AM,PM and Saturday peak hour traffic counts were collected for all intersections. Mid-day peak hour traffic counts were collected for intersections 3,7,9,11, 12, 16, 17 and 18 only, in accordance with the approved scoping agreement.

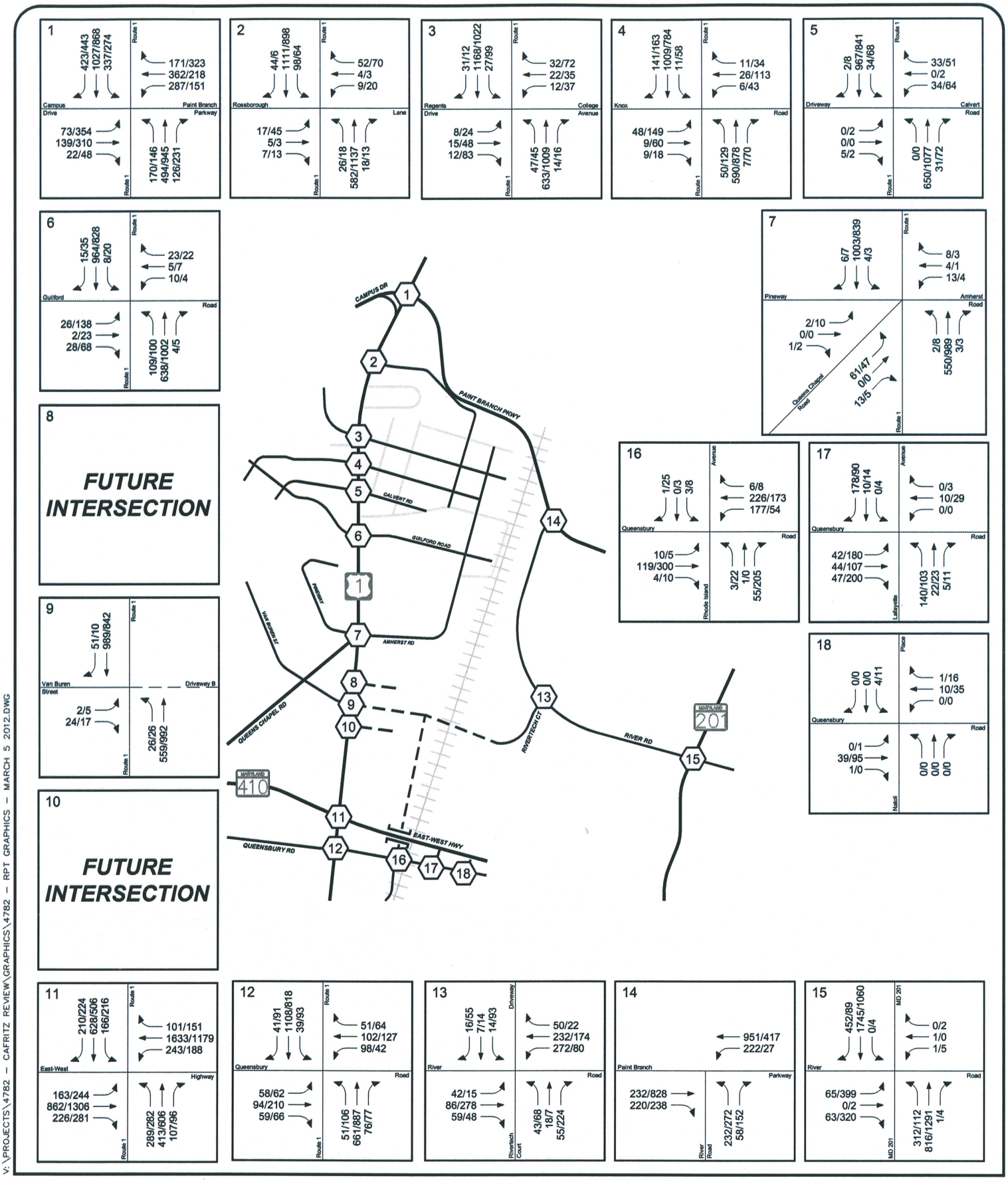

Figure 4
Existing Peak Hour and Traffic Volumes - AM & PM Peak

AM PEAK HOUR
PM PEAK HOUR
000/000

North

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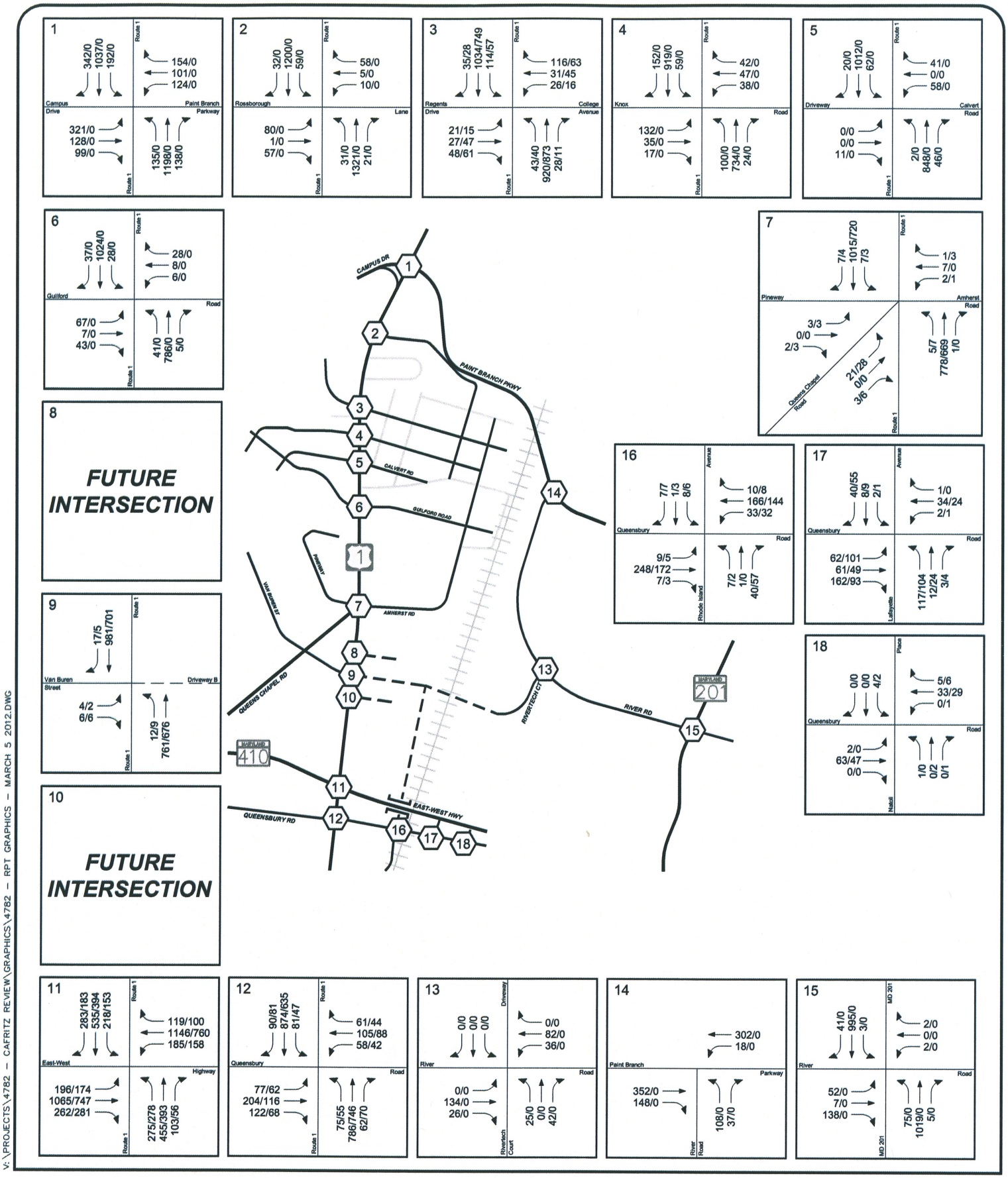

Figure 5
Existing Peak Hour and Traffic Volumes - SAT & MID DAY Peak

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

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ANALYSIS

Level of Service Standard

The proposed site is located in the Developed Tier of Prince George's County. The MNCPPC level of service standard in this policy area is Level of Service (LOS) "E" – up to 1,600 critical lane vehicles (CLV) for signalized intersections and 50.0 seconds of delay or less for unsignalized intersections.

Existing Levels of Service

Existing AM, PM, mid-day, and Saturday peak hour levels of service were calculated for each of the study intersections based on the existing lane usage and traffic control shown on Figure 3, the existing peak hour traffic volumes shown on Figure 4 and Figure 5, the MNCPPC critical lane analysis procedure for signalized intersections and the Highway Capacity Manual (HCM) method for unsignalized intersections, in accordance with the MNCPPC guidelines. The results are presented in Appendix C and summarized in Tables 1 and 2.

The results of the analysis for the existing conditions indicate that all of the study intersections are currently operating within the Developed Tier standard.

Table 1
Cafritz Property at Riverdale Park
Existing Intersection Level of Service Summary -AM and PM peak hours

Intersection	Operating Condition	Approach/ Movement	Existing AM	Existing PM
1: US 1/Paint Branch Parkway	Signalized	Overall	B (1036)	C (1213)
2: US 1/Rossborough Lane	Signalized	Overall	A (692)	A (767)
3: US 1/College Avenue	Signalized	Overall	A (754)	A (857)
4: US 1/Knox Road	Signalized	Overall	A (775)	A (993)
5: US 1/Calvert Road	Signalized	Overall	A (572)	A (768)
6: US 1/Guilford Road	Signalized	Overall	A (712)	A (754)
7: US 1/Amherst Road	Signalized	Overall	A (659)	A (619)
8: US 1/North Site Access (Future)	Unsignalized		N/A	N/A
9: US 1/Van Buren/Future Site Access	Unsignalized	NBL	B [10.9]	A [10.0]
		EB	B [12.8]	B [13.3]
10: US 1/South Site Access (Future)	Unsignalized		N/A	N/A
11: US 1/MD 410	Signalized	Overall	E (1555)	E (1590)
12: US 1/Queensbury Road	Signalized	Overall	A (934)	A (941)
13: Rivertech Court/River Road	Unsignalized	NB	D [27.6]	C [17.4]
		SB	C [24.1]	C [22.7]
		EBL	A [8.0]	A [7.7]
		WBL	A [8.2]	A [8.2]
14: River Road/Paint Branch Parkway	Signalized	Overall	A (662)	A (634)
15: Kenilworth Road/River Road	Signalized	Overall	A (999)	A (962)
16: Rhode Island/Queens Bury Road	Unsignalized	Overall	B [10.72]	B [11.15]
17: Lafayette Avenue/Queens Bury Road	Unsignalized	Overall	A [8.59]	B [12.94]
18: Natoli Place/Queens Bury Road	Unsignalized	SB	A [8.8]	A [9.5]
		NB	A [8.8]	A [9.4]
		EBL	A [7.2]	A [7.3]
		WBL	A [7.3]	A [7.4]

Notes : Numbers in parentheses ( ) represent the critical lane volume at signalized intersections.
Numbers in square brackets [ ] represent delay at unsignalized intersections in seconds per vehicle.

Table 2
Cafritz Property at Riverdale Park
Existing Intersection Level of Service Summary - SAT and Mid-day peak hours

Intersection	Operating Condition	Approach/ Movement	Existing SAT	Existing MID DAY
1: US 1/Paint Branch Parkway	Signalized	Overall	C (1158)	-
2: US 1/Rossborough Lane	Signalized	Overall	A (893)	-
3: US 1/College Avenue	Signalized	Overall	A (759)	A (684)
4: US 1/Knox Road	Signalized	Overall	A (952)	-
5: US 1/Calvert Road	Signalized	Overall	A (639)	-
6: US 1/Guilford Road	Signalized	Overall	A (735)	-
7: US 1/Amherst Road	Signalized	Overall	A (604)	A (446)
8: US 1/North Site Access (Future)	Unsignalized		N/A	N/A
9: US 1/Van Buren/Future Site Access	Unsignalized	NBL	B [10.6]	A [9.2]
		EB	C [15.5]	B [11.9]
10: US 1/South Site Access (Future)	Unsignalized		N/A	N/A
11: US 1/MD 410	Signalized	Overall	E (1496)	C (1164)
12: US 1/Queensbury Road	Signalized	Overall	A (989)	A (722)
13: Rivertech Court/River Road	Unsignalized	NB	A [9.8]	-
		SB	A [0.0]	-
		EBL	A [7.4]	-
		WBL	A [7.6]	-
14: River Road/Paint Branch Parkway	Signalized	Overall	A (270)	-
15: Kenilworth Road/River Road	Signalized	Overall	A (606)	-
16: Rhode Island/Queens Bury Road	Unsignalized	Overall	A [9.09]	A [8.42]
17: Lafayette Avenue/Queens Bury Road	Unsignalized	Overall	A [9.32]	A [9.04]
18: Natoli Place/Queens Bury Road	Unsignalized	SB	A [9.2]	A [9.1]
		NB	A [9.2]	A [9.3]
		EBL	A [7.3]	A [7.3]
		WBL	A [7.3]	A [7.3]

Notes : Numbers in parentheses ( ) represent the critical lane volume at signalized intersections.
Numbers in square brackets [ ] represent delay at unsignalized intersections in seconds per vehicle.
Mid Day analysis performed only for 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Background Traffic Growth

As required by the MNCPPC Guidelines for Traffic Impact Studies, growth in through traffic that would be generated by approved, but unbuilt, developments in the vicinity of the site, as well as the regional growth attributable to development outside the study area, should be included in the analyses. A review of the Maryland State Highway Administration Traffic Volume maps indicates that US 1 has experienced less than .01 percent growth over the last seven years. A copy of the SHA ADT data is contained in the scoping letter in Appendix A. Therefore, a regional growth rate of 0.5% has been applied to US 1 through the build-out year 2017 as a conservative measure.

Based on information obtained from the MNCPPC PG Atlas site and as discussed with MNCCPC staff, nine (9) approved pipeline developments in the immediate vicinity of the site have been included in this analysis. The approved developments include:

1. Garden Suites Hotel - 30 rooms
2. Northgate - 9,000 square feet (SF) high turn-over restaurant, 3,500 SF fast food, 376 apartments
3. Starview Plaza - 172 apartments,9,580 SF retail
4. Berwyn House - 72 apartments
5. Mosaic at Turtle Creek - 300 condominium units
6. M Square/Riverside – 1,145,734 SF office
7. EYA Hyattsville - 259 apartments, 183 townhouses
8. Domain at College Park - 256 apartment units, 10,000 SF retail
9. Maryland Book Exchange- 1010 student housing beds, 4,375 SF retail & 9,991 SF Book Store

The locations of the background developments are included in Appendix A. Information about M-Square/Riverside development was based of Development Activity Monitoring System (DAMS) report. Breakdown of the built and not built projects accounting for two (2) million square feet of Office is also included in Appendix A.

The number of peak hour trips that will be generated by the approved pipeline projects was estimated based on Prince George's County trip generation rates. As shown in Table 3, it is estimated that the approved projects will generate a total of 2,997 AM new peak hour trips, 3,084 PM new peak hour trips, 2,097 mid-day new peak trips and 1,753 Saturday new peak hour trips to the area road system.

Table 3

Cafritz Property at Riverdale Park

Background Development Trip Generation

Development	Land Use	Amount	Unit	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Mid Day Peak Hour[1] In	Mid Day Peak Hour[1] Out	Mid Day Peak Hour[1] Total	SAT Peak Hour[2] In	SAT Peak Hour[2] Out	SAT Peak Hour[2] Total
1. Garden Suites Hotel	Hotel	30	Rooms	**11**	**9**	**20**	**14**	**11**	**25**	**8**	**8**	**16**	**12**	**10**	**22**
2. Northgate	High-Turnover Restaurant	9,000	SF	54	50	104	59	41	100	54	45	99	67	60	127
	less passby[3]	33%/43%		*(18)*	*(16)*	*(34)*	*(25)*	*(18)*	*(43)*	*(23)*	*(19)*	*(42)*	*(29)*	*(26)*	*(55)*
	New High-Turnover Trips			36	34	70	34	23	57	31	26	57	38	34	72
	Fast Food Restaurant	3,500	SF	88	85	173	61	57	118	82	69	151	106	102	208
	less passby	49%/50%		*(43)*	*(42)*	*(85)*	*(31)*	*(28)*	*(59)*	*(41)*	*(35)*	*(76)*	*(53)*	*(51)*	*(104)*
	New Fast food Trips			45	43	88	30	29	59	41	34	75	53	51	104
	Apartments	376	SF	38	158	196	147	79	226	61	61	122	112	84	196
	Subtotal New Trips - Northgate			**119**	**235**	**354**	**211**	**131**	**342**	**133**	**121**	**254**	**203**	**169**	**372**
3. Starview Plaza	Apartments	172	DU	17	72	89	67	36	103	28	28	56	51	38	89
	Retail	9,580	SF	23	15	38	57	57	114	50	42	92	97	90	187
	less retail passby	60%		*(14)*	*(9)*	*(23)*	*(34)*	*(34)*	*(68)*	*(25)*	*(21)*	*(46)*	*(49)*	*(45)*	*(94)*
	New Retail Trips			9	6	15	23	23	46	25	21	46	48	45	93
	Subtotal New Trips - Starview Plaza			**26**	**78**	**104**	**90**	**59**	**149**	**53**	**49**	**102**	**99**	**83**	**182**
4. Berwyn House	Apartments	72	DU	**7**	**30**	**37**	**28**	**15**	**43**	**12**	**12**	**24**	**21**	**16**	**37**
5. Mosiac @ Turtle Creek	Condominiums	300	DU	**42**	**168**	**210**	**156**	**84**	**240**	**60**	**60**	**120**	**70**	**60**	**130**
6. M-Square - Riverside	Office	1,145,734	SF	2,062	229	2,291	401	1,719	2,120	706	802	1508	254	216	470
	less transit reduction[4]	25%		*(516)*	*(57)*	*(573)*	*(100)*	*(430)*	*(530)*	*(177)*	*(201)*	*(378)*	*(64)*	*(54)*	*(118)*
	Subtotal New Office Trips			**1,546**	**172**	**1,718**	**301**	**1,289**	**1,590**	**529**	**601**	**1,130**	**190**	**162**	**352**
7. EYA Hyattsville	Apartment	259	DU	26	109	135	101	54	155	42	42	84	77	58	135
	Townhouse	183	DU	26	102	128	95	51	146	37	37	74	52	44	96
	Subtotal - Hyattsville			**52**	**211**	**263**	**196**	**105**	**301**	**79**	**79**	**158**	**129**	**102**	**231**
8. Domain at College Park	Apartments	256	DU	26	108	134	100	54	154	42	42	84	76	57	133
	Retail	10,000	SF	24	15	39	60	60	120	52	43	95	100	92	192
	less retail passby	60%		*(14)*	*(9)*	*(23)*	*(36)*	*(36)*	*(72)*	*(26)*	*(22)*	*(48)*	*(50)*	*(46)*	*(96)*
	New Retail Trips			10	6	16	24	24	48	26	21	47	50	46	96
	Subtotal New Trips - Domain at College Park			**36**	**114**	**150**	**124**	**78**	**202**	**68**	**63**	**131**	**126**	**103**	**229**
9. Maryland Book Exchange Property[5]	Student Housing	1,010	Beds	30	101	131	101	71	172	71	71	142	71	71	142
	Book Store (No Additional Trips)	9,991	SF	0	0	0	0	0	0	0	0	0	0	0	0
	Shopping Center	4,375	SF	15	9	24	26	26	52	23	19	42	58	54	112
	less passby	60%		*(9)*	*(5)*	*(14)*	*(16)*	*(16)*	*(32)*	*(12)*	*(10)*	*(22)*	*(29)*	*(27)*	*(56)*
	New Shopping Center Trips			6	4	10	10	10	20	11	9	20	29	27	56
	Subtotal New Trips - Maryland Book Exchange			**36**	**105**	**141**	**111**	**81**	**192**	**82**	**80**	**162**	**100**	**98**	**198**
Total Background Development New Trips				**1,875**	**1,122**	**2,997**	**1,231**	**1,853**	**3,084**	**1,024**	**1,073**	**2,097**	**950**	**803**	**1,753**

Note: Trip generation is based on MNCPPC rates and the Institute of Transportation Engineers Trip Generation, 8th Edition

1. Mid Day peak rates were determined based on review of diurnal rates from ITE 8th Edition and other sources (Included in Appendix E)
2. Saturday Trips were computed using rates or equations established in ITE Trip Generation, 8th Edition
3. Pass by for High Turnover Restaurant was based on rates/equations established in ITE Trip Generation Handbook.
4. Transit reduction ercentage based on transit ridership goal establsihed in Approved General Plan, dated October 2002 (see Table 1, Page 28 of Approved General Plan Report)

Background Traffic Forecasts

The approved development trips, shown in Table 3, were distributed to the area road network based on the existing traffic patterns, previously approved traffic studies, and local knowledge of the roadway system. The individual development site trip assignments are shown in the forecasting sheets contained in Appendix D. The resulting combined approved development trips are shown in Figures 6 and 7.

The combined approved development peak hour trips and the regional growth were then added to the existing peak hour volumes, shown in Figures 4 and 5, to yield the future background traffic volumes as shown on Figure 8 and 9.

Planned improvements

The roadway improvements listed below are planned as a part of ACP and M Square formally known as Riverside Subdivision Phase I and the approved Transit District Development Plan for the College Park Transit District Overlay Zone.

- Additional right turn lane on east bound approach of MD 201/River Road Intersection
- Additional left turn lane on north bound approach of MD 201/River Road Intersection
- Signalized the intersection of Rivertech Court/River Road.

Additional road improvements were required of later phases of Riverside however they have not been considered in this analysis.

The background lane use and traffic control for each study intersection is shown on Figure 10.

Background Levels of Service

Background peak hour levels of service were calculated at the 18 study intersections based on the existing lane use and traffic control shown on Figure 10, the background traffic volumes shown on Figure 8 and 9, the MNCPPC critical lane analysis procedure for signalized intersections and the Highway Capacity Manual (HCM) method for unsignalized intersections, in accordance with the MNCPPC guidelines. The results are presented in Appendix F and summarized in Tables 4 and 5. It should be noted that the Mid-day level of service analysis is conducted for only intersections 3,7,8,9,10,11,12, 16 17 and 18 per the scope agreement included in Appendix A.

Table 4 indicates that all intersections, with the exception of US 1/MD410 will continue to operate within the MNCPPC standards for the developed tier during the AM and PM peak hours. The intersection of US 1/MD 410 will operate LOS "F" with a CLV of 1,635 during the AM peak hour and with a CLV of 1,706 during the PM peak hour.

Table 5 indicates that all intersections will continue to operate within the MNCPPC standards for the developed tier during the Saturday peak hour. During weekday Mid-day peak, all study intersections will continue to operate within the MNCPPC standards for the developed tier.

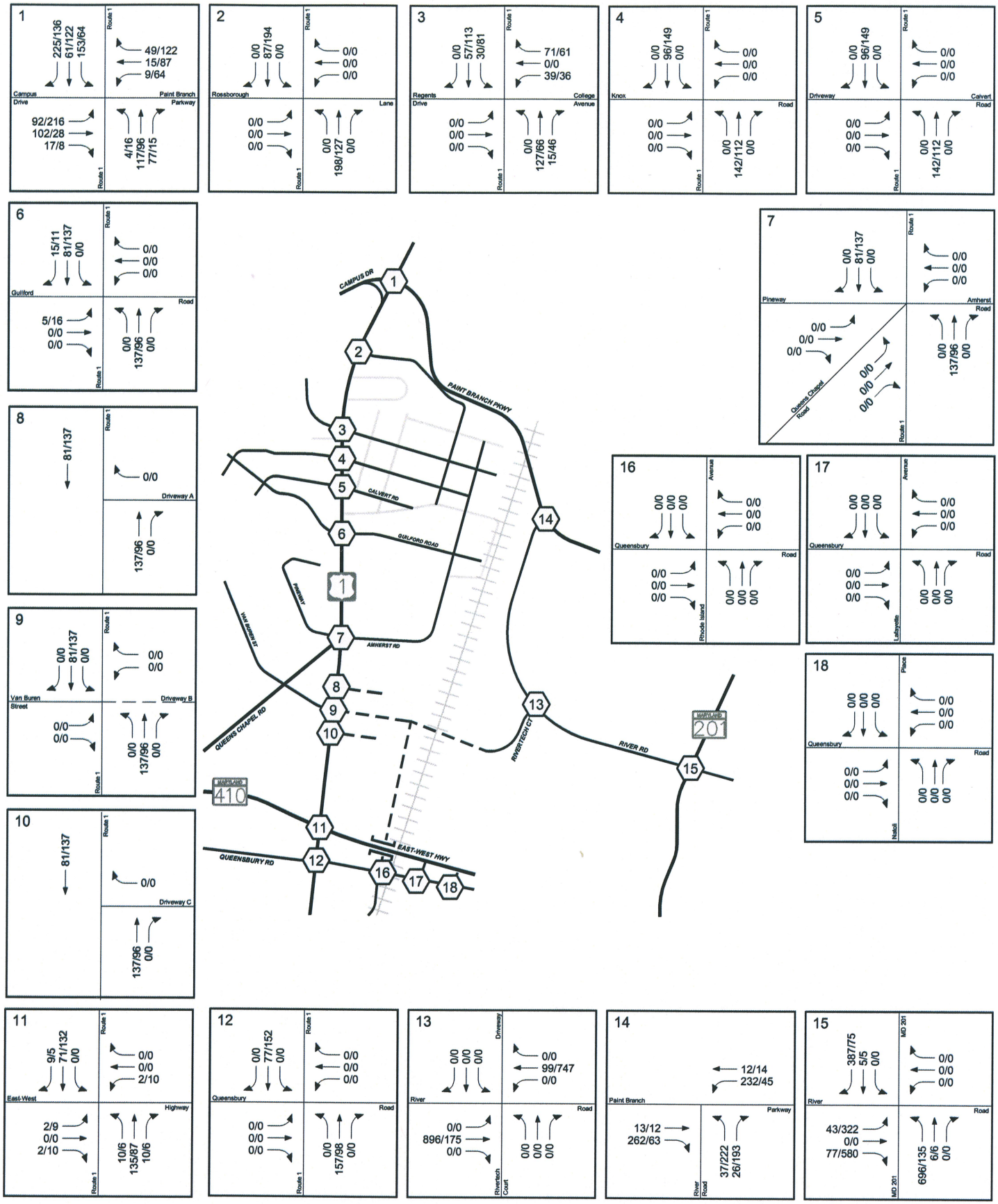

Figure 6
Combined Approved Development Peak Hour without CSX - AM & PM Peak

AM PEAK HOUR
PM PEAK HOUR
000/000

North

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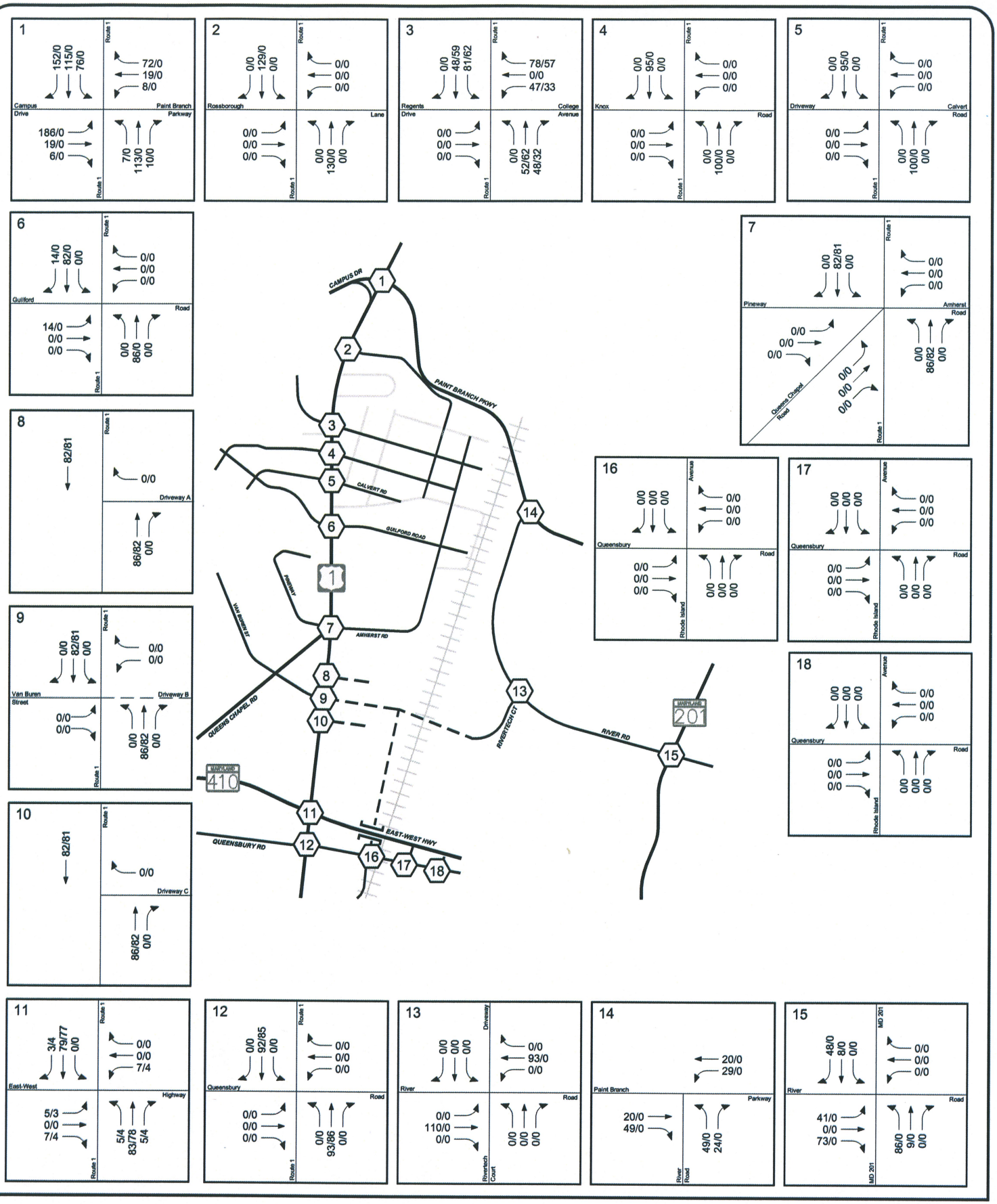

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Figure 7
Combined Approved Development Peak Hour without CSX - SAT & MID DAY Peak

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

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Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

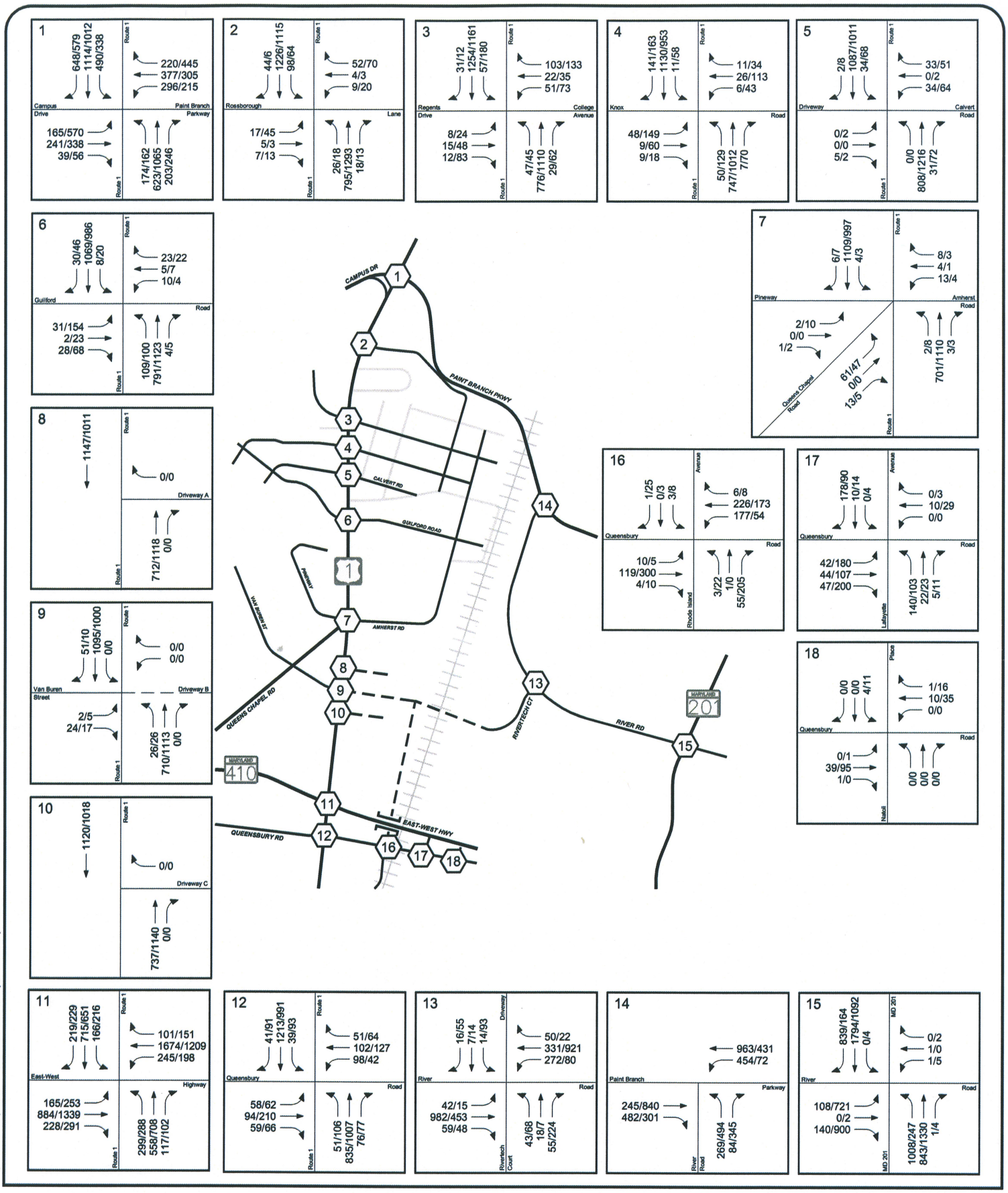

Figure 8
Background Peak Hour Traffic Forecasts without CSX - AM & PM

AM PEAK HOUR
PM PEAK HOUR
000/000

North

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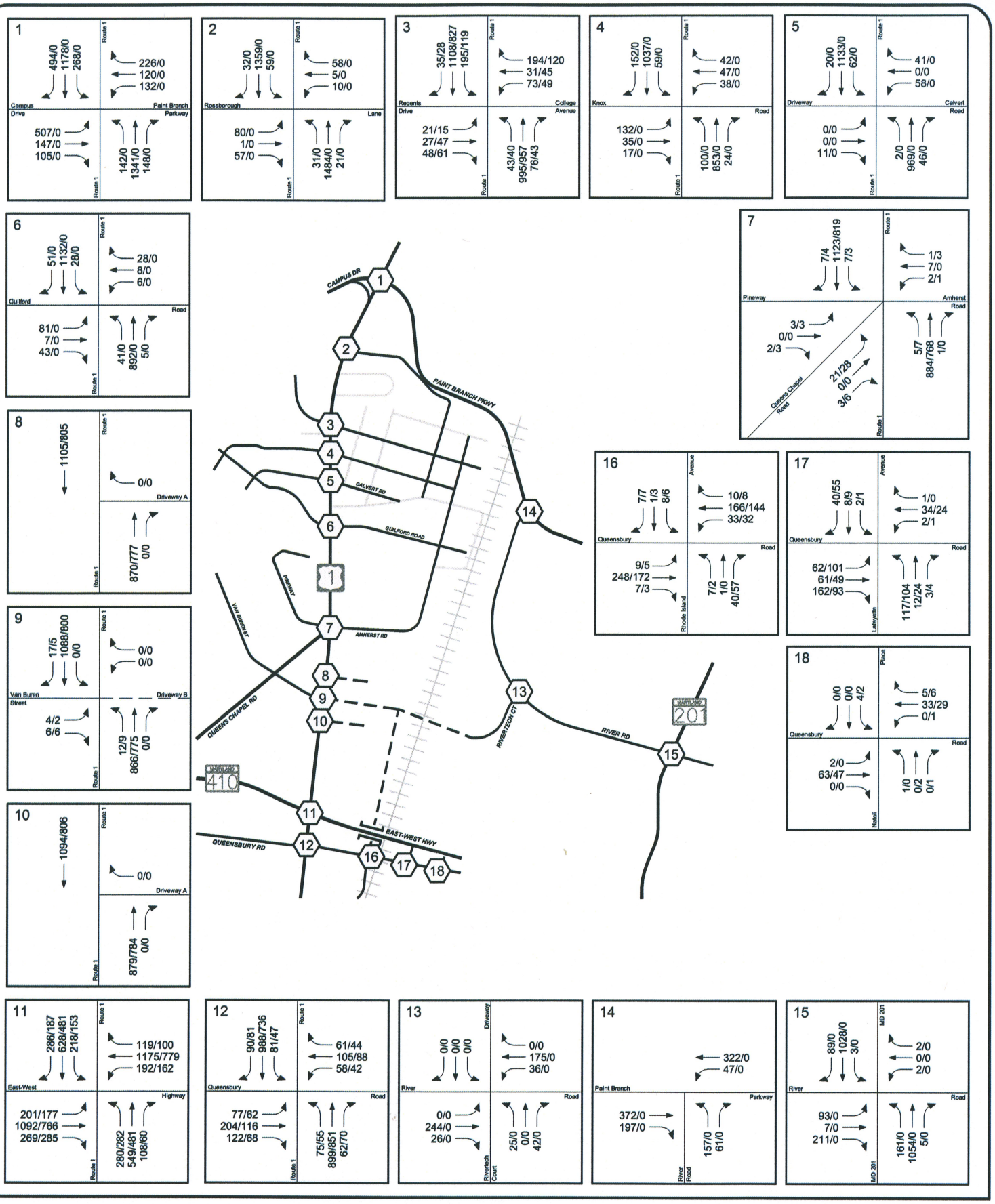

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Figure 9
Background Peak Hour Traffic Forecasts without CSX - SAT & MID DAY

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

JCP

Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

Figure 10
Background Lane Use and Traffic Control

Planned Improvements

Represents One Travel Lane

Signalized Intersection

Stop Sign

North

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Table 4
Cafritz Property at Riverdale Park
Background Intersection Level of Service Summary - AM and PM peak hours

Intersection	Operating Condition	Approach/ Movement	Existing AM	Existing PM	Background AM	Background PM
1: US 1/Paint Branch Parkway	Signalized	Overall	B (1036)	C (1213)	C (1211)	E (1511)
2: US 1/Rossborough Lane	Signalized	Overall	A (692)	A (767)	A (756)	A (852)
3: US 1/College Avenue	Signalized	Overall	A (754)	A (857)	A (841)	B (1049)
4: US 1/Knox Road	Signalized	Overall	A (775)	A (993)	A (841)	B (1086)
5: US 1/Calvert Road	Signalized	Overall	A (572)	A (768)	A (638)	A (844)
6: US 1/Guilford Road	Signalized	Overall	A (712)	A (754)	A (783)	A (864)
7: US 1/Amherst Road	Signalized	Overall	A (659)	A (619)	A (717)	A (685)
8: US 1/North Site Access (Future)	Unsignalized		N/A	N/A	N/A	N/A
9: US 1/Van Buren/Future Site Access	Unsignalized	NBL	B [10.9]	A [10.0]	B [11.5]	B [10.8]
		EB	B [12.8]	B [13.3]	B [13.5]	B [14.7]
10: US 1/South Site Access (Future)	Unsignalized		N/A	N/A	N/A	N/A
11: US 1/MD 410	Signalized	Overall	E (1555)	E (1590)	F (1635)	F (1706)
12: US 1/Queensbury Road	Signalized	Overall	A (934)	A (941)	A (992)	B (1019)
13: Rivertech Court/River Road	Unsignalized	NB	D [27.6]	C [17.4]		
		SB	C [24.1]	C [22.7]		
		EBL	A [8.0]	A [7.7]		
		WBL	A [8.2]	A [8.2]		
With Signal					A (926)	A (773)
14: River Road/Paint Branch Parkway	Signalized	Overall	A (662)	A (634)	A (691)	A (801)
15: Kenilworth Road/River Road[1]	Signalized	Overall	A (999)	A (962)	D (1336)	C (1177)
16: Rhode Island/Queens Bury Road	Unsignalized	Overall	B [10.72]	B [11.15]	B [10.72]	B [11.15]
17: Lafayette Avenue/Queens Bury Road	Unsignalized	Overall	A [8.59]	B [12.94]	A [8.59]	B [12.94]
18: Natoli Place/Queens Bury Road	Unsignalized	SB	A [8.8]	A [9.5]	A [8.8]	A [9.5]
		NB	A [8.8]	A [9.4]	A [8.8]	A [9.4]
		EBL	A [7.2]	A [7.3]	A [7.2]	A [7.3]
		WBL	A [7.3]	A [7.4]	A [7.3]	A [7.4]

Notes : Numbers in parentheses ( ) represent the critical lane volume at signalized intersections.
Numbers in square brackets [ ] represent delay at unsignalized intersections in seconds per vehicle.
1) Includes Riverside Subdivision Phase I Improvements

Table 5
Cafritz Property at Riverdale Park
Background Intersection Level of Service Summary - SAT and Mid-day peak hours

Intersection	Operating Condition	Approach/ Movement	Existing SAT	Existing MID DAY	Background SAT	Background MID DAY
1: US 1/Paint Branch Parkway	Signalized	Overall	C (1158)	-	D (1409)	-
2: US 1/Rossborough Lane	Signalized	Overall	A (893)	-	A (983)	-
3: US 1/College Avenue	Signalized	Overall	A (759)	A (684)	A (974)	A (843)
4: US 1/Knox Road	Signalized	Overall	A (952)	-	B (1017)	-
5: US 1/Calvert Road	Signalized	Overall	A (639)	-	A (705)	-
6: US 1/Guilford Road	Signalized	Overall	A (735)	-	A (816)	-
7: US 1/Amherst Road	Signalized	Overall	A (604)	A (446)	A (664)	A (501)
8: US 1/North Site Access (Future)	Unsignalized		N/A	N/A	N/A	N/A
9: US 1/Van Buren/Future Site Access	Unsignalized	NBL	B [10.6]	A [9.2]	B [11.2]	A [9.6]
		EB	C [15.5]	B [11.9]	C [16.9]	B [12.6]
10: US 1/South Site Access (Future)	Unsignalized		N/A	N/A	N/A	N/A
11: US 1/MD 410	Signalized	Overall	E (1496)	C (1164)	E (1576)	C (1232)
12: US 1/Queensbury Road	Signalized	Overall	A (989)	A (722)	B (1052)	A (780)
13: Rivertech Court/River Road	Unsignalized	NB	A [9.8]	-		
		SB	A [0.0]	-		
		EBL	A [7.4]	-		
		WBL	A [7.6]	-		
With Signal					A (210)	-
14: River Road/Paint Branch Parkway	Signalized	Overall	A (270)	-	A (327)	-
15: Kenilworth Road/River Road[1]	Signalized	Overall	A (606)	-	A (655)	-
16: Rhode Island/Queens Bury Road	Unsignalized	Overall	A [9.09]	A [8.42]	A [9.09]	A [8.42]
17: Lafayette Avenue/Queens Bury Road	Unsignalized	Overall	A [9.32]	A [9.04]	A [9.32]	A [9.04]
18: Natoli Place/Queens Bury Road	Unsignalized	SB	A [9.2]	A [9.1]	A [9.2]	A [9.1]
		NB	A [9.2]	A [9.3]	A [9.2]	A [9.3]
		EBL	A [7.3]	A [7.3]	A [7.3]	A [7.3]
		WBL	A [7.3]	A [7.3]	A [7.3]	A [7.3]

Notes : Numbers in parentheses ( ) represent the critical lane volume at signalized intersections.
Numbers in square brackets [ ] represent delay at unsignalized intersections in seconds per vehicle.
Mid Day analysis performed only for 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement
1) Includes Riverside Subdivision Phase I Improvements

Site Generated Traffic

The proposed development when fully built-out will consist of 981 dwelling units (219 senior housing units, 30 scholar/faculty housing units, 606 multi-family units and 126 townhouses), a 120-room hotel, 22,000 SF of office space, and 168,200 SF of retail space. The build-out of Cafritz Property at Riverdale Park will generate 548 new AM peak hour trips, 898 new PM peak hour trips, 865 mid-day peak hour trips and 1,153 Saturday peak hour trips, as shown in Table 6.

The site trip generation for AM, PM and SAT peak hours was developed using the MNCPPC trip generation rates, and ITE 8th edition Trip Generation report. The Mid-day site trip generation was based on review of diurnal rates established in ITE 8th Edition Trip Generation report and data collection efforts from other studies (see Appendix E).

Trip reductions were taken due to the proximity to Metro, the adjacent bus services on US 1, the MARC stations to the north and south, and the proposed Light Rail Purple Line to the east of the project. The transit & metro rail reductions taken are based on the anticipated transit and Metro ridership noted in the 2005 WMATA Ridership Study Report.

The transit ridership rates are exclusive of additional reductions that would occur with a Transportation Demand Management Plan that will be implemented with this project.

In addition to the transit reduction, there will also be a reduction of vehicular trips due to the synergy between the different uses proposed. These trips are "captured" and stay within the project. The internal capture rate between the uses within the site was calculated based on the ITE Trip Generation Handbook, March 2001. Copies of the internal capture calculations are presented in Appendix D.

Site Traffic Distribution

The distribution of the site traffic is based on area roadway network, existing traffic patterns, and previously approved traffic studies. The direction distributions used for each use within the Cafritz property are shown in Appendix A.

Table 6
The Cafritz Property at Riverdale Park
Site Trip Generation

Land Use	Amount	Units	AM Peak Hour In	AM Peak Hour Out	AM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Mid Day Peak Hour[1] In	Mid Day Peak Hour[1] Out	Mid Day Peak Hour[1] Total	SAT Peak Hour In	SAT Peak Hour Out	SAT Peak Hour Total
Residential														
Senior Housing - attached	219	DU	10	18	28	21	14	35	19	19	38	35	31	66
less internal capture [2]			*(1)*	*(1)*	*(2)*	*(4)*	*(3)*	*(7)*	*(4)*	*(3)*	*(7)*	*(4)*	*(4)*	*(8)*
Net Senior Housing Trips			9	17	26	17	11	28	15	16	31	31	27	58
Less Transit & Metro Rail Reductions	*5%*		*0*	*(1)*	*(1)*	*(1)*	*(1)*	*(2)*	*(1)*	*(1)*	*(2)*	*(2)*	*(1)*	*(3)*
Senior Housing External Trips			**9**	**16**	**25**	**16**	**10**	**26**	**14**	**15**	**29**	**29**	**26**	**55**
Faculty Housing [3]	30	DU	4	17	21	16	8	24	6	6	12	28	23	51
Multi-Family	606	DU	61	255	316	236	127	363	98	98	196	180	135	315
Townhouses	126	DU	18	71	89	66	35	101	25	25	50	43	36	79
Non-Age Restricted Residential Subtotal	762	DU	83	343	426	318	170	488	129	129	258	251	194	445
less internal capture [2]			*(6)*	*(10)*	*(16)*	*(53)*	*(36)*	*(89)*	*(24)*	*(20)*	*(44)*	*(30)*	*(23)*	*(53)*
Net Residential Trips			77	333	410	265	134	399	105	109	214	221	171	392
less transit reduction	*20%*		*(15)*	*(67)*	*(82)*	*(53)*	*(27)*	*(80)*	*(21)*	*(22)*	*(43)*	*(44)*	*(34)*	*(78)*
Non-Age Restricted Residential External Trips			**62**	**266**	**328**	**212**	**107**	**319**	**84**	**87**	**171**	**177**	**137**	**314**
All Residential External Subtotal			71	282	353	228	117	345	98	102	200	206	163	369
Office (ITE 710 for SAT)	22,000	SF	40	4	44	8	33	41	14	15	29	5	4	9
less internal capture [2]			*(3)*	*(1)*	*(4)*	*(3)*	*(8)*	*(11)*	*(5)*	*(3)*	*(8)*	*(2)*	*(1)*	*(3)*
Net Office Trips			37	3	40	5	25	30	9	12	21	3	3	6
less transit reduction	*10%*		*(4)*	*0*	*(4)*	*0*	*(3)*	*(3)*	*(1)*	*(1)*	*(2)*	*(1)*	*0*	*(1)*
Office External Trips			**33**	**3**	**36**	**5**	**22**	**27**	**8**	**11**	**19**	**2**	**3**	**5**
Hotel (ITE 310 rooms for SAT)	120	Room	42	36	78	54	42	96	30	30	60	48	38	86
less internal capture [2]			*(3)*	*(1)*	*(4)*	*(9)*	*(9)*	*(18)*	*(6)*	*(5)*	*(11)*	*(6)*	*(4)*	*(10)*
Net Hotel Trips			39	35	74	45	33	78	24	25	49	42	34	76
less transit reduction	*5%*		*(2)*	*(2)*	*(4)*	*(2)*	*(2)*	*(4)*	*(1)*	*(1)*	*(2)*	*(2)*	*(2)*	*(4)*
Hotel External Trips			**37**	**33**	**70**	**43**	**31**	**74**	**23**	**24**	**47**	**40**	**32**	**72**
Retail	168,200	SF	131	83	214	538	538	1,076	559	465	1,024	625	577	1,202
less internal capture [2]			*(13)*	*(12)*	*(25)*	*(55)*	*(68)*	*(123)*	*(31)*	*(38)*	*(69)*	*(32)*	*(42)*	*(74)*
Net Retail Trips			118	71	189	483	470	953	528	427	955	593	535	1,128
less transit reduction	*5%*		*(6)*	*(4)*	*(10)*	*(24)*	*(24)*	*(48)*	*(26)*	*(21)*	*(47)*	*(30)*	*(27)*	*(57)*
Retail External Trips			112	67	179	459	446	905	502	406	908	563	508	1,071
less pass-by	50%		*(56)*	*(34)*	*(90)*	*(230)*	*(223)*	*(453)*	*(171)*	*(138)*	*(309)*	*(191)*	*(173)*	*(364)*
Retail New External Trips			**56**	**33**	**89**	**229**	**223**	**452**	**331**	**268**	**599**	**372**	**335**	**707**
Full Buildout Net New External Trips			**197**	**351**	**548**	**505**	**393**	**898**	**460**	**405**	**865**	**620**	**533**	**1,153**

Note: Trip generation is based on MNCPPC rates unless otherwise noted above then used Institute of Transportation Engineers Trip Generation, 8th Edition. ITE Land Use code (LUC) # 252 used for Senior Housing (AM/PM/SAT), ITE LUC # 230 used for Faculty Housing and Townhouses; ITE LUC # 220 used for Multi-Family, ITE LUC # 710 used for Office, ITE LUC # 310 used for Hotel and ITE LUC # 820 used for Retail

1. Mid Day peak rates were determined based on review of diurnal rates from ITE 8th Edition and other sources (Included in Appendix E)
2. Internal Capture Rates were based on ITE Trip Generation Handbook
3. Townhouse rates were used for Faculty Housing

Total Future Traffic Forecasts

The site-generated trips shown in Table 6 were assigned to the public road network according to the directional distribution contained in Appendix A. This distribution of the site traffic assumes the connection to Maryland Avenue as well as the CSX crossing from the site to Rivertech Court. The resulting site AM and PM new and pass-by traffic assignments are shown in Figures 11 and 12, respectively. The mid-day and Saturday new and pass-by traffic assignments are shown in Figures 13 and 14, respectively.

Due to the proposed CSX crossing with the connection to Rivertech Court, the approved development project M-Square will have access to and through the Cafritz Property at Riverdale Park. Therefore, the trip assignments for the two projects were adjusted to reflect this new connection in the total future condition. The adjusted trip assignments for both of these projects and the resulting adjusted Background peak hour volumes are located in Appendix G. Figures G-1 and G-2 show the reassigned combined approved development volumes for the AM and PM peak hours, and the Mid-day and Saturday peak hour volumes, respectively. The background development volumes for AM & PM, and Mid-day & Saturday peak hours are shown in Figures G-3 and G-4, respectively. Figures G-1 through G-4 are included in Appendix G. The site traffic volumes for Mid-day peak on intersections 1 through 11 (along US 1) are shown on Figure G-5 (see Appendix G) for review purposes.

The site volumes shown in Figures 11,12, 13 and 14 were then added to the background traffic volumes shown on Figures G-3 and G-4 to yield the total future traffic forecasts for the weekday AM and PM peak hours and the Mid-day and Saturday peak hour volumes as shown on Figures 15 and 16, respectively. The site assignments for the individual uses proposed are shown on the forecast worksheets in Appendix D.

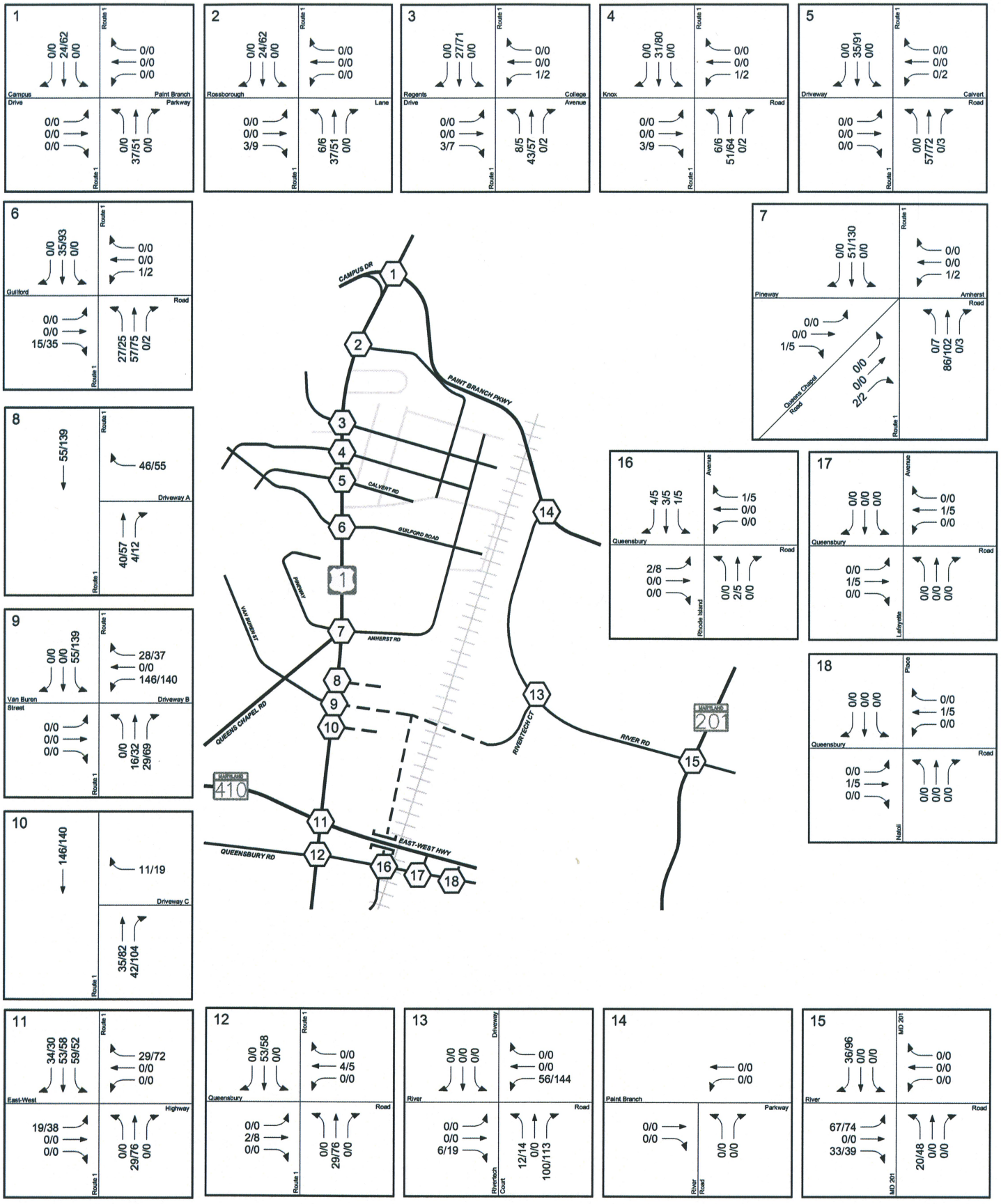

Figure 11
Site Generated New Peak Hour Traffic Forecasts with CSX - AM & PM

AM PEAK HOUR
PM PEAK HOUR
000/000

North

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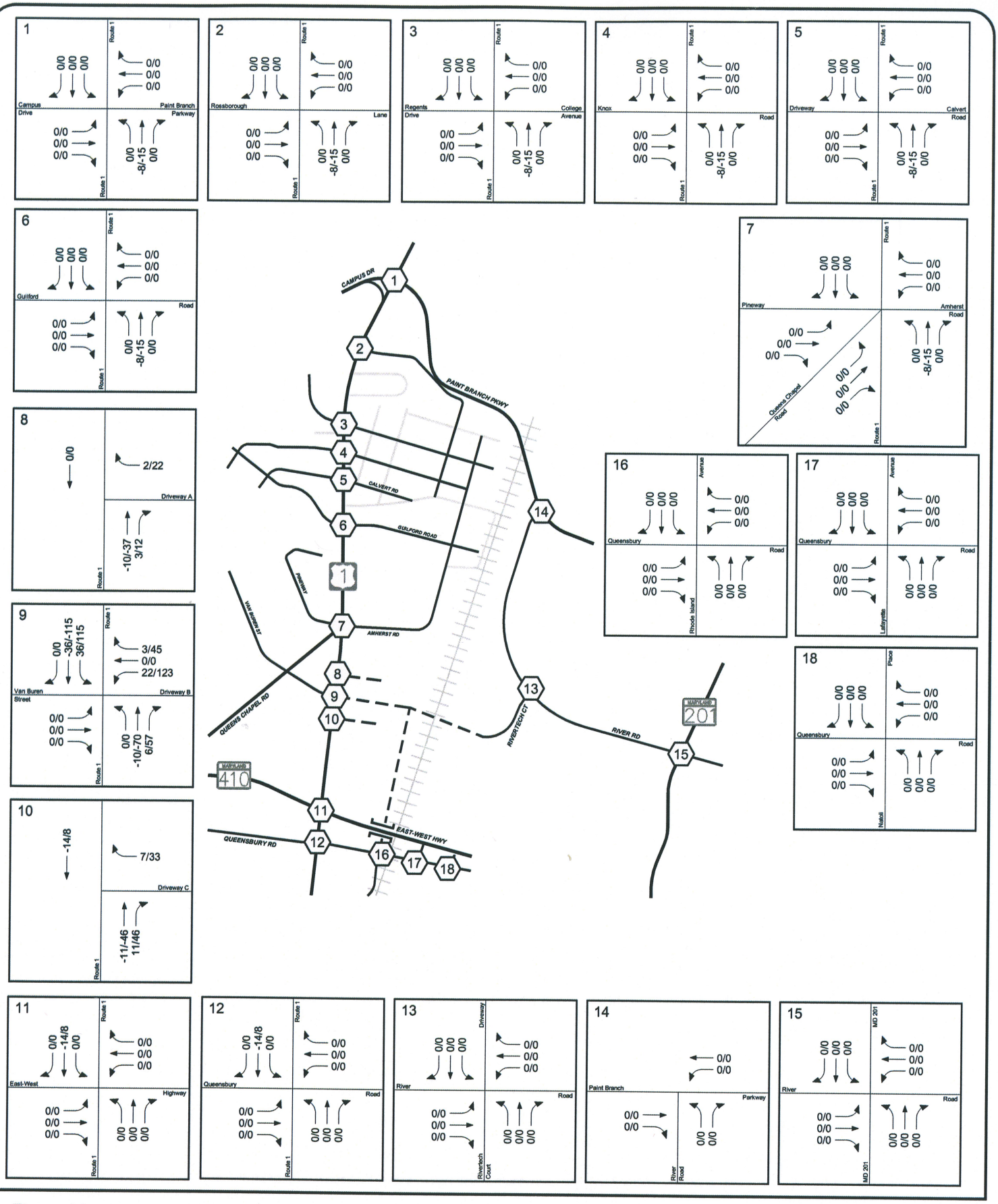

Figure 12
Site Generated Pass By Peak Hour Traffic Forecasts with CSX - AM & PM

AM PEAK HOUR
PM PEAK HOUR
000/000

North

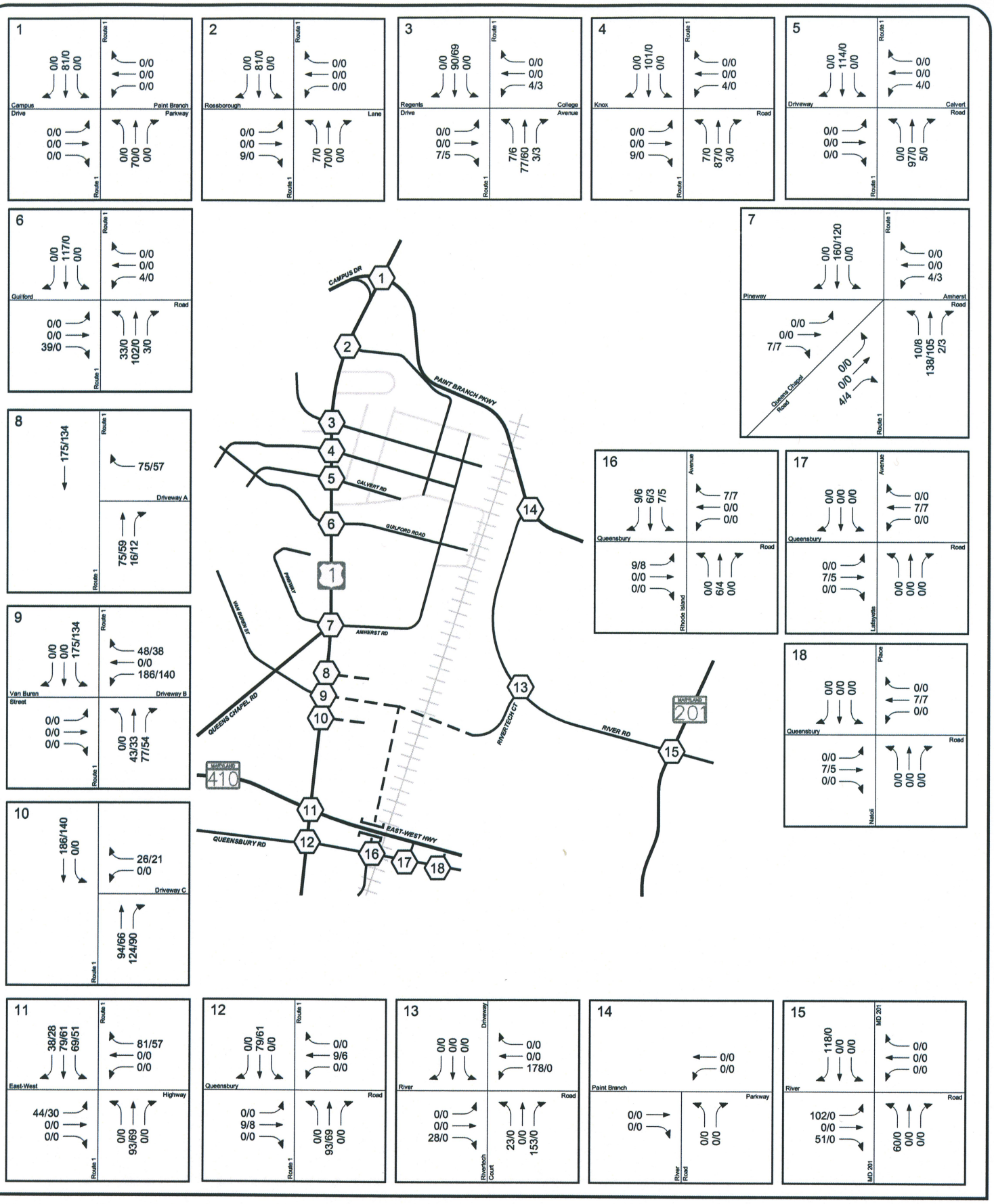

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Figure 13
Site Generated New Peak Hour Traffic Forecasts with CSX - SAT & MID DAY

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

JCP

Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

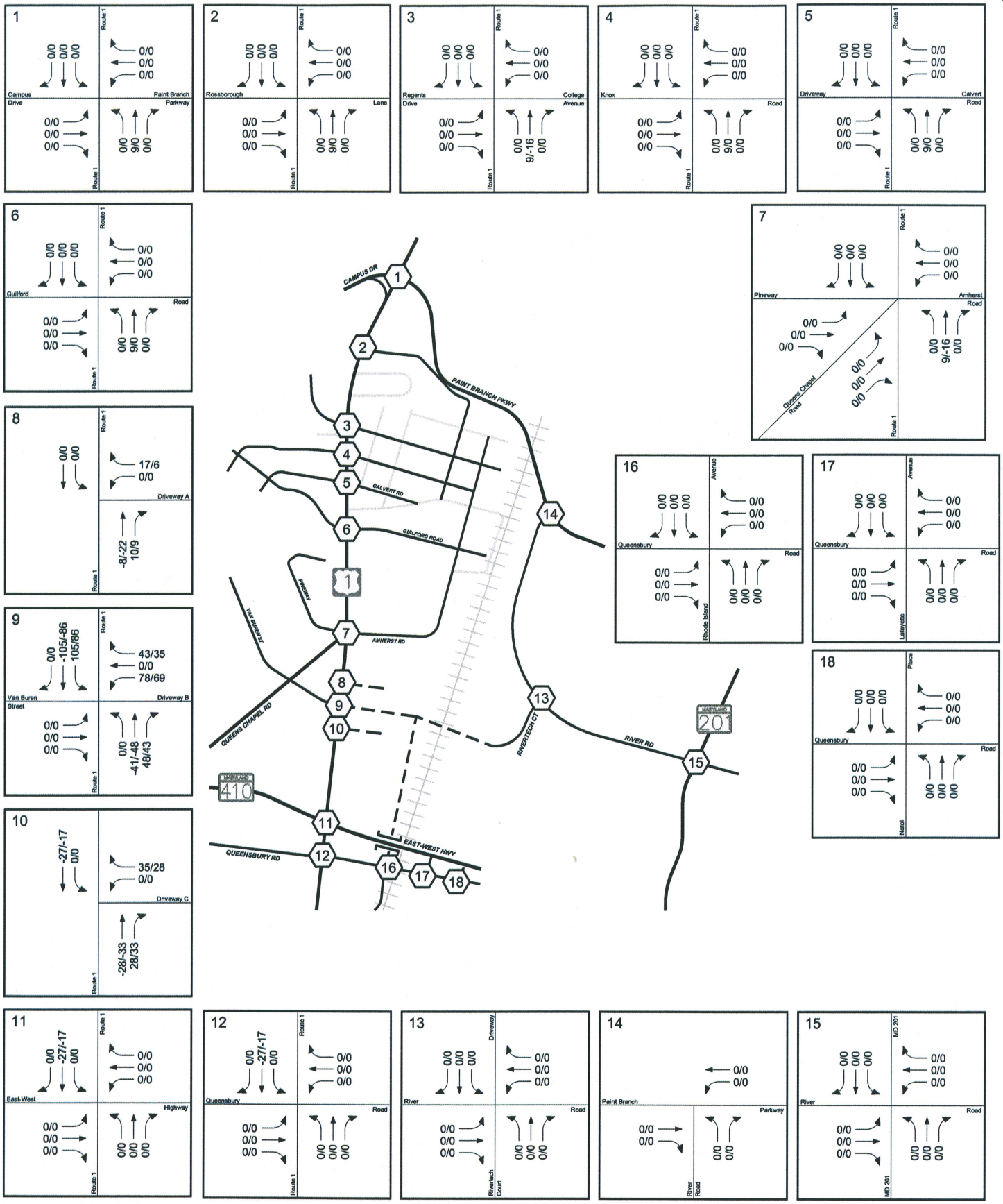

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Figure 14
Site Generated Pass By Peak Hour Traffic Forecasts with CSX - SAT & MID DAY

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

JCP

Notes: 1. Saturday Pass By Peak Hour Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

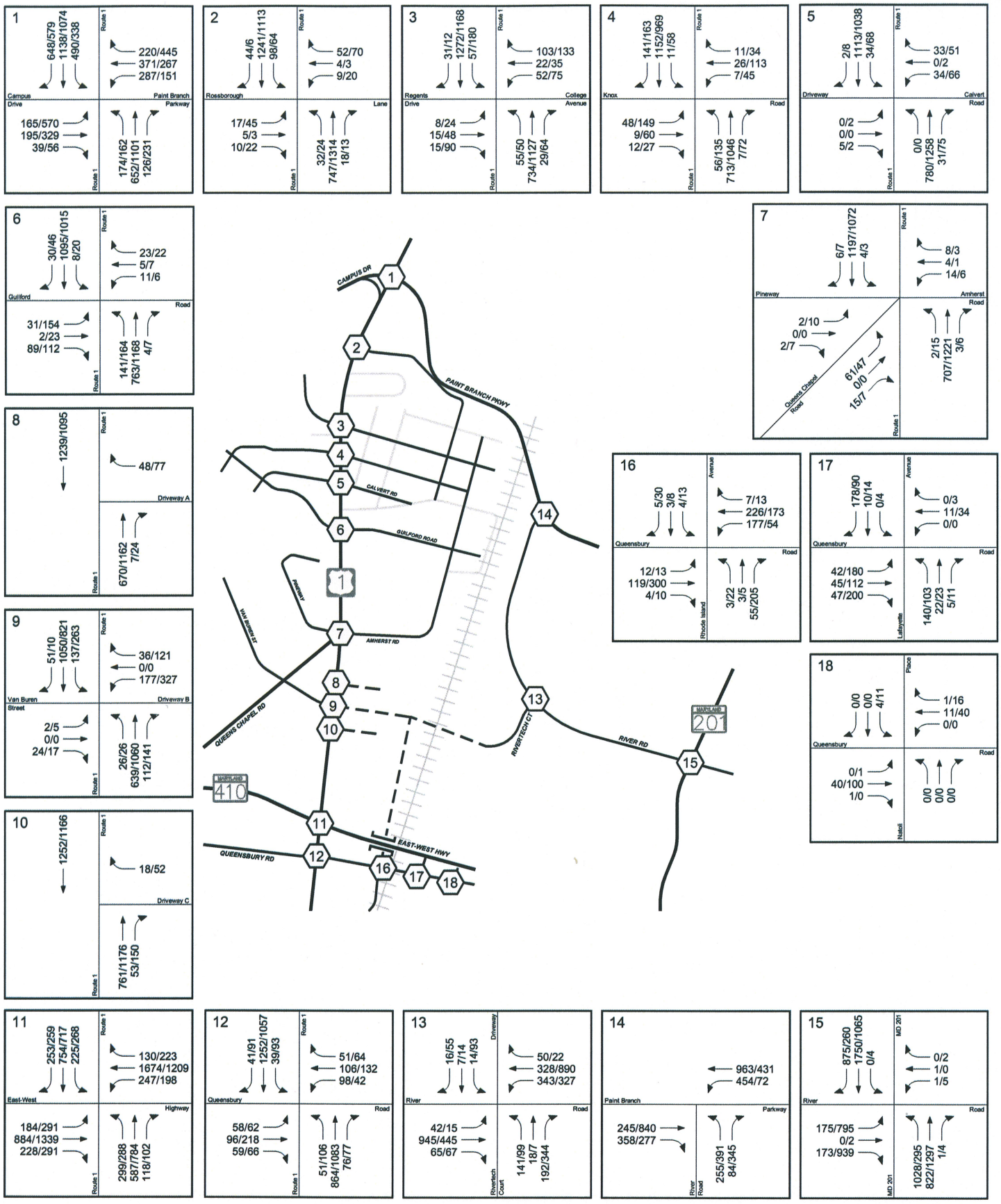

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Figure 15
Total Future Peak Hour Traffic Forecasts with CSX - AM & PM

AM PEAK HOUR
PM PEAK HOUR
000/000

North

JCP

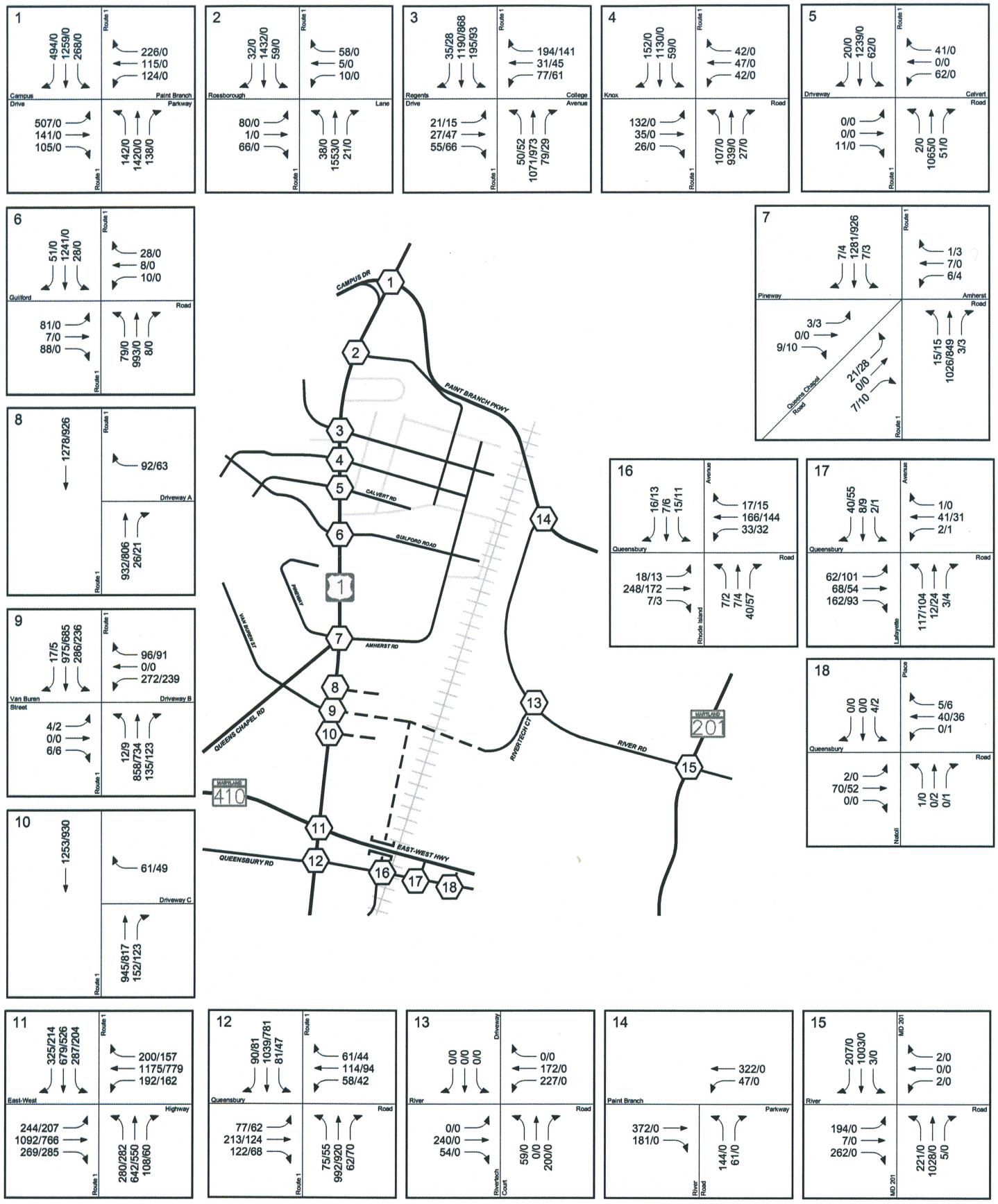

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Figure 16
Total Future Peak Hour Traffic Forecasts with CSX - SAT & MID DAY

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

JCP

Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

Future Levels of Service WITH the Cafritz Property at Riverdale Park

Future peak hour levels of service **with** the Cafritz Property at Riverdale Park were calculated for the 18 study intersections based on the background lane use and traffic control shown on Figure 10, the total future traffic forecasts shown on Figures 15 and 16, the MNCPPC critical lane analysis procedure for signalized intersections and the Highway Capacity Manual (HCM) method for unsignalized intersections, in accordance with the MNCPPC guidelines.

A signal is proposed to be installed at US 1/Van Buren/Future site access. Therefore, the subject intersection is analyzed as a signalized intersection for total future conditions. A signal warrant analysis indicating that this intersection will meet the warrants for signalization with the first 100 dwelling units and 100,000 square feet of retail space will be included as a latter chapter in this report.

The results are presented in Appendix H and summarized in Tables 7 and 8. Table 7 (AM and PM peak hours) indicates that all intersections with the exception of US1/MD 410 will operate within the MNCPPC standards. The intersection of US1/MD 410 will operate at LOS "F" during the AM and PM peak hours with a CLV of 1,704 and 1,759, respectively.

Table 8 (Mid-Day and Saturday peak hours) indicates that all intersections, with the exception of US 1/MD410 will continue to operate within the MNCPPC standards for the developed tier during Saturday peak hour. The intersection of US 1/MD 410 will operate LOS "F" with a CLV of 1,625 during the Saturday peak hour. During weekday Mid-day peak, all study intersections will continue to operate within the MNCPPC standards for the developed tier.

Table 7

Cafritz Property at Riverdale Park

Total Future Intersection Level of Service Summary - AM and PM peak hours

Intersection	Operating Condition	Approach/ Movement	Existing AM	Existing PM	Background AM	Background PM	Total Future (With CSX) AM	Total Future (With CSX) PM
1: US 1/Paint Branch Parkway	Signalized	Overall	B (1036)	C (1213)	C (1211)	E (1511)	C (1192)	E (1489)
2: US 1/Rossborough Lane	Signalized	Overall	A (692)	A (767)	A (756)	A (852)	A (770)	A (864)
3: US 1/College Avenue	Signalized	Overall	A (754)	A (857)	A (841)	B (1049)	A (863)	B (1074)
4: US 1/Knox Road	Signalized	Overall	A (775)	A (993)	A (841)	B (1086)	A (860)	B (1104)
5: US 1/Calvert Road	Signalized	Overall	A (572)	A (768)	A (638)	A (844)	A (652)	A (871)
6: US 1/Guilford Road	Signalized	Overall	A (712)	A (754)	A (783)	A (864)	A (831)	A (946)
7: US 1/Amherst Road	Signalized	Overall	A (659)	A (619)	A (717)	A (685)	A (769)	A (756)
8: US 1/North Site Access (Future)	Unsignalized	WB	N/A	N/A	N/A	N/A	B [10.6]	B [13.9]
9: US 1/Van Buren/Future Site Access	Unsignalized	NBL	B [10.9]	A [10.0]	B [11.5]	B [10.8]		
		EB	B [12.8]	B [13.3]	B [13.5]	B [14.7]		
Improvements [1]	Signalized	Overall	N/A	N/A	N/A	N/A	A (764)	B (1142)
10: US 1/South Site Access (Future)	Unsignalized	WB	N/A	N/A	N/A	N/A	B [10.9]	B [14.3]
11: US 1/MD 410	Signalized	Overall	E (1555)	E (1590)	F (1635)	F (1706)	F (1704)	F (1759)
Improvement [2]							E(1584)	F(1689)
12: US 1/Queensbury Road	Signalized	Overall	A (934)	A (941)	A (992)	B (1019)	B (1015)	B (1063)
13: Rivertech Court/River Road	Unsignalized	NB	D [27.6]	C [17.4]				
		SB	C [24.1]	C [22.7]				
		EBL	A [8.0]	A [7.7]				
		WBL	A [8.2]	A [8.2]				
With Signal					A (926)	A (773)	B (1077)	A (870)
14: River Road/Paint Branch Parkway	Signalized	Overall	A (662)	A (634)	A (691)	A (801)	A (683)	A (740)
15: Kenilworth Road/River Road[3]	Signalized	Overall	A (999)	A (962)	D (1336)	C (1177)	D (1388)	C (1221)
16: Rhode Island/Queens Bury Road	Unsignalized	Overall	B [10.72]	B [11.15]	B [10.72]	B [11.15]	B [10.8]	B [11.51]
17: Lafayette Avenue/Queens Bury Road	Unsignalized	Overall	A [8.59]	B [12.94]	A [8.59]	B [12.94]	A [8.60]	B [13.12]
18: Natoli Place/Queens Bury Road	Unsignalized	SB	A [8.8]	A [9.5]	A [8.8]	A [9.5]	A [8.8]	A [9.5]
		NB	A [8.8]	A [9.4]	A [8.8]	A [9.4]	A [8.8]	A [9.5]
		EBL	A [7.2]	A [7.3]	A [7.2]	A [7.3]	A [7.2]	A [7.3]
		WBL	A [7.3]	A [7.4]	A [7.3]	A [7.4]	A [7.3]	A [7.4]

Notes : Numbers in parentheses ( ) represent the critical lane volume at signalized intersections.
Numbers in square brackets [ ] represent delay at unsignalized intersections in seconds per vehicle.
1) Signalized intersection.
2) Provide second northbound left turn lane on US 1.
3) Includes Riverside Subdivision Phase I Improvements

Table 8

Cafritz Property at Riverdale Park

Total Future Intersection Level of Service Summary - SAT and Mid-day peak hours

Intersection	Operating Condition	Approach/ Movement	Existing SAT	Existing MID DAY	Background SAT	Background MID DAY	Total Future (With CSX) SAT	Total Future (With CSX) MID DAY
1: US 1/Paint Branch Parkway	Signalized	Overall	C (1158)	-	D (1409)	-	D (1444)	-
2: US 1/Rossborough Lane	Signalized	Overall	A (893)	-	A (983)	-	B (1021)	-
3: US 1/College Avenue	Signalized	Overall	A (759)	A (684)	A (974)	A (843)	B (1029)	A (835)
4: US 1/Knox Road	Signalized	Overall	A (952)	-	B (1017)	-	B (1079)	-
5: US 1/Calvert Road	Signalized	Overall	A (639)	-	A (705)	-	A (767)	-
6: US 1/Guilford Road	Signalized	Overall	A (735)	-	A (816)	-	A (918)	-
7: US 1/Amherst Road	Signalized	Overall	A (604)	A (446)	A (664)	A (501)	A (769)	A (582)
8: US 1/North Site Access (Future)	Unsignalized	WB	N/A	N/A	N/A	N/A	B [12.7]	B [11.5]
9: US 1/Van Buren/Future Site Access	Unsignalized	NBL	B [10.6]	A [9.2]	B [11.2]	A [9.6]		
		EB	C [15.5]	B [11.9]	C [16.9]	B [12.6]		
Improvements [1]	Signalized	Overall	N/A	N/A	N/A	N/A	B (1005)	A (858)
10: US 1/South Site Access (Future)	Unsignalized	WB	N/A	N/A	N/A	N/A	B [13.0]	B [11.9]
11: US 1/MD 410	Signalized	Overall	E (1496)	C (1164)	E (1576)	C (1232)	F (1625)	C (1272)
Improvement [2]				-		-	E(1513)	C(1159)
12: US 1/Queensbury Road	Signalized	Overall	A (989)	A (722)	B (1052)	A (780)	A (1089)	A (826)
13: Rivertech Court/River Road	Unsignalized	NB	A [9.8]	-				
		SB	A [0.0]	-				
		EBL	A [7.4]	-				
		WBL	A [7.6]	-				
With Signal					A (210)	-	A (663)	-
14: River Road/Paint Branch Parkway	Signalized	Overall	A (270)	-	A (327)	-	A (319)	-
15: Kenilworth Road/River Road [3]	Signalized	Overall	A (606)	-	A (655)	-	A (708)	-
16: Rhode Island/Queens Bury Road	Unsignalized	Overall	A [9.09]	A [8.42]	A [9.09]	A [8.42]	A [9.32]	A [8.55]
17: Lafayette Avenue/Queens Bury Road	Unsignalized	Overall	A [9.32]	A [9.04]	A [9.32]	A [9.04]	A [9.42]	A [9.10]
18: Natoli Place/Queens Bury Road	Unsignalized	SB	A [9.2]	A [9.1]	A [9.2]	A [9.1]	A [9.3]	A [9.2]
		NB	A [9.2]	A [9.3]	A [9.2]	A [9.3]	A [9.3]	A [9.3]
		EBL	A [7.3]	A [7.3]	A [7.3]	A [7.3]	A [7.3]	A [7.3]
		WBL	A [7.3]	A [7.3]	A [7.3]	A [7.3]	A [7.4]	A [7.3]

Notes : Numbers in parentheses ( ) represent the critical lane volume at signalized intersections.

Numbers in square brackets [ ] represent delay at unsignalized intersections in seconds per vehicle.

Mid Day analysis performed only for 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement

1) Signalized intersection.

2) Provide second northbound left turn lane on US 1.

3) Includes Riverside Subdivision Phase I Improvements

Recommended Intersection Improvements

As shown in Table 7 and Table 8 only US1/MD 410 intersection will operate above the MNCPPC standard for the Developed Tier

The following improvements are recommended to mitigate the impact of the Cafritz Property at Riverdale Park:

- MD 410/US1- Provide a second northbound left turn lane on US 1 at MD 410. This improvement is noted in the Maryland State Highway Administration (SHA) Consolidated Transportation Program (CTP)

- US 1/Van Buren Street/Main Site – Provide signalization.

The recommended improvements are illustrated on Figure 17.

The results of total future levels of service analysis with the Cafritz Property and with the recommended improvements are summarized in Table 7 and 8. CLV analyses for the study intersections are included in Appendix H. Tables 7 and 8 indicate that all intersections, with the exception of US 1/MD410 will continue to operate within the MNCPPC standards for the developed tier. With the recommended improvements, the intersection of US 1/MD 410 will operate at LOS "E" with a CLV of 1,584 during the AM peak hour, with a CLV of 1,689 during the PM peak hour and with a CLV of 1513 during Saturday peak hour. The full 150 percent mitigation (80 critical lane vehicles) will not be achieved with this improvement alone. Therefore, additional improvements are recommended to achieve the required 150 percent or 80 critical lane volume reduction. The first option is the implementation of a TDM plan that would significantly reduce the use of single occupant vehicle use from this project. The TDM plan is described in detail later in this report. in addition to the TDM plan another option would be to allow the eastbound right turn lane to be used by vehicles turning right a Beall Circle. This improvement would reduce the through volume by approximately 50 vehicles during the PM peak hour and would fully mitigate the impact in accordance with the TFMP standards contained in the MNCPPC guidelines.

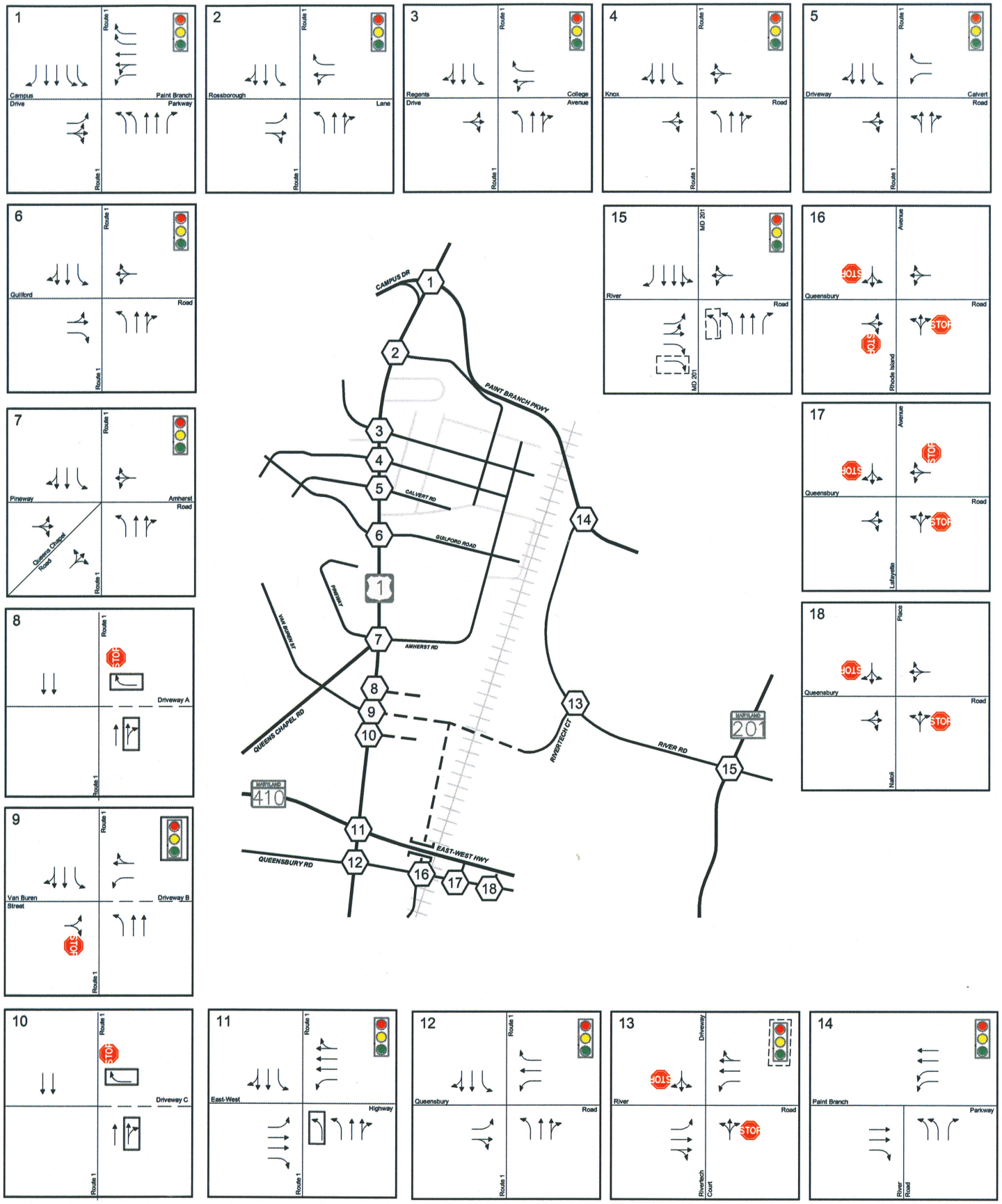

Figure 17
Recommended Lane Use and Traffic Control

Riverside Planned Improvements
Recommended Improvements
Represents One Travel Lane
Signalized Intersection
Stop Sign
North

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Queuing Analysis

In addition to the intersection analysis performed, a queuing analysis was also done as requested by MNCPPC Staff. The southbound left-turn lane was analyzed at the intersection of US 1/Van Buren Street/Site Access for total future conditions. The results are summarized below in Table 9.

As shown in Table 9, a maximum queue of 400 feet is anticipated at the southbound left turn movement of US 1/Van Buren Street/Site Access intersection during the Saturday peak hour. It should be noted that the nearest signalized intersection (US 1/Amherst Road) is located at approximately 1,200 feet from the subject intersection and the unsignalized intersection of Albion Road is located approximately 800 feet from the proposed main entrance into Cafritz at Riverdale Park. Based on our analysis, the southbound US1 queues resulting will not adversely affect traffic on US 1.

Table 9

Queuing Analysis for SBL at Intersection of US 1/Van Buren Street (with Signal)

Peak Hour	Movement	Volume	Lane Use Factor	Lane Volume	Cycle Length	Average Veh/Cycle	Average Queue Length (ft)	Max no. of Vehicles	Max Queue (ft)
AM	SBL	137	1.0	137	135	5	125	9	225
PM	SBL	263	1.0	263	135	10	250	15	375
SAT	SBL	286	1.0	286	135	11	275	16	400
MID-DAY	SBL	236	1.0	236	135	9	225	13	325

Note: Queueing Analysis based on SHA methodology

Signal Warrant Analysis

This analysis presents the results of a traffic signal warrant study completed for the intersection of Baltimore Avenue (US Route 1) and Van Buren Street in Prince Georges' County, Maryland. The existing intersection is being improved with the Cafritz Property at Riverdale Park project which would ultimately provide approximately 182,000 square feet of commercial space, 995 dwelling units, and a 120 room hotel. The project is located west of Baltimore Avenue (US Route 1) in the Riverdale Park area of Prince Georges County, Maryland. The proposed improved intersection is shown on Figure 18.

The purpose of this analysis is to document the need for a higher level of traffic control at the Baltimore Avenue (US Route 1)/Van Buren Street intersection at initial project opening, which will contain 100,000 square feet of retail space and 100 townhouses. The study was completed based on data collected by Wells + Associates and guidelines contained in the Manual on Uniform Traffic Control Devices (MUTCD), 2009 Edition. The Traffic Engineering Applications Package (TEAPAC) computer program was used to evaluate the MUTCD warrants.

Traffic Counts

Vehicle turning movement and pedestrian counts were collected during a 13-hour period on Tuesday, November 8, 2011. The results are shown in Appendix I.

Existing Conditions

A review of the existing traffic data indicates the AM peak hour occurred between 7:15-8:15 and the PM peak hour occurred between 5:45-6:45. The pedestrian data indicates the majority of the activity occurred during the PM peak hour with a peak hour volume of 23 pedestrian trips between 4:15-5:15.

Road Network

Baltimore Avenue (US Route 1) is a north-south, four-lane roadway that intersects University Boulevard/Greenbelt Road (Route 193) to the north and East-West Highway (Route 410) to the south. In the vicinity of the study intersection, Baltimore Avenue is posted 30 miles per hour.

Van Buren Street is an east-west undivided, two-lane local roadway that provides access between Baltimore Avenue (US Route 1) and Adelphi Road to the west. Van Buren Street is posted at 25 miles per hour.

13-Hour Traffic Forecasts

To account for traffic conditions expected at project opening, future traffic forecasts for the study intersection were developed for the initial phase of the project for a 13-hour period. These initial project trips were determined using average daily trips (ADT), diurnal rates, and directional distribution of each use consistent with the traffic study prepared for this project. The initial project trips were then added to existing trips to obtain total vehicle trips at the Baltimore Avenue (US Route 1) and Van Buren Street intersection and used to analyze the traffic signal warrants.

Diurnal rates describe the variation of traffic over a typical 24-hour or daily period. They are typically provided for specific land uses to account for different daily traffic patterns. For this analysis, diurnal rates commonly used for residential and retail uses were applied to the daily trips forecasted for the initial project. These diurnal rates are based on data assembled by Wells + Associates and published rates from the Institute of Transportation Engineers (ITE).

Analysis worksheets including diurnal rates and trip distribution are provided in Appendix J and summarized in Table 10 for the highest 8-hour periods.

Table 10
US Route 1 and Van Buren Street Signal Warrant
Summary of Highest 8-Hour Vehicular Volume

Time	Existing		Site Residential and Retail Trips		Total	
	N-S	WB	N-S	WB	N-S	WB
10:45-11:45 AM	1,215	0	137	212	1,352	212
11:45-12:45 PM	1,376	0	119	215	1,495	215
12:45-1:45 PM	1,346	0	104	200	1,450	200
2:00-3:00 PM	1,401	0	129	199	1,530	199
3:00-4:00 PM	1,494	0	141	241	1,635	241
4:00-5:00 PM	1,616	0	150	264	1,766	264
5:00-6:00 PM	1,870	0	149	241	2,019	241
6:00-7:00 PM	1,814	0	124	221	1,938	221

Traffic Signal Warrant Analysis

This intersection study has been conducted in accordance with the MUTCD, 2009 Edition using traffic forecasts discussed above. The purpose of the analysis is to determine if a traffic signal is warranted.

The MUTCD lists nine warrants that could indicate the need for, and appropriateness of, a new traffic signal. The warrants are listed below and described in greater detail in Appendix K.

- Warrant 1, Eight-Hour Vehicular Volume;
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour Volume and Delay.
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing.
- Warrant 6, Coordinated Signal System.
- Warrant 7, Crash Experience.
- Warrant 8, Roadway Network.
- Warrant 9, Intersection Near a Grade Crossing

One or more of the nine warrants should be satisfied before a new signal is considered for installation; however, satisfaction of a warrant does not in itself justify the need for a new signal. A new signal should improve the overall safety and/or operation of the intersection. For this analysis, warrants 1, 2, 3 and 4 are applicable based on available data. Warrants 5, 6, 8 and 9 are not applicable to the subject intersection. Data to evaluate warrant 7 was not available at the time of this analysis.

Warrant Analysis:

Following input of 13-hour traffic count data, road geometry, and other study parameters into TEAPAC, the program completed an evaluation of the MUTCD guidelines. The results of the TEAPAC analysis are presented in Appendix L and summarized on Table 11.

As shown in Table 11, the study intersection meets the 8-Hour Minimum Vehicular Volume (Warrant IA), 8-Hour Interruption of Continuous Traffic (Warrant IB), the 4-Hour Vehicular Volume (Warrant 2), and the Peak Hour Volume (Warrant 3B) under near forecasted conditions.

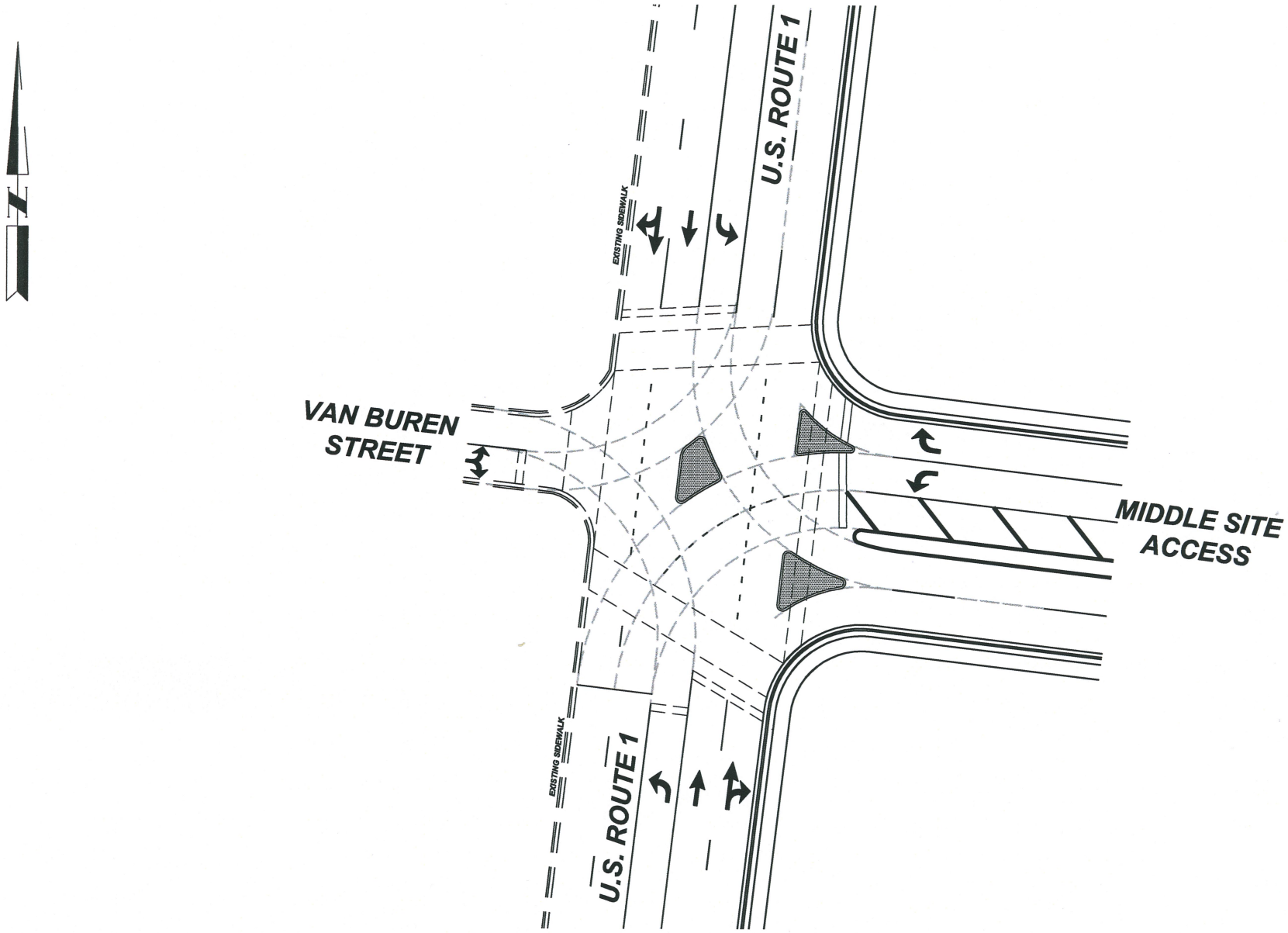


Figure 18
US1/Van Buren Street –Proposed Lane Use

North

Table 11
US Route 1 and Van Buren Street Signal Warrant
Traffic Signal Warrant Summary **(1) (2)**

Warrant Number	Warrant Title	Requirements	Existing Conditions	
			Analysis Results	Warrant Results
1-A	8 - Hour Minimum Vehicular Volume	8 hours	**8 hours**	**Met**
1-B	8 - Hour Interruption of Continuous Traffic	8 hours	**10 hours**	**Met**
1-C	8-Hour Combination of Warrants			
	Warrant 1-A (80%)	8 hours	**9 hours**	**Met**
	Warrant 1-B (80%)	8 hours	**11 hours**	**Met**
	Overall 1-C Warrant	8 hours (Both)	(3)	Not Met
2	4 - Hour Vehicular Volume	4 hours	**9 hours**	**Met**
3-A	Peak Hour Delay	≥ 5 vehicle-hours	*N/A*	*N/A*
3-B	Peak Hour Volume	1 hour	**8 hours**	**Met**
4-A	Pedestrian Peak Hour Volume	≥ 107 peds/hour; or	23 peds/hour	Not Met
4-B	Pedestrian 4-Hour Volume	≥ 133 peds/hour for 4 consecutive hours	23 peds/hour	Not Met
5	School Crossing	Min. 20 students/hour	*N/A*	*N/A*
6	Coordinated Signal System	Maintain Proper Platooning	*N/A*	*N/A*
7	Crash Experience (4)	≥ 5 correctable accidents for one 12 month period during last three years	*N/A*	*N/A*
8	Roadway Network	≥ 1000 vehs on Sat./Sun.	*N/A*	*N/A*
9	Intersection Near a Grade Crossing	(5)	*N/A*	*N/A*

Notes:
(1) Warrant summary based on TEAPAC (Version 8.23 - 20 JUL 10) - 2009 MUTCD Warrant Analysis.
(2) N/A: Not Applicable or does not apply.
(3) Other alternatives have not been trialed to reduce delays prior to this signal warrant, therefore, Warrant 1-C is not met.
(4) Data not available at the time of this study.
(5) This warrant is intended for use at a location where none of the conditions described in the other eight (8) warrants are met, but the intersection's proximity to a grade crossing is the principle reason to consider a traffic signal .

Transportation Demand Management (TDM)

The potential for vehicle trip reductions are significant for the Cafritz Property due to: (1) the proximity of the College Park Metro Station, the Riverdale Marc Station, numerous bus transit and shuttle services along US 1 and MD 410, the extension of Rhode Island Avenue bike trail and the proposed Purple line station on River Road all of which provide alternate modes of travel; (2) the synergy of uses planned on the site and in the immediate vicinity including, office, residential, and retail that will internalize site trips and provide access to services for the residents internal to the project as well as the opportunity for a live work dynamic; and (3) trip reduction measures provided by the project.

A comprehensive TDM program is proposed with this project. The program would establish a series of measures to influence travel behavior by mode, frequency, time, route, or trip length in order to achieve a maximally efficient use of the adjacent transportation facilities. The following sections outline the impacts of site TDM programs as well as a specific TDM program for the Cafritz Property project and includes descriptions for each of the elements that could comprise the TDM program. As the project is developed and occupied, modifications and additions to this TDM program should be considered.

Evaluation of TDM and Potential Measures

Fundamentally, Transportation Demand Management (TDM) strategies strive to influence the mode of transportation a traveler chooses by controlling several influences. Together, these influences can have a significant impact on the mode of travel used by travelers. There are numerous TDM strategies to influence travel decisions. Some improve the transportation options available; some provide incentives to change travel mode, time or destination; others improve land use accessibility; some involve transportation policy reforms and new programs that provide a foundation for TDM. Typical TDM Programs consist of education, marketing, outreach to employers and residents as well as advocacy for alternative commuting options. By reducing total vehicle traffic and improving overall accessibility, TDM provides multiple benefits, including:

- Congestion reduction
- Road and parking savings
- Transportation options (choices)
- Road safety
- Environmental protection
- Improved quality of life
- Economic development

- Healthy lifestyles

Table 12 below categorizes examples of TDM measures by type.

Table 12
TDM Measures by Type

Type	Measures
Alternative Modes of Transportation	• Carpool program • Vanpool program • Transit service/shuttle service • Bicycle/pedestrian facilities and site improvements
Economic	• Fuel Tax • Road user charging • Parking charges • Tradable permits (combined with regulation by quantity) • Public transportation subsidization
Land Use	• Land use and transportation strategies such as: car free developments and location of new developments • Park and Ride facilities
Information for Travelers	• Travel information provided before a trip is taken
Substitution of Communications for Travel	• Teleworking • E-shopping
Administrative Measures	• Parking controls • Pedestrianized zones • Alternative working patterns such as variable work hours, flex-time, compressed work week and staggered work hours

TDM Program Impacts

Research into TDM program effectiveness points to a range of impacts and factors for consideration in developing a site specific program:

- There is no single TDM recipe for success. The same elements implemented at different sites achieve different results. Variation in population demographics,

convenience of travel alternatives, community culture and the energy with which the program is implemented on a continuing basis all influence outcomes.

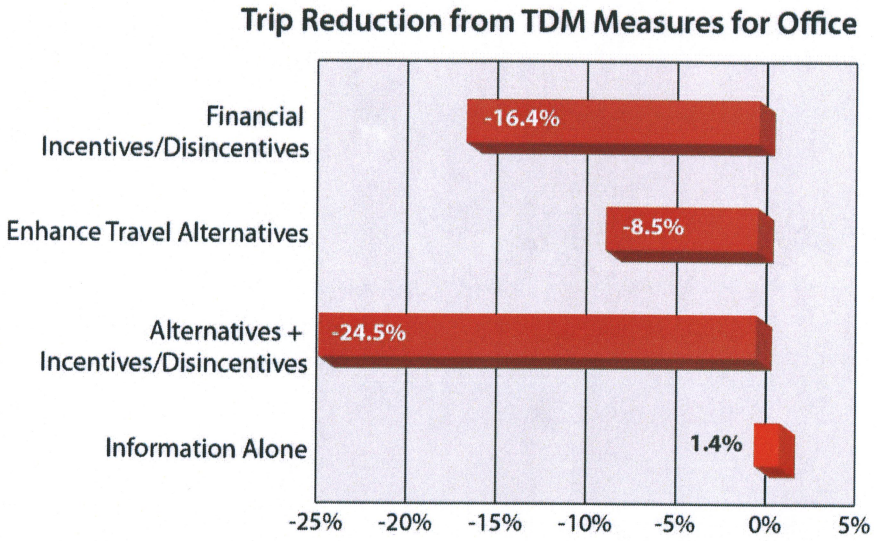
- Literature consistently points to financial incentives and disincentives as most effective in causing mode switch. Financial incentives include mode subsidies (i.e. tax favored transit discounts or vanpool fare subsidies), parking cash-out, discounted parking for alternative mode users, and indirect financial incentives (i.e. programs awarding points toward rewards for trips and alternative modes). Parking fees, particularly those set at market rate, are the primary disincentive. Programs employing financial incentives/disincentives exhibit trip reduction rates several times those of programs without these strategies.
- Travelers need to know about alternative modes and incentives in order to use them. Marketing is thus an important component of successful TDM initiatives. However, programs that involve information dissemination (i.e. transit maps or ridematching) and support programs (i.e. guaranteed ride home programs) are far less effective in the absence of financial incentive/disincentives.
- Effective TDM programs market specific incentives for attractive travel options (modes), using messages appealing to travelers' self-interest as opposed to general information about mode options.

Office

National research conducted for the Transit Cooperative Research Board (TCRB) compared the effectiveness of various worksite TDM measures. Data from nearly 50 employers compared the trip reduction percentages for a variety of worksite-based TDM strategies, implemented across the country. These programs, widely perceived as successful models, achieved average trip reductions of 15.3%, measured at the worksite levels. Results, as reported in Commuter Choice Primer: An Employer's Guide to Implementing Effective Commuter Choice Programs, are as follows:

- TDM programs focusing on financial incentives and disincentives achieved an average 16.4% reduction.
- Employer efforts that emphasized the provision of enhanced travel alternatives themselves, such as vanpools, accomplished trip reductions averaging 8.5%.
- Worksites combining enhanced travel alternatives with financial incentives/disincentives averaged trip reductions of 24.5%.
- Employer-based programs offering only information on commute alternatives experienced an increase in trip making averaging 1.4%. In other words, initiatives offering information alone were unable to counter the general trend toward increased drive alone travel.

Chart 1
Trip Reduction from TDM Measures for Office



Source: Briefing Paper, February 2005, TDM program Impacts and Evaluation: Chittenden County TDM Education, Outreach and Support

The Commuter Choice Primer's authors observe, "These results suggest that information alone is ineffective at changing commuter's travel behavior. However, when commuters are made aware (perhaps most effectively through their employer) of enhanced alternatives and incentive for using them, some commuters will switch from driving alone. It also suggests that financial incentives alone are not as effective as when they are combined with the necessary alternatives to driving alone and a means for employers to learn about the alternatives and incentives to use them."

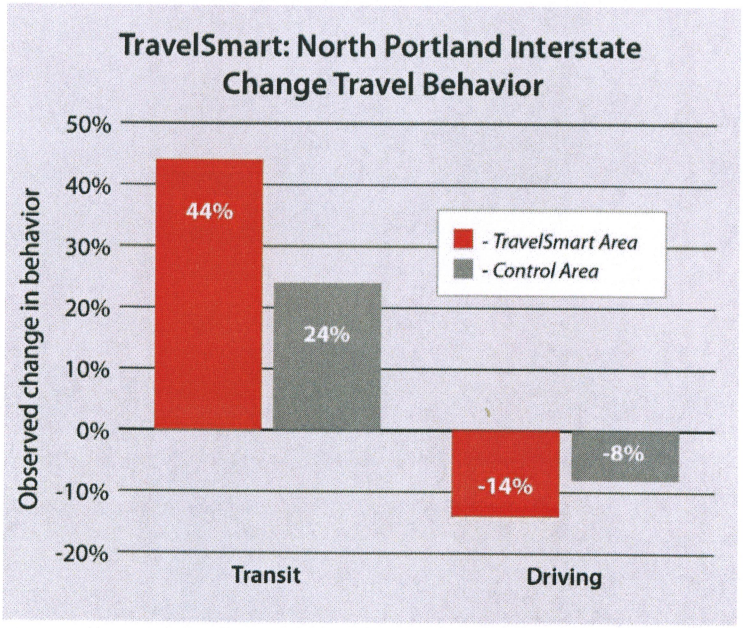
Residential

Although much of TDM research and implementation is focused on the worksite (office) and corresponding commute trip, residential based programs (i.e., Individualized Marketing and Community-Based Social Marketing) are gaining momentum. Such programs are household-based travel behavior change programs. By engaging in direct contact and dialogue with individuals at the household level, where a majority of trips either start or end, the approach aims to shift travel for some trips into more sustainable travel modes, such as walking, cycling, carpooling, and public transportation. This approach focuses on all trips instead of just the work trip. Through personal contact, the program encourages people to break habitual decision-making patterns and consciously consider their travel options for various trip types. The program also provides personalized information and incentives to overcome real or perceived

barriers to sustainable travel, and provide support and encouragement through the behavior change process. This process typically includes a before survey, market segmentation, creating awareness, information and motivation and a follow-up survey.

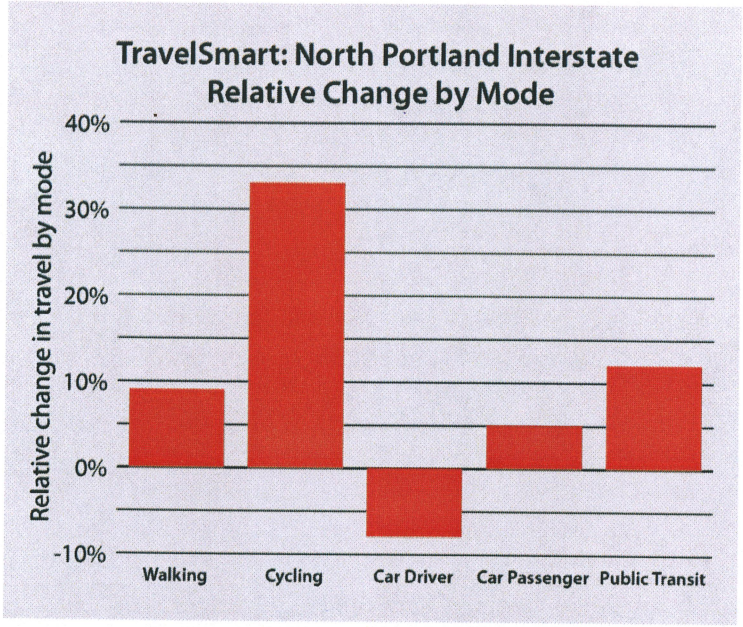
Portland, Oregon was the site of the first large-scale individualized marketing projects (called TravelSmart) in North America. After a new MAX light rail line was opened in the city's Interstate corridor in 2004, thousands of households in the target area asked for and received information on transit, walking and cycling. Some also received a personal home visit from trained staff. Surveys found that the growth in transit trips was almost twice as great in the area where TravelSmart was delivered as in a nearby "control" neighborhood (an increase of 44% versus 24%). The TravelSmart area also saw growth in cycling and walking, and a reduction in driving (a decrease of 14% versus 8%).

Chart 2
TravelSmart: North Portland Interstate Change in Travel Behavior



Source: Transport Canada: The Case for TDM in Canada

Chart 3
TravelSmart: North Portland Interstate Relative Change by Mode



Source: Transport Canada Report: The Case for TDM in Canada

Such residential TDM programs have been implemented all over the world including Australia and Canada. Statistically, significant reductions in single occupant vehicles have been reported of between 3 and 14%.

Arlington County

Arlington's TDM policy focuses on workplace commuter travel and looks to reduce peak hour work travel by achieving a reduction of single occupant vehicle trips. Key elements in the Arlington TDM program include:

- A TDM plan for each site plan consistent with the County's TDM Matrix.
- A standard site plan condition to implement the TDM Matrix.
- In-building parking provisions that extend preferences to vanpools, carpools and bicycles.
- The encouragement by employers of employee travel to and from the work place by modes of travel other than single occupant automobile through various educational and incentive measures.

- Coordination and cooperation on such measures among employers, building owners and management companies of an employment area through transportation management associations TMAs or districts.
- Arlington County encouragement to TDM planning in its roles as developer of public buildings and as employer.

A Standard County policy is set forth in the TDM Matrix. Based on the type of a land use (there are four (4) broad categories) certain strategies are mandated for implementation. The matrix includes a description of these strategies and associated costs.

City of Rockville

The City of Rockville staff recently developed a Trip Reduction Program tool which reflects a national experience with TDM program element effectiveness. The online web tool allows developers, property managers and city staff to select trip reduction strategies for new developments proposed to generate over 125 vehicle trips in a peak hour. Users select plan elements with effectiveness ratings most appropriate to their situation. Each strategy is assigned a point allocation between two (2) and fifteen (15) based on how effective the strategy is in changing travel behavior. Total points required are based on how they answer questions on availability of transit, land use mix, surrounding development and surrounding pedestrian conditions. They must select and combine strategies until they meet their total point allocation.

- Highest points are reserved for strategies involving parking, including parking cash-out (offering employees the choice of a parking space or its cash equivalent), charging parking fees, unbundled parking (lease residential or office space exclusive of parking) and parking management (balancing the supply or parking spaces in light of available alternatives).
- Moderate points include strategies that combine both mode incentives and alternative mode facilities. These include transit and vanpool subsidies, points redeemable for awards for using alternative modes, etc.
- Lowest points include variable work hour initiatives (i.e. compressed work weeks and flex time), marketing strategies and transportation fairs.

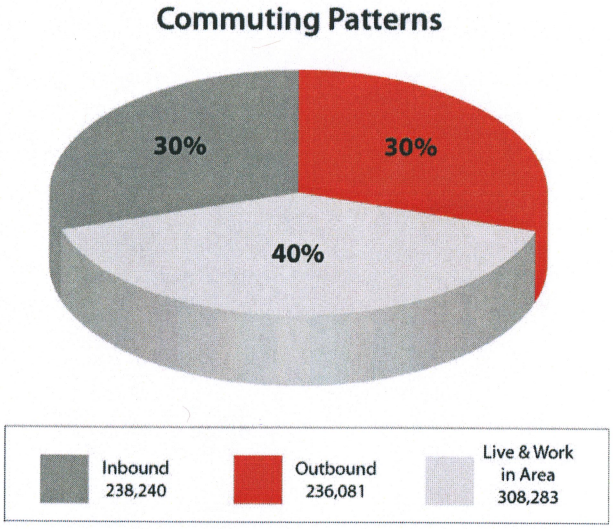
Fairfax County Application/Experience

Fairfax County's "Long-Range Transportation Demand Management (TDM) Plan" was published in February 2010 in compliance with Virginia Department of Rail and Public Transportation's (DRPT) mandate. The purpose of the plan is to identify and detail the TDM program currently provided in the region, to outline potential improvements to be

carried out in the Plan's timeframe and to illustrate the financial resources necessary to implement these programs and improvements.

Chart 4 as follows illustrates commuting patterns specific to Fairfax County.

Chart 4
Commuting Patterns



Source: 2000 U.S. Census and Virginia Employment Commission

Typically, the type of TDM program is dictated by the volume of inbound and outbound commuters. The larger the percentage of inbound commuters the more emphasis should be placed on employer services. The larger the percentage of outbound commuters, the more emphasis should be placed on residential services. Chart 4 illustrates that a large portion of Fairfax County residents live and work within a defined service area; in this case the service area has traditionally been defined as Fairfax County, the City of Fairfax, Falls Church and the Town of Herndon.

By 2050, however, up to 100,000 residents are expected to live in Tysons compared to 17,000 in 2010. The number of jobs is also expected to increase from 105,000 to as many as 200,000 by 2050. This greater balance of jobs to residents will provide more people with the opportunity to live near where they work, thereby increasing the use of alternate modes. Thus a successful TDM program in Tysons should focus on both employers' services and residential based programs.

In Fairfax County, the major tool for encouraging and implementing many types of TDM improvements to increase the quality of life in the county is via the proffer system. Proffers are used to ensure the private land developers construct sidewalks, trails, bike paths, bus stops and other transit and TDM friendly elements on their site as may be

indicated. In addition, developers are often encouraged to design and market a site specific TDM program to residents, employees and visitors. A robust monitoring and evaluation plan is included to measure the effectiveness of the TDM strategies on trip reduction.

Cafritz TDM Program

In developing a menu of strategies for the Cafritz TDM program, a range of impacts and factors associated with TDM effectiveness have been considered:

- There is no single TDM recipe for success. The same elements implemented at different sites achieve different results. Variation in population demographics, convenience of travel alternatives, community culture and the energy with which the program is implemented on a continuing basis all influence outcomes.
- Literature consistently points to financial incentives and disincentives as most effective in causing mode switch. Financial incentives include mode subsidies (i.e. tax favored transit discounts or vanpool fare subsidies), parking cash-out, discounted parking for alternative mode users, and indirect financial incentives (i.e. programs awarding points toward rewards for trips and alternative modes). Parking fees, particularly those set at market rate, are the primary disincentive. Programs employing financial incentives/disincentives exhibit trip reduction rates several times those of program without these strategies.
- Travelers need to know about alternative modes and incentives in order to use them. Marketing is thus an important component of successful TDM initiatives. However, programs that involve information dissemination (i.e. transit maps or ridematching) and support programs (i.e. guaranteed ride home programs) are far less effective in the absence of financial incentive/disincentives.
- Effective TDM programs market specific incentives for attractive travel options (modes), using messages appealing to travelers' self-interest as opposed to general information about mode options

The following sections outline the strategies to be implemented as part of the Cafritz TDM Program. Based on national research, best practices and proven results these strategies, together with TOD design elements, are intended to encourage greater use of sustainable transportation modes than might otherwise occur at the subject site.

SITE-WIDE
TDM Program Management

TDM program management responsibilities will be designated to a single site representative associated with the Cafritz development, which may also be responsible

for overall site operations and maintenance (particularly the Cafritz shuttle). This individual will serve as a central point of contact and manage the overall TDM program and work plan. The location of the program manager's office will be publicized broadly within the site, and the manager will be available for consultation during regular office hours.

TDM Program Manager responsibilities will include:

- Develop an annual TDM Work Plan which will outline the activities to be implemented in the upcoming year, provide an assessment of strategies implemented to date
- Promote transportation alternatives to all owners, residents and office/retail/hotel employees, including Cafritz shuttle.
- Remain available to answer questions about all aspects of the TDM program.
- Manage a volunteer network of Transportation Coordinators composed of individual Transportation Coordinators located at residential and office/hotel buildings, and provide these coordinators with materials and information to distribute about the TDM Program and organize periodic and regular meetings with these coordinators.
- Recruit and engage participants (residential and office/hotel/retail) for any outreach events or campaigns associated with the TDM Program over time.
- Coordinate with Prince George's County's Employer Services program to conduct TDM outreach to employers located in office/retail space at the site.
- Coordinate with other county TDM providers including MWCOG and Commuter Connections to avoid duplication of services and obtain support for program implementation.
- Work with residential sales and leasing staff to train them on TDM Program elements and information so they can provide these materials to tenants as they move in or to use as a recruitment tool.
- Coordinate and manage IT efforts associated with the TDM Program.
- Coordinate all monitoring and evaluation activities necessary to measure the effectiveness of the TDM program.

The overall approach of the site-wide TDM Program Manager is likely to follow an individualized marketing framework. Individualized marketing is a TDM implementation and evaluation process that takes the principles of social marketing and customizes them to transportation programs focused on the individual traveler. The approach is simple: target customized information, training and incentives to people who are open to changing the way they travel. Identifying people open to trying transportation alternatives is achieved through pre-surveys of the population to determine who uses transportation alternatives currently, who is interested in using them more, and who would never consider changing their travel behavior. The programs are implemented and the participants are then surveyed again to understand how their travel behavior

changed. This approach will ensure resources are spent on individuals most likely to change and will make sure all elements of the TDM program are captured in one fluid implementation strategy.

TDM Program Branding

An initial step in the promotion and marketing of the TDM Program is the development of a program brand. The brand will be used on TDM program marketing materials, which may include e-newsletters, the program web site, print ads, brochures, flyers, premiums and news releases. To be successful, a brand must offer a relevant, consistent message that resonates with current and potential customers. The graphic identity of a program brand, including a logo, taglines, and a brand standards document should convey the program's ability to address the needs of the various types of employees, residents and visitors that will travel to the site. The brand should create a single point of reference for the individuals that will access the site daily. Ideally, branding will eventually be coordinated with an area or district-wide TDM program. However, unique site branding will be pursued should an area-wide TDM program not be in place at the time of development.

Program Web Site

The TPM will develop a central web site to serve as a hub of transportation-related information for residents, employees, and visitors to the site. The web site will contain links to area transit, rideshare, and other relevant agencies for scheduling and route information as well as providing opportunities for users to learn more about transportation options. If an existing property-wide website exists, a link to the TDM Program Web Site will be created and maintained.

Promote Real-time Transit Information

WMATA now offers real-time transit information through its web site and applications are available for smart phones that allow travelers to access real-time schedule information. Because real-time transit information has been found to decrease perceived wait times and increase rider satisfaction with transit systems, the Cafrtiz TDM Program will promote applications and web sites that provide real-time travel information. In addition, through this platform, the TDM Program Manager can monitor new technology that can be used to increase the use of non-SOV travel modes and implement those strategies when appropriate based on costs and potential benefits. The information provided will include, but not be limited to, the following:

- Traffic conditions, road hazards, construction work zones, and road detours.
- Arrival times and delays on Metrorail and area bus routes.
- Arrival/departure times for the Cafritz Shuttle.

Site-Based Transportation Access Guide

A local access guide will be made available to all traveler groups to the site, including residents, employees, hotel guests, and visitors. The guide will provide them with information about how to access transportation options, parking, retail, and services, as well as provide them with a sense of amenities and destinations within walking and biking distance. When possible these access guides will be provided to new residents as part of their move-in packet as well as to all new employees in office and retail space. The purpose of the local access guide is to familiarize residents and employees with what is available in and around the project site. By doing so, the need to travel off-site is reduced and in some cases this eliminates the need for a vehicle during work hours to run errands. The local access guide will be updated on an annual basis or as needed.

Live-Work-Play Marketing

A live-work-play marketing program will be implemented to encourage tenants of the residential uses to work, shop, and eat within the area. An advanced strategy will be implemented to encourage local employees to purchase or lease housing close to their worksites through a variety of financial incentives that shall be defined in the annual TDM Work Plan. These may include, but are not limited to, incentives like giving away bicycles to encourage biking from home to work in or SmarTrip® Cards to encourage taking transit from home to work to individuals who both live and work in the area. The TDM Program Manager will also seek discounts or coupons from local retail and service establishments and distribute those items to residents to encourage them to shop locally. This marketing encourages residents to shop at, eat at, and visit businesses that are within walking distance of their homes or accessible via transit.

Bicycle Accommodations

Secure locations will be provided throughout the Cafritz project as development occurs. Outdoor racks will be designed to provide support at both the bicycle's wheel and frame. Racks will be placed near building entrances and in well-lit areas. The outdoor racks will largely serve as an amenity for visitors and will provide other access options for shoppers and diners. Recommended spacing dimensions for "Inverted U" bicycle rack parking are can be found in the in the Association of Pedestrian and Bicycle Professionals' Bicycle Parking Guidelines.

Bicycle storage options that protect bikes from weather and offer higher security will be offered for those who commute to work via bicycle and store their bicycle onsite for long time periods.

Car Sharing Placement and Services

Car sharing refers to a short-term automobile rental service available to the general public. Car sharing providers offer a small fleet of vehicles for a limited timeframe, typically only a few hours. The cars allow travelers to accomplish short trips for errands or meetings. Car sharing encourages travelers to use alternatives to SOVs (like transit) because they can use car share vehicles for mid-day trips rather than be forced to rely on their private vehicle. In addition to being an important TDM support strategy, a strategic car sharing program can also reduce the need for fleet vehicles and thereby reduce some of the corresponding parking required for those vehicles in office building parking structures or lots.

Third party car sharing providers are available on a contract basis, and would be appropriate for residential buildings within the Cafritz Riverdale area. The TDM Program Manager will pursue car sharing placement and services for the project. If opportunities exist to coordinate with other property owners in the vicinity, then a joint effort will be pursued. If such service is established, the TDM Program Manager will work with FCDOT to provide a minimum of two strategically located parking spaces throughout the project to accommodate such a car share program.

Vehicle Parking Management

There are several parking management techniques that can influence the use of alternative modes of transportation versus driving alone. The primary tool is charging a daily or monthly fee for parking. It is the intent of the TDM Plan to charge for parking associated with off-street garages, structures or lots as the market may dictate. In addition to using parking fees as a disincentive to driving alone (SOVs), there are several parking management techniques that incentivize travelers to use a transportation alternative. The techniques include:

- Limiting supply of parking
- Raising the price of parking
- Unbundling parking for residential and office space
- Parking permit controls
- Reduced cost and preferential parking for HOV

Commuter Café

A Commuter Café offers a relaxed and inviting environment to discover transportation options. The Café is typically equipped with transportation information such as transit schedules, program brochures and promotional pieces. Typically the Commuter Café is located in a visible and easily accessible location. Ideally a storefront location is preferred for the success of the establishment. The Commuter Café will be staffed by

the TPM and can double as the TPM's office. The TPM or equivalent staff will be present to assist commuters with trip planning, fare purchases and other basic transportation questions. In essence the Commuter Café acts as the hub of the TDM program and is both administrative and public facing. The Cafe also provides site residents and employees free internet access to participate in the regional incentives offered to alternative commuters. The Commuter Café can be complimented or supplemented with a property concierge service through the property management office.

Other Site Wide Elements

- Provide a taxi loading/waiting zone
- If permitted/desired by the public transit services (MTA, The Bus, UM Shuttle) a bus shelter will be provided on the property frontage of US 1 and/or within the site as directed by the transit services.
- Provide project shuttle to serve resident tenants and patrons connecting to the existing Metro, Marc, and future Purple Line stations.

Residential

In addition to the site-wide TDM Program elements, there are several residential specific TDM Program elements that will be implemented in each individual residential building planned for the property. These strategies are meant to evolve over time as the location reaches full build-out. However, the core of the following strategies will be implemented:

Residential Transportation Coordinators

A Transportation Coordinator will be designated to serve as a point of contact about the TDM program for the residential building(s). The Coordinator could be paid staff of the on-site property management company, residential leasing agents, or others who have responsibility for the ongoing operation and maintenance of the building(s). The individual will have the following responsibilities:

- Promote and distribute information about the TDM Program. This information will be produced by the project-wide TDM Program Manager and the only responsibility of the residential Transportation Coordinators will be to distribute it within their building(s).
- Manage the operations and maintenance of the Business Center if located in their building.
- Inspect the condition and functionality of the bicycle storage located within or on the grounds of the building(s). Report any issues to the project-wide TDM Program Manager.

- Respond to questions or concerns about TDM program elements, provide information, and coordinate with the project-wide TDM program manager as necessary

Business Center

A minimum of one business center with designated work space and including appropriate technology that may include computers, access to printer(s), copier(s) and fax machine(s) will be located within one of the multi-family residential buildings in the development. This center should take advantage of the building-wide high speed Internet and/or wireless Internet access that is likely to be incorporated in the building design and construction.

Metrorail Preloaded Pass Cards and Try Transit Campaign

Some new residents to Cafrtiz Riverdale will not be accustomed to using transit or other forms of transportation alternatives; however, they might be interested in learning more about Metrorail. Try Transit campaigns, in which travelers who do not normally use transit are given free transit passes, have been shown to be very effective at increasing transit use. Each year the TPM will distribute, site wide, Metrorail SmarTrip® cards loaded with enough funds to allow the recipients to make five round trips from College Park Station to DC. The effectiveness of the campaigns will be measured using survey instruments. The manner in which the cards are distributed may vary from year-to-year based on current TDM marketing campaigns, demand, and the success of previous distribution methods and available funds in the incentive fund. The value of each pass may differ from year to year; however, the total value of all passes distributed will remain equivalent to cover the cost of five round trips from College Park to DC as funding is available.

OFFICE TDM STRATEGIES

In addition to the site-wide TDM Program elements outlined in the previous section, several TDM strategies will be implemented for employees of the new office space associated with the Cafritz development. These strategies leverage the property-wide TDM program elements, as well as several regional TDM strategies such as ridesharing and guaranteed ride home that are available for free use by employers. The strategies include:

Onsite Transportation Coordinators

Onsite Transportation Coordinator will coordinate TDM program implementation with representatives from companies and organizations who are leasing or own space. Depending on their size, some companies and/or organizations may be large enough that

they designate their own transportation program personnel and are running several programs in addition to the Cafritz Riverdale TDM program. These personnel will be encouraged to coordinate with the property-wide TDM Program Manager.

Metrorail Preloaded Pass Cards and Try Transit Campaign for Office Employees

A *Try Transit* campaign will be implemented for office commuters who are interested in trying transit. The project wide TPM will distribute, Metrorail SmarTrip® cards loaded with enough funds to allow the recipients to make five round trips from College Park Station to DC. The manner in which the cards are distributed may vary from year to year based on current TDM marketing campaigns, demand, and the success of previous distribution methods and available funds in the incentive fund. The value of each pass may differ from year to year; however, the total value of all passes distributed will be of sufficient value to cover the cost of five round trips from College Park Station to DC as funding is available. This flexibility will allow the TPM to adjust the Try Transit program to meet the needs of the development's workers and adjust incentive amounts on a per-user basis to assure trip reduction is maximized.

More passes will likely be distributed to residents than employees because many employers offer subsidized transit passes to their employees and those within the development who do not will be encouraged to do so through the other outreach efforts of the TPM beyond those identified in this section.

Pretax Metrorail, Vanpool, and Bicycle Benefit Programs

Established in 2001 by the United States Internal Revenue Service (IRS), the Section 132(f) transit and vanpool pretax benefit enables commuters to pay for transit passes, vanpool fares, bicycle commuting costs, and parking costs through their employer on a pre-tax basis. The limits vary by mode used and are generally updated annually by the IRS. For the 2009 tax year, the benefit levels were $230 per month for transit and vanpool services and $230 per month for parking. The bicycling commuter benefit was recently introduced with a pre-tax benefit of $20 per month.

The TDM Program Manager will conduct outreach to inform employers and employees of this program element and its associated benefits as long as the tax law allows for this benefit.

Guaranteed Ride Home Program

A Guaranteed Ride Home Program is a program that provides commuters who rideshare, take transit, bicycle, or use other alternative modes with a way to get home or to another location in the case of an emergency. Although the need for employees to use a guaranteed ride home is very rare, knowing it is available provides them with the

assurance that their needs can be met. The industry standard for number of guaranteed rides home is up to five per calendar year.

A Guaranteed Ride Home program is provided at no cost to employers of the metropolitan Washington region through the Washington Metropolitan Council of Governments (MWCOG) Commuter Connections Program. The TDM Program Manager will conduct outreach to inform employees and employers of this program and its associated benefits.

Carpool Matching Program

Carpooling and vanpooling (i.e., "ridesharing") are important vehicle trip reduction strategies given the office and hotel development associated with Cafrtiz Riverdale and the current residential location of many workers who will work at the site. The location of many potential employees necessitates having a strong ridesharing program since the Metrorail service cannot be expected to serve all of the residential locations. Ridesharing can also be a very cost effective strategy for reducing single occupant vehicle trips. However, the challenge is matching riders and passengers, which can be facilitated today through online matching programs.

A Ridematching program is provided at no cost to employers of the metropolitan Washington region through the Washington Metropolitan Council of Governments (MWCOG) *Commuter Connections* Program and also by NuRide. The TPM will assess which program is most appropriate for the tenant mix and select a final product for the TDM program. The TPM will conduct outreach to inform Onsite Transportation Coordinators, employers and employees of the program and its associated benefits.

Should a ridematching program be created for the surrounding area, the TPM will work with the County's representative to market and promote the program to Onsite Transportation Coordinators, employers and employees.

Telework and Flextime

The Cafritz Riverdale development will likely employ individuals that can occasionally or frequently telework (e.g., work from home) or have considerable flexibility on when they can arrive or depart from their office. Given that some of the employees will likely choose housing options greater than 15-20 miles from the TOD, promoting the option to telework or flex arrival time could become a significant recruitment and retention tool for employees. This strategy will spread out or significantly reduce peak hour trips. The TPM will encourage and assist companies with the development and implementation of telework and variable work schedules policies and procedures.

CONCLUSIONS

The major findings and conclusions of this traffic impact study are as follows:

1. Under existing conditions, all of the existing study intersections are operating at acceptable levels of service.

2. Growth attributable to development outside the study area has been taken into account at 0.5% per year compounded through the year 2017.

3. The approved background developments will add a total of 2,997 AM peak hour trips, 3,084 PM peak hour trips, 1,753 Saturday peak hour trips and 2,097 Weekday Mid-day peak hour trips to the area road system.

4. Under background conditions, all of the study intersections, except for one intersection, will continue to operate at acceptable levels of service. The intersection of US 1/MD 410 which will operate at LOS "F" during AM and PM peak hours. During Mid-day and Saturday peak hours, US 1/MD 410 is anticipated to operate at acceptable levels of service.

5. The Cafritz Property at Riverdale Park will generate 548 new AM peak hour trips, 898 new PM peak hour trips, 865 Mid-day peak hour trips and 1,153 Saturday peak hour trips.

6. Under total future conditions, the US 1/MD 410 intersection will exceed the MNCPPC standard for the developed tier. A second northbound left turn lane on US 1 is planned by the Maryland State Highway Administration and with this improvement the impact of the project will be mitigated at this intersection.

7. Under total future conditions a signalization of US 1/Van Buren Street intersection is proposed to mitigate the impact of the project on this intersection.

8. All of the remaining intersections will operate within the MNCPPC standards.

9. With the recommended intersection improvements and transportation mitigation measures as outlined in this report all study intersections will operate within the MNCPPC standards.

10. Traffic signal is warranted at US 1/Van Buren Street/Site Access intersection with the initial phase of the project and is recommended for installation.

11. A TDM program will be implemented within the Cafritz at Riverdale Park to reduce the single occupancy vehicle use to encourage the use of available transit options.

Appendix A

Scoping Letter, Correspondence and Background Data

WELLS + ASSOCIATES

May 16, 2012

Faramarz Mokhtari, PhD
Maryland-National Capital Park & Planning Commission (M-NCPPC)
Transportation Planning Section
14741 Governor Oden Bowie Drive
Upper Marlboro, Maryland 20772

Subject: Revised Traffic Impact Study Scoping Agreement
Preliminary Plan Cafritz Property
Prince George's County, Maryland

Dear Dr. Mokhtari:

Based on our recent conversation and Eric Foster's recent email correspondence, I have revised our scoping agreement to reflect the changes discussed. The following reflects the proposed scope of work for traffic impact study for the Cafritz Property the preliminary plan submission.

The proposed development includes the following:

- 995 dwelling units will include a mix of apartments, senior housing and townhouses
- 168,200 square feet (SF) of retail space (including a 35,000 SF grocery store),
- 120-room hotel, and
- 22,000 SF of office space.

Build-out is expected to be completed by the end of 2017, which is concurrent with the projected completion of the CSX crossing.

A regional background traffic growth rate of 0.5 % compounded per year will be applied to the through movements along U.S. 1 and MD 410 through build out of the project. The regional growth rate is based on the SHA ADT volume maps (see attached table)

Trip generation rates will be in accordance with the M-NCPPC Guidelines; Institute of Transportation Engineers (ITE) rates will be used if M-NCPPC rates are not available.

We propose that the study area network include the following intersections:

1. U.S. 1/Paint Branch Parkway,
2. U.S. 1/Rossborough Lane,
3. U.S. 1/College Avenue,
4. U.S. 1/Knox Road,
5. U.S. 1/Calvert Road,
6. U.S. 1/Guilford Road,
7. U.S. 1/Amherst Road,
8. US 1/Site Access North
9. U.S. 1/Van Buren Street/Site Access,
10. US 1/Site Access South
11. U.S. 1/MD 410,
12. U.S. 1/Queensbury Road,
13. River Road/Rivertech Court
14. River Road/Paint Branch Parkway
15. River Road/MD 201
16. Queensbury Road/ Rhode Island Avenue(Maryland Avenue)
17. Queensbury Road and Natoli Place
18. Queensbury Road and Lafayette Avenue

The study will include the analysis of the standard AM and PM Peak periods as well as Saturday Mid-day peak period, and the weekday mid-day peak period for intersections number 3, 7, 8, 9, 10, 11, 12, 16, 17 and 18 as listed above.

The study intersections will be analyzed using the standard CLV methodology as outlined in the M-NCPPC guidelines. Mitigation will be proposed for any intersection that does not meet the MNCPPC standards.

The assumed site traffic distributions are shown on the attached maps. The distributions have been modified to reflect the changes and the clarification discussed. The distribution for the different uses shown in the attached maps assumes the CSX crossing and the Maryland Avenue connection.

We have revised the attached list of approved background developments to reflect the changes discussed. A trip reduction of 25% will be applied to M-Square and ACP developments (Riverside development) per the transit ridership goal established in Prince George's County Approved General Plan, dated October 2002 (see Table 1, Page

Pls see note on Lab!

Table
Cafritz Property at Riverdale Park
Background Developments

	Development	Land Use	Amount	Unit
1.	Garden Suites Hotel	Hotel	30	Rooms
2.	Northgate	High-Turnover Restaurant	9,000	SF
		Fast Food Restaurant	3,500	SF
		Apartments	376	SF
3.	Starview Plaza	Apartments	172	DU
		Retail	9,580	SF
4.	Berwyn House	Apartments	72	DU
5	Mosiac @ Turtle Creek	Condominiums	300	DU
6	Riverside - M square *	M-Square (Building 3)	75,000	SF
		M-Square (DSP-09028)	450,000	SF
		NOAA	289,550	SF
7	EYA Hyattsville	Apartment	259	DU
		Townhouse	183	DU
8	Domain at College Park	Apartments	256	DU
		Retail	10,000	SF
9	Maryland Book Exchange property	Student Housing	1,010	Beds
		Book Store	9,991	SF
		Shopping Center	4,375	SF

— this should be at least equal to 2 M square less what is already built within the riverside FM.

28 of Approved General Plan report), the required TDM plan and per trip cap and parking cap.

A TDM plan and a Signal Warrant study for the intersection of Main Access (through Van Buren) and US 1 will be included in this traffic study. It is likely that we may use traffic mitigation procedures as the subject development adheres to the criteria outlined on page 39 of Prince George's County Guidelines for Analysis of the Traffic Impact of Development Proposals report dated September, 2002. If traffic mitigation procedures are used for the subject development, a Transportation Facilities Mitigation Plan will be submitted for the Planning Board's consideration. (Pls see note below)

If the above and attached information meets with your approval, please sign this letter below, as well as the attached Scoping Agreement, and return one copy of each to our office via email or facsimile (410/266-9189).

Should you have any comments or questions, please contact me at (410)266-5723.

Sincerely,

Nancy Randall

Nancy Randall
Principal Associate

CC: Eric Foster
Chip Reed

Approved By: _____ Date: 5/23/2012
Dr. Faramarz Mokhtari

Note:
• The study should also include a left turn storage analysis along SB US 1 @ Prop. main access Driveway.

Figure 1

The Maryland-National Capital Park and Planning Commission
Prince George's County Planning Department
Transportation Planning Section, Countywide Planning Division

TRAFFIC IMPACT STUDY SCOPING AGREEMENT

This form must be completed prior to commencing a Traffic Impact Study. The completed Scoping Agreement should be submitted to the Transportation Planning Section (TPS) by the traffic consultant for concurrence and signature. TPS will return a signed copy, with any comments, to the traffic consultant for inclusion in the Traffic Impact Study. Failure to conduct the study in accordance with the guidelines and the signed Scoping Agreement may be grounds for rejection of the study, thereby necessitating an addendum or a new study prior to the start of the staff review.

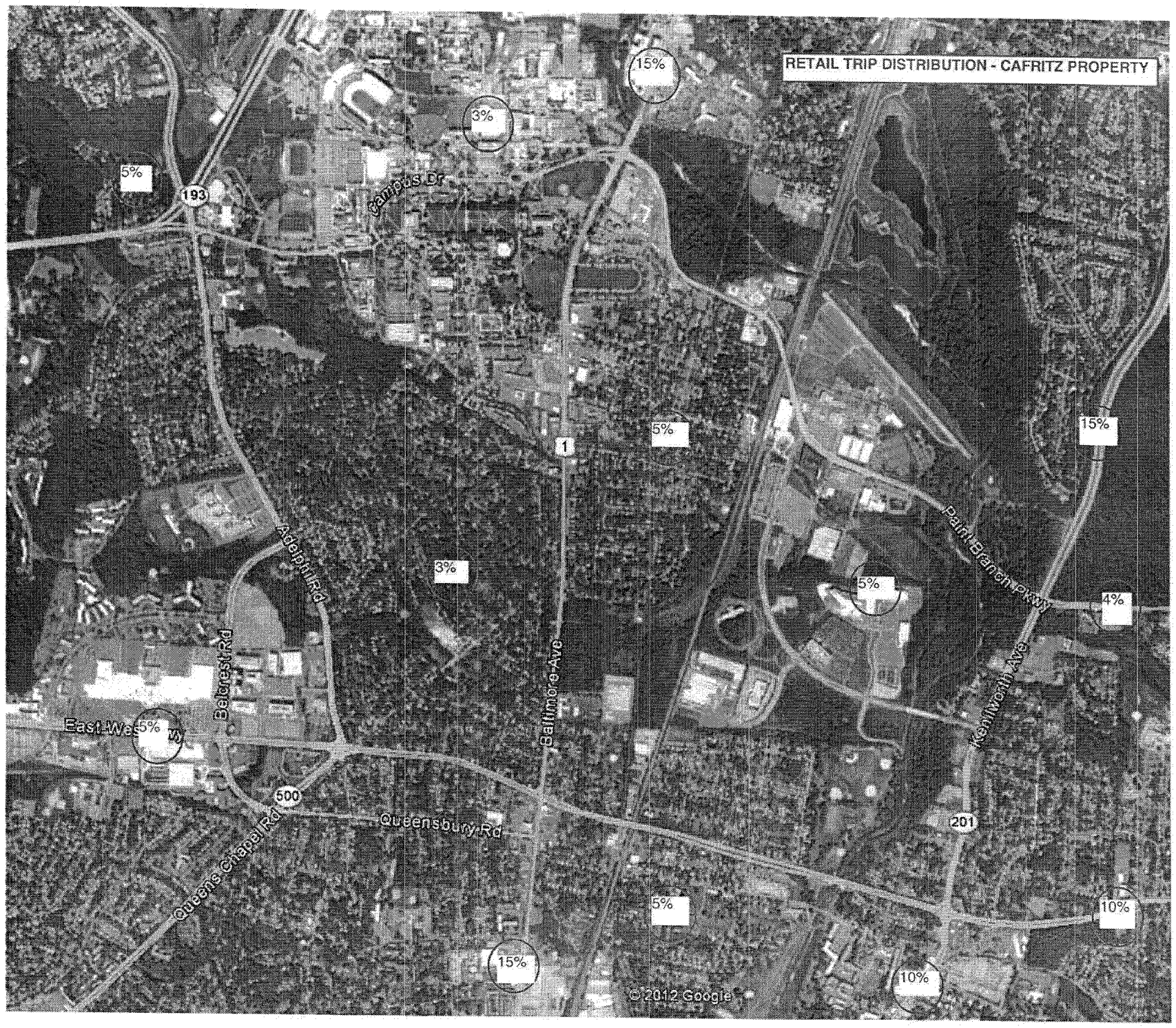
1. Date: 2/3/2012 2. Consultant: Wells + Assocaites
3. Project Name: Cafritz Property
4. Type of Application (see Figure 2 of Guidelines): Preliminary Plan
5. Location (please attach map showing site location and boundaries)
   Policy Tier Developed Center _____ Corridor _____
6. Municipality Riverdale Park
7. Use (check one): Residential _____ Commercial _____ Other Mixed Use
   If Residential, number and type of units proposed: see attached letter
   If Commercial, amount and type of space proposed: see attached Letter
   If Other, describe: see attached letter
8. SHA/DPW&T improvements assumed: n/a
9. Other improvements assumed: vehicle crossing of CSX, vehicle connection to Maryland Avenue
10. Will study assume trip reduction? (check one) Yes X No _____
    Describe the source: ULI, WMATA, MNCPPC Mont Co., ITE, APA
11. Is Mitigation (Section 11 in Guidelines) proffered? (check one) Yes X No ____
12. Will SCRP (Section 12 in Guidelines) be used? (check one) Yes x (1) No ____
13. Will summer counts be used? (check one) Yes ____ No X
14. Do you want staff to provide you with a list of background development? (check one)
    Yes x verify No ____

Please attach a map (or maps) showing Study Area network with included intersections and links, estimated site trip distribution, and growth factors for through traffic. Please note any other assumptions and/or comments on a separate sheet with initials.

SIGNED: Nancy Randall — Consultant — Date 2/2/2012 (resubmitted 5/16)

APPROVED: _____ TPS Coordinator (or Supervisor) — Date 5/23/2012 (Pls see note on attachment)

Note 1- at this time we are not sure will be based on the results of the analysis and would like to reserve the right to use


RETAIL TRIP DISTRIBUTION - CAFRITZ PROPERTY
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Campus Dr
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Adelphi Rd
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Baltimore Ave
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Queensbury Rd
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Queens Chapel Rd
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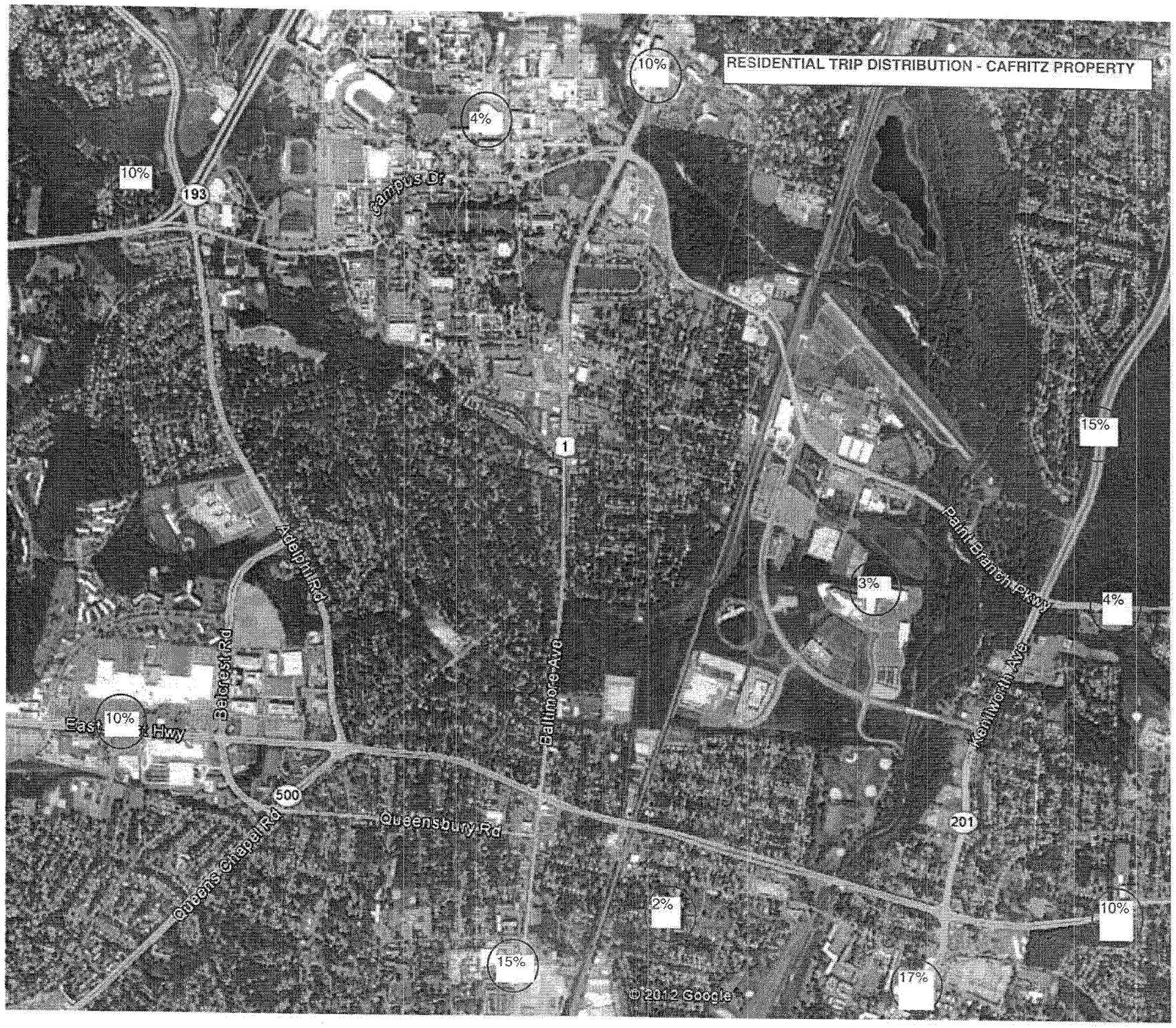
© 2012 Google


RESIDENTIAL TRIP DISTRIBUTION - CAFRITZ PROPERTY
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Belcrest Rd
Baltimore Ave
Kenilworth Ave
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Queensbury Rd
Queens Chapel Rd
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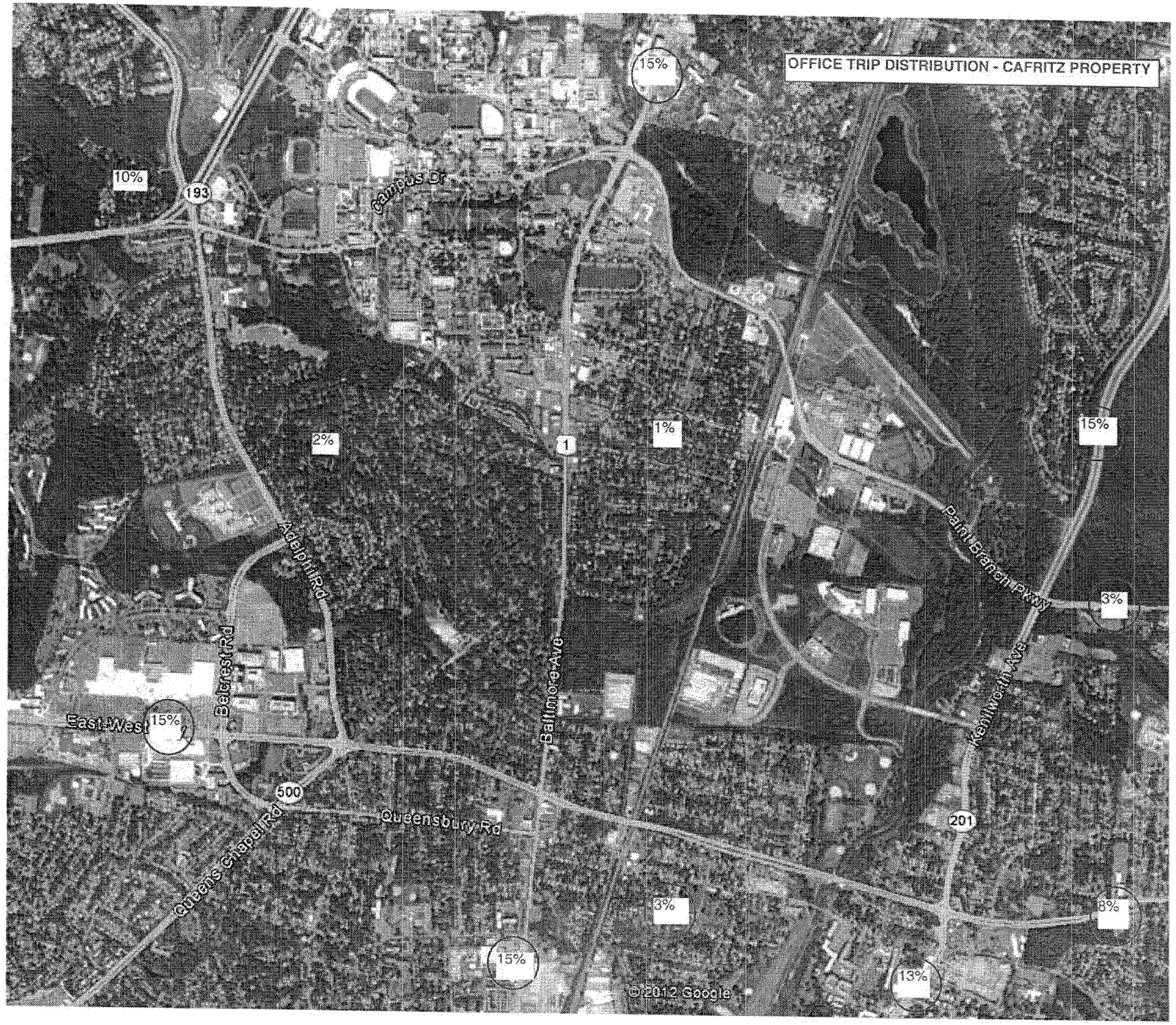
© 2012 Google


OFFICE TRIP DISTRIBUTION - CAFRITZ PROPERTY
15%
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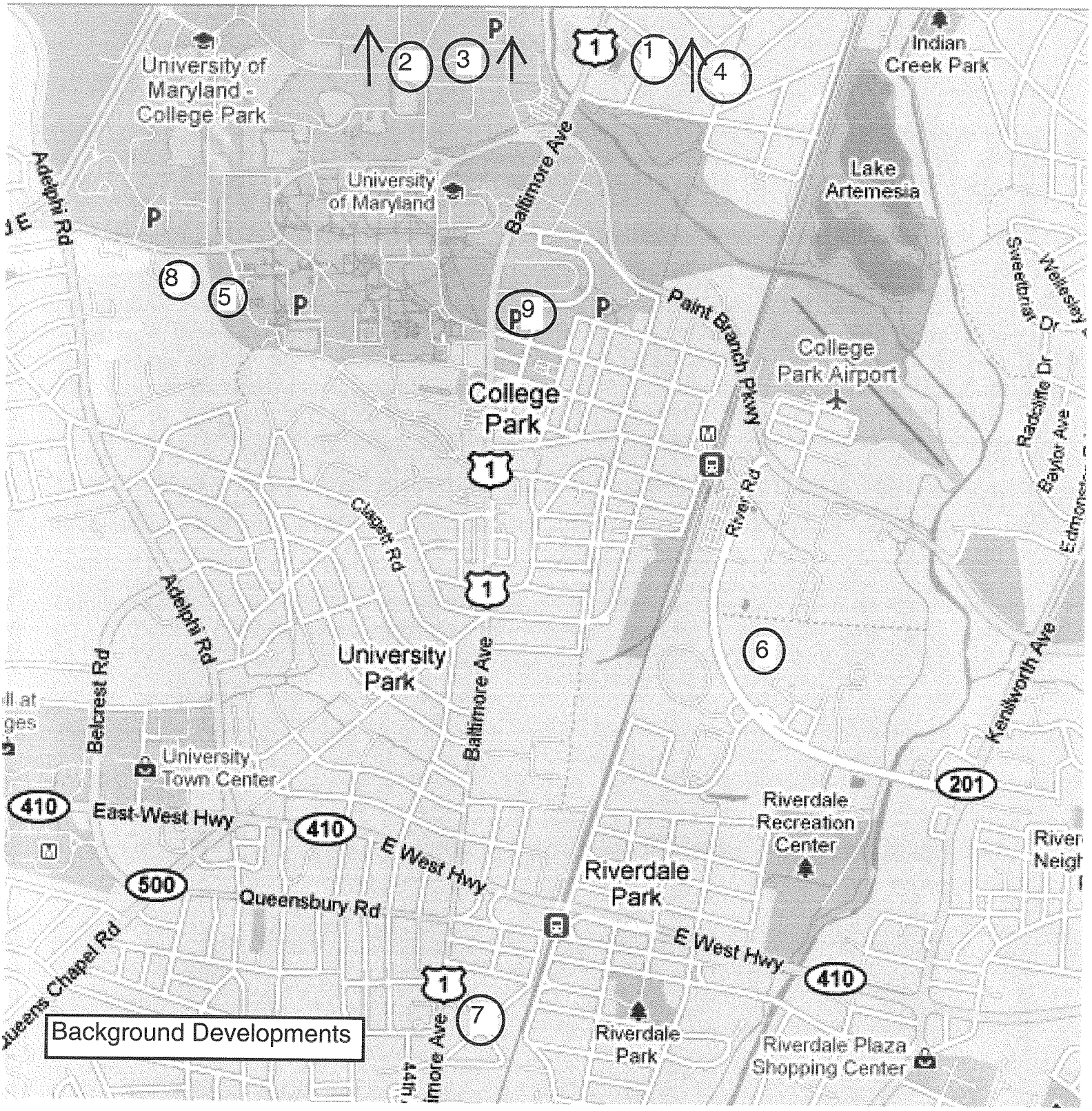
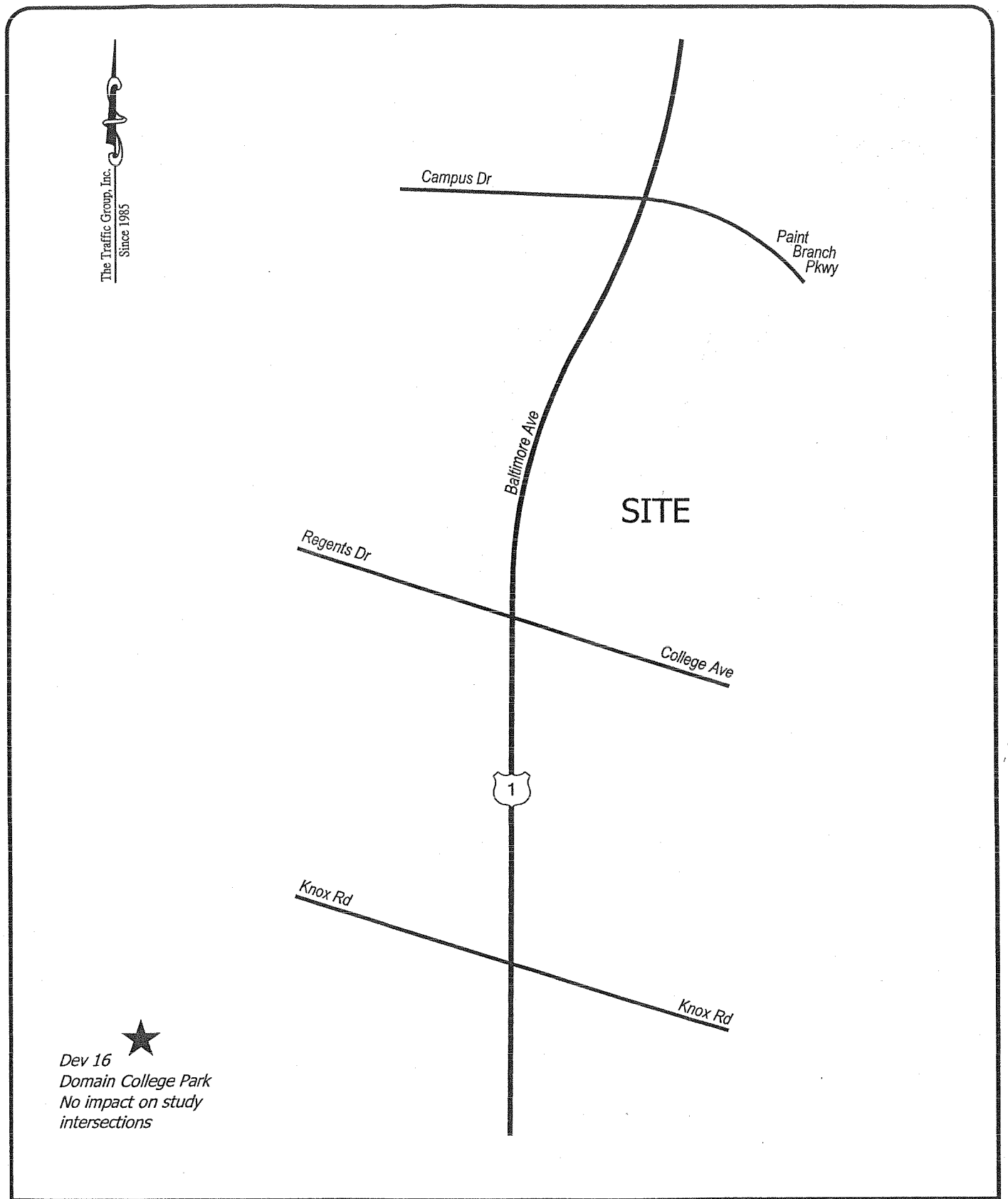
Paint Branch Pkwy
3%
Adelphi Rd
Beltrest Rd
Baltimore Ave
Kenilworth Ave
East West
15%
500
Queensbury Rd
201
Queens Chapel Rd
3%
8%
15%
13%
© 2012 Google

Growth

Year	Location #1 US 1 - N of Queens Chappel Volume	Difference	% change
2001	25875		
		875	3.4%
2002	26750		
		275	1.0%
2003	27025		
		-1650	-6.1%
2004	25375		
		-425	-1.7%
2005	24950		
		-248	-1.0%
2006	24702		
		1528	6.2%
2007	26230		
		-789	-3.0%
2008	25441		
		1	0.0%
2009	25442		
		548	2.2%
2010	25990		
% change per year			0.1%

Year	Location #2 US 1-N of MD 410 Volume	Difference	% change
2001	24875		
		775	3.1%
2002	25650		
		275	1.1%
2003	25925		
		-650	-2.5%
2004	25275		
		-425	-1.7%
2005	24850		
		-248	-1.0%
2006	24602		
		178	0.7%
2007	24780		
		-739	-3.0%
2008	24041		
		1	0.0%
2009	24042		
		1078	4.5%
2010	25120		
% change per year			0.1%


University of Maryland - College Park
University of Maryland
Indian Creek Park
Lake Artemesia
Adelphi Rd
Baltimore Ave
Paint Branch Pkwy
College Park Airport
College Park
Sweetbriar Dr
Wellesley
Radcliffe Dr
Baylor Ave
Edmonston
River Rd
Calvert Rd
University Park
Belcrest Rd
University Town Center
Kenilworth Ave
East-West Hwy
E West Hwy
Queensbury Rd
Queens Chapel Rd
Riverdale Recreation Center
Riverdale Park
Riverdale Plaza Shopping Center
1
2
3
4
5
6
7
8
9
410
500
201
Background Developments



NOT TO SCALE

The Traffic Group®

00 - AVERAGE MORNING
(00) - AVERAGE EVENING

EXHIBIT C-9
TRIP ASSIGNMENT FOR
DEVELOPMENT 16

sli, 100709\mdbookexchangeproperty 11aug.dwg-16, f08/23/11

Table 1

Cafritz Property at Riverdale Park

Background Developments - Built and Occupied

Development	Land Use	Amount	Unit	Project Update
Riverside Background Developments				
	ACP Office	120,478	SF	Built and Occupied
	M-Square (Building 1)	120,000	SF	Built and Occupied
	M-Square (Building 2)	120,000	SF	Built and Occupied
	M-Square USDA	337,428	SF	Built and Occupied
	M-Square Riggs	156,360	SF	Built and Occupied
Sub-total development Intensity (Built and Occupied)		**854,266**	**SF**	

Table 2

Cafritz Property at Riverdale Park

Background Developments - Not Built/Built and Not Occupied

Development	Land Use	Amount	Unit	Project Update
Riverside Subdivision Background Developments				
	M-Square (Building 3)	56,205	SF	Not Built
	M-Square (DSP-09028)	450,000	SF	Not Built
	NOAA	289,550	SF	Built and Not Occupied
	Riverside-Msquare (other)	349,979		Not Built
Sub-total development Intensity (Built and Not Occupied or Not Built)		**1,145,734**	**SF**	
Total Development Intensity (Built and Not Built)		**2,000,000**	**SF**	

Nancy Randall

From: Mokhtari, Faramarz [Faramarz.Mokhtari@ppd.mncppc.org]
Sent: Thursday, May 24, 2012 12:23 PM
To: Lareuse, Susan; John Tabori
Cc: Sara Imhulse; Nancy Randall; Foster, Eric; Chellis, Whitney
Subject: RE: conditions

Susan,
Thank you for the email. In short, the answer to your question is yes. As part of this study, the traffic consultant is required to analyze and evaluate the geometric configuration and feasibility of such a crossing across the tracks and how it is proposed to be connected on the east side to the River Road within the Riverside subdivision. Also the study is required to evaluate the adequacy of several intersections east of the tracks, specifically, River Road with River Tech, River Road with Paint Branch Parkway, and River Road with MD 201.
Faramarz

From: Lareuse, Susan
Sent: Thursday, May 24, 2012 10:16 AM
To: Mokhtari, Faramarz; John Tabori
Cc: Sara Imhulse; Nancy Randall; Foster, Eric; Chellis, Whitney
Subject: RE: conditions

Faramarz,

Does the scoping study include an analysis of the CXS crossing, its impact on east west traffic that will use it to by-pass East West Highway?

Susan

From: Mokhtari, Faramarz
Sent: Wednesday, May 23, 2012 4:11 PM
To: John Tabori
Cc: Sara Imhulse; Nancy Randall; Foster, Eric; Lareuse, Susan; Chellis, Whitney
Subject: RE: conditions

Honorable Mayor Tabori:
Thank you for your comments. I am happy to report that the submitted draft revised scope (dated May 16, 2012) for the preparation traffic impact study which will be submitted with the Preliminary Plan, fully incorporate the staff comments and those received from your town, the town of Riverdale Park and City of College Park. Therefore, we will send the consultant the sign scoping agreement with one additional note that the study should include the evaluation of the required left turn storage need along southbound US1 at the proposed main entrance.

W/ Regards:
Faramarz Mokhtari

From: John Tabori [mailto:mayor@upmd.org]
Sent: Wednesday, May 23, 2012 3:52 PM
To: Mokhtari, Faramarz
Cc: Sara Imhulse; Nancy Randall
Subject: RE: conditions

Dear Dr. Mokhtari,

With the clarification contained in the email below as an addendum to the traffic study scoping agreement submitted to your office, I am satisfied that the Calvert Tract, LLC applicant has met the traffic study conditions set forth by the Planning Board and in the Town of University Park's agreement with them. We, of course, reserve the right to remonstrate or otherwise object or withdraw our support if material changes are made either by the District Council or the Planning Board to the requirements for the study.

I would ask that you keep us appraised of any changes and that we receive a copy of the final scoping agreement when it is issued. Of course, if you have questions or wish to have a clarification, please do not hesitate to call or email.

It is always a pleasure working with you.

Sincerely,

John

John Rogard Tabori
Mayor
Town of University Park
6724 Baltimore Avenue
University Park, Maryland 20782
301-927-4262 (O)
301-277-4548 (F)

From: Nancy Randall [mailto:amrandall@mjwells.com]
Sent: Tuesday, May 22, 2012 4:36 PM
To: John Tabori
Cc: Mokhtari, Faramarz; Sara Imhulse
Subject: conditions

Mayor Tabori, just to make it clear we will be adhering to the requirements regarding the traffic study scope and analysis and will not be averaging the results our analysis on US 1 and we will not be assuming existing diverted trips from MD 410 to the site, per the conditions outlined in the Planning Board resolution for the Cafritz Property. Thanks as always for your conversation and I hope that all have a great memorial day.

Nancy Randall AICP, PTP
Principal Associate
Wells & Associates
170 Jennifer Road
Suite 260
Annapolis Maryland 21401

Phone 410 266-5723
Fax 410 266- 9189

Nancy Randall

From: Sara Imhulse [simhulse@riverdaleparkmd.gov]
Sent: Tuesday, May 15, 2012 4:53 PM
To: Nancy Randall
Subject: FW: Cafritz scoping agreement

Nancy:

Here is the email that I sent to Faramarz in March.

Sara Imhulse
Town Administrator
Town of Riverdale Park
5008 Queensbury Road
Riverdale Park, MD 20737
301-927-6381

From: Sara Imhulse [mailto:simhulse@riverdaleparkmd.gov]
Sent: Tuesday, March 27, 2012 11:28 AM
To: Faramarz.Mokhtari@ppd.mncppc.org
Subject: Cafritz scoping agreement

Hi Faramarz:

We would like to add something to the scoping agreement. The Town of Riverdale Park considers the large intersection of Queensbury and Town Center to be one intersection, even though I understand that traffic engineers consider it to be two separate intersections. Because of this, we would like the intersections of Queensbury and Lafayette and Queensbury and Natoli Place to be included in the scoping agreement, in addition to the intersections of Queensbury and Maryland Avenue and Queensbury and Rhode Island Avenue, which are already included in the scoping agreement.

We will work with the applicant to review other intersections and streets separately and outside of the APF review.

Thank you for the opportunity to weigh in on this important matter.

Sara Imhulse
Town Administrator
Town of Riverdale Park
5008 Queensbury Road
Riverdale Park, MD 20737
301-927-6381

Appendix B

Existing Peak Hour Traffic Counts, CTP listing, Transit Information

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Paint Branch Pkwy.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Paint Branch Parkway
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Roberto,Geraldin,Mujo & Ali	**EASTBOUND ROAD:**	Campus Drive
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North	East	Total
	Baltimore Avenue - 1				Paint Branch Parkway				Baltimore Avenue - 1				Campus Drive				&	&	
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	13	75	37	125	15	20	20	55	9	56	10	75	3	8	2	13	200	68	268
6:15 AM - 6:30 AM	29	106	50	185	13	22	18	53	8	49	21	78	5	8	4	17	263	70	333
6:30 AM - 6:45 AM	27	167	57	251	28	28	32	88	14	74	34	122	7	21	8	36	373	124	497
6:45 AM - 7:00 AM	42	229	68	339	26	49	22	97	20	94	13	127	11	24	18	53	466	150	616
7:00 AM - 7:15 AM	75	248	78	401	36	59	36	131	22	105	24	151	5	24	23	52	552	183	735
7:15 AM - 7:30 AM	44	279	94	417	36	70	38	144	22	93	32	147	4	27	20	51	564	195	759
7:30 AM - 7:45 AM	104	264	92	460	39	77	44	160	26	137	45	208	4	29	18	51	668	211	879
7:45 AM - 8:00 AM	126	230	74	430	55	100	71	226	31	143	44	218	5	39	21	65	648	291	939
8:00 AM - 8:15 AM	82	282	91	455	39	95	85	219	42	107	54	203	7	38	19	64	658	283	941
8:15 AM - 8:30 AM	111	251	80	442	38	90	87	215	27	107	27	161	6	33	15	54	603	269	872
8:30 AM - 8:45 AM	82	217	68	367	34	87	73	194	25	115	36	176	5	29	20	54	543	248	791
8:45 AM - 9:00 AM	116	277	67	460	38	87	83	208	35	106	36	177	8	25	24	57	637	265	902
Total	851	2625	856	4332	397	784	609	1790	281	1186	376	1843	70	305	192	567	6175	2357	8532
AM One Hour Volumes																			
6:00 AM - 7:00 AM	111	577	212	900	82	119	92	293	51	273	78	402	26	61	32	119	1302	412	1714
6:15 AM - 7:15 AM	173	750	253	1176	103	158	108	369	64	322	92	478	28	77	53	158	1654	527	2181
6:30 AM - 7:30 AM	188	923	297	1408	126	206	128	460	78	366	103	547	27	96	69	192	1955	652	2607
6:45 AM - 7:45 AM	265	1020	332	1617	137	255	140	532	90	429	114	633	24	104	79	207	2250	739	2989
7:00 AM - 8:00 AM	349	1021	338	1708	166	306	189	661	101	478	145	724	18	119	82	219	2432	880	3312
7:15 AM - 8:15 AM	356	1055	351	1762	169	342	238	749	121	480	175	776	20	133	78	231	2538	980	3518
7:30 AM - 8:30 AM	423	1027	337	1787	171	362	287	820	126	494	170	790	22	139	73	234	2577	1054	3631
7:45 AM - 8:45 AM	401	980	313	1694	166	372	316	854	125	472	161	758	23	139	75	237	2452	1091	3543
8:00 AM - 9:00 AM	391	1027	306	1724	149	359	328	836	129	435	153	717	26	125	78	229	2441	1065	3506
AM Peak																			
7:30 AM - 8:30 AM	**423**	**1027**	**337**	**1787**	**171**	**362**	**287**	**820**	**126**	**494**	**170**	**790**	**22**	**139**	**73**	**234**	**2577**	**1054**	**3631**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	61	162	39	262	79	41	28	148	57	234	38	329	8	93	61	162	591	310	901
4:15 PM - 4:30 PM	65	148	51	264	65	48	27	140	40	180	22	242	8	54	55	117	506	257	763
4:30 PM - 4:45 PM	85	176	68	329	74	38	44	156	78	238	32	348	7	91	83	181	677	337	1014
4:45 PM - 5:00 PM	72	183	82	337	75	56	49	180	59	233	32	324	15	77	75	167	661	347	1008
5:00 PM - 5:15 PM	80	210	101	391	80	47	44	171	89	253	22	364	7	114	87	208	755	379	1134
5:15 PM - 5:30 PM	55	245	97	397	77	48	38	163	70	219	35	324	10	84	79	173	721	336	1057
5:30 PM - 5:45 PM	87	198	85	370	80	42	36	158	59	207	27	293	14	98	81	193	663	351	1014
5:45 PM - 6:00 PM	101	211	85	397	95	59	45	199	75	228	31	334	14	63	79	156	731	355	1086
6:00 PM - 6:15 PM	114	234	79	427	98	42	44	184	54	217	34	305	15	76	87	178	732	362	1094
6:15 PM - 6:30 PM	122	234	65	421	73	55	41	169	47	253	33	333	13	81	96	190	754	359	1113
6:30 PM - 6:45 PM	106	189	45	340	57	62	21	140	55	247	48	350	6	90	92	188	690	328	1018
6:45 PM - 7:00 PM	127	198	66	391	54	73	42	169	47	207	41	295	17	58	69	144	686	313	999
Total	1075	2388	863	4326	907	611	459	1977	730	2716	395	3841	134	979	944	2057	8167	4034	12201
PM One Hour Volumes																			
4:00 PM - 5:00 PM	283	669	240	1192	293	183	148	624	234	885	124	1243	38	315	274	627	2435	1251	3686
4:15 PM - 5:15 PM	302	717	302	1321	294	189	164	647	266	904	108	1278	37	336	300	673	2599	1320	3919
4:30 PM - 5:30 PM	292	814	348	1454	306	189	175	670	296	943	121	1360	39	366	324	729	2814	1399	4213
4:45 PM - 5:45 PM	294	836	365	1495	312	193	167	672	277	912	116	1305	46	373	322	741	2800	1413	4213
5:00 PM - 6:00 PM	323	864	368	1555	332	196	163	691	293	907	115	1315	45	359	326	730	2870	1421	4291
5:15 PM - 6:15 PM	357	888	346	1591	350	191	163	704	258	871	127	1256	53	321	326	700	2847	1404	4251
5:30 PM - 6:30 PM	424	877	314	1615	346	198	166	710	235	905	125	1265	56	318	343	717	2880	1427	4307
5:45 PM - 6:45 PM	443	868	274	1585	323	218	151	692	231	945	146	1322	48	310	354	712	2907	1404	4311
6:00 PM - 7:00 PM	469	855	255	1579	282	232	148	662	203	924	156	1283	51	305	344	700	2862	1362	4224
PM Peak																			
5:45 PM - 6:45 PM	**443**	**868**	**274**	**1585**	**323**	**218**	**151**	**692**	**231**	**945**	**146**	**1322**	**48**	**310**	**354**	**712**	**2907**	**1404**	**4311**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Paint Branch Pkwy.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Paint Branch Parkway
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Roberto,Jose,(	**EASTBOUND ROAD:**	Campus Drive
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North &	East &	Total
	Baltimore Avenue - 1				Paint Branch Parkway				Baltimore Avenue - 1				Campus Drive						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
10:00 AM - 11:00 AM	320	810	135	1265	154	121	125	400	122	761	112	995	50	54	122	226	2260	626	2886
10:15 AM - 11:15 AM	322	781	152	1255	141	129	115	385	111	790	122	1023	47	78	140	265	2278	650	2928
10:30 AM - 11:30 AM	294	825	155	1274	126	132	109	367	120	824	110	1054	48	94	166	308	2328	675	3003
10:45 AM - 11:45 AM	277	859	169	1305	137	124	97	358	110	972	103	1185	53	96	174	323	2490	681	3171
11:00 AM - 12:00 PM	262	854	156	1272	134	128	108	370	102	977	105	1184	59	105	213	377	2456	747	3203
11:15 AM - 12:15 PM	251	914	157	1322	136	115	124	375	104	1049	100	1253	61	98	258	417	2575	792	3367
11:30 AM - 12:30 PM	254	913	151	1318	148	106	133	387	112	1119	95	1326	62	98	304	464	2644	851	3495
11:45 AM - 12:45 PM	265	897	146	1308	146	117	159	422	118	1016	89	1223	70	101	354	525	2531	947	3478
12:00 PM - 1:00 PM	282	953	164	1399	142	95	146	383	147	1097	96	1340	67	118	345	530	2739	913	3652
12:15 PM - 1:15 PM	297	975	175	1447	145	88	132	365	155	1075	100	1330	82	116	336	534	2777	899	3676
12:30 PM - 1:30 PM	314	958	179	1451	154	95	140	389	153	1061	120	1334	95	117	313	525	2785	914	3699
12:45 PM - 1:45 PM	335	1003	189	1527	168	98	128	394	159	1166	139	1464	89	139	294	522	2991	916	3907
1:00 PM - 2:00 PM	342	1037	192	1571	154	101	124	379	138	1198	135	1471	99	128	321	548	3042	927	3969
1:15 PM - 2:15 PM	344	1013	191	1548	149	118	123	390	124	1205	144	1473	97	127	316	540	3021	930	3951
1:30 PM - 2:30 PM	310	987	231	1528	132	109	103	344	129	1186	127	1442	85	126	349	560	2970	904	3874
1:45 PM - 2:45 PM	293	975	249	1517	126	105	97	328	117	1177	122	1416	86	112	344	542	2933	870	3803
2:00 PM - 3:00 PM	273	990	298	1561	145	117	102	364	102	1109	117	1328	77	112	362	551	2889	915	3804
2:15 PM - 3:15 PM	243	1012	305	1560	166	102	93	361	133	1030	93	1256	69	125	426	620	2816	981	3797
2:30 PM - 3:30 PM	244	1054	287	1585	180	106	97	383	133	1036	84	1253	70	127	430	627	2838	1010	3848
2:45 PM - 3:45 PM	215	1046	253	1514	174	103	104	381	149	983	70	1202	74	138	437	649	2716	1030	3746
3:00 PM - 4:00 PM	199	1006	202	1407	164	94	109	367	152	1018	70	1240	79	136	400	615	2647	982	3629
3:15 PM - 4:15 PM	200	1012	204	1416	139	92	127	358	142	1082	82	1306	81	145	359	585	2722	943	3665
3:30 PM - 4:30 PM	200	1007	199	1406	143	97	134	374	126	1075	86	1287	76	163	300	539	2693	913	3606
3:45 PM - 4:45 PM	204	996	234	1434	172	116	148	436	118	1085	94	1297	66	149	283	498	2731	934	3665
4:00 PM - 5:00 PM	199	975	247	1421	211	125	154	490	123	1121	83	1327	58	160	265	483	2748	973	3721
4:15 PM - 5:15 PM	177	966	251	1394	228	128	144	500	130	1078	78	1286	56	153	267	476	2680	976	3656
4:30 PM - 5:30 PM	171	963	250	1384	220	124	160	504	131	1041	82	1254	65	129	294	488	2638	992	3630
4:45 PM - 5:45 PM	171	999	250	1420	194	100	146	440	126	1001	77	1204	64	116	275	455	2624	895	3519
5:00 PM - 6:00 PM	179	1088	245	1512	174	86	138	398	121	945	75	1141	61	110	285	456	2653	854	3507
Sat Peak																			
1:00 PM - 2:00 PM	342	1037	192	1571	154	101	124	379	138	1198	135	1471	99	128	321	548	3042	927	3969

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimor Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimor Avenue - 1
INTERSECTION:	US Route 1& Rossborough La.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Rossborough Lane
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Dakary & Whitney	**EASTBOUND ROAD:**	Rossborough Lane
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North & South	East & West	Total
	Baltimor Avenue - 1				Rossborough Lane				Baltimor Avenue - 1				Rossborough Lane						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	1	81	16	98	8	0	0	8	3	66	1	70	2	0	1	3	168	11	179
6:15 AM - 6:30 AM	0	112	21	133	17	1	3	21	8	48	0	56	0	0	0	0	189	21	210
6:30 AM - 6:45 AM	1	155	33	189	13	0	2	15	3	93	1	97	1	0	0	1	286	16	302
6:45 AM - 7:00 AM	3	227	60	290	12	0	2	14	3	101	0	104	0	0	0	0	394	14	408
7:00 AM - 7:15 AM	6	249	29	284	13	10	3	26	7	112	0	119	0	1	2	3	403	29	432
7:15 AM - 7:30 AM	6	271	35	312	18	0	2	20	4	109	2	115	2	0	1	3	427	23	450
7:30 AM - 7:45 AM	2	253	25	280	10	2	5	17	0	164	4	168	1	0	0	1	448	18	466
7:45 AM - 8:00 AM	6	247	29	282	8	1	2	11	4	158	3	165	1	1	2	4	447	15	462
8:00 AM - 8:15 AM	12	295	26	333	20	2	3	25	5	171	6	182	3	3	3	9	515	34	549
8:15 AM - 8:30 AM	7	274	22	303	8	0	3	11	3	138	4	145	1	1	5	7	448	18	466
8:30 AM - 8:45 AM	11	243	26	280	9	1	1	11	3	134	6	143	1	0	2	3	423	14	437
8:45 AM - 9:00 AM	14	299	24	337	15	1	2	18	7	139	10	156	2	1	7	10	493	28	521
Total	69	2706	346	3121	151	18	28	197	50	1433	37	1520	14	7	23	44	4641	241	4882
AM One Hour Volumes																			
6:00 AM - 7:00 AM	5	575	130	710	50	1	7	58	17	308	2	327	3	0	1	4	1037	62	1099
6:15 AM - 7:15 AM	10	743	143	896	55	11	10	76	21	354	1	376	1	1	2	4	1272	80	1352
6:30 AM - 7:30 AM	16	902	157	1075	56	10	9	75	17	415	3	435	3	1	3	7	1510	82	1592
6:45 AM - 7:45 AM	17	1000	149	1166	53	12	12	77	14	486	6	506	3	1	3	7	1672	84	1756
7:00 AM - 8:00 AM	20	1020	118	1158	49	13	12	74	15	543	9	567	4	2	5	11	1725	85	1810
7:15 AM - 8:15 AM	26	1066	115	1207	56	5	12	73	13	602	15	630	7	4	6	17	1837	90	1927
7:30 AM - 8:30 AM	27	1069	102	1198	46	5	13	64	12	631	17	660	6	5	10	21	1858	85	1943
7:45 AM - 8:45 AM	36	1059	103	1198	45	4	9	58	15	601	19	635	6	5	12	23	1833	81	1914
8:00 AM - 9:00 AM	44	1111	98	1253	52	4	9	65	18	582	26	626	7	5	17	29	1879	94	1973
AM Peak																			
8:00 AM - 9:00 AM	**44**	**1111**	**98**	**1253**	**52**	**4**	**9**	**65**	**18**	**582**	**26**	**626**	**7**	**5**	**17**	**29**	**1879**	**94**	**1973**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	1	162	14	177	46	0	2	48	8	210	0	218	2	1	16	19	395	67	462
4:15 PM - 4:30 PM	1	179	7	187	20	0	4	24	8	228	0	236	3	0	7	10	423	34	457
4:30 PM - 4:45 PM	1	201	18	220	27	1	4	32	10	274	3	287	9	1	29	39	507	71	578
4:45 PM - 5:00 PM	0	200	11	211	25	0	1	26	5	247	2	254	2	3	26	31	465	57	522
5:00 PM - 5:15 PM	1	220	7	228	43	2	8	53	4	277	2	283	12	0	37	49	511	102	613
5:15 PM - 5:30 PM	2	213	8	223	16	1	4	21	4	252	1	257	9	2	21	32	480	53	533
5:30 PM - 5:45 PM	0	232	12	244	23	0	1	24	5	244	0	249	4	8	5	17	493	41	534
5:45 PM - 6:00 PM	1	209	16	226	22	0	5	27	5	279	3	287	2	0	12	14	513	41	554
6:00 PM - 6:15 PM	0	243	16	259	13	2	7	22	2	291	6	299	5	3	18	26	558	48	606
6:15 PM - 6:30 PM	3	235	11	249	17	1	8	26	5	287	5	297	3	0	6	9	546	35	581
6:30 PM - 6:45 PM	2	211	21	234	18	0	0	18	1	280	4	285	3	0	9	12	519	30	549
6:45 PM - 7:00 PM	6	209	21	236	16	3	0	19	1	268	0	269	2	1	4	7	505	26	531
Total	18	2514	162	2694	286	10	44	340	58	3137	26	3221	56	19	190	265	5915	605	6520
PM One Hour Volumes																			
4:00 PM - 5:00 PM	3	742	50	795	118	1	11	130	31	959	5	995	16	5	78	99	1790	229	2019
4:15 PM - 5:15 PM	3	800	43	846	115	3	17	135	27	1026	7	1060	26	4	99	129	1906	264	2170
4:30 PM - 5:30 PM	4	834	44	882	111	4	17	132	23	1050	8	1081	32	6	113	151	1963	283	2246
4:45 PM - 5:45 PM	3	865	38	906	107	3	14	124	18	1020	5	1043	27	13	89	129	1949	253	2202
5:00 PM - 6:00 PM	4	874	43	921	104	3	18	125	18	1052	6	1076	27	10	75	112	1997	237	2234
5:15 PM - 6:15 PM	3	897	52	952	74	3	17	94	16	1066	10	1092	20	13	56	89	2044	183	2227
5:30 PM - 6:30 PM	4	919	55	978	75	3	21	99	17	1101	14	1132	14	11	41	66	2110	165	2275
5:45 PM - 6:45 PM	6	898	64	968	70	3	20	93	13	1137	18	1168	13	3	45	61	2136	154	2290
6:00 PM - 7:00 PM	11	898	69	978	64	6	15	85	9	1126	15	1150	13	4	37	54	2128	139	2267
AM Peak																			
5:45 PM - 6:45 PM	**6**	**898**	**64**	**968**	**70**	**3**	**20**	**93**	**13**	**1137**	**18**	**1168**	**13**	**3**	**45**	**61**	**2136**	**154**	**2290**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Rossborough La..	**WEATHER:**	clear	**WESTBOUND ROAD:**	Rossborough Lane
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Ali & Mujo	**EASTBOUND ROAD:**	Rossborough Lane
		INPUTED BY:	agan		

Time Period	Southbound Baltimore Avenue - 1				Westbound Rossborough Lane				Northbound Baltimore Avenue - 1				Eastbound Rossborough Lane				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																			
10:00 AM - 11:00 AM	22	919	38	979	43	12	6	61	17	890	39	946	23	7	51	81	1925	142	2067
10:15 AM - 11:15 AM	17	924	38	979	49	11	4	64	15	906	39	960	37	4	64	105	1939	169	2108
10:30 AM - 11:30 AM	24	944	35	1003	53	8	3	64	13	942	40	995	36	4	56	96	1998	160	2158
10:45 AM - 11:45 AM	26	993	39	1058	56	9	1	66	19	1027	33	1079	37	3	67	107	2137	173	2310
11:00 AM - 12:00 PM	27	1048	38	1113	59	6	1	66	19	1041	33	1093	36	1	67	104	2206	170	2376
11:15 AM - 12:15 PM	39	1113	39	1191	62	6	4	72	17	1107	31	1155	24	3	76	103	2346	175	2521
11:30 AM - 12:30 PM	36	1184	48	1268	63	10	5	78	17	1153	27	1197	33	3	97	133	2465	211	2676
11:45 AM - 12:45 PM	31	1211	41	1283	92	14	7	113	15	1144	21	1180	39	4	95	138	2463	251	2714
12:00 PM - 1:00 PM	32	1261	46	1339	100	14	9	123	18	1174	26	1218	39	3	104	146	2557	269	2826
12:15 PM - 1:15 PM	23	1246	46	1315	113	18	8	139	28	1150	30	1208	56	1	101	158	2523	297	2820
12:30 PM - 1:30 PM	23	1198	51	1272	112	15	12	139	28	1182	42	1252	58	1	95	154	2524	293	2817
12:45 PM - 1:45 PM	32	1222	53	1307	84	10	10	104	27	1204	44	1275	55		95	150	2582	254	2836
1:00 PM - 2:00 PM	33	1190	51	1274	74	11	8	93	26	1275	38	1339	69	1	86	156	2613	249	2862
1:15 PM - 2:15 PM	32	1200	59	1291	58	5	10	73	21	1321	31	1373	57	1	80	138	2664	211	2875
1:30 PM - 2:30 PM	23	1166	68	1257	62	4	7	73	20	1257	26	1303	49	2	81	132	2560	205	2765
1:45 PM - 2:45 PM	13	1103	81	1197	68	4	9	81	24	1228	26	1278	46	2	75	123	2475	204	2679
2:00 PM - 3:00 PM	12	1079	90	1181	75	2	10	87	21	1126	28	1175	31	2	72	105	2356	192	2548
2:15 PM - 3:15 PM	10	1072	88	1170	85	4	8	97	21	1034	30	1085	42	4	79	125	2255	222	2477
2:30 PM - 3:30 PM	11	1100	71	1182	77	6	10	93	19	1079	27	1125	46	3	80	129	2307	222	2529
2:45 PM - 3:45 PM	13	1154	61	1228	71	9	10	90	14	1075	31	1120	54	4	82	140	2348	230	2578
3:00 PM - 4:00 PM	13	1208	54	1275	60	8	13	81	16	1090	29	1135	57	3	79	139	2410	220	2630
3:15 PM - 4:15 PM	13	1218	56	1287	50	6	14	70	14	1112	26	1152	43	2	70	115	2439	185	2624
3:30 PM - 4:30 PM	14	1240	66	1320	57	4	13	74	17	1055	25	1097	39	3	58	100	2417	174	2591
3:45 PM - 4:45 PM	12	1232	70	1314	64	1	15	80	20	1060	20	1100	36	6	64	106	2414	186	2600
4:00 PM - 5:00 PM	37	1221	71	1329	76	2	13	91	15	1026	16	1057	35	7	69	111	2386	202	2588
4:15 PM - 5:15 PM	37	1265	74	1376	83	2	11	96	23	1005	14	1042	31	6	70	107	2418	203	2621
4:30 PM - 5:30 PM	44	1274	69	1387	102	3	9	114	28	1001	12	1041	27	6	61	94	2428	208	2636
4:45 PM - 5:45 PM	43	1284	76	1403	103	5	7	115	27	1085	8	1120	14	2	37	53	2523	168	2691
5:00 PM - 6:00 PM	13	1273	102	1388	113	5	10	128	38	1097	9	1144	5	1	18	24	2532	152	2684
Sat Peak																			
1:15 PM - 2:15 PM	32	1200	59	1291	58	5	10	73	21	1321	31	1373	57	1	80	138	2664	211	2875

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & College Ave.	**WEATHER:**	clear	**WESTBOUND ROAD:**	College Avenue
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Gina & Mallory	**EASTBOUND ROAD:**	Regents Drive
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North	East	Total
	Baltimore Avenue - 1				College Avenue				Baltimore Avenue - 1				Regents Drive				&	&	
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	0	87	0	87	2	0	0	2	0	64	2	66	0	0	0	0	153	2	155
6:15 AM - 6:30 AM	3	108	6	117	2	1	1	4	0	55	3	58	0	1	0	1	175	5	180
6:30 AM - 6:45 AM	1	156	5	162	2	1	2	5	0	92	0	92	1	0	0	1	254	6	260
6:45 AM - 7:00 AM	1	216	11	228	0	1	1	2	0	105	3	108	3	4	0	7	336	9	345
7:00 AM - 7:15 AM	0	263	6	269	3	3	1	7	1	109	5	115	2	3	3	8	384	15	399
7:15 AM - 7:30 AM	1	284	3	288	2	5	0	7	0	110	10	120	1	2	0	3	408	10	418
7:30 AM - 7:45 AM	2	284	3	289	11	3	2	16	4	156	12	172	1	2	2	5	461	21	482
7:45 AM - 8:00 AM	8	269	9	286	5	5	5	15	6	180	18	204	3	3	1	7	490	22	512
8:00 AM - 8:15 AM	12	312	5	329	9	7	4	20	4	166	9	179	4	5	1	10	508	30	538
8:15 AM - 8:30 AM	9	303	10	322	7	7	1	15	0	131	8	139	4	5	4	13	461	28	489
8:30 AM - 8:45 AM	12	242	8	262	6	5	3	14	2	152	12	166	4	4	0	8	428	22	450
8:45 AM - 9:00 AM	12	284	15	311	9	5	5	19	7	131	9	147	3	8	3	14	458	33	491
Total	61	2808	81	2950	58	43	25	126	24	1451	91	1566	26	37	14	77	4516	203	4719
AM One Hour Volumes																			
6:00 AM - 7:00 AM	5	567	22	594	6	3	4	13	0	316	8	324	4	5	0	9	918	22	940
6:15 AM - 7:15 AM	5	743	28	776	7	6	5	18	1	361	11	373	6	8	3	17	1149	35	1184
6:30 AM - 7:30 AM	3	919	25	947	7	10	4	21	1	416	18	435	7	9	3	19	1382	40	1422
6:45 AM - 7:45 AM	4	1047	23	1074	16	12	4	32	5	480	30	515	7	11	5	23	1589	55	1644
7:00 AM - 8:00 AM	11	1100	21	1132	21	16	8	45	11	555	45	611	7	10	6	23	1743	68	1811
7:15 AM - 8:15 AM	23	1149	20	1192	27	20	11	58	14	612	49	675	9	12	4	25	1867	83	1950
7:30 AM - 8:30 AM	31	1168	27	1226	32	22	12	66	14	633	47	694	12	15	8	35	1920	101	2021
7:45 AM - 8:45 AM	41	1126	32	1199	27	24	13	64	12	629	47	688	15	17	6	38	1887	102	1989
8:00 AM - 9:00 AM	45	1141	38	1224	31	24	13	68	13	580	38	631	15	22	8	45	1855	113	1968
AM Peak																			
7:30 AM - 8:30 AM	**31**	**1168**	**27**	**1226**	**32**	**22**	**12**	**66**	**14**	**633**	**47**	**694**	**12**	**15**	**8**	**35**	**1920**	**101**	**2021**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	2	178	11	191	13	7	11	31	7	178	11	196	17	11	4	32	387	63	450
4:15 PM - 4:30 PM	3	201	10	214	17	9	7	33	5	206	8	219	12	6	3	21	433	54	487
4:30 PM - 4:45 PM	2	209	16	227	20	8	3	31	3	255	11	269	17	12	4	33	496	64	560
4:45 PM - 5:00 PM	3	209	17	229	11	18	7	36	0	232	12	244	13	21	4	38	473	74	547
5:00 PM - 5:15 PM	5	265	19	289	17	8	4	29	1	237	11	249	21	12	4	37	538	66	604
5:15 PM - 5:30 PM	1	255	26	282	22	8	6	36	3	220	10	233	27	11	2	40	515	76	591
5:30 PM - 5:45 PM	1	250	18	269	16	9	5	30	5	217	9	231	30	10	3	43	500	73	573
5:45 PM - 6:00 PM	3	267	19	289	18	12	12	42	2	255	15	272	19	8	6	33	561	75	636
6:00 PM - 6:15 PM	4	263	30	297	22	5	8	35	1	272	10	283	21	13	10	44	580	79	659
6:15 PM - 6:30 PM	4	242	32	278	16	9	12	37	8	265	11	284	13	17	5	35	562	72	634
6:30 PM - 6:45 PM	3	230	14	247	11	5	4	20	7	248	14	269	19	3	5	27	516	47	563
6:45 PM - 7:00 PM	8	231	19	258	17	13	6	36	6	250	20	276	23	8	8	39	534	75	609
Total	39	2800	231	3070	200	111	85	396	48	2835	142	3025	232	132	58	422	6095	818	6913
PM One Hour Volumes																			
4:00 PM - 5:00 PM	10	797	54	861	61	42	28	131	15	871	42	928	59	50	15	124	1789	255	2044
4:15 PM - 5:15 PM	13	884	62	959	65	43	21	129	9	930	42	981	63	51	15	129	1940	258	2198
4:30 PM - 5:30 PM	11	938	78	1027	70	42	20	132	7	944	44	995	78	56	14	148	2022	280	2302
4:45 PM - 5:45 PM	10	979	80	1069	66	43	22	131	9	906	42	957	91	54	13	158	2026	289	2315
5:00 PM - 6:00 PM	10	1037	82	1129	73	37	27	137	11	929	45	985	97	41	15	153	2114	290	2404
5:15 PM - 6:15 PM	9	1035	93	1137	78	34	31	143	11	964	44	1019	97	42	21	160	2156	303	2459
5:30 PM - 6:30 PM	12	1022	99	1133	72	35	37	144	16	1009	45	1070	83	48	24	155	2203	299	2502
5:45 PM - 6:45 PM	14	1002	95	1111	67	31	36	134	18	1040	50	1108	72	41	26	139	2219	273	2492
6:00 PM - 7:00 PM	19	966	95	1080	66	32	30	128	22	1035	55	1112	76	41	28	145	2192	273	2465
PM Peak																			
5:30 PM - 6:30 PM	**12**	**1022**	**99**	**1133**	**72**	**35**	**37**	**144**	**16**	**1009**	**45**	**1070**	**83**	**48**	**24**	**155**	**2203**	**299**	**2502**

Wells & Associates,Inc

McLean, Virginia

Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	2/29/2012	SOUTHBOUND ROAD:	Baltimore Avenue - 1
W & A JOB NO.:	4782	DAY:	Wednesday	NORTHBOUND ROAD:	Baltimore Avenue - 1
INTERSECTION:	Route 1 & College Ave.	WEATHER:	rain	WESTBOUND ROAD:	College Avenue
LOCATION:	Montgomery Co.,MD	COUNTED BY:	Charlie & Geraldin	EASTBOUND ROAD:	Regents Drive
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Baltimore Avenue - 1				Westbound College Avenue				Northbound Baltimore Avenue - 1				Eastbound Regents Drive				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
11:00-11:15	6	173	13	192	9	14	2	25	6	151	6	163	18	19	5	42	355	67	422		11:00-11:15
11:15-11:30	4	188	17	209	10	5	3	18	5	127	8	140	9	9	2	20	349	38	387		11:15-11:30
11:30-11:45	6	147	17	170	16	15	4	35	0	128	10	138	20	9	4	33	308	68	376		11:30-11:45
11:45-12:00	10	176	19	205	18	18	3	39	9	153	18	180	8	14	4	26	385	65	450		11:45-12:00
12:00-12:15	5	198	22	225	12	6	6	24	9	174	8	191	22	21	6	49	416	73	489		12:00-12:15
12:15-12:30	4	180	21	205	12	6	6	24	1	214	3	218	10	8	3	21	423	45	468		12:15-12:30
12:30-12:45	3	208	26	237	27	10	6	43	5	170	10	185	15	10	0	25	422	68	490		12:30-12:45
12:45-1:00	12	185	16	213	19	23	5	47	2	194	19	215	9	9	3	21	428	68	496		12:45-1:00
1:00-1:15	4	186	18	208	16	8	5	29	5	194	9	208	16	15	8	39	416	68	484		1:00-1:15
1:15-1:30	5	197	18	220	12	7	3	22	2	211	6	219	13	8	2	23	439	45	484		1:15-1:30
1:30-1:45	11	202	12	225	19	12	5	36	1	209	14	224	9	12	1	22	449	58	507		1:30-1:45
1:45-2:00	8	161	12	181	19	17	5	41	4	210	11	225	16	10	7	33	406	74	480		1:45-2:00
2:00-2:15	4	189	15	208	13	9	3	25	4	243	9	256	23	17	5	45	464	70	534		2:00-2:15
2:15-2:30	0	166	15	181	12	7	4	23	3	205	5	213	17	6	3	26	394	49	443		2:15-2:30
2:30-2:45	5	195	9	209	15	6	5	26	3	195	5	203	8	8	1	17	412	43	455		2:30-2:45
2:45-3:00	4	162	15	181	12	5	5	22	5	214	4	223	15	14	3	32	404	54	458		2:45-3:00
4 Hour Totals	**91**	**2,913**	**265**	**3,269**	**241**	**168**	**70**	**479**	**64**	**2,992**	**145**	**3,201**	**228**	**189**	**57**	**474**	**6,470**	**953**	**7,423**		
1 Hour Totals																					
11:00-12:00	22	762	88	872	69	40	21	130	24	711	39	774	55	53	13	121	1,646	251	1,897	0.97	11:00-12:00
11:15-12:15	24	771	85	880	70	45	23	138	17	752	40	809	56	48	12	116	1,689	254	1,943	0.98	11:15-12:15
11:30-12:30	23	759	81	863	74	47	22	143	13	772	41	826	50	42	14	106	1,689	249	1,938	0.98	11:30-12:30
11:45-12:45	24	776	78	878	74	48	19	141	14	769	44	827	53	42	13	108	1,705	249	1,954	0.98	11:45-12:45
12:00-1:00	32	770	64	866	66	50	18	134	10	808	48	866	47	44	14	105	1,732	239	1,971	0.97	12:00-1:00
12:15-1:15	28	746	60	834	66	44	18	128	12	824	40	876	54	45	18	117	1,710	245	1,955	0.96	12:15-1:15
12:30-1:30	28	749	57	834	63	45	16	124	11	873	40	924	61	47	15	123	1,758	247	2,005	0.94	12:30-1:30
12:45-1:45	23	718	54	795	63	45	17	125	12	867	39	918	65	45	16	126	1,713	251	1,964	0.92	12:45-1:45
1:00-2:00	17	711	51	779	59	39	17	115	14	853	30	897	64	41	16	121	1,676	236	1,912	0.90	1:00-2:00
1:15-2:15	13	712	54	779	52	27	17	96	15	857	23	895	63	45	12	120	1,674	216	1,890	0.88	1:15-2:15
1:30-2:30	9	523	39	571	39	18	14	71	11	614	14	639	40	28	7	75	1,210	146	1,356	0.74	1:30-2:30
1:45-2:45	9	357	24	390	27	11	10	48	8	409	9	426	23	22	4	49	816	97	913	0.50	1:45-2:45
2:00-3:00	4	162	15	181	12	5	5	22	5	214	4	223	15	14	3	32	404	54	458	0.25	2:00-3:00
Midday Peak 12:30-1:30	**28**	**749**	**57**	**834**	**63**	**45**	**16**	**124**	**11**	**873**	**40**	**924**	**61**	**47**	**15**	**123**	**1,758**	**247**	**2,005**	**0.94**	**Midday Peak 12:30-1:30**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & College Ave.	**WEATHER:**	clear	**WESTBOUND ROAD:**	College Avenue
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Carmen & Victo	**EASTBOUND ROAD:**	Regents Drive
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North &	East &	Total
	Baltimore Avenue - 1				College Avenue				Baltimore Avenue - 1				Regents Drive						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
10:00 AM - 11:00 AM	40	784	86	910	76	19	27	122	19	787	32	838	3	18	23	44	1748	166	1914
10:15 AM - 11:15 AM	39	790	84	913	83	19	26	128	16	789	37	842	4	16	26	46	1755	174	1929
10:30 AM - 11:30 AM	30	794	91	915	90	18	28	136	14	820	49	883	19	16	31	66	1798	202	2000
10:45 AM - 11:45 AM	34	826	95	955	78	17	32	127	11	865	54	930	25	14	30	69	1885	196	2081
11:00 AM - 12:00 PM	33	898	89	1020	82	21	31	134	13	852	52	917	30	17	35	82	1937	216	2153
11:15 AM - 12:15 PM	35	946	93	1074	91	22	34	147	15	908	51	974	43	17	42	102	2048	249	2297
11:30 AM - 12:30 PM	36	969	92	1097	87	25	29	141	17	918	44	979	31	20	39	90	2076	231	2307
11:45 AM - 12:45 PM	41	990	99	1130	94	27	26	147	25	918	50	993	39	18	34	91	2123	238	2361
12:00 PM - 1:00 PM	38	1008	104	1150	100	25	24	149	27	944	42	1013	40	20	28	88	2163	237	2400
12:15 PM - 1:15 PM	33	1025	114	1172	105	28	28	161	29	918	42	989	35	21	20	76	2161	237	2398
12:30 PM - 1:30 PM	35	1034	114	1183	116	31	26	173	28	920	43	991	48	27	21	96	2174	269	2443
12:45 PM - 1:45 PM	32	1035	104	1171	118	36	28	182	27	875	47	949	39	27	25	91	2120	273	2393
1:00 PM - 2:00 PM	45	1024	99	1168	118	35	31	184	20	898	54	972	41	19	30	90	2140	274	2414
1:15 PM - 2:15 PM	51	1013	88	1152	104	31	32	167	17	925	47	989	38	18	31	87	2141	254	2395
1:30 PM - 2:30 PM	45	995	86	1126	98	31	41	170	17	916	44	977	34	16	26	76	2103	246	2349
1:45 PM - 2:45 PM	41	970	92	1103	95	31	46	172	16	909	29	954	41	21	26	88	2057	260	2317
2:00 PM - 3:00 PM	28	962	90	1080	87	32	44	163	14	808	27	849	38	24	29	91	1929	254	2183
2:15 PM - 3:15 PM	22	980	93	1095	94	36	48	178	13	753	30	796	50	27	33	110	1891	288	2179
2:30 PM - 3:30 PM	30	1023	100	1153	88	31	44	163	19	753	27	799	63	23	39	125	1952	288	2240
2:45 PM - 3:45 PM	34	1072	91	1197	93	27	39	159	17	776	28	821	77	27	41	145	2018	304	2322
3:00 PM - 4:00 PM	34	1100	96	1230	97	22	43	162	18	796	27	841	76	28	35	139	2071	301	2372
3:15 PM - 4:15 PM	36	1091	95	1222	91	25	36	152	18	796	23	837	68	31	29	128	2059	280	2339
3:30 PM - 4:30 PM	31	1053	93	1177	94	24	31	149	15	799	25	839	49	33	25	107	2016	256	2272
3:45 PM - 4:45 PM	26	1058	99	1183	89	25	29	143	14	792	25	831	31	30	19	80	2014	223	2237
4:00 PM - 5:00 PM	26	1061	98	1185	78	26	26	130	22	795	26	843	41	26	20	87	2028	217	2245
4:15 PM - 5:15 PM	28	1058	93	1179	78	20	24	122	23	799	40	862	47	19	20	86	2041	208	2249
4:30 PM - 5:30 PM	30	1095	90	1215	72	21	27	120	19	765	35	819	65	18	18	101	2034	221	2255
4:45 PM - 5:45 PM	30	1098	75	1203	68	17	24	109	23	779	33	835	61	11	22	94	2038	203	2241
5:00 PM - 6:00 PM	25	1071	76	1172	75	18	22	115	17	833	27	877	55	11	38	104	2049	219	2268
Sat Peak																			
12:30 PM - 1:30 PM	35	1034	114	1183	116	31	26	173	28	920	43	991	48	27	21	96	2174	269	2443

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Knox Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Knox Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Admir & Collen	**EASTBOUND ROAD:**	Knox Road
		INPUTED BY:	agan		

Time Period	Southbound Baltimore Avenue - 1				Westbound Knox Road				Northbound Baltimore Avenue - 1				Eastbound Knox Road				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	9	71	6	86	0	2	0	2	1	55	4	60	1	2	9	12	146	14	160
6:15 AM - 6:30 AM	10	87	1	98	0	2	0	2	4	52	7	63	1	3	4	8	161	10	171
6:30 AM - 6:45 AM	7	155	4	166	0	3	2	5	1	77	10	88	1	2	11	14	254	19	273
6:45 AM - 7:00 AM	16	191	2	209	1	3	3	7	1	104	5	110	4	3	5	12	319	19	338
7:00 AM - 7:15 AM	16	238	5	259	0	7	2	9	2	99	10	111	1	3	12	16	370	25	395
7:15 AM - 7:30 AM	17	261	2	280	1	1	1	3	0	98	12	110	7	1	8	16	390	19	409
7:30 AM - 7:45 AM	40	255	0	295	2	5	1	8	2	138	16	156	1	2	11	14	451	22	473
7:45 AM - 8:00 AM	29	240	1	270	4	9	0	13	3	175	12	190	4	4	11	19	460	32	492
8:00 AM - 8:15 AM	40	260	5	305	2	7	2	11	2	153	8	163	2	3	20	25	468	36	504
8:15 AM - 8:30 AM	32	254	5	291	3	5	3	11	0	124	14	138	2	0	6	8	429	19	448
8:30 AM - 8:45 AM	52	196	5	253	5	10	2	17	0	159	11	170	3	4	11	18	423	35	458
8:45 AM - 9:00 AM	47	219	8	274	2	9	6	17	1	129	16	146	2	2	19	23	420	40	460
Total	315	2427	44	2786	20	63	22	105	17	1363	125	1505	29	29	127	185	4291	290	4581
AM One Hour Volumes																			
6:00 AM - 7:00 AM	42	504	13	559	1	10	5	16	7	288	26	321	7	10	29	46	880	62	942
6:15 AM - 7:15 AM	49	671	12	732	1	15	7	23	8	332	32	372	7	11	32	50	1104	73	1177
6:30 AM - 7:30 AM	56	845	13	914	2	14	8	24	4	378	37	419	13	9	36	58	1333	82	1415
6:45 AM - 7:45 AM	89	945	9	1043	4	16	7	27	5	439	43	487	13	9	36	58	1530	85	1615
7:00 AM - 8:00 AM	102	994	8	1104	7	22	4	33	7	510	50	567	13	10	42	65	1671	98	1769
7:15 AM - 8:15 AM	126	1016	8	1150	9	22	4	35	7	564	48	619	14	10	50	74	1769	109	1878
7:30 AM - 8:30 AM	141	1009	11	1161	11	26	6	43	7	590	50	647	9	9	48	66	1808	109	1917
7:45 AM - 8:45 AM	153	950	16	1119	14	31	7	52	5	611	45	661	11	11	48	70	1780	122	1902
8:00 AM - 9:00 AM	171	929	23	1123	12	31	13	56	3	565	49	617	9	9	56	74	1740	130	1870
AM Peak																			
7:30 AM - 8:30 AM	**141**	**1009**	**11**	**1161**	**11**	**26**	**6**	**43**	**7**	**590**	**50**	**647**	**9**	**9**	**48**	**66**	**1808**	**109**	**1917**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	26	128	8	162	10	17	12	39	3	120	16	139	3	12	30	45	301	84	385
4:15 PM - 4:30 PM	36	182	10	228	5	18	5	28	7	167	29	203	5	3	36	44	431	72	503
4:30 PM - 4:45 PM	38	176	11	225	5	22	8	35	2	214	20	236	8	7	40	55	461	90	551
4:45 PM - 5:00 PM	25	183	9	217	6	38	14	58	12	219	16	247	7	23	28	58	464	116	580
5:00 PM - 5:15 PM	36	205	14	255	9	30	13	52	14	222	20	256	3	8	26	37	511	89	600
5:15 PM - 5:30 PM	23	232	18	273	5	29	12	46	8	201	23	232	7	14	33	54	505	100	605
5:30 PM - 5:45 PM	37	209	16	262	12	17	5	34	18	179	31	228	7	7	28	42	490	76	566
5:45 PM - 6:00 PM	39	201	18	258	11	26	13	50	18	220	22	260	4	12	35	51	518	101	619
6:00 PM - 6:15 PM	44	213	17	274	8	36	11	55	22	234	40	296	1	16	30	47	570	102	672
6:15 PM - 6:30 PM	45	189	12	246	4	25	7	36	18	213	35	266	7	21	47	75	512	111	623
6:30 PM - 6:45 PM	35	181	11	227	11	26	12	49	12	211	32	255	6	11	37	54	482	103	585
6:45 PM - 7:00 PM	51	185	13	249	7	39	11	57	6	217	34	257	0	14	32	46	506	103	609
Total	435	2284	157	2876	93	323	123	539	140	2417	318	2875	58	148	402	608	5751	1147	6898
PM One Hour Volumes																			
4:00 PM - 5:00 PM	125	669	38	832	26	95	39	160	24	720	81	825	23	45	134	202	1657	362	2019
4:15 PM - 5:15 PM	135	746	44	925	25	108	40	173	35	822	85	942	23	41	130	194	1867	367	2234
4:30 PM - 5:30 PM	122	796	52	970	25	119	47	191	36	856	79	971	25	52	127	204	1941	395	2336
4:45 PM - 5:45 PM	121	829	57	1007	32	114	44	190	52	821	90	963	24	52	115	191	1970	381	2351
5:00 PM - 6:00 PM	135	847	66	1048	37	102	43	182	58	822	96	976	21	41	122	184	2024	366	2390
5:15 PM - 6:15 PM	143	855	69	1067	36	108	41	185	66	834	116	1016	19	49	126	194	2083	379	2462
5:30 PM - 6:30 PM	165	812	63	1040	35	104	36	175	76	846	128	1050	19	56	140	215	2090	390	2480
5:45 PM - 6:45 PM	163	784	58	1005	34	113	43	190	70	878	129	1077	18	60	149	227	2082	417	2499
6:00 PM - 7:00 PM	175	768	53	996	30	126	41	197	58	875	141	1074	14	62	146	222	2070	419	2489
PM Peak																			
5:45 PM - 6:45 PM	**163**	**784**	**58**	**1005**	**34**	**113**	**43**	**190**	**70**	**878**	**129**	**1077**	**18**	**60**	**149**	**227**	**2082**	**417**	**2499**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Knox Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Knox Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Yasenia & Jose	**EASTBOUND ROAD:**	Knox Road
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North &	East &	Total
	Baltimore Avenue - 1				Knox Road				Baltimore Avenue - 1				Knox Road						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
10:00 AM - 11:00 AM	124	616	48	788	28	53	34	115	17	674	109	800	10	24	97	131	1588	246	1834
10:15 AM - 11:15 AM	122	628	52	802	31	55	34	120	18	658	118	794	6	24	104	134	1596	254	1850
10:30 AM - 11:30 AM	126	634	60	820	35	54	43	132	23	699	121	843	8	20	105	133	1663	265	1928
10:45 AM - 11:45 AM	133	657	62	852	38	56	42	136	31	732	135	898	19	24	118	161	1750	297	2047
11:00 AM - 12:00 PM	156	693	64	913	39	50	50	139	29	750	138	917	22	20	142	184	1830	323	2153
11:15 AM - 12:15 PM	168	735	83	986	40	51	51	142	31	784	138	953	29	25	150	204	1939	346	2285
11:30 AM - 12:30 PM	176	729	97	1002	46	64	49	159	29	759	125	913	32	27	161	220	1915	379	2294
11:45 AM - 12:45 PM	167	731	119	1017	49	58	52	159	28	716	102	846	23	34	160	217	1863	376	2239
12:00 PM - 1:00 PM	150	745	129	1024	63	68	46	177	26	643	88	757	20	32	167	219	1781	396	2177
12:15 PM - 1:15 PM	156	768	111	1035	66	73	41	180	25	645	77	747	17	32	145	194	1782	374	2156
12:30 PM - 1:30 PM	143	796	103	1042	63	67	40	170	24	672	80	776	12	31	145	188	1818	358	2176
12:45 PM - 1:45 PM	160	795	92	1047	61	72	39	172	18	695	79	792	11	24	157	192	1839	364	2203
1:00 PM - 2:00 PM	159	801	83	1043	51	63	43	157	21	773	79	873	10	28	148	186	1916	343	2259
1:15 PM - 2:15 PM	150	789	80	1019	54	54	46	154	20	789	89	898	9	26	179	214	1917	368	2285
1:30 PM - 2:30 PM	167	764	77	1008	56	55	42	153	20	783	83	886	10	33	182	225	1894	378	2272
1:45 PM - 2:45 PM	158	751	71	980	63	58	41	162	22	749	95	866	10	28	159	197	1846	359	2205
2:00 PM - 3:00 PM	161	745	65	971	66	57	42	165	22	697	92	811	13	33	156	202	1782	367	2149
2:15 PM - 3:15 PM	162	751	61	974	66	59	41	166	21	637	83	741	10	34	160	204	1715	370	2085
2:30 PM - 3:30 PM	156	808	60	1024	60	44	41	145	25	617	78	720	8	27	157	192	1744	337	2081
2:45 PM - 3:45 PM	154	876	57	1087	54	43	42	139	29	651	77	757	11	26	151	188	1844	327	2171
3:00 PM - 4:00 PM	164	914	60	1138	50	41	39	130	29	667	87	783	8	17	127	152	1921	282	2203
3:15 PM - 4:15 PM	170	927	64	1161	44	43	36	123	30	704	93	827	12	17	109	138	1988	261	2249
3:30 PM - 4:30 PM	156	896	64	1116	46	46	41	133	25	704	107	836	14	26	110	150	1952	283	2235
3:45 PM - 4:45 PM	152	919	59	1130	42	47	38	127	24	734	100	858	17	35	132	184	1988	311	2299
4:00 PM - 5:00 PM	151	896	54	1101	45	45	43	133	26	726	93	845	25	37	151	213	1946	346	2292
4:15 PM - 5:15 PM	135	906	50	1091	49	49	51	149	28	673	89	790	28	35	149	212	1881	361	2242
4:30 PM - 5:30 PM	164	899	64	1127	41	57	41	139	29	661	77	767	31	33	143	207	1894	346	2240
4:45 PM - 5:45 PM	166	858	73	1097	42	55	53	150	24	579	65	668	26	26	129	181	1765	331	2096
5:00 PM - 6:00 PM	164	811	79	1054	40	59	43	142	22	580	65	667	21	32	128	181	1721	323	2044
Sat Peak																			
3:45 PM - 4:45 PM	152	919	59	1130	42	47	38	127	24	734	100	858	17	35	132	184	1988	311	2299

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Calvert Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Calvert Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Azer	**EASTBOUND ROAD:**	Hotel Driveway
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North	East	Total
	Baltimore Avenue - 1				Calvert Road				Baltimore Avenue - 1				Hotel Driveway				&	&	
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	0	70	3	73	0	0	5	5	0	60	1	61	1	1	1	3	134	8	142
6:15 AM - 6:30 AM	0	90	2	92	1	0	1	2	1	61	0	62	1	0	1	2	154	4	158
6:30 AM - 6:45 AM	1	145	4	150	1	0	3	4	6	92	0	98	0	0	0	0	248	4	252
6:45 AM - 7:00 AM	2	194	4	200	4	0	5	9	1	109	0	110	0	0	0	0	310	9	319
7:00 AM - 7:15 AM	0	242	2	244	9	0	6	15	8	118	0	126	0	0	1	1	370	16	386
7:15 AM - 7:30 AM	1	253	6	260	7	1	6	14	3	115	0	118	0	0	0	0	378	14	392
7:30 AM - 7:45 AM	0	253	9	262	8	0	5	13	5	159	0	164	2	0	0	2	426	15	441
7:45 AM - 8:00 AM	0	235	8	243	6	0	8	14	6	201	0	207	1	0	0	1	450	15	465
8:00 AM - 8:15 AM	0	238	10	248	11	0	12	23	11	153	0	164	2	0	0	2	412	25	437
8:15 AM - 8:30 AM	2	241	7	250	8	0	9	17	9	137	0	146	0	0	0	0	396	17	413
8:30 AM - 8:45 AM	1	202	4	207	7	0	10	17	10	168	0	178	1	1	0	2	385	19	404
8:45 AM - 9:00 AM	0	200	15	215	6	1	6	13	5	156	0	161	3	0	0	3	376	16	392
Total	7	2363	74	2444	68	2	76	146	65	1529	1	1595	11	2	3	16	4039	162	4201
AM One Hour Volumes																			
6:00 AM - 7:00 AM	3	499	13	515	6	0	14	20	8	322	1	331	2	1	2	5	846	25	871
6:15 AM - 7:15 AM	3	671	12	686	15	0	15	30	16	380	0	396	1	0	2	3	1082	33	1115
6:30 AM - 7:30 AM	4	834	16	854	21	1	20	42	18	434	0	452	0	0	1	1	1306	43	1349
6:45 AM - 7:45 AM	3	942	21	966	28	1	22	51	17	501	0	518	2	0	1	3	1484	54	1538
7:00 AM - 8:00 AM	1	983	25	1009	30	1	25	56	22	593	0	615	3	0	1	4	1624	60	1684
7:15 AM - 8:15 AM	1	979	33	1013	32	1	31	64	25	628	0	653	5	0	0	5	1666	69	1735
7:30 AM - 8:30 AM	2	967	34	1003	33	0	34	67	31	650	0	681	5	0	0	5	1684	72	1756
7:45 AM - 8:45 AM	3	916	29	948	32	0	39	71	36	659	0	695	4	1	0	5	1643	76	1719
8:00 AM - 9:00 AM	3	881	36	920	32	1	37	70	35	614	0	649	6	1	0	7	1569	77	1646
AM Peak																			
7:30 AM - 8:30 AM	**2**	**967**	**34**	**1003**	**33**	**0**	**34**	**67**	**31**	**650**	**0**	**681**	**5**	**0**	**0**	**5**	**1684**	**72**	**1756**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	1	157	11	169	13	0	15	28	10	177	0	187	1	0	0	1	356	29	385
4:15 PM - 4:30 PM	0	187	13	200	7	0	11	18	4	204	0	208	0	0	0	0	408	18	426
4:30 PM - 4:45 PM	4	189	10	203	11	0	7	18	6	225	0	231	1	0	0	1	434	19	453
4:45 PM - 5:00 PM	1	222	19	242	7	0	9	16	13	254	0	267	2	0	0	2	509	18	527
5:00 PM - 5:15 PM	0	214	16	230	11	1	15	27	14	243	0	257	1	0	0	1	487	28	515
5:15 PM - 5:30 PM	1	239	10	250	13	0	11	24	14	216	0	230	1	0	0	1	480	25	505
5:30 PM - 5:45 PM	3	235	19	257	15	1	18	34	11	231	1	243	0	0	0	0	500	34	534
5:45 PM - 6:00 PM	0	196	14	210	12	0	17	29	15	271	0	286	0	0	1	1	496	30	526
6:00 PM - 6:15 PM	3	227	18	248	14	0	13	27	18	274	0	292	1	0	0	1	540	28	568
6:15 PM - 6:30 PM	1	205	17	223	18	0	15	33	17	272	0	289	1	0	1	2	512	35	547
6:30 PM - 6:45 PM	4	213	19	236	7	2	19	28	22	260	0	282	0	0	0	0	518	28	546
6:45 PM - 7:00 PM	2	201	11	214	14	1	14	29	11	269	1	281	1	0	0	1	495	30	525
Total	20	2485	177	2682	142	5	164	311	155	2896	2	3053	9	0	2	11	5735	322	6057
PM One Hour Volumes																			
4:00 PM - 5:00 PM	6	755	53	814	38	0	42	80	33	860	0	893	4	0	0	4	1707	84	1791
4:15 PM - 5:15 PM	5	812	58	875	36	1	42	79	37	926	0	963	4	0	0	4	1838	83	1921
4:30 PM - 5:30 PM	6	864	55	925	42	1	42	85	47	938	0	985	5	0	0	5	1910	90	2000
4:45 PM - 5:45 PM	5	910	64	979	46	2	53	101	52	944	1	997	4	0	0	4	1976	105	2081
5:00 PM - 6:00 PM	4	884	59	947	51	2	61	114	54	961	1	1016	2	0	1	3	1963	117	2080
5:15 PM - 6:15 PM	7	897	61	965	54	1	59	114	58	992	1	1051	2	0	1	3	2016	117	2133
5:30 PM - 6:30 PM	7	863	68	938	59	1	63	123	61	1048	1	1110	2	0	2	4	2048	127	2175
5:45 PM - 6:45 PM	8	841	68	917	51	2	64	117	72	1077	0	1149	2	0	2	4	2066	121	2187
6:00 PM - 7:00 PM	10	846	65	921	53	3	61	117	68	1075	1	1144	3	0	1	4	2065	121	2186
PM Peak																			
5:45 PM - 6:45 PM	**8**	**841**	**68**	**917**	**51**	**2**	**64**	**117**	**72**	**1077**	**0**	**1149**	**2**	**0**	**2**	**4**	**2066**	**121**	**2187**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Calvert Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Calvert Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Azer & Aer	**EASTBOUND ROAD:**	Hotel Driveway
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North &	East &	Total
	Baltimore Avenue - 1				Calvert Road				Baltimore Avenue - 1				Hotel Driveway						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
10:00 AM - 11:00 AM	25	680	35	740	42	2	44	88	51	832	4	887	11	2	1	14	1627	102	1729
10:15 AM - 11:15 AM	29	685	35	749	43	2	43	88	54	805	4	863	12	2	2	16	1612	104	1716
10:30 AM - 11:30 AM	30	691	36	757	49	4	53	106	45	841	4	890	10	2	4	16	1647	122	1769
10:45 AM - 11:45 AM	24	728	42	794	57	2	56	115	45	882	5	932	10	1	5	16	1726	131	1857
11:00 AM - 12:00 PM	27	769	46	842	59	2	52	113	44	895	2	941	14	1	4	19	1783	132	1915
11:15 AM - 12:15 PM	24	816	54	894	60	3	49	112	35	937	5	977	13	1	3	17	1871	129	2000
11:30 AM - 12:30 PM	23	844	54	921	59	2	43	104	36	963	5	1004	14		1	15	1925	119	2044
11:45 AM - 12:45 PM	21	857	53	931	50	2	34	86	31	930	3	964	10			10	1895	96	1991
12:00 PM - 1:00 PM	17	852	51	920	50	2	31	83	32	898	4	934	7			7	1854	90	1944
12:15 PM - 1:15 PM	21	853	50	924	48	1	37	86	41	923	1	965	9			9	1889	95	1984
12:30 PM - 1:30 PM	18	841	61	920	47		35	82	41	889	2	932	9			9	1852	91	1943
12:45 PM - 1:45 PM	19	841	63	923	47	1	44	92	45	910	2	957	13			13	1880	105	1985
1:00 PM - 2:00 PM	22	839	60	921	54	1	47	102	54	939	2	995	12			12	1916	114	2030
1:15 PM - 2:15 PM	16	813	57	886	54	1	54	109	57	911	2	970	9			9	1856	118	1974
1:30 PM - 2:30 PM	18	815	47	880	56	1	61	118	73	885	1	959	10			10	1839	128	1967
1:45 PM - 2:45 PM	15	795	43	853	61		65	126	77	860	1	938	12			12	1791	138	1929
2:00 PM - 3:00 PM	13	818	47	878	50	1	68	119	71	813	3	887	11		1	12	1765	131	1896
2:15 PM - 3:15 PM	14	841	48	903	54	1	65	120	61	791	3	855	15		1	16	1758	136	1894
2:30 PM - 3:30 PM	12	897	49	958	43	1	59	103	45	804	3	852	14		1	15	1810	118	1928
2:45 PM - 3:45 PM	14	980	59	1053	47	1	51	99	44	803	4	851	9		1	10	1904	109	2013
3:00 PM - 4:00 PM	17	995	61	1073	48		57	105	44	842	2	888	13			13	1961	118	2079
3:15 PM - 4:15 PM	20	1012	62	1094	41		58	99	46	848	2	896	11			11	1990	110	2100
3:30 PM - 4:30 PM	20	971	62	1053	45		60	105	49	827	2	878	11	1	1	13	1931	118	2049
3:45 PM - 4:45 PM	16	958	66	1040	39	1	61	101	46	856	1	903	12	1	2	15	1943	116	2059
4:00 PM - 5:00 PM	13	950	65	1028	39	1	60	100	50	832	1	883	10	1	2	13	1911	113	2024
4:15 PM - 5:15 PM	11	975	61	1047	42	1	61	104	58	809	2	869	7	1	2	10	1916	114	2030
4:30 PM - 5:30 PM	11	988	57	1056	47	1	61	109	56	777	2	835	9		1	10	1891	119	2010
4:45 PM - 5:45 PM	13	979	42	1034	45	1	60	106	59	747	2	808	9	1		10	1842	116	1958
5:00 PM - 6:00 PM	17	945	36	998	52	1	57	110	57	766	1	824	7	1	1	9	1822	119	1941
Sat Peak																			
3:15 PM - 4:15 PM	20	1012	62	1094	41		58	99	46	848	2	896	11			11	1990	110	2100

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**ITHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**ITHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Guilford Rd.	**WEATHER:**	clear	**ESTBOUND ROAD:**	Guilford Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Eduvina & Amina	**ASTBOUND ROAD:**	Guilford Drive
		INPUTED BY:	agan		

Time Period	Southbound Baltimore Avenue - 1				Westbound Guilford Road				Northbound Baltimore Avenue - 1				Eastbound Guilford Drive				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total F	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	1	67	0	68	1	2	2	5	0	54	5	59	1	0	0	1	127	6	133
6:15 AM - 6:30 AM	1	89	0	90	2	0	3	5	0	56	6	62	2	0	1	3	152	8	160
6:30 AM - 6:45 AM	1	149	0	150	4	2	1	7	0	90	10	100	0	0	3	3	250	10	260
6:45 AM - 7:00 AM	1	196	1	198	3	0	0	3	0	105	8	113	3	1	0	4	311	7	318
7:00 AM - 7:15 AM	1	248	2	251	2	0	3	5	0	105	13	118	7	3	5	15	369	20	389
7:15 AM - 7:30 AM	1	247	0	248	1	1	5	7	0	115	10	125	3	2	7	12	373	19	392
7:30 AM - 7:45 AM	5	252	3	260	4	2	3	9	1	155	19	175	5	0	4	9	435	18	453
7:45 AM - 8:00 AM	1	239	2	242	9	0	2	11	1	190	20	211	8	1	6	15	453	26	479
8:00 AM - 8:15 AM	2	234	2	238	6	1	3	10	2	144	29	175	7	0	13	20	413	30	443
8:15 AM - 8:30 AM	7	239	1	247	4	2	2	8	0	149	41	190	8	1	3	12	437	20	457
8:30 AM - 8:45 AM	2	205	1	208	3	1	4	8	0	169	31	200	2	3	8	13	408	21	429
8:45 AM - 9:00 AM	9	171	5	185	4	1	3	8	1	147	31	179	2	2	13	17	364	25	389
Total	32	2336	17	2385	43	12	31	86	5	1479	223	1707	48	13	63	124	4092	210	4302
AM One Hour Volumes																			
6:00 AM - 7:00 AM	4	501	1	506	10	4	6	20	0	305	29	334	6	1	4	11	840	31	871
6:15 AM - 7:15 AM	4	682	3	689	11	2	7	20	0	356	37	393	12	4	9	25	1082	45	1127
6:30 AM - 7:30 AM	4	840	3	847	10	3	9	22	0	415	41	456	13	6	15	34	1303	56	1359
6:45 AM - 7:45 AM	8	943	6	957	10	3	11	24	1	480	50	531	18	6	16	40	1488	64	1552
7:00 AM - 8:00 AM	8	986	7	1001	16	3	13	32	2	565	62	629	23	6	22	51	1630	83	1713
7:15 AM - 8:15 AM	9	972	7	988	20	4	13	37	4	604	78	686	23	3	30	56	1674	93	1767
7:30 AM - 8:30 AM	15	964	8	987	23	5	10	38	4	638	109	751	28	2	26	56	1738	94	1832
7:45 AM - 8:45 AM	12	917	6	935	22	4	11	37	3	652	121	776	25	5	30	60	1711	97	1808
8:00 AM - 9:00 AM	20	849	9	878	17	5	12	34	3	609	132	744	19	6	37	62	1622	96	1718
AM Peak																			
7:30 AM - 8:30 AM	**15**	**964**	**8**	**987**	**23**	**5**	**10**	**38**	**4**	**638**	**109**	**751**	**28**	**2**	**26**	**56**	**1738**	**94**	**1832**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	8	152	2	162	4	0	1	5	0	189	4	193	18	8	11	37	355	42	397
4:15 PM - 4:30 PM	8	172	3	183	2	3	3	8	5	169	16	190	25	3	14	42	373	50	423
4:30 PM - 4:45 PM	4	173	8	185	1	0	0	1	2	203	14	219	18	6	20	44	404	45	449
4:45 PM - 5:00 PM	8	207	10	225	0	2	3	5	2	212	24	238	28	8	24	60	463	65	528
5:00 PM - 5:15 PM	8	207	9	224	6	0	3	9	6	233	16	255	19	8	27	54	479	63	542
5:15 PM - 5:30 PM	8	229	5	242	3	2	2	7	1	192	10	203	22	6	16	44	445	51	496
5:30 PM - 5:45 PM	6	221	7	234	2	2	3	7	1	211	12	224	17	7	28	52	458	59	517
5:45 PM - 6:00 PM	4	212	5	221	5	4	0	9	2	281	29	312	20	8	35	63	533	72	605
6:00 PM - 6:15 PM	10	218	5	233	2	1	2	5	0	241	19	260	23	5	36	64	493	69	562
6:15 PM - 6:30 PM	11	184	4	199	9	0	1	10	2	236	21	259	19	7	39	65	458	75	533
6:30 PM - 6:45 PM	10	214	6	230	6	2	1	9	1	244	31	276	6	3	28	37	506	46	552
6:45 PM - 7:00 PM	7	202	5	214	8	1	1	10	3	260	22	285	11	1	23	35	499	45	544
Total	92	2391	69	2552	48	17	20	85	25	2671	218	2914	226	70	301	597	5466	682	6148
PM One Hour Volumes																			
4:00 PM - 5:00 PM	28	704	23	755	7	5	7	19	9	773	58	840	89	25	69	183	1595	202	1797
4:15 PM - 5:15 PM	28	759	30	817	9	5	9	23	15	817	70	902	90	25	85	200	1719	223	1942
4:30 PM - 5:30 PM	28	816	32	876	10	4	8	22	11	840	64	915	87	28	87	202	1791	224	2015
4:45 PM - 5:45 PM	30	864	31	925	11	6	11	28	10	848	62	920	86	29	95	210	1845	238	2083
5:00 PM - 6:00 PM	26	869	26	921	16	8	8	32	10	917	67	994	78	29	106	213	1915	245	2160
5:15 PM - 6:15 PM	28	880	22	930	12	9	7	28	4	925	70	999	82	26	115	223	1929	251	2180
5:30 PM - 6:30 PM	31	835	21	887	18	7	6	31	5	969	81	1055	79	27	138	244	1942	275	2217
5:45 PM - 6:45 PM	35	828	20	883	22	7	4	33	5	1002	100	1107	68	23	138	229	1990	262	2252
6:00 PM - 7:00 PM	38	818	20	876	25	4	5	34	6	981	93	1080	59	16	126	201	1956	235	2191
PM Peak																			
5:45 PM - 6:45 PM	**35**	**828**	**20**	**883**	**22**	**7**	**4**	**33**	**5**	**1002**	**100**	**1107**	**68**	**23**	**138**	**229**	**1990**	**262**	**2252**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Guilford Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Guilford Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Damir,Valentir	**EASTBOUND ROAD:**	Guilford Drive
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North &	East &	Total
	Baltimore Avenue - 1				Guilford Road				Baltimore Avenue - 1				Guilford Drive						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
10:00 AM - 11:00 AM	33	691	21	745	39	13	8	60	14	785	47	846	36	10	78	124	1591	184	1775
10:15 AM - 11:15 AM	34	694	20	748	39	16	8	63	13	761	44	818	37	9	68	114	1566	177	1743
10:30 AM - 11:30 AM	32	705	23	760	33	14	9	56	9	787	42	838	37	9	71	117	1598	173	1771
10:45 AM - 11:45 AM	36	739	26	801	32	11	10	53	9	823	39	871	45	6	75	126	1672	179	1851
11:00 AM - 12:00 PM	31	780	23	834	29	9	13	51	8	846	37	891	44	7	64	115	1725	166	1891
11:15 AM - 12:15 PM	33	829	20	882	30	6	18	54	9	872	39	920	42	9	79	130	1802	184	1986
11:30 AM - 12:30 PM	33	849	22	904	34	5	19	58	12	878	41	931	44	9	84	137	1835	195	2030
11:45 AM - 12:45 PM	32	843	21	896	33	4	25	62	9	857	46	912	42	13	80	135	1808	197	2005
12:00 PM - 1:00 PM	35	834	25	894	31	3	22	56	12	818	46	876	45	12	83	140	1770	196	1966
12:15 PM - 1:15 PM	34	839	28	901	32	4	19	55	15	843	40	898	49	15	88	152	1799	207	2006
12:30 PM - 1:30 PM	40	831	24	895	27	5	20	52	12	821	41	874	45	13	91	149	1769	201	1970
12:45 PM - 1:45 PM	40	838	31	909	27	5	14	46	14	835	39	888	52	10	98	160	1797	206	2003
1:00 PM - 2:00 PM	48	825	30	903	26	4	10	40	13	860	38	911	55	9	119	183	1814	223	2037
1:15 PM - 2:15 PM	49	714	38	801	22	98	10	130	13	766	38	817	52	87	104	243	1618	373	1991
1:30 PM - 2:30 PM	40	721	40	801	25	100	7	132	13	749	37	799	52	92	112	256	1600	388	1988
1:45 PM - 2:45 PM	38	705	33	776	21	101	9	131	11	724	38	773	43	95	102	240	1549	371	1920
2:00 PM - 3:00 PM	33	742	31	806	20	101	14	135	10	687	35	732	39	94	81	214	1538	349	1887
2:15 PM - 3:15 PM	32	846	28	906	19	7	13	39	5	760	40	805	37	13	84	134	1711	173	1884
2:30 PM - 3:30 PM	41	890	32	963	18	7	12	37	4	751	41	796	41	8	72	121	1759	158	1917
2:45 PM - 3:45 PM	39	973	35	1047	20	10	9	39	5	768	36	809	48	6	71	125	1856	164	2020
3:00 PM - 4:00 PM	38	1002	31	1071	23	10	5	38	3	795	42	840	46	6	71	123	1911	161	2072
3:15 PM - 4:15 PM	37	1024	28	1089	28	8	6	42	5	786	41	832	43	7	67	117	1921	159	2080
3:30 PM - 4:30 PM	29	991	23	1043	30	7	9	46	6	797	36	839	41	10	58	109	1882	155	2037
3:45 PM - 4:45 PM	31	987	19	1037	27	2	13	42	4	823	37	864	35	10	56	101	1901	143	2044
4:00 PM - 5:00 PM	34	967	21	1022	25	3	14	42	7	804	32	843	43	13	60	116	1865	158	2023
4:15 PM - 5:15 PM	39	984	24	1047	23	4	15	42	10	790	28	828	54	14	62	130	1875	172	2047
4:30 PM - 5:30 PM	43	991	26	1060	24	2	15	41	10	746	30	786	57	11	62	130	1846	171	2017
4:45 PM - 5:45 PM	46	972	30	1048	25	5	15	45	10	721	32	763	61	9	61	131	1811	176	1987
5:00 PM - 6:00 PM	45	940	33	1018	24	5	14	43	12	748	37	797	60	10	58	128	1815	171	1986
Sat Peak																			
3:15 PM - 4:15 PM	37	1024	28	1089	28	8	6	42	5	786	41	832	43	7	67	117	1921	159	2080

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count (5-leg Intersection) - Total Vehicles

PROJECT:	Cafritc - Riverdale	11/8/2011	**ROADWAY #1:**	Baltimore Avenue - 1
W+A JOB NO:	4782	Tuesday	**ROADWAY #2:**	Amherst Road
INTERSECTION:	Route 1 & Amherst Rd.& Queens Chapel Rd.& Pinewa	clear	**ROADWAY #3:**	Baltimore Avenue - 1
LOCATION:	Prince Georges County,MD	Charlie,Alba & Damir	**ROADWAY #4:**	Pineway
		agan	**ROADWAY #5:**	Queens Chapel Road

Time Period	ROADWAY #1: Baltimore Avenue - 1				ROADWAY #2: Amherst Road				ROADWAY #3: Baltimore Avenue - 1				ROADWAY #4: Pineway				ROADWAY #5: Queens Chapel Road				Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	
One Hour Volumes																					
6:00 AM - 7:00 AM		513	1	514	1		1	2	2	299	1	302	2		5	7	3		7	14	839
6:15 AM - 7:15 AM		688	1	689	1		3	4	2	353	1	356	2		4	6	5		14	21	1076
6:30 AM - 7:30 AM	1	864	1	866	1		4	5	3	405	1	409	3		4	7	9		19	30	1317
6:45 AM - 7:45 AM	2	980	3	985	5	2	11	18	3	471	1	475	2		4	6	12		27	41	1525
7:00 AM - 8:00 AM	4	1005	3	1012	4	3	13	20	2	519	2	523	2		2	4	13		50	63	1622
7:15 AM - 8:15 AM	6	1003	4	1013	8	4	13	25	3	550	2	555	1		2	3	13		61	75	1671
7:30 AM - 8:30 AM	7	956	4	967	9	4	14	27	2	573	2	577	2		3	5	11		70	82	1658
7:45 AM - 8:45 AM	6	928	5	939	7	2	8	17	2	564	4	570	2		4	6	11		65	77	1609
8:00 AM - 9:00 AM	4	877	5	886	8	1	8	17	1	563	4	568	3		3	6	10		53	64	1541
8:15 AM - 9:15 AM	5	818	5	828	4		6	10		585	5	590	3		3	6	8		45	53	1487
8:30 AM - 9:30 AM	3	752	6	761	5		6	11		627	5	632	1		2	3	7		34	41	1448
8:45 AM - 9:45 AM	3	664	3	670	5		6	11		641	4	645	1			1	4		30	34	1361
9:00 AM - 10:00 AM	3	620	2	625	5		3	8	3	647	3	653					5		20	25	1311
9:15 AM - 10:15 AM		571	1	572	5		3	8	3	610	2	615					6		16	22	1217
9:30 AM - 10:30 AM	1	564		565	3		1	4	3	614	2	619			1	1	6		22	28	1217
9:45 AM - 10:45 AM	2	563		565	2			2	3	604	2	609			1	1	5		24	30	1207
10:00 AM - 11:00 AM	2	565	2	569	2			2		621	1	622			1	1	3		26	30	1224
10:15 AM - 11:15 AM	2	568	5	575	3			3		650	1	651			1	1	2		23	26	1256
10:30 AM - 11:30 AM	1	552	7	560	3		1	4		644	1	645	1			1	2		20	23	1233
10:45 AM - 11:45 AM	2	552	8	562	3		2	5		672	1	673	1			1	2		16	18	1259
11:00 AM - 12:00 PM	2	560	6	568	2		2	4	1	679	2	682	1			1	3		14	17	1272
11:15 AM - 12:15 PM	2	574	3	579	4		2	6	3	716	4	723	1			1	3		14	17	1326
11:30 AM - 12:30 PM	2	602	2	606	4		2	6	3	711	4	718	2		1	3	3		14	17	1350
11:45 AM - 12:45 PM	2	672	6	680	5		1	6	3	681	5	689	2		1	3	5		19	24	1402
12:00 PM - 1:00 PM	4	705	7	716	9		1	10	3	661	6	670	2	1	3	6	7		19	26	1428
12:15 PM - 1:15 PM	5	709	9	723	7		3	10	1	631	6	638	3	1	4	8	10		18	28	1407
12:30 PM - 1:30 PM	6	714	10	730	10	2	2	14	1	609	6	616	1	1	3	5	11		18	29	1394
12:45 PM - 1:45 PM	6	646	5	657	8	2	4	14	2	655	4	661	3	1	3	7	11		15	26	1365
1:00 PM - 2:00 PM	4	658	5	667	5	2	4	11	1	655	3	659	4		1	5	10		24	34	1376
1:15 PM - 2:15 PM	4	674	4	682	5	2	3	10	1	665	4	670	3		2	5	6		29	36	1403
1:30 PM - 2:30 PM	5	682	3	690	2		3	5	1	675	6	682	3		2	5	6		30	37	1419
1:45 PM - 2:45 PM	4	720	3	727	3		1	4		669	7	676	3		3	6	6		28	36	1449
2:00 PM - 3:00 PM	4	695	3	702	2		2	4		679	7	686	2		3	5	8		25	35	1432
2:15 PM - 3:15 PM	3	679	4	686	3		3	6		730	5	735	2		1	3	10		23	34	1464
2:30 PM - 3:30 PM	2	690	4	696	4		5	9	1	768	4	773	2	1	5	8	9		21	31	1517
2:45 PM - 3:45 PM	4	679	4	687	4	3	5	12	1	740	5	746		1	7	8	9		29	38	1491
3:00 PM - 4:00 PM	6	699	6	711	7	3	4	14	2	762	5	769	2	1	7	10	5		22	27	1531
3:15 PM - 4:15 PM	8	708	4	720	8	3	6	17	5	719	5	729	3	1	7	11	5		22	27	1504
3:30 PM - 4:30 PM	7	717	4	728	9	3	4	16	4	722	5	731	4		3	7	4		21	25	1507
3:45 PM - 4:45 PM	5	743	4	752	9	1	9	19	5	771	3	779	5		1	6	2		16	18	1574
4:00 PM - 5:00 PM	4	760	2	766	7	2	9	18	5	820	4	829	3	1	2	6	4		28	32	1651
4:15 PM - 5:15 PM	2	825	3	830	4	3	7	14	3	866	5	874	3	1	3	7	6		29	35	1760
4:30 PM - 5:30 PM	2	863	4	869	3	3	7	13	4	864	5	873	4	1	3	8	6		38	44	1807
4:45 PM - 5:45 PM	2	911	7	920	3	2	2	7	4	856	8	868	3	1	4	8	6		40	46	1849
5:00 PM - 6:00 PM	5	924	7	936	2	1	4	7	3	883	7	893	4		8	12	7		35	42	1890
5:15 PM - 6:15 PM	8	911	7	926	3		2	5	3	906	9	918	3		8	11	4		42	46	1906
5:30 PM - 6:30 PM	8	876	6	890	3	1	4	8	3	935	9	947	2		11	13	5		39	44	1902
5:45 PM - 6:45 PM	7	839	3	849	3	1	4	8	3	989	8	1000	2		10	12	5		47	52	1921
6:00 PM - 7:00 PM	4	828	2	834	4	2	4	10	3	943	9	955	3		6	9	3		46	49	1857
AM Peak																					
7:15 AM - 8:15 AM	**6**	**1003**	**4**	**1013**	**8**	**4**	**13**	**25**	**3**	**550**	**2**	**555**	**1**	**0**	**2**	**3**	**13**	**0**	**61**	**75**	**1671**
MidDay Peak																					
1:45 PM - 2:45 PM	**4**	**720**	**3**	**727**	**3**	**0**	**1**	**4**		**669**	**7**	**676**	**3**	**0**	**3**	**6**	**6**	**0**	**28**	**36**	**1449**
PM Peak																					
5:45 PM - 6:45 PM	**7**	**839**	**3**	**849**	**3**	**1**	**4**	**8**	**3**	**989**	**8**	**1000**	**2**	**0**	**10**	**12**	**5**	**0**	**47**	**52**	**1921**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count (5-leg Intersection) - Total Vehicles

PROJECT:	Cafritc - Riverdale	**DATE:**	11/12/2011	**ROADWAY #1:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**ROADWAY #2:**	Amherst Road
INTERSECTION:	Route 1 & Amherst Rd.& Queens Chapel Rd.& Pineway	**WEATHER:**	clear	**ROADWAY #3:**	Baltimore Avenue - 1
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Charlie,Avni & Di	**ROADWAY #4:**	Pineway
		INPUTED BY:	agan	**ROADWAY #5:**	Queens Chapel Road

Time	ROADWAY #1: Baltimore Avenue - 1				ROADWAY #2: Amherst Road				ROADWAY #3: Baltimore Avenue - 1				ROADWAY #4: Queens Chappel Road				ROADWAY #5: PineWay				Total
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	PHF	Right	Thru	Left	Total	Right	Thru	Left	Total	
One Hour Volumes																					
10:00 AM - 11:00 AM	10	667	4	681	9		3	12	2	739	7	0.882	11	2	26	39	5	1	4	10	1490
10:15 AM - 11:15 AM	10	682	4	696	8		4	12	2	745	7	0.889	10		26	36	5		1	6	1504
10:30 AM - 11:30 AM	9	688	6	703	10		3	13	2	776	5	0.923	9		29	38	6		4	10	1547
10:45 AM - 11:45 AM	12	727	6	745	9	1	2	12	1	794	5	0.943	8		28	36	4		6	10	1603
11:00 AM - 12:00 PM	7	760	5	772	9	1	3	13	1	796	4	0.94	4		28	32	4		8	12	1630
11:15 AM - 12:15 PM	7	817	4	828	9	1	3	13	1	818	5	0.967	6		27	33	3		9	12	1710
11:30 AM - 12:30 PM	7	841	2	850	5	2	4	11	3	815	5	0.966	4		22	26	1		6	7	1717
11:45 AM - 12:45 PM	4	840	1	845	5	1	4	10	5	786	7	0.937	6		20	26	4		6	10	1689
12:00 PM - 1:00 PM	5	843	5	853	5	1	3	9	8	755	5	0.928	4		23	27	3		4	7	1664
12:15 PM - 1:15 PM	3	840	5	848	5	1	4	10	7	767	4	0.896	2	1	27	30	4		5	9	1675
12:30 PM - 1:30 PM	2	828	6	836	7		3	10	5	739	4	0.862	4	1	25	30	4		8	12	1636
12:45 PM - 1:45 PM	2	845	8	855	6		2	8	4	794	3	0.89	4	1	24	29	2		6	8	1701
1:00 PM - 2:00 PM	3	833	6	842	9		2	11	2	844	3	0.919	5	1	22	28	3		6	9	1739
1:15 PM - 2:15 PM	4	815	6	825	8		2	10	2	804	4	0.877	5		19	24	7		3	10	1679
1:30 PM - 2:30 PM	6	818	4	828	8		4	12	4	827	3	0.903	4	1	19	24	7			7	1705
1:45 PM - 2:45 PM	6	788	2	796	9		5	14	3	764	4	0.834	4	1	26	31	6		3	9	1621
2:00 PM - 3:00 PM	8	824		832	4		5	9	3	705	11	0.899	5	1	25	31	5		6	11	1602
2:15 PM - 3:15 PM	7	823	1	831	6		3	9	3	730	11	0.916	5	1	31	37			6	6	1627
2:30 PM - 3:30 PM	8	876	1	885	4	7	1	12	1	727	11	0.91	4		32	36			6	6	1678
2:45 PM - 3:45 PM	8	969	2	979	3	7	1	11	1	754	11	0.943	2		31	33	1		5	6	1795
3:00 PM - 4:00 PM	6	988	5	999	3	7	2	12	1	771	6	0.958	2		29	31	2		3	5	1825
3:15 PM - 4:15 PM	7	1015	7	1029	1	7	2	10	1	778	5	0.938	3		21	24	2		3	5	1852
3:30 PM - 4:30 PM	4	986	10	1000	2		5	7	4	777	6	0.941	5		21	26	3		3	6	1826
3:45 PM - 4:45 PM	4	972	10	986	2		6	8	5	806	6	0.933	8		18	26	2		2	4	1841
4:00 PM - 5:00 PM	3	965	7	975	2		5	7	4	801	6	0.926	6		21	27	1		1	2	1822
4:15 PM - 5:15 PM	3	986	5	994	3		5	8	4	769	8	0.892	6	1	24	31	3		2	5	1819
4:30 PM - 5:30 PM	4	998	2	1004	3		3	6	1	729	9	0.844	8	1	21	30	3	1	4	8	1787
4:45 PM - 5:45 PM	5	989	1	995	3		1	4		732	7	0.844	6	1	21	28	4	1	3	8	1774
5:00 PM - 6:00 PM	5	954	2	961	4		2	6	1	754	6	0.869	9	1	18	28	4	1	3	8	1764
Sat Peak																					
3:15 PM - 4:15 PM	7	1015	7	1029	1	7	2	10	1	778	5	0.938	3		21	24	2		3	5	1852

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	#######	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Van Buren St.	**WEATHER:**	clear	**WESTBOUND ROAD:**	0
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Majda & Di	**EASTBOUND ROAD:**	Van Buren Street
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North	East	
	Baltimore Avenue - 1				0				Baltimore Avenue - 1				Van Buren Street				&	&	Total
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
6:00 AM - 7:00 AM	5	506		511						309	4	313	13		2	15	824	15	839
6:15 AM - 7:15 AM	9	679		688						355	5	360	16		2	18	1048	18	1066
6:30 AM - 7:30 AM	23	859		882						412	9	421	20		2	22	1303	22	1325
6:45 AM - 7:45 AM	31	972		1003						479	18	497	23		1	24	1500	24	1524
7:00 AM - 8:00 AM	44	996		1040						527	27	554	23		1	24	1594	24	1618
7:15 AM - 8:15 AM	51	989		1040						559	26	585	24		2	26	1625	26	1651
7:30 AM - 8:30 AM	45	942		987						583	22	605	24		3	27	1592	27	1619
7:45 AM - 8:45 AM	40	915		955						577	15	592	21		3	24	1547	24	1571
8:00 AM - 9:00 AM	26	879		905						578	8	586	20		2	22	1491	22	1513
8:15 AM - 9:15 AM	16	826		842						611	11	622	19		2	21	1464	21	1485
8:30 AM - 9:30 AM	16	760		776						648	12	660	16		1	17	1436	17	1453
8:45 AM - 9:45 AM	12	683		695						665	12	677	19		1	20	1372	20	1392
9:00 AM - 10:00 AM	12	627		639						657	9	666	18		1	19	1305	19	1324
9:15 AM - 10:15 AM	12	584		596						617	5	622	15			15	1218	15	1233
9:30 AM - 10:30 AM	5	567		572						615	7	622	15			15	1194	15	1209
9:45 AM - 10:45 AM	7	564		571						611	8	619	11			11	1190	11	1201
10:00 AM - 11:00 AM	5	556		561						627	8	635	9		1	10	1196	10	1206
10:15 AM - 11:15 AM	8	561		569						647	11	658	11		2	13	1227	13	1240
10:30 AM - 11:30 AM	8	544		552						634	9	643	16		2	18	1195	18	1213
10:45 AM - 11:45 AM	7	542		549						658	8	666	15		2	17	1215	17	1232
11:00 AM - 12:00 PM	6	569		575						663	12	675	16		1	17	1250	17	1267
11:15 AM - 12:15 PM	3	574		577						701	10	711	18		1	19	1288	19	1307
11:30 AM - 12:30 PM	3	603		606						714	12	726	11		1	12	1332	12	1344
11:45 AM - 12:45 PM	3	677		680						683	13	696	11		2	13	1376	13	1389
12:00 PM - 1:00 PM	5	701		706						676	9	685	6		2	8	1391	8	1399
12:15 PM - 1:15 PM	7	708		715						654	11	665	3		1	4	1380	4	1384
12:30 PM - 1:30 PM	11	715		726						637	11	648	4		1	5	1374	5	1379
12:45 PM - 1:45 PM	12	651		663						672	11	683	7			7	1346	7	1353
1:00 PM - 2:00 PM	14	660		674						674	15	689	7		1	8	1363	8	1371
1:15 PM - 2:15 PM	14	663		677						660	21	681	10		1	11	1358	11	1369
1:30 PM - 2:30 PM	13	672		685						662	17	679	10		1	11	1364	11	1375
1:45 PM - 2:45 PM	12	708		720						663	20	683	7		1	8	1403	8	1411
2:00 PM - 3:00 PM	12	690		702						682	17	699	10			10	1401	10	1411
2:15 PM - 3:15 PM	12	690		702						730	12	742	7		1	8	1444	8	1452
2:30 PM - 3:30 PM	11	707		718						765	15	780	11		1	12	1498	12	1510
2:45 PM - 3:45 PM	11	695		706						743	10	753	14		1	15	1459	15	1474
3:00 PM - 4:00 PM	7	718		725						754	15	769	18		2	20	1494	20	1514
3:15 PM - 4:15 PM	6	723		729						740	15	755	17		1	18	1484	18	1502
3:30 PM - 4:30 PM	7	728		735						744	15	759	15		1	16	1494	16	1510
3:45 PM - 4:45 PM	10	748		758						782	20	802	14		1	15	1560	15	1575
4:00 PM - 5:00 PM	13	757		770						826	20	846	9			9	1616	9	1625
4:15 PM - 5:15 PM	13	825		838						863	20	883	14			14	1721	14	1735
4:30 PM - 5:30 PM	17	867		884						863	21	884	16			16	1768	16	1784
4:45 PM - 5:45 PM	15	908		923						878	23	901	15			15	1824	15	1839
5:00 PM - 6:00 PM	16	929		945						903	22	925	16			16	1870	16	1886
5:15 PM - 6:15 PM	16	909		925						929	22	951	13			13	1876	13	1889
5:30 PM - 6:30 PM	9	878		887						965	24	989	12		2	14	1876	14	1890
5:45 PM - 6:45 PM	10	842		852						992	26	1018	17		5	22	1870	22	1892
6:00 PM - 7:00 PM	9	820		829						963	22	985	14		6	20	1814	20	1834
AM Peak																			
7:15 AM - 8:15 AM	**51**	**989**		**1040**						**559**	**26**	**585**	**24**		**2**	**26**	**1625**	**26**	**1651**
Midday Peak																			
12:00 PM - 1:00 PM	**5**	**701**		**706**						**676**	**9**	**685**	**6**		**2**	**8**	**1391**	**8**	**1399**
PM Peak																			
5:45 PM - 6:45 PM	**10**	**842**		**852**						**992**	**26**	**1018**	**17**		**5**	**22**	**1870**	**22**	**1892**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Van Buren St.	**WEATHER:**	clear	**WESTBOUND ROAD:**	0
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Admir & Colle	**EASTBOUND ROAD:**	Van Buren Street
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North & South	East & West	Total
	Baltimore Avenue - 1				0				Baltimore Avenue - 1				Van Buren Street						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																			
10:00 AM - 11:00 AM	12	646		658						720	15	735	20		3	23	1393	23	1416
10:15 AM - 11:15 AM	12	678		690						717	17	734	17		4	21	1424	21	1445
10:30 AM - 11:30 AM	15	681		696						737	13	750	17		5	22	1446	22	1468
10:45 AM - 11:45 AM	10	736		746						773	16	789	14		4	18	1535	18	1553
11:00 AM - 12:00 PM	10	767		777						787	16	803	14		5	19	1580	19	1599
11:15 AM - 12:15 PM	11	819		830						824	16	840	16		6	22	1670	22	1692
11:30 AM - 12:30 PM	9	844		853						846	17	863	15		6	21	1716	21	1737
11:45 AM - 12:45 PM	9	832		841						816	16	832	15		6	21	1673	21	1694
12:00 PM - 1:00 PM	7	844		851						783	13	796	14		5	19	1647	19	1666
12:15 PM - 1:15 PM	7	839		846						772	12	784	12		3	15	1630	15	1645
12:30 PM - 1:30 PM	6	833		839						751	14	765	10		2	12	1604	12	1616
12:45 PM - 1:45 PM	10	842		852						786	12	798	9		2	11	1650	11	1661
1:00 PM - 2:00 PM	14	830		844						824	14	838	8		2	10	1682	10	1692
1:15 PM - 2:15 PM	13	801		814						813	13	826	7		3	10	1640	10	1650
1:30 PM - 2:30 PM	14	801		815						821	17	838	8		3	11	1653	11	1664
1:45 PM - 2:45 PM	13	807		820						780	15	795	12		5	17	1615	17	1632
2:00 PM - 3:00 PM	12	810		822						727	13	740	12		4	16	1562	16	1578
2:15 PM - 3:15 PM	13	824		837						724	15	739	12		4	16	1576	16	1592
2:30 PM - 3:30 PM	17	864		881						710	12	722	11		5	16	1603	16	1619
2:45 PM - 3:45 PM	14	930		944						735	11	746	6		3	9	1690	9	1699
3:00 PM - 4:00 PM	11	969		980						756	13	769	5		4	9	1749	9	1758
3:15 PM - 4:15 PM	17	981		998						761	12	773	6		4	10	1771	10	1781
3:30 PM - 4:30 PM	14	969		983						754	8	762	9		3	12	1745	12	1757
3:45 PM - 4:45 PM	17	954		971						770	8	778	8		3	11	1749	11	1760
4:00 PM - 5:00 PM	19	939		958						762	7	769	12		2	14	1727	14	1741
4:15 PM - 5:15 PM	12	981		993						750	6	756	14		1	15	1749	15	1764
4:30 PM - 5:30 PM	14	993		1007						719	8	727	11			11	1734	11	1745
4:45 PM - 5:45 PM	12	984		996						710	15	725	14			14	1721	14	1735
5:00 PM - 6:00 PM	10	964		974						726	15	741	17			17	1715	17	1732
Sat Peak																			
3:15 PM - 4:15 PM	17	981		998						761	12	773	6		4	10	1771	10	1781

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Route 410	**WEATHER:**	clear	**WESTBOUND ROAD:**	East West Highway - 410
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Admir,Luz & Yas	**EASTBOUND ROAD:**	East West Highway - 410
		INPUTED BY:	agan		

Time		Southbound Baltimore Avenue - 1				Westbound East West Highway - 410				Northbound Baltimore Avenue - 1				Eastbound East West Highway - 410				North & South	East & West	Total
Period		Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																				
6:00 AM	- 7:00 AM	88	367	56	511	53	1231	165	1449	63	172	240	475	195	618	84	897	986	2346	3332
6:15 AM	- 7:15 AM	117	476	70	663	71	1400	195	1666	81	209	265	555	202	687	98	987	1218	2653	3871
6:30 AM	- 7:30 AM	127	573	103	803	83	1502	230	1815	91	256	286	633	205	732	116	1053	1436	2868	4304
6:45 AM	- 7:45 AM	153	627	139	919	97	1575	245	1917	113	303	294	710	216	798	131	1145	1629	3062	4691
7:00 AM	- 8:00 AM	171	650	168	989	109	1634	255	1998	110	362	283	755	240	863	143	1246	1744	3244	4988
7:15 AM	- 8:15 AM	183	635	185	1003	102	1643	257	2002	109	401	294	804	228	841	144	1213	1807	3215	5022
7:30 AM	- 8:30 AM	210	628	166	1004	101	1633	243	1977	107	413	289	809	226	862	163	1251	1813	3228	5041
7:45 AM	- 8:45 AM	209	604	159	972	100	1633	239	1972	94	402	288	784	236	806	170	1212	1756	3184	4940
8:00 AM	- 9:00 AM	197	582	144	923	115	1558	232	1905	94	363	299	756	227	771	174	1172	1679	3077	4756
8:15 AM	- 9:15 AM	202	575	128	905	127	1468	236	1831	91	370	302	763	241	721	186	1148	1668	2979	4647
8:30 AM	- 9:30 AM	194	526	117	837	132	1351	233	1716	93	402	316	811	243	672	182	1097	1648	2813	4461
8:45 AM	- 9:45 AM	183	482	96	761	141	1151	207	1499	99	413	299	811	245	692	182	1119	1572	2618	4190
9:00 AM	- 10:00 AM	168	434	87	689	107	979	195	1281	105	411	290	806	244	672	188	1104	1495	2385	3880
9:15 AM	- 10:15 AM	163	376	90	629	104	895	174	1173	106	387	270	763	224	682	168	1074	1392	2247	3639
9:30 AM	- 10:30 AM	154	367	118	639	115	827	157	1099	105	370	232	707	231	657	157	1045	1346	2144	3490
9:45 AM	- 10:45 AM	160	348	130	638	101	768	150	1019	108	374	235	717	227	601	152	980	1355	1999	3354
10:00 AM	- 11:00 AM	176	341	134	651	110	759	135	1004	103	399	237	739	222	600	139	961	1390	1965	3355
10:15 AM	- 11:15 AM	159	349	136	644	102	699	134	935	96	405	234	735	245	588	146	979	1379	1914	3293
10:30 AM	- 11:30 AM	159	340	121	620	79	671	124	874	95	406	237	738	236	608	148	992	1358	1866	3224
10:45 AM	- 11:45 AM	154	334	116	604	84	679	131	894	96	414	229	739	227	626	146	999	1343	1893	3236
11:00 AM	- 12:00 PM	144	338	114	596	85	653	135	873	97	397	217	711	238	623	151	1012	1307	1885	3192
11:15 AM	- 12:15 PM	164	340	115	619	97	668	137	902	86	402	229	717	255	635	178	1068	1336	1970	3306
11:30 AM	- 12:30 PM	169	343	130	642	113	689	139	941	74	389	245	708	244	630	178	1052	1350	1993	3343
11:45 AM	- 12:45 PM	192	376	155	723	109	707	144	960	58	356	262	676	264	653	180	1097	1399	2057	3456
12:00 PM	- 1:00 PM	203	379	171	753	115	734	146	995	50	360	281	691	267	668	180	1115	1444	2110	3554
12:15 PM	- 1:15 PM	181	412	161	754	107	746	148	1001	52	382	268	702	257	706	174	1137	1456	2138	3594
12:30 PM	- 1:30 PM	183	394	153	730	100	760	158	1018	56	393	278	727	281	747	174	1202	1457	2220	3677
12:45 PM	- 1:45 PM	172	379	145	696	104	730	144	978	66	442	277	785	274	768	172	1214	1481	2192	3673
1:00 PM	- 2:00 PM	179	389	142	710	101	687	136	924	77	460	267	804	273	780	162	1215	1514	2139	3653
1:15 PM	- 2:15 PM	200	362	175	737	101	660	141	902	97	456	278	831	265	781	153	1199	1568	2101	3669
1:30 PM	- 2:30 PM	212	394	178	784	95	682	153	930	110	464	259	833	259	775	153	1187	1617	2117	3734
1:45 PM	- 2:45 PM	206	412	191	809	98	738	170	1006	119	464	254	837	251	754	147	1152	1646	2158	3804
2:00 PM	- 3:00 PM	184	387	188	759	85	832	185	1102	136	466	261	863	259	745	157	1161	1622	2263	3885
2:15 PM	- 3:15 PM	155	395	193	743	84	912	192	1188	132	487	273	892	256	711	147	1114	1635	2302	3937
2:30 PM	- 3:30 PM	148	387	196	731	82	910	187	1179	128	522	279	929	262	712	142	1116	1660	2295	3955
2:45 PM	- 3:45 PM	145	368	186	699	74	936	185	1195	113	471	282	866	284	807	160	1251	1565	2446	4011
3:00 PM	- 4:00 PM	151	383	192	726	87	917	181	1185	93	484	273	850	278	934	157	1369	1576	2554	4130
3:15 PM	- 4:15 PM	176	389	177	742	90	884	170	1144	85	453	255	793	271	1067	162	1500	1535	2644	4179
3:30 PM	- 4:30 PM	171	407	173	751	102	906	178	1186	91	433	270	794	260	1181	176	1617	1545	2803	4348
3:45 PM	- 4:45 PM	189	434	172	795	106	955	171	1232	105	505	281	891	256	1208	165	1629	1686	2861	4547
4:00 PM	- 5:00 PM	211	433	182	826	108	1018	172	1298	106	540	292	938	276	1225	177	1678	1764	2976	4740
4:15 PM	- 5:15 PM	222	445	202	869	109	1079	173	1361	115	575	307	997	295	1232	199	1726	1866	3087	4953
4:30 PM	- 5:30 PM	243	468	210	921	109	1120	179	1408	110	579	272	961	308	1268	216	1792	1882	3200	5082
4:45 PM	- 5:45 PM	245	477	227	949	124	1128	182	1434	92	574	240	906	306	1309	242	1857	1855	3291	5146
5:00 PM	- 6:00 PM	240	502	225	967	129	1164	191	1484	101	583	240	924	283	1316	248	1847	1891	3331	5222
5:15 PM	- 6:15 PM	239	510	208	957	139	1179	198	1516	98	595	238	931	289	1322	254	1865	1888	3381	5269
5:30 PM	- 6:30 PM	224	506	216	946	151	1179	188	1518	96	606	282	984	281	1306	244	1831	1930	3349	5279
5:45 PM	- 6:45 PM	204	517	206	927	143	1117	191	1451	118	618	314	1050	281	1207	235	1723	1977	3174	5151
6:00 PM	- 7:00 PM	191	505	190	886	146	1063	198	1407	125	598	318	1041	283	1117	230	1630	1927	3037	4964
AM Peak																				
7:30 AM	**- 8:30 AM**	**210**	**628**	**166**	**1004**	**101**	**1633**	**243**	**1977**	**107**	**413**	**289**	**809**	**226**	**862**	**163**	**1251**	**1813**	**3228**	**5041**
MidDay Peak																				
12:30 PM	**- 1:30 PM**	**183**	**394**	**153**	**730**	**100**	**760**	**158**	**1018**	**56**	**393**	**278**	**727**	**281**	**747**	**174**	**1202**	**1457**	**2220**	**3677**
PM Peak																				
5:30 PM	**- 6:30 PM**	**224**	**506**	**216**	**946**	**151**	**1179**	**188**	**1518**	**96**	**606**	**282**	**984**	**281**	**####**	**244**	**1831**	**1930**	**3349**	**5279**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Route 410	**WEATHER:**	clear	**WESTBOUND ROAD:**	East West Highway - 410
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Luz,Alba & Ma	**EASTBOUND ROAD:**	East West Highway - 410
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North & South	East & West	Total
	Baltimore Avenue - 1				East West Highway - 410				Baltimore Avenue - 1				East West Highway - 410						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																			
10:00 AM - 11:00 AM	186	411	139	736	106	1026	226	1358	86	433	276	795	208	811	204	1223	1531	2581	4112
10:15 AM - 11:15 AM	190	416	149	755	107	1034	199	1340	85	419	279	783	231	898	209	1338	1538	2678	4216
10:30 AM - 11:30 AM	178	412	169	759	109	1028	196	1333	90	435	288	813	235	905	205	1345	1572	2678	4250
10:45 AM - 11:45 AM	199	437	177	813	119	1008	207	1334	94	463	328	885	241	928	213	1382	1698	2716	4414
11:00 AM - 12:00 PM	222	455	186	863	137	1017	215	1369	97	474	318	889	263	981	208	1452	1752	2821	4573
11:15 AM - 12:15 PM	254	473	197	924	140	1002	217	1359	100	491	317	908	273	954	221	1448	1832	2807	4639
11:30 AM - 12:30 PM	283	475	188	946	141	1003	212	1356	94	491	311	896	283	963	226	1472	1842	2828	4670
11:45 AM - 12:45 PM	290	466	182	938	136	1031	198	1365	86	493	279	858	266	1000	223	1489	1796	2854	4650
12:00 PM - 1:00 PM	304	488	176	968	120	1021	181	1322	80	489	267	836	269	1016	216	1501	1804	2823	4627
12:15 PM - 1:15 PM	286	496	175	957	118	1079	190	1387	92	493	265	850	263	1045	221	1529	1807	2916	4723
12:30 PM - 1:30 PM	293	496	172	961	115	1112	175	1402	98	498	260	856	252	1073	224	1549	1817	2951	4768
12:45 PM - 1:45 PM	280	498	172	950	114	1117	159	1390	123	529	265	917	250	1037	219	1506	1867	2896	4763
1:00 PM - 2:00 PM	271	480	160	911	113	1129	154	1396	144	519	277	940	237	1040	237	1514	1851	2910	4761
1:15 PM - 2:15 PM	267	469	150	886	116	1088	141	1345	148	517	283	948	244	1041	225	1510	1834	2855	4689
1:30 PM - 2:30 PM	257	477	139	873	120	1065	150	1335	163	528	283	974	249	1052	232	1533	1847	2868	4715
1:45 PM - 2:45 PM	262	486	137	885	121	1047	154	1322	144	473	290	907	269	1098	227	1594	1792	2916	4708
2:00 PM - 3:00 PM	262	478	148	888	112	1058	185	1355	124	452	302	878	268	1069	212	1549	1766	2904	4670
2:15 PM - 3:15 PM	271	460	154	885	119	1059	180	1358	112	453	290	855	264	1077	194	1535	1740	2893	4633
2:30 PM - 3:30 PM	265	489	150	904	119	1063	184	1366	90	434	306	830	264	1094	174	1532	1734	2898	4632
2:45 PM - 3:45 PM	277	529	177	983	117	1098	197	1412	93	444	305	842	237	1057	191	1485	1825	2897	4722
3:00 PM - 4:00 PM	296	554	191	1041	122	1108	187	1417	83	428	298	809	239	1045	193	1477	1850	2894	4744
3:15 PM - 4:15 PM	287	570	191	1048	109	1144	212	1465	68	413	303	784	224	980	224	1428	1832	2893	4725
3:30 PM - 4:30 PM	298	567	201	1066	102	1158	207	1467	86	398	277	761	218	941	224	1383	1827	2850	4677
3:45 PM - 4:45 PM	293	531	186	1010	102	1156	195	1453	96	420	281	797	244	966	232	1442	1807	2895	4702
4:00 PM - 5:00 PM	277	516	194	987	108	1160	189	1457	106	456	292	854	239	979	225	1443	1841	2900	4741
4:15 PM - 5:15 PM	280	537	215	1032	117	1122	165	1404	122	442	301	865	243	1031	203	1477	1897	2881	4778
4:30 PM - 5:30 PM	283	535	218	1036	119	1146	185	1450	103	455	275	833	262	1065	196	1523	1869	2973	4842
4:45 PM - 5:45 PM	275	566	216	1057	134	1131	187	1452	83	453	265	801	250	1056	177	1483	1858	2935	4793
5:00 PM - 6:00 PM	260	590	195	1045	141	1131	191	1463	84	427	245	756	248	1058	206	1512	1801	2975	4776
Sat Peak																			
4:30 PM - 5:30 PM	283	535	218	1036	119	1146	185	1450	103	455	275	833	262	1065	196	1523	1869	2973	4842

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Queensbury Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Queensbury Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Sterling & Dragan	**EASTBOUND ROAD:**	Queensbury Road
		INPUTED BY:	agan		

Time Period	Southbound Baltimore Avenue - 1				Westbound Queensbury Road					Northbound Baltimore Avenue - 1				Eastbound Queensbury Road				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	F	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																				
6:00 AM - 6:15 AM	11	108	7	126	7	5	5	17		4	75	4	83	2	0	5	7	209	24	233
6:15 AM - 6:30 AM	5	139	7	151	9	10	11	30		4	82	6	92	2	6	3	11	243	41	284
6:30 AM - 6:45 AM	6	195	7	208	12	7	7	26		2	119	8	129	4	11	5	20	337	46	383
6:45 AM - 7:00 AM	9	226	9	244	13	13	12	38		4	113	19	136	7	9	7	23	380	61	441
7:00 AM - 7:15 AM	14	236	18	268	16	14	27	57		9	126	6	141	7	16	9	32	409	89	498
7:15 AM - 7:30 AM	10	287	4	301	13	28	31	72		16	156	17	189	19	18	16	53	490	125	615
7:30 AM - 7:45 AM	13	278	16	307	9	29	29	67		23	166	10	199	11	26	18	55	506	122	628
7:45 AM - 8:00 AM	11	289	8	308	11	14	18	43		17	178	11	206	15	23	13	51	514	94	608
8:00 AM - 8:15 AM	7	254	11	272	18	31	20	69		20	161	13	194	14	27	11	52	466	121	587
8:15 AM - 8:30 AM	13	248	5	266	17	26	22	65		11	108	31	150	8	27	17	52	416	117	533
8:30 AM - 8:45 AM	8	275	11	294	22	43	22	87		9	157	12	178	22	24	8	54	472	141	613
8:45 AM - 9:00 AM	8	265	8	281	13	22	12	47		9	135	13	157	14	14	15	43	438	90	528
Total	115	2800	111	3026	160	242	216	618		128	1576	150	1854	125	201	127	453	4880	1071	5951
AM One Hour Volumes																				
6:00 AM - 7:00 AM	31	668	30	729	41	35	35	111		14	389	37	440	15	26	20	61	1169	172	1341
6:15 AM - 7:15 AM	34	796	41	871	50	44	57	151		19	440	39	498	20	42	24	86	1369	237	1606
6:30 AM - 7:30 AM	39	944	38	1021	54	62	77	193		31	514	50	595	37	54	37	128	1616	321	1937
6:45 AM - 7:45 AM	46	1027	47	1120	51	84	99	234		52	561	52	665	44	69	50	163	1785	397	2182
7:00 AM - 8:00 AM	48	1090	46	1184	49	85	105	239		65	626	44	735	52	83	56	191	1919	430	2349
7:15 AM - 8:15 AM	41	1108	39	1188	51	102	98	251		76	661	51	788	59	94	58	211	1976	462	2438
7:30 AM - 8:30 AM	44	1069	40	1153	55	100	89	244		71	613	65	749	48	103	59	210	1902	454	2356
7:45 AM - 8:45 AM	39	1066	35	1140	68	114	82	264		57	604	67	728	59	101	49	209	1868	473	2341
8:00 AM - 9:00 AM	36	1042	35	1113	70	122	76	268		49	561	69	679	58	92	51	201	1792	469	2261
AM Peak																				
7:15 AM - 8:15 AM	**41**	**1108**	**39**	**1188**	**51**	**102**	**98**	**251**		**76**	**661**	**51**	**788**	**59**	**94**	**58**	**211**	**1976**	**462**	**2438**
PM 15 Minute Volumes																				
4:00 PM - 4:15 PM	18	142	14	174	13	28	11	52		24	167	29	220	21	44	14	79	394	131	525
4:15 PM - 4:30 PM	35	190	12	237	16	36	6	58		31	218	22	271	24	49	14	87	508	145	653
4:30 PM - 4:45 PM	23	212	21	256	20	19	8	47		17	206	23	246	12	50	20	82	502	129	631
4:45 PM - 5:00 PM	30	195	31	256	15	18	11	44		11	220	21	252	25	59	20	104	508	148	656
5:00 PM - 5:15 PM	20	223	32	275	17	41	16	74		35	178	22	235	21	63	10	94	510	168	678
5:15 PM - 5:30 PM	30	213	20	263	13	36	14	63		16	131	20	167	21	68	23	112	430	175	605
5:30 PM - 5:45 PM	22	209	32	263	16	26	8	50		19	146	26	191	21	53	17	91	454	141	595
5:45 PM - 6:00 PM	31	198	20	249	22	22	10	54		20	225	34	279	17	57	17	91	528	145	673
6:00 PM - 6:15 PM	13	218	17	248	11	29	9	49		28	208	18	254	13	53	14	80	502	129	631
6:15 PM - 6:30 PM	22	189	28	239	16	43	11	70		11	205	27	243	19	53	17	89	482	159	641
6:30 PM - 6:45 PM	25	213	28	266	15	33	12	60		18	249	27	294	17	47	14	78	560	138	698
6:45 PM - 7:00 PM	14	208	19	241	10	25	13	48		22	186	16	224	21	42	22	85	465	133	598
Total	283	2410	274	2967	184	356	129	669		252	2339	285	2876	232	638	202	1072	5843	1741	7584
PM One Hour Volumes																				
4:00 PM - 5:00 PM	106	739	78	923	64	101	36	201		83	811	95	989	82	202	68	352	1912	553	2465
4:15 PM - 5:15 PM	108	820	96	1024	68	114	41	223		94	822	88	1004	82	221	64	367	2028	590	2618
4:30 PM - 5:30 PM	103	843	104	1050	65	114	49	228		79	735	86	900	79	240	73	392	1950	620	2570
4:45 PM - 5:45 PM	102	840	115	1057	61	121	49	231		81	675	89	845	88	243	70	401	1902	632	2534
5:00 PM - 6:00 PM	103	843	104	1050	68	125	48	241		90	680	102	872	80	241	67	388	1922	629	2551
5:15 PM - 6:15 PM	96	838	89	1023	62	113	41	216		83	710	98	891	72	231	71	374	1914	590	2504
5:30 PM - 6:30 PM	88	814	97	999	65	120	38	223		78	784	105	967	70	216	65	351	1966	574	2540
5:45 PM - 6:45 PM	91	818	93	1002	64	127	42	233		77	887	106	1070	66	210	62	338	2072	571	2643
6:00 PM - 7:00 PM	74	828	92	994	52	130	45	227		79	848	88	1015	70	195	67	332	2009	559	2568
PM Peak																				
5:45 PM - 6:45 PM	**91**	**818**	**93**	**1002**	**64**	**127**	**42**	**233**		**77**	**887**	**106**	**1070**	**66**	**210**	**62**	**338**	**2072**	**571**	**2643**

Wells & Associates,Inc

McLean, Virginia

Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	2/29/2012	SOUTHBOUND ROAD:	Baltimore Avenue - 1
W & A JOB NO.:	4782	DAY:	Wednesday	NORTHBOUND ROAD:	Baltimore Avenue - 1
INTERSECTION:	Route 1 & Queensbury Rd.	WEATHER:	rain	WESTBOUND ROAD:	Queensbury Road
LOCATION:	Montgomery Co.,MD	COUNTED BY	Yas & Jose	EASTBOUND ROAD:	Queensbury Road
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Baltimore Avenue - 1				Westbound Queensbury Road				Northbound Baltimore Avenue - 1				Eastbound Queensbury Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
11:00-11:15	12	137	14	163	18	17	12	47	9	125	9	143	12	12	14	38	306	85	391		11:00-11:15
11:15-11:30	9	150	9	168	6	16	9	31	7	157	12	176	6	17	8	31	344	62	406		11:15-11:30
11:30-11:45	8	122	13	143	16	16	12	44	8	125	5	138	12	15	6	33	281	77	358		11:30-11:45
11:45-12:00	14	156	16	186	6	19	12	37	8	137	12	157	8	19	5	32	343	69	412		11:45-12:00
12:00-12:15	9	152	12	173	9	14	10	33	11	132	5	148	12	18	15	45	321	78	399		12:00-12:15
12:15-12:30	15	130	10	155	12	21	10	43	17	153	10	180	12	11	10	33	335	76	411		12:15-12:30
12:30-12:45	12	162	17	191	10	25	17	52	7	151	16	174	16	14	10	40	365	92	457		12:30-12:45
12:45-1:00	12	146	15	173	10	13	6	29	10	166	10	186	10	19	12	41	359	70	429		12:45-1:00
1:00-1:15	9	170	17	196	16	25	6	47	14	189	8	211	11	20	12	43	407	90	497		1:00-1:15
1:15-1:30	13	166	10	189	12	16	9	37	27	173	13	213	10	25	9	44	402	81	483		1:15-1:30
1:30-1:45	14	181	16	211	12	19	7	38	25	175	14	214	13	17	15	45	425	83	508		1:30-1:45
1:45-2:00	19	132	25	176	14	12	6	32	10	167	8	185	18	29	19	66	361	98	459		1:45-2:00
2:00-2:15	17	160	14	191	9	17	11	37	16	183	15	214	18	29	16	63	405	100	505		2:00-2:15
2:15-2:30	22	149	12	183	10	13	8	31	8	204	15	227	19	28	18	65	410	96	506		2:15-2:30
2:30-2:45	22	184	11	217	12	27	12	51	8	162	7	177	19	27	16	62	394	113	507		2:30-2:45
2:45-3:00	20	142	10	172	13	31	11	55	38	197	18	253	12	32	12	56	425	111	536		2:45-3:00
4 Hour Totals	**227**	**2,439**	**221**	**2,887**	**185**	**301**	**158**	**644**	**223**	**2,596**	**177**	**2,996**	**208**	**332**	**197**	**737**	**5,883**	**1,381**	**7,264**		
1 Hour Totals																					
11:00-12:00	50	600	55	705	37	79	49	165	43	573	43	659	48	62	40	150	1,364	315	1,679	0.92	11:00-12:00
11:15-12:15	48	590	54	692	41	73	43	157	45	602	41	688	50	62	47	159	1,380	316	1,696	0.93	11:15-12:15
11:30-12:30	48	608	59	715	48	84	39	171	48	659	44	751	49	64	44	157	1,466	328	1,794	0.90	11:30-12:30
11:45-12:45	46	644	59	749	48	79	38	165	58	679	47	784	47	78	43	168	1,533	333	1,866	0.94	11:45-12:45
12:00-1:00	48	663	58	769	50	73	28	151	76	703	45	824	44	81	48	173	1,593	324	1,917	0.94	12:00-1:00
12:15-1:15	55	649	68	772	54	72	28	154	76	704	43	823	52	91	55	198	1,595	352	1,947	0.96	12:15-1:15
12:30-1:30	63	639	65	767	47	64	33	144	78	698	50	826	59	100	59	218	1,593	362	1,955	0.96	12:30-1:30
12:45-1:45	72	622	67	761	45	61	32	138	59	729	52	840	68	103	68	239	1,601	377	1,978	0.97	12:45-1:45
1:00-2:00	80	625	62	767	45	69	37	151	42	716	45	803	74	113	69	256	1,570	407	1,977	0.97	1:00-2:00
1:15-2:15	81	635	47	763	44	88	42	174	70	746	55	871	68	116	62	246	1,634	420	2,054	0.96	1:15-2:15
1:30-2:30	64	475	33	572	35	71	31	137	54	563	40	657	50	87	46	183	1,229	320	1,549	0.72	1:30-2:30
1:45-2:45	42	326	21	389	25	58	23	106	46	359	25	430	31	59	28	118	819	224	1,043	0.49	1:45-2:45
2:00-3:00	20	142	10	172	13	31	11	55	38	197	18	253	12	32	12	56	425	111	536	0.25	2:00-3:00
Midday Peak 1:15-2:15	**81**	**635**	**47**	**763**	**44**	**88**	**42**	**174**	**70**	**746**	**55**	**871**	**68**	**116**	**62**	**246**	**1,634**	**420**	**2,054**	**0.96**	**Midday Peak 1:15-2:15**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Queensbury Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Queensbery Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Steling & Di	**EASTBOUND ROAD:**	Queensbery Road
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North &	East &	Total
	Baltimore Avenue - 1				Queensbery Road				Baltimore Avenue - 1				Queensbery Road						
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
One Hour Volumes																			
10:00 AM - 11:00 AM	55	689	79	823	114	102	57	273	39	642	62	743	51	85	80	216	1566	489	2055
10:15 AM - 11:15 AM	63	704	88	855	109	105	57	271	45	655	60	760	52	99	86	237	1615	508	2123
10:30 AM - 11:30 AM	65	701	86	852	113	116	48	277	51	686	70	807	63	118	80	261	1659	538	2197
10:45 AM - 11:45 AM	61	750	90	901	109	121	47	277	58	736	86	880	70	133	78	281	1781	558	2339
11:00 AM - 12:00 PM	62	770	110	942	107	109	38	254	60	764	101	925	86	129	76	291	1867	545	2412
11:15 AM - 12:15 PM	55	797	122	974	102	91	29	222	61	767	110	938	81	130	71	282	1912	504	2416
11:30 AM - 12:30 PM	59	810	118	987	94	79	31	204	63	778	115	956	85	120	68	273	1943	477	2420
11:45 AM - 12:45 PM	64	750	108	922	82	94	40	216	48	773	114	935	87	107	68	262	1857	478	2335
12:00 PM - 1:00 PM	79	785	102	966	92	98	49	239	52	753	115	920	84	131	62	277	1886	516	2402
12:15 PM - 1:15 PM	91	778	92	961	90	106	50	246	56	752	123	931	91	133	56	280	1892	526	2418
12:30 PM - 1:30 PM	82	764	90	936	90	116	44	250	51	751	119	921	85	137	58	280	1857	530	2387
12:45 PM - 1:45 PM	82	787	93	962	90	102	32	224	58	788	116	962	83	151	55	289	1924	513	2437
1:00 PM - 2:00 PM	72	752	90	914	81	90	30	201	57	834	90	981	75	122	68	265	1895	466	2361
1:15 PM - 2:15 PM	63	768	104	935	75	93	31	199	54	854	79	987	67	116	84	267	1922	466	2388
1:30 PM - 2:30 PM	68	779	106	953	70	94	34	198	54	860	81	995	63	111	88	262	1948	460	2408
1:45 PM - 2:45 PM	65	809	117	991	59	86	32	177	54	836	70	960	67	104	96	267	1951	444	2395
2:00 PM - 3:00 PM	74	821	116	1011	50	99	28	177	45	781	82	908	69	114	87	270	1919	447	2366
2:15 PM - 3:15 PM	73	794	96	963	49	97	25	171	40	795	80	915	78	120	81	279	1878	450	2328
2:30 PM - 3:30 PM	79	821	91	991	58	103	26	187	35	775	77	887	89	136	74	299	1878	486	2364
2:45 PM - 3:45 PM	85	841	69	995	58	104	35	197	29	783	75	887	88	139	73	300	1882	497	2379
3:00 PM - 4:00 PM	75	842	66	983	61	102	44	207	39	790	74	903	104	162	71	337	1886	544	2430
3:15 PM - 4:15 PM	84	854	75	1013	63	111	56	230	55	781	81	917	113	188	70	371	1930	601	2531
3:30 PM - 4:30 PM	90	874	81	1045	61	105	58	224	62	786	75	923	122	204	77	403	1968	627	2595
3:45 PM - 4:45 PM	95	840	91	1026	67	116	50	233	66	779	75	920	120	214	72	406	1946	639	2585
4:00 PM - 5:00 PM	96	843	77	1016	63	103	39	205	73	783	89	945	108	196	76	380	1961	585	2546
4:15 PM - 5:15 PM	93	868	79	1040	65	97	33	195	60	767	93	920	93	174	81	348	1960	543	2503
4:30 PM - 5:30 PM	79	896	83	1058	71	91	34	196	60	729	100	889	77	148	73	298	1947	494	2441
4:45 PM - 5:45 PM	74	960	85	1119	77	89	30	196	59	721	119	899	73	141	71	285	2018	481	2499
5:00 PM - 6:00 PM	80	1004	91	1175	72	98	38	208	48	764	102	914	61	132	68	261	2089	469	2558
Sat Peak																			
3:30 PM - 4:30 PM	90	874	81	1045	61	105	58	224	62	786	75	923	122	204	77	403	1968	627	2595

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Driveway
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Rivertech Court
INTERSECTION:	River Rd.& Rivertech Ct.	**WEATHER:**	clear	**WESTBOUND ROAD:**	River Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Aco & Luz	**EASTBOUND ROAD:**	River Road
		INPUTED BY:	agan		

Time	Southbound Driveway				Westbound River Road				Northbound Rivertech Court				Eastbound River Road				North & South	East & West	Total
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	1	1	1	3	3	19	16	38	6	0	2	8	5	9	2	16	11	54	65
6:15 AM - 6:30 AM	1	0	0	1	3	33	20	56	6	0	1	7	9	10	5	24	8	80	88
6:30 AM - 6:45 AM	1	0	1	2	15	39	21	75	6	1	2	9	4	11	3	18	11	93	104
6:45 AM - 7:00 AM	1	0	3	4	7	67	34	108	7	2	5	14	6	26	5	37	18	145	163
7:00 AM - 7:15 AM	0	1	2	3	10	33	49	92	5	2	12	19	7	17	7	31	22	123	145
7:15 AM - 7:30 AM	5	2	1	8	11	47	68	126	12	2	3	17	12	27	6	45	25	171	196
7:30 AM - 7:45 AM	2	0	0	2	10	44	67	121	20	2	7	29	14	30	6	50	31	171	202
7:45 AM - 8:00 AM	1	1	1	3	8	67	66	141	16	4	14	34	13	16	13	42	37	183	220
8:00 AM - 8:15 AM	2	1	3	6	15	61	70	146	16	2	13	31	13	15	5	33	37	179	216
8:15 AM - 8:30 AM	5	2	5	12	13	57	61	131	11	7	7	25	20	33	15	68	37	199	236
8:30 AM - 8:45 AM	8	3	5	16	14	47	75	136	12	5	9	26	13	22	9	44	42	180	222
8:45 AM - 9:00 AM	4	2	3	9	16	53	57	126	14	3	6	23	6	25	12	43	32	169	201
Total	31	13	25	69	125	567	604	1296	131	30	81	242	122	241	88	451	311	1747	2058
AM One Hour Volumes																			
6:00 AM - 7:00 AM	4	1	5	10	28	158	91	277	25	3	10	38	24	56	15	95	48	372	420
6:15 AM - 7:15 AM	3	1	6	10	35	172	124	331	24	5	20	49	26	64	20	110	59	441	500
6:30 AM - 7:30 AM	7	3	7	17	43	186	172	401	30	7	22	59	29	81	21	131	76	532	608
6:45 AM - 7:45 AM	8	3	6	17	38	191	218	447	44	8	27	79	39	100	24	163	96	610	706
7:00 AM - 8:00 AM	8	4	4	16	39	191	250	480	53	10	36	99	46	90	32	168	115	648	763
7:15 AM - 8:15 AM	10	4	5	19	44	219	271	534	64	10	37	111	52	88	30	170	130	704	834
7:30 AM - 8:30 AM	10	4	9	23	46	229	264	539	63	15	41	119	60	94	39	193	142	732	874
7:45 AM - 8:45 AM	16	7	14	37	50	232	272	554	55	18	43	116	59	86	42	187	153	741	894
8:00 AM - 9:00 AM	19	8	16	43	58	218	263	539	53	17	35	105	52	95	41	188	148	727	875
AM Peak																			
7:45 AM - 8:45 AM	**16**	**7**	**14**	**37**	**50**	**232**	**272**	**554**	**55**	**18**	**43**	**116**	**59**	**86**	**42**	**187**	**153**	**741**	**894**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	18	2	24	44	5	42	23	70	35	0	13	48	5	63	3	71	92	141	233
4:15 PM - 4:30 PM	11	4	25	40	3	35	13	51	45	1	16	62	6	58	3	67	102	118	220
4:30 PM - 4:45 PM	16	0	23	39	2	48	22	72	54	0	16	70	4	57	4	65	109	137	246
4:45 PM - 5:00 PM	11	2	16	29	5	44	18	67	54	0	19	73	12	65	2	79	102	146	248
5:00 PM - 5:15 PM	13	2	31	46	4	43	24	71	56	2	18	76	14	70	4	88	122	159	281
5:15 PM - 5:30 PM	18	4	26	48	8	49	24	81	58	4	11	73	11	82	8	101	121	182	303
5:30 PM - 5:45 PM	13	6	20	39	5	38	14	57	56	1	20	77	11	61	1	73	116	130	246
5:45 PM - 6:00 PM	9	1	11	21	4	44	11	59	55	1	22	78	14	71	1	86	99	145	244
6:00 PM - 6:15 PM	9	3	26	38	3	41	6	50	44	0	21	65	9	62	0	71	103	121	224
6:15 PM - 6:30 PM	9	0	10	19	2	38	16	56	50	0	14	64	11	43	0	54	83	110	193
6:30 PM - 6:45 PM	3	0	6	9	2	30	5	37	39	0	13	52	1	33	0	34	61	71	132
6:45 PM - 7:00 PM	1	2	4	7	0	27	7	34	22	0	9	31	11	46	1	58	38	92	130
Total	131	26	222	379	43	479	183	705	568	9	192	769	109	711	27	847	1148	1552	2700
PM One Hour Volumes																			
4:00 PM - 5:00 PM	56	8	88	152	15	169	76	260	188	1	64	253	27	243	12	282	405	542	947
4:15 PM - 5:15 PM	51	8	95	154	14	170	77	261	209	3	69	281	36	250	13	299	435	560	995
4:30 PM - 5:30 PM	58	8	96	162	19	184	88	291	222	6	64	292	41	274	18	333	454	624	1078
4:45 PM - 5:45 PM	55	14	93	162	22	174	80	276	224	7	68	299	48	278	15	341	461	617	1078
5:00 PM - 6:00 PM	53	13	88	154	21	174	73	268	225	8	71	304	50	284	14	348	458	616	1074
5:15 PM - 6:15 PM	49	14	83	146	20	172	55	247	213	6	74	293	45	276	10	331	439	578	1017
5:30 PM - 6:30 PM	40	10	67	117	14	161	47	222	205	2	77	284	45	237	2	284	401	506	907
5:45 PM - 6:45 PM	30	4	53	87	11	153	38	202	188	1	70	259	35	209	1	245	346	447	793
6:00 PM - 7:00 PM	22	5	46	73	7	136	34	177	155	0	57	212	32	184	1	217	285	394	679
PM Peak																			
4:45 PM - 5:45 PM	**55**	**14**	**93**	**162**	**22**	**174**	**80**	**276**	**224**	**7**	**68**	**299**	**48**	**278**	**15**	**341**	**461**	**617**	**1078**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Driveway
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Rivertech Court
INTERSECTION:	River Rd.& Rivertech Ct.	**WEATHER:**	clear	**WESTBOUND ROAD:**	River Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Aco & Admir	**EASTBOUND ROAD:**	River Road
		INPUTED BY:	agan		

Time	Southbound Driveway				Westbound River Road				Northbound Rivertech Court				Eastbound River Road				North & South	East & West	Total
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																			
10:00 AM - 11:00 AM			2	2	1	50	24	75	33		28	61	10	39	2	51	63	126	189
10:15 AM - 11:15 AM	1		2	3	1	49	23	73	36		29	65	13	40	1	54	68	127	195
10:30 AM - 11:30 AM	2		2	4	1	45	26	72	38		27	65	14	53	1	68	69	140	209
10:45 AM - 11:45 AM	2			2	2	47	30	79	41		28	69	15	53	1	69	71	148	219
11:00 AM - 12:00 PM	2			2	1	42	26	69	38		23	61	14	47		61	63	130	193
11:15 AM - 12:15 PM	1			1	2	52	30	84	39		19	58	16	54		70	59	154	213
11:30 AM - 12:30 PM			1	1	2	55	30	87	42		19	61	14	59		73	62	160	222
11:45 AM - 12:45 PM			1	1	1	55	31	87	43		16	59	16	65		81	60	168	228
12:00 PM - 1:00 PM			4	4	1	64	27	92	40		19	59	21	73		94	63	186	249
12:15 PM - 1:15 PM			4	4		56	26	82	37		19	56	19	73		92	60	174	234
12:30 PM - 1:30 PM			3	3		66	31	97	32		20	52	24	73		97	55	194	249
12:45 PM - 1:45 PM			3	3		64	26	90	33		25	58	20	74		94	61	184	245
1:00 PM - 2:00 PM			1	1		58	26	84	36		19	55	18	78		96	56	180	236
1:15 PM - 2:15 PM			1	1		65	30	95	34		22	56	19	78		97	57	192	249
1:30 PM - 2:30 PM	1		1	2		58	26	84	33		21	54	14	72		86	56	170	226
1:45 PM - 2:45 PM	1		1	2		65	29	94	30		17	47	19	74		93	49	187	236
2:00 PM - 3:00 PM	1		1	2		77	34	111	26		22	48	23	74		97	50	208	258
2:15 PM - 3:15 PM	1		1	2		76	33	109	32		22	54	23	70		93	56	202	258
2:30 PM - 3:30 PM			1	1		82	33	115	35		24	59	26	78		104	60	219	279
2:45 PM - 3:45 PM	1		1	2		73	34	107	40		22	62	24	80		104	64	211	275
3:00 PM - 4:00 PM	1			1		63	31	94	47		21	68	21	81		102	69	196	265
3:15 PM - 4:15 PM	1			1		59	35	94	42		24	66	26	84		110	67	204	271
3:30 PM - 4:30 PM	1			1		60	39	99	42		27	69	25	77		102	70	201	271
3:45 PM - 4:45 PM						70	44	114	37		31	68	28	88		116	68	230	298
4:00 PM - 5:00 PM						84	42	126	32		33	65	28	104		132	65	258	323
4:15 PM - 5:15 PM						89	38	127	31		33	64	26	125		151	64	278	342
4:30 PM - 5:30 PM						82	36	118	42		25	67	26	134		160	67	278	345
4:45 PM - 5:45 PM	1			1		74	31	105	43		21	64	21	126		147	65	252	317
5:00 PM - 6:00 PM	1			1		59	36	95	45		18	63	16	107		123	64	218	282
Sat Peak																			
4:30 PM - 5:30 PM						82	36	118	42		25	67	26	134		160	67	278	345

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	0
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	River Road
INTERSECTION:	Paint Branch Pkwy.& River Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Paint Branch Parkway
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Carmen & Victor	**EASTBOUND ROAD:**	Paint Branch Parkway
		INPUTED BY:	agan		

Time	Southbound				Westbound				Northbound				Eastbound				North	East	Total
	0				Paint Branch Parkway				River Road				Paint Branch Parkway				&	&	
Period	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	South	West	
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	0	0	0	0	0	58	15	73	3	0	28	31	21	13	0	34	31	107	138
6:15 AM - 6:30 AM	0	0	0	0	0	68	21	89	5	0	19	24	27	18	0	45	24	134	158
6:30 AM - 6:45 AM	0	0	0	0	0	96	16	112	8	0	36	44	28	24	0	52	44	164	208
6:45 AM - 7:00 AM	0	0	0	0	0	147	21	168	8	0	37	45	38	31	0	69	45	237	282
7:00 AM - 7:15 AM	0	0	0	0	0	175	24	199	7	0	37	44	47	48	0	95	44	294	338
7:15 AM - 7:30 AM	0	0	0	0	0	194	44	238	7	0	41	48	41	43	0	84	48	322	370
7:30 AM - 7:45 AM	0	0	0	0	0	174	45	219	10	0	67	77	59	62	0	121	77	340	417
7:45 AM - 8:00 AM	0	0	0	0	0	238	52	290	18	0	63	81	60	68	0	128	81	418	499
8:00 AM - 8:15 AM	0	0	0	0	0	202	53	255	8	0	62	70	51	62	0	113	70	368	438
8:15 AM - 8:30 AM	0	0	0	0	0	265	65	330	15	0	49	64	51	51	0	102	64	432	496
8:30 AM - 8:45 AM	0	0	0	0	0	246	52	298	17	0	58	75	58	51	0	109	75	407	482
8:45 AM - 9:00 AM	0	0	0	0	0	255	36	291	7	0	44	51	44	69	0	113	51	404	455
Total	0	0	0	0	0	2118	444	2562	113	0	541	654	525	540	0	1065	654	3627	4281
AM One Hour Volumes																			
6:00 AM - 7:00 AM	0	0	0	0	0	369	73	442	24	0	120	144	114	86	0	200	144	642	786
6:15 AM - 7:15 AM	0	0	0	0	0	486	82	568	28	0	129	157	140	121	0	261	157	829	986
6:30 AM - 7:30 AM	0	0	0	0	0	612	105	717	30	0	151	181	154	146	0	300	181	1017	1198
6:45 AM - 7:45 AM	0	0	0	0	0	690	134	824	32	0	182	214	185	184	0	369	214	1193	1407
7:00 AM - 8:00 AM	0	0	0	0	0	781	165	946	42	0	208	250	207	221	0	428	250	1374	1624
7:15 AM - 8:15 AM	0	0	0	0	0	808	194	1002	43	0	233	276	211	235	0	446	276	1448	1724
7:30 AM - 8:30 AM	0	0	0	0	0	879	215	1094	51	0	241	292	221	243	0	464	292	1558	1850
7:45 AM - 8:45 AM	0	0	0	0	0	951	222	1173	58	0	232	290	220	232	0	452	290	1625	1915
8:00 AM - 9:00 AM	0	0	0	0	0	968	206	1174	47	0	213	260	204	233	0	437	260	1611	1871
AM Peak																			
7:45 AM - 8:45 AM	**0**	**0**	**0**	**0**	**0**	**951**	**222**	**1173**	**58**	**0**	**232**	**290**	**220**	**232**	**0**	**452**	**290**	**1625**	**1915**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	0	0	0	0	0	75	4	79	29	0	58	87	43	142	0	185	87	264	351
4:15 PM - 4:30 PM	0	0	0	0	0	70	10	80	37	0	50	87	33	126	0	159	87	239	326
4:30 PM - 4:45 PM	0	0	0	0	0	98	6	104	51	0	43	94	41	172	0	213	94	317	411
4:45 PM - 5:00 PM	0	0	0	0	0	102	10	112	43	0	66	109	52	193	0	245	109	357	466
5:00 PM - 5:15 PM	0	0	0	0	0	95	9	104	39	0	73	112	64	228	0	292	112	396	508
5:15 PM - 5:30 PM	0	0	0	0	0	94	10	104	44	0	67	111	61	203	0	264	111	368	479
5:30 PM - 5:45 PM	0	0	0	0	0	116	3	119	35	0	59	94	53	209	0	262	94	381	475
5:45 PM - 6:00 PM	0	0	0	0	0	112	5	117	34	0	73	107	60	188	0	248	107	365	472
6:00 PM - 6:15 PM	0	0	0	0	0	111	6	117	36	0	63	99	53	174	0	227	99	344	443
6:15 PM - 6:30 PM	0	0	0	0	0	99	7	106	29	0	42	71	36	205	0	241	71	347	418
6:30 PM - 6:45 PM	0	0	0	0	0	101	4	105	13	0	48	61	37	174	0	211	61	316	377
6:45 PM - 7:00 PM	0	0	0	0	0	112	10	122	15	0	51	66	49	155	0	204	66	326	392
Total	0	0	0	0	0	1185	84	1269	405	0	693	1098	582	2169	0	2751	1098	4020	5118
PM One Hour Volumes																			
4:00 PM - 5:00 PM	0	0	0	0	0	345	30	375	160	0	217	377	169	633	0	802	377	1177	1554
4:15 PM - 5:15 PM	0	0	0	0	0	365	35	400	170	0	232	402	190	719	0	909	402	1309	1711
4:30 PM - 5:30 PM	0	0	0	0	0	389	35	424	177	0	249	426	218	796	0	1014	426	1438	1864
4:45 PM - 5:45 PM	0	0	0	0	0	407	32	439	161	0	265	426	230	833	0	1063	426	1502	1928
5:00 PM - 6:00 PM	0	0	0	0	0	417	27	444	152	0	272	424	238	828	0	1066	424	1510	1934
5:15 PM - 6:15 PM	0	0	0	0	0	433	24	457	149	0	262	411	227	774	0	1001	411	1458	1869
5:30 PM - 6:30 PM	0	0	0	0	0	438	21	459	134	0	237	371	202	776	0	978	371	1437	1808
5:45 PM - 6:45 PM	0	0	0	0	0	423	22	445	112	0	226	338	186	741	0	927	338	1372	1710
6:00 PM - 7:00 PM	0	0	0	0	0	423	27	450	93	0	204	297	175	708	0	883	297	1333	1630
PM Peak																			
5:00 PM - 6:00 PM	**0**	**0**	**0**	**0**	**0**	**417**	**27**	**444**	**152**	**0**	**272**	**424**	**238**	**828**	**0**	**1066**	**424**	**1510**	**1934**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	0
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	River Road
INTERSECTION:	Paint Branch Pkwy.& River Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Paint Branch Parkway
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Malda & Ibro	**EASTBOUND ROAD:**	Paint Branch Parkway
		INPUTED BY:	agan		

Time Period	Southbound 0				Westbound Paint Branch Parkway				Northbound River Road				Eastbound Paint Branch Parkway				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																			
10:00 AM - 11:00 AM						345	14	359	18		72	90	56	209		265	90	624	714
10:15 AM - 11:15 AM						339	16	355	23		67	90	63	224		287	90	642	732
10:30 AM - 11:30 AM						322	19	341	31		64	95	76	244		320	95	661	756
10:45 AM - 11:45 AM						336	17	353	28		68	96	80	240		320	96	673	769
11:00 AM - 12:00 PM						329	16	345	26		58	84	70	235		305	84	650	734
11:15 AM - 12:15 PM						346	18	364	21		63	84	75	244		319	84	683	767
11:30 AM - 12:30 PM						322	17	339	11		69	80	73	260		333	80	672	752
11:45 AM - 12:45 PM						333	19	352	10		72	82	78	279		357	82	709	791
12:00 PM - 1:00 PM						313	26	339	14		90	104	91	325		416	104	755	859
12:15 PM - 1:15 PM						294	28	322	15		89	104	92	344		436	104	758	862
12:30 PM - 1:30 PM						319	32	351	17		94	111	90	332		422	111	773	884
12:45 PM - 1:45 PM						300	32	332	21		91	112	90	325		415	112	747	859
1:00 PM - 2:00 PM						298	24	322	19		76	95	96	296		392	95	714	809
1:15 PM - 2:15 PM						293	20	313	21		83	104	101	272		373	104	686	790
1:30 PM - 2:30 PM						285	18	303	22		80	102	100	272		372	102	675	777
1:45 PM - 2:45 PM						278	24	302	24		82	106	105	301		406	106	708	814
2:00 PM - 3:00 PM						280	31	311	22		100	122	100	314		414	122	725	847
2:15 PM - 3:15 PM						277	33	310	23		100	123	87	343		430	123	740	863
2:30 PM - 3:30 PM						280	40	320	26		108	134	98	392		490	134	810	944
2:45 PM - 3:45 PM						275	34	309	24		104	128	91	386		477	128	786	914
3:00 PM - 4:00 PM						277	33	310	25		95	120	91	369		460	120	770	890
3:15 PM - 4:15 PM						284	32	316	25		86	111	98	364		462	111	778	889
3:30 PM - 4:30 PM						277	23	300	33		88	121	99	343		442	121	742	863
3:45 PM - 4:45 PM						296	22	318	36		93	129	115	321		436	129	754	883
4:00 PM - 5:00 PM						300	16	316	38		104	142	129	340		469	142	785	927
4:15 PM - 5:15 PM						302	18	320	37		108	145	148	352		500	145	820	965
4:30 PM - 5:30 PM						287	13	300	22		98	120	141	333		474	120	774	894
4:45 PM - 5:45 PM						266	13	279	15		93	108	132	335		467	108	746	854
5:00 PM - 6:00 PM						267	15	282	15		81	96	116	309		425	96	707	803
Sat Peak																			
4:15 PM - 5:15 PM						302	18	320	37		108	145	148	352		500	145	820	965

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Kenilworth Avenue - 201
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Kenilworth Avenue - 201
INTERSECTION:	Kenilworth Ave.& River Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Tuckerman Street
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Salih,Ibro & Mirjan	**EASTBOUND ROAD:**	River Road
		INPUTED BY:	agan		

Time Period	Southbound Kenilworth Avenue - 201				Westbound Tuckerman Street				Northbound Kenilworth Avenue - 201				Eastbound River Road				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	39	158	0	197	0	0	0	0	0	142	23	165	7	0	7	14	362	14	376
6:15 AM - 6:30 AM	47	242	0	289	0	0	0	0	0	129	35	164	7	0	7	14	453	14	467
6:30 AM - 6:45 AM	55	288	0	343	0	0	1	1	0	148	49	197	9	0	16	25	540	26	566
6:45 AM - 7:00 AM	80	312	0	392	4	0	0	4	1	165	80	246	18	0	8	26	638	30	668
7:00 AM - 7:15 AM	84	330	0	414	0	0	0	0	0	198	70	268	22	0	5	27	682	27	709
7:15 AM - 7:30 AM	117	438	0	555	0	0	1	1	0	198	64	262	19	0	14	33	817	34	851
7:30 AM - 7:45 AM	113	497	0	610	0	0	0	0	0	187	50	237	21	0	16	37	847	37	884
7:45 AM - 8:00 AM	109	483	0	592	0	1	0	1	0	204	107	311	15	0	14	29	903	30	933
8:00 AM - 8:15 AM	113	327	0	440	0	0	0	0	1	227	91	319	8	0	21	29	759	29	788
8:15 AM - 8:30 AM	98	326	2	426	1	1	2	4	1	232	88	321	15	0	17	32	747	36	783
8:30 AM - 8:45 AM	119	439	0	558	1	0	1	2	0	224	87	311	13	0	17	30	869	32	901
8:45 AM - 9:00 AM	93	334	1	428	0	0	0	0	0	203	80	283	13	0	14	27	711	27	738
Total	1067	4174	3	5244	6	2	5	13	3	2257	824	3084	167	0	156	323	8328	336	8664
AM One Hour Volumes																			
6:00 AM - 7:00 AM	221	1000	0	1221	4	0	1	5	1	584	187	772	41	0	38	79	1993	84	2077
6:15 AM - 7:15 AM	266	1172	0	1438	4	0	1	5	1	640	234	875	56	0	36	92	2313	97	2410
6:30 AM - 7:30 AM	336	1368	0	1704	4	0	2	6	1	709	263	973	68	0	43	111	2677	117	2794
6:45 AM - 7:45 AM	394	1577	0	1971	4	0	1	5	1	748	264	1013	80	0	43	123	2984	128	3112
7:00 AM - 8:00 AM	423	1748	0	2171	0	1	1	2	0	787	291	1078	77	0	49	126	3249	128	3377
7:15 AM - 8:15 AM	452	1745	0	2197	0	1	1	2	1	816	312	1129	63	0	65	128	3326	130	3456
7:30 AM - 8:30 AM	433	1633	2	2068	1	2	2	5	2	850	336	1188	59	0	68	127	3256	132	3388
7:45 AM - 8:45 AM	439	1575	2	2016	2	2	3	7	2	887	373	1262	51	0	69	120	3278	127	3405
8:00 AM - 9:00 AM	423	1426	3	1852	2	1	3	6	2	886	346	1234	49	0	69	118	3086	124	3210
AM Peak																			
7:15 AM - 8:15 AM	**452**	**1745**	**0**	**2197**	**0**	**1**	**1**	**2**	**1**	**816**	**312**	**1129**	**63**	**0**	**65**	**128**	**3326**	**130**	**3456**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	20	288	0	308	1	0	0	1	1	308	33	342	63	0	87	150	650	151	801
4:15 PM - 4:30 PM	14	271	2	287	1	0	0	1	1	322	32	355	68	0	82	150	642	151	793
4:30 PM - 4:45 PM	24	276	0	300	0	0	0	0	0	315	26	341	72	0	88	160	641	160	801
4:45 PM - 5:00 PM	24	239	3	266	0	0	0	0	0	309	34	343	77	1	107	185	609	185	794
5:00 PM - 5:15 PM	26	235	2	263	1	0	1	2	1	342	25	368	90	1	106	197	631	199	830
5:15 PM - 5:30 PM	29	272	1	302	0	0	1	1	0	326	32	358	92	0	94	186	660	187	847
5:30 PM - 5:45 PM	20	283	1	304	1	0	1	2	1	300	31	332	63	1	101	165	636	167	803
5:45 PM - 6:00 PM	14	270	0	284	0	0	2	2	2	323	24	349	75	0	98	173	633	175	808
6:00 PM - 6:15 PM	9	241	1	251	1	1	0	2	2	325	21	348	76	1	102	179	599	181	780
6:15 PM - 6:30 PM	14	246	0	260	0	0	0	0	0	311	29	340	47	0	76	123	600	123	723
6:30 PM - 6:45 PM	6	203	1	210	1	0	0	1	0	288	26	314	45	0	56	101	524	102	626
6:45 PM - 7:00 PM	10	194	13	217	0	0	0	0	1	291	26	318	48	0	35	83	535	83	618
Total	210	3018	24	3252	6	1	5	12	9	3760	339	4108	816	4	1032	1852	7360	1864	9224
PM One Hour Volumes																			
4:00 PM - 5:00 PM	82	1074	5	1161	2	0	0	2	2	1254	125	1381	280	1	364	645	2542	647	3189
4:15 PM - 5:15 PM	88	1021	7	1116	2	0	1	3	2	1288	117	1407	307	2	383	692	2523	695	3218
4:30 PM - 5:30 PM	103	1022	6	1131	1	0	2	3	1	1292	117	1410	331	2	395	728	2541	731	3272
4:45 PM - 5:45 PM	99	1029	7	1135	2	0	3	5	2	1277	122	1401	322	3	408	733	2536	738	3274
5:00 PM - 6:00 PM	89	1060	4	1153	2	0	5	7	4	1291	112	1407	320	2	399	721	2560	728	3288
5:15 PM - 6:15 PM	72	1066	3	1141	2	1	4	7	5	1274	108	1387	306	2	395	703	2528	710	3238
5:30 PM - 6:30 PM	57	1040	2	1099	2	1	3	6	5	1259	105	1369	261	2	377	640	2468	646	3114
5:45 PM - 6:45 PM	43	960	2	1005	2	1	2	5	4	1247	100	1351	243	1	332	576	2356	581	2937
6:00 PM - 7:00 PM	39	884	15	938	2	1	0	3	3	1215	102	1320	216	1	269	486	2258	489	2747
PM Peak																			
5:00 PM - 6:00 PM	**89**	**1060**	**4**	**1153**	**2**	**0**	**5**	**7**	**4**	**1291**	**112**	**1407**	**320**	**2**	**399**	**721**	**2560**	**728**	**3288**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Kenilworth Avenue - 201
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Kenilworth Avenue - 201
INTERSECTION:	Kenilworth Ave.& River Rd.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Tuckerman Street
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Salih,Mirjana &	**EASTBOUND ROAD:**	River Road
		INPUTED BY:	agan		

Time Period	Southbound Kenilworth Avenue - 201				Westbound Tuckerman Street				Northbound Kenilworth Avenue - 201				Eastbound River Road				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																			
10:00 AM - 11:00 AM	28	777	2	807	2		5	7	5	777	52	834	43		28	71	1641	78	1719
10:15 AM - 11:15 AM	29	763	1	793			3	3	5	784	48	837	47		28	75	1630	78	1708
10:30 AM - 11:30 AM	32	767	1	800			3	3	5	808	46	859	59		29	88	1659	91	1750
10:45 AM - 11:45 AM	34	779	1	814	1		2	3	5	793	60	858	64		29	93	1672	96	1768
11:00 AM - 12:00 PM	30	796	1	827	1			1	5	816	58	879	60		31	91	1706	92	1798
11:15 AM - 12:15 PM	38	779	1	818	2			2	5	868	65	938	64		32	96	1756	98	1854
11:30 AM - 12:30 PM	34	814		848	3			3	5	867	66	938	70	2	39	111	1786	114	1900
11:45 AM - 12:45 PM	40	808		848	2		1	3	3	895	57	955	76	2	44	122	1803	125	1928
12:00 PM - 1:00 PM	62	809		871	2		4	6	2	887	64	953	80	2	43	125	1824	131	1955
12:15 PM - 1:15 PM	55	843		898	2		6	8	3	858	59	920	86	2	41	129	1818	137	1955
12:30 PM - 1:30 PM	62	811		873	1	2	6	9	2	913	62	977	89	1	34	124	1850	133	1983
12:45 PM - 1:45 PM	54	787		841	3	2	5	10	5	917	64	986	90	1	40	131	1827	141	1968
1:00 PM - 2:00 PM	33	807		840	3	2	2	7	4	915	58	977	93	1	42	136	1817	143	1960
1:15 PM - 2:15 PM	34	771		805	2	2		4	4	898	71	973	88	1	45	134	1778	138	1916
1:30 PM - 2:30 PM	32	781		813	2			2	4	859	65	928	76	1	46	123	1741	125	1866
1:45 PM - 2:45 PM	35	805		840					3	848	66	917	76	1	34	111	1757	111	1868
2:00 PM - 3:00 PM	33	796		829	2			2	3	814	85	902	73	1	30	104	1731	106	1837
2:15 PM - 3:15 PM	30	793		823	2		2	4	3	813	79	895	70	1	28	99	1718	103	1821
2:30 PM - 3:30 PM	30	822		852	2		3	5	3	793	87	883	81		29	110	1735	115	1850
2:45 PM - 3:45 PM	28	828		856	2		4	6	2	789	83	874	83		35	118	1730	124	1854
3:00 PM - 4:00 PM	31	865	9	905	1		4	5	3	814	70	887	90		41	131	1792	136	1928
3:15 PM - 4:15 PM	37	926	10	973	2		2	4	2	842	69	913	90		41	131	1886	135	2021
3:30 PM - 4:30 PM	38	920	11	969	2		1	3	3	899	68	970	81		41	122	1939	125	2064
3:45 PM - 4:45 PM	47	954	11	1012	2			2	4	941	76	1021	96	1	36	133	2033	135	2168
4:00 PM - 5:00 PM	44	969	3	1016	2			2	3	980	81	1064	111	1	41	153	2080	155	2235
4:15 PM - 5:15 PM	41	950	4	995	1		2	3	3	1024	81	1108	128	1	43	172	2103	175	2278
4:30 PM - 5:30 PM	41	995	3	1039	2		2	4	5	1019	75	1099	138	7	52	197	2138	201	2339
4:45 PM - 5:45 PM	34	1000	4	1038	7		2	9	5	987	64	1056	118	7	56	181	2094	190	2284
5:00 PM - 6:00 PM	36	992	3	1031	7		3	10	5	946	55	1006	94	9	43	146	2037	156	2193
Sat Peak																			
4:30 PM - 5:30 PM	41	995	3	1039	2	0	2	4	5	1019	75	1099	138	7	52	197	2138	201	2339

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - All Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Parking Entrance
W+A JOB NO:	4782	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Rhode Island Avenue
INTERSECTION:	Queensbury Rd. & Rhode Island	**WEATHER:**	clear	**WESTBOUND ROAD:**	Queensbury Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Matt & Avni	**EASTBOUND ROAD:**	Queensbury Road
		INPUTED BY:	agan		

Time Period	Southbound Parking Entrance				Westbound Queensbury Road				Northbound Rhode Island Avenue				Eastbound Queensbury Road				North & South	East & West	Total
	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
AM 15 Minute Volumes																			
6:00 AM - 6:15 AM	3	0	5	8	9	27	6	42	0	0	0	0	0	9	4	13	8	55	63
6:15 AM - 6:30 AM	3	0	0	3	4	27	9	40	4	0	0	4	0	11	0	11	7	51	58
6:30 AM - 6:45 AM	1	0	0	1	1	15	6	22	0	0	0	0	1	10	3	14	1	36	37
6:45 AM - 7:00 AM	1	0	0	1	0	42	11	53	5	2	1	8	0	16	1	17	9	70	79
7:00 AM - 7:15 AM	1	1	0	2	1	42	29	72	7	0	1	8	0	16	2	18	10	90	100
7:15 AM - 7:30 AM	2	0	3	5	1	58	32	91	5	0	0	5	3	20	0	23	10	114	124
7:30 AM - 7:45 AM	1	0	0	1	1	50	56	107	17	0	1	18	2	25	4	31	19	138	157
7:45 AM - 8:00 AM	0	0	2	2	0	49	45	94	12	1	0	13	1	38	1	40	15	134	149
8:00 AM - 8:15 AM	0	0	1	1	3	59	41	103	20	0	0	20	0	27	2	29	21	132	153
8:15 AM - 8:30 AM	0	0	0	0	2	68	35	105	6	0	2	8	1	29	3	33	8	138	146
8:30 AM - 8:45 AM	1	0	0	1	4	66	28	98	10	1	0	11	0	31	2	33	12	131	143
8:45 AM - 9:00 AM	0	0	2	2	3	41	13	57	8	0	0	8	0	30	1	31	10	88	98
Total	13	1	13	27	29	544	311	884	94	4	5	103	8	262	23	293	130	1177	1307
AM One Hour Volumes																			
6:00 AM - 7:00 AM	8	0	5	13	14	111	32	157	9	2	1	12	1	46	8	55	25	212	237
6:15 AM - 7:15 AM	6	1	0	7	6	126	55	187	16	2	2	20	1	53	6	60	27	247	274
6:30 AM - 7:30 AM	5	1	3	9	3	157	78	238	17	2	2	21	4	62	6	72	30	310	340
6:45 AM - 7:45 AM	5	1	3	9	3	192	128	323	34	2	3	39	5	77	7	89	48	412	460
7:00 AM - 8:00 AM	4	1	5	10	3	199	162	364	41	1	2	44	6	99	7	112	54	476	530
7:15 AM - 8:15 AM	3	0	6	9	5	216	174	395	54	1	1	56	6	110	7	123	65	518	583
7:30 AM - 8:30 AM	1	0	3	4	6	226	177	409	55	1	3	59	4	119	10	133	63	542	605
7:45 AM - 8:45 AM	1	0	3	4	9	242	149	400	48	2	2	52	2	125	8	135	56	535	591
8:00 AM - 9:00 AM	1	0	3	4	12	234	117	363	44	1	2	47	1	117	8	126	51	489	540
AM Peak																			
7:30 AM - 8:30 AM	**1**	**0**	**3**	**4**	**6**	**226**	**177**	**409**	**55**	**1**	**3**	**59**	**4**	**119**	**10**	**133**	**63**	**542**	**605**
PM 15 Minute Volumes																			
4:00 PM - 4:15 PM	1	0	6	7	3	49	16	68	26	0	0	26	1	53	2	56	33	124	157
4:15 PM - 4:30 PM	3	0	6	9	0	36	11	47	30	1	0	31	0	67	1	68	40	115	155
4:30 PM - 4:45 PM	3	0	4	7	3	39	11	53	50	1	3	54	2	67	1	70	61	123	184
4:45 PM - 5:00 PM	3	0	0	3	3	39	10	52	41	0	1	42	0	65	2	67	45	119	164
5:00 PM - 5:15 PM	11	1	2	14	3	49	13	65	48	0	7	55	2	74	1	77	69	142	211
5:15 PM - 5:30 PM	6	1	0	7	2	42	9	53	48	0	4	52	3	88	1	92	59	145	204
5:30 PM - 5:45 PM	7	1	2	10	0	48	21	69	45	0	2	47	3	67	2	72	57	141	198
5:45 PM - 6:00 PM	1	0	4	5	3	34	11	48	64	0	9	73	2	71	1	74	78	122	200
6:00 PM - 6:15 PM	1	0	2	3	2	40	11	53	61	0	2	63	1	68	0	69	66	122	188
6:15 PM - 6:30 PM	0	1	1	2	2	54	8	64	21	0	1	22	3	66	1	70	24	134	158
6:30 PM - 6:45 PM	3	0	2	5	0	46	9	55	36	0	1	37	2	69	2	73	42	128	170
6:45 PM - 7:00 PM	3	1	1	5	1	31	3	35	11	0	3	14	2	42	1	45	19	80	99
Total	42	5	30	77	22	507	133	662	481	2	33	516	21	797	15	833	593	1495	2088
PM One Hour Volumes																			
4:00 PM - 5:00 PM	10	0	16	26	9	163	48	220	147	2	4	153	3	252	6	261	179	481	660
4:15 PM - 5:15 PM	20	1	12	33	9	163	45	217	169	2	11	182	4	273	5	282	215	499	714
4:30 PM - 5:30 PM	23	2	6	31	11	169	43	223	187	1	15	203	7	294	5	306	234	529	763
4:45 PM - 5:45 PM	27	3	4	34	8	178	53	239	182	0	14	196	8	294	6	308	230	547	777
5:00 PM - 6:00 PM	25	3	8	36	8	173	54	235	205	0	22	227	10	300	5	315	263	550	813
5:15 PM - 6:15 PM	15	2	8	25	7	164	52	223	218	0	17	235	9	294	4	307	260	530	790
5:30 PM - 6:30 PM	9	2	9	20	7	176	51	234	191	0	14	205	9	272	4	285	225	519	744
5:45 PM - 6:45 PM	5	1	9	15	7	174	39	220	182	0	13	195	8	274	4	286	210	506	716
6:00 PM - 7:00 PM	7	2	6	15	5	171	31	207	129	0	7	136	8	245	4	257	151	464	615
PM Peak																			
5:00 PM - 6:00 PM	**25**	**3**	**8**	**36**	**8**	**173**	**54**	**235**	**205**	**0**	**22**	**227**	**10**	**300**	**5**	**315**	**263**	**550**	**813**

Wells & Associates,Inc

McLean, Virginia

Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	2/29/2012	SOUTHBOUND ROAD:	Parking Lot Entrance
W & A JOB NO.:	4782	DAY:	Wednesday	NORTHBOUND ROAD:	Rhode Island Avenue
INTERSECTION:	Rhode Island Ave, & Queensbury Rd.	WEATHER:	rain	WESTBOUND ROAD:	Queensbury Road
LOCATION:	Montgomery Co.,MD	COUNTED BY	Matt & Majda	EASTBOUND ROAD:	Queensbury Road
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Parking Lot Entrance				Westbound Queensbury Road				Northbound Rhode Island Avenue				Eastbound Queensbury Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
11:00-11:15	4	1	1	6	2	22	6	30	4	2	2	8	1	18	4	23	14	53	67		11:00-11:15
11:15-11:30	2	0	3	5	3	23	6	32	12	0	0	12	2	25	3	30	17	62	79		11:15-11:30
11:30-11:45	1	1	2	4	0	14	0	14	3	0	0	3	1	12	3	16	7	30	37		11:30-11:45
11:45-12:00	3	1	1	5	1	17	4	22	0	0	2	2	0	19	2	21	7	43	50		11:45-12:00
12:00-12:15	1	1	6	8	0	23	4	27	8	0	0	8	3	25	1	29	16	56	72		12:00-12:15
12:15-12:30	2	1	0	3	4	35	7	46	9	0	1	10	1	22	1	24	13	70	83		12:15-12:30
12:30-12:45	2	0	1	3	2	36	5	43	4	1	1	6	0	23	5	28	9	71	80		12:30-12:45
12:45-1:00	6	1	1	8	3	19	7	29	4	0	0	4	2	35	2	39	12	68	80		12:45-1:00
1:00-1:15	3	1	2	6	3	40	5	48	11	0	0	11	3	33	3	39	17	87	104		1:00-1:15
1:15-1:30	3	0	1	4	1	25	6	32	13	1	1	15	0	30	3	33	19	65	84		1:15-1:30
1:30-1:45	2	1	1	4	4	16	1	21	16	1	0	17	0	38	0	38	21	59	80		1:30-1:45
1:45-2:00	2	2	3	7	4	21	3	28	8	1	1	10	0	35	0	35	17	63	80		1:45-2:00
2:00-2:15	4	1	0	5	3	24	5	32	14	0	0	14	0	39	2	41	19	73	92		2:00-2:15
2:15-2:30	0	0	4	4	1	25	4	30	5	0	0	5	1	43	1	45	9	75	84		2:15-2:30
2:30-2:45	1	2	1	4	2	54	11	67	10	0	1	11	1	38	0	39	15	106	121		2:30-2:45
2:45-3:00	2	0	1	3	2	41	12	55	28	0	1	29	1	52	2	55	32	110	142		2:45-3:00
4 Hour Totals	**38**	**13**	**28**	**79**	**35**	**435**	**86**	**556**	**149**	**6**	**10**	**165**	**16**	**487**	**32**	**535**	**244**	**1,091**	**1,335**		
1 Hour Totals																					
11:00-12:00	8	3	8	19	7	111	20	138	21	1	4	26	4	89	9	102	45	240	285	0.86	11:00-12:00
11:15-12:15	11	3	8	22	9	113	23	145	25	1	2	28	6	105	9	120	50	265	315	0.95	11:15-12:15
11:30-12:30	13	3	4	20	12	130	24	166	28	1	2	31	6	113	11	130	51	296	347	0.83	11:30-12:30
11:45-12:45	14	2	5	21	9	120	23	152	32	2	2	36	5	121	13	139	57	291	348	0.84	11:45-12:45
12:00-1:00	14	3	5	22	11	100	19	130	44	2	1	47	5	136	8	149	69	279	348	0.84	12:00-1:00
12:15-1:15	10	4	7	21	12	102	15	129	48	3	2	53	3	136	6	145	74	274	348	0.84	12:15-1:15
12:30-1:30	11	4	5	20	12	86	15	113	51	3	2	56	0	142	5	147	76	260	336	0.91	12:30-1:30
12:45-1:45	8	4	8	20	12	86	13	111	43	2	1	46	1	155	3	159	66	270	336	0.91	12:45-1:45
1:00-2:00	7	5	8	20	10	124	23	157	37	1	2	40	2	155	3	160	60	317	377	0.78	1:00-2:00
1:15-2:15	7	3	6	16	8	144	32	184	57	0	2	59	3	172	5	180	75	364	439	0.77	1:15-2:15
1:30-2:30	3	2	6	11	5	120	27	152	43	0	2	45	3	133	3	139	56	291	347	0.61	1:30-2:30
1:45-2:45	3	2	2	7	4	95	23	122	38	0	2	40	2	90	2	94	47	216	263	0.46	1:45-2:45
2:00-3:00	2	0	1	3	2	41	12	55	28	0	1	29	1	52	2	55	32	110	142	0.25	2:00-3:00
Midday Peak 1:15-2:15	**7**	**3**	**6**	**16**	**8**	**144**	**32**	**184**	**57**	**0**	**2**	**59**	**3**	**172**	**5**	**180**	**75**	**364**	**439**	**0.77**	**Midday Peak 1:15-2:15**

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles

PROJECT:	Cafritz - Riverdale	**DATE:**	11/12/2011	**SOUTHBOUND ROAD:**	Parking Driveway
W+A JOB NO:	4782	**DAY:**	Saturday	**NORTHBOUND ROAD:**	Rhode Island Avenue
INTERSECTION:	Queensbury Rd.& Rhode Island Ave.	**WEATHER:**	clear	**WESTBOUND ROAD:**	Queensbury Road
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Matt & Ali	**EASTBOUND ROAD:**	Queensbury Road
		INPUTED BY:	agan		

Time		Southbound Parking Driveway				Westbound Queensbury Road				Northbound Rhode Island Avenue				Eastbound Queensbury Road				North & South	East & West	Total
Period		Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total	Right	Thru	Left	Total			
One Hour Volumes																				
10:00 AM	- 11:00 AM	7	1	8	16	10	141	30	181	24	1	4	29	5	127	10	142	45	323	368
10:15 AM	- 11:15 AM	12	1	9	22	8	140	23	171	28	1	2	31	4	137	13	154	53	325	378
10:30 AM	- 11:30 AM	13	1	10	24	8	144	22	174	26	1	6	33	6	134	15	155	57	329	386
10:45 AM	- 11:45 AM	15	3	5	23	8	128	15	151	25	1	7	33	6	123	13	142	56	293	349
11:00 AM	- 12:00 PM	17	4	5	26	11	108	17	136	18	3	6	27	6	121	12	139	53	275	328
11:15 AM	- 12:15 PM	13	3	7	23	12	104	20	136	18	3	6	27	5	136	12	153	50	289	339
11:30 AM	- 12:30 PM	12	4	13	29	12	101	19	132	27	4	3	34	4	142	12	158	63	290	353
11:45 AM	- 12:45 PM	9	2	14	25	10	133	26	169	32	4	2	38	5	157	12	174	63	343	406
12:00 PM	- 1:00 PM	10	2	14	26	13	145	25	183	40	5	2	47	6	176	12	194	73	377	450
12:15 PM	- 1:15 PM	9	2	15	26	14	142	21	177	42	7	2	51	9	183	8	200	77	377	454
12:30 PM	- 1:30 PM	11	2	11	24	14	157	25	196	42	7		49	12	182	7	201	73	397	470
12:45 PM	- 1:45 PM	17	4	9	30	14	123	18	155	40	6	1	47	12	182	11	205	77	360	437
1:00 PM	- 2:00 PM	17	5	12	34	9	116	17	142	34	3	3	40	12	160	8	180	74	322	396
1:15 PM	- 2:15 PM	18	6	11	35	8	124	21	153	33	2	3	38	11	169	13	193	73	346	419
1:30 PM	- 2:30 PM	18	5	11	34	7	121	17	145	30	4	3	37	9	170	14	193	71	338	409
1:45 PM	- 2:45 PM	14	4	12	30	10	120	21	151	28	5	4	37	11	165	11	187	67	338	405
2:00 PM	- 3:00 PM	13	3	9	25	10	132	17	159	26	5	2	33	11	176	11	198	58	357	415
2:15 PM	- 3:15 PM	15	2	8	25	8	126	18	152	35	4	4	43	9	165	7	181	68	333	401
2:30 PM	- 3:30 PM	13	3	5	21	12	126	25	163	37	1	6	44	8	178	6	192	65	355	420
2:45 PM	- 3:45 PM	13	2	8	23	11	140	28	179	43		5	48	7	179	4	190	71	369	440
3:00 PM	- 4:00 PM	11	1	8	20	10	137	26	173	48		8	56	9	193	6	208	76	381	457
3:15 PM	- 4:15 PM	8	1	8	17	14	157	34	205	40		7	47	9	226	8	243	64	448	512
3:30 PM	- 4:30 PM	7	1	8	16	10	165	34	209	46		7	53	7	237	9	253	69	462	531
3:45 PM	- 4:45 PM	7	1	8	16	10	166	33	209	40	1	7	48	7	248	9	264	64	473	537
4:00 PM	- 5:00 PM	6	1	9	16	9	160	34	203	41	1	4	46	4	248	7	259	62	462	524
4:15 PM	- 5:15 PM	6	1	7	14	9	148	25	182	55	1	4	60	6	228	7	241	74	423	497
4:30 PM	- 5:30 PM	10		10	20	10	152	28	190	51	1	3	55	7	221	10	238	75	428	503
4:45 PM	- 5:45 PM	8		8	16	9	163	22	194	56		3	59	5	216	12	233	75	427	502
5:00 PM	- 6:00 PM	8	1	7	16	12	169	25	206	53	1	5	59	4	198	13	215	75	421	496
	-																			
Sat Peak																				
3:45 PM	- 4:45 PM	7	1	8	16	10	166	33	209	40	1	7	48	7	248	9	264	64	473	537

Wells & Associates,Inc

McLean, Virginia

Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	3/29/2012	SOUTHBOUND ROAD:	Lafayette Avenue
W & A JOB NO.:	4782	DAY:	Tuesday	NORTHBOUND ROAD:	Lafayette Avenue
INTERSECTION:	Queensbury Rd. & Lafayette Ave.	WEATHER:	Clear	WESTBOUND ROAD:	Queensbury Road
LOCATION:	Prince Georges County,MD	COUNTED BY	Matt	EASTBOUND ROAD:	Queensbury Road
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Lafayette Avenue				Westbound Queensbury Road				Northbound Lafayette Avenue				Eastbound Queensbury Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
1 Hour Totals																					
6:00-7:00	60	4	0	64	0	4	0	4	5	8	75	88	32	20	10	62	152	66	218	0.85	6:00-7:00
6:15-7:15	97	4	0	101	0	3	0	3	4	13	91	108	31	23	17	71	209	74	283	0.65	6:15-7:15
6:30-7:30	137	3	0	140	0	2	0	2	6	16	125	147	37	24	21	82	287	84	371	0.68	6:30-7:30
6:45-7:45	174	3	0	177	0	5	0	5	6	14	129	149	36	37	30	103	326	108	434	0.80	6:45-7:45
7:00-8:00	190	4	0	194	0	8	0	8	4	19	145	168	41	36	36	113	362	121	483	0.89	7:00-8:00
7:15-8:15	178	10	0	188	0	10	0	10	5	22	140	167	47	44	42	133	355	143	498	0.92	7:15-8:15
7:30-8:30	158	15	1	174	0	14	0	14	2	17	129	148	49	49	49	147	322	161	483	0.95	7:30-8:30
7:45-8:45	113	16	1	130	0	11	0	11	5	20	126	151	50	42	53	145	281	156	437	0.88	7:45-8:45
8:00-9:00	92	18	2	112	0	10	1	11	8	17	102	127	43	42	51	136	239	147	386	0.78	8:00-9:00
8:15-9:15	59	11	2	72	0	8	1	9	7	9	70	86	29	30	36	95	158	104	262	0.54	8:15-9:15
8:30-9:30	28	6	1	35	0	3	1	4	6	8	34	48	13	19	22	54	83	58	141	0.44	8:30-9:30
8:45-9:45	13	4	1	18	0	3	1	4	3	3	15	21	2	6	9	17	39	21	60	0.25	8:45-9:45
9:00-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:00-10:00
9:15-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:15-10:15
9:30-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:30-10:30
9:45-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:45-10:45
10:00-11:0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	10:00-11:0
10:15-11:1	11	3	0	14	0	4	0	4	1	1	7	9	9	4	6	19	23	23	46	0.25	10:15-11:1
10:30-11:3	24	6	0	30	0	9	2	11	2	3	14	19	22	16	11	49	49	60	109	0.43	10:30-11:3
10:45-11:4	35	8	0	43	0	15	3	18	3	8	32	43	41	23	19	83	86	101	187	0.60	10:45-11:4
11:00-12:0	50	9	0	59	0	24	3	27	3	11	50	64	52	30	23	105	123	132	255	0.82	11:00-12:0
11:15-12:1	52	8	1	61	0	27	3	30	2	11	60	73	51	36	30	117	134	147	281	0.90	11:15-12:1
11:30-12:3	47	7	1	55	1	32	1	34	1	13	72	86	61	32	34	127	141	161	302	0.90	11:30-12:3
11:45-12:4	46	6	1	53	1	31	0	32	0	16	71	87	62	37	37	136	140	168	308	0.92	11:45-12:4
12:00-1:00	39	8	1	48	1	29	1	31	1	15	72	88	69	40	40	149	136	180	316	0.94	12:00-1:00
12:15-1:15	29	7	0	36	2	31	2	35	2	21	70	93	73	38	37	148	129	183	312	0.93	12:15-1:15
12:30-1:30	32	6	0	38	1	32	3	36	3	22	74	99	68	40	36	144	137	180	317	0.89	12:30-1:30
12:45-1:45	28	5	0	33	1	29	5	35	3	20	73	96	73	36	40	149	129	184	313	0.88	12:45-1:45
1:00-2:00	31	6	0	37	1	26	4	31	2	20	68	90	79	38	44	161	127	192	319	0.90	1:00-2:00
1:15-2:15	38	9	0	47	0	23	3	26	1	18	74	93	86	39	53	178	140	204	344	0.92	1:15-2:15
1:30-2:30	39	9	0	48	0	16	3	19	2	18	73	93	100	41	69	210	141	229	370	0.80	1:30-2:30
1:45-2:45	52	12	0	64	0	24	1	25	4	18	84	106	98	46	78	222	170	247	417	0.82	1:45-2:45
2:00-3:00	55	9	1	65	0	24	1	25	4	24	104	132	93	49	101	243	197	268	465	0.89	2:00-3:00
2:15-3:15	45	5	1	51	0	18	1	19	4	19	83	106	74	40	82	196	157	215	372	0.72	2:15-3:15
2:30-3:30	33	4	1	38	0	14	0	14	2	14	61	77	42	28	58	128	115	142	257	0.49	2:30-3:30
2:45-3:45	14	1	1	16	0	4	0	4	0	8	34	42	19	15	34	68	58	72	130	0.25	2:45-3:45
3:00-4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	3:00-4:00
3:15-4:15	20	4	1	25	0	6	0	6	2	6	32	40	37	18	42	97	65	103	168	0.25	3:15-4:15
3:30-4:30	42	9	1	52	0	14	0	14	5	7	50	62	78	42	73	193	114	207	321	0.48	3:30-4:30
3:45-4:45	61	12	1	74	0	21	0	21	6	14	73	93	109	66	103	278	167	299	466	0.69	3:45-4:45
4:00-5:00	87	14	2	103	0	26	0	26	7	18	105	130	154	96	130	380	233	406	639	0.92	4:00-5:00
4:15-5:15	83	12	2	97	0	26	0	26	6	13	100	119	163	94	129	386	216	412	628	0.91	4:15-5:15
4:30-5:30	79	13	2	94	1	29	0	30	5	16	105	126	162	94	146	402	220	432	652	0.92	4:30-5:30
4:45-5:45	75	15	4	94	2	31	0	33	8	14	100	122	176	98	158	432	216	465	681	0.96	4:45-5:45
5:00-6:00	70	14	3	87	4	32	0	36	11	14	92	117	186	94	188	468	204	504	708	0.89	5:00-6:00
5:15-6:15	87	16	4	107	4	36	0	40	11	21	95	127	180	105	186	471	234	511	745	0.93	5:15-6:15
5:30-6:30	90	14	4	108	3	29	0	32	11	23	103	137	200	107	180	487	245	519	764	0.96	5:30-6:30
5:45-6:45	88	9	2	99	2	24	0	26	10	21	119	150	186	99	162	447	249	473	722	0.90	5:45-6:45
6:00-7:00	79	11	2	92	0	21	0	21	7	23	126	156	156	95	127	378	248	399	647	0.83	6:00-7:00
AM Peak 7:15-8:15	**178**	**10**	**0**	**188**	**0**	**10**	**0**	**10**	**5**	**22**	**140**	**167**	**47**	**44**	**42**	**133**	**355**	**143**	**498**	**0.92**	**AM Peak 7:15-8:15**
Mid-Day Peak 2:00-3:00	**55**	**9**	**1**	**65**	**0**	**24**	**1**	**25**	**4**	**24**	**104**	**132**	**93**	**49**	**101**	**243**	**197**	**268**	**465**	**0.89**	**Mid-Day Peak 2:00-3:00**
PM Peak 5:30-6:30	**90**	**14**	**4**	**108**	**3**	**29**	**0**	**32**	**11**	**23**	**103**	**137**	**200**	**107**	**180**	**487**	**245**	**519**	**764**	**0.96**	**PM Peak 5:30-6:30**

Wells & Associates,Inc

McLean, Virginia

Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	3/31/2012	SOUTHBOUND ROAD:	Lafayette Avenue
W & A JOB NO.:	4782	DAY:	Saturday	NORTHBOUND ROAD:	Lafayette Avenue
INTERSECTION:	Queensbury Rd. & Lafayette Ave.	WEATHER:	Clear	WESTBOUND ROAD:	Queensbury Road
LOCATION:	Prince Georges County,MD	COUNTED BY	Majda	EASTBOUND ROAD:	Queensbury Road
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Lafayette Avenue				Westbound Queensbury Road				Northbound Lafayette Avenue				Eastbound Queensbury Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
10:00-10:15	11	1	0	12	0	3	0	3	1	2	22	25	11	5	7	23	37	26	63		10:00-10:15
10:15-10:30	9	0	1	10	0	5	0	5	3	4	30	37	20	3	11	34	47	39	86		10:15-10:30
10:30-10:45	9	1	0	10	0	3	0	3	0	0	27	27	14	11	11	36	37	39	76		10:30-10:45
10:45-11:00	16	1	1	18	0	8	0	8	0	0	27	27	35	10	16	61	45	69	114		10:45-11:00
11:00-11:15	9	2	0	11	2	6	0	8	2	3	17	22	12	15	9	36	33	44	77		11:00-11:15
11:15-11:30	11	0	0	11	0	5	0	5	2	5	34	41	34	4	13	51	52	56	108		11:15-11:30
11:30-11:45	10	1	0	11	0	6	0	6	1	3	26	30	36	9	9	54	41	60	101		11:30-11:45
11:45-12:00	9	1	0	10	0	15	0	15	1	1	28	30	26	13	16	55	40	70	110		11:45-12:00
12:00-12:15	10	2	0	12	0	8	0	8	1	2	30	33	26	12	12	50	45	58	103		12:00-12:15
12:15-12:30	11	5	1	17	0	3	0	3	1	1	28	30	36	16	16	68	47	71	118		12:15-12:30
12:30-12:45	10	2	1	13	1	6	0	7	3	3	25	31	34	17	22	73	44	80	124		12:30-12:45
12:45-1:00	7	2	0	9	0	1	0	1	2	5	12	19	12	13	3	28	28	29	57		12:45-1:00
1:00-1:15	8	5	0	13	0	10	0	10	2	3	35	40	35	19	8	62	53	72	125		1:00-1:15
1:15-1:30	13	3	0	16	0	6	0	6	0	3	24	27	28	16	15	59	43	65	108		1:15-1:30
1:30-1:45	11	1	0	12	0	7	0	7	1	3	24	28	39	15	7	61	40	68	108		1:30-1:45
1:45-2:00	13	3	0	16	0	7	0	7	0	4	25	29	34	14	14	62	45	69	114		1:45-2:00
2:00-2:15	7	0	0	7	0	2	1	3	1	3	25	29	32	14	15	61	36	64	100		2:00-2:15
2:15-2:30	15	4	0	19	0	8	0	8	1	2	32	35	34	16	10	60	54	68	122		2:15-2:30
2:30-2:45	10	3	0	13	0	4	0	4	0	4	24	28	38	16	17	71	41	75	116		2:30-2:45
2:45-3:00	10	2	1	13	0	3	2	5	1	7	29	37	31	10	10	51	50	56	106		2:45-3:00
3:00-3:15	11	0	1	12	0	4	0	4	0	4	27	31	26	8	19	53	43	57	100		3:00-3:15
3:15-3:30	4	3	0	7	2	7	0	9	6	2	14	22	22	11	13	46	29	55	84		3:15-3:30
3:30-3:45	8	2	0	10	0	10	0	10	2	0	29	31	32	14	12	58	41	68	109		3:30-3:45
3:45-4:00	9	2	2	13	0	4	0	4	1	0	27	28	37	15	10	62	41	66	107		3:45-4:00
4:00-4:15	10	5	0	15	1	10	0	11	0	1	24	25	44	16	16	76	40	87	127		4:00-4:15
4:15-4:30	14	2	1	17	0	3	1	4	3	4	52	59	31	19	13	63	76	67	143		4:15-4:30
4:30-4:45	5	0	0	5	0	4	0	4	0	0	25	25	31	17	22	70	30	74	104		4:30-4:45
4:45-5:00	20	3	1	24	0	5	0	5	0	4	30	34	40	8	13	61	58	66	124		4:45-5:00
5:00-5:15	5	2	0	7	0	11	0	11	0	4	32	36	40	12	16	68	43	79	122		5:00-5:15
5:15-5:30	17	4	1	22	0	10	0	10	1	2	28	31	41	15	11	67	53	77	130		5:15-5:30
5:30-5:45	7	1	0	8	0	5	0	5	0	3	26	29	32	19	16	67	37	72	109		5:30-5:45
5:45-6:00	11	1	1	13	1	8	2	11	2	3	31	36	49	15	19	83	49	94	143		5:45-6:00
1 Hour Totals																					
10:00-11:00	45	3	2	50	0	19	0	19	4	6	106	116	80	29	45	154	166	173	339	0.74	10:00-11:00
10:15-11:15	43	4	2	49	2	22	0	24	5	7	101	113	81	39	47	167	162	191	353	0.77	10:15-11:15
10:30-11:30	45	4	1	50	2	22	0	24	4	8	105	117	95	40	49	184	167	208	375	0.82	10:30-11:30
10:45-11:45	46	4	1	51	2	25	0	27	5	11	104	120	117	38	47	202	171	229	400	0.88	10:45-11:45
11:00-12:00	39	4	0	43	2	32	0	34	6	12	105	123	108	41	47	196	166	230	396	0.90	11:00-12:00
11:15-12:15	40	4	0	44	0	34	0	34	5	11	118	134	122	38	50	210	178	244	422	0.96	11:15-12:15
11:30-12:30	40	9	1	50	0	32	0	32	4	7	112	123	124	50	53	227	173	259	432	0.92	11:30-12:30
11:45-12:45	40	10	2	52	1	32	0	33	6	7	111	124	122	58	66	246	176	279	455	0.92	11:45-12:45
12:00-1:00	38	11	2	51	1	18	0	19	7	11	95	113	108	58	53	219	164	238	402	0.81	12:00-1:00
12:15-1:15	36	14	2	52	1	20	0	21	8	12	100	120	117	65	49	231	172	252	424	0.85	12:15-1:15
12:30-1:30	38	12	1	51	1	23	0	24	7	14	96	117	109	65	48	222	168	246	414	0.83	12:30-1:30
12:45-1:45	39	11	0	50	0	24	0	24	5	14	95	114	114	63	33	210	164	234	398	0.80	12:45-1:45
1:00-2:00	45	12	0	57	0	30	0	30	3	13	108	124	136	64	44	244	181	274	455	0.91	1:00-2:00
1:15-2:15	44	7	0	51	0	22	1	23	2	13	98	113	133	59	51	243	164	266	430	0.94	1:15-2:15
1:30-2:30	46	8	0	54	0	24	1	25	3	12	106	121	139	59	46	244	175	269	444	0.91	1:30-2:30
1:45-2:45	45	10	0	55	0	21	1	22	2	13	106	121	138	60	56	254	176	276	452	0.93	1:45-2:45
2:00-3:00	42	9	1	52	0	17	3	20	3	16	110	129	135	56	52	243	181	263	444	0.91	2:00-3:00
2:15-3:15	46	9	2	57	0	19	2	21	2	17	112	131	129	50	56	235	188	256	444	0.91	2:15-3:15
2:30-3:30	35	8	2	45	2	18	2	22	7	17	94	118	117	45	59	221	163	243	406	0.88	2:30-3:30
2:45-3:45	33	7	2	42	2	24	2	28	9	13	99	121	111	43	54	208	163	236	399	0.92	2:45-3:45
3:00-4:00	32	7	3	42	2	25	0	27	9	6	97	112	117	48	54	219	154	246	400	0.92	3:00-4:00
3:15-4:15	31	12	2	45	3	31	0	34	9	3	94	106	135	56	51	242	151	276	427	0.84	3:15-4:15
3:30-4:30	41	11	3	55	1	27	1	29	6	5	132	143	144	64	51	259	198	288	486	0.85	3:30-4:30
3:45-4:45	38	9	3	50	1	21	1	23	4	5	128	137	143	67	61	271	187	294	481	0.84	3:45-4:45
4:00-5:00	49	10	2	61	1	22	1	24	3	9	131	143	146	60	64	270	204	294	498	0.87	4:00-5:00
4:15-5:15	44	7	2	53	0	23	1	24	3	12	139	154	142	56	64	262	207	286	493	0.86	4:15-5:15
4:30-5:30	47	9	2	58	0	30	0	30	1	10	115	126	152	52	62	266	184	296	480	0.92	4:30-5:30
4:45-5:45	49	10	2	61	0	31	0	31	1	13	116	130	153	54	56	263	191	294	485	0.93	4:45-5:45
5:00-6:00	40	8	2	50	1	34	2	37	3	12	117	132	162	61	62	285	182	322	504	0.88	5:00-6:00
Saturday Peak 5:00-6:00	**40**	**8**	**2**	**50**	**1**	**34**	**2**	**37**	**3**	**12**	**117**	**132**	**162**	**61**	**62**	**285**	**182**	**322**	**504**	**0.88**	**Saturday Peak 5:00-6:00**

Wells & Associates,Inc

McLean, Virginia

Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	3/29/2012	SOUTHBOUND ROAD:	Natoli Place
W & A JOB NO.:	4782	DAY:	Tuesday	NORTHBOUND ROAD:	Parking Entrance
INTERSECTION:	Queensbury Rd. & Natoli Place	WEATHER:	Clear	WESTBOUND ROAD:	Queensbury Road
LOCATION:	Prince Georges County,MD	COUNTED BY	Matt	EASTBOUND ROAD:	Queensbury Road
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Natoli Place				Westbound Queensbury Road				Northbound Parking Entrance				Eastbound Queensbury Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
1 Hour Totals																					
6:00-7:00	0	0	5	5	0	4	0	4	0	0	0	0	0	11	2	13	5	17	22	0.79	6:00-7:00
6:15-7:15	0	0	4	4	0	2	0	2	0	0	0	0	0	13	2	15	4	17	21	0.75	6:15-7:15
6:30-7:30	2	0	4	6	0	1	0	1	0	0	0	0	1	16	3	20	6	21	27	0.52	6:30-7:30
6:45-7:45	4	0	7	11	0	2	0	2	0	0	0	0	1	27	2	30	11	32	43	0.54	6:45-7:45
7:00-8:00	6	0	6	12	0	2	0	2	0	0	0	0	1	27	1	29	12	31	43	0.54	7:00-8:00
7:15-8:15	6	0	9	15	0	3	0	3	0	0	0	0	2	31	1	34	15	37	52	0.65	7:15-8:15
7:30-8:30	4	0	8	12	0	9	0	9	0	0	0	0	1	32	0	33	12	42	54	0.68	7:30-8:30
7:45-8:45	2	0	4	6	0	8	0	8	0	0	0	0	1	33	0	34	6	42	48	0.80	7:45-8:45
8:00-9:00	0	0	4	4	1	10	0	11	0	0	0	0	1	39	0	40	4	51	55	0.92	8:00-9:00
8:15-9:15	0	0	1	1	1	9	0	10	0	0	0	0	0	32	0	32	1	42	43	0.72	8:15-9:15
8:30-9:30	0	0	1	1	1	3	0	4	0	0	0	0	0	23	0	23	1	27	28	0.50	8:30-9:30
8:45-9:45	0	0	1	1	1	3	0	4	0	0	0	0	0	9	0	9	1	13	14	0.25	8:45-9:45
9:00-10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:00-10:00
9:15-10:15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:15-10:15
9:30-10:30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:30-10:30
9:45-10:45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	9:45-10:45
10:00-11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	10:00-11:00
10:15-11:15	0	0	0	0	1	4	0	5	0	0	0	0	0	8	0	8	0	13	13	0.25	10:15-11:15
10:30-11:30	0	0	0	0	2	10	0	12	0	0	0	0	0	20	0	20	0	32	32	0.42	10:30-11:30
10:45-11:45	0	0	0	0	2	16	0	18	0	0	1	1	0	25	2	27	1	45	46	0.61	10:45-11:45
11:00-12:00	0	0	0	0	2	28	0	30	0	1	2	3	0	33	2	35	3	65	68	0.77	11:00-12:00
11:15-12:15	0	0	0	0	3	29	0	32	0	2	3	5	0	34	2	36	5	68	73	0.83	11:15-12:15
11:30-12:30	0	0	2	2	4	34	0	38	0	2	3	5	0	28	3	31	7	69	76	0.86	11:30-12:30
11:45-12:45	0	0	2	2	4	30	1	35	0	2	2	4	0	33	1	34	6	69	75	0.85	11:45-12:45
12:00-1:00	0	0	4	4	4	24	1	29	0	1	2	3	1	37	1	39	7	68	75	0.85	12:00-1:00
12:15-1:15	0	0	4	4	2	26	1	29	0	0	1	1	1	37	1	39	5	68	73	0.83	12:15-1:15
12:30-1:30	0	0	3	3	0	25	1	26	0	0	1	1	2	39	0	41	4	67	71	0.81	12:30-1:30
12:45-1:45	0	0	3	3	1	26	0	27	0	0	2	2	2	37	0	39	5	66	71	0.81	12:45-1:45
1:00-2:00	0	0	1	1	2	25	0	27	0	0	1	1	1	36	0	37	2	64	66	0.83	1:00-2:00
1:15-2:15	0	0	1	1	2	24	0	26	0	0	1	1	1	34	0	35	2	61	63	0.79	1:15-2:15
1:30-2:30	0	0	1	1	4	20	0	24	0	0	1	1	0	38	0	38	2	62	64	0.76	1:30-2:30
1:45-2:45	0	0	1	1	4	29	0	33	0	1	0	1	0	42	0	42	2	75	77	0.74	1:45-2:45
2:00-3:00	0	0	2	2	6	29	1	36	1	2	0	3	0	47	0	47	5	83	88	0.79	2:00-3:00
2:15-3:15	0	0	2	2	6	23	1	30	1	2	0	3	0	40	0	40	5	70	75	0.67	2:15-3:15
2:30-3:30	0	0	1	1	4	17	1	22	1	2	0	3	0	28	0	28	4	50	54	0.48	2:30-3:30
2:45-3:45	0	0	1	1	3	5	1	9	1	1	0	2	0	16	0	16	3	25	28	0.25	2:45-3:45
3:00-4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.00	3:00-4:00
3:15-4:15	0	0	2	2	0	6	0	6	0	0	0	0	0	18	0	18	2	24	26	0.25	3:15-4:15
3:30-4:30	0	0	3	3	2	14	0	16	0	0	0	0	1	39	2	42	3	58	61	0.44	3:30-4:30
3:45-4:45	0	0	5	5	6	22	0	28	0	2	0	2	2	60	2	64	7	92	99	0.65	3:45-4:45
4:00-5:00	0	0	8	8	11	27	0	38	0	2	0	2	2	91	2	95	10	133	143	0.81	4:00-5:00
4:15-5:15	0	0	8	8	15	26	0	41	0	2	0	2	2	89	2	93	10	134	144	0.82	4:15-5:15
4:30-5:30	0	0	10	10	17	27	0	44	0	2	0	2	1	91	0	92	12	136	148	0.84	4:30-5:30
4:45-5:45	0	0	13	13	16	28	0	44	0	0	0	0	0	95	1	96	13	140	153	0.87	4:45-5:45
5:00-6:00	0	0	10	10	14	30	0	44	0	0	0	0	0	89	1	90	10	134	144	0.84	5:00-6:00
5:15-6:15	0	0	11	11	16	35	0	51	0	0	0	0	0	95	1	96	11	147	158	0.92	5:15-6:15
5:30-6:30	0	0	10	10	14	29	0	43	0	1	0	1	0	96	1	97	11	140	151	0.88	5:30-6:30
5:45-6:45	0	0	6	6	12	24	0	36	0	1	0	1	0	94	0	94	7	130	137	0.84	5:45-6:45
6:00-7:00	0	0	8	8	9	21	0	30	0	1	0	1	0	90	0	90	9	120	129	0.79	6:00-7:00
AM Peak 8:00-9:00	**0**	**0**	**4**	**4**	**1**	**10**	**0**	**11**	**0**	**0**	**0**	**0**	**1**	**39**	**0**	**40**	**4**	**51**	**55**	**0.92**	**AM Peak 8:00-9:00**
Mid-Day Peak 2:00-3:00	**0**	**0**	**2**	**2**	**6**	**29**	**1**	**36**	**1**	**2**	**0**	**3**	**0**	**47**	**0**	**47**	**5**	**83**	**88**	**0.79**	**Mid-Day Peak 2:00-3:00**
PM Peak 5:15-6:15	**0**	**0**	**11**	**11**	**16**	**35**	**0**	**51**	**0**	**0**	**0**	**0**	**0**	**95**	**1**	**96**	**11**	**147**	**158**	**0.92**	**PM Peak 5:15-6:15**

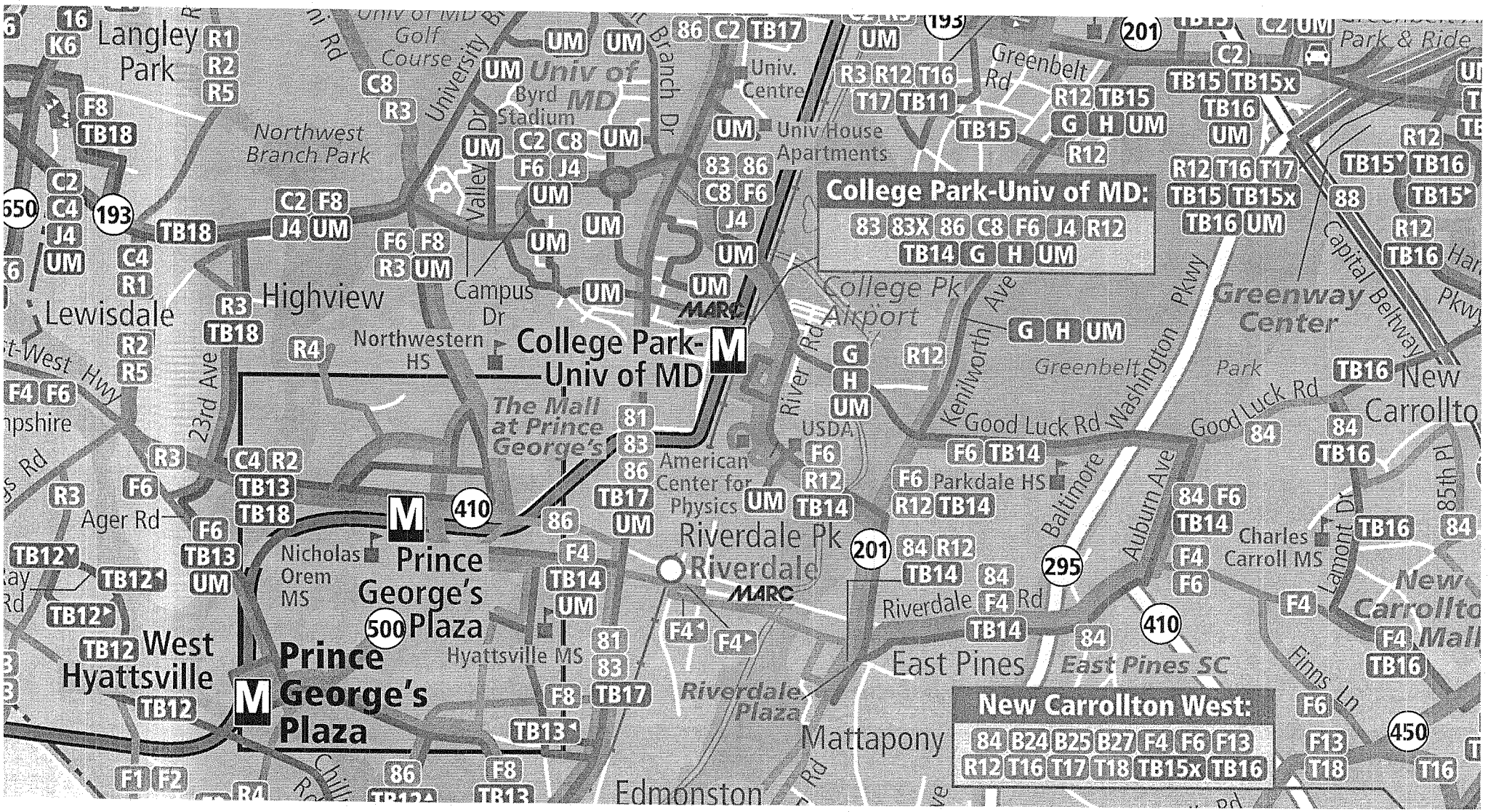
Wells & Associates,Inc

McLean, Virginia

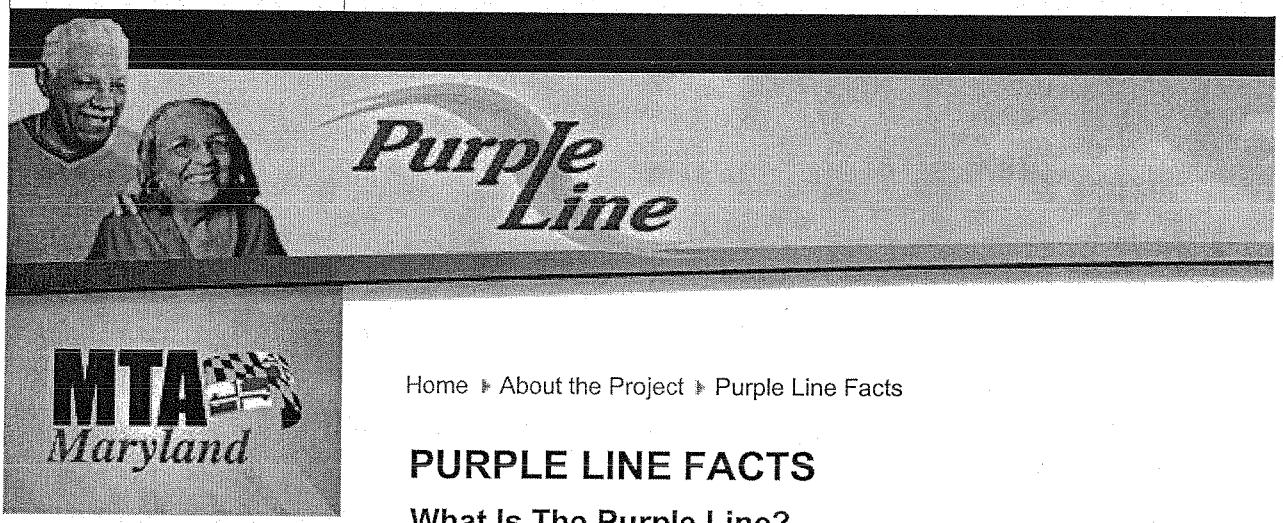
Existing Traffic Count

PROJECT:	Cafritz - Riverdale	DATE:	3/31/2012	SOUTHBOUND ROAD:	Natoli Place
W & A JOB NO.:	4782	DAY:	Saturday	NORTHBOUND ROAD:	Parking Entrance
INTERSECTION:	Queensbury Rd. & Natoli Place	WEATHER:	Clear	WESTBOUND ROAD:	Queensbury Road
LOCATION:	Prince Georges County,MD	COUNTED BY	Matt	EASTBOUND ROAD:	Queensbury Road
		INPUTED BY:	agan		

Time Period	Turning Movements																		Total	PHF	Time Period
	Southbound Natoli Place				Westbound Queensbury Road				Northbound Parking Entrance				Eastbound Queensbury Road				North & South	East & West			
	1 Right	2 Thru	3 Left	Total	4 Right	5 Thru	6 Left	Total	7 Right	8 Thru	9 Left	Total	10 Right	11 Thru	12 Left	Total					
AM																					
10:00-10:15	0	0	0	0	0	3	0	3	0	0	0	0	1	5	0	6	0	9	9		10:00-10:15
10:15-10:30	0	0	1	1	0	5	0	5	1	0	0	1	0	4	0	4	2	9	11		10:15-10:30
10:30-10:45	0	0	2	2	1	3	0	4	0	0	0	0	0	11	0	11	2	15	17		10:30-10:45
10:45-11:00	0	0	0	0	1	8	1	10	0	0	0	0	0	8	2	10	0	20	20		10:45-11:00
11:00-11:15	1	0	1	2	0	6	0	6	3	0	1	4	0	15	0	15	6	21	27		11:00-11:15
11:15-11:30	0	0	0	0	1	6	0	7	0	0	0	0	0	8	0	8	0	15	15		11:15-11:30
11:30-11:45	0	0	1	1	0	5	0	5	0	0	0	0	0	8	2	10	1	15	16		11:30-11:45
11:45-12:00	0	0	0	0	0	14	0	14	0	0	1	1	0	14	0	14	1	28	29		11:45-12:00
12:00-12:15	0	0	0	0	1	8	0	9	0	0	0	0	0	12	1	13	0	22	22		12:00-12:15
12:15-12:30	0	0	1	1	4	2	0	6	0	0	0	0	0	17	0	17	1	23	24		12:15-12:30
12:30-12:45	0	0	1	1	1	6	0	7	0	0	0	0	0	15	2	17	1	24	25		12:30-12:45
12:45-1:00	0	2	3	5	0	1	0	1	0	0	1	1	0	16	0	16	6	17	23		12:45-1:00
1:00-1:15	0	0	1	1	4	7	0	11	0	0	0	0	0	21	1	22	1	33	34		1:00-1:15
1:15-1:30	0	0	0	0	1	6	0	7	0	0	0	0	0	15	0	15	0	22	22		1:15-1:30
1:30-1:45	0	0	0	0	2	7	0	9	0	0	0	0	0	16	0	16	0	25	25		1:30-1:45
1:45-2:00	0	0	0	0	2	7	0	9	0	0	0	0	0	15	0	15	0	24	24		1:45-2:00
2:00-2:15	0	0	0	0	0	3	0	3	0	0	0	0	0	15	0	15	0	18	18		2:00-2:15
2:15-2:30	0	0	2	2	1	8	1	10	0	0	0	0	0	15	1	16	2	26	28		2:15-2:30
2:30-2:45	0	0	0	0	2	3	0	5	0	1	0	1	0	15	0	15	1	20	21		2:30-2:45
2:45-3:00	0	0	1	1	1	5	0	6	0	0	0	0	0	9	1	10	1	16	17		2:45-3:00
3:00-3:15	0	0	0	0	3	4	0	7	0	0	0	0	0	6	1	7	0	14	14		3:00-3:15
3:15-3:30	0	0	3	3	1	9	0	10	0	0	0	0	0	14	1	15	3	25	28		3:15-3:30
3:30-3:45	0	0	0	0	1	10	0	11	0	0	1	1	0	17	0	17	1	28	29		3:30-3:45
3:45-4:00	0	0	1	1	3	4	0	7	0	0	0	0	0	17	1	18	1	25	26		3:45-4:00
4:00-4:15	0	0	0	0	0	10	0	10	0	0	0	0	0	15	0	15	0	25	25		4:00-4:15
4:15-4:30	0	0	0	0	1	5	0	6	0	0	0	0	0	20	1	21	0	27	27		4:15-4:30
4:30-4:45	0	0	2	2	0	4	0	4	0	0	0	0	0	16	0	16	2	20	22		4:30-4:45
4:45-5:00	0	0	1	1	0	5	0	5	0	0	0	0	0	9	0	9	1	14	15		4:45-5:00
5:00-5:15	0	0	0	0	2	11	0	13	0	0	0	0	0	9	1	10	0	23	23		5:00-5:15
5:15-5:30	0	0	2	2	0	10	0	10	0	0	0	0	0	15	1	16	2	26	28		5:15-5:30
5:30-5:45	0	0	1	1	2	5	0	7	0	0	0	0	0	18	1	19	1	26	27		5:30-5:45
5:45-6:00	0	0	0	0	0	10	0	10	0	0	0	0	0	18	1	19	0	29	29		5:45-6:00
1 Hour Totals																					
10:00-11:00	0	0	3	3	2	19	1	22	1	0	0	1	1	28	2	31	4	53	57	0.71	10:00-11:00
10:15-11:15	1	0	4	5	2	22	1	25	4	0	1	5	0	38	2	40	10	65	75	0.69	10:15-11:15
10:30-11:30	1	0	3	4	3	23	1	27	3	0	1	4	0	42	2	44	8	71	79	0.73	10:30-11:30
10:45-11:45	1	0	2	3	2	25	1	28	3	0	1	4	0	39	4	43	7	71	78	0.72	10:45-11:45
11:00-12:00	1	0	2	3	1	31	0	32	3	0	2	5	0	45	2	47	8	79	87	0.75	11:00-12:00
11:15-12:15	0	0	1	1	2	33	0	35	0	0	1	1	0	42	3	45	2	80	82	0.71	11:15-12:15
11:30-12:30	0	0	2	2	5	29	0	34	0	0	1	1	0	51	3	54	3	88	91	0.78	11:30-12:30
11:45-12:45	0	0	2	2	6	30	0	36	0	0	1	1	0	58	3	61	3	97	100	0.86	11:45-12:45
12:00-1:00	0	2	5	7	6	17	0	23	0	0	1	1	0	60	3	63	8	86	94	0.94	12:00-1:00
12:15-1:15	0	2	6	8	9	16	0	25	0	0	1	1	0	69	3	72	9	97	106	0.78	12:15-1:15
12:30-1:30	0	2	5	7	6	20	0	26	0	0	1	1	0	67	3	70	8	96	104	0.76	12:30-1:30
12:45-1:45	0	2	4	6	7	21	0	28	0	0	1	1	0	68	1	69	7	97	104	0.76	12:45-1:45
1:00-2:00	0	0	1	1	9	27	0	36	0	0	0	0	0	67	1	68	1	104	105	0.77	1:00-2:00
1:15-2:15	0	0	0	0	5	23	0	28	0	0	0	0	0	61	0	61	0	89	89	0.89	1:15-2:15
1:30-2:30	0	0	2	2	5	25	1	31	0	0	0	0	0	61	1	62	2	93	95	0.85	1:30-2:30
1:45-2:45	0	0	2	2	5	21	1	27	0	1	0	1	0	60	1	61	3	88	91	0.81	1:45-2:45
2:00-3:00	0	0	3	3	4	19	1	24	0	1	0	1	0	54	2	56	4	80	84	0.75	2:00-3:00
2:15-3:15	0	0	3	3	7	20	1	28	0	1	0	1	0	45	3	48	4	76	80	0.71	2:15-3:15
2:30-3:30	0	0	4	4	7	21	0	28	0	1	0	1	0	44	3	47	5	75	80	0.71	2:30-3:30
2:45-3:45	0	0	4	4	6	28	0	34	0	0	1	1	0	46	3	49	5	83	88	0.76	2:45-3:45
3:00-4:00	0	0	4	4	8	27	0	35	0	0	1	1	0	54	3	57	5	92	97	0.84	3:00-4:00
3:15-4:15	0	0	4	4	5	33	0	38	0	0	1	1	0	63	2	65	5	103	108	0.93	3:15-4:15
3:30-4:30	0	0	1	1	5	29	0	34	0	0	1	1	0	69	2	71	2	105	107	0.92	3:30-4:30
3:45-4:45	0	0	3	3	4	23	0	27	0	0	0	0	0	68	2	70	3	97	100	0.93	3:45-4:45
4:00-5:00	0	0	3	3	1	24	0	25	0	0	0	0	0	60	1	61	3	86	89	0.82	4:00-5:00
4:15-5:15	0	0	3	3	3	25	0	28	0	0	0	0	0	54	2	56	3	84	87	0.81	4:15-5:15
4:30-5:30	0	0	5	5	2	30	0	32	0	0	0	0	0	49	2	51	5	83	88	0.79	4:30-5:30
4:45-5:45	0	0	4	4	4	31	0	35	0	0	0	0	0	51	3	54	4	89	93	0.83	4:45-5:45
5:00-6:00	0	0	3	3	4	36	0	40	0	0	0	0	0	60	4	64	3	104	107	0.92	5:00-6:00
Saturday Peak																					**Saturday Peak**
3:15-4:15	**0**	**0**	**4**	**4**	**5**	**33**	**0**	**38**	**0**	**0**	**1**	**1**	**0**	**63**	**2**	**65**	**5**	**103**	**108**	**0.93**	**3:15-4:15**


College Park-Univ of MD:
83 83X 86 C8 F6 J4 R12
TB14 G H UM
New Carrollton West:
84 B24 B25 B27 F4 F6 F13
R12 T16 T17 T18 TB15x TB16
College Park-Univ of MD
Prince George's Plaza
Prince George's Plaza
Langley Park
Lewisdale
Highview
West Hyattsville
Riverdale Pk
Riverdale
East Pines
Mattapony
Edmonston
Univ of MD
Byrd Stadium
Univ. Centre
Univ House Apartments
Northwest Branch Park
Northwestern HS
The Mall at Prince George's
American Center for Physics
Nicholas Orem MS
Hyattsville MS
Parkdale HS
Charles Carroll MS
Greenway Center
New Carrollton
Riverdale Plaza
East Pines SC
Campus Dr
Ager Rd
Good Luck Rd
Riverdale Rd
Greenbelt Rd
Greenbelt Park
Kenilworth Ave
Washington Pkwy
Baltimore
Auburn Ave
Capital Beltway
Lamont Dr
Finns Ln
85th Pl
University Dr
Valley Dr
Branch Dr
23rd Ave
River Rd
Park & Ride
MARC

Maryland Department of Transportation, Maryland Transit Administration



PURPLE LINE FACTS

What Is The Purple Line?

A proposed 16-mile east-west Light Rail Transit (LRT) line extending inside the C to Bethesda in Montgomery County. The Purple Line would:

- Connect the major central business districts and activity centers of Bethes Park/University of Maryland, and New Carrollton.
- Provide direct connections to Metrorail at Bethesda, Silver Spring, Colleg Red, Green, and Orange lines.
- Connect to all three MARC lines, Amtrak, and local bus routes.
- Provide 21 conveniently located stations.
- Include a hiker/biker trail along the Georgetown Branch and CSX/Metrora
- Improve east-west mobility, and reduce travel times for thousands of area

What Will The Purple Line Be?

- The Locally Preferred Alternative selected for the Purple Line is a modern
- Light rail operates on tracks with overhead wires, has permanent stations or on a separate right-of-way.
- The Purple Line would be a pedestrian-friendly transit system that would i
- The Purple Line would be integrated with the region's Metrorail system th

Why Do We Need The Purple Line?

- The number of people and jobs in the area is growing and more people a
- The existing roads are highly congested, and commuting times continue t
- The existing east-west bus services are unreliable and slow.
- It is difficult and time-consuming to get from many parts of the corridor to
- The Purple Line would provide a high-quality, faster and more dependabl
- It would provide a direct link to the state's primary university and largest e
- There is a large population in the area that relies on transit and there are
- The Purple Line will support smart growth, economic development and co

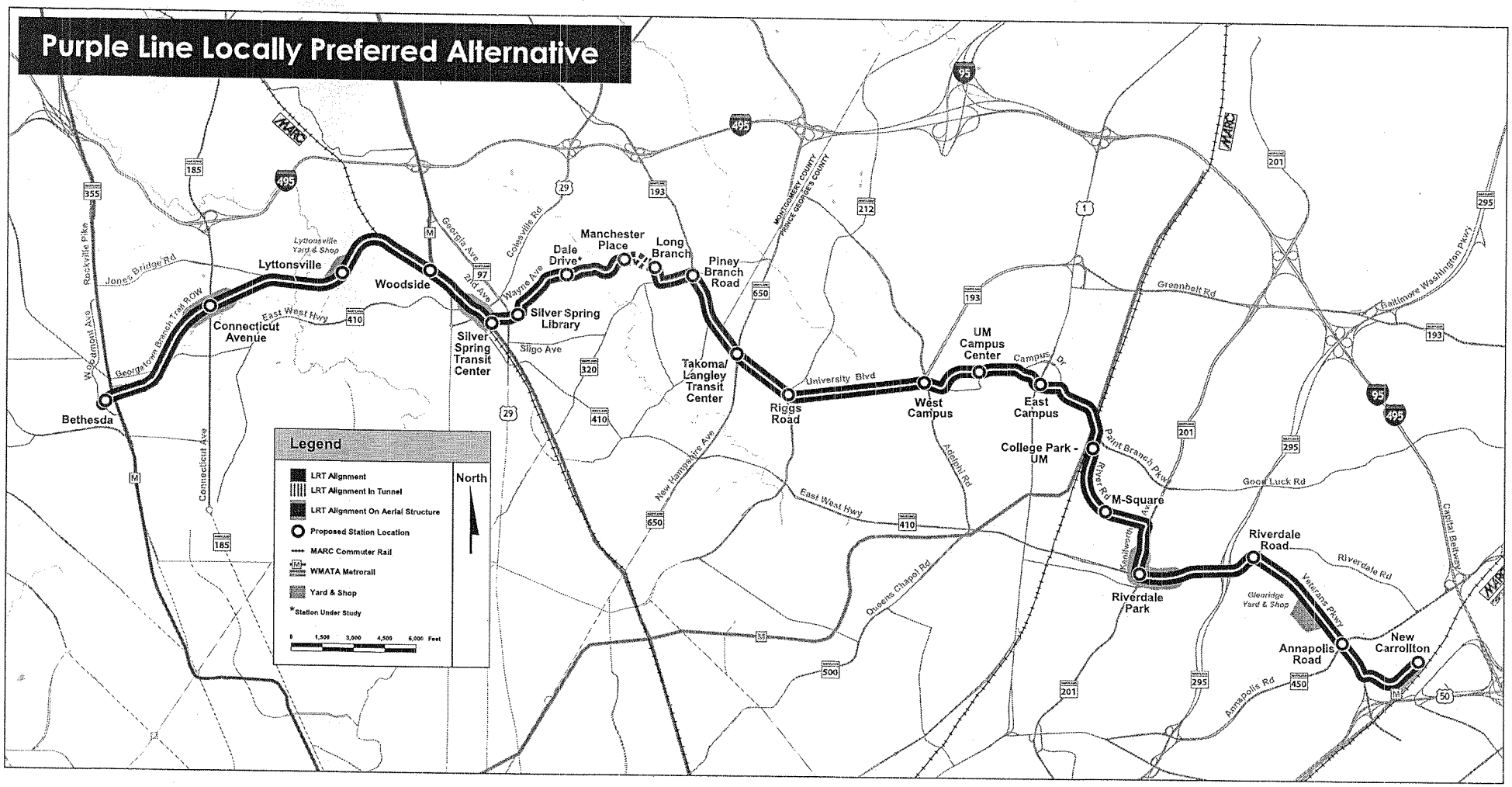
Where Are We In The Project Schedule?

- On October 17, 2008 the MTA released the Alternatives Analysis/Draft Er
- On August 4, 2009 Governor Martin O'Malley announced his selection of point for the project.
- The next phase of the project for the Purple Line is Preliminary Engineerir on the LPA and the Final Environmental Impact Statement will be prepare Administration to enter PE in 2011.
- Construction on the Purple Line could begin is 2015, if funding is availabl
- It would likely take 3 to 5 years to complete construction.

Transit Information Call Center (410) 539-5000
Toll Free: 1-866-RIDE-MTA
Monday through Friday | 6:00 a.m. until 7:00 p.m.

TTY for Hearing or Speech Impaired Persons
(410) 539-3497

Purple Line Locally Preferred Alternative



Purple Line

MTA Maryland

Appendix C

Existing Intersection Levels of Service Analysis

Cafritz Property at Riverdale Park
Critical Lane Volume
Level of Service Calculations

Intersection: 1: US 1/Paint Branch Parkway
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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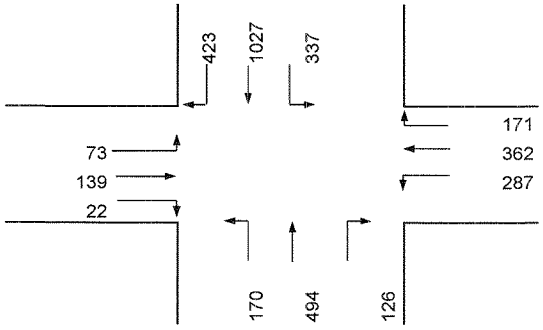
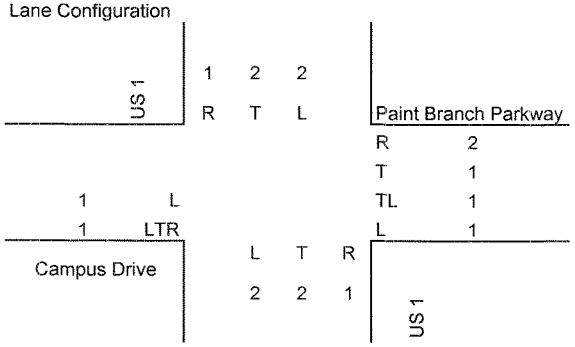
Phone: (410)266-5723 Facsimile: (410)266-9189

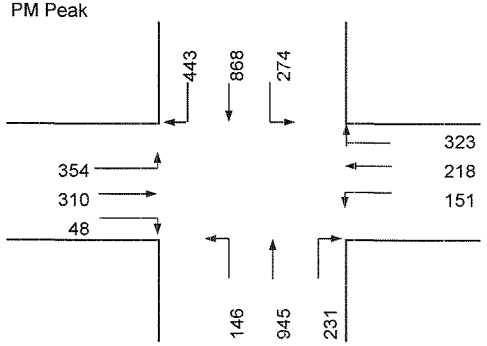
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: E/W Stop: Ways:

RTOR/Overlap (AM):	NB	126	SB	73	EB	0	WB 171
RTOR/Overlap (PM):	NB	151	SB	354	EB	0	WB 274
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	234	0.55	129	0	1.00	0	129	*
WB	TL	649	0.37	240	0	1.00	0	240	*
NB	T	494	0.55	272	337	0.60	202	474	
SB	T	1027	0.55	565	170	0.60	102	667	*
Note:							SUM	1036	
								B	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	712	0.55	392	0	1.00	0	392	*
WB	TL	369	0.37	137	0	1.00	0	137	*
NB	T	945	0.55	520	274	0.60	164	684	*
SB	T	868	0.55	477	146	0.60	88	565	
Note:							SUM	1213	
								C	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volume
Level of Service Calculations

Intersection: 1: US 1/Paint Branch Parkway
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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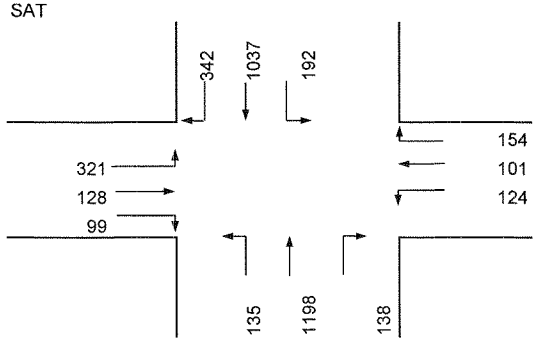
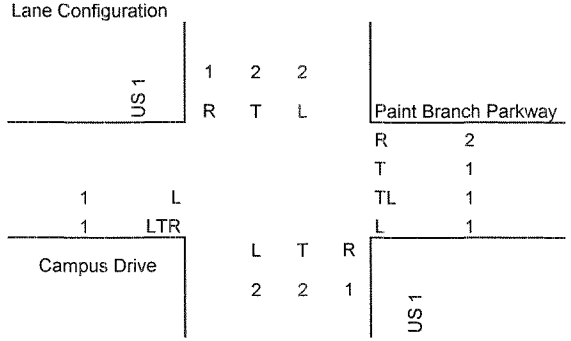
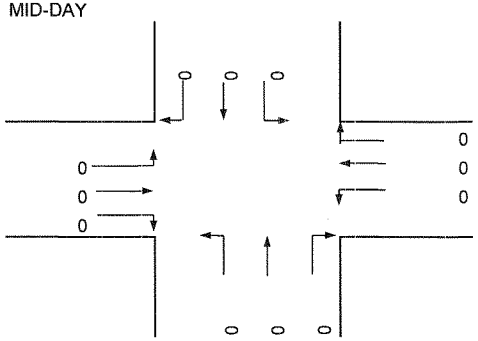
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: E/W Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	124	321	0	154
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	548	0.55	301	0	1.00	0	301	*
WB	TL	225	0.37	83	0	1.00	0	83	*
NB	T	1198	0.55	659	192	0.60	115	774	*
SB	T	1037	0.55	570	135	0.60	81	651	
Note:							SUM	1158	
								C	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	0.55	0	0	1.00	0	0	*
WB	TL	0	0.37	0	0	1.00	0	0	*
NB	T	0	0.55	0	0	0.60	0	0	*
SB	T	0	0.55	0	0	0.60	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 2: US 1/Rossborough Lane
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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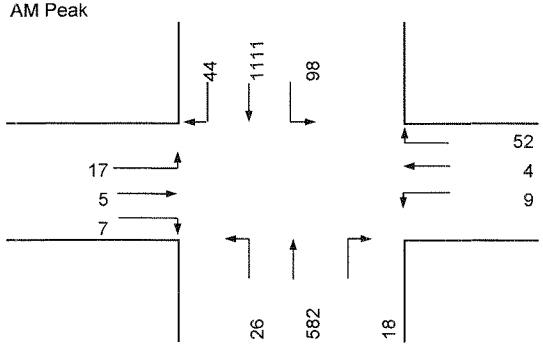
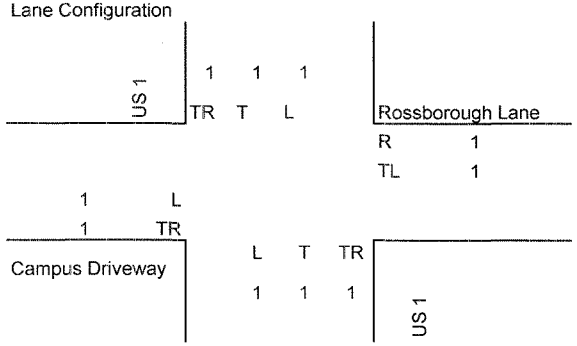
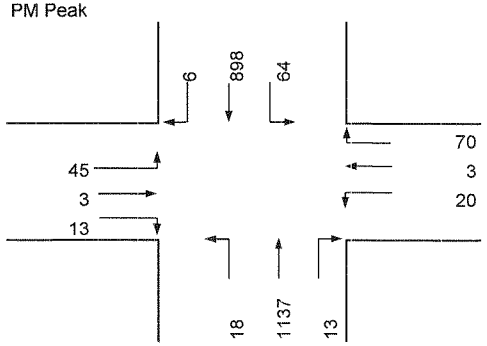
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop:
Split: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB	52
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB	64
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB	1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	12	1.00	12	9	1.00	9	21	
WB	TL	14	1.00	14	17	1.00	17	31	*
NB	TR	600	0.55	330	98	1.00	98	428	
SB	TR	1155	0.55	635	26	1.00	26	661	*

Note: SUM 692
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	16	1	16	20	1.00	20	36	
WB	TL	25	1	25	45	1.00	45	70	*
NB	TR	1150	0.55	633	64	1.00	64	697	*
SB	TR	904	0.55	497	18	1.00	18	515	

Note: SUM 767
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 2: US 1/Rossborough Lane
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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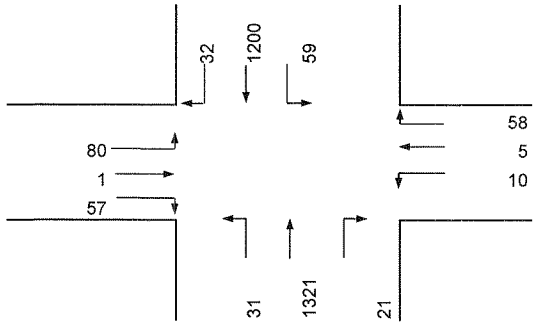
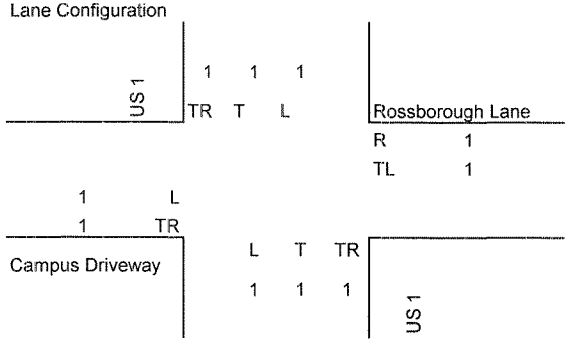
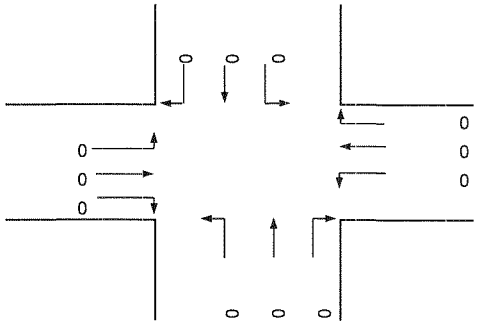
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 58
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	58	1.00	58	10	1.00	10	68	
WB	TL	16	1.00	16	80	1.00	80	96	*
NB	TR	1342	0.55	738	59	1.00	59	797	*
SB	TR	1232	0.55	678	31	1.00	31	709	
Note:							SUM	893	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	0	1	0	0	1.00	0	0	*
WB	TL	0	1	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 3: US 1/College Avenue
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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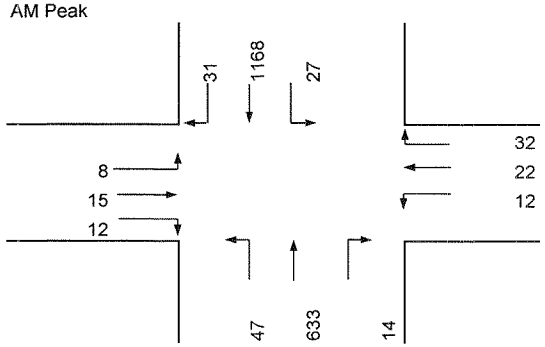
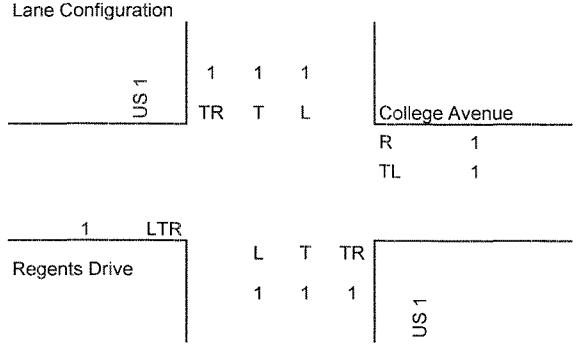
Phone: (410)266-5723 Facsimile: (410)266-9189

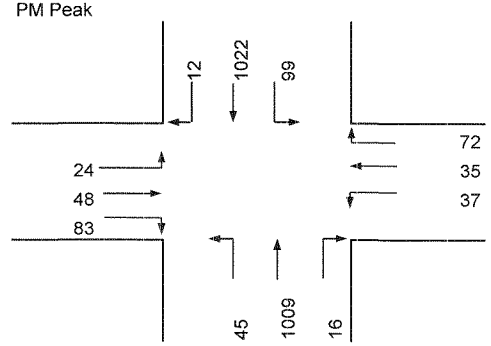
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 27
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 72
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	36	1.00	36	12	1.00	12	48	*
WB	TL	35	1.00	35	8	1.00	8	43	
NB	TR	647	0.55	356	27	1.00	27	383	
SB	TR	1199	0.55	659	47	1.00	47	706	*
Note:							SUM	754	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	157	1.00	157	37	1.00	37	194	*
WB	TL	76	1.00	76	24	1.00	24	100	
NB	TR	1025	0.55	564	99	1.00	99	663	*
SB	TR	1034	0.55	569	45	1.00	45	614	
Note:							SUM	857	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 3: US 1/College Avenue
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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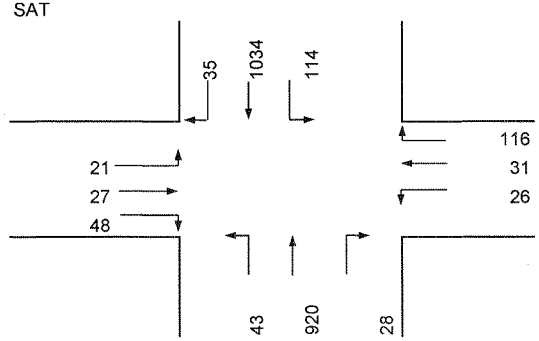
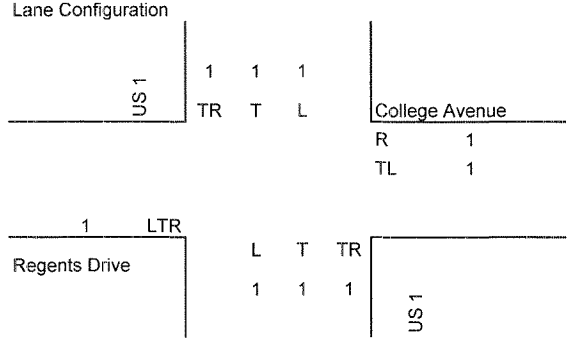
Phone: (410)266-5723 Facsimile: (410)266-9189

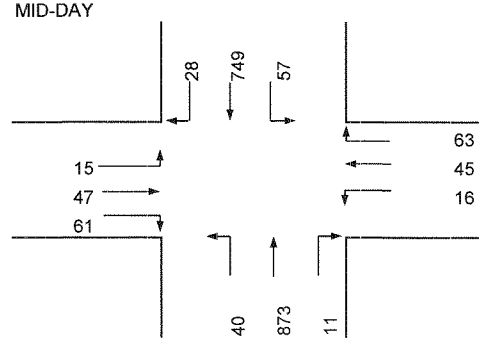
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 114
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 57
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	98	1.00	98	26	1.00	26	124	*
WB	TL	60	1.00	60	21	1.00	21	81	
NB	TR	948	0.55	521	114	1.00	114	635	*
SB	TR	1069	0.55	588	43	1.00	43	631	
Note:							SUM	759	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	125	1.00	125	16	1.00	16	141	*
WB	TL	63	1.00	63	15	1.00	15	78	
NB	TR	884	0.55	486	57	1.00	57	543	*
SB	TR	777	0.55	427	40	1.00	40	467	
Note:							SUM	684	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 4: US 1/Knox Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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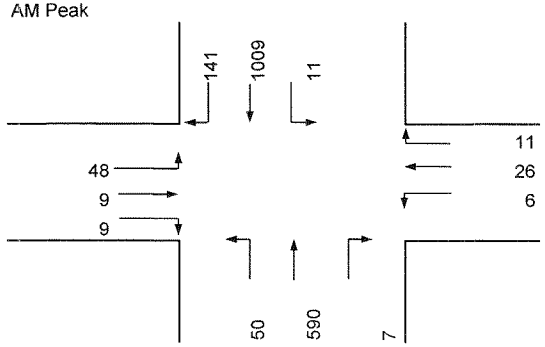
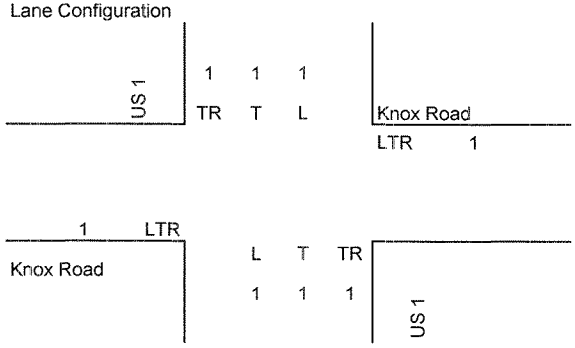
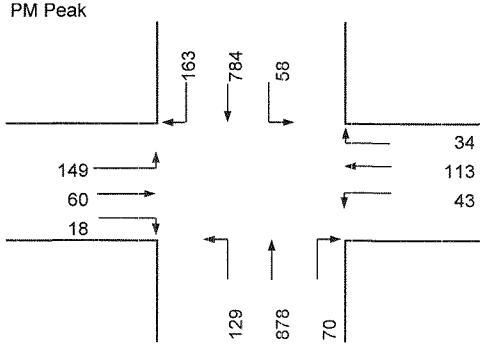
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1.1	1.1
Shared Left PCE (PM):	1	1	1.1	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	71	1.00	71	6	1.00	6	77	
WB	LTR	44	1.00	44	48	1.00	48	92	*
NB	TR	597	0.55	328	11	1.00	11	339	
SB	TR	1150	0.55	633	50	1.00	50	683	*

Note:

SUM 775
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	242	1.00	242	43	1.00	43	285	
WB	LTR	194	1.00	194	149	1.00	149	343	*
NB	TR	948	0.55	521	58	1.00	58	579	
SB	TR	947	0.55	521	129	1.00	129	650	*

Note:

SUM 993
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 4: US 1/Knox Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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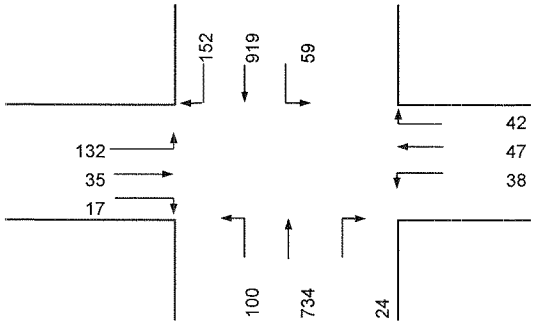
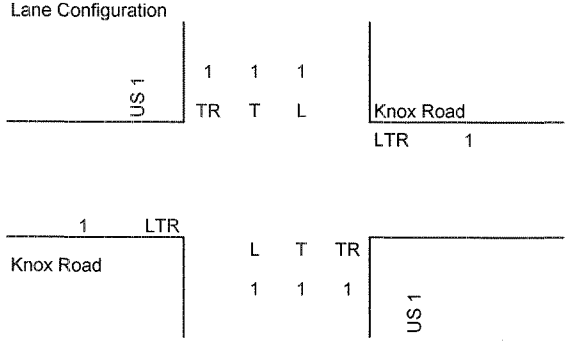
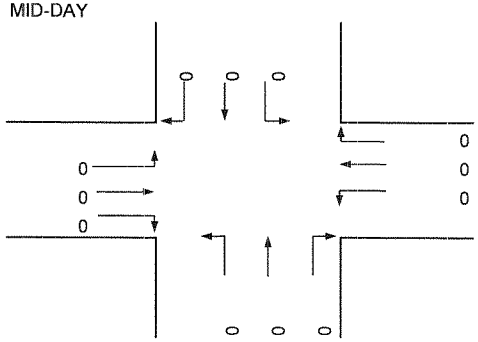
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	197	1.00	197	38	1.00	38	235	
WB	LTR	131	1.00	131	132	1.00	132	263	*
NB	TR	758	0.55	417	59	1.00	59	476	
SB	TR	1071	0.55	589	100	1.00	100	689	*

Note:

SUM 952
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	1.00	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 5: US 1/Calvert Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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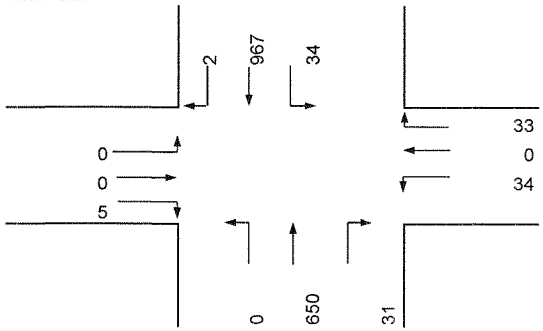
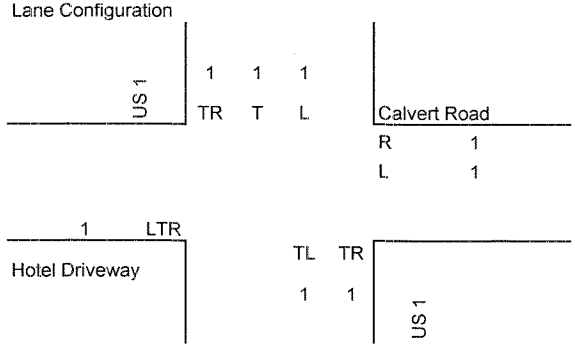
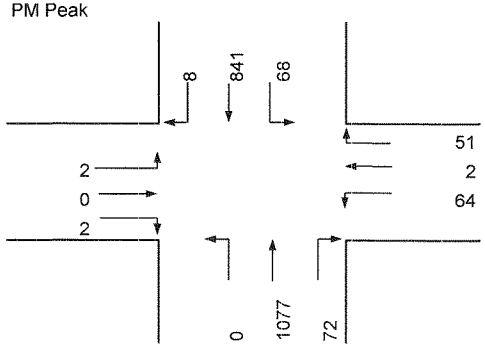
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 33
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 51
Shared Left PCE (AM):	NB	4	SB	1	EB	1.1	WB 1
Shared Left PCE (PM):	NB	4	SB	1	EB	1.1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	5	1.00	5	34	1.00	34	39	*
WB	L	34	1.00	34	0	1.00	0	34	
NB	LTR	681	0.55	375	34	1.00	34	409	
SB	TR	969	0.55	533	0	1.00	0	533	*

Note:

SUM 572
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	4	1.00	4	64	1.00	64	68	*
WB	L	64	1.00	64	2	1.00	2	66	
NB	LTR	1149	0.55	632	68	1.00	68	700	*
SB	TR	849	0.55	467	0	1.00	0	467	

Note:

SUM 768
A

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 5: US 1/Calvert Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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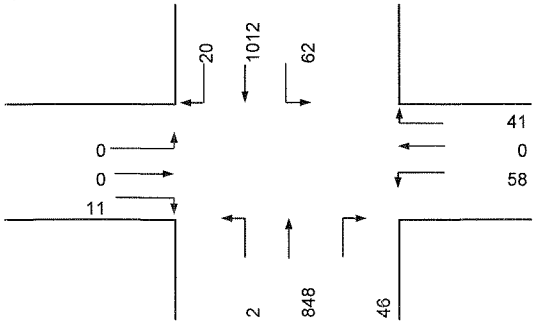
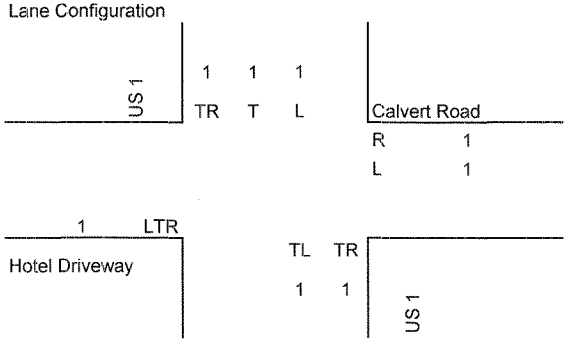
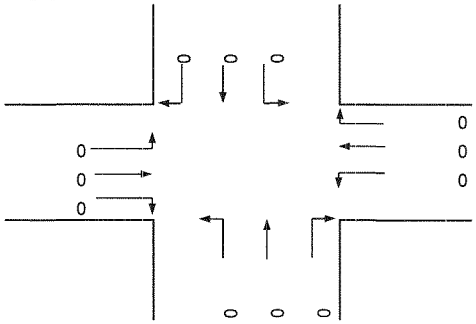
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	41
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	5	1	1.1	1
Shared Left PCE (PM):	1.1	1	1.1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	11	1.00	11	58	1.00	58	69	*
WB	L	58	1.00	58	0	1.00	0	58	
NB	LTR	904	0.55	497	62	1.00	62	559	
SB	TR	1032	0.55	568	2	1.00	2	570	*

Note:

SUM 639
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	1.00	0	0	1.00	0	0	*
WB	L	0	1.00	0	0	1.00	0	0	
NB	LTR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 6: US 1/Guilford Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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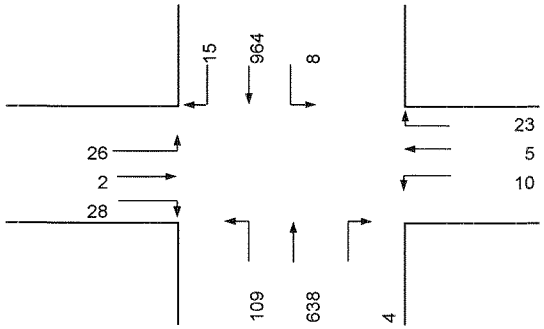
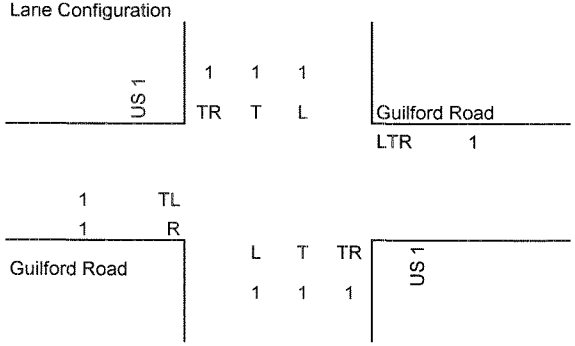
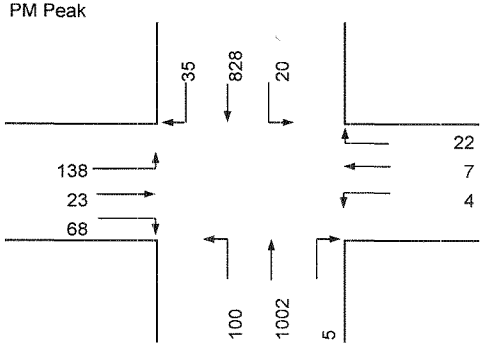
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	28	0
RTOR/Overlap (PM):	0	0	68	0
Shared Left PCE (AM):	1	1	1.1	1.1
Shared Left PCE (PM):	1	1	1.1	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	31	1.00	31	10	1.00	10	41	
WB	LTR	39	1.00	39	26	1.00	26	65	*
NB	TR	642	0.55	353	8	1.00	8	361	
SB	TR	979	0.55	538	109	1.00	109	647	*
Note:							SUM	712	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	175	1.00	175	4	1.00	4	179	*
WB	LTR	33	1.00	33	138	1.00	138	171	
NB	TR	1007	0.55	554	20	1.00	20	574	
SB	TR	863	0.55	475	100	1.00	100	575	*
Note:							SUM	754	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 6: US 1/Guilford Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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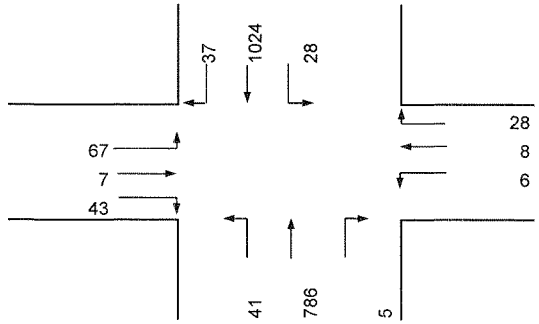
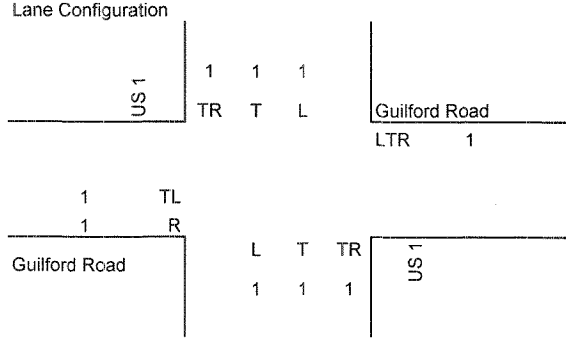
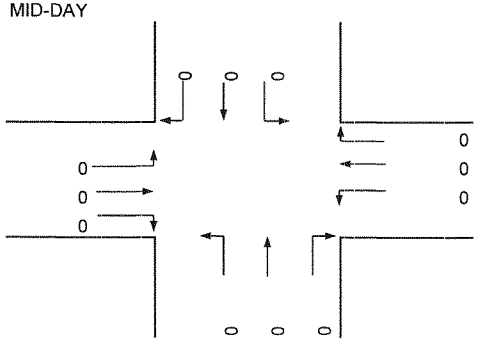
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	41	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	81	1.00	81	6	1.00	6	87	
WB	LTR	43	1.00	43	67	1.00	67	110	*
NB	TR	791	0.55	435	28	1.00	28	463	
SB	TR	1061	0.55	584	41	1.00	41	625	*

Note:

SUM 735
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	0	1.00	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 7: US 1/Amherst Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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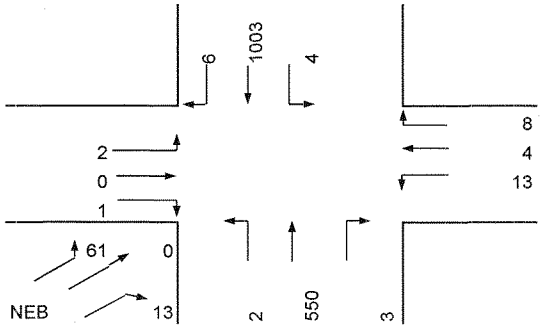
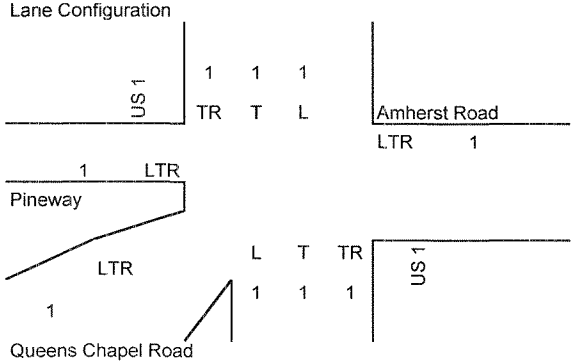
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

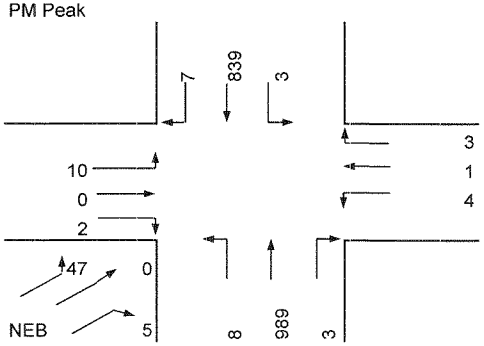
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: x Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	3	1.00	3	13	1.00	13	16	
WB	LTR	26	1.00	26	2	1.00	2	28	*
NB	TR	553	0.55	304	4	1.00	4	308	
SB	TR	1009	0.55	555	2	1.00	2	557	*
NEB	LTR	74	1.00	74	0	0	0	74	*
Note:							SUM	659	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	13	1.00	13	4	1.00	4	17	
WB	LTR	8	1.00	8	10	1.00	10	18	*
NB	TR	992	0.55	546	3	1.00	3	549	*
SB	TR	846	0.55	465	8	1.00	8	473	
NEB	LTR	52	1.00	52	0	0	0	52	*
Note:							SUM	619	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 7: US 1/Amherst Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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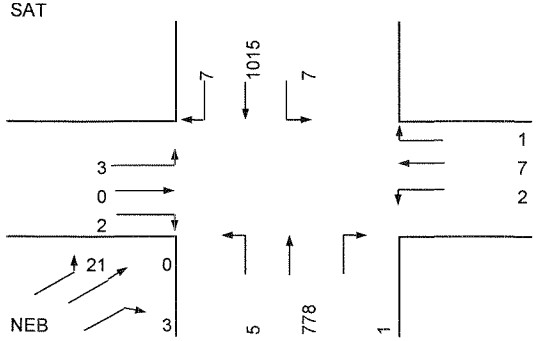
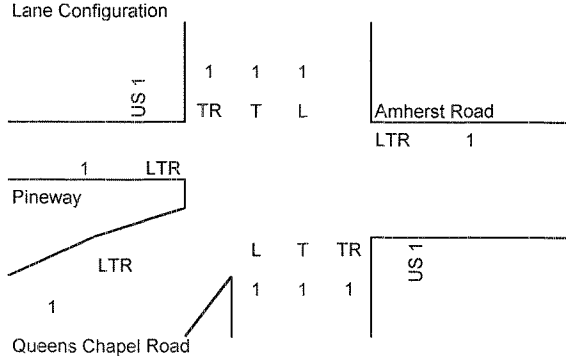
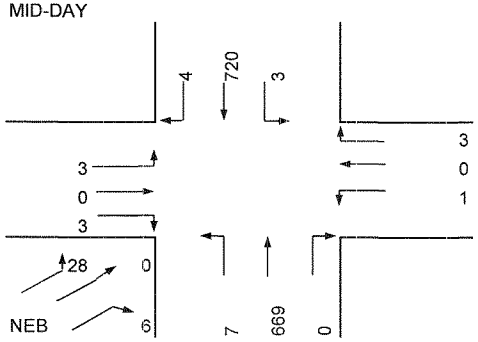
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: x Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	5	1.00	5	2	1.00	2	7	
WB	LTR	10	1.00	10	3	1.00	3	13	*
NB	TR	779	0.55	428	7	1.00	7	435	
SB	TR	1022	0.55	562	5	1.00	5	567	*
NEB	LTR	24	1.00	24	0	0	0	24	*
Note:							SUM	604	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	6	1.00	6	1	1.00	1	7	*
WB	LTR	4	1.00	4	3	1.00	3	7	
NB	TR	669	0.55	368	3	1.00	3	371	
SB	TR	724	0.55	398	7	1.00	7	405	*
NEB	LTR	34	1.00	34	0	0	0	34	*
Note:							SUM	446	
								A	

Date Printed: 7/9/2012

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/Van Buren Street
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	11/19/2011	Analysis Year	Existing
Analysis Time Period	AM Peak		

Project Description *Riverdale*

East/West Street: *Van Buren Street* | North/South Street: *US 1*

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)	26	559			989	51
Peak-Hour Factor, PHF	0.96	0.96	1.00	1.00	0.96	0.96
Hourly Flow Rate, HFR (veh/h)	27	582	0	0	1030	53
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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	0	24			
Peak-Hour Factor, PHF	0.96	0.96	0.96	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	2	0	25	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
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	L						LTR	
v (veh/h)	27						27	
C (m) (veh/h)	640						491	
v/c	0.04						0.05	
95% queue length	0.13						0.17	
Control Delay (s/veh)	10.9						12.8	
LOS	B						B	
Approach Delay (s/veh)	--	--	12.8					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/Van Buren Street
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	11/19/2011	Analysis Year	Existing
Analysis Time Period	PM Peak		

Project Description *Riverdale*

East/West Street: *Van Buren Street*	North/South Street: *US 1*
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)	26	992			842	10
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	27	1044	0	0	886	10
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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)	5		17			
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	5	0	17	0	0	0
Percent Heavy Vehicles	2	0	2	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	L						LR	
v (veh/h)	27						22	
C (m) (veh/h)	753						454	
v/c	0.04						0.05	
95% queue length	0.11						0.15	
Control Delay (s/veh)	10.0						13.3	
LOS	A						B	
Approach Delay (s/veh)	--	--				13.3		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*SK*	Intersection	*US 1/Van Buren Street*
Agency/Co.	*Wells + Associates*	Jurisdiction	*Prince George's County*
Date Performed	*11/19/2011*	Analysis Year	*Existing*
Analysis Time Period	*SAT*		

Project Description *Riverdale*

East/West Street: *Van Buren Street*	North/South Street: *US 1*
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)	*12*	*761*			*981*	*17*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*1.00*	*1.00*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*12*	*801*	*0*	*0*	*1032*	*17*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*0*	*2*	*0*
Configuration	*L*	*T*			*T*	*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)	*4*	*0*	*6*			
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*1.00*	*1.00*	*1.00*
Hourly Flow Rate, HFR (veh/h)	*4*	*0*	*6*	*0*	*0*	*0*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*0*
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	*L*						*LTR*	
v (veh/h)	*12*						*10*	
C (m) (veh/h)	*659*						*354*	
v/c	*0.02*						*0.03*	
95% queue length	*0.06*						*0.09*	
Control Delay (s/veh)	*10.6*						*15.5*	
LOS	*B*						*C*	
Approach Delay (s/veh)	--	--				*15.5*		
Approach LOS	--	--				*C*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/Van Buren Street
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	11/19/2011	Analysis Year	Existing
Analysis Time Period	Mid Day		

Project Description *Riverdale*

East/West Street: *Van Buren Street* | North/South Street: *US 1*

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	676			701	5
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	9	711	0	0	737	5
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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	0	6			
Peak-Hour Factor, PHF	0.95	0.95	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	2	0	6	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
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	L						LTR	
v (veh/h)	9						8	
C (m) (veh/h)	861						530	
v/c	0.01						0.02	
95% queue length	0.03						0.05	
Control Delay (s/veh)	9.2						11.9	
LOS	A						B	
Approach Delay (s/veh)	--	--				11.9		
Approach LOS	--	--				B		

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Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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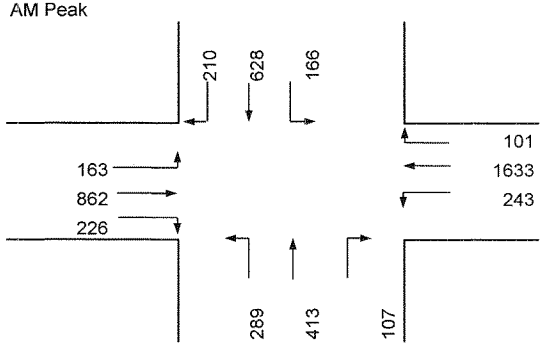
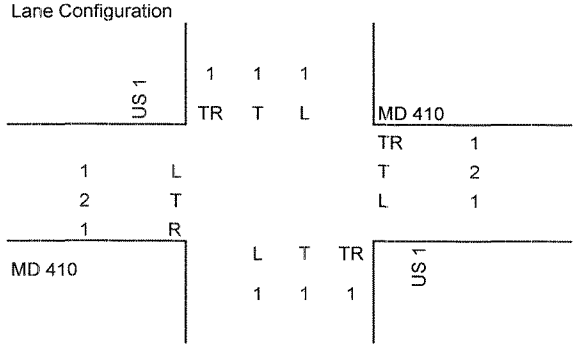
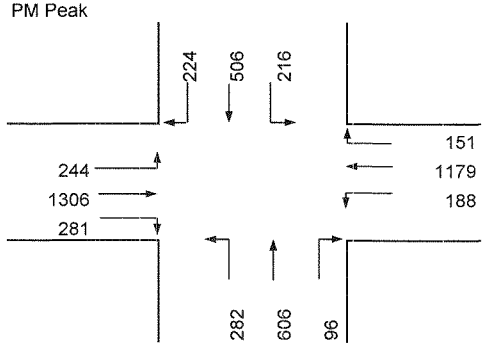
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	226	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	281	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	862	0.55	474	243	1.00	243	717	
WB	TR	1734	0.37	642	163	1.00	163	805	*
NB	TR	520	0.55	286	166	1.00	166	452	
SB	TR	838	0.55	461	289	1.00	289	750	*
Note:							SUM	1555	
								E	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1306	0.55	718	188	1.00	188	906	*
WB	TR	1330	0.37	492	244	1.00	244	736	
NB	TR	702	0.55	386	216	1.00	216	602	
SB	TR	730	0.55	402	282	1.00	282	684	*
Note:							SUM	1590	
								E	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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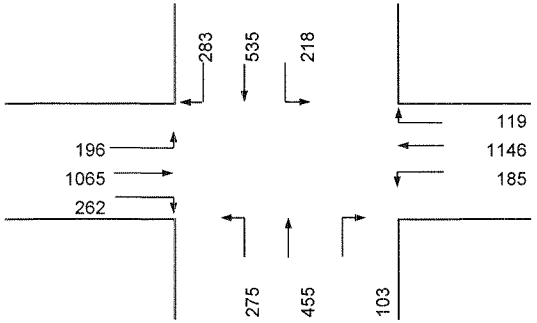
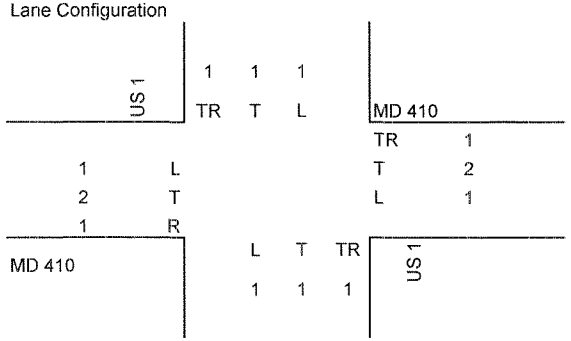
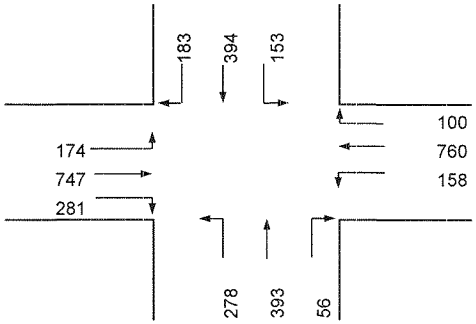
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	262	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	278	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1065	0.55	586	185	1.00	185	771	*
WB	TR	1265	0.37	468	196	1.00	196	664	
NB	TR	558	0.55	307	218	1.00	218	525	
SB	TR	818	0.55	450	275	1.00	275	725	*

Note:

SUM 1496
E

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	747	0.55	411	158	1.00	158	569	*
WB	TR	860	0.37	318	174	1.00	174	492	
NB	TR	449	0.55	247	153	1.00	153	400	
SB	TR	577	0.55	317	278	1.00	278	595	*

Note:

SUM 1164
C

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 12: US 1/Queensbury Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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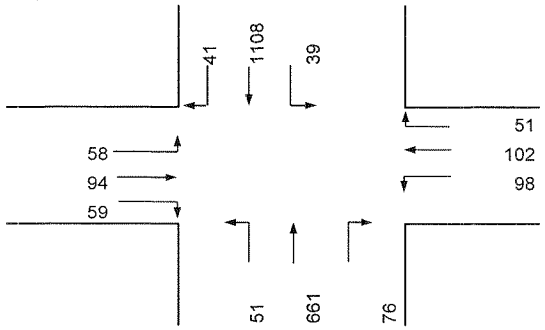
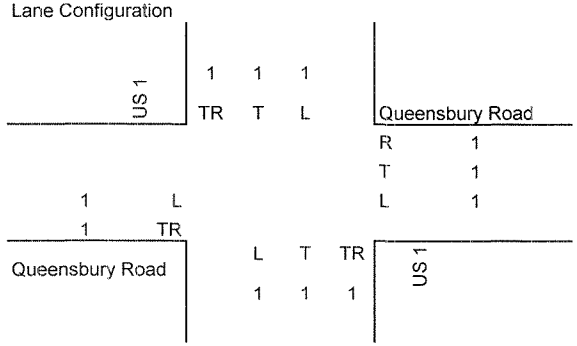
Phone: (410)266-5723 Facsimile: (410)266-9189

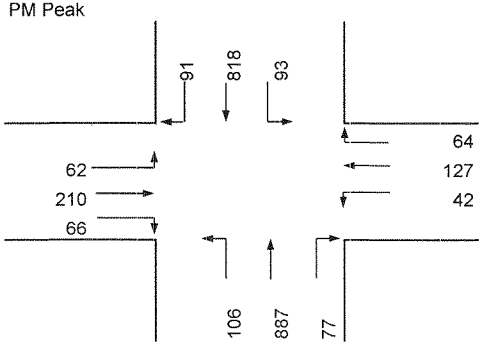
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 39
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 64
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	153	1.00	153	98	1.00	98	251	*
WB	T	102	1.00	102	58	1.00	58	160	
NB	TR	737	0.55	405	39	1.00	39	444	
SB	TR	1149	0.55	632	51	1.00	51	683	*
Note:							SUM	934	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	276	1.00	276	42	1.00	42	318	*
WB	T	127	1.00	127	62	1.00	62	189	
NB	TR	964	0.55	530	93	1.00	93	623	*
SB	TR	909	0.55	500	106	1.00	106	606	
Note:							SUM	941	
								A	

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 12: US 1/Queensbury Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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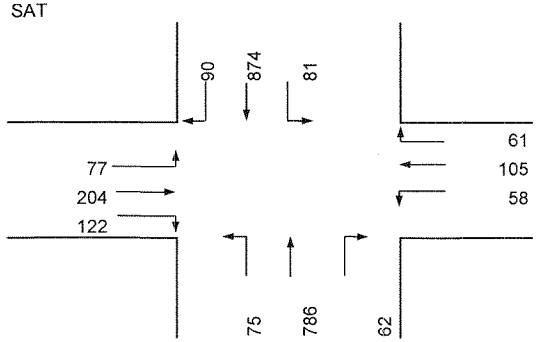
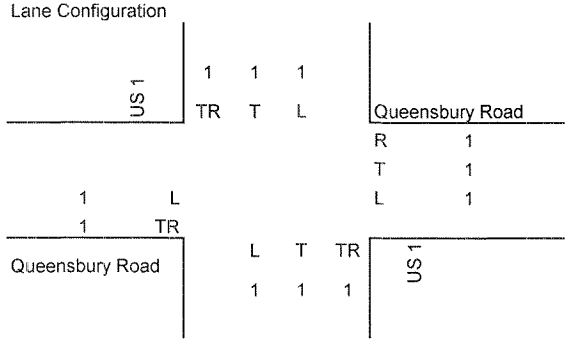
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

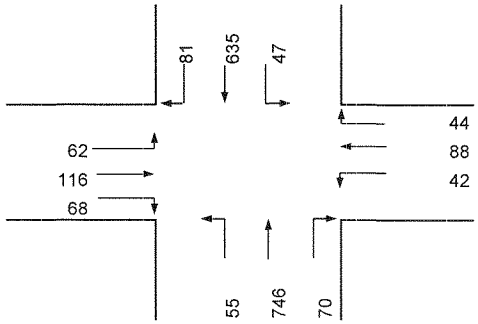
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 61
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 44
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	326	1.00	326	58	1.00	58	384	*
WB	T	105	1.00	105	77	1.00	77	182	
NB	TR	848	0.55	466	81	1.00	81	547	
SB	TR	964	0.55	530	75	1.00	75	605	*

Note:

SUM 989
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	184	1.00	184	42	1.00	42	226	*
WB	T	88	1.00	88	62	1.00	62	150	
NB	TR	816	0.55	449	47	1.00	47	496	*
SB	TR	716	0.55	394	55	1.00	55	449	

Note:

SUM 722
A

Date Printed: 7/9/2012

TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	*SK*
Agency/Co.	*Wells and Associates*
Date Performed	*2/25/2012*
Analysis Time Period	*AM*

Site Information

Intersection	*River Tech Ct at River Rd*
Jurisdiction	*Prince George's County*
Analysis Year	*Existing*

Project Description *Cafritz Property*

East/West Street: *River Rd* | North/South Street: *Rivertech Ct*

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)	*42*	*86*	*59*	*272*	*232*	*50*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*44*	*90*	*62*	*286*	*244*	*52*
Percent Heavy Vehicles	*2*	--	--	*2*	--	--
Median Type	*Undivided*					
RT Channelized			*0*			*0*
Lanes	*1*	*2*	*0*	*1*	*2*	*0*
Configuration	*L*	*T*	*TR*	*L*	*T*	*TR*
Upstream Signal		*0*			*0*	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	*43*	*18*	*55*	*14*	*7*	*16*
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*45*	*18*	*57*	*14*	*7*	*16*
Percent Heavy Vehicles	*2*	*0*	*2*	*2*	*2*	*2*
Percent Grade (%)		*1*			*1*	
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	*L*	*L*		*LTR*			*LTR*	
v (veh/h)	*44*	*286*		*120*			*37*	
C (m) (veh/h)	*1262*	*1426*		*277*			*225*	
v/c	*0.03*	*0.20*		*0.43*			*0.16*	
95% queue length	*0.11*	*0.75*		*2.07*			*0.58*	
Control Delay (s/veh)	*8.0*	*8.2*		*27.6*			*24.1*	
LOS	*A*	*A*		*D*			*C*	
Approach Delay (s/veh)	--	--	*27.6*			*24.1*		
Approach LOS	--	--	*D*			*C*		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	River Tech Ct at River Rd
Agency/Co.	Wells and Associates	Jurisdiction	Prince George's County
Date Performed	2/25/2012	Analysis Year	Existing
Analysis Time Period	PM		

Project Description *Cafritz Property*

East/West Street: *River Rd* | North/South Street: *Rivertech Ct*

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	278	48	80	174	22
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	15	292	50	84	183	23
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	68	7	224	93	14	55
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	71	7	235	97	14	57
Percent Heavy Vehicles	2	0	2	2	2	2
Percent Grade (%)		1			1	
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	L	L		LTR			LTR	
v (veh/h)	15	84		313			168	
C (m) (veh/h)	1363	1214		599			368	
v/c	0.01	0.07		0.52			0.46	
95% queue length	0.03	0.22		3.03			2.31	
Control Delay (s/veh)	7.7	8.2		17.4			22.7	
LOS	A	A		C			C	
Approach Delay (s/veh)	--	--	17.4			22.7		
Approach LOS	--	--	C			C		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	River Tech Ct at River Rd
Agency/Co.	Wells and Associates	Jurisdiction	Prince George's County
Date Performed	2/25/2012	Analysis Year	Existing
Analysis Time Period	SAT		

Project Description *Cafritz Property*

East/West Street: *River Rd* | North/South Street: *Rivertech Ct*

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	134	26	36	82	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	141	27	37	86	0
Percent Heavy Vehicles	2	--	--	2	--	--
Median Type	Undivided					
RT Channelized			0			0
Lanes	1	2	0	1	2	0
Configuration	L	T	TR	L	T	TR
Upstream Signal		0			0	

Minor Street	Northbound			Southbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)	25	0	42	0	0	0
Peak-Hour Factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	26	0	44	0	0	0
Percent Heavy Vehicles	2	0	2	2	2	2
Percent Grade (%)		1			1	
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	L	L		LTR			LTR	
v (veh/h)	0	37		70			0	
C (m) (veh/h)	1508	1407		813				
v/c	0.00	0.03		0.09				
95% queue length	0.00	0.08		0.28				
Control Delay (s/veh)	7.4	7.6		9.8				
LOS	A	A		A				
Approach Delay (s/veh)	--	--	9.8					
Approach LOS	--	--	A					

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Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 14. River Road at Paint Branch Pkwy
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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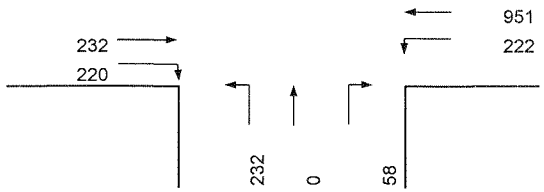
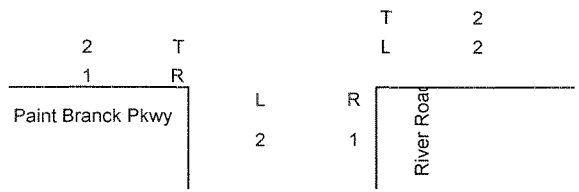
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

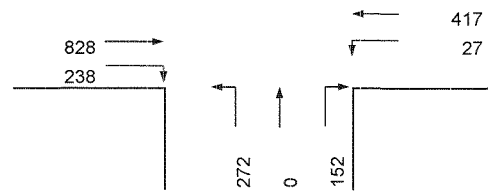
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	58	0	220	0
RTOR/Overlap (PM):	27	0	238	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	232	0.55	128	222	0.60	133	261	
WB	T	951	0.55	523	0	1.00	0	523	*
NB	L	232	0.60	139	0	1.00	0	139	*
Note:							SUM	662	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	828	0.55	455	27	0.60	16	471	*
WB	T	417	0.55	229	0	1.00	0	229	
NB	L	272	0.60	163	0	1.00	0	163	*
Note:							SUM	634	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 14. River Road at Paint Branch Pkwy
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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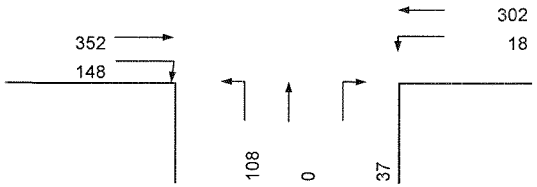
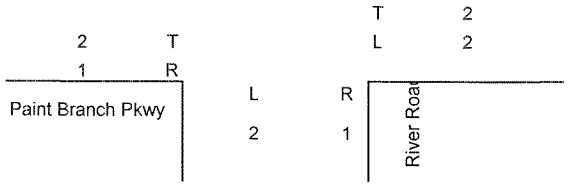
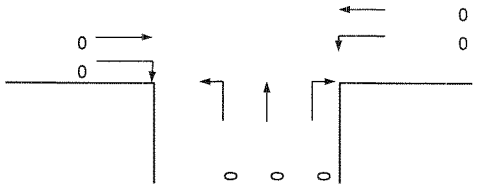
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	18	0	108	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE
<199	1.10
200-599	2.00
600-799	3.00
800-999	4.00
>999	5.00

Number of Lanes	Lane Use Factor
1	1.00
2	0.55
3	0.37
4	0.29
5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	352	0.55	194	18	0.60	11	205	*
WB	T	302	0.55	166	0	1.00	0	166	
NB	L	108	0.60	65	0	1.00	0	65	*

Note:

SUM 270
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	0	0.55	0	0	0.60	0	0	*
WB	T	0	0.55	0	0	1.00	0	0	
NB	L	0	0.60	0	0	1.00	0	0	*

Note:

SUM 0

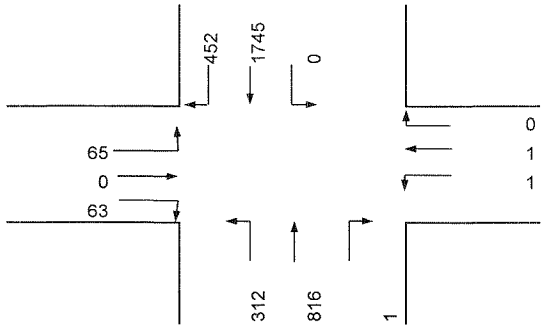
Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

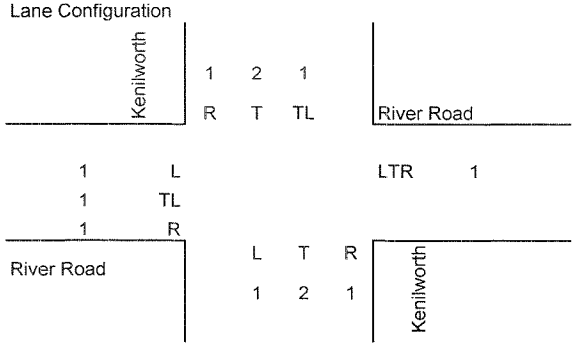
Intersection: 15: Kenilworth Road/River Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

WELLS + ASSOCIATES
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

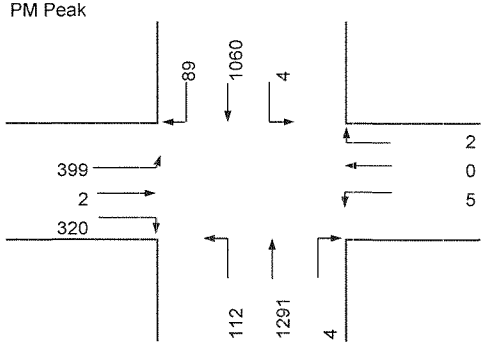
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: X Stop: Ways: E/W

	NB	SB	EB	WB
RTOR/Overlap (AM):	1	65	63	0
RTOR/Overlap (PM):	4	89	112	0
Shared Left PCE (AM):	1	4	1	1
Shared Left PCE (PM):	1	5	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	65	0.60	39	0	1.00	0	39	*
WB	LTR	2	1.00	2	0	1.00	0	2	*
NB	T	816	0.55	449	0	1.00	0	449	
SB	TL	1745	0.37	646	312	1.00	312	958	*
Note:							SUM	999	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	401	0.60	241	0	1.00	0	241	*
WB	LTR	7	1.00	7	0	1.00	0	7	*
NB	T	1291	0.55	710	4	1.00	4	714	*
SB	TL	1080	0.37	400	112	1.00	112	512	
Note:							SUM	962	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 15: Kenilworth Road/River Road
Jurisdiction: Prince George's County
Scenario/Design Year: Existing
Computed by: SK

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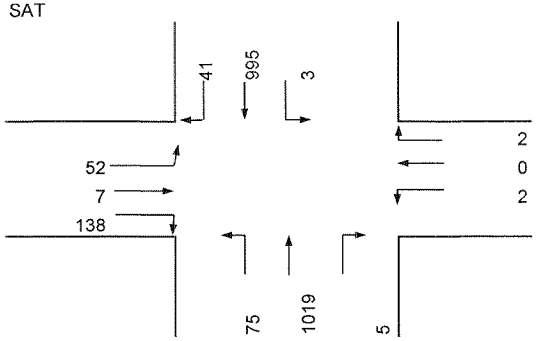
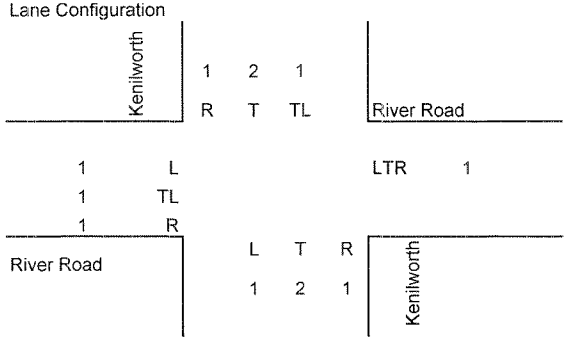
Phone: (410)266-5723 Facsimile: (410)266-9189

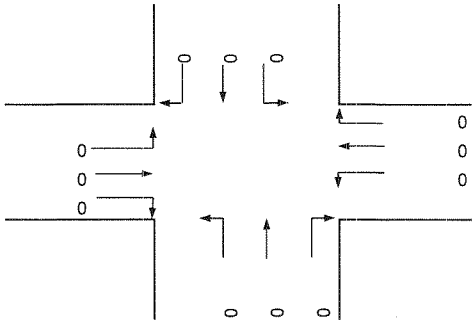
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: X Stop: Ways: E/W

RTOR/Overlap (AM):	NB	2	SB	41	EB	75	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	5	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1.1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	64	0.60	39	0	1.00	0	39	*
WB	LTR	4	1.00	4	0	1.00	0	4	*
NB	T	1019	0.55	560	3	1.00	3	563	*
SB	TL	1010	0.37	374	75	1.00	75	449	

Note:

SUM 606
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	0	0.60	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	*
NB	T	0	0.55	0	0	1.00	0	0	*
SB	TL	0	0.37	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*sk*
Agency/Co.	*Wells and Associates*
Date Performed	*2/25/2012*
Analysis Time Period	*AM Peak*

Site Information

Intersection	*Rhode Island and Queens Bury*
Jurisdiction	*Prince Georges County*
Analysis Year	*Existing*

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	119	4	177	226	6
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	3	1	55	3	0	1
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	139		429		61		4	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.4		0.0		0.8	
Prop. Right-Turns	0.0		0.0		0.9		0.3	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.1		-0.5		0.0	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.12		0.38		0.05		0.00	
hd, final value (s)	4.54		4.33		4.66		5.31	
x, final value	0.18		0.52		0.08		0.01	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.5		2.3		2.7		3.3	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	389		679		311		254	
Delay (s/veh)	8.50		11.84		8.06		8.34	
LOS	A		B		A		A	
Approach: Delay (s/veh)	8.50		11.84		8.06		8.34	
LOS	A		B		A		A	
Intersection Delay (s/veh)	10.72							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	PM Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	Existing

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	5	300	10	54	173	8
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	0	205	8	3	25
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	330		246		238		37	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.1		0.2	
Prop. Right-Turns	0.0		0.0		0.9		0.7	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.1		-0.5		-0.3	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.29		0.22		0.21		0.03	
hd, final value (s)	5.01		5.15		4.94		5.45	
x, final value	0.46		0.35		0.33		0.06	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	3.0		3.2		2.9		3.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	580		496		488		287	
Delay (s/veh)	12.18		10.93		10.33		8.78	
LOS	B		B		B		A	
Approach: Delay (s/veh)	12.18		10.93		10.33		8.78	
LOS	B		B		B		A	
Intersection Delay (s/veh)	11.15							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	SAT Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	Existing

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	248	7	33	166	10
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	7	1	40	8	1	7
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	277		218		50		16	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.1		0.5	
Prop. Right-Turns	0.0		0.0		0.8		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.4		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.25		0.19		0.04		0.01	
hd, final value (s)	4.32		4.39		4.58		4.95	
x, final value	0.33		0.27		0.06		0.02	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.3		2.4		2.6		2.9	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	527		468		300		266	
Delay (s/veh)	9.45		8.97		7.89		8.06	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.45		8.97		7.89		8.06	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.09							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*sk*
Agency/Co.	*Wells and Associates*
Date Performed	*2/25/2012*
Analysis Time Period	*Mid Day Peak*

Site Information

Intersection	*Rhode Island and Queens Bury*
Jurisdiction	*Prince Georges County*
Analysis Year	*Existing*

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	5	172	3	32	144	8
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	2	0	57	6	3	7
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	189		192		62		16	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.0		0.4	
Prop. Right-Turns	0.0		0.0		1.0		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.5		-0.2	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.17		0.17		0.06		0.01	
hd, final value (s)	4.31		4.32		4.23		4.67	
x, final value	0.23		0.23		0.07		0.02	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.3		2.3		2.2		2.7	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	439		442		312		266	
Delay (s/veh)	8.57		8.61		7.56		7.77	
LOS	A		A		A		A	
Approach: Delay (s/veh)	8.57		8.61		7.56		7.77	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.42							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	AM Peak

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Existing

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	42	44	47	0	10	0
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	140	22	5	0	10	178
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.92		0.92		0.92		0.92	
Flow Rate (veh/h)	143		10		180		203	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.3		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.0		0.0		1.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.0		0.2		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.13		0.01		0.16		0.18	
hd, final value (s)	4.65		4.98		4.67		3.96	
x, final value	0.18		0.01		0.23		0.22	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.6		3.0		2.7		2.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	393		260		430		453	
Delay (s/veh)	8.70		8.05		9.09		8.09	
LOS	A		A		A		A	
Approach: Delay (s/veh)	8.70		8.05		9.09		8.09	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.59							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	PM Peak

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Existing

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	180	107	200	0	29	3
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	103	23	11	4	14	90
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.96		0.96		0.96		0.96	
Flow Rate (veh/h)	506		33		141		111	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.1		0.1		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		-0.0		0.1		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.45		0.03		0.13		0.10	
hd, final value (s)	4.50		5.22		5.52		4.98	
x, final value	0.63		0.05		0.22		0.15	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.5		3.2		3.5		3.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	756		283		391		361	
Delay (s/veh)	14.93		8.48		10.03		8.88	
LOS	B		A		B		A	
Approach: Delay (s/veh)	14.93		8.48		10.03		8.88	
LOS	B		A		B		A	
Intersection Delay (s/veh)	12.94							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	SAT

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Existing

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	62	61	162	2	34	1
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	117	12	3	2	8	40
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.88		0.88		0.88		0.88	
Flow Rate (veh/h)	323		41		148		56	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2		0.0		0.9		0.0	
Prop. Right-Turns	0.6		0.0		0.0		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.3		0.0		0.2		-0.4	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.29		0.04		0.13		0.05	
hd, final value (s)	4.21		4.82		5.00		4.49	
x, final value	0.38		0.05		0.21		0.07	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.2		2.8		3.0		2.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	573		291		398		306	
Delay (s/veh)	9.74		8.10		9.28		7.83	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.74		8.10		9.28		7.83	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.32							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	Mid day

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Existing

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	101	49	93	1	24	0
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	104	24	4	1	9	55
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.89		0.89		0.89		0.89	
Flow Rate (veh/h)	272		27		146		72	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.0		0.0		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.0		0.2		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.24		0.02		0.13		0.06	
hd, final value (s)	4.36		4.80		4.86		4.32	
x, final value	0.33		0.04		0.20		0.09	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.4		2.8		2.9		2.3	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	522		277		396		322	
Delay (s/veh)	9.49		7.98		9.05		7.73	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.49		7.98		9.05		7.73	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.04							
Intersection LOS	A							

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Existing
Analysis Time Period	AM Peak		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	39	1	0	10	1
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	0	42	1	0	10	1
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)	1	0	0	4	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	4	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	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		1			4	
C (m) (veh/h)	1608	1566		947			947	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.00			0.01	
Control Delay (s/veh)	7.2	7.3		8.8			8.8	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	8.8			8.8		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Existing
Analysis Time Period	PM Peak		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	95	0	0	35	16
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	103	0	0	38	17
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)	1	0	0	11	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	11	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	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	0		1			11	
C (m) (veh/h)	1550	1489		816			816	
v/c	0.00	0.00		0.00			0.01	
95% queue length	0.00	0.00		0.00			0.04	
Control Delay (s/veh)	7.3	7.4		9.4			9.5	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.4			9.5		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Existing
Analysis Time Period	SAT		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	63	0	0	33	5
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	2	68	0	0	35	5
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)	1	0	0	4	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	4	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	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)	2	0		1			4	
C (m) (veh/h)	1570	1533		867			867	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.00			0.01	
Control Delay (s/veh)	7.3	7.3		9.2			9.2	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.2			9.2		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Existing
Analysis Time Period	Mid-day		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	47	0	1	29	6
Peak-Hour Factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	0	59	0	1	36	7
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	2	1	2	0	0
Peak-Hour Factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	0	2	1	2	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	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	1		3			2	
C (m) (veh/h)	1566	1545		847			876	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.01			0.01	
Control Delay (s/veh)	7.3	7.3		9.3			9.1	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.3			9.1		
Approach LOS	--	--	A			A		

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Appendix D

Traffic Forecasting Worksheets and ITE Internal Capture Analysis

1: US 1/Paint Branch Parkway
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound Paint Branch Parkway			Northbound US 1			Eastbound Campus Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			423	1,027	337	171	362	287	126	494	170	22	139	73
Growth				26						12				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	2	3	-	-	-	2	-	-	-	1
Northgate Residential	38	158	119	8	16	4	-	-	-	2	-	-	-	29
Northgate Commercial	81	77	23	12	27	28	-	-	-	12	-	-	-	24
Starview Plaza Residential	17	72	54	4	7	2	-	-	-	1	-	-	-	13
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	2	1	1	2	-	-	-	1	-	-	-	3
Berwyn House	7	30	23	2	23	1	-	-	-	-	-	-	-	5
Mosiac @ Turtle Creek	42	168	4	-	-	-	6	-	-	-	4	17	25	17
M-Square - Riverside	1,546	172	-	-	77	9	9	9	77	-	-	-	77	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	24	-	-	-	-	-	69	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	(1)	-	-	-	-
Combined Approved Developments	1,875	1,122	225	61	153	49	15	9	77	117	4	17	102	92
Background			648	1,114	490	220	377	296	203	623	174	39	241	165

1: US 1/Paint Branch Parkway
PM Peak Hour

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound US 1			Eastbound Campus Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			443	868	274	323	218	151	231	945	146	48	310	354
Growth				22						24				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	1	2	3	4	-	-	-	3	-	-	-	1
Northgate Residential	147	79	59	4	8	15	-	-	-	7	-	-	-	110
Northgate Commercial	64	52	15	8	18	23	-	-	-	10	-	-	-	19
Starview Plaza Residential	67	36	27	2	4	7	-	-	-	3	-	-	-	50
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	7	3	5	5	-	-	-	3	-	-	-	7
Berwyn House	28	15	11	1	11	4	-	-	-	1	-	-	-	21
Mosiac @ Turtle Creek	156	84	16	-	-	-	23	-	-	-	16	8	13	8
M-Square - Riverside	301	1,289	-	-	15	64	64	64	15	-	-	-	15	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	73	-	-	-	-	-	53	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	136	122	64	122	87	64	15	96	16	8	28	216
Background			579	1,012	338	445	305	215	246	1,065	162	56	338	570

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

1: US 1/Paint Branch Parkway
SAT Peak Hour

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound US 1			Eastbound Campus Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			342	1037	192	154	101	124	138	1198	135	99	128	321
Growth				26						30				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	1	2	3	3	-	-	-	2	-	-	-	1
Northgate Residential	112	84	63	4	8	11	-	-	-	6	-	-	-	84
Northgate Commercial	91	85	26	13	30	32	-	-	-	14	-	-	-	27
Starview Plaza Residential	51	38	29	2	4	5	-	-	-	3	-	-	-	38
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	14	7	9	10	-	-	-	7	-	-	-	14
Berwyn House	21	16	12	1	12	3	-	-	-	1	-	-	-	16
Mosiac @ Turtle Creek	70	60	7	-	-	-	11	-	-	-	7	6	9	6
M-Square - Riverside	190	162	-	-	10	8	8	8	10	-	-	-	10	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	66	-	-	-	-	-	65	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	(1)		-	-	-
Combined Approved Developments Total	950	803	152	115	76	72	19	8	10	113	7	6	19	186
Background			494	1,178	268	226	120	132	148	1,341	142	105	147	507

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

2: US 1/Rossborough Lane
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound Rossborough Lane			Northbound US 1			Eastbound Campus Driveway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			44	1,111	98	52	4	9	18	582	26	7	5	17
Growth				28						15				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	24	-	-	-	-	-	69	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	(1)	-	-	-	-
Combined Approved Developments	1,875	1,122	-	87	-	-	-	-	-	198	-	-	-	-
Background			44	1,226	98	52	4	9	18	795	26	7	5	17

2: US 1/Rossborough Lane
PM Peak Hour

Traffic Component			Southbound US 1			Westbound Rossborough Lane			Northbound US 1			Eastbound Campus Driveway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			6	898	64	70	3	20	13	1,137	18	13	3	45
Growth				23						29				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	73	-	-	-	-	-	53	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	194	-	-	-	-	-	127	-	-	-	-
Background			6	1,115	64	70	3	20	13	1,293	18	13	3	45

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

2: US 1/Rossborough Lane
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Rossborough Lane			Northbound US 1			Eastbound Campus Driveway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			32	1200	59	58	5	10	21	1321	31	57	1	80
Growth				30						33				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	66	-	-	-	-	-	65	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	(1)	-	-	-	-
Combined Approved Developments Total	950	803	-	129	-	-	-	-	-	130	-	-	-	-
Background			32	1,359	59	58	5	10	21	1,484	31	57	1	80

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

3: US 1/College Avenue
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound College Avenue Right	Westbound College Avenue Through	Westbound College Avenue Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Regents Drive Right	Eastbound Regents Drive Through	Eastbound Regents Drive Left
Existing Traffic Volume			31	1,168	27	32	22	12	14	633	47	12	15	8
Growth				29						16				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	-	24	69	-	36	12	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(6)	6	2	-	3	3	(3)	-	-	-	-
Combined Approved Developments	1,875	1,122	-	57	30	71	-	39	15	127	-	-	-	-
Background			31	1,254	57	103	22	51	29	776	47	12	15	8

3: US 1/College Avenue
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound College Avenue Right	Westbound College Avenue Through	Westbound College Avenue Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Regents Drive Right	Eastbound Regents Drive Through	Eastbound Regents Drive Left
Existing Traffic Volume			12	1,022	99	72	35	37	16	1,009	45	83	48	24
Growth				26						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	-	73	53	-	28	38	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	(8)	8	8	-	8	8	(8)	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	113	81	61	-	36	46	66	-	-	-	-
Background			12	1,161	180	133	35	73	62	1,100	45	83	48	24

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

3: US 1/College Avenue
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound College Avenue			Northbound US 1			Eastbound Regents Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			35	1,034	114	116	31	26	28	920	43	48	27	21
Growth				26						23				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	66	65	-	33	34	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(15)	15	13	-	14	14	(14)	-	-	-	-
Combined Approved Developments Total	950	803	-	48	81	78	-	47	48	52	-	-	-	-
Background			35	1,108	195	194	31	73	76	995	43	48	27	21

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

3: US 1/College Avenue
MIDDAY Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound College Avenue Right	Westbound College Avenue Through	Westbound College Avenue Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Regents Drive Right	Eastbound Regents Drive Through	Eastbound Regents Drive Left
Existing Traffic Volume			28	749	57	63	45	16	11	873	40	61	47	15
Growth				19						22				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	-	54	53	-	27	28	-	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(8)	8	4	-	6	4	(4)	-	-	-	-
Subtotal	1,024	1,073	-	59	62	57	-	33	32	62	-	-	-	-
Background			28	827	119	120	45	49	43	957	40	61	47	15

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

4: US 1/Knox Road
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Knox Road Right	Westbound Knox Road Through	Westbound Knox Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Knox Road Right	Eastbound Knox Road Through	Eastbound Knox Road Left
Existing Traffic Volume			141	1,009	11	11	26	6	7	590	50	9	9	48
Growth				25						15				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	36	-	-	-	-	-	12	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-			
Combined Approved Developments	1,875	1,122	-	96	-	-	-	-	-	142	-	-	-	-
Background			141	1,130	11	11	26	6	7	747	50	9	9	48

4: US 1/Knox Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Knox Road Right	Westbound Knox Road Through	Westbound Knox Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Knox Road Right	Eastbound Knox Road Through	Eastbound Knox Road Left
Existing Traffic Volume			163	784	58	34	113	43	70	878	129	18	60	149
Growth				20						22				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	28	-	-	-	-	-	38	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,215	1,837	-	149	-	-	-	-	-	112	-	-	-	-
Background			163	953	58	34	113	43	70	1,012	129	18	60	149

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

4: US 1/Knox Road
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Knox Road Right	Westbound Knox Road Through	Westbound Knox Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Knox Road Right	Eastbound Knox Road Through	Eastbound Knox Road Left
Existing Traffic Volume			152	919	59	42	47	38	24	734	100	17	35	132
Growth				23						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	33	-	-	-	-	-	34	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	95	-	-	-	-	-	100	-	-	-	-
Background			152	1,037	59	42	47	38	24	853	100	17	35	132

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

5: US 1/Calvert Road
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Calvert Road Right	Westbound Calvert Road Through	Westbound Calvert Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Hotel Driveway Right	Eastbound Hotel Driveway Through	Eastbound Hotel Driveway Left
Existing Traffic Volume			2	967	34	33	-	34	31	650	-	5	-	-
Growth				24						16				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	36	-	-	-	-	-	12	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	-	96	-	-	-	-	-	142	-	-	-	-
Background			2	1,087	34	33	-	34	31	808	-	5	-	-

5: US 1/Calvert Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Calvert Road Right	Westbound Calvert Road Through	Westbound Calvert Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Hotel Driveway Right	Eastbound Hotel Driveway Through	Eastbound Hotel Driveway Left
Existing Traffic Volume			8	841	68	51	2	64	72	1,077	-	2	-	2
Growth				21						27				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	28	-	-	-	-	-	38	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	149	-	-	-	-	-	112	-	-	-	-
Background			8	1,011	68	51	2	64	72	1,216	-	2	-	2

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

5: US 1/Calvert Road
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Calvert Road			Northbound US 1			Eastbound Hotel Driveway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			20	1012	62	41	0	58	46	848	2	11	0	0
Growth				26						21				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	33	-	-	-	-	-	34	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	95	-	-	-	-	-	100	-	-	-	-
Background			20	1,133	62	41	-	58	46	969	2	11	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

6: US 1/Guilford Road
AM Peak Hour

Without CSX

Traffic Component	IN	OUT	Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Guilford Road Right	Westbound Guilford Road Through	Westbound Guilford Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Guilford Road Right	Eastbound Guilford Road Through	Eastbound Guilford Road Left
Existing Traffic Volume			15	964	8	23	5	10	4	638	109	28	2	26
Growth				24						16				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	15	21	-	-	-	-	-	7	-	-	-	5
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	15	81	-	-	-	-	-	137	-	-	-	5
Background			30	1,069	8	23	5	10	4	791	109	28	2	31

6: US 1/Guilford Road
PM Peak Hour

Traffic Component	IN	OUT	Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Guilford Road Right	Westbound Guilford Road Through	Westbound Guilford Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Guilford Road Right	Eastbound Guilford Road Through	Eastbound Guilford Road Left
Existing Traffic Volume			35	828	20	22	7	4	5	1,002	100	68	23	138
Growth				21						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	11	16	-	-	-	-	-	22	-	-	-	16
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	11	137	-	-	-	-	-	96	-	-	-	16
Background			46	986	20	22	7	4	5	1,123	100	68	23	154

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

6: US 1/Guilford Road
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Guilford Road Right	Westbound Guilford Road Through	Westbound Guilford Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Guilford Road Right	Eastbound Guilford Road Through	Eastbound Guilford Road Left
Existing Traffic Volume			37	1024	28	28	8	6	5	786	41	43	7	67
Growth				26						20				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	14	20	-	-	-	-	-	20	-	-	-	14
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	14	82	-	-	-	-	-	86	-	-	-	14
Background			51	1,132	28	28	8	6	5	892	41	43	7	81

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

7: US 1/Amherst Road
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound Amherst Road			Northbound US 1			Northeastbound Queens Chapel Road			Eastbound Pineway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			6	1003	4	8	4	13	3	550	2	13	-	61	1	-	2
Growth				25						14							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	21	-	-	-	-	-	7	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	-	81	-	-	-	-	-	137	-	-	-	-	-	-	-
Background			6	1,109	4	8	4	13	3	701	2	13	-	61	1	-	2

7: US 1/Amherst Road
PM Peak Hour

Traffic Component			Southbound US 1			Westbound Amherst Road			Northbound US 1			Eastbound Queens Chapel Road			Eastbound Pineway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			7	839	3	3	1	4	3	989	8	5	0	47	2	0	10
Growth				21						25							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	16	-	-	-	-	-	22	-	-	-	-			
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	137	-	-	-	-	-	96	-	-	-	-	-	-	-
Background			7	997	3	3	1	4	3	1,110	8	5	-	47	2	-	10

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

7: US 1/Amherst Road
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Amherst Road			Northbound US 1			Eastbound Queens Chapel Road			Eastbound Pineway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			7	1015	7	1	7	2	1	778	5	3	0	21	2	0	3
Growth				26						20							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	20	-	-	-	-	-	20	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	82	-	-	-	-	-	86	-	-	-	-	-	-	-
Background			7	1,123	7	1	7	2	1	884	5	3	-	21	2	-	3

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

7: US 1/Amherst Road
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound Amherst Road			Northbound US 1			Northeastbound Queens Chapel Road			Eastbound Pineway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			4	720	3	3	-	1	-	669	7	6	-	28	3	-	3
Growth				18						17							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(2)	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	81	-	-	-	-	-	82	-	-	-	-	-	-	-
Background			4	819	3	3	-	1	-	768	7	6	-	28	3	-	3

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

8: US 1/North Site Access
AM Peak Hour

Without CSX

Traffic Component	IN	OUT	Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound North Site Access Right	Westbound North Site Access Through	Westbound North Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound none Right	Eastbound none Through	Eastbound none Left
Existing Traffic Volume			-	1,040	-	-	-	-	-	561	-	-	-	-
Growth				26						14				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	-	81	-	-	-	-	-	137	-	-	-	-
Background			-	1,147	-	-	-	-	-	712	-	-	-	-

8: US 1/North Site Access
PM Peak Hour

Traffic Component	IN	OUT	Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound North Site Access Right	Westbound North Site Access Through	Westbound North Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound none Right	Eastbound none Through	Eastbound none Left
Existing Traffic Volume			-	852	-	-	-	-	-	997	-	-	-	-
Growth				22						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	137	-	-	-	-	-	96	-	-	-	-
Background			-	1,011	-	-	-	-	-	1,118	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

8: US 1/North Site Access
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound North Site Access			Northbound US 1			Eastbound none		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	998	-	-	-	-	-	765	-	-	-	-
Growth				25						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	82	-	-	-	-	-	86	-	-	-	-
Background			-	1,105	-	-	-	-	-	870	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

8: US 1/North Site Access
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound North Site Access			Northbound US 1			Eastbound none		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	706	-	-	-	-	-	678	-	-	-	-
Growth				18						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(2)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	81	-	-	-	-	-	82	-	-	-	-
Background			-	805	-	-	-	-	-	777	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

9: US 1/Van Buren/Future Site Access
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Middle Site Access Right	Westbound Middle Site Access Through	Westbound Middle Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Van Buren Street Right	Eastbound Van Buren Street Through	Eastbound Van Buren Street Left
Existing Traffic Volume			51	989	-	-	-	-	-	559	26	24		2
Growth				25						14				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	-	81	-	-	-	-	-	137	-	-	-	-
Background			51	1,095	-	-	-	-	-	710	26	24	-	2

9: US 1/Van Buren/Future Site Access
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Middle Site Access Right	Westbound Middle Site Access Through	Westbound Middle Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Van Buren Street Right	Eastbound Van Buren Street Through	Eastbound Van Buren Street Left
Existing Traffic Volume			10	842	-	-	-	-	-	992	26	17	-	5
Growth				21						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	137	-	-	-	-	-	96	-	-	-	-
Background			10	1,000	-	-	-	-	-	1,113	26	17	-	5

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

9: US 1/Van Buren/Future Site Access
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Middle Site Access			Northbound US 1			Eastbound Van Buren Street		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			17	981	0	0	0	0	0	761	12	6	0	4
Growth				25						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	82	-	-	-	-	-	86	-	-	-	-
Background			17	1,088	-	-	-	-	-	866	12	6	-	4

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

9: US 1/Van Buren/Future Site Access
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound Middle Site Access			Northbound US 1			Eastbound Van Buren Street		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			5	701	-	-	-	-	-	676	9	6		2
Growth				18						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(2)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	81	-	-	-	-	-	82	-	-	-	-
Background			5	800	-	-	-	-	-	775	9	6	-	2

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

10: US 1/South Site Access
AM Peak Hour

Without CSX

Traffic Component	IN	OUT	Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound South Site Access Right	Westbound South Site Access Through	Westbound South Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound None Right	Eastbound None Through	Eastbound None Left
Existing Traffic Volume			-	1,013	-	-	-	-	-	585	-	-	-	-
Growth				26						15				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	-	81	-	-	-	-	-	137	-	-	-	-
Background			-	1,120	-	-	-	-	-	737	-	-	-	-

10: US 1/South Site Access
PM Peak Hour

Traffic Component	IN	OUT	Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound South Site Access Right	Westbound South Site Access Through	Westbound South Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound None Right	Eastbound None Through	Eastbound None Left
Existing Traffic Volume			-	859	-	-	-	-	-	1,018	-	-	-	-
Growth				22						26				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	137	-	-	-	-	-	96	-	-	-	-
Background			-	1,018	-	-	-	-	-	1,140	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

10: US 1/South Site Access
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound South Site Access			Northbound US 1			Eastbound None		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	987	-	-	-	-	-	773	-	-	-	-
Growth				25						20				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	82	-	-	-	-	-	86	-	-	-	-
Background			-	1,094	-	-	-	-	-	879	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

10: US 1/South Site Access
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound South Site Access			Northbound US 1			Eastbound None		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	707	-	-	-	-	-	685	-	-	-	-
Growth				18						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(2)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	81	-	-	-	-	-	82	-	-	-	-
Background			-	806	-	-	-	-	-	784	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

11: US 1/MD 410
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			210	628	166	101	1,633	243	107	413	289	226	862	163
Growth				16			41			10			22	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	1	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	8	8	-	-	-	-	-	2	-	-	-	2
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	1	5	16	5	1	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	1	5	15	5	1	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	9	71	-	-	-	2	10	135	10	2	-	2
Background			219	715	166	101	1,674	245	117	558	299	228	884	165

11: US 1/MD 410
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			224	506	216	151	1,179	188	96	606	282	281	1,306	244
Growth				13			30			15			33	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	1	1	-	-	-	-	-	2	-	-	-	1
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	4	4	-	-	-	-	-	8	-	-	-	8
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	5	3	8	3	5	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	5	3	8	3	5	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	5	132	-	-	-	10	6	87	6	10	-	9
Background			229	651	216	151	1,209	198	102	708	288	291	1,339	253

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

11: US 1/MD 410
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			283	535	218	119	1,146	185	103	455	275	262	1,065	196
Growth				14			29			11			27	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	1
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	3	3	-	-	-	-	-	4	-	-	-	4
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	4	3	9	3	4	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	3	2	7	2	3	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	3	79	-	-	-	7	5	83	5	7	-	5
Background			286	628	218	119	1,175	192	108	549	280	269	1,092	201

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

11: US 1/MD 410
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			183	394	153	100	760	158	56	393	278	281	747	174
Growth				10			19			10			19	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	1	1	-	-	-	-	-	1	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	3	3	-	-	-	-	-	3	-	-	-	3
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	2	2	6	2	2	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	2	2	6	2	2	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(2)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	4	77	-	-	-	4	4	78	4	4	-	3
Background			187	481	153	100	779	162	60	481	282	285	766	177

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

12: US 1/Queensbury Road
AM Peak Hour

Without CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Queensbury Road Right	Westbound Queensbury Road Through	Westbound Queensbury Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Queensbury Road Right	Eastbound Queensbury Road Through	Eastbound Queensbury Road Left
Existing Traffic Volume			41	1,108	39	51	102	98	76	661	51	59	94	58
Growth				28						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	8	-	-	-	-	-	2	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	7	-	-	-	-	-	27	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	7	-	-	-	-	-	26	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	-	77	-	-	-	-	-	157	-	-	-	-
Background			41	1,213	39	51	102	98	76	835	51	59	94	58

12: US 1/Queensbury Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Queensbury Road Right	Westbound Queensbury Road Through	Westbound Queensbury Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Queensbury Road Right	Eastbound Queensbury Road Through	Eastbound Queensbury Road Left
Existing Traffic Volume			91	818	93	64	127	42	77	887	106	66	210	62
Growth				21						22				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	4	-	-	-	-	-	8	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	25	-	-	-	-	-	14	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	24	-	-	-	-	-	13	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	-	152	-	-	-	-	-	98	-	-	-	-
Background			91	991	93	64	127	42	77	1,007	106	66	210	62

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

12: US 1/Queensbury Road
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Queensbury Road			Northbound US 1			Eastbound Queensbury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			90	874	81	61	105	58	62	786	75	122	204	77
Growth				22						20				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	3	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	20	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	13	-	-	-	-	-	11	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	-	92	-	-	-	-	-	93	-	-	-	-
Background			90	988	81	61	105	58	62	899	75	122	204	77

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

12: US 1/Queensbury Road
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound US 1			Westbound Queensbury Road			Northbound US 1			Eastbound Queensbury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			81	635	47	44	88	42	70	746	55	68	116	62
Growth				16						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	1	-	-	-	-	-	1	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	3	-	-	-	-	-	3	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	11	-	-	-	-	-	11	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	9	-	-	-	-	-	9	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(2)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	85	-	-	-	-	-	86	-	-	-	-
Background			81	736	47	44	88	42	70	851	55	68	116	62

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

13: Rivertech Court/River Road

AM Peak Hour

Without CSX

Traffic Component			Southbound Driveway Right	Southbound Driveway Through	Southbound Driveway Left	Westbound River Road Right	Westbound River Road Through	Westbound River Road Left	Northbound Rivertech Court Right	Northbound Rivertech Court Through	Northbound Rivertech Court Left	Eastbound River Road Right	Eastbound River Road Through	Eastbound River Road Left
Existing Traffic Volume			16	7	14	50	232	272	55	18	43	59	86	42
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	99	-	-	-	-	-	896	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	99	-	-	-	-	-	896	-
Background			16	7	14	50	331	272	55	18	43	59	982	42

13: Rivertech Court/River Road

PM Peak Hour

Traffic Component			Southbound None Right	Southbound None Through	Southbound None Left	Westbound River Road Right	Westbound River Road Through	Westbound River Road Left	Northbound Rivertech Court Right	Northbound Rivertech Court Through	Northbound Rivertech Court Left	Eastbound River Road Right	Eastbound River Road Through	Eastbound River Road Left
Existing Traffic Volume			55	14	93	22	174	80	224	7	68	48	278	15
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	747	-	-	-	-	-	175	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81												
Maryland Book Exchange Pass by	16	16												
Subtotal	1,231	1,853	-	-	-	-	747	-	-	-	-	-	175	-
Background			55	14	93	22	921	80	224	7	68	48	453	15

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 2[illegible], 2011 included in Appendix A)

13: Rivertech Court/River Road
SAT Peak Hour

Traffic Component			Southbound None			Westbound River Road			Northbound Rivertech Court			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			0	0	0	0	82	36	42	0	25	26	134	0
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	93	-	-	-	-	-	110	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	93	-	-	-	-	-	110	-
Background			-	-	-	-	175	36	42	-	25	26	244	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

14: River Road/Paint Branch Parkway
AM Peak Hour

Without CSX

Traffic Component			Southbound River Road			Westbound Paint Branch Parkway			Northbound River Road			Eastbound Paint Branch Parkway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	-	-	951	222	58	-	232	220	232	-
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	3	-	-	-	-	-	2	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	4	16	-	-
Northgate Commercial	81	77	-	-	-	-	8	-	-	-	4	4	8	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	2	7	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	1	-	-	-	-	-	1	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	1	3	2	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	232	26	-	26	232	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	12	232	26	-	37	262	13	-
Background			-	-	-	-	963	454	84	-	269	482	245	-

14: River Road/Paint Branch Parkway
PM Peak Hour

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound River Road			Eastbound Paint Branch Parkway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	-	-	417	27	152	-	272	238	828	-
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	4	-	-	-	-	-	3	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	15	8	-	-
Northgate Commercial	64	52	-	-	-	-	6	-	-	-	3	3	5	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	7	4	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	3	-	-	-	1	1	3	-
Berwyn House	28	15	-	-	-	-	1	-	-	-	3	2	1	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	45	193	-	193	45	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	14	45	193	-	222	63	12	-
Background			-	-	-	-	431	72	345	-	494	301	840	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

14: River Road/Paint Branch Parkway
SAT Peak Hour

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound River Road			Eastbound Paint Branch Parkway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			0	0	0	0	302	18	37	0	108	148	352	0
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	3	-	-	-	-	-	3	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	11	8	-	-
Northgate Commercial	91	85	-	-	-	-	9	-	-	-	5	4	9	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	5	4	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	7	-	-	-	2	2	7	-
Berwyn House	21	16	-	-	-	-	1	-	-	-	2	2	1	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	29	24	-	24	29	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	20	29	24	-	49	49	20	-
Background			-	-	-	-	322	47	61	-	157	197	372	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

15: Kenilworth Road/River Road
AM Peak Hour

Traffic Component			Southbound Kenilworth Road			Westbound River Road			Northbound Kenilworth Road			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			452	1,745	-	-	1	1	1	816	312	63	-	65
Growth				44						21				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	4	-	-	-	-	-	4	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	387	-	-	-	-	-	-	-	696	77	-	43
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105												
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments	1,875	1,122	387	5	-	-	-	-	-	6	696	77	-	43
Background			839	1,794	-	-	1	1	1	843	1,008	140	-	108

15: Kenilworth Road/River Road
PM Peak Hour

Traffic Component			Southbound Kenilworth Road			Westbound River Road			Northbound Kenilworth Road			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			89	1,060	4	2	-	5	4	1,291	112	320	2	399
Growth				27						33				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	3	-	-	-	-	-	3	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	75	-	-	-	-	-	-	-	135	580	-	322
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Subtotal	1,231	1,853	75	5	-	-	-	-	-	6	135	580	-	322
Background			164	1,092	4	2	-	5	4	1,330	247	900	2	721

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

15: Kenilworth Road/River Road
SAT Peak Hour

Traffic Component			Southbound Kenilworth Road			Westbound River Road			Northbound Kenilworth Road			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			41	995	3	2	-	2	5	1,019	75	138	7	52
Growth				25						26				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	4	-	-	-	-	-	5	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	2	-	-	-	-	-	2	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	48	-	-	-	-	-	-	-	86	73	-	41
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Combined Approved Developments Total	950	803	48	8	-	-	-	-	-	9	86	73	-	41
Background			89	1,028	3	2	-	2	5	1,054	161	211	7	93

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

16: Rhode Island/Queens Bury Road
AM Peak Hour

Without CSX

Traffic Component			Southbound Parking Entrance			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			1	-	3	6	226	177	55	1	3	4	119	10
Growth			-											
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	-	-	-	-	-	-	-	-
Background			1	-	3	6	226	177	55	1	3	4	119	10

16: Rhode Island/Queens Bury Road
PM Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			25	3	8	8	173	54	205	-	22	10	300	5
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	-	-	-	-	-	-	-	-
Background			25	3	8	8	173	54	205	-	22	10	300	5

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

16: Rhode Island/Queens Bury Road
SAT Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			7	1	8	10	166	33	40	1	7	7	248	9
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	-	-	-	-	-	-	-	-
Background			7	1	8	10	166	33	40	1	7	7	248	9

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

16: Rhode Island/Queens Bury Road
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound Parking Entrance			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			7	3	6	8	144	32	57	-	2	3	172	5
Growth			-											
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	61	61	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	12	12	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Property	82	80	-	-	-	-	-	-	-	-	-	-	-	-
Book Exchange Pass by	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	-	-	-	-	-	-	-	-	-	-	-
Background			7	3	6	8	144	32	57	-	2	3	172	5

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

17: Lafayette Avenue/Queens Bury Road
AM Peak Hour

Without CSX

Traffic Component			Southbound Lafayette Avenue			Westbound Queens Bury Road			Northbound Lafayette Avenue			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			178	10	-	-	10	-	5	22	140	47	44	42
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	-	-	-	-	-	-	-	-
Background			178	10	-	-	10	-	5	22	140	47	44	42

17: Lafayette Avenue/Queens Bury Road
PM Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Lafayette Avenue			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			90	14	4	3	29	-	11	23	103	200	107	180
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	-	-	-	-	-	-	-	-
Background			90	14	4	3	29	-	11	23	103	200	107	180

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 26, 2011 included in Appendix A)

17: Lafayette Avenue/Queens Bury Road
SAT Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Lafayette Avenue			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			40	8	2	1	34	2	3	12	117	162	61	62
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	-	-	-	-	-	-	-	-
Background			40	8	2	1	34	2	3	12	117	162	61	62

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

17: Lafayette Avenue/Queens Bury Road
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound Lafayette Avenue			Westbound Queens Bury Road			Northbound Lafayette Avenue			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			55	9	1	-	24	1	4	24	104	93	49	101
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	61	61	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	12	12	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Property	82	80	-	-	-	-	-	-	-	-	-	-	-	-
Book Exchange Pass by	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	-	-	-	-	-	-	-	-	-	-	-
Background			55	9	1	-	24	1	4	24	104	93	49	101

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

18: Natoli Place/Queens Bury Road
AM Peak Hour

Without CSX

Traffic Component			Southbound Natoli Place			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	4	1	10	-	-	-	-	1	39	-
Growth			-											
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	4	1	10	-	-	-	-	1	39	-

18: Natoli Place/Queens Bury Road
PM Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	11	16	35	-	-	-	-	-	95	1
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	11	16	35	-	-	-	-	-	95	1

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

18: Natoli Place/Queens Bury Road
SAT Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	4	5	33	-	-	-	1	-	63	2
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange New	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	4	5	33	-	-	-	1	-	63	2

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

18: Queens Bury Road/Natoli Place
MID DAY Peak Hour

Without CSX

Traffic Component			Southbound Natoli Place			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	2	6	29	1	1	2	-	-	47	-
Growth			-											
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	61	61	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	12	12	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Property	82	80	-	-	-	-	-	-	-	-	-	-	-	-
Book Exchange Pass by	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	2	6	29	1	1	2	-	-	47	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

1: US 1/Paint Branch Parkway
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Paint Branch Parkway Right	Westbound Paint Branch Parkway Through	Westbound Paint Branch Parkway Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Campus Drive Right	Eastbound Campus Drive Through	Eastbound Campus Drive Left
Existing Traffic Volume			423	1,027	337	171	362	287	126	494	170	22	139	73
Growth				26						12				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	2	3	-	-	-	2	-	-	-	1
Northgate Residential	38	158	119	8	16	4	-	-	-	2	-	-	-	29
Northgate Commercial	81	77	23	12	27	28	-	-	-	12	-	-	-	24
Starview Plaza Residential	17	72	54	4	7	2	-	-	-	1	-	-	-	13
Starview Plaza Retail	9	6	2	1	1	2	-	-	-	1	-	-	-	3
Berwyn House	7	30	23	2	23	1	-	-	-	-	-	-	-	5
Mosiac @ Turtle Creek	42	168	4	-	-	-	6	-	-	-	4	17	25	17
M-Square - Riverside	1,546	172	-	-	77	9	3	-	-	-	-	-	31	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	24	-	-	-	-	-	69	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	(1)	-	-	-	-
Subtotal	1,875	1,122	225	61	153	49	9	-	-	117	4	17	56	92
Background			648	1,114	490	220	371	287	126	623	174	39	195	165
Site-Office	33	3	-	5	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	11	-	-	-	-	-	32	-	-	-	-
Site Retail New Trips	56	33	-	8	-	-	-	-	-	5	-	-	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-
Site Subtotal	197	351	-	24	-	-	-	-	-	37	-	-	-	-
Total Future			**648**	**1,138**	**490**	**220**	**371**	**287**	**126**	**652**	**174**	**39**	**195**	**165**

1: US 1/Paint Branch Parkway
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Paint Branch Parkway Right	Westbound Paint Branch Parkway Through	Westbound Paint Branch Parkway Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Campus Drive Right	Eastbound Campus Drive Through	Eastbound Campus Drive Left
Existing Traffic Volume			443	868	274	323	218	151	231	945	146	48	310	354
Growth				22						24				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	1	2	3	4	-	-	-	3	-	-	-	1
Northgate Residential	147	79	59	4	8	15	-	-	-	7	-	-	-	110
Northgate Commercial	64	52	15	8	18	23	-	-	-	10	-	-	-	19
Starview Plaza Residential	67	36	27	2	4	7	-	-	-	3	-	-	-	50
Starview Plaza Retail	23	23	7	3	5	5	-	-	-	3	-	-	-	7
Berwyn House	28	15	11	1	11	4	-	-	-	1	-	-	-	21
Mosiac @ Turtle Creek	156	84	16	-	-	-	23	-	-	-	16	8	13	8
M-Square - Riverside	301	1,289	-	-	15	64	26	-	-	-	-	-	6	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	73	-	-	-	-	-	53	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	136	122	64	122	49	-	-	96	16	8	19	216
Background			579	1,012	338	445	267	151	231	1,065	162	56	329	570
Site-Office	5	22	-	1	-	-	-	-	-	3	-	-	-	-
Site - Residential & Hotel	271	148	-	27	-	-	-	-	-	15	-	-	-	-
Site Retail New Trips	229	223	-	34	-	-	-	-	-	33	-	-	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-
Site Subtotal New Trips	505	393	-	62	-	-	-	-	-	51	-	-	-	-
Total Future			**579**	**1,074**	**338**	**445**	**267**	**151**	**231**	**1,101**	**162**	**56**	**329**	**570**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

1: US 1/Paint Branch Parkway
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Paint Branch Parkway			Northbound US 1			Eastbound Campus Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			342	1037	192	154	101	124	138	1198	135	99	128	321
Growth				26						30				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	1	2	3	3	-	-	-	2	-	-	-	1
Northgate Residential	112	84	63	4	8	11	-	-	-	6	-	-	-	84
Northgate Commercial	91	85	26	13	30	32	-	-	-	14	-	-	-	27
Starview Plaza Residential	51	38	29	2	4	5	-	-	-	3	-	-	-	38
Starview Plaza Retail	48	45	14	7	9	10	-	-	-	7	-	-	-	14
Berwyn House	21	16	12	1	12	3	-	-	-	1	-	-	-	16
Mosiac @ Turtle Creek	70	60	7	-	-	-	11	-	-	-	7	6	9	6
M-Square - Riverside	190	162	-	-	10	8	3	-	-	-	-	-	4	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	66	-	-	-	-	-	65	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	(1)	-	-	-	-
Subtotal	950	803	152	115	76	72	14	-	-	113	7	6	13	186
Background			494	1,178	268	226	115	124	138	1,341	142	105	141	507
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	25	-	-	-	-	-	20	-	-	-	-
Site Retail New Trips	372	335	-	56	-	-	-	-	-	50	-	-	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-
Site Subtotal New Trips	620	533	-	81	-	-	-	-	-	70	-	-	-	-
Total Future			**494**	**1,259**	**268**	**226**	**115**	**124**	**138**	**1,420**	**142**	**105**	**141**	**507**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

2: US 1/Rossborough Lane
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Rossborough Lane Right	Westbound Rossborough Lane Through	Westbound Rossborough Lane Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Campus Driveway Right	Eastbound Campus Driveway Through	Eastbound Campus Driveway Left
Existing Traffic Volume			44	1,111	98	52	4	9	18	582	26	7	5	17
Growth				28						15				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	24	-	-	-	-	-	69	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	(1)	-	-	-	-
Subtotal	1,875	1,122	-	78	-	-	-	-	-	121	-	-	-	-
Background			44	1,217	98	52	4	9	18	718	26	7	5	17
Site-Office	33	3	-	5	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	11	-	-	-	-	-	32	6	2	-	-
Site Retail New Trips	56	33	-	8	-	-	-	-	-	5	-	1	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-
Site Subtotal	197	351	-	24	-	-	-	-	-	37	6	3	-	-
Total Future			**44**	**1,241**	**98**	**52**	**4**	**9**	**18**	**747**	**32**	**10**	**5**	**17**

2: US 1/Rossborough Lane
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Rossborough Lane Right	Westbound Rossborough Lane Through	Westbound Rossborough Lane Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Campus Driveway Right	Eastbound Campus Driveway Through	Eastbound Campus Driveway Left
Existing Traffic Volume			6	898	64	70	3	20	13	1,137	18	13	3	45
Growth				23						29				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	73	-	-	-	-	-	53	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	130	-	-	-	-	-	112	-	-	-	-
Background			6	1,051	64	70	3	20	13	1,278	18	13	3	45
Site-Office	5	22	-	1	-	-	-	-	-	3	-	-	-	-
Site - Residential & Hotel	271	148	-	27	-	-	-	-	-	15	3	6	-	-
Site Retail New Trips	229	223	-	34	-	-	-	-	-	33	3	3	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-
Site Subtotal New Trips	505	393	-	62	-	-	-	-	-	51	6	9	-	-
Total Future			**6**	**1,113**	**64**	**70**	**3**	**20**	**13**	**1,314**	**24**	**22**	**3**	**45**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

2: US 1/Rossborough Lane
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Rossborough Lane			Northbound US 1			Eastbound Campus Driveway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			32	1200	59	58	5	10	21	1321	31	57	1	80
Growth				30						33				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	66	-	-	-	-	-	65	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	(1)	-	-	-	-
Subtotal	950	803	-	121	-	-	-	-	-	120	-	-	-	-
Background			32	1,351	59	58	5	10	21	1,474	31	57	1	80
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	25	-	-	-	-	-	20	4	5	-	-
Site Retail New Trips	372	335	-	56	-	-	-	-	-	50	3	4	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-
Site Subtotal New Trips	620	533	-	81	-	-	-	-	-	70	7	9	-	-
Total Future			**32**	**1,432**	**59**	**58**	**5**	**10**	**21**	**1,553**	**38**	**66**	**1**	**80**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

3: US 1/College Avenue
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound College Avenue Right	Westbound College Avenue Through	Westbound College Avenue Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Regents Drive Right	Eastbound Regents Drive Through	Eastbound Regents Drive Left
Existing Traffic Volume			31	1,168	27	32	22	12	14	633	47	12	15	8
Growth				29						16				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	-	24	69	-	36	12	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(6)	6	2	-	3	3	(3)	-	-	-	-
Subtotal	1,875	1,122	-	48	30	71	-	39	15	50	-	-	-	-
Background			31	1,245	57	103	22	51	29	699	47	12	15	8
Site-Office	33	3	-	5	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	13	-	-	-	-	-	38	7	2	-	-
Site Retail New Trips	56	33	-	9	-	-	-	1	-	5	1	1	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-
Site Subtotal	197	351	-	27	-	-	-	1	-	43	8	3	-	-
Total Future			**31**	**1,272**	**57**	**103**	**22**	**52**	**29**	**734**	**55**	**15**	**15**	**8**

3: US 1/College Avenue
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound College Avenue Right	Westbound College Avenue Through	Westbound College Avenue Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Regents Drive Right	Eastbound Regents Drive Through	Eastbound Regents Drive Left
Existing Traffic Volume			12	1,022	99	72	35	37	16	1,009	45	83	48	24
Growth				26						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	-	73	53	-	28	38	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	(8)	8	8	-	8	8	(8)	-	-	-	-
Subtotal	1,231	1,853	-	49	81	61	-	36	46	51	-	-	-	-
Background			12	1,097	180	133	35	73	62	1,085	45	83	48	24
Site-Office	5	22	-	1	-	-	-	-	-	3	-	-	-	-
Site - Residential & Hotel	271	148	-	33	-	-	-	-	-	18	3	5	-	-
Site Retail New Trips	229	223	-	37	-	-	-	2	2	36	2	2	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-
Site Subtotal	505	393	-	71	-	-	-	2	2	57	5	7	-	-
Total Future			**12**	**1,168**	**180**	**133**	**35**	**75**	**64**	**1,127**	**50**	**90**	**48**	**24**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

3: US 1/College Avenue
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound College Avenue			Northbound US 1			Eastbound Regents Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			35	1,034	114	116	31	26	28	920	43	48	27	21
Growth				26						23				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	66	65	-	33	34	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(15)	15	13	-	14	14	(14)	-	-	-	-
Subtotal	950	803	-	40	81	78	-	47	48	42	-	-	-	-
Background			35	1,100	195	194	31	73	76	985	43	48	27	21
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	30	-	-	-	-	-	23	4	4	-	-
Site Retail New Trips	372	335	-	60	-	-	-	4	3	54	3	3	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-
Site Subtotal	620	533	-	90	-	-	-	4	3	77	7	7	-	-
Total Future			**35**	**1,190**	**195**	**194**	**31**	**77**	**79**	**1,071**	**50**	**55**	**27**	**21**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

3: US 1/College Avenue
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1			Westbound College Avenue			Northbound US 1			Eastbound Regents Drive		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			28	749	57	63	45	16	11	873	40	61	47	15
Growth				19						22				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	-	30	73	-	37	15	-	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(6)	6	5	-	5	-	(6)	6	-	-	-
Subtotal	1,024	1,073	-	31	36	78	-	42	15	34	6	-	-	-
Background			28	799	93	141	45	58	26	929	46	61	47	15
Site-Office	8	11	-	1	-	-	-	-	-	2	-	-	-	-
Site - Residential & Hotel	121	126	-	15	-	-	-	-	-	15	3	2	-	-
Site Retail New Trips	331	268	-	53	-	-	-	3	3	43	3	3	-	-
Site Retail passby Mid day	171	138	-	-	-	-	-	-	-	(16)	-	-	-	-
Site Subtotal	460	405	-	69	-	-	-	3	3	60	6	5	-	-
Total Future			**28**	**868**	**93**	**141**	**45**	**61**	**29**	**973**	**52**	**66**	**47**	**15**

4: US 1/Knox Road
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Knox Road Right	Westbound Knox Road Through	Westbound Knox Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Knox Road Right	Eastbound Knox Road Through	Eastbound Knox Road Left
Existing Traffic Volume			141	1,009	11	11	26	6	7	590	50	9	9	48
Growth				25						15				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	36	-	-	-	-	-	12	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	87	-	-	-	-	-	65	-	-	-	-
Background			141	1,121	11	11	26	6	7	670	50	9	9	48
Site-Office	33	3	-	5	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	15	-	-	-	-	-	45	6	2	-	-
Site Retail New Trips	56	33	-	11	-	-	-	1	-	6	-	1	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-
Site Subtotal	197	351	-	31	-	-	-	1	-	51	6	3	-	-
Total Future			**141**	**1,152**	**11**	**11**	**26**	**7**	**7**	**713**	**56**	**12**	**9**	**48**

4: US 1/Knox Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Knox Road Right	Westbound Knox Road Through	Westbound Knox Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Knox Road Right	Eastbound Knox Road Through	Eastbound Knox Road Left
Existing Traffic Volume			163	784	58	34	113	43	70	878	129	18	60	149
Growth				20						22				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	28	-	-	-	-	-	38	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	85	-	-	-	-	-	97	-	-	-	-
Background			163	889	58	34	113	43	70	997	129	18	60	149
Site-Office	5	22	-	1	-	-	-	-	-	3	-	-	-	-
Site - Residential & Hotel	271	148	-	38	-	-	-	-	-	21	3	6	-	-
Site Retail New Trips	229	223	-	41	-	-	-	2	2	40	3	3	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-
Site Subtotal	505	393	-	80	-	-	-	2	2	64	6	9	-	-
Total Future			**163**	**969**	**58**	**34**	**113**	**45**	**72**	**1,046**	**135**	**27**	**60**	**149**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

4: US 1/Knox Road
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Knox Road Right	Westbound Knox Road Through	Westbound Knox Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Knox Road Right	Eastbound Knox Road Through	Eastbound Knox Road Left
Existing Traffic Volume			152	919	59	42	47	38	24	734	100	17	35	132
Growth				23						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	33	-	-	-	-	-	34	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	87	-	-	-	-	-	90	-	-	-	-
Background			152	1,029	59	42	47	38	24	843	100	17	35	132
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	34	-	-	-	-	-	27	4	5	-	-
Site Retail New Trips	372	335	-	67	-	-	-	4	3	60	3	4	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-
Site Subtotal	620	533	-	101	-	-	-	4	3	87	7	9	-	-
Total Future			**152**	**1,130**	**59**	**42**	**47**	**42**	**27**	**939**	**107**	**26**	**35**	**132**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

5: US 1/Calvert Road
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Calvert Road Right	Westbound Calvert Road Through	Westbound Calvert Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Hotel Driveway Right	Eastbound Hotel Driveway Through	Eastbound Hotel Driveway Left
Existing Traffic Volume			2	967	34	33	-	34	31	650	-	5	-	-
Growth				24						16				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	36	-	-	-	-	-	12	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	87	-	-	-	-	-	65	-	-	-	-
Background			2	1,078	34	33	-	34	31	731	-	5	-	-
Site-Office	33	3	-	5	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	18	-	-	-	-	-	50	-	-	-	-
Site Retail New Trips	56	33	-	12	-	-	-	-	-	7	-	-	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-
Site Subtotal	197	351	-	35	-	-	-	-	-	57	-	-	-	-
Total Future			**2**	**1,113**	**34**	**33**	**-**	**34**	**31**	**780**	**-**	**5**	**-**	**-**

5: US 1/Calvert Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Calvert Road Right	Westbound Calvert Road Through	Westbound Calvert Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Hotel Driveway Right	Eastbound Hotel Driveway Through	Eastbound Hotel Driveway Left
Existing Traffic Volume			8	841	68	51	2	64	72	1,077	-	2	-	2
Growth				21						27				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	28	-	-	-	-	-	38	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	85	-	-	-	-	-	97	-	-	-	-
Background			8	947	68	51	2	64	72	1,201	-	2	-	2
Site-Office	5	22	-	1	-	-	-	-	-	3	-	-	-	-
Site - Residential & Hotel	271	148	-	44	-	-	-	-	-	24	-	-	-	-
Site Retail New Trips	229	223	-	46	-	-	-	2	3	45	-	-	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-
Site Subtotal	505	393	-	91	-	-	-	2	3	72	-	-	-	-
Total Future			**8**	**1,038**	**68**	**51**	**2**	**66**	**75**	**1,258**	**-**	**2**	**-**	**2**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

5: US 1/Calvert Road
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Calvert Road Right	Westbound Calvert Road Through	Westbound Calvert Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Hotel Driveway Right	Eastbound Hotel Driveway Through	Eastbound Hotel Driveway Left
Existing Traffic Volume			20	1012	62	41	0	58	46	848	2	11	0	0
Growth				26						21				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	33	-	-	-	-	-	34	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	87	-	-	-	-	-	90	-	-	-	-
Background			20	1,125	62	41	-	58	46	959	2	11	-	-
Site-Office	2	3	-	-	-	-	-	-	1	-	-	-	-	-
Site - Residential & Hotel	246	195	-	39	-	-	-	-	-	30	-	-	-	-
Site Retail New Trips	372	335	-	75	-	-	-	4	4	67	-	-	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-
Site Subtotal	620	533	-	114	-	-	-	4	5	97	-	-	-	-
Total Future			**20**	**1,239**	**62**	**41**	**-**	**62**	**51**	**1,065**	**2**	**11**	**-**	**-**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

6: US 1/Guilford Road
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Guilford Road Right	Westbound Guilford Road Through	Westbound Guilford Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Guilford Road Right	Eastbound Guilford Road Through	Eastbound Guilford Road Left
Existing Traffic Volume			15	964	8	23	5	10	4	638	109	28	2	26
Growth				24						16				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	5	46	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	15	21	-	-	-	-	-	7	-	-	-	5
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	15	72	-	-	-	-	-	60	5	46	-	5
Background			30	1,060	8	23	5	10	4	714	114	74	2	31
Site-Office	33	3	-	5	-	-	-	-	-	-	-	3	-	-
Site - Residential & Hotel	108	315	-	18	-	-	-	-	-	50	25	9	-	-
Site Retail New Trips	56	33	-	12	-	-	-	1	-	7	2	3	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-
Site Subtotal	197	351	-	35	-	-	-	1	-	57	27	15	-	-
Total Future			**30**	**1,095**	**8**	**23**	**5**	**11**	**4**	**763**	**141**	**89**	**2**	**31**

6: US 1/Guilford Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Guilford Road Right	Westbound Guilford Road Through	Westbound Guilford Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Guilford Road Right	Eastbound Guilford Road Through	Eastbound Guilford Road Left
Existing Traffic Volume			35	828	20	22	7	4	5	1,002	100	68	23	138
Growth				21						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	39	9	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	11	16	-	-	-	-	-	22	-	-	-	16
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	11	73	-	-	-	-	-	81	39	9	-	16
Background			46	922	20	22	7	4	5	1,108	139	77	23	154
Site-Office	5	22	-	1	-	-	-	-	-	4	2	1	-	-
Site - Residential & Hotel	271	148	-	43	-	-	-	-	-	24	12	22	-	-
Site Retail New Trips	229	223	-	49	-	-	-	2	2	47	11	12	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-
Site Subtotal	505	393	-	93	-	-	-	2	2	75	25	35	-	-
Total Future			**46**	**1,015**	**20**	**22**	**7**	**6**	**7**	**1,168**	**164**	**112**	**23**	**154**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

6: US 1/Guilford Road
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Guilford Road Right	Westbound Guilford Road Through	Westbound Guilford Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Guilford Road Right	Eastbound Guilford Road Through	Eastbound Guilford Road Left
Existing Traffic Volume			37	1024	28	28	8	6	5	786	41	43	7	67
Growth				26						20				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	5	6	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	14	20	-	-	-	-	-	20	-	-	-	14
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	14	74	-	-	-	-	-	76	5	6	-	14
Background			51	1,124	28	28	8	6	5	882	46	49	7	81
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	39	-	-	-	-	-	31	16	20	-	-
Site Retail New Trips	372	335	-	78	-	-	-	4	3	71	17	19	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-
Site Subtotal	620	533	-	117	-	-	-	4	3	102	33	39	-	-
Total Future			**51**	**1,241**	**28**	**28**	**8**	**10**	**8**	**993**	**79**	**88**	**7**	**81**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

7: US 1/Amherst Road
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Amherst Road Right	Westbound Amherst Road Through	Westbound Amherst Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Northeastbound Queens Chapel Road Right	Northeastbound Queens Chapel Road Through	Northeastbound Queens Chapel Road Left	Eastbound Pineway Right	Eastbound Pineway Through	Eastbound Pineway Left
Existing Traffic Volume			6	1003	4	8	4	13	3	550	2	13	-	61	1	-	2
Growth				25						14							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	46	-	-	-	-	-	5	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	21	-	-	-	-	-	7	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	118	-	-	-	-	-	65	-	-	-	-	-	-	-
Background			6	1,146	4	8	4	13	3	629	2	13	-	61	1	-	2
Site-Office	33	3	-	9	-	-	-	-	-	1	-	1	-	-	-	-	-
Site - Residential & Hotel	108	315	-	26	-	-	-	-	-	76	-	-	-	-	-	-	-
Site Retail New Trips	56	33	-	16	-	-	-	1	-	9	-	1	-	-	1	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	(8)	-	-	-	-	-	-	-
Site Subtotal	197	351	-	51	-	-	-	1	-	86	-	2	-	-	1	-	-
Total Future			**6**	**1,197**	**4**	**8**	**4**	**14**	**3**	**707**	**2**	**15**	**-**	**61**	**2**	**-**	**2**

7: US 1/Amherst Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Amherst Road Right	Westbound Amherst Road Through	Westbound Amherst Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Queens Chapel Road Right	Eastbound Queens Chapel Road Through	Eastbound Queens Chapel Road Left	Eastbound Pineway Right	Eastbound Pineway Through	Eastbound Pineway Left
Existing Traffic Volume			7	839	3	3	1	4	3	989	8	5	0	47	2	0	10
Growth				21						25							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	9	-	-	-	-	-	39	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	16	-	-	-	-	-	22	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	82	-	-	-	-	-	120	-	-	-	-	-	-	-
Background			7	942	3	3	1	4	3	1,134	8	5	-	47	2	-	10
Site-Office	5	22	-	2	-	-	-	-	-	6	-	-	-	-	-	-	-
Site - Residential & Hotel	271	148	-	66	-	-	-	-	-	36	-	-	-	-	-	-	-
Site Retail New Trips	229	223	-	62	-	-	-	2	3	60	7	2	-	-	5	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	(15)	-	-	-	-	-	-	-
Site Subtotal	505	393	-	130	-	-	-	2	3	102	7	2	-	-	5	-	-
Total Future			**7**	**1,072**	**3**	**3**	**1**	**6**	**6**	**1,221**	**15**	**7**	**-**	**47**	**7**	**-**	**10**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

7: US 1/Amherst Road
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Amherst Road			Northbound US 1			Eastbound Queens Chapel Road			Eastbound Pineway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			7	1015	7	1	7	2	1	778	5	3	0	21	2	0	3
Growth				26						20							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	6	-	-	-	-	-	5	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	20	-	-	-	-	-	20	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	80	-	-	-	-	-	81	-	-	-	-	-	-	-
Background			7	1,121	7	1	7	2	1	879	5	3	-	21	2	-	3
Site-Office	2	3	-	1	-	-	-	-	-	1	-	-	-	-			
Site - Residential & Hotel	246	195	-	59	-	-	-	-	-	47	-	-	-	-	-	-	-
Site Retail New Trips	372	335	-	100	-	-	-	4	2	90	10	4	-	-	7	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	9	-	-	-	-	-	-	-
Site Subtotal	620	533	-	160	-	-	-	4	2	138	10	4	-	-	7	-	-
Total Future			**7**	**1,281**	**7**	**1**	**7**	**6**	**3**	**1,026**	**15**	**7**	**-**	**21**	**9**	**-**	**3**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

7: US 1/Amherst Road
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1			Westbound Amherst Road			Northbound US 1			Northeastbound Queens Chapel Road			Eastbound Pineway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			4	720	3	3	-	1	-	669	7	6	-	28	3	-	3
Growth				18						17							
Pipeline Developments	IN	OUT															
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	16	-	-	-	-	-	18	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(1)	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	68	-	-	-	-	-	74	-	-	-	-	-	-	-
Background			4	806	3	3	-	1	-	760	7	6	-	28	3	-	3
Site-Office	8	11	-	2	-	-	-	-	-	3	-	-	-	-	-	-	-
Site - Residential & Hotel	121	126	-	29	-	-	-	-	-	30	-	-	-	-	-	-	-
Site Retail New Trips	331	268	-	89	-	-	-	3	3	72	8	4	-	-	7	-	-
Site Retail passby Mid day	171	138	-	-	-	-	-	-	-	(16)	-	-	-	-	-	-	-
Site Subtotal	460	405	-	120	-	-	-	3	3	105	8	4	-	-	7	-	-
Total Future			**4**	**926**	**3**	**3**	**-**	**4**	**3**	**849**	**15**	**10**	**-**	**28**	**10**	**-**	**3**

8: US 1/North Site Access
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound North Site Access Right	Westbound North Site Access Through	Westbound North Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound none Right	Eastbound none Through	Eastbound none Left
Existing Traffic Volume			-	1,040	-	-	-	-	-	561	-	-	-	-
Growth				26						14				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	46	-	-	-	-	-	5	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	118	-	-	-	-	-	65	-	-	-	-
Background			-	1,184	-	-	-	-	-	640	-	-	-	-
Site-Office	33	3	-	9	-	-	-	-	1	-	-	-	-	-
Site - Residential & Hotel	108	315	-	27	-	41	-	-	2	35	-	-	-	-
Site Retail New Trips	56	33	-	18	-	5	-	-	1	5	-	-	-	-
Site Retail Pass-by AM	56	34	-	-	-	2	-	-	3	(10)	-	-	-	-
Site Subtotal	197	351	-	54	-	46	-	-	4	40	-	-	-	-
Total Future			**-**	**1,238**	**-**	**48**	**-**	**-**	**7**	**670**	**-**	**-**	**-**	**-**

8: US 1/North Site Access
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound North Site Access Right	Westbound North Site Access Through	Westbound North Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound none Right	Eastbound none Through	Eastbound none Left
Existing Traffic Volume			-	852	-	-	-	-	-	997	-	-	-	-
Growth				22						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	9	-	-	-	-	-	39	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	82	-	-	-	-	-	120	-	-	-	-
Background			-	956	-	-	-	-	-	1,142	-	-	-	-
Site-Office	5	22	-	2	-	3	-	-	-	3	-	-	-	-
Site - Residential & Hotel	271	148	-	66	-	19	-	-	5	18	-	-	-	-
Site Retail New Trips	229	223	-	71	-	33	-	-	7	36	-	-	-	-
Site Retail Pass-by PM	230	223	-	-	-	22	-	-	12	(37)	-	-	-	-
Site Subtotal	505	393	-	139	-	55	-	-	12	57	-	-	-	-
Total Future			**-**	**1,095**	**-**	**77**	**-**	**-**	**24**	**1,162**	**-**	**-**	**-**	**-**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

8: US 1/North Site Access
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound North Site Access			Northbound US 1			Eastbound none		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	998	-	-	-	-	-	765	-	-	-	-
Growth				25						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	6	-	-	-	-	-	5	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	80	-	-	-	-	-	81	-	-	-	-
Background			-	1,103	-	-	-	-	-	865	-	-	-	-
Site-Office	2	3	-	1	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	59	-	25	-	-	5	21	-	-	-	-
Site Retail New Trips	372	335	-	115	-	50	-	-	11	54	-	-	-	-
Site Retail Pass-by SAT	191	173	-	-	-	17	-	-	10	(8)	-	-	-	-
Site Subtotal	620	533	-	175	-	75	-	-	16	75	-	-	-	-
Total Future			-	**1,278**	-	**92**	-	-	**26**	**932**	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

8: US 1/North Site Access
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound North Site Access Right	Westbound North Site Access Through	Westbound North Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound none Right	Eastbound none Through	Eastbound none Left
Existing Traffic Volume			-	706	-	-	-	-	-	678	-	-	-	-
Growth				18						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	16	-	-	-	-	-	18	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	68	-	-	-	-	-	74	-	-	-	-
Background			-	792	-	-	-	-	-	769	-	-	-	-
Site-Office	8	11	-	2	-	1	-	-	-	2	-	-	-	-
Site - Residential & Hotel	121	126	-	29	-	16	-	-	2	14	-	-	-	-
Site Retail New Trips	331	268	-	103	-	40	-	-	10	43	-	-	-	-
Site Retail passby Mid day	171	138	-	-	-	6	-	-	9	(22)	-	-	-	-
Site Subtotal	460	405	-	134	-	57	-	-	12	59	-	-	-	-
Total Future			-	**926**	-	**63**	-	-	**21**	**806**	-	-	-	-

9: US 1/Van Buren/Future Site Access

AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Middle Site Access Right	Westbound Middle Site Access Through	Westbound Middle Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Van Buren Street Right	Eastbound Van Buren Street Through	Eastbound Van Buren Street Left
Existing Traffic Volume			51	989	-	-	-	-	-	559	26	24		2
Growth				25						14				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	-	46	5	-	9	77	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	72	46	5	-	9	77	60	-	-	-	-
Background			51	1,086	46	5	-	9	77	633	26	24	-	2
Site-Office	33	3	-	-	9	-	-	1	5	1	-	-	-	-
Site - Residential & Hotel	108	315	-	-	27	25	-	135	19	11	-	-	-	-
Site Retail New Trips	56	33	-	-	18	3	-	10	5	4	-	-	-	-
Site Retail Pass-by AM	56	34	-	(36)	36	3	-	22	6	(10)	-	-	-	-
Site Subtotal	197	351	-	-	54	28	-	146	29	16	-	-	-	-
Total Future			**51**	**1,050**	**136**	**36**	**-**	**177**	**112**	**639**	**26**	**24**	**-**	**2**
										0.54				

9: US 1/Van Buren/Future Site Access

PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Middle Site Access Right	Westbound Middle Site Access Through	Westbound Middle Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Van Buren Street Right	Eastbound Van Buren Street Through	Eastbound Van Buren Street Left
Existing Traffic Volume			10	842	-	-	-	-	-	992	26	17	-	5
Growth				21						25				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	-	9	39	-	64	15	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	73	9	39	-	64	15	81	-	-	-	-
Background			10	936	9	39	-	64	15	1,098	26	17	-	5
Site-Office	5	22	-	-	2	2	-	9	1	1	-	-	-	-
Site - Residential & Hotel	271	148	-	-	66	12	-	64	48	11	-	-	-	-
Site Retail New Trips	229	223	-	-	71	23	-	67	20	20	-	-	-	-
Site Retail Pass-by PM	230	223	-	(115)	115	45	-	123	57	(70)	-	-	-	-
Site Subtotal	505	393	-	-	139	37	-	140	69	32	-	-	-	-
Total Future			**10**	**821**	**263**	**121**	**-**	**327**	**141**	**1,060**	**26**	**17**	**-**	**5**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

9: US 1/Van Buren/Future Site Access
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Middle Site Access			Northbound US 1			Eastbound Van Buren Street		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			17	981	0	0	0	0	0	761	12	6	0	4
Growth				25						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	-	6	5	-	8	10	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	74	6	5	-	8	10	76	-	-	-	-
Background			17	1,080	6	5	-	8	10	856	12	6	-	4
Site-Office	2	3	-	-	1	-	-	1	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	-	59	15	-	84	44	11	-	-	-	-
Site Retail New Trips	372	335	-	-	115	33	-	101	33	32	-	-	-	-
Site Retail Pass-by SAT	191	173	-	(105)	105	43	-	78	48	(41)	-	-	-	-
Site Subtotal	620	533	-	-	175	48	-	186	77	43	-	-	-	-
Total Future			**17**	**975**	**286**	**96**	**-**	**272**	**135**	**858**	**12**	**6**	**-**	**4**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

9: US 1/Van Buren/Future Site Access
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1			Westbound Middle Site Access			Northbound US 1			Eastbound Van Buren Street		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			5	701	-	-	-	-	-	676	9	6		2
Growth				18						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	-	16	18	-	30	26	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Resi	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Ret:	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pa	12	10	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	52	16	18	-	30	26	56	-	-	-	-
Background			5	771	16	18	-	30	26	749	9	6	-	2
Site-Office	8	11	-	-	2	1	-	4	2	1	-	-	-	-
Site - Residential & Hote	121	126	-	-	29	10	-	55	22	6	-	-	-	-
Site Retail New Trips	331	268	-	-	103	27	-	81	30	26	-	-	-	-
Site Retail passby Mid da	171	138	-	(86)	86	35	-	69	43	(48)	-	-	-	-
Site Subtotal	460	405	-	-	134	38	-	140	54	33	-	-	-	-
Total Future			**5**	**685**	**236**	**91**	**-**	**239**	**123**	**734**	**9**	**6**	**-**	**2**

10: US 1/South Site Access
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound South Site Access Right	Westbound South Site Access Through	Westbound South Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound None Right	Eastbound None Through	Eastbound None Left
Existing Traffic Volume			-	1,013	-	-	-	-	-	585	-	-	-	-
Growth				26						15				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	17	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	-	-	16	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	-	-	15	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	81	-	-	-	-	-	137	-	-	-	-
Background			-	1,120	-	-	-	-	-	737	-	-	-	-
Site-Office	33	3	-	1	-	-	-	-	7	6	-	-	-	-
Site - Residential & Hotel	108	315	-	135	-	9	-	-	25	22	-	-	-	-
Site Retail New Trips	56	33	-	10	-	2	-	-	10	7	-	-	-	-
Site Retail Pass-by AM	56	34	-	(14)	-	7	-	-	11	(11)	-	-	-	-
Site Subtotal	197	351	-	146	-	11	-	-	42	35	-	-	-	-
Total Future			**-**	**1,252**	**-**	**18**	**-**	**-**	**53**	**761**	**-**	**-**	**-**	**-**

10: US 1/South Site Access
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound South Site Access Right	Westbound South Site Access Through	Westbound South Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound None Right	Eastbound None Through	Eastbound None Left
Existing Traffic Volume			-	859	-	-	-	-	-	1,018	-	-	-	-
Growth				22						26				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	2	-	-	-	-	-	3	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	8	-	-	-	-	-	16	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	-	-	8	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	-	-	8	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	137	-	-	-	-	-	96	-	-	-	-
Background			-	1,018	-	-	-	-	-	1,140	-	-	-	-
Site-Office	5	22	-	9	-	1	-	-	1	1	-	-	-	-
Site - Residential & Hotel	271	148	-	64	-	5	-	-	62	54	-	-	-	-
Site Retail New Trips	229	223	-	67	-	13	-	-	41	27	-	-	-	-
Site Retail Pass-by PM	230	223	-	8	-	33	-	-	46	(46)	-	-	-	-
Site Subtotal	505	393	-	140	-	19	-	-	104	82	-	-	-	-
Total Future			**-**	**1,166**	**-**	**52**	**-**	**-**	**150**	**1,176**	**-**	**-**	**-**	**-**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

10: US 1/South Site Access
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound South Site Access			Northbound US 1			Eastbound None		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	987	-	-	-	-	-	773	-	-	-	-
Growth				25						20				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	6	-	-	-	-	-	7	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	-	-	9	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	-	-	7	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	82	-	-	-	-	-	86	-	-	-	-
Background			-	1,094	-	-	-	-	-	879	-	-	-	-
Site-Office	2	3	-	1	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	84	-	6	-	-	57	49	-	-	-	-
Site Retail New Trips	372	335	-	101	-	20	-	-	67	45	-	-	-	-
Site Retail Pass-by SAT	191	173	-	(27)	-	35	-	-	28	(28)	-	-	-	-
Site Subtotal	620	533	-	186	-	26	-	-	124	94	-	-	-	-
Total Future			-	**1,253**	-	**61**	-	-	**152**	**945**	-	-	-	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

10: US 1/South Site Access
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound South Site Access Right	Westbound South Site Access Through	Westbound South Site Access Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound None Right	Eastbound None Through	Eastbound None Left
Existing Traffic Volume			-	707	-	-	-	-	-	685	-	-	-	-
Growth				18						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	6	-	-	-	-	-	6	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	-	-	6	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	-	-	6	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	82	-	-	-	-	-	82	-	-	-	-
Background			-	807	-	-	-	-	-	784	-	-	-	-
Site-Office	8	11	-	4	-	1	-	-	2	2	-	-	-	-
Site - Residential & Hotel	121	126	-	55	-	4	-	-	28	24	-	-	-	-
Site Retail New Trips	331	268	-	81	-	16	-	-	60	40	-	-	-	-
Site Retail passby Mid day	171	138	-	(17)	-	28	-	-	33	(33)	-	-	-	-
Site Subtotal	460	405	-	140	-	21	-	-	90	66	-	-	-	-
Total Future			-	**930**	-	**49**	-	-	**123**	**817**	-	-	-	-

11: US 1/MD 410
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			210	628	166	101	1,633	243	107	413	289	226	862	163
Growth				16			41			10			22	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	1	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	8	8	-	-	-	-	-	2	-	-	-	2
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	4	-	-	-	2	5	16	5	1	-	-
EYA Hyattsville Townhomes	26	102	-	4	-	-	-	2	6	15	5	1	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	9	71	-	-	-	4	11	135	10	2	-	2
Background			219	715	166	101	1,674	247	118	558	299	228	884	165
Site-Office	33	3	-	-	-	3	-	-	-	5	-	-	-	5
Site - Residential & Hotel	108	315	32	48	56	20	-	-	-	16	-	-	-	11
Site Retail New Trips	56	33	2	5	3	6	-	-	-	8	-	-	-	3
Site Retail Pass-by AM	56	34	-	(14)	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	34	53	59	29	-	-	-	29	-	-	-	19
Total Future			**253**	**754**	**225**	**130**	**1,674**	**247**	**118**	**587**	**299**	**228**	**884**	**184**

11: US 1/MD 410
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			224	506	216	151	1,179	188	96	606	282	281	1,306	244
Growth				13			30			15			33	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	1	1	-	-	-	-	-	2	-	-	-	1
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	4	4	-	-	-	-	-	8	-	-	-	8
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	15	-	-	-	5	3	8	3	5	-	-
EYA Hyattsville Townhomes	95	51	-	14	-	-	-	5	3	8	3	5	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	5	132	-	-	-	10	6	87	6	10	-	9
Background			229	651	216	151	1,209	198	102	708	288	291	1,339	253
Site-Office	5	22	3	3	2	1	-	-	-	1	-	-	-	-
Site - Residential & Hotel	271	148	15	22	27	48	-	-	-	41	-	-	-	27
Site Retail New Trips	229	223	12	33	23	23	-	-	-	34	-	-	-	11
Site Retail Pass-by PM	230	223	-	8	-	-	-	-	-	-	-	-	-	-
Site Subtotal	505	393	30	58	52	72	-	-	-	76	-	-	-	38
Total Future			**259**	**717**	**268**	**223**	**1,209**	**198**	**102**	**784**	**288**	**291**	**1,339**	**291**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

11: US 1/MD 410
SAT Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			283	535	218	119	1,146	185	103	455	275	262	1,065	196
Growth				14			29			11			27	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	1	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	3	3	-	-	-	-	-	4	-	-	-	4
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	12	-	-	-	4	3	9	3	4	-	-
EYA Hyattsville Townhomes	52	44	-	8	-	-	-	3	2	7	2	3	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	4	78	-	-	-	7	5	83	5	7	-	4
Background			287	627	218	119	1,175	192	108	549	280	269	1,092	200
Site-Office	2	3	1	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	20	29	35	44	-	-	-	37	-	-	-	25
Site Retail New Trips	372	335	17	50	34	37	-	-	-	56	-	-	-	19
Site Retail Pass-by SAT	191	173	-	(27)	-	-	-	-	-	-	-	-	-	-
Site Subtotal	620	533	38	79	69	81	-	-	-	93	-	-	-	44
Total Future			**325**	**679**	**287**	**200**	**1,175**	**192**	**108**	**642**	**280**	**269**	**1,092**	**244**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

11: US 1/MD 410
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound MD 410 Right	Westbound MD 410 Through	Westbound MD 410 Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound MD 410 Right	Eastbound MD 410 Through	Eastbound MD 410 Left
Existing Traffic Volume			183	394	153	100	760	158	56	393	278	281	747	174
Growth				10			19			10			19	
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	1	-	-	-	-	-	1	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	3	3	-	-	-	-	-	3	-	-	-	3
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	6	-	-	-	2	2	6	2	2	-	-
EYA Hyattsville Townhomes	37	37	-	6	-	-	-	2	2	6	2	2	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	3	78	-	-	-	4	4	78	4	4	-	3
Background			186	482	153	100	779	162	60	481	282	285	766	177
Site-Office	8	11	2	2	1	1	-	-	-	1	-	-	-	1
Site - Residential & Hotel	121	126	13	19	23	22	-	-	-	18	-	-	-	12
Site Retail New Trips	331	268	13	40	27	34	-	-	-	50	-	-	-	17
Site Retail passby Mid day	171	138	-	(17)	-	-	-	-	-	-	-	-	-	-
Site Subtotal	460	405	28	61	51	57	-	-	-	69	-	-	-	30
Total Future			**214**	**526**	**204**	**157**	**779**	**162**	**60**	**550**	**282**	**285**	**766**	**207**

12: US 1/Queensbury Road
AM Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Queensbury Road Right	Westbound Queensbury Road Through	Westbound Queensbury Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Queensbury Road Right	Eastbound Queensbury Road Through	Eastbound Queensbury Road Left
Existing Traffic Volume			41	1,108	39	51	102	98	76	661	51	59	94	58
Growth				28						17				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	8	-	-	-	-	-	2	-	-	-	-
Northgate Commercial	81	77	-	12	-	-	-	-	-	12	-	-	-	-
Starview Plaza Residential	17	72	-	4	-	-	-	-	-	1	-	-	-	-
Starview Plaza Retail	9	6	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	7	30	-	2	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	8	-	-	-	-	-	2	-	-	-	-
M-Square - Riverside	1,546	172	-	9	-	-	-	-	-	77	-	-	-	-
EYA Hyattsville Apartments	26	109	-	7	-	-	-	-	-	27	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	7	-	-	-	-	-	26	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	21	-	-	-	-	-	7	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	(3)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	77	-	-	-	-	-	157	-	-	-	-
Background			41	1,213	39	51	102	98	76	835	51	59	94	58
Site-Office	33	3	-	-	-	-	-	-	-	5	-	-	-	-
Site - Residential & Hotel	108	315	-	48	-	-	3	-	-	16	-	-	1	-
Site Retail New Trips	56	33	-	5	-	-	1	-	-	8	-	-	1	-
Site Retail Pass-by AM	56	34	-	(14)	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	-	53	-	-	4	-	-	29	-	-	2	-
Total Future			**41**	**1,252**	**39**	**51**	**106**	**98**	**76**	**864**	**51**	**59**	**96**	**58**

12: US 1/Queensbury Road
PM Peak Hour

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Queensbury Road Right	Westbound Queensbury Road Through	Westbound Queensbury Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Queensbury Road Right	Eastbound Queensbury Road Through	Eastbound Queensbury Road Left
Existing Traffic Volume			91	818	93	64	127	42	77	887	106	66	210	62
Growth				21						22				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	147	79	-	4	-	-	-	-	-	7	-	-	-	-
Northgate Commercial	64	52	-	8	-	-	-	-	-	10	-	-	-	-
Starview Plaza Residential	67	36	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	23	23	-	3	-	-	-	-	-	3	-	-	-	-
Berwyn House	28	15	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	4	-	-	-	-	-	8	-	-	-	-
M-Square - Riverside	301	1,289	-	64	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Apartments	101	54	-	25	-	-	-	-	-	14	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	24	-	-	-	-	-	13	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	16	-	-	-	-	-	22	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	152	-	-	-	-	-	98	-	-	-	-
Background			91	991	93	64	127	42	77	1,007	106	66	210	62
Site-Office	5	22	-	3	-	-	-	-	-	1	-	-	-	-
Site - Residential & Hotel	271	148	-	22	-	-	1	-	-	41	-	-	3	-
Site Retail New Trips	229	223	-	33	-	-	4	-	-	34	-	-	5	-
Site Retail Pass-by PM	230	223	-	8	-	-	-	-	-	-	-	-	-	-
Site Subtotal	505	393	-	58	-	-	5	-	-	76	-	-	8	-
Total Future			**91**	**1,057**	**93**	**64**	**132**	**42**	**77**	**1,083**	**106**	**66**	**218**	**62**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

12: US 1/Queensbury Road
SAT Peak Hour

Traffic Component			Southbound US 1			Westbound Queensbury Road			Northbound US 1			Eastbound Queensbury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			90	874	81	61	105	58	62	786	75	122	204	77
Growth				22						20				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	4	-	-	-	-	-	6	-	-	-	-
Northgate Commercial	91	85	-	13	-	-	-	-	-	14	-	-	-	-
Starview Plaza Residential	51	38	-	2	-	-	-	-	-	3	-	-	-	-
Starview Plaza Retail	48	45	-	7	-	-	-	-	-	7	-	-	-	-
Berwyn House	21	16	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	3	-	-	-	-	-	4	-	-	-	-
M-Square - Riverside	190	162	-	8	-	-	-	-	-	10	-	-	-	-
EYA Hyattsville Apartments	77	58	-	19	-	-	-	-	-	15	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	13	-	-	-	-	-	11	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	20	-	-	-	-	-	20	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	91	-	-	-	-	-	93	-	-	-	-
Background			90	987	81	61	105	58	62	899	75	122	204	77
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	29	-	-	2	-	-	37	-	-	2	-
Site Retail New Trips	372	335	-	50	-	-	7	-	-	56	-	-	7	-
Site Retail Pass-by SAT	191	173	-	(27)	-	-	-	-	-	-	-	-	-	-
Site Subtotal	620	533	-	79	-	-	9	-	-	93	-	-	9	-
Total Future			**90**	**1,039**	**81**	**61**	**114**	**58**	**62**	**992**	**75**	**122**	**213**	**77**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

12: US 1/Queensbury Road
MID DAY Peak Hour

With CSX

Traffic Component			Southbound US 1 Right	Southbound US 1 Through	Southbound US 1 Left	Westbound Queensbury Road Right	Westbound Queensbury Road Through	Westbound Queensbury Road Left	Northbound US 1 Right	Northbound US 1 Through	Northbound US 1 Left	Eastbound Queensbury Road Right	Eastbound Queensbury Road Through	Eastbound Queensbury Road Left
Existing Traffic Volume			81	635	47	44	88	42	70	746	55	68	116	62
Growth				16						19				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	1	-	-	-	-	-	1	-	-	-	-
Northgate Residential	61	61	-	3	-	-	-	-	-	3	-	-	-	-
Northgate Commercial	72	60	-	9	-	-	-	-	-	11	-	-	-	-
Starview Plaza Residential	28	28	-	1	-	-	-	-	-	1	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	3	-	-	-	-	-	4	-	-	-	-
Berwyn House	12	12	-	1	-	-	-	-	-	1	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	3	-	-	-	-	-	3	-	-	-	-
M-Square - Riverside	529	601	-	30	-	-	-	-	-	26	-	-	-	-
EYA Hyattsville Apartments	42	42	-	11	-	-	-	-	-	11	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	9	-	-	-	-	-	9	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	16	-	-	-	-	-	16	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	(1)	-	-	-	-	-	-	-	-	-	-
Subtotal	1,024	1,073	-	86	-	-	-	-	-	86	-	-	-	-
Background			81	737	47	44	88	42	70	851	55	68	116	62
Site-Office	8	11	-	2	-	-	-	-	-	1	-	-	-	-
Site - Residential & Hotel	121	126	-	19	-	-	1	-	-	18	-	-	1	-
Site Retail New Trips	331	268	-	40	-	-	5	-	-	50	-	-	7	-
Site Retail passby Mid day	171	138	-	(17)	-	-	-	-	-	-	-	-	-	-
Site Subtotal	460	405	-	61	-	-	6	-	-	69	-	-	8	-
Total Future			**81**	**781**	**47**	**44**	**94**	**42**	**70**	**920**	**55**	**68**	**124**	**62**

13: Rivertech Court/River Road
AM Peak Hour

With CSX

Traffic Component			Southbound Driveway Right	Southbound Driveway Through	Southbound Driveway Left	Westbound River Road Right	Westbound River Road Through	Westbound River Road Left	Northbound Rivertech Court Right	Northbound Rivertech Court Through	Northbound Rivertech Court Left	Eastbound River Road Right	Eastbound River Road Through	Eastbound River Road Left
Existing Traffic Volume			16	7	14	50	232	272	55	18	43	59	86	42
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	96	15	37	-	86	-	859	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	96	15	37	-	86	-	859	-
Background			16	7	14	50	328	287	92	18	129	59	945	42
Site-Office	33	3	-	-	-	-	-	10	1	-	-	-	-	-
Site - Residential & Hotel	108	315	-	-	-	-	-	30	89	-	10	3	-	-
Site Retail New Trips	56	33	-	-	-	-	-	16	10	-	2	3	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	-	-	-	-	-	56	100	-	12	6	-	-
Total Future			**16**	**7**	**14**	**50**	**328**	**343**	**192**	**18**	**141**	**65**	**945**	**42**

13: Rivertech Court/River Road
PM Peak Hour

With CSX

Traffic Component			Southbound None Right	Southbound None Through	Southbound None Left	Westbound River Road Right	Westbound River Road Through	Westbound River Road Left	Northbound Rivertech Court Right	Northbound Rivertech Court Through	Northbound Rivertech Court Left	Eastbound River Road Right	Eastbound River Road Through	Eastbound River Road Left
Existing Traffic Volume			55	14	93	22	174	80	224	7	68	48	278	15
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	716	103	7	-	17	-	167	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	716	103	7	-	17	-	167	-
Background			55	14	93	22	890	183	231	7	85	48	445	15
Site-Office	5	22	-	-	-	-	-	1	6	-	-	-	-	-
Site - Residential & Hotel	271	148	-	-	-	-	-	76	42	-	4	8	-	-
Site Retail New Trips	229	223	-	-	-	-	-	67	65	-	10	11	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	505	393	-	-	-	-	-	144	113	-	14	19	-	-
Total Future			**55**	**14**	**93**	**22**	**890**	**327**	**344**	**7**	**99**	**67**	**445**	**15**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

13: Rivertech Court/River Road
SAT Peak Hour

Traffic Component			Southbound None			Westbound River Road			Northbound Rivertech Court			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			0	0	0	0	82	36	42	0	25	26	134	0
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	90	13	5	-	11	-	106	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	90	13	5	-	11	-	106	-
Background			-	-	-	-	172	49	47	-	36	26	240	-
Site-Office	2	3	-	-	-	-	-	1	1	-	-	-	-	-
Site - Residential & Hotel	246	195	-	-	-	-	-	69	55	-	6	8	-	-
Site Retail New Trips	372	335	-	-	-	-	-	108	97	-	17	20	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	620	533	-	-	-	-	-	178	153	-	23	28	-	-
Total Future			-	-	-	-	**172**	**227**	**200**	-	**59**	**54**	**240**	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

14: River Road/Paint Branch Parkway
AM Peak Hour

With CSX

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound River Road			Eastbound Paint Branch Parkway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	-	-	951	222	58	-	232	220	232	-
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	3	-	-	-	-	-	2	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	4	16	-	-
Northgate Commercial	81	77	-	-	-	-	8	-	-	-	4	4	8	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	2	7	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	1	-	-	-	-	-	1	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	232	26	-	12	108	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	12	232	26	-	23	138	13	-
Background			-	-	-	-	963	454	84	-	255	358	245	-
Site-Office	33	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	56	33	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	-	-	-	-	-	-	-	-	-	-	-	-
Total Future			-	-	-	-	963	454	84	-	255	358	245	-

14: River Road/Paint Branch Parkway
PM Peak Hour

With CSX

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound River Road			Eastbound Paint Branch Parkway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	-	-	417	27	152	-	272	238	828	-
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	4	-	-	-	-	-	3	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	15	8	-	-
Northgate Commercial	64	52	-	-	-	-	6	-	-	-	3	3	5	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	7	4	-	-
Starview Plaza Retail	23	23	-	-	-	-	3	-	-	-	1	1	3	-
Berwyn House	28	15	-	-	-	-	1	-	-	-	3	2	1	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	45	193	-	90	21	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	14	45	193	-	119	39	12	-
Background			-	-	-	-	431	72	345	-	391	277	840	-
Site-Office	5	22	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	271	148	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	229	223	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	505	393	-	-	-	-	-	-	-	-	-	-	-	-
Total Future			-	-	-	-	431	72	345	-	391	277	840	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

14: River Road/Paint Branch Parkway
SAT Peak Hour

Traffic Component			Southbound None			Westbound Paint Branch Parkway			Northbound River Road			Eastbound Paint Branch Parkway		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			0	0	0	0	302	18	37	0	108	148	352	0
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	3	-	-	-	-	-	3	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	11	8	-	-
Northgate Commercial	91	85	-	-	-	-	9	-	-	-	5	4	9	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	5	4	-	-
Starview Plaza Retail	48	45	-	-	-	-	7	-	-	-	2	2	7	-
Berwyn House	21	16	-	-	-	-	1	-	-	-	2	2	1	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	29	24	-	11	13	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	20	29	24	-	36	33	20	-
Background			-	-	-	-	322	47	61	-	144	181	372	-
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	372	335	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	620	533	-	-	-	-	-	-	-	-	-	-	-	-
Total Future			-	-	-	-	322	47	61	-	144	181	372	-

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

15: Kenilworth Road/River Road
AM Peak Hour

With CSX

Traffic Component			Southbound Kenilworth Road			Westbound River Road			Northbound Kenilworth Road			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			452	1,745	-	-	1	1	1	816	312	63	-	65
Growth				44						21				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	4	-	-	-	-	-	4	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	7	30	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	387	-	-	-	-	-	-	-	696	77	-	43
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	387	5	-	-	-	-	-	6	696	77	-	43
Background			839	1,794	-	-	1	1	1	843	1,008	140	-	108
Site-Office	33	3	6	-	-	-	-	-	-	-	4	-	-	1
Site - Residential & Hotel	108	315	20	-	-	-	-	-	-	-	10	29	-	60
Site Retail New Trips	56	33	10	-	-	-	-	-	-	-	6	4	-	6
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	36	-	-	-	-	-	-	-	20	33	-	67
Total Future			**875**	**1,794**	**-**	**-**	**1**	**1**	**1**	**843**	**1,028**	**173**	**-**	**175**

15: Kenilworth Road/River Road
PM Peak Hour

Traffic Component			Southbound Kenilworth Road			Westbound River Road			Northbound Kenilworth Road			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			89	1,060	4	2	-	5	4	1,291	112	320	2	399
Growth				27						33				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	1	-	-	-	-	-	2	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	3	-	-	-	-	-	3	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	1	-	-	-	-	-	1	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	75	-	-	-	-	-	-	-	135	580	-	322
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	75	5	-	-	-	-	-	6	135	580	-	322
Background			164	1,092	4	2	-	5	4	1,330	247	900	2	721
Site-Office	5	22	1	-	-	-	-	-	-	-	1	2	-	4
Site - Residential & Hotel	271	148	51	-	-	-	-	-	-	-	24	14	-	28
Site Retail New Trips	229	223	44	-	-	-	-	-	-	-	23	23	-	42
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	505	393	96	-	-	-	-	-	-	-	48	39	-	74
Total Future			**260**	**1,092**	**4**	**2**	**-**	**5**	**4**	**1,330**	**295**	**939**	**2**	**795**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

15: Kenilworth Road/River Road
SAT Peak Hour

Traffic Component			Southbound Kenilworth Road			Westbound River Road			Northbound Kenilworth Road			Eastbound River Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			41	995	3	2	-	2	5	1,019	75	138	7	52
Growth				25						26				
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	2	-	-	-	-	-	2	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	4	-	-	-	-	-	5	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	2	-	-	-	-	-	2	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	48	-	-	-	-	-	-	-	86	73	-	41
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	48	8	-	-	-	-	-	9	86	73	-	41
Background			89	1,028	3	2	-	2	5	1,054	161	211	7	93
Site-Office	2	3	-	-	-	-	-	-	-	-	1	-	-	1
Site - Residential & Hotel	246	195	47	-	-	-	-	-	-	-	22	17	-	37
Site Retail New Trips	372	335	71	-	-	-	-	-	-	-	37	34	-	64
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	620	533	118	-	-	-	-	-	-	-	60	51	-	102
Total Future			**207**	**1,028**	**3**	**2**	**-**	**2**	**5**	**1,054**	**221**	**262**	**7**	**195**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

16: Rhode Island/Queens Bury Road
AM Peak Hour

With CSX

Traffic Component			Southbound Parking Entrance			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			1	-	3	6	226	177	55	1	3	4	119	10
Growth			-											
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	-	-	-	-	-	-	-	-
Background			1	-	3	6	226	177	55	1	3	4	119	10
Site-Office	33	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	3	3	-	-	-	-	-	1	-	-	-	1
Site Retail New Trips	56	33	1	-	1	1	-	-	-	1	-	-	-	1
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	4	3	1	1	-	-	-	2	-	-	-	2
Total Future			**5**	**3**	**4**	**7**	**226**	**177**	**55**	**3**	**3**	**4**	**119**	**12**

16: Rhode Island/Queens Bury Road
PM Peak Hour

With CSX

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			25	3	8	8	173	54	205	-	22	10	300	5
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	-	-	-	-	-	-	-	-
Background			25	3	8	8	173	54	205	-	22	10	300	5
Site-Office	5	22	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	271	148	1	2	-	-	-	-	-	3	-	-	-	3
Site Retail New Trips	229	223	4	3	5	5	-	-	-	2	-	-	-	5
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	505	393	5	5	5	5	-	-	-	5	-	-	-	8
Total Future			**30**	**8**	**13**	**13**	**173**	**54**	**205**	**5**	**22**	**10**	**300**	**13**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

16: Rhode Island/Queens Bury Road
SAT Peak Hour

Traffic Component			Southbound None			Westbound Queens Bury Road			Northbound Rhode Island			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			7	1	8	10	166	33	40	1	7	7	248	9
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	-	-	-	-	-	-	-	-
Background			7	1	8	10	166	33	40	1	7	7	248	9
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	2	2	-	-	-	-	-	2	-	-	-	2
Site Retail New Trips	372	335	7	4	7	7	-	-	-	4	-	-	-	7
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	620	533	9	6	7	7	-	-	-	6	-	-	-	9
Total Future			**16**	**7**	**15**	**17**	**166**	**33**	**40**	**7**	**7**	**7**	**248**	**18**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

17: Lafayette Avenue/Queens Bury Road
SAT Peak Hour

Traffic Component			Southbound Lafayette Avenue			Westbound Queens Bury Road			Northbound Lafayette Avenue			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			40	8	2	1	34	2	3	12	117	162	61	62
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	-	-	-	-	-	-	-	-
Background			40	8	2	1	34	2	3	12	117	162	61	62
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	372	335	-	-	-	-	7	-	-	-	-	-	7	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	620	533	-	-	-	-	7	-	-	-	-	-	7	-
Total Future			**40**	**8**	**2**	**1**	**41**	**2**	**3**	**12**	**117**	**162**	**68**	**62**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

17: Lafayette Avenue/Queens Bury Road

MID DAY Peak Hour

With CSX

Traffic Component			Southbound Lafayette Avenue			Westbound Queens Bury Road			Northbound Lafayette Avenue			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			55	9	1	-	24	1	4	24	104	93	49	101
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	61	61	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	12	12	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	-	-	-	-	-	-	-	-	-	-	-
	1,024	1,073	-	-	-	-	-	-	-	-	-	-	-	-
Background			55	9	1	-	24	1	4	24	104	93	49	101
Site-Office	8	11	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	121	126	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	331	268	-	-	-	-	7	-	-	-	-	-	5	-
Site Retail Pass-by AM	171	138	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	460	405	-	-	-	-	7	-	-	-	-	-	5	-
Total Future			**55**	**9**	**1**	-	**31**	**1**	**4**	**24**	**104**	**93**	**54**	**101**

18: Natoli Place/Queens Bury Road
AM Peak Hour

With CSX

2017

Traffic Component			Southbound Natoli Place			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	4	1	10	-	-	-	-	1	39	-
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	11	9	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	38	158	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	81	77	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	17	72	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	9	6	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	42	168	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	1,546	172	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	26	109	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	26	102	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	26	108	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	10	6	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	36	105	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	9	5	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,875	1,122	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	4	1	10	-	-	-	-	1	39	-
Site-Office	33	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	108	315	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	56	33	-	-	-	-	1	-	-	-	-	-	1	-
Site Retail Pass-by AM	56	34	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	197	351	-	-	-	-	1	-	-	-	-	-	1	-
-			**-**	**-**	**4**	**1**	**11**	**-**	**-**	**-**	**-**	**1**	**40**	**-**

18: Natoli Place/Queens Bury Road
PM Peak Hour

With CSX

2017

Traffic Component			Southbound Natoli Place			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	11	16	35	-	-	-	-	-	95	1
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	14	11	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	147	79	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	64	52	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	67	36	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	23	23	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	28	15	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	156	84	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	301	1,289	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	101	54	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	95	51	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	100	54	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	24	24	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	111	81	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	16	16	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	1,231	1,853	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	11	16	35	-	-	-	-	-	95	1
Site-Office	5	22	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	271	148	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	229	223	-	-	-	-	5	-	-	-	-	-	5	-
Site Retail Pass-by PM	230	223	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	505	393	-	-	-	-	5	-	-	-	-	-	5	-
-			**-**	**-**	**11**	**16**	**40**	**-**	**-**	**-**	**-**	**-**	**100**	**1**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

18: Natoli Place/Queens Bury Road
SAT Peak Hour

Traffic Component			Southbound Natoli Place			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	4	5	33	-	-	-	1	-	63	2
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	12	10	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	112	84	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	91	85	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	51	38	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	48	45	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	21	16	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	70	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	190	162	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	77	58	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	52	44	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	76	57	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	50	46	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	100	98	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	29	27	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal	950	803	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	4	5	33	-	-	-	1	-	63	2
Site-Office	2	3	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	246	195	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	372	335	-	-	-	-	7	-	-	-	-	-	7	-
Site Retail Pass-by SAT	191	173	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal New Trips	620	533	-	-	-	-	7	-	-	-	-	-	7	-
			-	**-**	**4**	**5**	**40**	**-**	**-**	**-**	**1**	**-**	**70**	**2**

Domain at College Park Development does not impact the study intersections (see Maryland Book Exchange Property Report dated August 24, 2011 included in Appendix A)

18: Natoli Place/Queens Bury Road

MID DAY Peak Hour

With CSX

Traffic Component			Southbound Natoli Place			Westbound Queens Bury Road			Northbound Natoli Place			Eastbound Queens Bury Road		
			Right	Through	Left	Right	Through	Left	Right	Through	Left	Right	Through	Left
Existing Traffic Volume			-	-	2	6	29	1	1	2	-	-	47	-
Growth														
Pipeline Developments	IN	OUT												
Garden Suites Hotel	8	8	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Residential	61	61	-	-	-	-	-	-	-	-	-	-	-	-
Northgate Commercial	72	60	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Residential	28	28	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Office	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starview Plaza Retail	25	21	-	-	-	-	-	-	-	-	-	-	-	-
Berwyn House	12	12	-	-	-	-	-	-	-	-	-	-	-	-
Mosiac @ Turtle Creek	60	60	-	-	-	-	-	-	-	-	-	-	-	-
M-Square - Riverside	529	601	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Apartments	42	42	-	-	-	-	-	-	-	-	-	-	-	-
EYA Hyattsville Townhomes	37	37	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Residential	42	42	-	-	-	-	-	-	-	-	-	-	-	-
Domain at College Park Retail	26	21	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange	82	80	-	-	-	-	-	-	-	-	-	-	-	-
Maryland Book Exchange Pass by	12	10	-	-	-	-	-	-	-	-	-	-	-	-
	1,024	1,073	-	-	-	-	-	-	-	-	-	-	-	-
Background			-	-	2	6	29	1	1	2	-	-	47	-
Site-Office	8	11	-	-	-	-	-	-	-	-	-	-	-	-
Site - Residential & Hotel	121	126	-	-	-	-	-	-	-	-	-	-	-	-
Site Retail New Trips	331	268	-	-	-	-	7	-	-	-	-	-	5	-
Site Retail Pass-by AM	171	138	-	-	-	-	-	-	-	-	-	-	-	-
Site Subtotal	460	405	-	-	-	-	7	-	-	-	-	-	5	-
Total Future			**-**	**-**	**2**	**6**	**36**	**1**	**1**	**2**	**-**	**-**	**52**	**-**

Table D-1

AM Peak Hour Internal Site Reductions

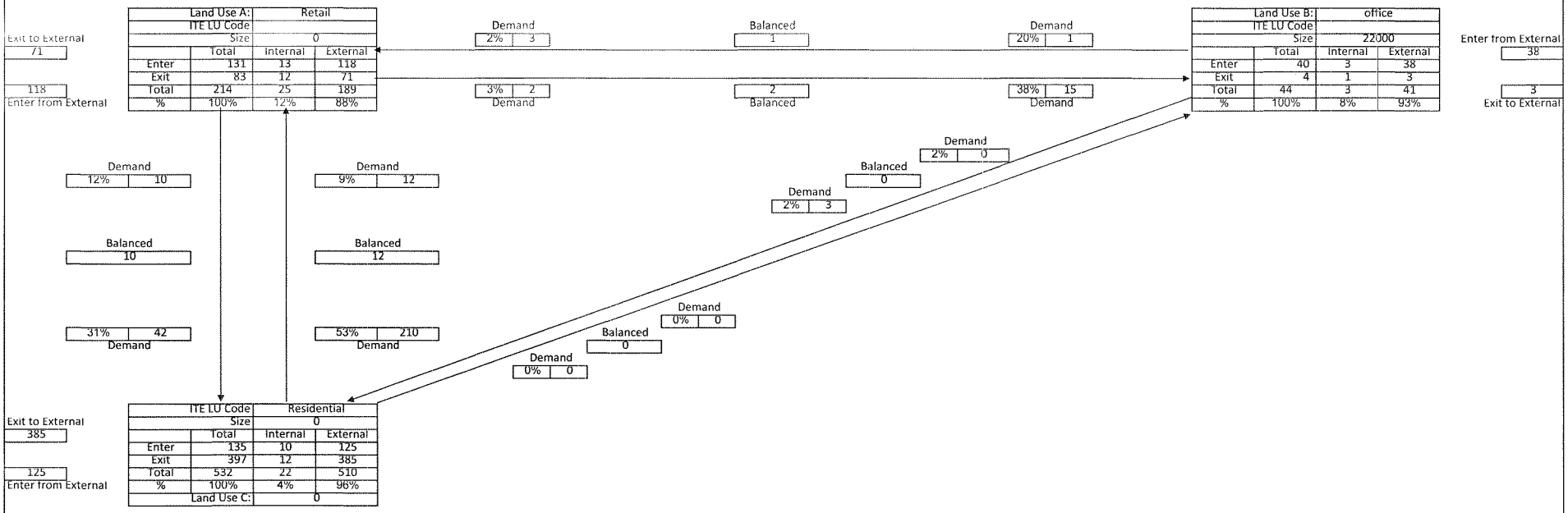
MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Analyst: SK

Date: 6/19/2012

Name of Development: Catriz

Time Period: **AM Peak Hour**



Net External Trips for Multi-Use Development

	and Use	and Use	and Use	and Use	Total	
Enter	118	38	125		281	
Exit	71	3	385		459	
Total	189	41	510		739	Interal Capture
Use Trip Gen. Est.	214	44	532		790	6%

Wells + Associates, Inc.
Annapolis, Maryland

Table D-2

PM Peak Hour Internal Site Reductions -Phase II

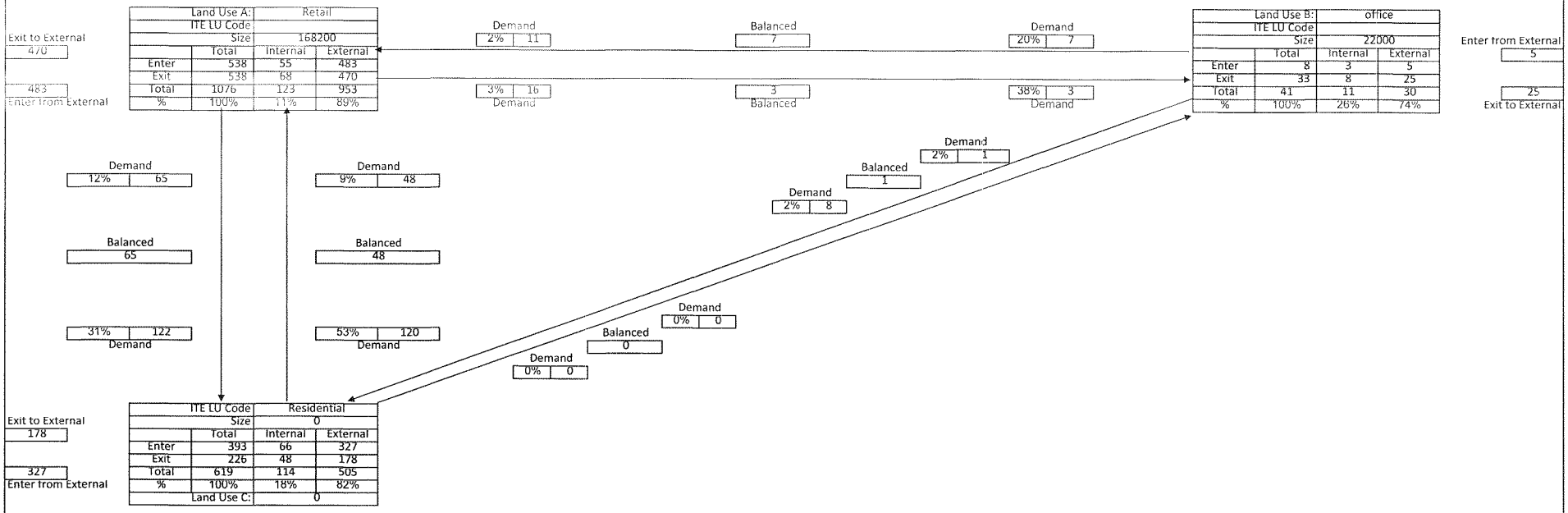
MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Analyst: SK

Date: 5/19/2011

Name of Development: Catriz

Time Period: PM Peak Hour



Net External Trips for Multi-Use Development						
	and Use	and Use	and Use	and Use	Total	
Enter	483	5	327		815	
Exit	470	25	178		673	
Total	953	30	505		1,489	Interal Capture
Use Trip Gen. Est.	1,076	41	619		1,736	14%

Table D-3

MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Analyst: SK

Date: 6/19/2011

Name of Development: Catriz

Time Period: **SAT**

Land Use A:	Retail		
ITE LU Code	810		
Size	162,200		
	Total	Internal	External
Enter	625	32	593
Exit	577	42	535
Total	1202	74	1,128
%	100%	6%	94%

Exit to External: 535

593 Enter from External

Land Use B:	office		
ITE LU Code	710		
Size	22,000.00		
	Total	Internal	External
Enter	5	2	3
Exit	4	1	3
Total	9	3	6
%	100%	30%	70%

Enter from External: 3

Exit to External: 3

Demand 4% 25

Balanced 1

Demand 20% 1

3% 17 Demand

2 Balanced

38% 2 Demand

Demand 0% 0

Balanced 0

Demand 0% 0

Demand 7% 40

Demand 5% 31

Balanced 40

Balanced 31

37% 124 Demand

34% 89 Demand

Demand 0% 0

Balanced 0

Demand 0% 0

ITE LU Code			
Size		0	
	Total	Internal	External
Enter	334	40	294
Exit	263	31	232
Total	597	71	526
%	100%	12%	88%
Land Use C:		0	

Exit to External: 232

294 Enter from External

Net External Trips for Multi-Use Development						
Enter	593	3	294		890	
Exit	535	3	232		770	
Total	1,128	6	526		1,661	Interal Capture
Use Trip Gen. Est.	1,202	9	597		1,808	8.2%

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Annapolis, Maryland

Table D-4
Mid-Day Peak Hour Internal Site Reductions

Analyst: SK
Date: 6/19/2012

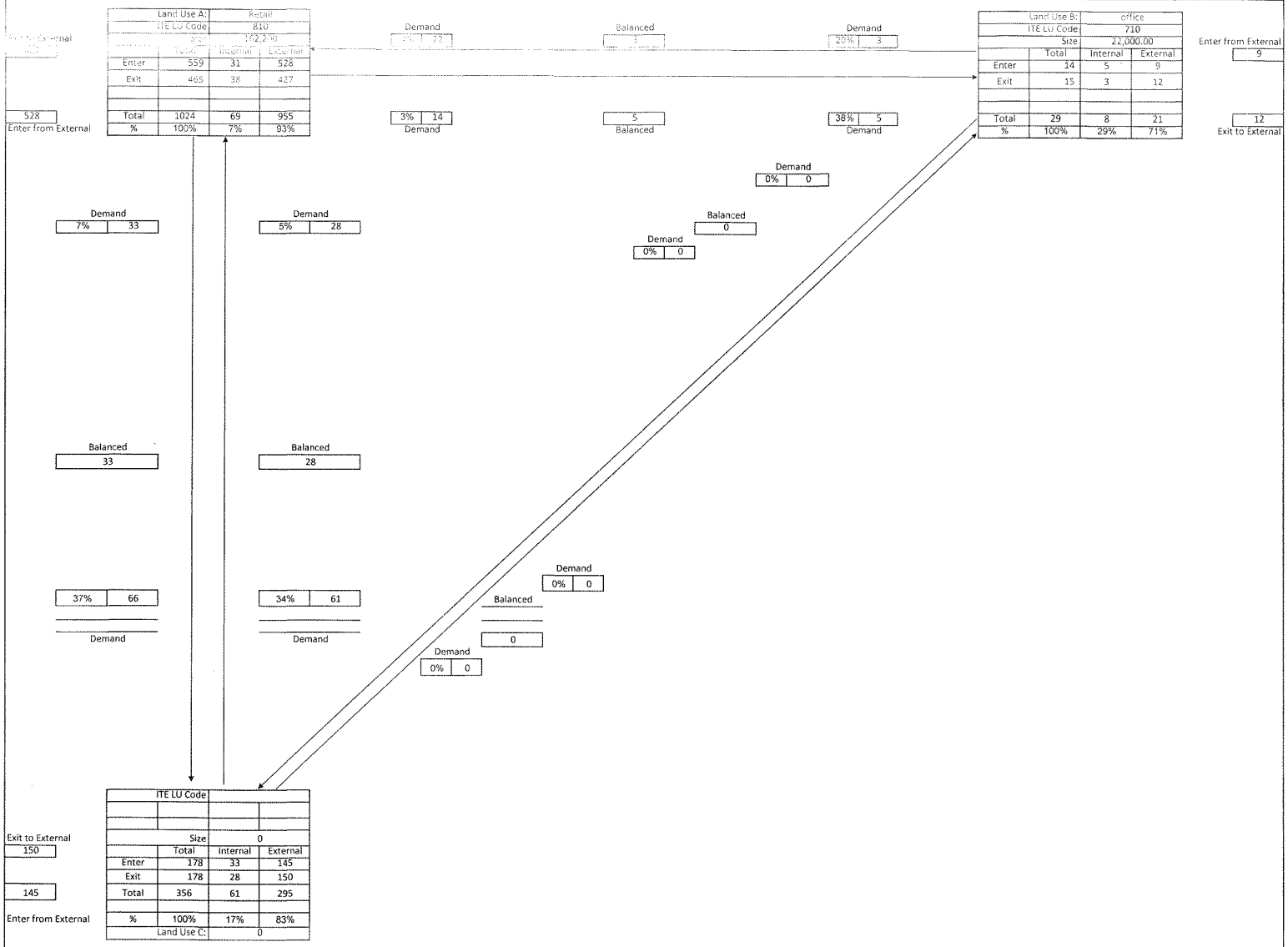
MULTI-USE DEVELOPMENT
TRIP GENERATION
AND INTERNAL CAPTURE SUMMARY

Name of Development: Catriz
Time Period: **Mid Day Peak**

Land Use A:	Retail		
ITE LU Code	810		
Size	162.200		
	Total	Internal	External
Enter	559	31	528
Exit	465	38	427
Total	1024	69	955
%	100%	7%	93%

Land Use B:	office		
ITE LU Code	710		
Size	22,000.00		
	Total	Internal	External
Enter	14	5	9
Exit	15	3	12
Total	29	8	21
%	100%	29%	71%

ITE LU Code			
Size	0		
	Total	Internal	External
Enter	178	33	145
Exit	178	28	150
Total	356	61	295
%	100%	17%	83%
Land Use C:	0		



Net External Trips for Multi-Use Development						
Enter	528	9	145		682	
Exit	427	12	150		589	
Total	955	21	295		1,270	Interal Capture
Use Trip Gen. Est.	1,024	29	356		1,409	10%

Annapolis, Maryland

Appendix E

Diurnal rates and Transit Ridership Information

Hourly Distribution of Daily Volumes
Retail Patrons (ITE Shopping Center > 100,000 Square Feet)

Beginning Time	End Time	Percent of Daily Traffic IN	OUT	TOTAL
12:00 AM	1:00 AM			
1:00 AM	2:00 AM	0	0	0
2:00 AM	3:00 AM	0	0	0
3:00 AM	4:00 AM	0	0	0
4:00 AM	5:00 AM	0	0	0
5:00 AM	6:00 AM	0	0	0
6:00 AM	7:00 AM	0	0	0
7:00 AM	8:00 AM	0	0	0
8:00 AM	9:00 AM	0	0	0
9:00 AM	10:00 AM	0	0	0
10:00 AM	11:00 AM	7.5	3.7	11.2
11:00 AM	12:00 PM	8.6	5.9	14.5
12:00 PM	1:00 PM	9.5	7.9	17.4
1:00 PM	2:00 PM	8.7	8.2	16.9
2:00 PM	3:00 PM	7.9	8.8	16.7
3:00 PM	4:00 PM	7.7	8.9	16.6
4:00 PM	5:00 PM	8.2	9.1	17.3
5:00 PM	6:00 PM	8.3	9.5	17.8
6:00 PM	7:00 PM	7.8	7.7	15.5
7:00 PM	8:00 PM	8.4	7	15.4
8:00 PM	9:00 PM	4.7	7.7	12.4
9:00 PM	10:00 PM	1.8	9.1	10.9
10:00 PM	11:00 PM	0	0	0
11:00 PM	12:00 AM	0	0	0
TOTAL		89.1	93.5	182.6

Assumes:

Source: ITE Trip Generation Manual, 8th Edition

Hourly Distribution of Daily Volumes
Residential

Beginnin Time	End Time	Percent of Daily Traffic IN	OUT	TOTAL
12:00 AM	1:00 AM	0.6%	0.2%	0.8%
1:00 AM	2:00 AM	0.3%	0.1%	0.3%
2:00 AM	3:00 AM	0.2%	0.1%	0.4%
3:00 AM	4:00 AM	0.1%	0.1%	0.2%
4:00 AM	5:00 AM	0.0%	0.1%	0.1%
5:00 AM	6:00 AM	0.0%	0.4%	0.5%
6:00 AM	7:00 AM	0.3%	1.8%	2.1%
7:00 AM	8:00 AM	0.8%	6.6%	7.4%
8:00 AM	9:00 AM	1.1%	7.3%	8.4%
9:00 AM	10:00 AM	1.5%	3.7%	5.3%
10:00 AM	11:00 AM	1.2%	2.5%	3.7%
11:00 AM	12:00 PM	2.2%	2.4%	4.6%
12:00 PM	1:00 PM	2.5%	2.5%	5.0%
1:00 PM	2:00 PM	2.2%	2.6%	4.8%
2:00 PM	3:00 PM	2.7%	2.0%	4.7%
3:00 PM	4:00 PM	3.3%	2.3%	5.6%
4:00 PM	5:00 PM	4.9%	2.6%	7.5%
5:00 PM	6:00 PM	7.1%	2.4%	9.5%
6:00 PM	7:00 PM	5.7%	3.4%	9.1%
7:00 PM	8:00 PM	3.8%	2.5%	6.3%
8:00 PM	9:00 PM	3.6%	1.7%	5.3%
9:00 PM	10:00 PM	3.2%	1.2%	4.4%
10:00 PM	11:00 PM	1.7%	0.8%	2.5%
11:00 PM	12:00 AM	1.0%	0.6%	1.6%
	TOTAL	50%	50%	1

Assumes: 109 Single Family
583 Townhouses
264 Apartments
311 Condos

Source: Mays Chapel

Date: 1987

Hourly Distribution of Daily Volumes
Office Park

Beginnin	End	Percent of Daily Traffic		
Time	Time	IN	OUT	TOTAL
12:00 AM	1:00 AM	0	0	0
1:00 AM	2:00 AM	0	0	0
2:00 AM	3:00 AM	0	0	0
3:00 AM	4:00 AM	0	0	0
4:00 AM	5:00 AM	0	0	0
5:00 AM	6:00 AM	0	0	0
6:00 AM	7:00 AM	7.8	1.1	8.9
7:00 AM	8:00 AM	8.2	1	9.2
8:00 AM	9:00 AM	3.6	1.4	5
9:00 AM	10:00 AM	1	2.2	3.2
10:00 AM	11:00 AM	2.3	3	5.3
11:00 AM	12:00 PM	4.4	5	9.4
12:00 PM	1:00 PM	4.9	3.9	8.8
1:00 PM	2:00 PM	2.2	3	5.2
2:00 PM	3:00 PM	2.5	4.8	7.3
3:00 PM	4:00 PM	2.6	7.6	10.2
4:00 PM	5:00 PM	2.3	6.7	9
5:00 PM	6:00 PM	0.7	3.4	4.1
6:00 PM	7:00 PM	0	0	0
7:00 PM	8:00 PM	0	0	0
8:00 PM	9:00 PM	0	0	0
9:00 PM	10:00 PM	0	0	0
10:00 PM	11:00 PM	0	0	0
11:00 PM	12:00 AM	0	0	0
	TOTAL	42.5	43.1	85.6

Assumes: 130,000 SF Office/Warehouse

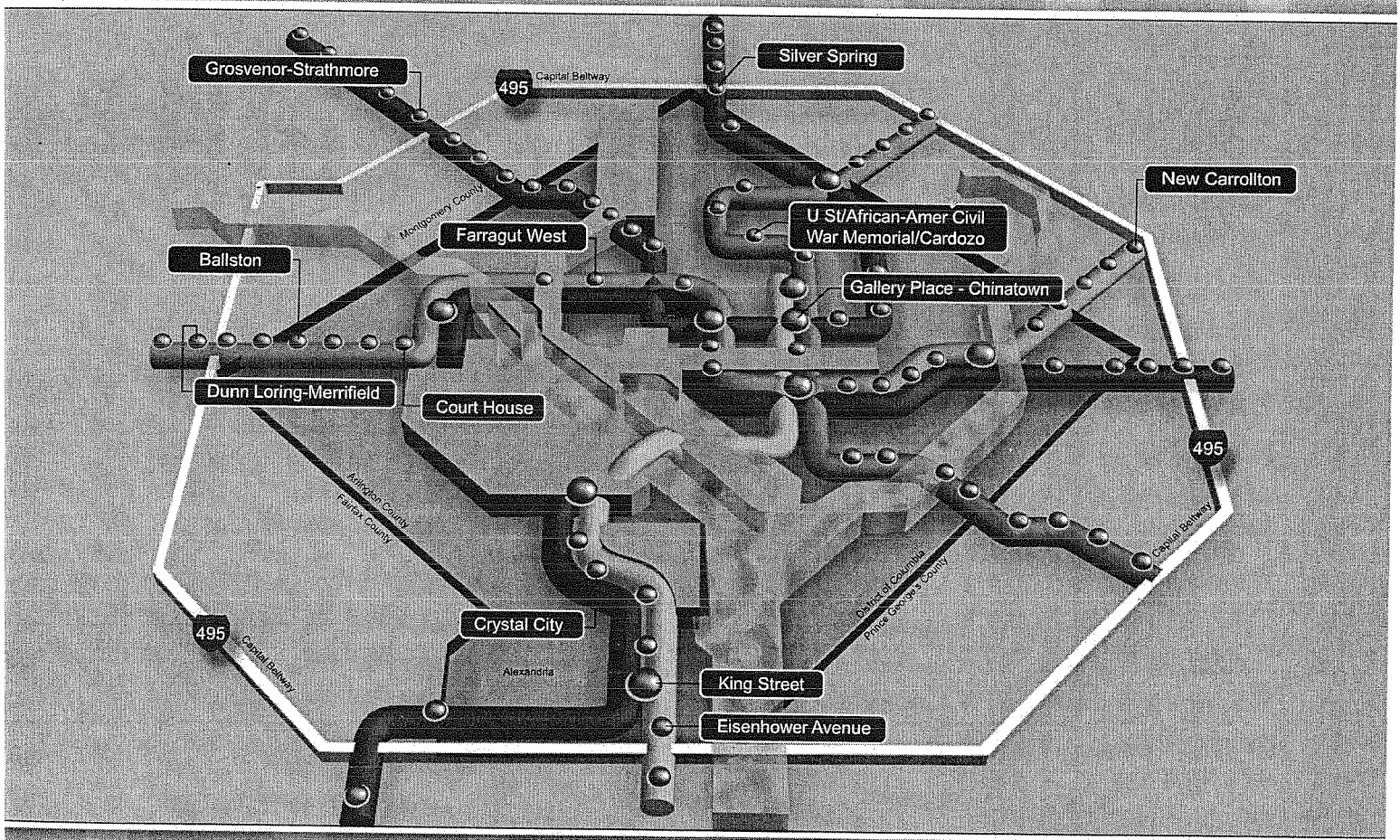
Source: Timonium Office Park

Date: 1986

March 2006

2005 DEVELOPMENT-RELATED Ridership Survey

FINAL REPORT



Washington Metropolitan Area Transit Authority

metro

Table S-3
Office Commute and Residential Mode Share
by Concentric Location Typology

Mode Share	CBD	Inside the Beltway	Outside the Beltway
Office Site Commute			
Metrorail	63%	21%	8%
Metrobus & Other Transit	12%	9%	3%
Auto	21%	66%	89%
Walk & Other	5%	6%	0%
Residential Sites			
Metrorail	50%	43%	31%
Metrobus & Other Transit	6%	6%	1%
Auto	18%	39%	62%
Walk & Other	26%	14%	6%

Table S-4
Comparison of Transit Share Results from 2005 & 1989 Surveys

Land Use Type	Transit[1] Share Range		Transit Share Average		
	2005 Survey	1989 Survey	2005 Survey	1989 Survey	% Change
Office: Commute	8% - 76%	8% - 50%	34% (17 locations)	17.6% (10 locations)	93%
Residential	17%[2] - 67%	30% - 74%	45% (18 locations)	46.2% (10 locations)	-3%[3]
Retail	19% - 57%	34% - 56%	37% (5 locations)	44.2% (8 locations)	-16%
Hotel	12% - 51%	11% - 38%	31% (5 locations)	25.2% (10 locations)	23%
Entertainment	13% - 44%	N/A	32% (4 locations)	N/A	N/A

Notes: [1] Transit mode share includes Metrorail, Metrobus and Other Transit.
[2] The 17% figure is from a site converting its apartments to condominiums, and is an outlier. The next lowest end of the range is 32%.
[3] This figure may be skewed due to the low figure reported from the site converting its apartments to condominiums.

S.3.2 Land Use Specifics

For each land use type, survey results were tabulated to display frequencies and regression analyses were performed to test the strength of relationships between transit ridership and certain independent variables. A summary of the frequency results follows:

Office (17 sites; 15 percent response rate)

- 25 percent of all workplace survey respondents use Metrorail to commute to work.
- 44 percent of District residents responding to the workplace survey used Metrorail to commute to work. This figure exceeds the auto mode share for District residents, which was 41 percent. District residents accounted for only 14 percent of all survey responses, but accounted for more than 25 percent of all Metrorail commute trips.

transit modes, and only 41 percent reported driving to work. The jurisdiction with the second highest rate of Metrorail use was Prince George's County at 35 percent.

Table 4
Commute Mode Share at Office Sites by Concentric Location Typology

Typology	Mode			
	Metrorail[1]	Metrobus & Other Transit	Auto	Walk & Other
CBD	63%	12%	21%	5%
Suburban-Inside the Beltway	21%	9%	66%	6%
Suburban-Outside the Beltway	8%	3%	89%	0%

Overall, Metrorail use among the respondents decreased as the number of vehicles owned in the household increased. Seventy-six percent of respondents whose households have no vehicles (six percent of all respondents) used transit (Metrorail, bus or other type), and 63 percent used Metrorail. Conversely, only 16 and 18 percent of respondents whose households have three (15 percent of all respondents) and four or more vehicles (six percent of all respondents) used Metrorail, respectively.

Most workplace respondents reported that their employers subsidized use of their commuting mode of choice. For transit users, 62 percent reported that their employers pay for or subsidize their transit fares, some of which may include employer participation in government programs that subsidize transit use. For auto users, 72 percent reported that their employers provide free parking or subsidize their parking costs.

Table 5 highlights mode share at offices for midday trips. Some sites such as Courthouse Tower, Crystal Square 2, the Farragut West Station sites, the Friendship Heights Station sites, and Metro Plaza 1, reported fairly high percentages of midday walk trips. Each of these sites is located in an area with ample business, retail and eating establishments. The sites with high auto use rates for midday trips also tended to have high auto use for commute trips.

The transit (Metrorail and Metrobus & Other Transit modes) mode share for office visitors averaged 23 percent, which was slightly greater than the average percentage of visitors who walked to the office site (see Table 6). Similar to the office commute and midday trips, wide deviations in mode shares were reported for individual sites. Those sites located in high-density areas, such as the Farragut West and Crystal City sites tended to have a high percentage of visitors arriving by walk mode. These sites contain a mixed of land uses.

More detailed information about the frequency analysis conducted for office sites can be found in Appendix C.1.1.

among these trips, 67 percent were made using Metrorail. Trips to other political jurisdictions did not come close to this rate of Metrorail use.

Table 10
Residential Mode Share for All Trips by Concentric Location Typology

Typology	Mode			
	Metrorail	Metrobus & Other Transit	Auto	Walk & Other
CBD	50%	6%	18%	26%
Suburban-Inside the Beltway	43%	6%	39%	14%
Suburban-Outside the Beltway	31%	1%	62%	6%

Similar to the office commute results, auto ownership appears to influence mode choice among the surveyed households, with those households having relatively high auto ownership rates tending to use the auto mode more often. However, auto ownership rates were much lower than that reported by office workers, probably reflecting the higher density status of the households. One-vehicle households reported a 40 percent Metrorail use rate. Zero-vehicle and two-vehicle households reported 66 and 30 percent Metrorail use rates, respectively.

More detailed information about the frequency analysis conducted for residential sites is provided in Appendix C.1.2.

4.2.2 Regression Analysis

Independent variables similar to those used in the office site analysis were tested to determine if any explain the variation in modal split for trips made from the residential sites. After initial analysis using all sites, data from the two Gallery Place-Chinatown sites were removed from the equations as a sensitivity test as these sites produced very different mode share characteristics than the other residential sites (see Table 9).

Distance between site and station produced a stronger correlation with mode shares than that found for office sites (see Section 4.1.2). For Metrorail use, the R-square value was 0.41, and the correlation indicates that Metrorail use decreases by 0.87 percent for every 100 feet increase in distance a residential site is located from the station exit/entrance (see Figure 15). If only commute and school trips are counted, the R-square value for Metrorail trips drops to 0.23, but as noted above, the overall percent of trips made by Metrorail increases. Table 11 summarizes the predictive outcomes for all and commute/school residential Metrorail trips by distances of zero, 1/4 and 1/2 mile from a Metrorail station.

Table 15
Mode Shares at Retail, Hotel and Entertainment Sites

Site Name	Site Type	Mode			
		Metrorail[1]	Metrobus & Other Transit[2]	Auto[3]	Walk & Other[4]
Ballston Station Area					
Ballston Common	R	23%	7%	43%	27%
Holiday Inn Arlington	H	17%	0%	67%	17%
Regal Cinemas	E	35%	9%	39%	17%
Crystal City Station Area					
Crystal Plaza Shops	R	36%	5%	24%	36%
The Underground	R	31%	6%	27%	35%
Crystal Gateway Marriott	H	27%	7%	24%	42%
Crystal Hyatt Regency	H	48%	3%	21%	28%
Eisenhower Avenue Station Area					
AMC Hoffman Theaters	E	12%	1%	83%	4%
Friendship Heights Station Area					
Embassy Suites Chevy Chase Pavilion	H	33%	5%	25%	36%
Silver Spring Station Area					
Silver Spring Neighborhood Center	R	9%	10%	67%	14%
Holiday Inn Silver Spring	H	8%	4%	54%	33%
AFI Silver Theater	E	39%	2%	49%	10%
The Majestic 20	E	19%	13%	56%	13%
U Street/African American Civil War Memorial/Cardozo Station Area					
U St Main Street	R	44%	13%	19%	25%
Average Among Sites					
Retail Sites	R	**29%**	**8%**	**36%**	**27%**
Hotel Sites	H	**27%**	**4%**	**38%**	**31%**
Entertainment Sites	E	**26%**	**6%**	**57%**	**11%**

Notes: [1] Includes multimodal trips that may have involved auto or bus use in combination with Metrorail.
[2] Includes bus only trips, and commuter rail, such as MARC, VRE or Amtrak.
[3] Includes trips as driver and passenger of a private automobile.
[4] Includes cycling and any other form of transportation one may use.
R: Retail
H: Hotel
E: Entertainment (Movie Theater)

Among the entertainment (movie theater) sites, the Regal Cinemas and AFI Silver Theater drew the highest percentages of Metrorail riders (35 and 39 percent, respectively) (see Table 15). The AMC Hoffman, with its ample free parking and good highway access, had a much lower Metrorail use rate of only 12 percent.

More detailed information about the frequency analysis conducted for retail, hotel and entertainment (movie theater) sites can be found in Appendices C.1.3 through C.1.5.

Appendix F

Background Intersection Levels of Service Analysis

Cafritz Property at Riverdale Park
Critical Lane Volume
Level of Service Calculations

Intersection: 1: US 1/Paint Branch Parkway
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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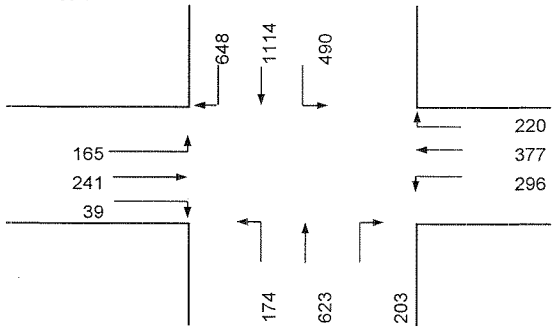
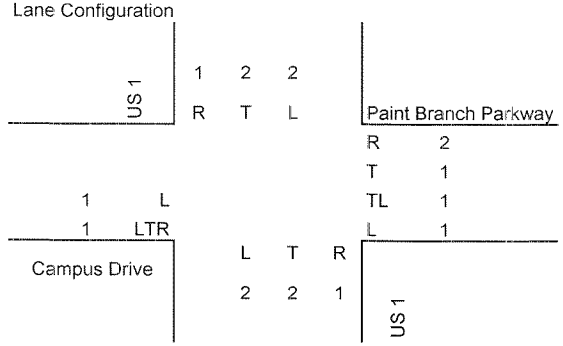
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

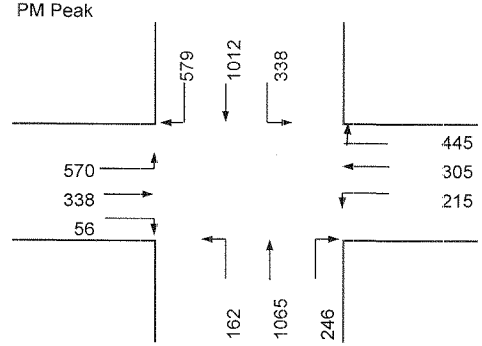
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: E/W Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	203	165	0	220
RTOR/Overlap (PM):	215	570	0	338
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	445	0.55	245	0	1.00	0	245	*
WB	TL	673	0.37	249	0	1.00	0	249	*
NB	T	623	0.55	343	490	0.60	294	637	
SB	T	1114	0.55	613	174	0.60	104	717	*

Note:

SUM 1211
C

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	964	0.55	530	0	1.00	0	530	*
WB	TL	520	0.37	192	0	1.00	0	192	*
NB	T	1065	0.55	586	338	0.60	203	789	*
SB	T	1012	0.55	557	162	0.60	97	654	

Note:

SUM 1511
E

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volume
Level of Service Calculations

Intersection: 1: US 1/Paint Branch Parkway
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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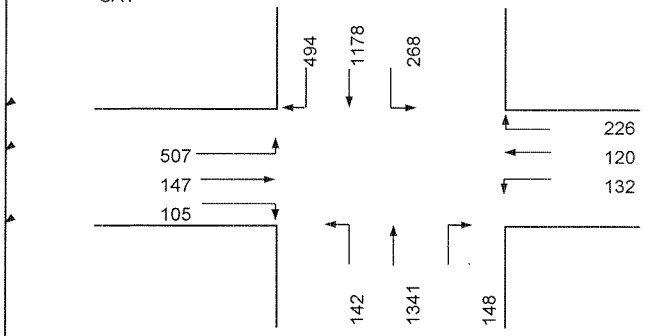
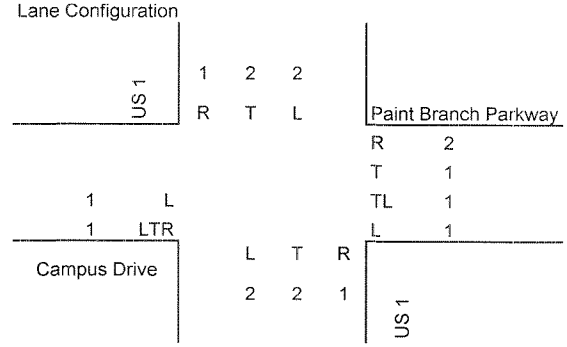
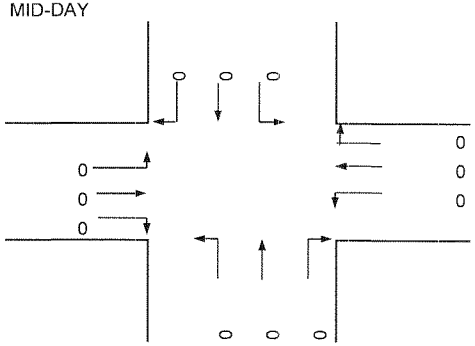


Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: E/W Stop: Ways:

RTOR/Overlap (AM):	NB	132	SB	494	EB	0	WB 226
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	759	0.55	417	0	1.00	0	417	*
WB	TL	252	0.37	93	0	1.00	0	93	*
NB	T	1341	0.55	738	268	0.60	161	899	*
SB	T	1178	0.55	648	142	0.60	85	733	

Note:

SUM 1409
D

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	0.55	0	0	1.00	0	0	*
WB	TL	0	0.37	0	0	1.00	0	0	*
NB	T	0	0.55	0	0	0.60	0	0	*
SB	T	0	0.55	0	0	0.60	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 2: US 1/Rossborough Lane
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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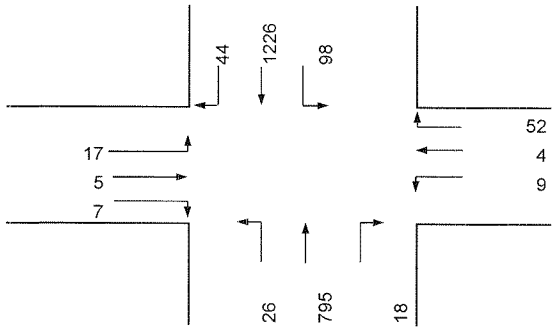
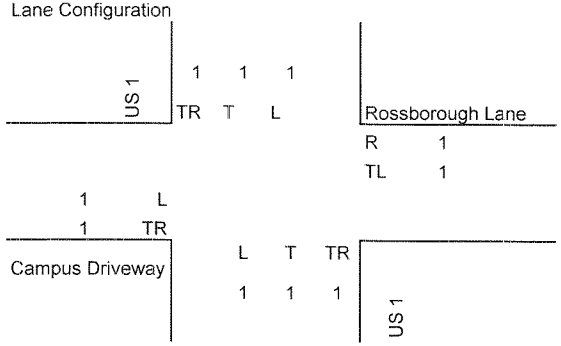
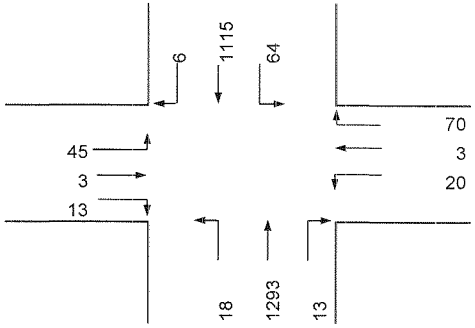
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 52
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 64
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	12	1.00	12	9	1.00	9	21	
WB	TL	14	1.00	14	17	1.00	17	31	*
NB	TR	813	0.55	447	98	1.00	98	545	
SB	TR	1270	0.55	699	26	1.00	26	725	*

Note:

SUM 756
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	16	1	16	20	1.00	20	36	
WB	TL	25	1	25	45	1.00	45	70	*
NB	TR	1306	0.55	718	64	1.00	64	782	*
SB	TR	1121	0.55	617	18	1.00	18	635	

Note:

SUM 852
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 2: US 1/Rossborough Lane
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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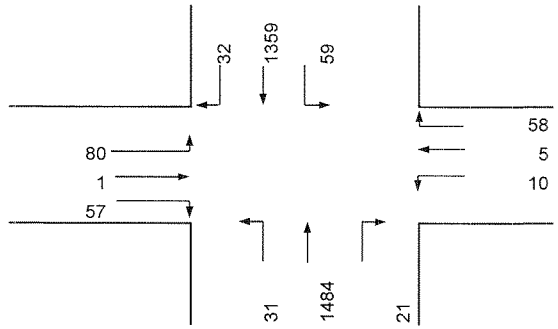
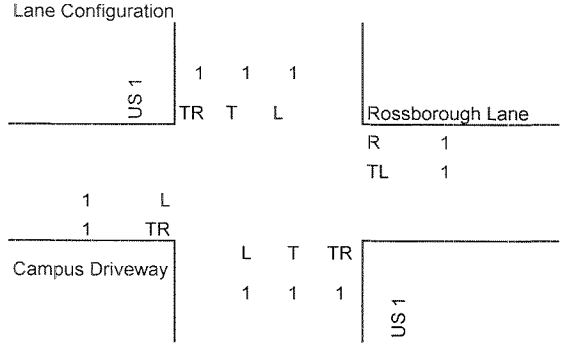
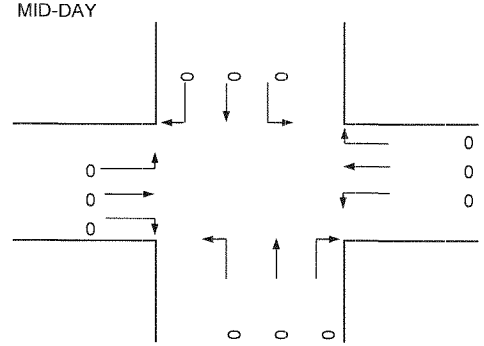
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	58
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1.1
Shared Left PCE (PM):	1	1	1	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	58	1.00	58	10	1.00	10	68	
WB	TL	16	1.00	16	80	1.00	80	96	*
NB	TR	1505	0.55	828	59	1.00	59	887	*
SB	TR	1391	0.55	765	31	1.00	31	796	

Note:

SUM 983
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	0	1	0	0	1.00	0	0	*
WB	TL	0	1	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 3: US 1/College Avenue
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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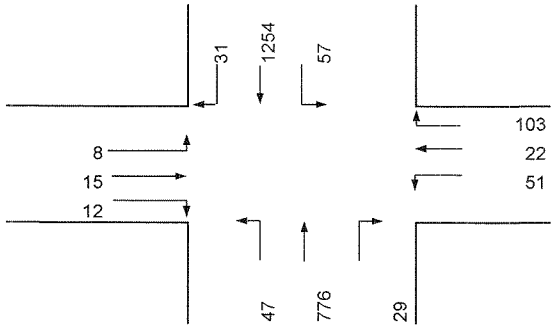
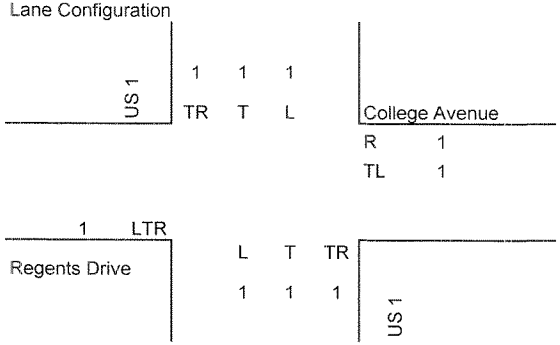
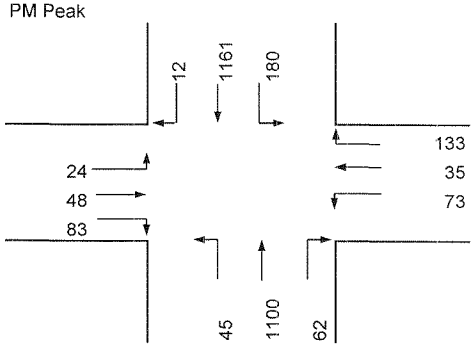
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 57
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 133
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	36	1.00	36	51	1.00	51	87	*
WB	TL	78	1.00	78	8	1.00	8	86	
NB	TR	805	0.55	443	57	1.00	57	500	
SB	TR	1285	0.55	707	47	1.00	47	754	*
Note:							SUM	841	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	157	1.00	157	73	1.00	73	230	*
WB	TL	115	1.00	115	24	1.00	24	139	
NB	TR	1162	0.55	639	180	1.00	180	819	*
SB	TR	1173	0.55	645	45	1.00	45	690	
Note:							SUM	1049	
								B	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 3: US 1/College Avenue
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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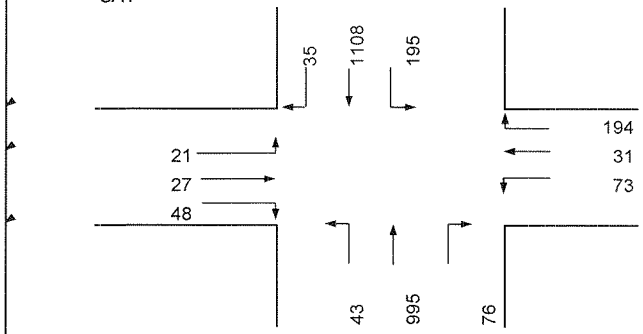
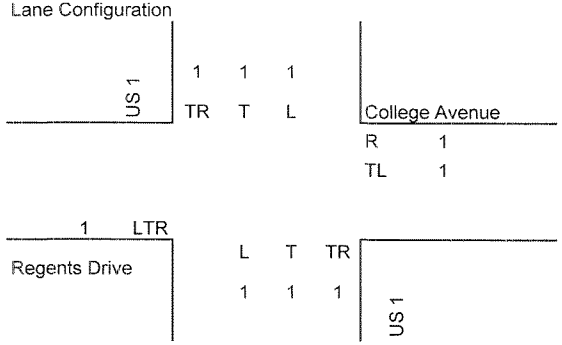
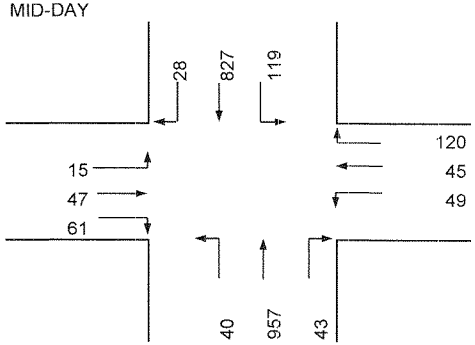
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 194
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 119
Shared Left PCE (AM):	NB	1	SB	1	EB	2	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	117	1.00	117	73	1.00	73	190	*
WB	TL	111	1.00	111	21	1.00	21	132	
NB	TR	1071	0.55	589	195	1.00	195	784	*
SB	TR	1143	0.55	629	43	1.00	43	672	
Note:							SUM	974	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	125	1.00	125	49	1.00	49	174	*
WB	TL	99	1.00	99	15	1.00	15	114	
NB	TR	1000	0.55	550	119	1.00	119	669	*
SB	TR	855	0.55	470	40	1.00	40	510	
Note:							SUM	843	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 4: US 1/Knox Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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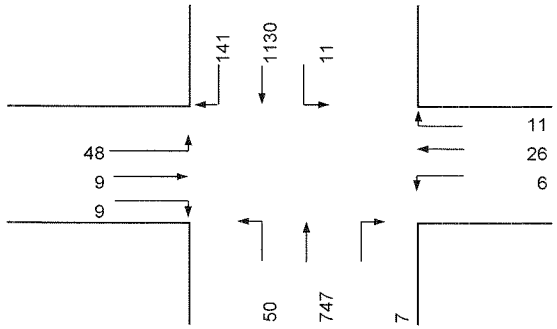
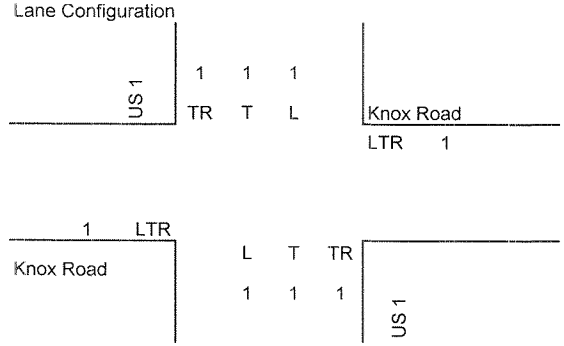
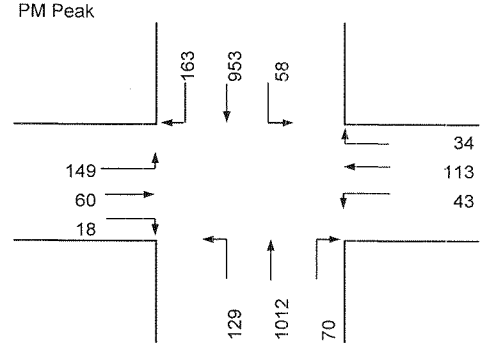
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	71	1.00	71	6	1.00	6	77	
WB	LTR	44	1.00	44	48	1.00	48	92	*
NB	TR	754	0.55	415	11	1.00	11	426	
SB	TR	1271	0.55	699	50	1.00	50	749	*
							SUM	841	
								A	

Note:

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	242	1.00	242	43	1.00	43	285	
WB	LTR	194	1.00	194	149	1.00	149	343	*
NB	TR	1082	0.55	595	58	1.00	58	653	
SB	TR	1116	0.55	614	129	1.00	129	743	*
							SUM	1086	
								B	

Note:

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 4: US 1/Knox Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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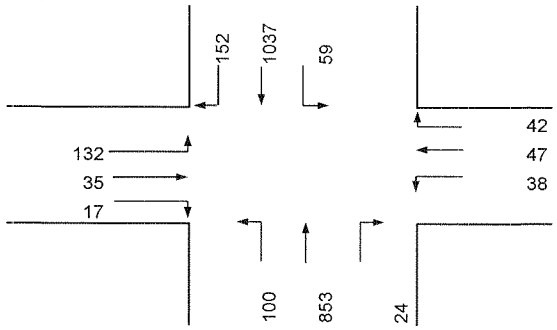
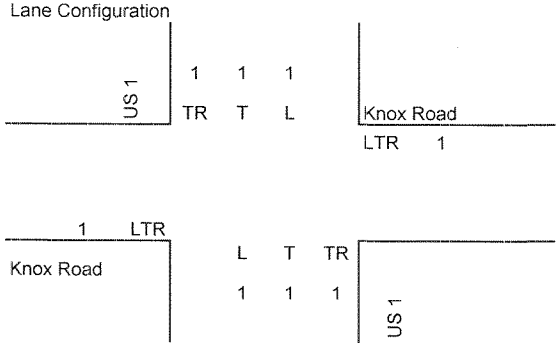
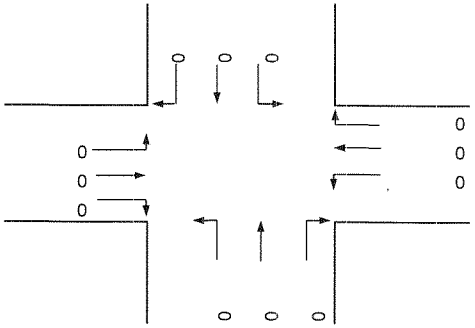
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	197	1.00	197	38	1.00	38	235	
WB	LTR	131	1.00	131	132	1.00	132	263	*
NB	TR	877	0.55	482	59	1.00	59	541	
SB	TR	1189	0.55	654	100	1.00	100	754	*
Note:							SUM	1017	
								B	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	1.00	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	
Note:								SUM	0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 5: US 1/Calvert Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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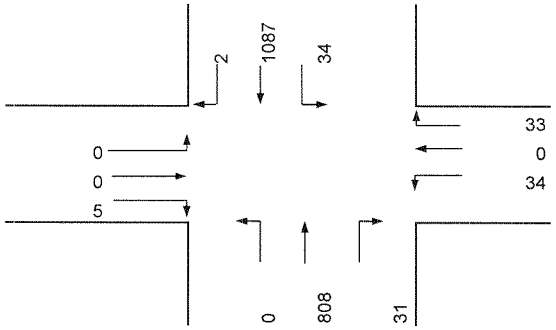
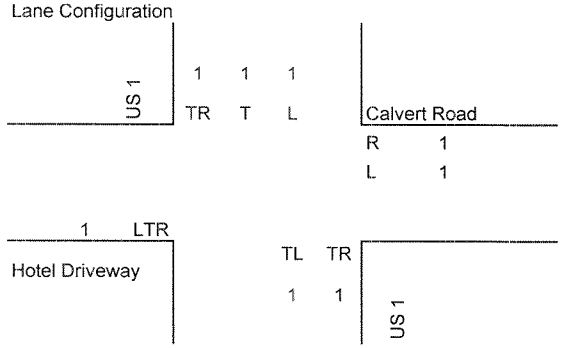
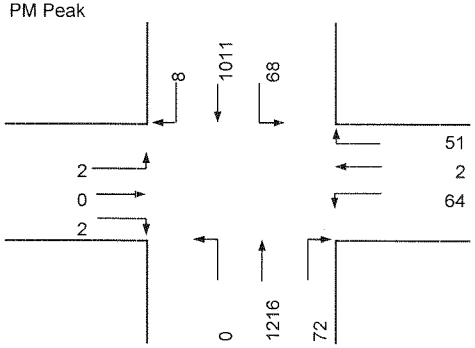
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 33
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 51
Shared Left PCE (AM):	NB	5	SB	1	EB	1.1	WB 1
Shared Left PCE (PM):	NB	5	SB	1	EB	1.1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	5	1.00	5	34	1.00	34	39	*
WB	L	34	1.00	34	0	1.00	0	34	
NB	LTR	839	0.55	461	34	1.00	34	495	
SB	TR	1089	0.55	599	0	1.00	0	599	*
Note:							SUM	638	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	4	1.00	4	64	1.00	64	68	*
WB	L	64	1.00	64	2	1.00	2	66	
NB	LTR	1288	0.55	708	68	1.00	68	776	*
SB	TR	1019	0.55	560	0	1.00	0	560	
Note:							SUM	844	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 5: US 1/Calvert Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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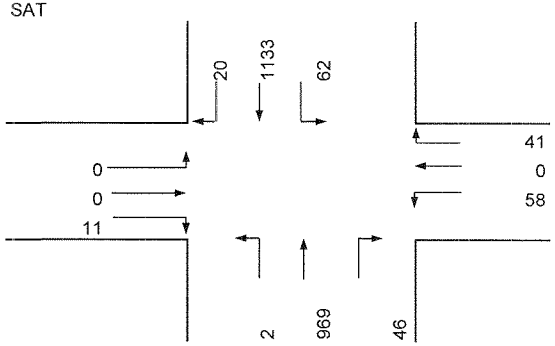
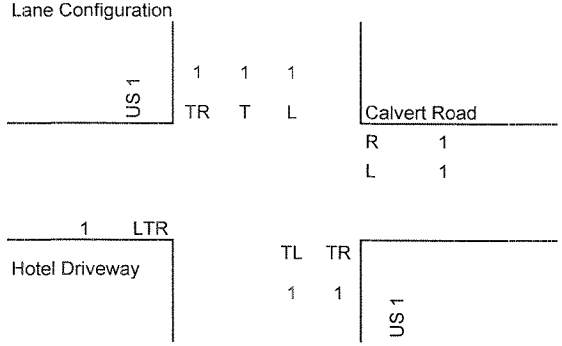
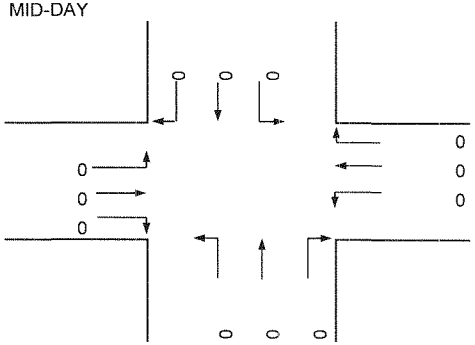
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	41
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	5	1	1.1	1
Shared Left PCE (PM):	1.1	1	1.1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	11	1.00	11	58	1.00	58	69	*
WB	L	58	1.00	58	0	1.00	0	58	
NB	LTR	1025	0.55	564	62	1.00	62	626	
SB	TR	1153	0.55	634	2	1.00	2	636	*

Note:

SUM 705
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	1.00	0	0	1.00	0	0	*
WB	L	0	1.00	0	0	1.00	0	0	
NB	LTR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 6: US 1/Guilford Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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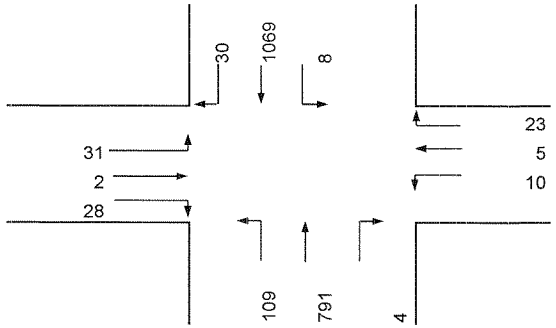
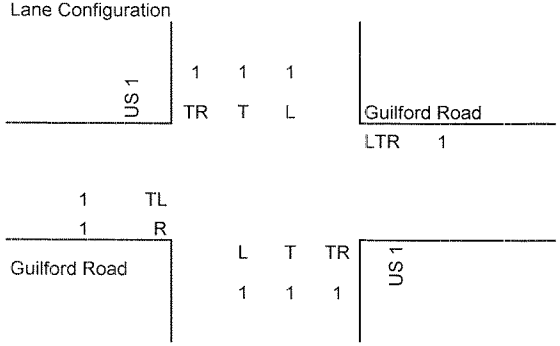
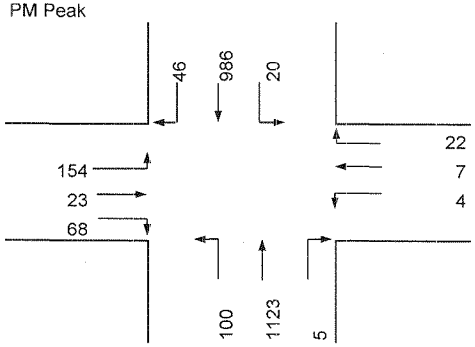
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

RTOR/Overlap (AM):	NB	0	SB	0	EB	28	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	68	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	36	1.00	36	10	1.00	10	46	
WB	LTR	39	1.00	39	31	1.00	31	70	*
NB	TR	795	0.55	437	8	1.00	8	445	
SB	TR	1099	0.55	604	109	1.00	109	713	*
Note:							SUM	783	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	192	1.00	192	4	1.00	4	196	*
WB	LTR	33	1.00	33	154	1.00	154	187	
NB	TR	1128	0.55	620	20	1.00	20	640	
SB	TR	1032	0.55	568	100	1.00	100	668	*
Note:							SUM	864	
								A	

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Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 6: US 1/Guilford Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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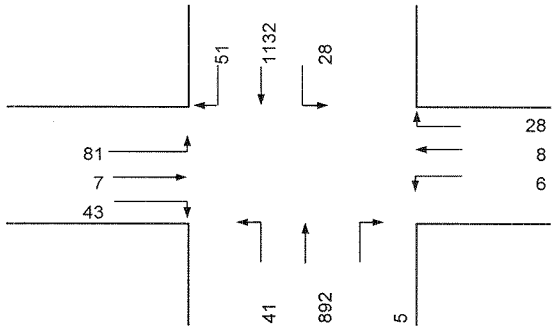
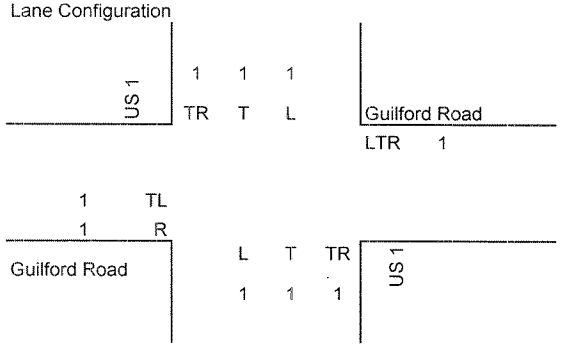
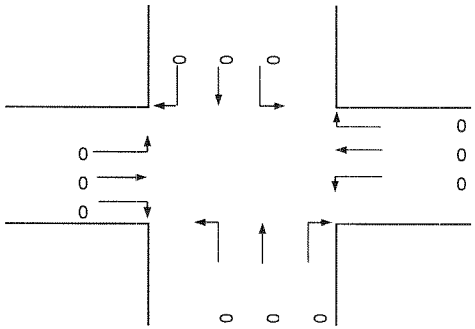
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	41	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	96	1.00	96	6	1.00	6	102	
WB	LTR	43	1.00	43	81	1.00	81	124	*
NB	TR	897	0.55	493	28	1.00	28	521	
SB	TR	1183	0.55	651	41	1.00	41	692	*
Note:							SUM	816	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	0	1.00	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 7: US 1/Amherst Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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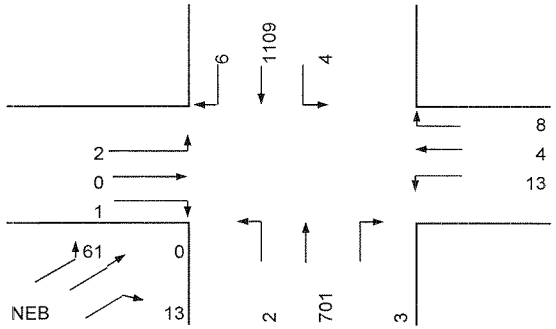
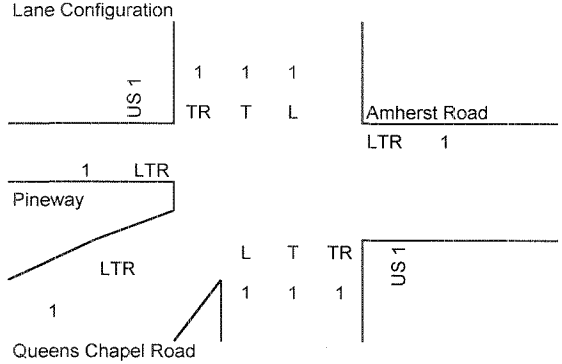
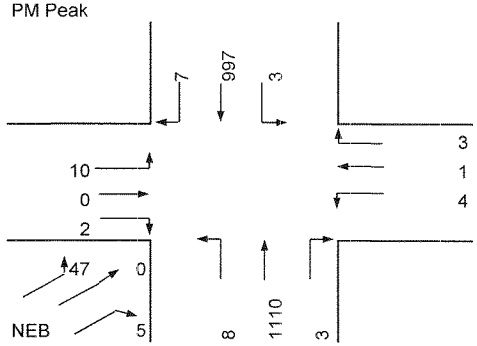
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: ____ Split: ____ Stop: ____ Ways: ____

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	3	1.00	3	13	1.00	13	16	
WB	LTR	26	1.00	26	2	1.00	2	28	*
NB	TR	704	0.55	387	4	1.00	4	391	
SB	TR	1115	0.55	613	2	1.00	2	615	*
NEB	LTR	74	1.00	74	0	0	0	74	*
Note:							SUM	717	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	13	1.00	13	4	1.00	4	17	
WB	LTR	8	1.00	8	10	1.00	10	18	*
NB	TR	1113	0.55	612	3	1.00	3	615	*
SB	TR	1004	0.55	552	8	1.00	8	560	
NEB	LTR	52	1.00	52	0	0	0	52	*
Note:							SUM	685	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 7: US 1/Amherst Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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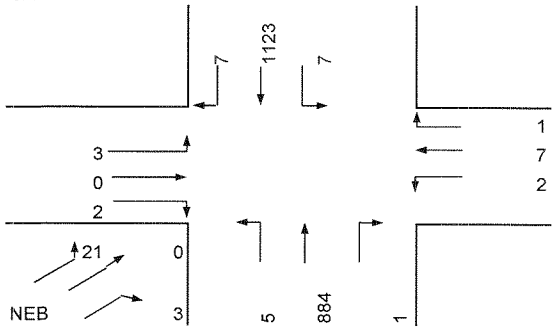
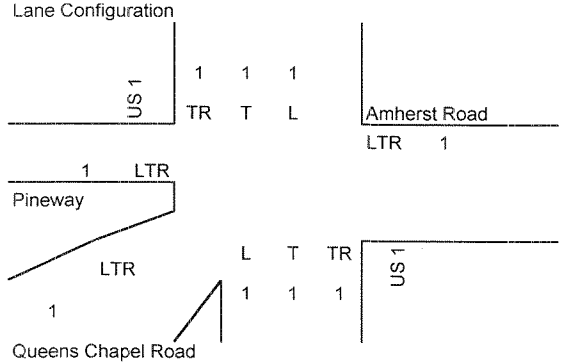
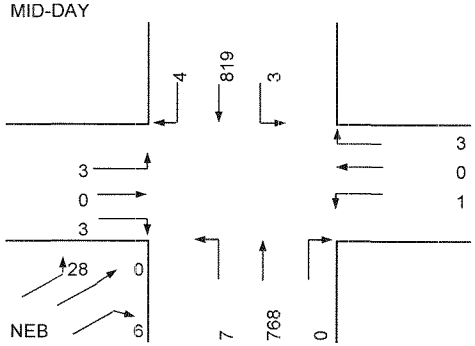
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	5	1.00	5	2	1.00	2	7	
WB	LTR	10	1.00	10	3	1.00	3	13	*
NB	TR	885	0.55	487	7	1.00	7	494	
SB	TR	1130	0.55	622	5	1.00	5	627	*
NEB	LTR	24	1.00	24	0	0	0	24	*
Note:							SUM	664	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	6	1.00	6	1	1.00	1	7	*
WB	LTR	4	1.00	4	3	1.00	3	7	
NB	TR	768	0.55	422	3	1.00	3	425	
SB	TR	823	0.55	453	7	1.00	7	460	*
NEB	LTR	34	1.00	34	0	0	0	34	*
Note:							SUM	501	
								A	

Date Printed: 7/9/2012

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/Van Buren Street
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	11/19/2011	Analysis Year	Background
Analysis Time Period	AM Peak		

Project Description *Riverdale*

East/West Street: *Van Buren Street*	North/South Street: *US 1*
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)	26	710			1095	51
Peak-Hour Factor, PHF	0.96	0.96	1.00	1.00	0.96	0.96
Hourly Flow Rate, HFR (veh/h)	27	739	0	0	1140	53
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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	0	24			
Peak-Hour Factor, PHF	0.96	0.96	0.96	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	2	0	25	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
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	L						LTR	
v (veh/h)	27						27	
C (m) (veh/h)	581						451	
v/c	0.05						0.06	
95% queue length	0.15						0.19	
Control Delay (s/veh)	11.5						13.5	
LOS	B						B	
Approach Delay (s/veh)	--	--				13.5		
Approach LOS	--	--				B		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/Van Buren Street
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	11/19/2011	Analysis Year	Background
Analysis Time Period	PM Peak		

Project Description Riverdale	
East/West Street: Van Buren Street	North/South Street: US 1
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)	26	1113			1000	10
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	27	1171	0	0	1052	10
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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)	5		17			
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	5	0	17	0	0	0
Percent Heavy Vehicles	2	0	2	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	L						LR	
v (veh/h)	27						22	
C (m) (veh/h)	652						392	
v/c	0.04						0.06	
95% queue length	0.13						0.18	
Control Delay (s/veh)	10.8						14.7	
LOS	B						B	
Approach Delay (s/veh)	--	--	14.7					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/Van Buren Street
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	11/19/2011	Analysis Year	Background
Analysis Time Period	SAT		

Project Description Riverdale	
East/West Street: Van Buren Street	North/South Street: US 1
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)	12	866			1088	17
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	12	911	0	0	1145	17
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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)	4	0	6			
Peak-Hour Factor, PHF	0.95	0.95	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	4	0	6	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
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	L						LTR	
v (veh/h)	12						10	
C (m) (veh/h)	597						313	
v/c	0.02						0.03	
95% queue length	0.06						0.10	
Control Delay (s/veh)	11.2						16.9	
LOS	B						C	
Approach Delay (s/veh)	--	--				16.9		
Approach LOS	--	--				C		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*SK*	Intersection	*US 1/Van Buren Street*
Agency/Co.	*Wells + Associates*	Jurisdiction	*Prince George's County*
Date Performed	*11/19/2011*	Analysis Year	*Background*
Analysis Time Period	*Mid Day*		

Project Description *Riverdale*

East/West Street: *Van Buren Street*	North/South Street: *US 1*
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	775			800	5
Peak-Hour Factor, PHF	0.95	0.95	1.00	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	9	815	0	0	842	5
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	1	2	0	0	2	0
Configuration	L	T			T	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	0	6			
Peak-Hour Factor, PHF	0.95	0.95	0.95	1.00	1.00	1.00
Hourly Flow Rate, HFR (veh/h)	2	0	6	0	0	0
Percent Heavy Vehicles	2	0	2	0	0	0
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	L						LTR	
v (veh/h)	9						8	
C (m) (veh/h)	786						481	
v/c	0.01						0.02	
95% queue length	0.03						0.05	
Control Delay (s/veh)	9.6						12.6	
LOS	A						B	
Approach Delay (s/veh)	--	--				12.6		
Approach LOS	--	--				B		

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Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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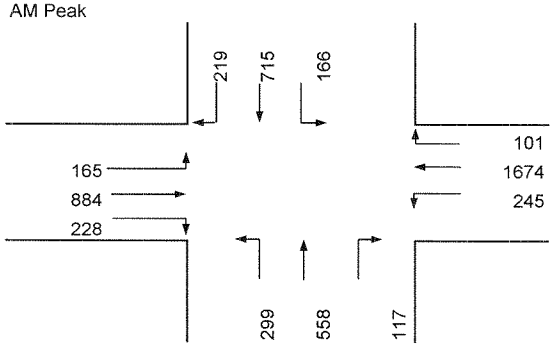
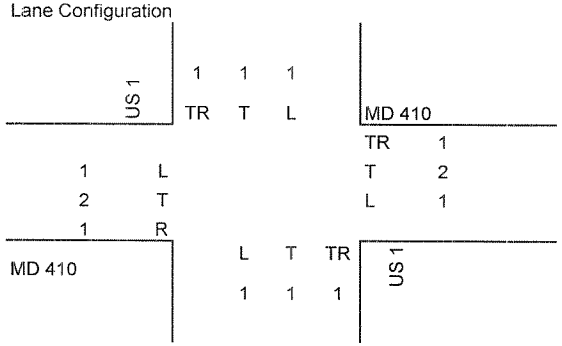
Phone: (410)266-5723 Facsimile: (410)266-9189

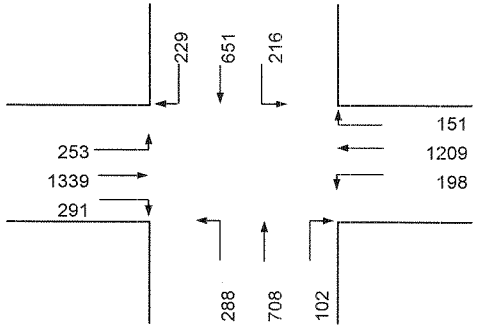
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	228	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	288	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	884	0.55	486	245	1.00	245	731	
WB	TR	1775	0.37	657	165	1.00	165	822	*
NB	TR	675	0.55	371	166	1.00	166	537	
SB	TR	934	0.55	514	299	1.00	299	813	*
							SUM	1635	
								F	

Note:

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1339	0.55	736	198	1.00	198	934	*
WB	TR	1360	0.37	503	253	1.00	253	756	
NB	TR	810	0.55	446	216	1.00	216	662	
SB	TR	880	0.55	484	288	1.00	288	772	*
							SUM	1706	
								F	

Note:

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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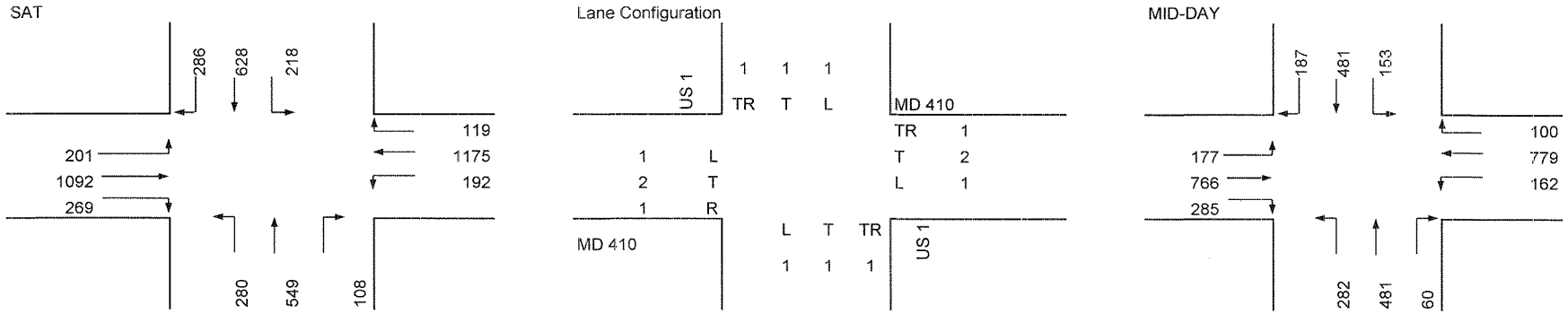

Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	269	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	282	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1092	0.55	601	192	1.00	192	793	*
WB	TR	1294	0.37	479	201	1.00	201	680	
NB	TR	657	0.55	361	218	1.00	218	579	
SB	TR	914	0.55	503	280	1.00	280	783	*
Note:							SUM	1576	
								E	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	766	0.55	421	162	1.00	162	583	*
WB	TR	879	0.37	325	177	1.00	177	502	
NB	TR	541	0.55	298	153	1.00	153	451	
SB	TR	668	0.55	367	282	1.00	282	649	*
Note:							SUM	1232	
								C	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 12: US 1/Queensbury Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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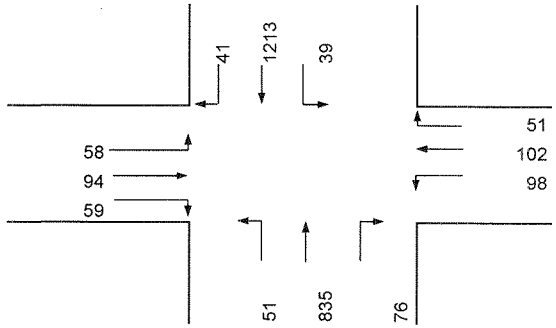
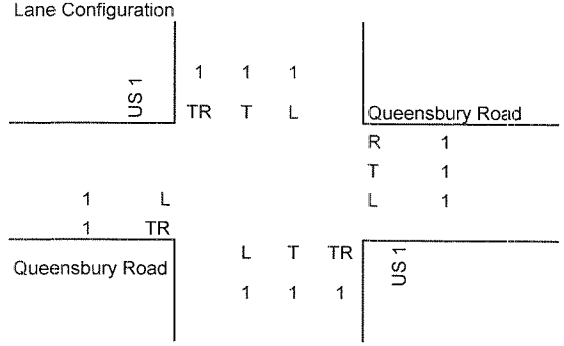
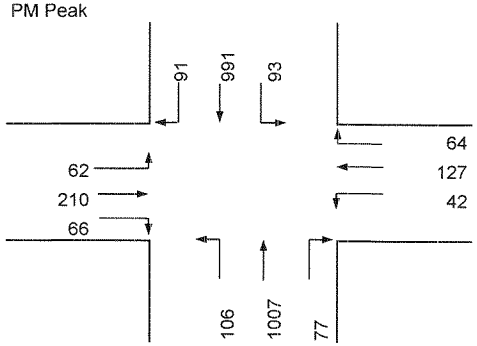
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 39
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 64
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	153	1.00	153	98	1.00	98	251	*
WB	T	102	1.00	102	58	1.00	58	160	
NB	TR	911	0.55	501	39	1.00	39	540	
SB	TR	1254	0.55	690	51	1.00	51	741	*

Note:

SUM 992
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	276	1.00	276	42	1.00	42	318	*
WB	T	127	1.00	127	62	1.00	62	189	
NB	TR	1084	0.55	596	93	1.00	93	689	
SB	TR	1082	0.55	595	106	1.00	106	701	*

Note:

SUM 1019
B

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 12: US 1/Queensbury Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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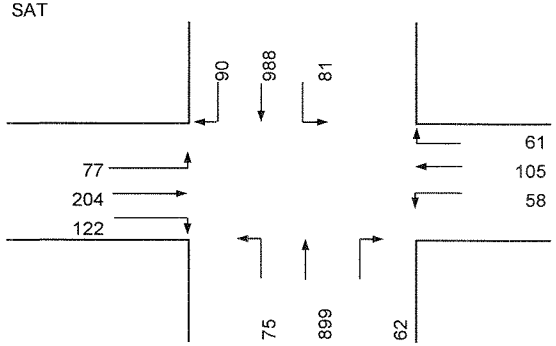
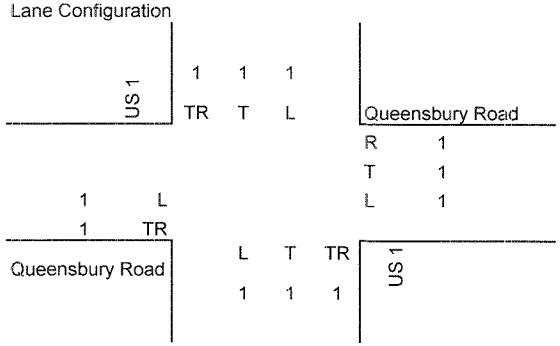
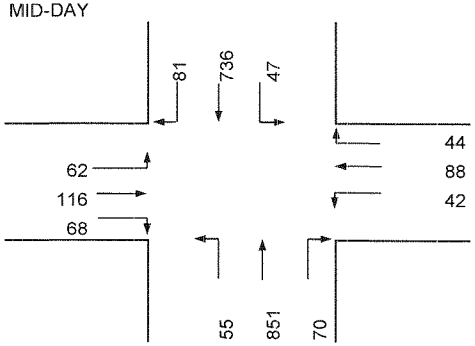
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 61
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 44
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	326	1.00	326	58	1.00	58	384	*
WB	T	105	1.00	105	77	1.00	77	182	
NB	TR	961	0.55	529	81	1.00	81	610	
SB	TR	1078	0.55	593	75	1.00	75	668	*
Note:							SUM	1052	
								B	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	184	1.00	184	42	1.00	42	226	*
WB	T	88	1.00	88	62	1.00	62	150	
NB	TR	921	0.55	507	47	1.00	47	554	*
SB	TR	817	0.55	449	55	1.00	55	504	
Note:							SUM	780	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 13. River Road/River Tech Ct
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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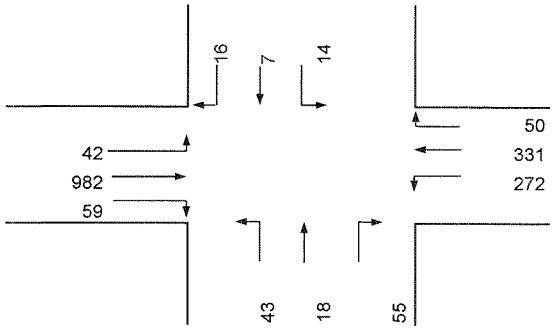
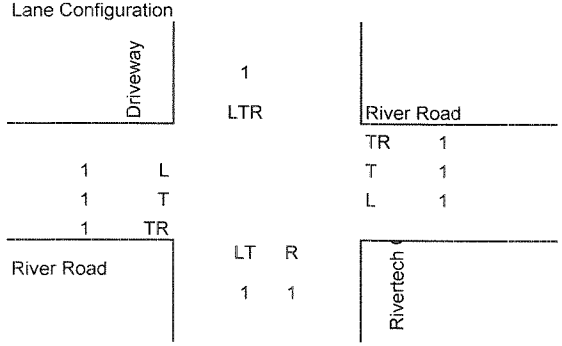
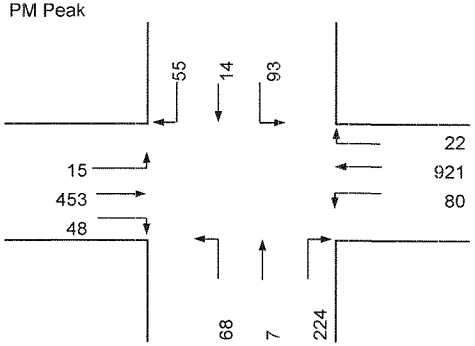
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: ____ Split: ____ Stop: X Ways: ____

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1.1	1.1	1	1
Shared Left PCE (PM):	1.1	1.1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	1041	0.55	573	272	1.00	272	845	*
WB	TR	381	0.55	210	42	1.00	42	252	
NB	TL	65	1.00	65	14	1.00	14	79	
SB	LTR	38	1.00	38	43	1.00	43	81	*

Note:
Spacing Available to accommodate two lanes on North Bound

SUM 926
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	501	0.55	276	80	1.00	80	356	
WB	TR	943	0.55	519	15	1.00	15	534	*
NB	TL	82	1.00	82	93	1.00	93	175	
SB	LTR	171	1.00	171	68	1.00	68	239	*

Note:
Spacing Available to accommodate two lanes on North Bound

SUM 773
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 13. River Road/River Tech Ct
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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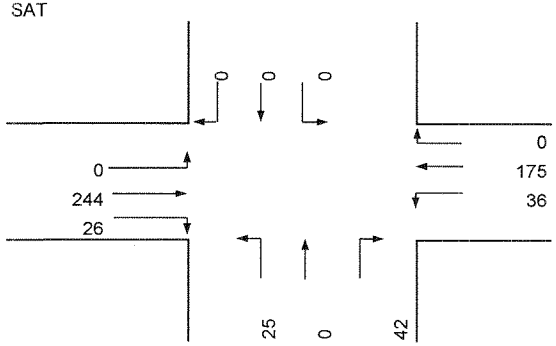
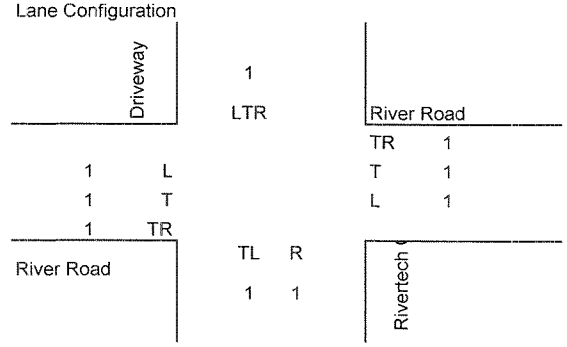
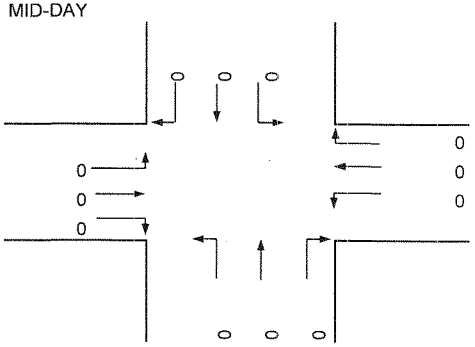
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: x Split: Stop: X Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	270	0.55	149	36	1.00	36	185	*
WB	TR	175	0.55	96	0	1.00	0	96	
NB	TL	25	1.00	25	0	1.00	0	25	*
SB	LTR	0	1.00	0		1.00	0	0	

Note:

SUM 210
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	0	0.55	0	0	1.00	0	0	*
WB	TR	0	0.55	0	0	1.00	0	0	
NB	TL	0	1.00	0	0	1.00	0	0	*
SB	LTR	0	1.00	0	0	1.00	0	0	

Note:

SUM 0
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 14. River Road at Paint Branch Pkwy
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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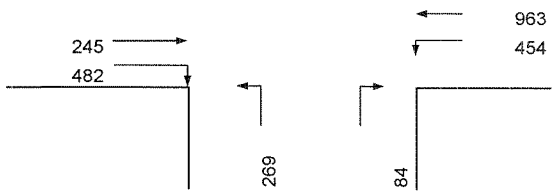
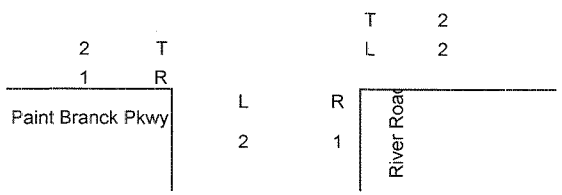
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

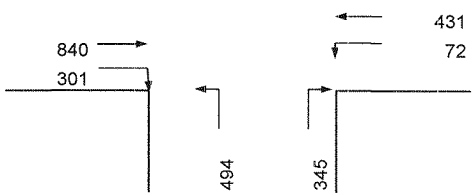
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	84	0	269	0
RTOR/Overlap (PM):	72	0	301	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	245	0.55	135	454	0.60	272	407	
WB	T	963	0.55	530	0	1.00	0	530	*
NB	L	269	0.60	161	0	1.00	0	161	*
Note:							SUM	691	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	840	0.55	462	72	0.60	43	505	*
WB	T	431	0.55	237	0	1.00	0	237	
NB	L	494	0.60	296	0	1.00	0	296	*
Note:							SUM	801	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 14. River Road at Paint Branch Pkwy
Jurisdiction: Prince George's County
Scenario/Design Year: Background
Computed by: SK

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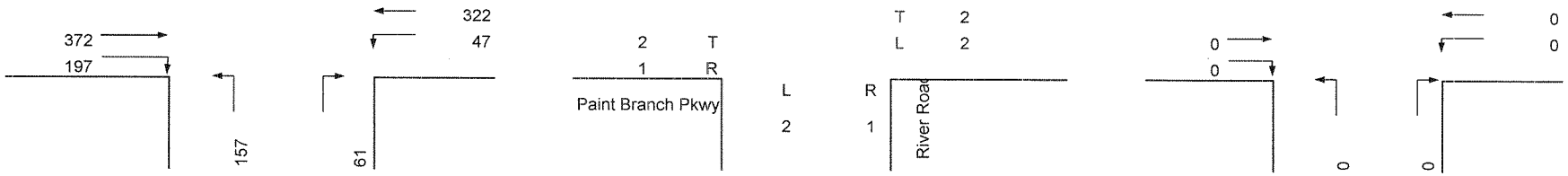
SAT | Lane Configuration | MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	47	SB	0	EB	157	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	372	0.55	205	47	0.60	28	233	*
WB	T	322	0.55	177	0	1.00	0	177	
NB	L	157	0.60	94	0	1.00	0	94	*
Note:							SUM	327	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	0	0.55	0	0	0.60	0	0	*
WB	T	0	0.55	0	0	1.00	0	0	
NB	L	0	0.60	0	0	1.00	0	0	*
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 15: Kenilworth Road/River Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background (with Improvements)
Computed by: SK

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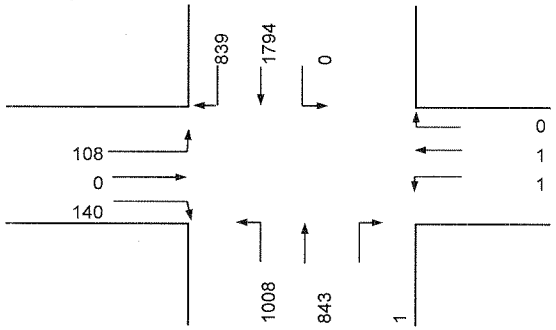
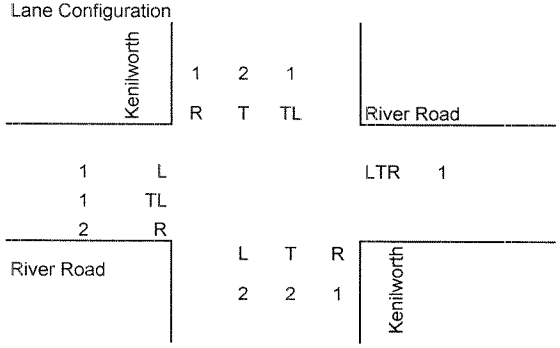
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

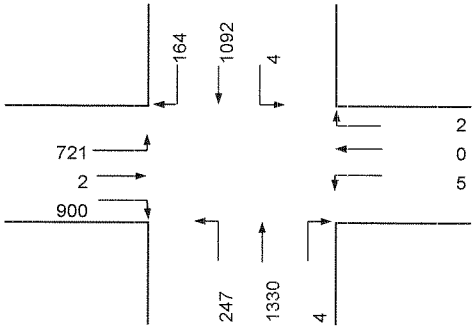
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: X Stop: Ways: E/W

RTOR/Overlap (AM):	NB	1	SB	108	EB	140	WB 0
RTOR/Overlap (PM):	NB	4	SB	164	EB	247	WB 0
Shared Left PCE (AM):	NB	1	SB	4	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	5	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	108	0.60	65	0	1.00	0	65	*
WB	LTR	2	1.00	2	0	1.00	0	2	*
NB	T	843	0.55	464	0	1.00	0	464	
SB	TL	1794	0.37	664	1008	0.60	605	1269	*
Note:							SUM	1336	
								D	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	723	0.60	434	0	1.00	0	434	*
WB	LTR	7	1.00	7	0	1.00	0	7	*
NB	T	1330	0.55	732	4	1.00	4	736	*
SB	TL	1112	0.37	411	247	0.60	148	559	
Note:							SUM	1177	
								C	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 15: Kenilworth Road/River Road
Jurisdiction: Prince George's County
Scenario/Design Year: Background (with Riverside Phase I Improvements)
Computed by: SK

WELLS + ASSOCIATES
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
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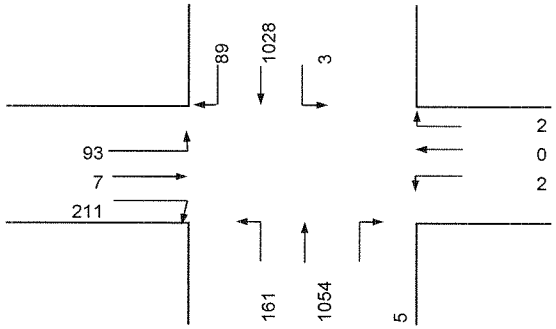
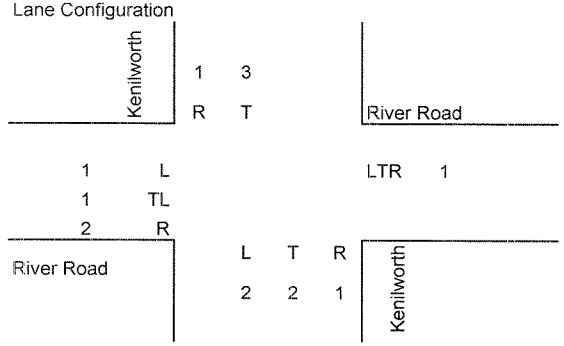
Phone: (410)266-5723 Facsimile: (410)266-9189

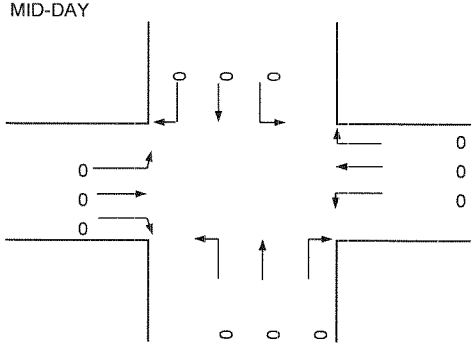
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	2	SB	89	EB	161	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 2
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	109	0.60	66	0	1.00	0	66	*
WB	LTR	6	1.00	6	0	1.00	0	6	*
NB	T	1054	0.55	580	3	1.00	3	583	*
SB	T	1028	0.37	380	161	0.60	97	477	
Note:							SUM	655	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	0	0.60	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	*
NB	T	0	0.55	0	0	1.00	0	0	*
SB	T	0	0.37	0	0	0.60	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	AM Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	BACKGROUND

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	10	119	4	177	226	6
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	3	1	55	3	0	1
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	139		429		61		4	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.4		0.0		0.8	
Prop. Right-Turns	0.0		0.0		0.9		0.3	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.1		-0.5		0.0	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.12		0.38		0.05		0.00	
hd, final value (s)	4.54		4.33		4.66		5.31	
x, final value	0.18		0.52		0.08		0.01	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.5		2.3		2.7		3.3	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	389		679		311		254	
Delay (s/veh)	8.50		11.84		8.06		8.34	
LOS	A		B		A		A	
Approach: Delay (s/veh)	8.50		11.84		8.06		8.34	
LOS	A		B		A		A	
Intersection Delay (s/veh)	10.72							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*sk*
Agency/Co.	*Wells and Associates*
Date Performed	*2/25/2012*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*Rhode Island and Queens Bury*
Jurisdiction	*Prince Georges County*
Analysis Year	*Background*

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	5	300	10	54	173	8
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	0	205	8	3	25
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	330		246		238		37	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.1		0.2	
Prop. Right-Turns	0.0		0.0		0.9		0.7	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.1		-0.5		-0.3	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.29		0.22		0.21		0.03	
hd, final value (s)	5.01		5.15		4.94		5.45	
x, final value	0.46		0.35		0.33		0.06	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	3.0		3.2		2.9		3.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	580		496		488		287	
Delay (s/veh)	12.18		10.93		10.33		8.78	
LOS	B		B		B		A	
Approach: Delay (s/veh)	12.18		10.93		10.33		8.78	
LOS	B		B		B		A	
Intersection Delay (s/veh)	11.15							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	SAT Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	Background

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	9	248	7	33	166	10
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	7	1	40	8	1	7
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	277		218		50		16	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.1		0.5	
Prop. Right-Turns	0.0		0.0		0.8		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.4		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.25		0.19		0.04		0.01	
hd, final value (s)	4.32		4.39		4.58		4.95	
x, final value	0.33		0.27		0.06		0.02	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.3		2.4		2.6		2.9	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	527		468		300		266	
Delay (s/veh)	9.45		8.97		7.89		8.06	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.45		8.97		7.89		8.06	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.09							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	Mid Day Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	Background

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	5	172	3	32	144	8
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	2	0	57	6	3	7
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	189		192		62		16	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.0		0.4	
Prop. Right-Turns	0.0		0.0		1.0		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.5		-0.2	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.17		0.17		0.06		0.01	
hd, final value (s)	4.31		4.32		4.23		4.67	
x, final value	0.23		0.23		0.07		0.02	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.3		2.3		2.2		2.7	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	439		442		312		266	
Delay (s/veh)	8.57		8.61		7.56		7.77	
LOS	A		A		A		A	
Approach: Delay (s/veh)	8.57		8.61		7.56		7.77	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.42							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	AM Peak

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Background

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	42	44	47	0	10	0
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	140	22	5	0	10	178
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.92		0.92		0.92		0.92	
Flow Rate (veh/h)	143		10		180		203	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.3		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.0		0.0		1.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.0		0.2		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.13		0.01		0.16		0.18	
hd, final value (s)	4.65		4.98		4.67		3.96	
x, final value	0.18		0.01		0.23		0.22	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.6		3.0		2.7		2.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	393		260		430		453	
Delay (s/veh)	8.70		8.05		9.09		8.09	
LOS	A		A		A		A	
Approach: Delay (s/veh)	8.70		8.05		9.09		8.09	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.59							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	PM Peak

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Background

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	180	107	200	0	29	3
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	103	23	11	4	14	90
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.96		0.96		0.96		0.96	
Flow Rate (veh/h)	506		33		141		111	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.1		0.1		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		-0.0		0.1		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.45		0.03		0.13		0.10	
hd, final value (s)	4.50		5.22		5.52		4.98	
x, final value	0.63		0.05		0.22		0.15	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.5		3.2		3.5		3.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	756		283		391		361	
Delay (s/veh)	14.93		8.48		10.03		8.88	
LOS	B		A		B		A	
Approach: Delay (s/veh)	14.93		8.48		10.03		8.88	
LOS	B		A		B		A	
Intersection Delay (s/veh)	12.94							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	SAT

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Background

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	62	61	162	2	34	1
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	117	12	3	2	8	40
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.88		0.88		0.88		0.88	
Flow Rate (veh/h)	323		41		148		56	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2		0.0		0.9		0.0	
Prop. Right-Turns	0.6		0.0		0.0		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.3		0.0		0.2		-0.4	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.29		0.04		0.13		0.05	
hd, final value (s)	4.21		4.82		5.00		4.49	
x, final value	0.38		0.05		0.21		0.07	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.2		2.8		3.0		2.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	573		291		398		306	
Delay (s/veh)	9.74		8.10		9.28		7.83	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.74		8.10		9.28		7.83	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.32							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	Mid day

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Background

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	101	49	93	1	24	0
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	104	24	4	1	9	55
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.89		0.89		0.89		0.89	
Flow Rate (veh/h)	272		27		146		72	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.0		0.0		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.0		0.2		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.24		0.02		0.13		0.06	
hd, final value (s)	4.36		4.80		4.86		4.32	
x, final value	0.33		0.04		0.20		0.09	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.4		2.8		2.9		2.3	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	522		277		396		322	
Delay (s/veh)	9.49		7.98		9.05		7.73	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.49		7.98		9.05		7.73	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.04							
Intersection LOS	A							

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Background
Analysis Time Period	AM Peak		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	39	1	0	10	1
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	0	42	1	0	10	1
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)	1	0	0	4	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	4	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	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		1			4	
C (m) (veh/h)	1608	1566		947			947	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.00			0.01	
Control Delay (s/veh)	7.2	7.3		8.8			8.8	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	8.8			8.8		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Background
Analysis Time Period	PM Peak		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	95	0	0	35	16
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	103	0	0	38	17
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)	1	0	0	11	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	11	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	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	0		1			11	
C (m) (veh/h)	1550	1489		816			816	
v/c	0.00	0.00		0.00			0.01	
95% queue length	0.00	0.00		0.00			0.04	
Control Delay (s/veh)	7.3	7.4		9.4			9.5	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.4			9.5		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Background
Analysis Time Period	SAT		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	63	0	0	33	5
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	2	68	0	0	35	5
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)	1	0	0	4	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	4	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	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)	2	0		1			4	
C (m) (veh/h)	1570	1533		867			867	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.00			0.01	
Control Delay (s/veh)	7.3	7.3		9.2			9.2	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.2			9.2		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Background
Analysis Time Period	Mid-day		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	47	0	1	29	6
Peak-Hour Factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	0	59	0	1	36	7
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	2	1	2	0	0
Peak-Hour Factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	0	2	1	2	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	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	1		3			2	
C (m) (veh/h)	1566	1545		847			876	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.01			0.01	
Control Delay (s/veh)	7.3	7.3		9.3			9.1	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.3			9.1		
Approach LOS	--	--	A			A		

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Appendix G

Background Development Traffic with CSX

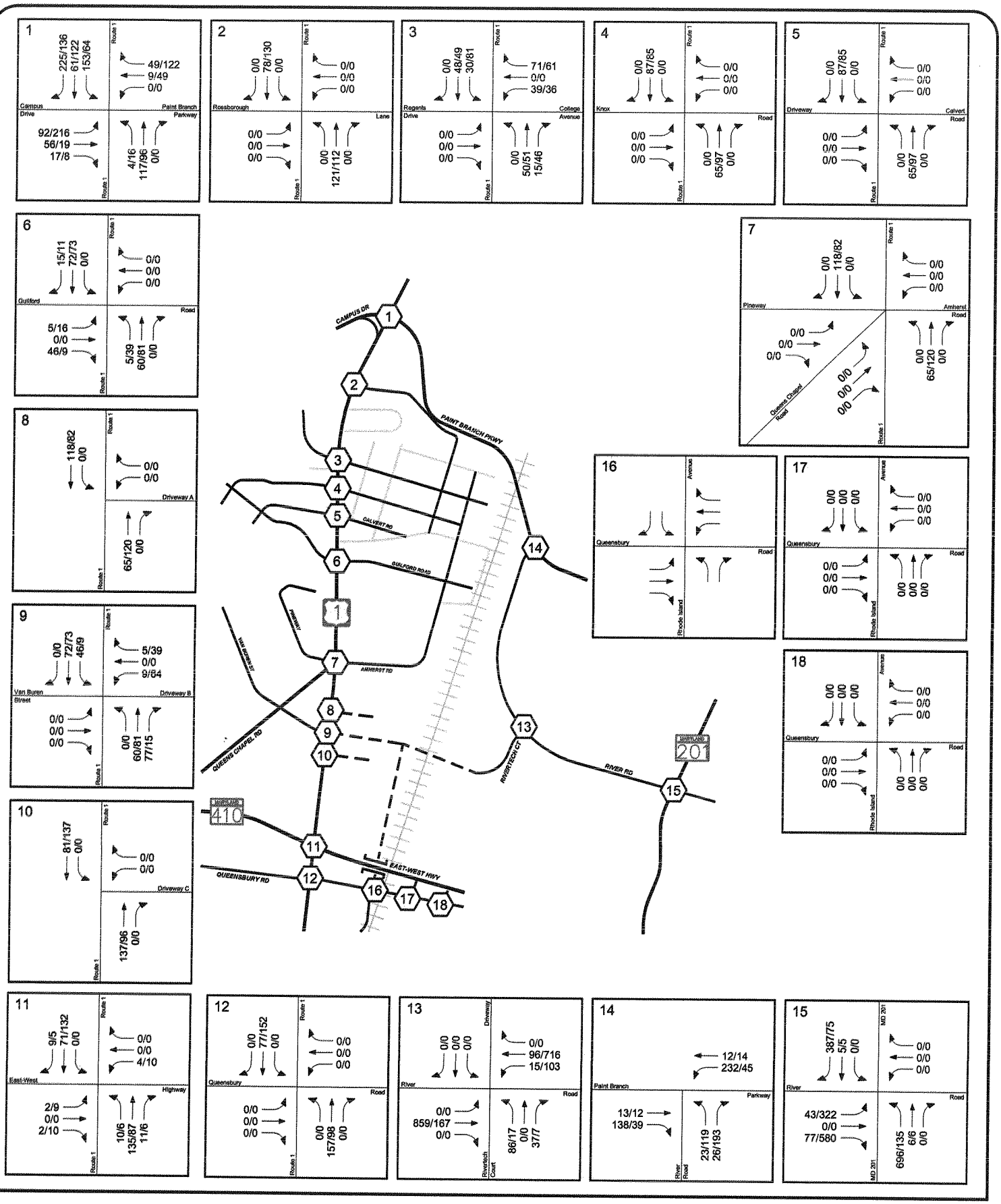

Figure G-1
Combined Approved Development Peak Hour with CSX - AM & PM Peak

AM PEAK HOUR
PM PEAK HOUR
000/000

North

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

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JCP

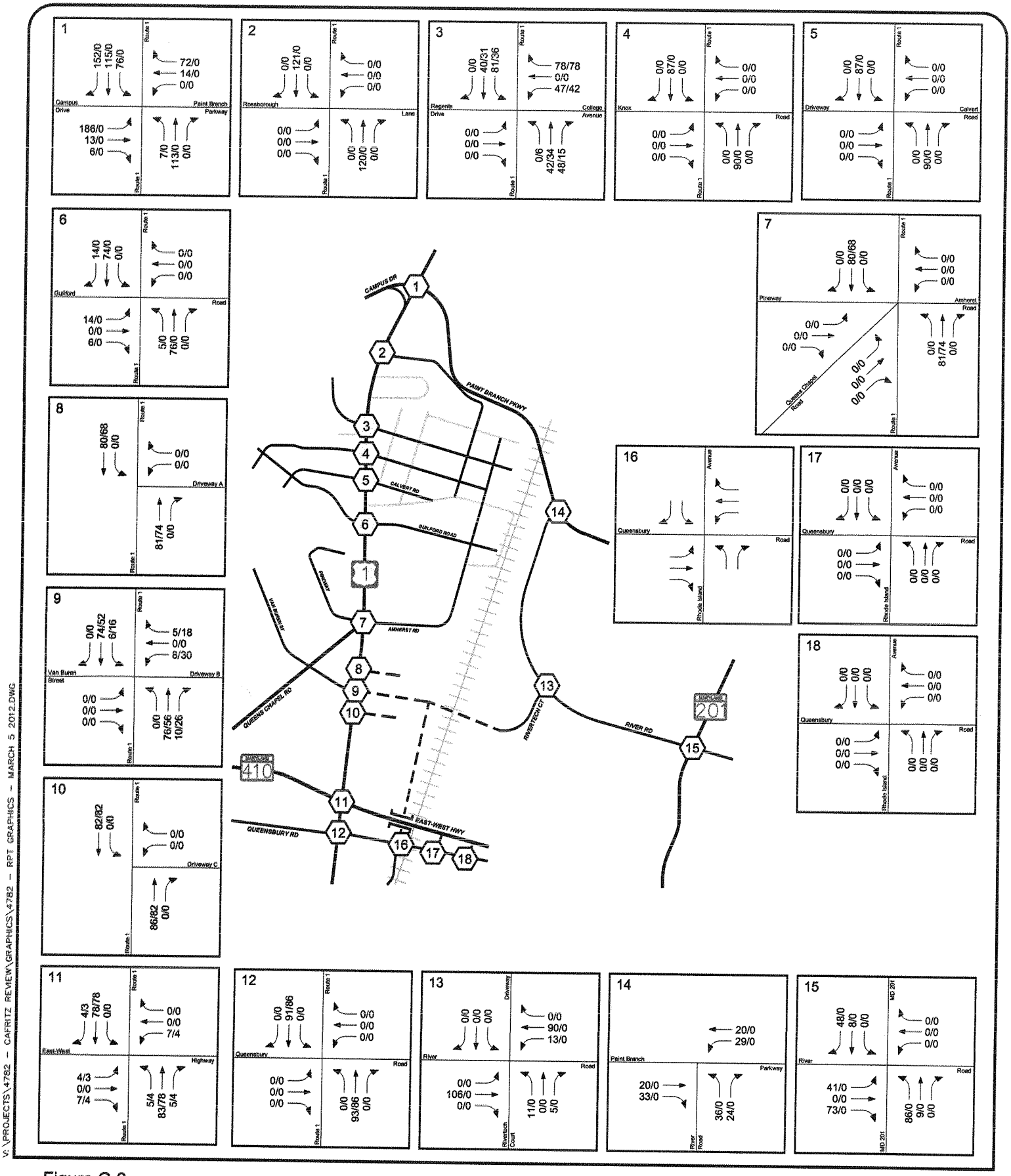


Figure G-2
Combined Approved Development Peak Hour with CSX - SAT & MID DAY

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

V:\PROJECTS\4782 - CARFRITZ REVIEW\GRAPHICS\4782 - RPT GRAPHICS - MARCH 5 2012.DWG

JCP

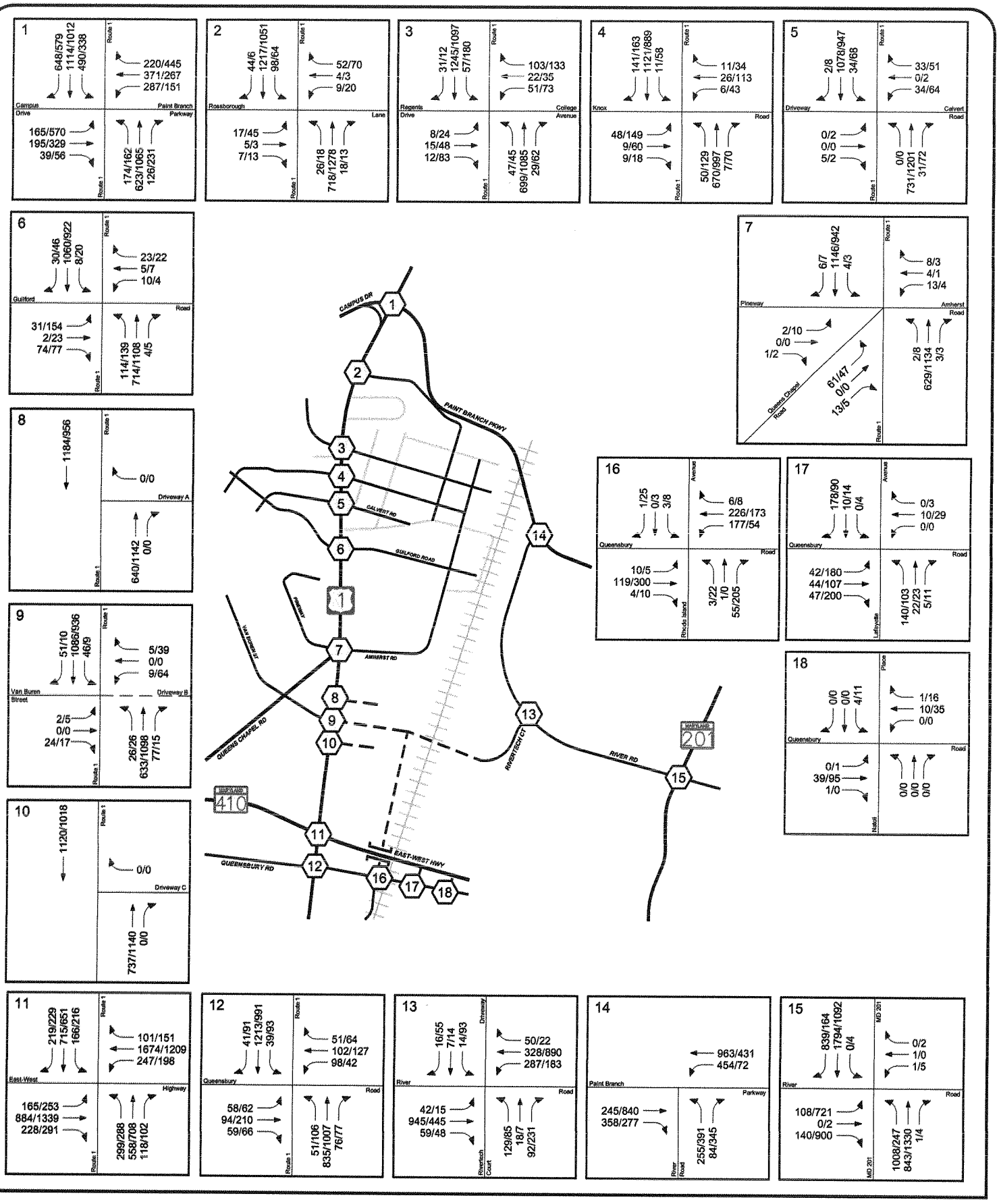


Figure G-3
Background Peak Hour Traffic Forecasts with CSX - AM & PM

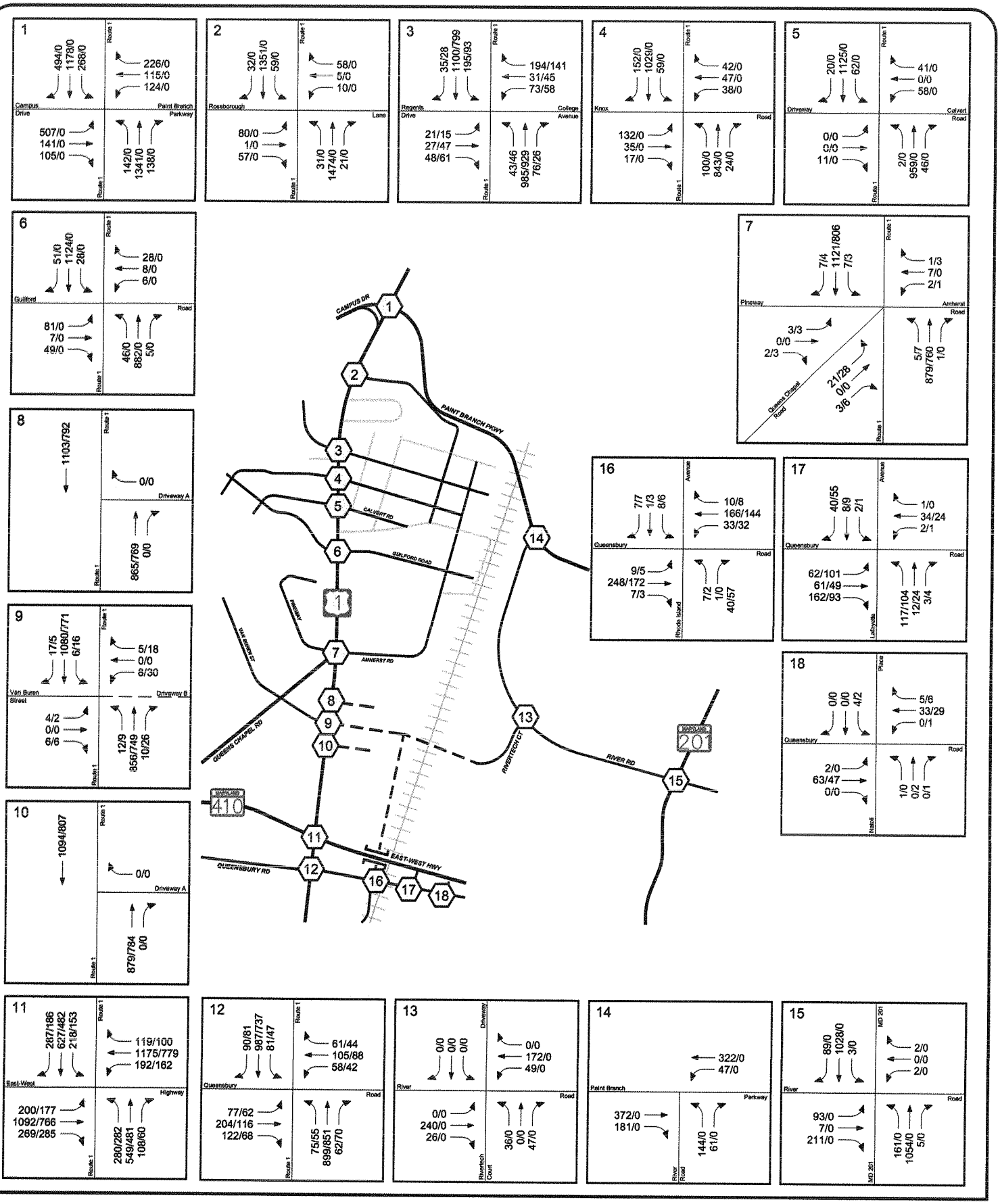
AM PEAK HOUR
PM PEAK HOUR
000/000

North

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

V:\PROJECTS\4782 - CARFRITZ REVIEW\GRAPHICS\4782 - RPT GRAPHICS - MARCH 5 2012.DWG



V:\PROJECTS\4782 – CARFRITZ REVIEW\GRAPHICS\4782 – RPT GRAPHICS – MARCH 5 2012.DWG

Figure G-4
Background Peak Hour Traffic Forecasts with CSX - SAT & MID DAY

SAT PEAK HOUR
MIDDAY PEAK HOUR
000/000

North

JCP

Notes: 1. Saturday Peak Hour Turning Movement Volumes shown for all Intersections
2. Mid-day Peak Hour Turning Movement Volumes shown for Intersections

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

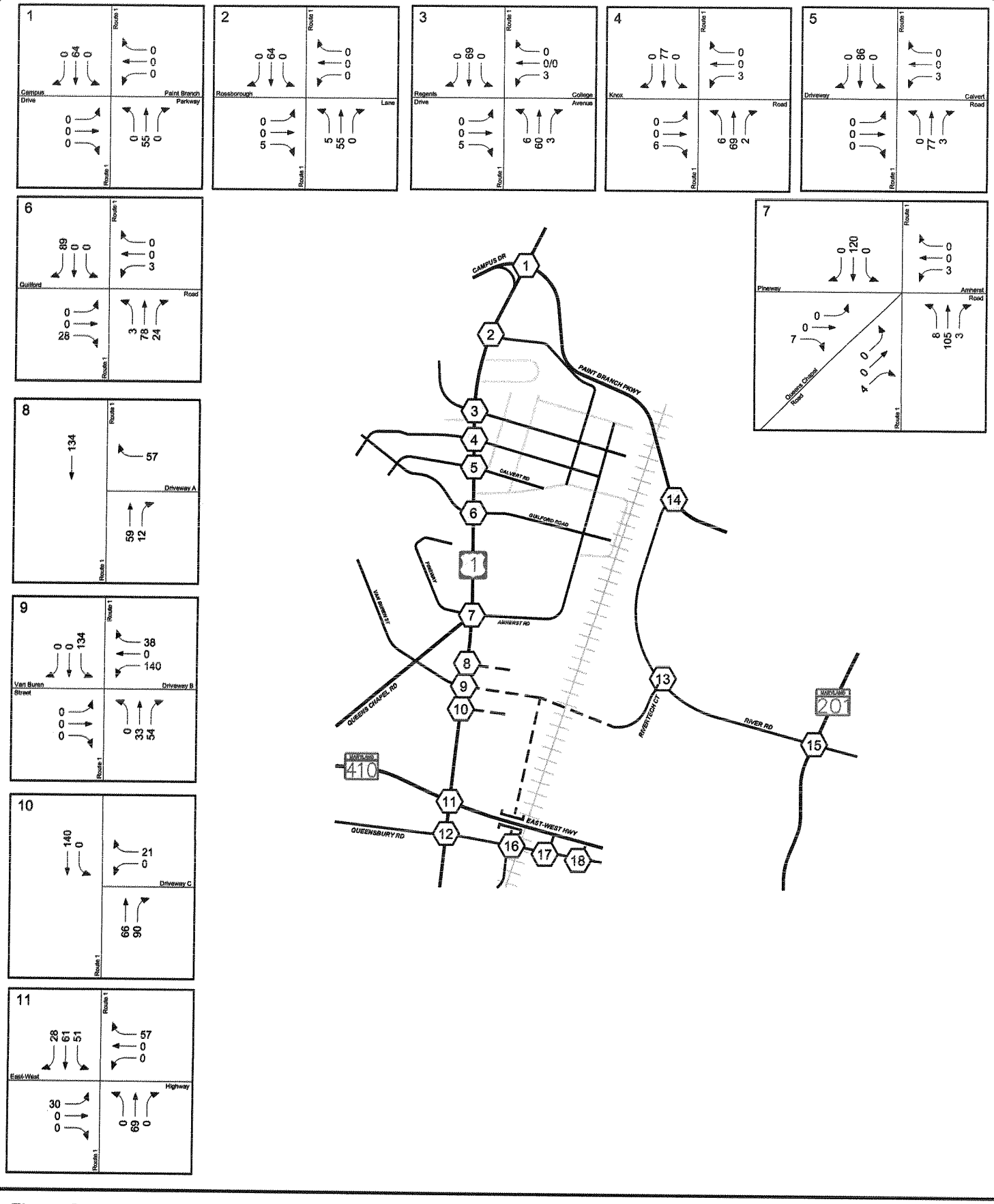


Figure G-5
Site Generated New Peak Hour Traffic Forecasts with CSX - SAT & MID DAY

MIDDAY PEAK HOUR
000

North

Notes: 1. Mid-day Peak Hour Turning Movement Volumes shown for Intersections 3,7,8,9,10,11,12,16,17 & 18 per MNCPPC Scoping Agreement
2. Mid-day Turning Movement Volumes at intersections 1 through 11 (along US 1) provided for review purposes only

Carfritz Property at Riverdal Park
Prince Georges County, Maryland

Wells + Associates, Inc.

V:\PROJECTS\4782 - CARFRITZ REVIEW\GRAPHICS\4782 - RPT GRAPHICS - MARCH 5 2012.DWG

JCP

Appendix H

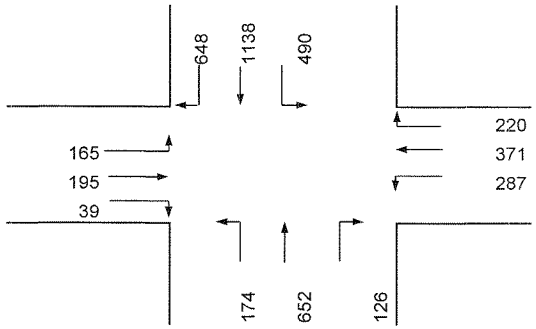
Future Intersection Levels of Service Analysis with Cafritz and with CSX

Cafritz Property at Riverdale Park
Critical Lane Volume
Level of Service Calculations

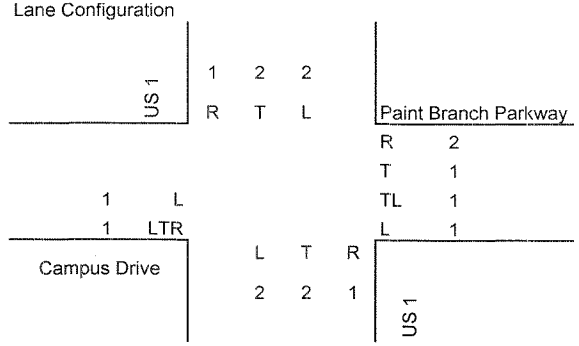
Intersection: 1: US 1/Paint Branch Parkway
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

WELLS + ASSOCIATES
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

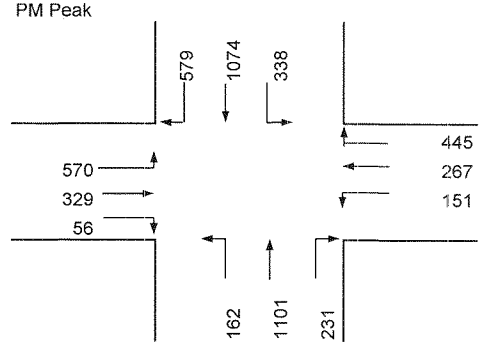
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: E/W Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	126	165	0	220
RTOR/Overlap (PM):	151	570	0	338
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	399	0.55	219	0	1.00	0	219	*
WB	TL	658	0.37	243	0	1.00	0	243	*
NB	T	652	0.55	359	490	0.60	294	653	
SB	T	1138	0.55	626	174	0.60	104	730	*

Note:

SUM 1192
C

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	955	0.55	525	0	1.00	0	525	*
WB	TL	418	0.37	155	0	1.00	0	155	*
NB	T	1101	0.55	606	338	0.60	203	809	*
SB	T	1074	0.55	591	162	0.60	97	688	

Note:

SUM 1489
E

Date Printed: 7/10/2012

Cafritz Property at Riverdale Park
Critical Lane Volume
Level of Service Calculations

Intersection: 1: US 1/Paint Branch Parkway
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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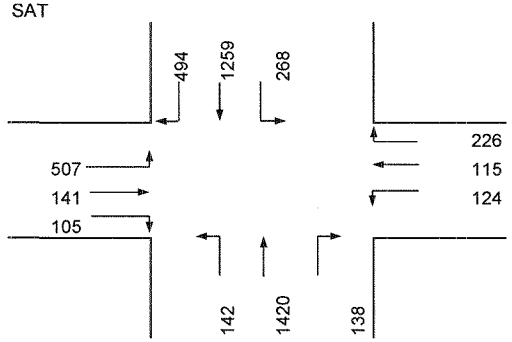
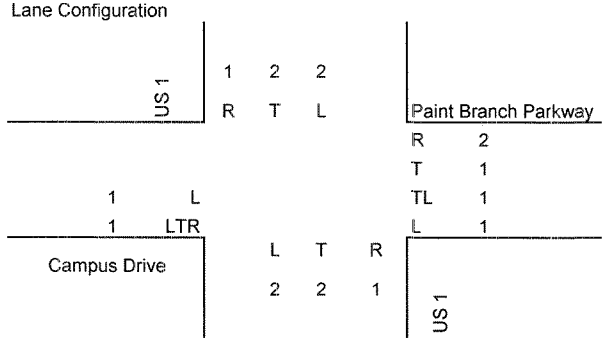
Phone: (410)266-5723 Facsimile: (410)266-9189

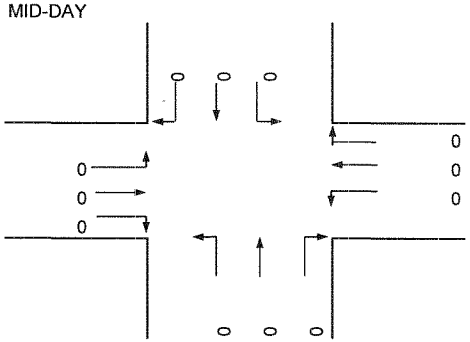
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: E/W Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	124	494	0	226
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	753	0.55	414	0	1.00	0	414	*
WB	TL	239	0.37	88	0	1.00	0	88	*
NB	T	1420	0.55	781	268	0.60	161	942	*
SB	T	1259	0.55	692	142	0.60	85	777	
							SUM	1444	
								D	

Note:
EB shared LTR lane operates as defacto TR lane due to volumes.

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	0.55	0	0	1.00	0	0	*
WB	TL	0	0.37	0	0	1.00	0	0	*
NB	T	0	0.55	0	0	0.60	0	0	*
SB	T	0	0.55	0	0	0.60	0	0	
							SUM	0	

Note:

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 2: US 1/Rossborough Lane
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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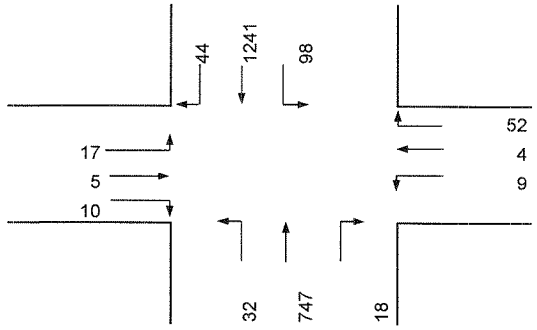
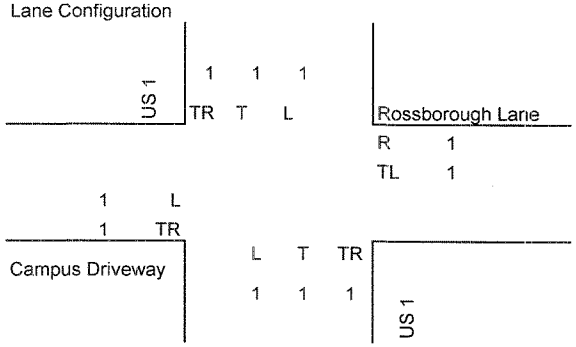
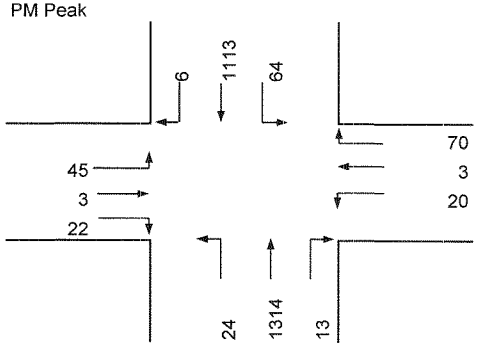
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 52
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 64
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	15	1.00	15	9	1.00	9	24	
WB	TL	14	1.00	14	17	1.00	17	31	*
NB	TR	765	0.55	421	98	1.00	98	519	
SB	TR	1285	0.55	707	32	1.00	32	739	*

Note:

SUM 770
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	25	1	25	20	1.00	20	45	
WB	TL	25	1	25	45	1.00	45	70	*
NB	TR	1327	0.55	730	64	1.00	64	794	*
SB	TR	1119	0.55	615	24	1.00	24	639	

Note:

SUM 864
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 2: US 1/Rossborough Lane
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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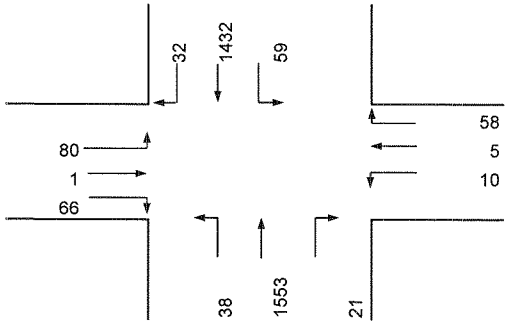
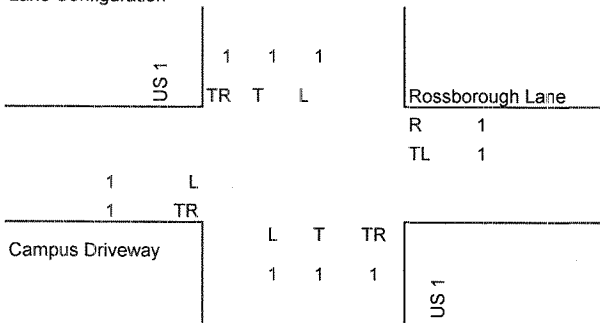
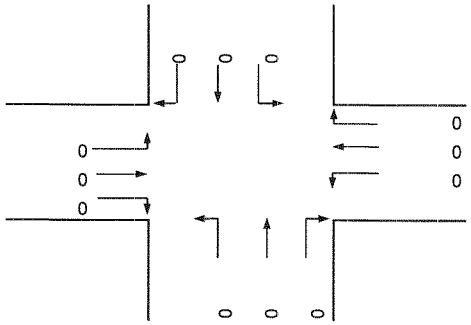
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	58
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1.1
Shared Left PCE (PM):	1	1	1	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	67	1.00	67	10	1.00	10	77	
WB	TL	16	1.00	16	80	1.00	80	96	*
NB	TR	1574	0.55	866	59	1.00	59	925	*
SB	TR	1464	0.55	805	38	1.00	38	843	
Note:							SUM	1021	
								B	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	0	1	0	0	1.00	0	0	*
WB	TL	0	1	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 3: US 1/College Avenue
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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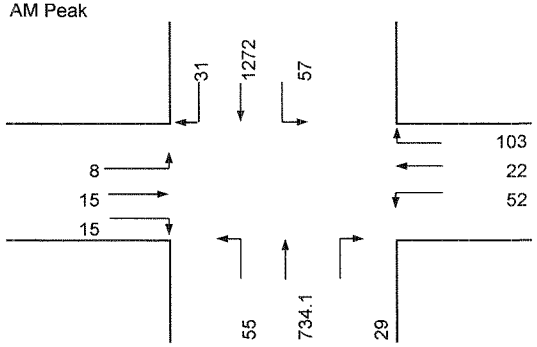
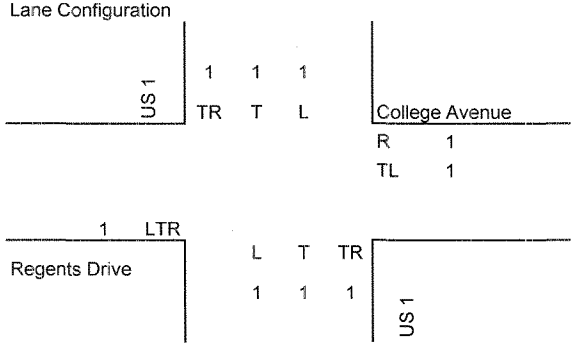
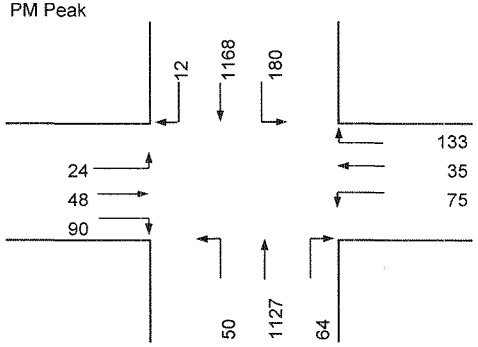
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 57
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 133
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	39	1.00	39	52	1.00	52	91	*
WB	TL	79	1.00	79	8	1.00	8	87	
NB	TR	763	0.55	420	57	1.00	57	477	
SB	TR	1303	0.55	717	55	1.00	55	772	*

Note:

SUM 863
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	164	1.00	164	75	1.00	75	239	*
WB	TL	118	1.00	118	24	1.00	24	142	
NB	TR	1191	0.55	655	180	1.00	180	835	*
SB	TR	1180	0.55	649	50	1.00	50	699	

Note:

SUM 1074
B

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 3: US 1/College Avenue
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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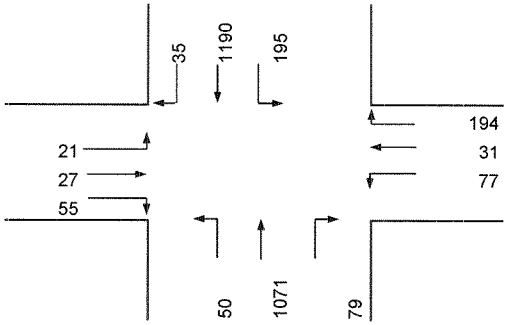
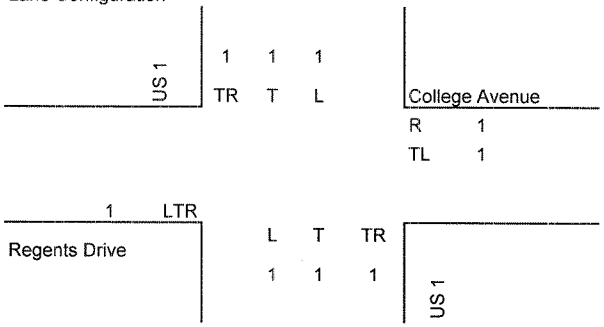
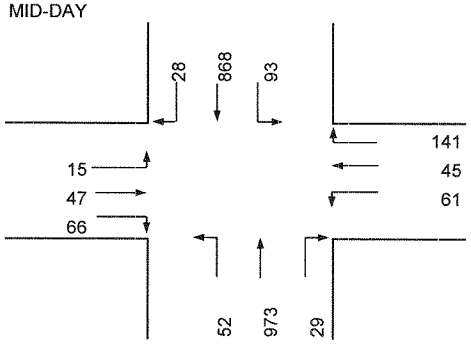
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 194
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 93
Shared Left PCE (AM):	NB	1	SB	1	EB	2	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	124	1.00	124	77	1.00	77	201	*
WB	TL	116	1.00	116	21	1.00	21	137	
NB	TR	1150	0.55	633	195	1.00	195	828	*
SB	TR	1225	0.55	674	50	1.00	50	724	

Note:

SUM 1029
B

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	130	1.00	130	61	1.00	61	191	*
WB	TL	112	1.00	112	15	1.00	15	127	
NB	TR	1002	0.55	551	93	1.00	93	644	*
SB	TR	896	0.55	493	52	1.00	52	545	

Note:

SUM 835
A

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 4: US 1/Knox Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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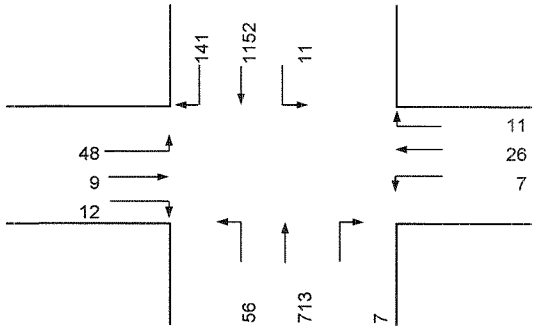
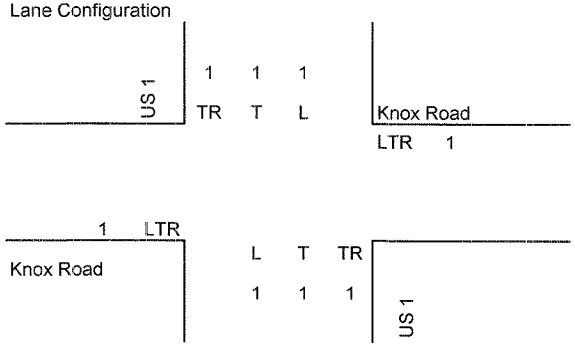
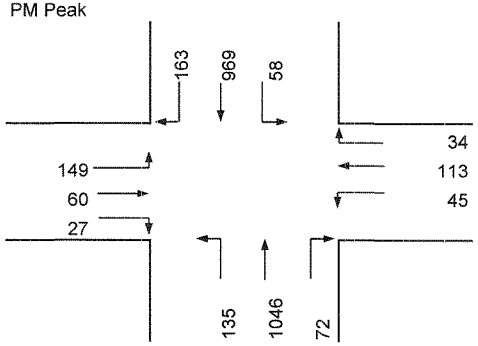
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1.1	1.1
Shared Left PCE (PM):	1	1	1.1	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	74	1.00	74	7	1.00	7	81	
WB	LTR	45	1.00	45	48	1.00	48	93	*
NB	TR	720	0.55	396	11	1.00	11	407	
SB	TR	1293	0.55	711	56	1.00	56	767	*
Note:							SUM	860	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	251	1.00	251	45	1.00	45	296	
WB	LTR	197	1.00	197	149	1.00	149	346	*
NB	TR	1118	0.55	615	58	1.00	58	673	
SB	TR	1132	0.55	623	135	1.00	135	758	*
Note:							SUM	1104	
								B	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 4: US 1/Knox Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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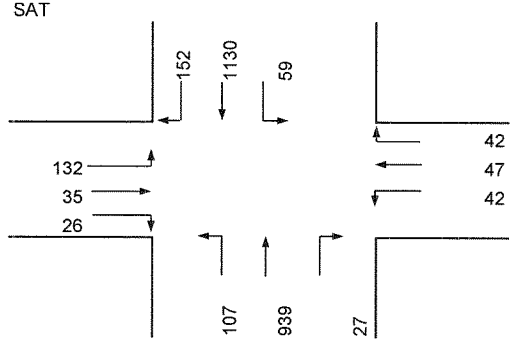
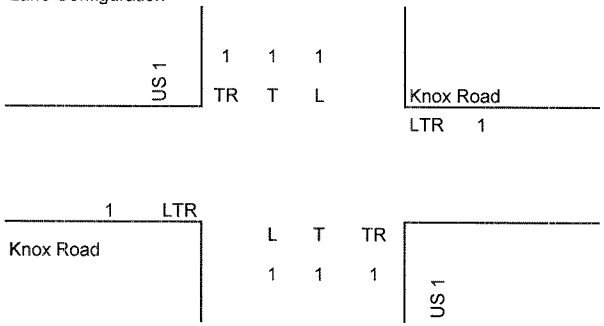
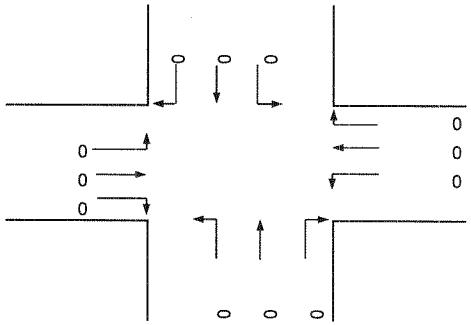
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	206	1.00	206	42	1.00	42	248	
WB	LTR	135	1.00	135	132	1.00	132	267	*
NB	TR	966	0.55	531	59	1.00	59	590	
SB	TR	1282	0.55	705	107	1.00	107	812	*
Note:							SUM	1079	
								B	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	1.00	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 5: US 1/Calvert Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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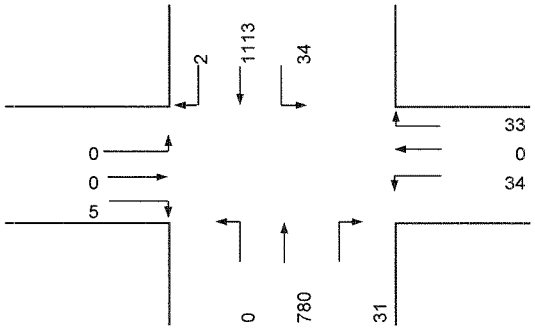
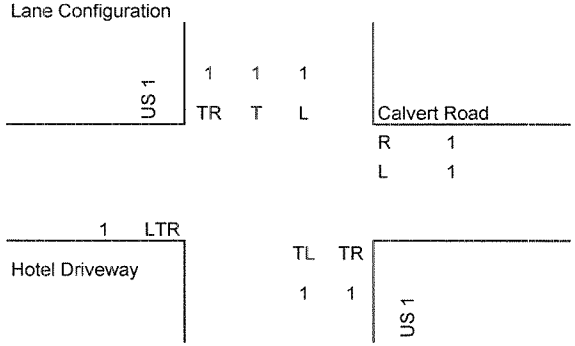
Phone: (410)266-5723 Facsimile: (410)266-9189

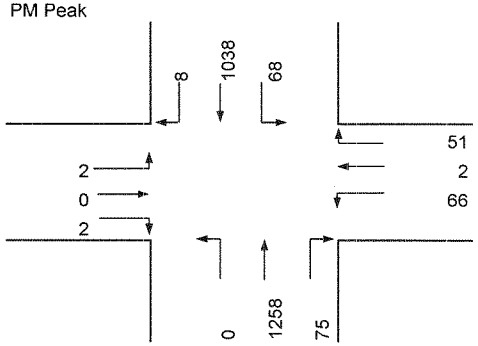
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	33
RTOR/Overlap (PM):	0	0	0	51
Shared Left PCE (AM):	5	1	1.1	1
Shared Left PCE (PM):	5	1	1.1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	5	1.00	5	34	1.00	34	39	*
WB	L	34	1.00	34	0	1.00	0	34	
NB	LTR	811	0.55	446	34	1.00	34	480	
SB	TR	1115	0.55	613	0	1.00	0	613	*
Note:							SUM	652	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	4.2	1.00	4	66	1.00	66	70	*
WB	L	66	1.00	66	2	1.00	2	68	
NB	LTR	1333	0.55	733	68	1.00	68	801	*
SB	TR	1046	0.55	575	0	1.00	0	575	
Note:							SUM	871	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 5: US 1/Calvert Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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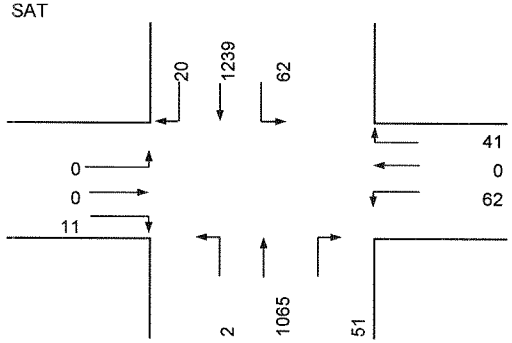
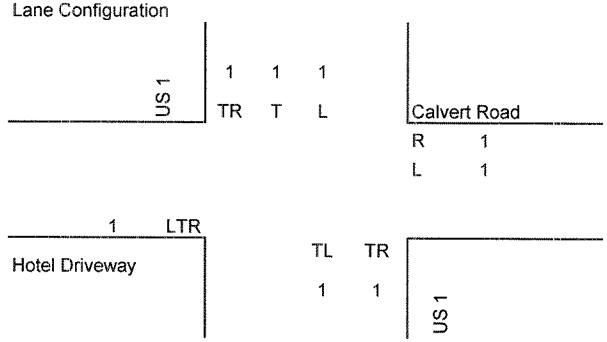
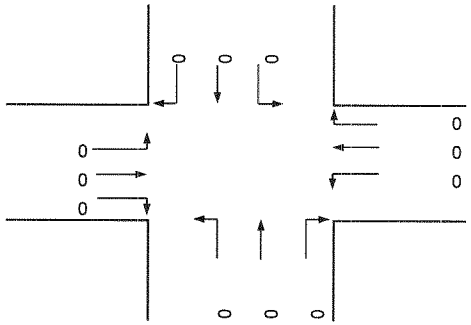
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 41
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	5	SB	1	EB	1.1	WB 1
Shared Left PCE (PM):	NB	1.1	SB	1	EB	1.1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	11	1.00	11	62	1.00	62	73	*
WB	L	62	1.00	62	0	1.00	0	62	
NB	LTR	1126	0.55	619	62	1.00	62	681	
SB	TR	1259	0.55	692	2	1.00	2	694	*

Note:

SUM 767
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	0	1.00	0	0	1.00	0	0	*
WB	L	0	1.00	0	0	1.00	0	0	
NB	LTR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 6: US 1/Guilford Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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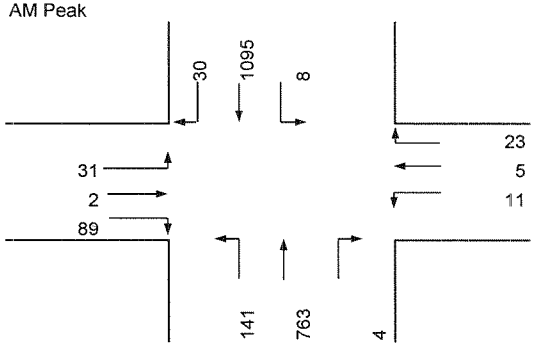
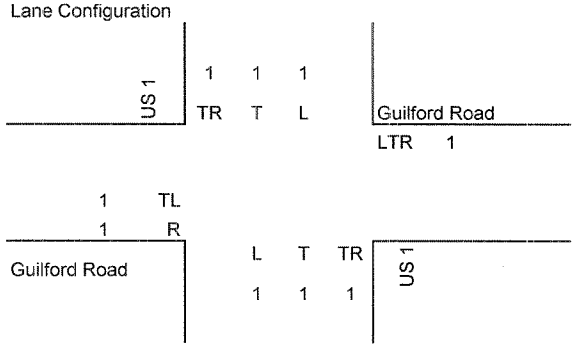
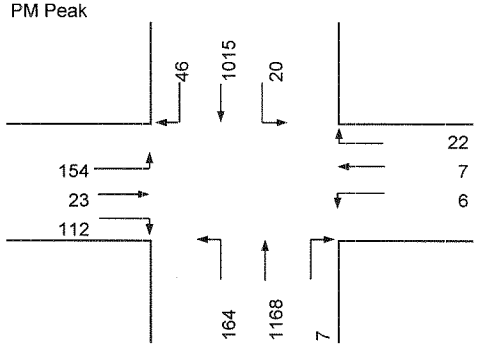
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

RTOR/Overlap (AM):	NB	0	SB	0	EB	89	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	112	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	36	1.00	36	11	1.00	11	47	
WB	LTR	40	1.00	40	31	1.00	31	71	*
NB	TR	767	0.55	422	8	1.00	8	430	
SB	TR	1125	0.55	619	141	1.00	141	760	*
Note:							SUM	831	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	192	1.00	192	6	1.00	6	198	*
WB	LTR	36	1.00	36	154	1.00	154	190	
NB	TR	1175	0.55	646	20	1.00	20	666	
SB	TR	1061	0.55	584	164	1.00	164	748	*
Note:							SUM	946	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 6: US 1/Guilford Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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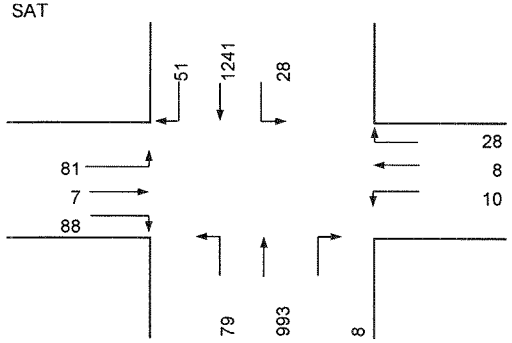
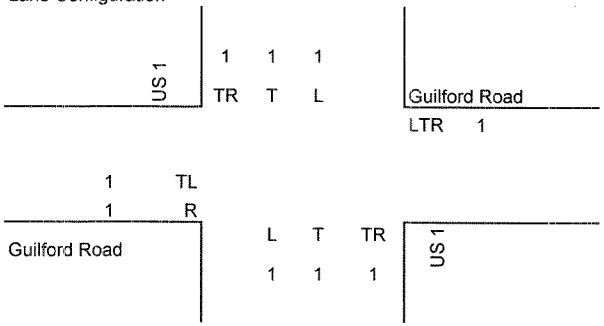
SAT



Lane Configuration



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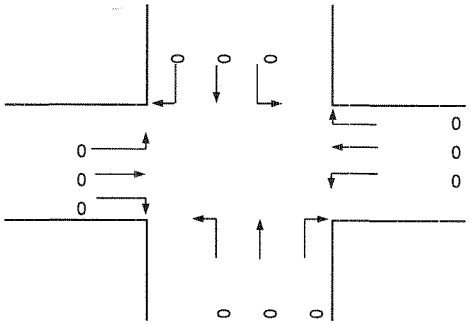

Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	79	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	96	1.00	96	10	1.00	10	106	
WB	LTR	47	1.00	47	81	1.00	81	128	*
NB	TR	1001	0.55	551	28	1.00	28	579	
SB	TR	1292	0.55	711	79	1.00	79	790	*
Note:							SUM	918	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	0	1.00	0	0	1.00	0	0	*
WB	LTR	0	1.00	0	0	1.00	0	0	
NB	TR	0	0.55	0	0	1.00	0	0	*
SB	TR	0	0.55	0	0	1.00	0	0	
Note:							SUM	0	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 7: US 1/Amherst Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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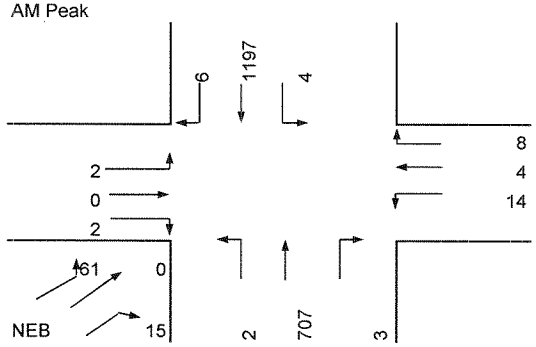
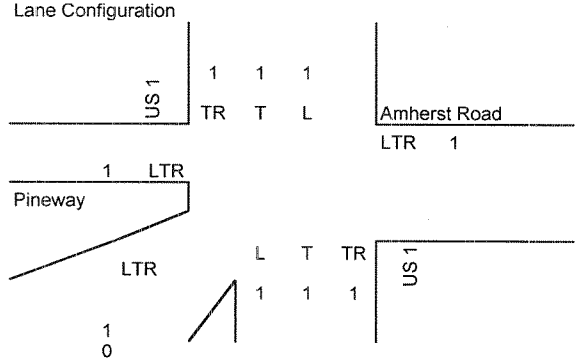
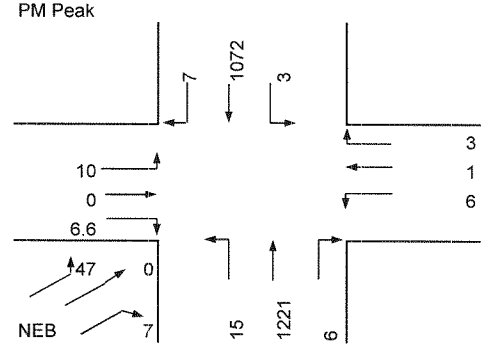
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1.1	1.1
Shared Left PCE (PM):	1	1	1.1	1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	4	1.00	4	14	1.00	14	18	
WB	LTR	27	1.00	27	2	1.00	2	29	*
NB	TR	710	0.55	391	4	1.00	4	395	
SB	TR	1203	0.55	662	2	1.00	2	664	*
NEB	LTR	76	1.00	76	0	0	0	76	*
Note:							SUM	769	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	18	1.00	18	6	1.00	6	24	*
WB	LTR	11	1.00	11	10	1.00	10	21	
NB	TR	1227	0.55	675	3	1.00	3	678	*
SB	TR	1079	0.55	593	15	1.00	15	608	
NEB	LTR	54	1.00	54	0	0	0	54	*
Note:							SUM	756	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 7: US 1/Amherst Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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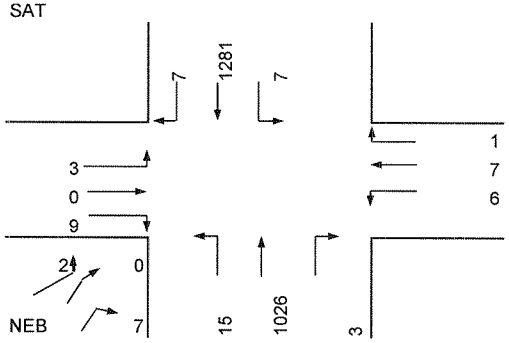
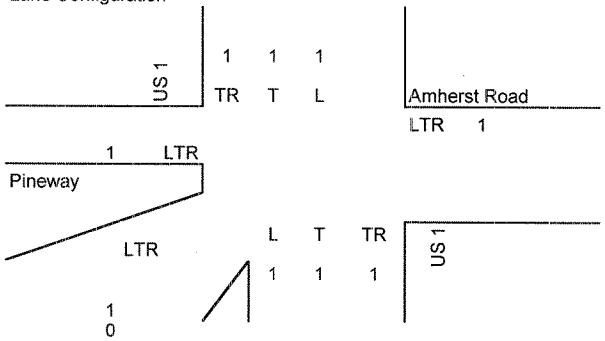
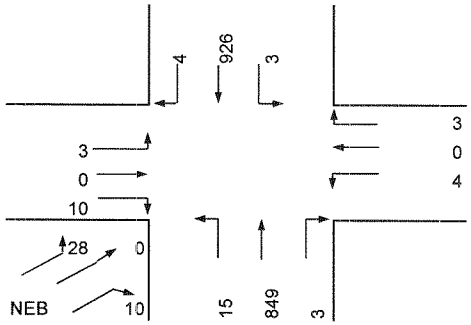
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: _____ Split: _____ Stop: _____ Ways: _____

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1.1	WB 1.1
Shared Left PCE (PM):	NB	1	SB	1	EB	1.1	WB 1.1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	12	1.00	12	6	1.00	6	18	*
WB	LTR	15	1.00	15	3	1.00	3	18	
NB	TR	1029	0.55	566	7	1.00	7	573	
SB	TR	1288	0.55	708	15	1.00	15	723	*
NEB	LTR	28	1.00	28	0	0	0	28	*

Note:

SUM 769
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	13	1.00	13	4	1.00	4	17	*
WB	LTR	7	1.00	7	3	1.00	3	10	
NB	TR	852	0.55	469	3	1.00	3	472	
SB	TR	930	0.55	512	15	1.00	15	527	*
NEB	LTR	38	1.00	38	0	0	0	38	*

Note:

SUM 582
A

Date Printed: 7/9/2012

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/North Site Access
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	5/30/2012	Analysis Year	Total Future - With CSX
Analysis Time Period	AM Peak		

Project Description Riverdale	
East/West Street: Site Access North	North/South Street: US 1
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)		670	7		1239	
Peak-Hour Factor, PHF	0.95	0.96	0.96	1.00	0.96	0.95
Hourly Flow Rate, HFR (veh/h)	0	697	7	0	1290	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		T	TR		T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						48
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	0.96
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	50
Percent Heavy Vehicles	2	0	2	0	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					R			
v (veh/h)					50			
C (m) (veh/h)					690			
v/c					0.07			
95% queue length					0.23			
Control Delay (s/veh)					10.6			
LOS					B			
Approach Delay (s/veh)	--	--	10.6					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*SK*	Intersection	*US 1/North Site Access*
Agency/Co.	*Wells + Associates*	Jurisdiction	*Prince George's County*
Date Performed	*3/31/2011*	Analysis Year	*Total Future With CSX*
Analysis Time Period	*PM Peak*		

Project Description *Riverdale*

East/West Street: *Site Access North*	North/South Street: *US 1*
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)		*1162*	*24*		*1095*	
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*1.00*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*1223*	*25*	*0*	*1152*	*0*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration		*T*	*TR*		*T*	
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						*77*
Peak-Hour Factor, PHF	*0.95*	*1.00*	*0.95*	*1.00*	*1.00*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*81*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*2*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					*R*			
v (veh/h)					*81*			
C (m) (veh/h)					*484*			
v/c					*0.17*			
95% queue length					*0.60*			
Control Delay (s/veh)					*13.9*			
LOS					*B*			
Approach Delay (s/veh)	--	--	*13.9*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information

Analyst	SK
Agency/Co.	Wells + Associates
Date Performed	3/31/2011
Analysis Time Period	SAT Peak

Site Information

Intersection	US 1/North Site Access
Jurisdiction	Prince George's County
Analysis Year	Total Future With CSX

Project Description *Riverdale*

East/West Street: *Site Access North* | North/South Street: *US 1*

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)		932	26		1278	
Peak-Hour Factor, PHF	0.95	0.95	0.95	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	981	27	0	1345	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		T	TR		T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						92
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	96
Percent Heavy Vehicles	2	0	2	0	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					R			
v (veh/h)					96			
C (m) (veh/h)					566			
v/c					0.17			
95% queue length					0.61			
Control Delay (s/veh)					12.7			
LOS					B			
Approach Delay (s/veh)	--	--	12.7					
Approach LOS	--	--	B					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/North Site Access
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	3/31/2011	Analysis Year	Total Future with CSX
Analysis Time Period	Midday Peak		

Project Description Riverdale	
East/West Street: Site Access North	North/South Street: US 1
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)		806	21		926	
Peak-Hour Factor, PHF	0.95	0.95	0.95	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	848	22	0	974	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		T	TR		T	
Upstream Signal		0			0	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						63
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	66
Percent Heavy Vehicles	2	0	2	0	0	2
Percent Grade (%)		0			0	
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					R			
v (veh/h)					66			
C (m) (veh/h)					619			
v/c					0.11			
95% queue length					0.36			
Control Delay (s/veh)					11.5			
LOS					B			
Approach Delay (s/veh)	--	--	11.5					
Approach LOS	--	--	B					

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Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 9: US 1/Van Buren/Future Site Access
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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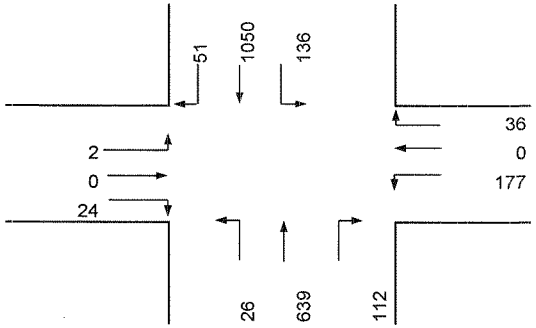
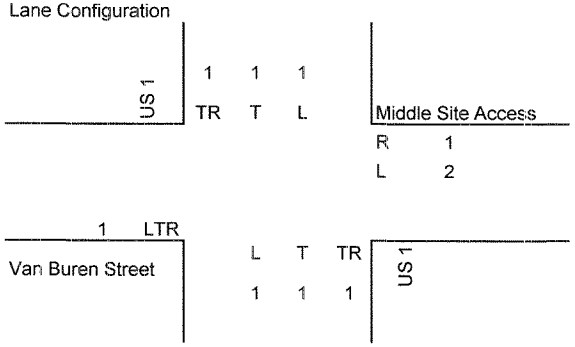
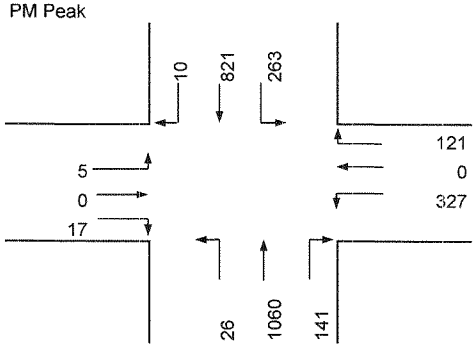
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: E/W Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	36
RTOR/Overlap (PM):	0	0	0	121
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	26	1.00	26	0	1.00	0	26	*
WB	L	177	0.60	106	0	1.00	0	106	*
NB	TR	751	0.55	413	136	1.00	136	549	
SB	TR	1101	0.55	606	26	1.00	26	632	*
Note:							SUM	764	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	22	1.00	22	0	1.00	0	22	*
WB	L	327	0.60	196	0	1.00	0	196	*
NB	TR	1201	0.55	661	263	1.00	263	924	*
SB	TR	831	0.55	457	26	1.00	26	483	
Note:							SUM	1142	
								B	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 9: US 1/Van Buren/Future Site Access
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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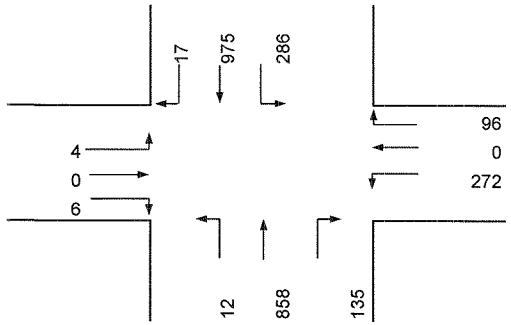
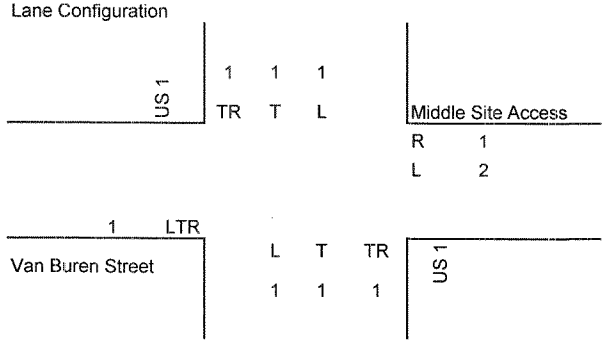
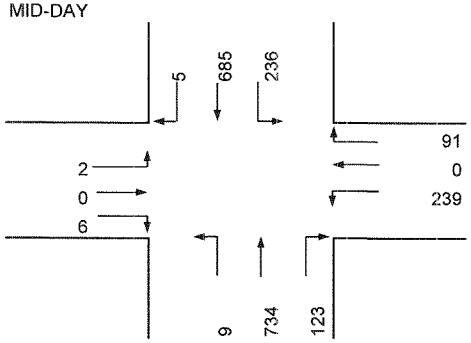
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: E/W Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 96
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 91
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
		2 lefts	0.6	F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	10	1.00	10	0	1.00	0	10	*
WB	L	272	0.60	163	0	1.00	0	163	*
NB	TR	993	0.55	546	286	1.00	286	832	*
SB	TR	992	0.55	546	12	1.00	12	558	
Note:							SUM	1005	
								B	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	LTR	8	1.00	8	0	1.00	0	8	*
WB	L	239	0.60	143	0	1.00	0	143	*
NB	TR	857	0.55	471	236	1.00	236	707	*
SB	TR	690	0.55	380	9	1.00	9	389	
Note:							SUM	858	
								A	

TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*SK*	Intersection	*US 1/South Site Access*
Agency/Co.	*Wells + Associates*	Jurisdiction	*Prince George's County*
Date Performed	*3/2/2012*	Analysis Year	*Total Future with CSX*
Analysis Time Period	*AM Peak*		

Project Description *Riverdale*

East/West Street: *Site Access South*	North/South Street: *US 1*
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)		*761*	*53*		*1252*	
Peak-Hour Factor, PHF	*0.95*	*0.96*	*0.96*	*1.00*	*0.96*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*792*	*55*	*0*	*1304*	*0*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration		*T*	*TR*		*T*	
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						*18*
Peak-Hour Factor, PHF	*0.95*	*1.00*	*0.95*	*1.00*	*1.00*	*0.96*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*18*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*2*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					*R*			
v (veh/h)					*18*			
C (m) (veh/h)					*628*			
v/c					*0.03*			
95% queue length					*0.09*			
Control Delay (s/veh)					*10.9*			
LOS					*B*			
Approach Delay (s/veh)	--	--	*10.9*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*SK*	Intersection	*US 1/South Site Access*
Agency/Co.	*Wells + Associates*	Jurisdiction	*Prince George's County*
Date Performed	*3/31/2011*	Analysis Year	*Total Future With CSX*
Analysis Time Period	*PM Peak*		

Project Description *Riverdale*

East/West Street: *Site Access South*	North/South Street: *US 1*
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)		*1176*	*150*		*1166*	
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*1.00*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*1237*	*157*	*0*	*1227*	*0*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration		*T*	*TR*		*T*	
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						*52*
Peak-Hour Factor, PHF	*0.95*	*1.00*	*0.95*	*1.00*	*1.00*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*54*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*2*
Percent Grade (%)		*0*			*0*	
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					*R*			
v (veh/h)					*54*			
C (m) (veh/h)					*439*			
v/c					*0.12*			
95% queue length					*0.42*			
Control Delay (s/veh)					*14.3*			
LOS					*B*			
Approach Delay (s/veh)	--	--	*14.3*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	*SK*	Intersection	*US 1/South Site Access*
Agency/Co.	*Wells + Associates*	Jurisdiction	*Prince George's County*
Date Performed	*3/31/2011*	Analysis Year	*Total Future with CSX*
Analysis Time Period	*SAT*		

Project Description *Riverdale*

East/West Street: *Site Access South*	North/South Street: *US 1*
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)		*945*	*152*		*1253*	
Peak-Hour Factor, PHF	*0.95*	*0.95*	*0.95*	*1.00*	*0.95*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*994*	*160*	*0*	*1318*	*0*
Percent Heavy Vehicles	*2*	--	--	*0*	--	--
Median Type	*Two Way Left Turn Lane*					
RT Channelized			*0*			*0*
Lanes	*0*	*2*	*0*	*0*	*2*	*0*
Configuration		*T*	*TR*		*T*	
Upstream Signal		*0*			*0*	

Minor Street	Eastbound			Westbound		
Movement	7	8	9	10	11	12
	L	T	R	L	T	R
Volume (veh/h)						*61*
Peak-Hour Factor, PHF	*0.95*	*1.00*	*0.95*	*1.00*	*1.00*	*0.95*
Hourly Flow Rate, HFR (veh/h)	*0*	*0*	*0*	*0*	*0*	*64*
Percent Heavy Vehicles	*2*	*0*	*2*	*0*	*0*	*2*
Percent Grade (%)	*0*			*0*		
Flared Approach		*N*			*N*	
Storage		*0*			*0*	
RT Channelized			*0*			*0*
Lanes	*0*	*0*	*0*	*0*	*0*	*1*
Configuration						*R*

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					*R*			
v (veh/h)					*64*			
C (m) (veh/h)					*514*			
v/c					*0.12*			
95% queue length					*0.42*			
Control Delay (s/veh)					*13.0*			
LOS					*B*			
Approach Delay (s/veh)	--	--	*13.0*					
Approach LOS	--	--	*B*					

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	SK	Intersection	US 1/South Site Access
Agency/Co.	Wells + Associates	Jurisdiction	Prince George's County
Date Performed	3/31/2011	Analysis Year	Total Future with CSX
Analysis Time Period	Midday Peak		

Project Description *Riverdale*

East/West Street: *Site Access South* | North/South Street: *US 1*

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)		817	123		930	
Peak-Hour Factor, PHF	0.95	0.95	0.95	1.00	0.95	0.95
Hourly Flow Rate, HFR (veh/h)	0	860	129	0	978	0
Percent Heavy Vehicles	2	--	--	0	--	--
Median Type	Two Way Left Turn Lane					
RT Channelized			0			0
Lanes	0	2	0	0	2	0
Configuration		T	TR		T	
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
Peak-Hour Factor, PHF	0.95	1.00	0.95	1.00	1.00	0.95
Hourly Flow Rate, HFR (veh/h)	0	0	0	0	0	51
Percent Heavy Vehicles	2	0	2	0	0	2
Percent Grade (%)	0			0		
Flared Approach		N			N	
Storage		0			0	
RT Channelized			0			0
Lanes	0	0	0	0	0	1
Configuration						R

Delay, Queue Length, and Level of Service

Approach	Northbound	Southbound	Westbound			Eastbound		
Movement	1	4	7	8	9	10	11	12
Lane Configuration					R			
v (veh/h)					51			
C (m) (veh/h)					573			
v/c					0.09			
95% queue length					0.29			
Control Delay (s/veh)					11.9			
LOS					B			
Approach Delay (s/veh)	--	--	11.9					
Approach LOS	--	--	B					

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Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

WELLS + ASSOCIATES
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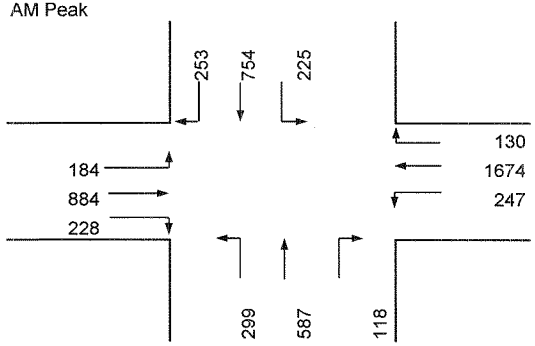
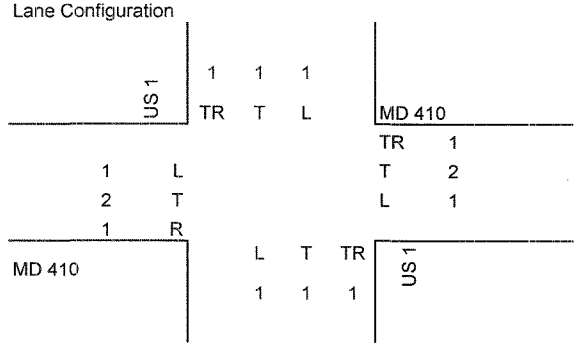
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

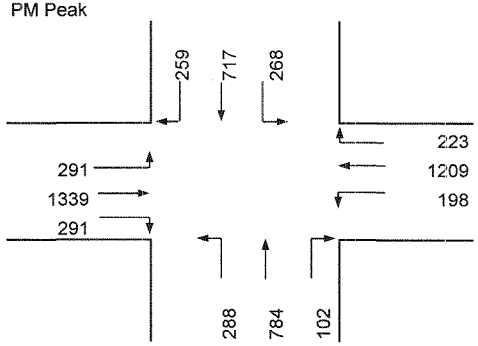
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

RTOR/Overlap (AM):	NB	0	SB	0	EB	228	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	288	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	884	0.55	486	247	1.00	247	733	
WB	TR	1804	0.37	667	184	1.00	184	851	*
NB	TR	705	0.55	388	225	1.00	225	613	
SB	TR	1007	0.55	554	299	1.00	299	853	*
Note:							SUM	1704	
								F	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1339	0.55	736	198	1.00	198	934	*
WB	TR	1432	0.37	530	291	1.00	291	821	
NB	TR	886	0.55	487	268	1.00	268	755	
SB	TR	976	0.55	537	288	1.00	288	825	*
Note:							SUM	1759	
								F	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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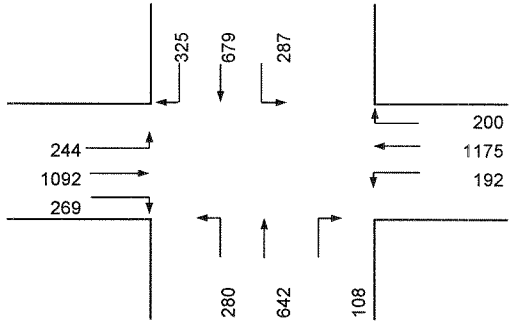
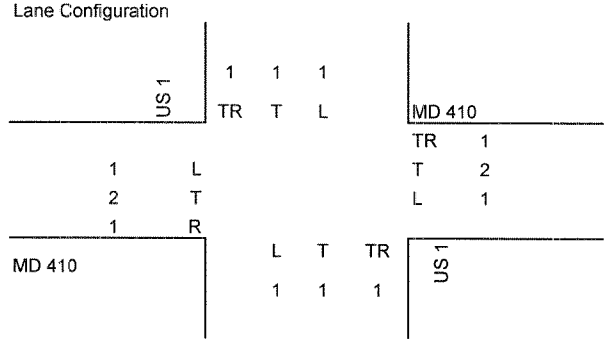
Phone: (410)266-5723 Facsimile: (410)266-9189

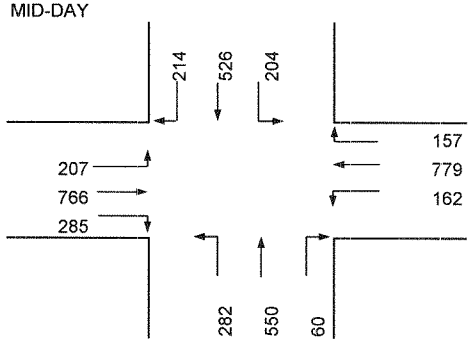
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	269	0
RTOR/Overlap (PM):	0	0	282	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1092	0.55	601	192	1.00	192	793	*
WB	TR	1375	0.37	509	244	1.00	244	753	
NB	TR	750	0.55	413	287	1.00	287	700	
SB	TR	1004	0.55	552	280	1.00	280	832	*
Note:							SUM	1625	
								F	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	766	0.55	421	162	1.00	162	583	*
WB	TR	936	0.37	346	207	1.00	207	553	
NB	TR	610	0.55	336	204	1.00	204	540	
SB	TR	740	0.55	407	282	1.00	282	689	*
Note:							SUM	1272	
								C	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future W/ CSX & W/ Improvements"
Computed by: SK

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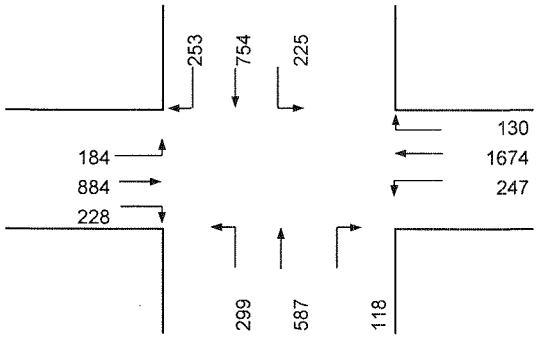
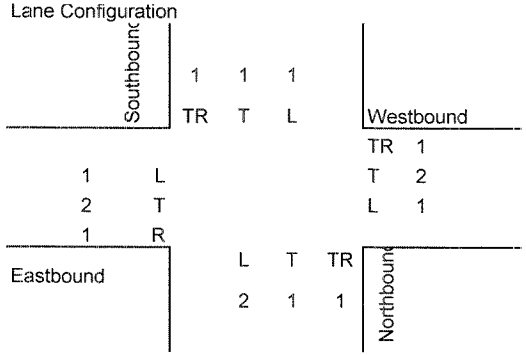
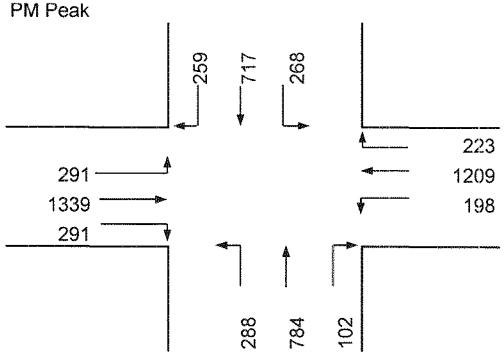
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	228	0
RTOR/Overlap (PM):	0	0	288	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	884	0.55	486	247	1.00	247	733	
WB	TR	1804	0.37	667	184	1.00	184	851	*
NB	TR	705	0.55	388	225	1.00	225	613	
SB	TR	1007	0.55	554	299	0.60	179	733	*
Note:							SUM	1584	
								E	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1339	0.55	736	198	1.00	198	934	*
WB	TR	1432	0.37	530	291	1.00	291	821	
NB	TR	886	0.55	487	268	1.00	268	755	*
SB	TR	976	0.55	537	288	0.60	173	710	
Note:							SUM	1689	
								F	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future W/ CSX & W/TFMP Improvements"
Computed by: SK

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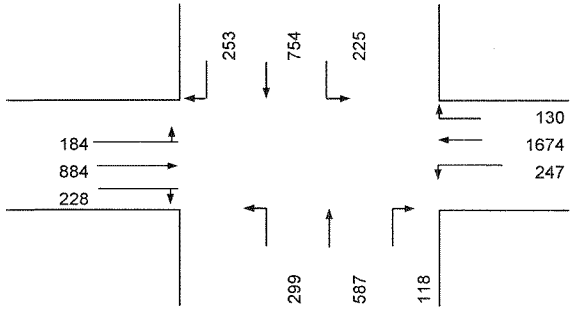
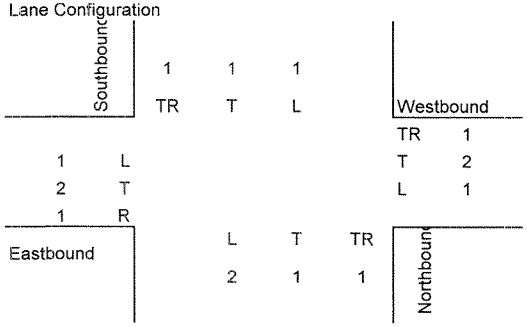
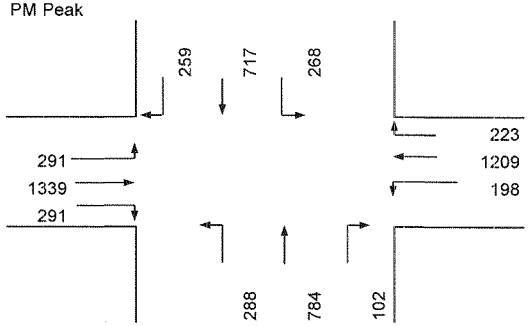
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB 0	SB 0	EB 228	WB 0
RTOR/Overlap (PM):	NB 0	SB 0	EB 288	WB 0
Shared Left PCE (AM):	NB 1	SB 1	EB 1	WB 1
Shared Left PCE (PM):	NB 1	SB 1	EB 1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume
<199	1.10	1	1.00	A : 1,000
200-599	2.00	2	0.55	B : 1,150
600-799	3.00	3	0.37	C : 1,300
800-999	4.00	4	0.29	D : 1,450
>999	5.00	5	0.25	E : 1,600
				F : 1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	884	0.55	486	247	1.00	247	733	
WB	TR	1804	0.37	667	184	1.00	184	851	*
NB	TR	705	0.55	388	225	1.00	225	613	
SB	TR	1007	0.55	554	299	0.60	179	733	*

Note:

SUM 1584
E

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1289	0.55	709	198	1.00	198	907	*
WB	TR	1432	0.37	530	291	1.00	291	821	
NB	TR	886	0.55	487	268	1.00	268	755	*
SB	TR	976	0.55	537	288	0.60	173	710	

Note: West bound thru volumes reduced by 50 vehicles and put into right turn lane (used as thru right to turn ino beall circle)

SUM 1662
F

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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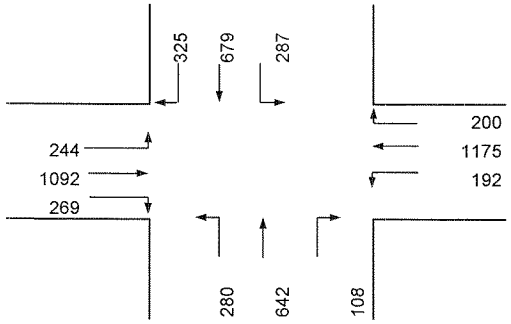
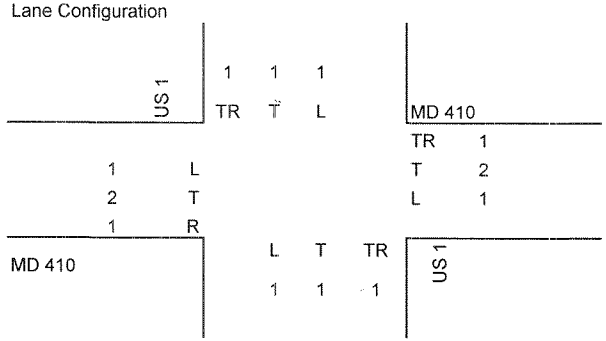
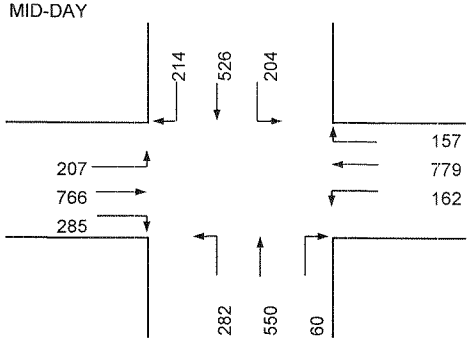
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	269	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	282	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1092	0.55	601	192	1.00	192	793	*
WB	TR	1375	0.37	509	244	1.00	244	753	
NB	TR	750	0.55	413	287	1.00	287	700	
SB	TR	1004	0.55	552	280	1.00	280	832	*

Note:

SUM 1625
F

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	766	0.55	421	162	1.00	162	583	*
WB	TR	936	0.37	346	207	1.00	207	553	
NB	TR	610	0.55	336	204	1.00	204	540	
SB	TR	740	0.55	407	282	1.00	282	689	*

Note:

SUM 1272
C

Date Printed: 7/10/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 11: US 1/MD 410
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future with CSX and W/ Improvements
Computed by: SK

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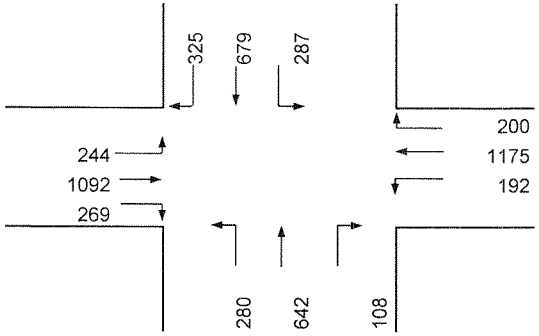
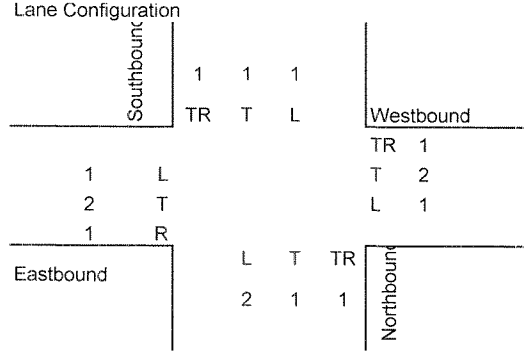
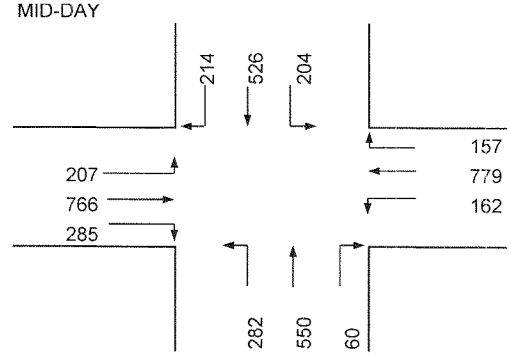
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	269	0
RTOR/Overlap (PM):	0	0	282	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	1092	0.55	601	192	1.00	192	793	*
WB	TR	1375	0.37	509	244	1.00	244	753	
NB	TR	750	0.55	413	287	1.00	287	700	
SB	TR	1004	0.55	552	280	0.60	168	720	*
Note:							SUM	1513	
								E	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	766	0.55	421	162	1.00	162	583	*
WB	TR	936	0.37	346	207	1.00	207	553	
NB	TR	610	0.55	336	204	1.00	204	540	
SB	TR	740	0.55	407	282	0.60	169	576	*
Note:							SUM	1159	
								C	

Date Printed: 7/10/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 12: US 1/Queensbury Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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170 Jennifer Road, Annapolis, Maryland 20401
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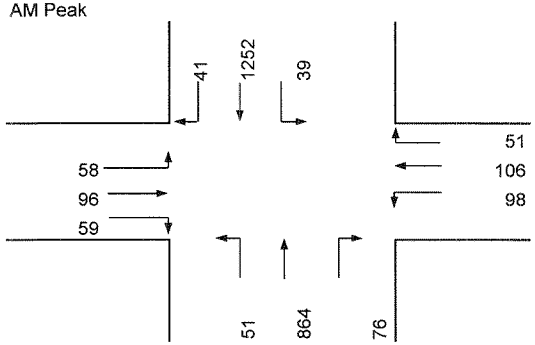
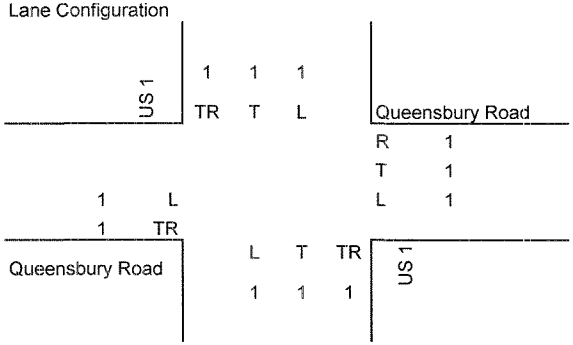
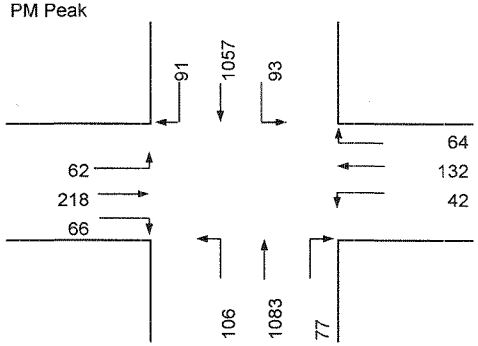
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Stop: ____
Split: ____ Ways: ____

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB	39
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB	64
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB	1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	155	1.00	155	98	1.00	98	253	*
WB	T	106	1.00	106	58	1.00	58	164	
NB	TR	940	0.55	517	39	1.00	39	556	
SB	TR	1293	0.55	711	51	1.00	51	762	*

Note: SUM 1015
B

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	284	1.00	284	42	1.00	42	326	*
WB	T	132	1.00	132	62	1.00	62	194	
NB	TR	1160	0.55	638	93	1.00	93	731	
SB	TR	1148	0.55	631	106	1.00	106	737	*

Note: SUM 1063
B

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 12: US 1/Queensbury Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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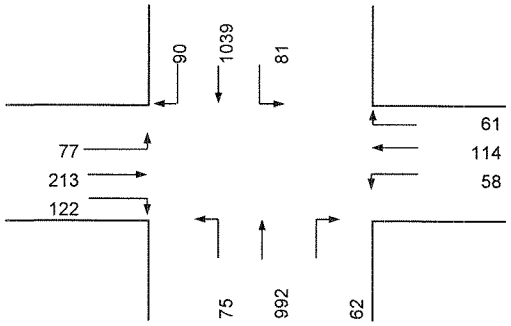
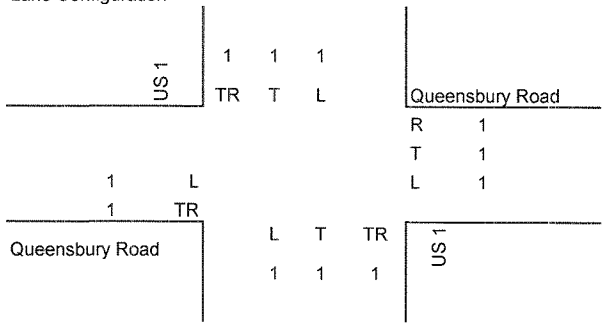
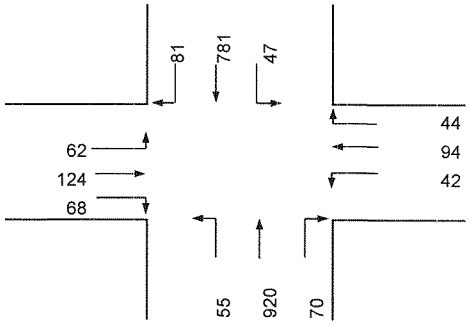
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 61
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 44
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor
<199	1.10	1	1.00
200-599	2.00	2	0.55
600-799	3.00	3	0.37
800-999	4.00	4	0.29
>999	5.00	5	0.25

Critical Lane Volume		
A	≤	1,000
B	≤	1,150
C	≤	1,300
D	≤	1,450
E	≤	1,600
F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	335	1.00	335	58	1.00	58	393	*
WB	T	114	1.00	114	77	1.00	77	191	
NB	TR	1054	0.55	580	81	1.00	81	661	
SB	TR	1129	0.55	621	75	1.00	75	696	*

Note:

SUM 1089
B

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	192	1.00	192	42	1.00	42	234	*
WB	T	94	1.00	94	62	1.00	62	156	
NB	TR	990	0.55	545	47	1.00	47	592	*
SB	TR	862	0.55	474	55	1.00	55	529	

Note:

SUM 826
A

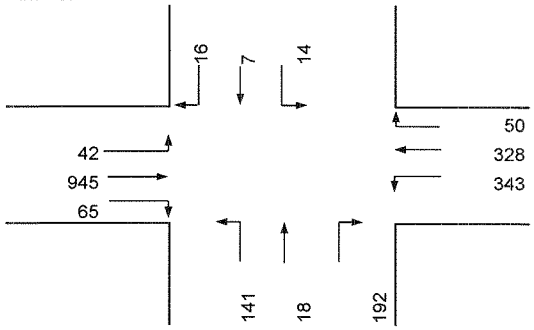
Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

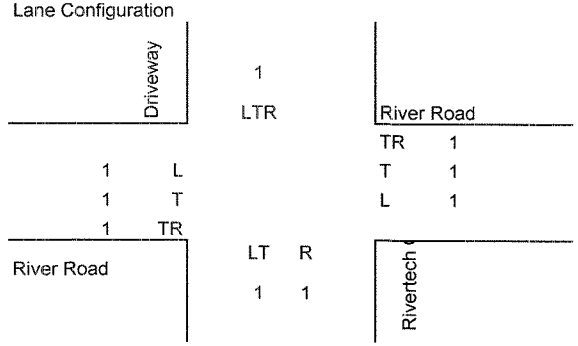
Intersection: 13. River Road/River Tech Ct
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

WELLS + ASSOCIATES
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
170 Jennifer Road, Annapolis, Maryland 20401
Phone: (410)266-5723 Facsimile: (410)266-9189

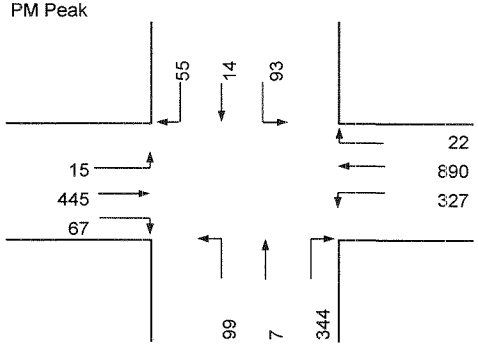
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: X Stop: X Ways: NS

RTOR/Overlap (AM):	NB	0	SB	0	EB	0	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	1010	0.55	556	343	1.00	343	899	*
WB	TR	378	0.55	208	42	1.00	42	250	
NB	TL	159	1.00	159	14	1.00	14	173	
SB	LTR	37	1.00	37	141	1.00	141	178	*
							SUM	1077	
								B	

Note:
Spacing available to accommodate two lanes on north bound

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	512	0.55	282	327	1.00	327	609	*
WB	TR	912	0.55	502	15	1.00	15	517	
NB	TL	106	1.00	106	93	1.00	93	199	
SB	LTR	162	1.00	162	99	1.00	99	261	*
							SUM	870	
								A	

Note:

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 13. River Road/River Tech Ct
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future
Computed by: SK

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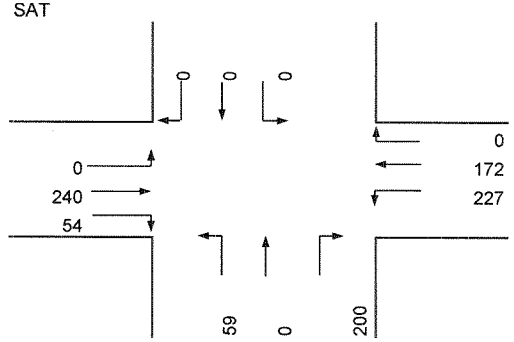
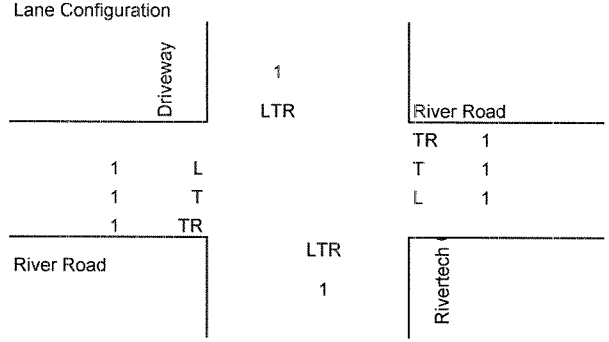
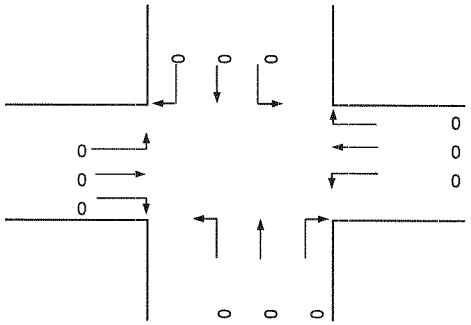
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	0	0	0	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	294	1.00	294	227	1.00	227	521	*
WB	TR	172	1.00	172	0	1.00	0	172	
NB	LTR	259	0.55	142	0	1.00	0	142	*
SB	LTR	0	0.55	0	59	1.00	59	59	

Note:

SUM 663
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TR	0	1.00	0	0	1.00	0	0	*
WB	TR	0	1.00	0	0	1.00	0	0	
NB	LTR	0	0.55	0	0	1.00	0	0	*
SB	LTR	0	0.55	0	0	1.00	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 14. River Road at Paint Branch Pkwy
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

WELLS + ASSOCIATES
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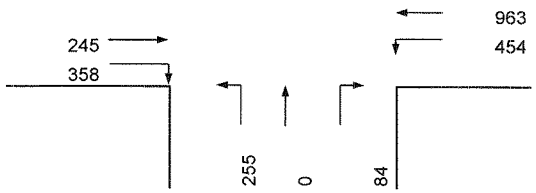
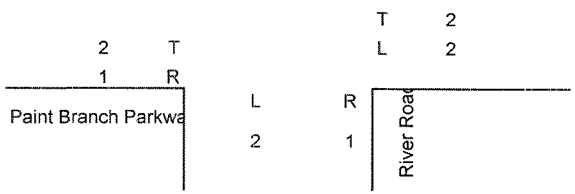
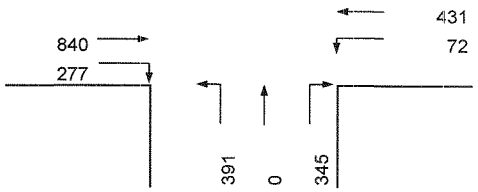
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: Stop: Ways:

RTOR/Overlap (AM):	NB	84	SB	0	EB	255	WB 0
RTOR/Overlap (PM):	NB	72	SB	0	EB	277	WB 0
Shared Left PCE (AM):	NB	1	SB	1	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	245	0.55	135	454	0.60	272	407	
WB	T	963	0.55	530	0	1.00	0	530	*
NB	L	255	0.60	153	0	1.00	0	153	*
Note:							SUM	683	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	840	0.55	462	72	0.60	43	505	*
WB	T	431	0.55	237	0	1.00	0	237	
NB	L	391	0.60	235	0	1.00	0	235	*
Note:							SUM	740	
								A	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 14. River Road at Paint Branch Pkwy
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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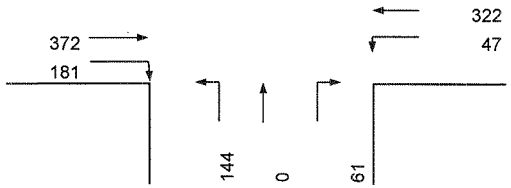
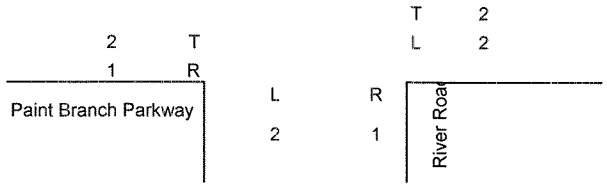
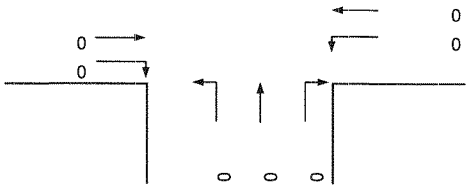
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: Stop: Ways:

	NB	SB	EB	WB
RTOR/Overlap (AM):	47	0	144	0
RTOR/Overlap (PM):	0	0	0	0
Shared Left PCE (AM):	1	1	1	1
Shared Left PCE (PM):	1	1	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	372	0.55	205	47	0.60	28	233	*
WB	T	322	0.55	177	0	1.00	0	177	
NB	L	144	0.60	86	0	1.00	0	86	*
Note:							SUM	319	
								A	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	T	0	0.55	0	0	0.60	0	0	*
WB	T	0	0.55	0	0	1.00	0	0	
NB	L	0	0.60	0	0	1.00	0	0	*
Note:								SUM	0

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 15: Kenilworth Road/River Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

WELLS + ASSOCIATES
TRANSPORTATION, TRAFFIC, AND PARKING CONSULTANTS
170 Jennifer Road, Annapolis, Maryland 20401
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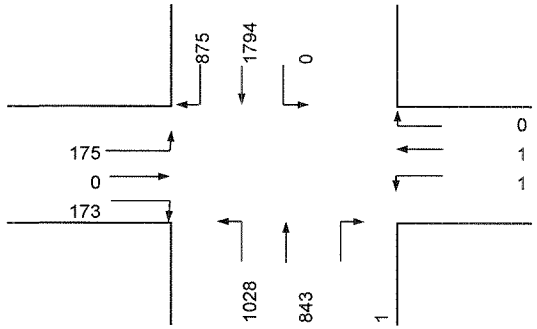
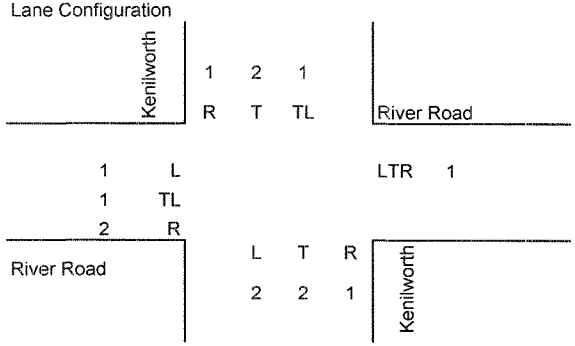
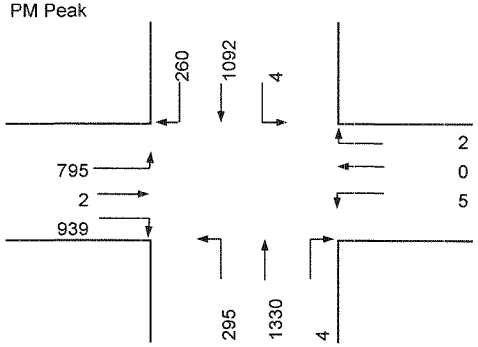
AM Peak



Lane Configuration



PM Peak



Intersection Control: Signal: X Split: X Stop: Ways: E/W

	NB	SB	EB	WB
RTOR/Overlap (AM):	1	175	173	0
RTOR/Overlap (PM):	4	260	295	0
Shared Left PCE (AM):	1	4	1	1
Shared Left PCE (PM):	1	5	1	1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	175	0.60	105	0	1.00	0	105	*
WB	LTR	2	1.00	2	0	1.00	0	2	*
NB	T	843	0.55	464	0	1.00	0	464	
SB	TL	1794	0.37	664	1028	0.60	617	1281	*
Note:							SUM	1388	
								D	

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	797	0.60	478	0	1.00	0	478	*
WB	LTR	7	1.00	7	0	1.00	0	7	*
NB	T	1330	0.55	732	4	1.00	4	736	*
SB	TL	1112	0.37	411	295	0.60	177	588	
Note:							SUM	1221	
								C	

Date Printed: 7/9/2012

Cafritz Property at Riverdale Park
Critical Lane Volue
Level of Service Calculations

Intersection: 15: Kenilworth Road/River Road
Jurisdiction: Prince George's County
Scenario/Design Year: Total Future With CSX
Computed by: SK

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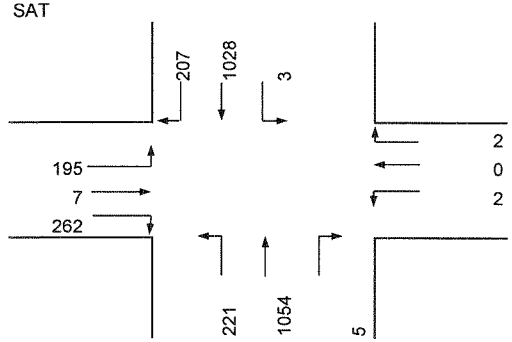
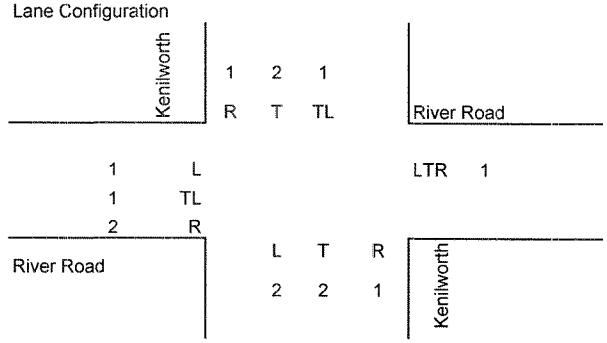
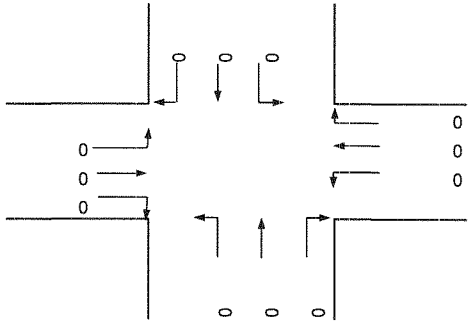
SAT



Lane Configuration



MID-DAY



Intersection Control: Signal: X Split: X Stop: Ways: E/W

RTOR/Overlap (AM):	NB	2	SB	195	EB	221	WB 0
RTOR/Overlap (PM):	NB	0	SB	0	EB	0	WB 0
Shared Left PCE (AM):	NB	1	SB	5	EB	1	WB 1
Shared Left PCE (PM):	NB	1	SB	1.1	EB	1	WB 1

Opposing Volume	PCE	Number of Lanes	Lane Use Factor	Critical Lane Volume		
<199	1.10	1	1.00	A	≤	1,000
200-599	2.00	2	0.55	B	≤	1,150
600-799	3.00	3	0.37	C	≤	1,300
800-999	4.00	4	0.29	D	≤	1,450
>999	5.00	5	0.25	E	≤	1,600
				F	>	1,600

Phase	Movemen	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	202	0.60	121	0	1.00	0	121	*
WB	LTR	4	1.00	4	0	1.00	0	4	*
NB	T	1054	0.55	580	3	1.00	3	583	*
SB	TL	1043	0.37	386	221	0.60	133	519	

Note:

SUM 708
A

Phase	Movement	Volume	Lane Use Factor	Lane Volume	Opposing Lefts	Lane Use Factor	Opposing Volume	Critical Lane Volume	*
EB	TL	0	0.60	0		1.00	0	0	*
WB	LTR	0	1.00	0		1.00	0	0	*
NB	T	0	0.55	0	0	1.00	0	0	*
SB	TL	0	0.37	0	0	0.60	0	0	

Note:

SUM 0

Date Printed: 7/9/2012

ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	AM Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	Total Future with csx

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	12	119	4	177	226	7
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	3	3	55	4	3	5
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	141		430		63		12	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.4		0.0		0.3	
Prop. Right-Turns	0.0		0.0		0.9		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.1		-0.5		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.13		0.38		0.06		0.01	
hd, final value (s)	4.58		4.36		4.71		5.14	
x, final value	0.18		0.52		0.08		0.02	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.6		2.4		2.7		3.1	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	391		680		313		262	
Delay (s/veh)	8.58		11.99		8.13		8.23	
LOS	A		B		A		A	
Approach: Delay (s/veh)	8.58		11.99		8.13		8.23	
LOS	A		B		A		A	
Intersection Delay (s/veh)	10.80							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*sk*
Agency/Co.	*Wells and Associates*
Date Performed	*2/25/2012*
Analysis Time Period	*PM Peak*

Site Information

Intersection	*Rhode Island and Queens Bury*
Jurisdiction	*Prince Georges County*
Analysis Year	*Total Future With csx*

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	13	300	10	54	173	13
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	22	5	205	13	8	30
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	338		251		243		52	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.0		0.2		0.1		0.3	
Prop. Right-Turns	0.0		0.1		0.9		0.6	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.5		-0.3	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.30		0.22		0.22		0.05	
hd, final value (s)	5.10		5.25		5.05		5.61	
x, final value	0.48		0.37		0.34		0.08	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	3.1		3.2		3.0		3.6	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	588		501		493		302	
Delay (s/veh)	12.71		11.24		10.64		9.11	
LOS	B		B		B		A	
Approach: Delay (s/veh)	12.71		11.24		10.64		9.11	
LOS	B		B		B		A	
Intersection Delay (s/veh)	11.51							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	*sk*
Agency/Co.	*Wells and Associates*
Date Performed	*2/25/2012*
Analysis Time Period	*SAT Peak*

Site Information

Intersection	*Rhode Island and Queens Bury*
Jurisdiction	*Prince Georges County*
Analysis Year	*Total Future with csx*

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	18	248	7	33	166	17
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	7	7	40	15	7	16
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	286		225		56		38	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.2		0.1		0.4	
Prop. Right-Turns	0.0		0.1		0.8		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.4		-0.1	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.25		0.20		0.05		0.03	
hd, final value (s)	4.42		4.47		4.72		5.00	
x, final value	0.35		0.28		0.07		0.05	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.4		2.5		2.7		3.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	536		475		306		288	
Delay (s/veh)	9.79		9.20		8.10		8.28	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.79		9.20		8.10		8.28	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.32							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	sk
Agency/Co.	Wells and Associates
Date Performed	2/25/2012
Analysis Time Period	Mid Day Peak

Site Information

Intersection	Rhode Island and Queens Bury
Jurisdiction	Prince Georges County
Analysis Year	Total Future with CSX

Project ID *Cafritz*

East/West Street: *Queensbury* North/South Street: *Rhode Island*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	13	172	3	32	144	15
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	2	4	57	11	6	13
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.95		0.95		0.95		0.95	
Flow Rate (veh/h)	197		199		66		30	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.1		0.2		0.0		0.4	
Prop. Right-Turns	0.0		0.1		0.9		0.4	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	0.0		0.0		-0.5		-0.2	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.18		0.18		0.06		0.03	
hd, final value (s)	4.38		4.36		4.33		4.73	
x, final value	0.24		0.24		0.08		0.04	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.4		2.4		2.3		2.7	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	447		449		316		280	
Delay (s/veh)	8.75		8.74		7.70		7.92	
LOS	A		A		A		A	
Approach: Delay (s/veh)	8.75		8.74		7.70		7.92	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.55							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	AM Peak

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Total Future

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	42	45	47	0	11	0
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	140	22	5	0	10	178
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.92		0.92		0.92		0.92	
Flow Rate (veh/h)	144		11		180		203	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.3		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.0		0.0		1.0	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.0		0.2		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.13		0.01		0.16		0.18	
hd, final value (s)	4.65		4.99		4.68		3.96	
x, final value	0.19		0.02		0.23		0.22	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.7		3.0		2.7		2.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	394		261		430		453	
Delay (s/veh)	8.71		8.06		9.10		8.10	
LOS	A		A		A		A	
Approach: Delay (s/veh)	8.71		8.06		9.10		8.10	
LOS	A		A		A		A	
Intersection Delay (s/veh)	8.60							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	PM Peak

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Total Future

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	180	112	200	0	34	3
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	103	23	11	4	14	90
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.96		0.96		0.96		0.96	
Flow Rate (veh/h)	511		38		141		111	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.1		0.1		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		-0.0		0.1		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.45		0.03		0.13		0.10	
hd, final value (s)	4.52		5.24		5.55		5.01	
x, final value	0.64		0.06		0.22		0.15	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.5		3.2		3.5		3.0	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	761		288		391		361	
Delay (s/veh)	15.21		8.55		10.08		8.93	
LOS	C		A		B		A	
Approach: Delay (s/veh)	15.21		8.55		10.08		8.93	
LOS	C		A		B		A	
Intersection Delay (s/veh)	13.12							
Intersection LOS	B							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	SAT

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Total Future

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	62	68	162	2	41	1
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	117	12	3	2	8	40
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.88		0.88		0.88		0.88	
Flow Rate (veh/h)	331		49		148		56	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.2		0.0		0.9		0.0	
Prop. Right-Turns	0.6		0.0		0.0		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.3		0.0		0.2		-0.4	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.29		0.04		0.13		0.05	
hd, final value (s)	4.23		4.83		5.04		4.54	
x, final value	0.39		0.07		0.21		0.07	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.2		2.8		3.0		2.5	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	581		299		398		306	
Delay (s/veh)	9.90		8.17		9.35		7.88	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.90		8.17		9.35		7.88	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.42							
Intersection LOS	A							

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ALL-WAY STOP CONTROL ANALYSIS

General Information

Analyst	SK
Agency/Co.	Wells & Associates
Date Performed	5/30/2012
Analysis Time Period	Mid day

Site Information

Intersection	Queens Bury Rd/Lafayette Ave.
Jurisdiction	Prince Georges County
Analysis Year	Total Future With CSX

Project ID *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Rd* North/South Street: *Lafayette Ave*

Volume Adjustments and Site Characteristics

Approach	Eastbound			Westbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	101	54	93	1	31	0
%Thrus Left Lane						

Approach	Northbound			Southbound		
Movement	L	T	R	L	T	R
Volume (veh/h)	104	24	4	1	9	55
%Thrus Left Lane						

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Configuration	LTR		LTR		LTR		LTR	
PHF	0.89		0.89		0.89		0.89	
Flow Rate (veh/h)	277		35		146		72	
% Heavy Vehicles	2		2		2		2	
No. Lanes	1		1		1		1	
Geometry Group	1		1		1		1	
Duration, T	0.25							

Saturation Headway Adjustment Worksheet

Prop. Left-Turns	0.4		0.0		0.8		0.0	
Prop. Right-Turns	0.4		0.0		0.0		0.8	
Prop. Heavy Vehicle	0.0		0.0		0.0		0.0	
hLT-adj	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
hRT-adj	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6	-0.6
hHV-adj	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
hadj, computed	-0.1		0.0		0.2		-0.5	

Departure Headway and Service Time

hd, initial value (s)	3.20		3.20		3.20		3.20	
x, initial	0.25		0.03		0.13		0.06	
hd, final value (s)	4.38		4.81		4.90		4.36	
x, final value	0.34		0.05		0.20		0.09	
Move-up time, m (s)	2.0		2.0		2.0		2.0	
Service Time, t_s (s)	2.4		2.8		2.9		2.4	

Capacity and Level of Service

	Eastbound		Westbound		Northbound		Southbound	
	L1	L2	L1	L2	L1	L2	L1	L2
Capacity (veh/h)	527		285		396		322	
Delay (s/veh)	9.58		8.04		9.11		7.77	
LOS	A		A		A		A	
Approach: Delay (s/veh)	9.58		8.04		9.11		7.77	
LOS	A		A		A		A	
Intersection Delay (s/veh)	9.10							
Intersection LOS	A							

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Total Future W/CSX
Analysis Time Period	AM Peak		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	40	1	0	11	1
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	0	43	1	0	11	1
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)	1	0	0	4	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	4	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	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		1			4	
C (m) (veh/h)	1607	1564		941			941	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.00			0.01	
Control Delay (s/veh)	7.2	7.3		8.8			8.8	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	8.8			8.8		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Total Future W/CSX
Analysis Time Period	PM Peak		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	100	0	0	40	16
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	108	0	0	43	17
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)	1	0	0	11	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	11	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	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	0		1			11	
C (m) (veh/h)	1544	1483		803			803	
v/c	0.00	0.00		0.00			0.01	
95% queue length	0.00	0.00		0.00			0.04	
Control Delay (s/veh)	7.3	7.4		9.5			9.5	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.5			9.5		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Total Future W/CSX
Analysis Time Period	SAT		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	70	0	0	40	5
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	2	76	0	0	43	5
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)	1	0	0	4	0	0
Peak-Hour Factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Hourly Flow Rate, HFR (veh/h)	1	0	0	4	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	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)	2	0		1			4	
C (m) (veh/h)	1559	1523		847			847	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.00			0.01	
Control Delay (s/veh)	7.3	7.4		9.3			9.3	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.3			9.3		
Approach LOS	--	--	A			A		

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TWO-WAY STOP CONTROL SUMMARY

General Information		Site Information	
Analyst	sk	Intersection	Queensbury Rd/Natoli Place
Agency/Co.	Wells and Associates	Jurisdiction	Prince Georges County
Date Performed	5/30/2012	Analysis Year	Total Future W/CSX
Analysis Time Period	SAT		

Project Description *Cafritz Property at Riverdale Park*

East/West Street: *Queens Bury Road* | North/South Street: *Natoli Place*

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	52	0	1	36	6
Peak-Hour Factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	0	65	0	1	45	7
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	2	1	2	0	0
Peak-Hour Factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Hourly Flow Rate, HFR (veh/h)	0	2	1	2	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	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	1		3			2	
C (m) (veh/h)	1554	1537		834			858	
v/c	0.00	0.00		0.00			0.00	
95% queue length	0.00	0.00		0.01			0.01	
Control Delay (s/veh)	7.3	7.3		9.3			9.2	
LOS	A	A		A			A	
Approach Delay (s/veh)	--	--	9.3			9.2		
Approach LOS	--	--	A			A		

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Appendix I

Signal Warrant Analysis
Existing US 1/Van Buren Intersection Data
(Vehicle and Pedestrian Counts)

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles (1-Hour Interval)

PROJECT: US Route 1 & Van Buren St. Signal Warrant
W+A JOB NO: 5404
INTERSECTION: US Route 1 & Van Buren St.
LOCATION: Prince Georges County,MD

DATE: 11/8/2011
DAY: Tuesday
WEATHER: clear
COUNTED BY: Majda & Di
INPUTED BY: agan

SOUTHBOUND ROAD: Baltimore Avenue - 1
NORTHBOUND ROAD: Baltimore Avenue - 1
WESTBOUND ROAD: 0
EASTBOUND ROAD: Van Buren Street

Time	Southbound Baltimore Avenue - 1				Northbound Baltimore Avenue - 1					Eastbound Van Buren Street				North & South	East & West	Total
Period	Right	Thru	Total	PHF	Right	Thru	Left	Total	PHF	Right	Left	Total	PHF			
One Hour Volumes																
6:00 AM - 7:00 AM	5	506	511	0.63		309	4	313	0.73	13	2	15	0.42	824	15	839
6:15 AM - 7:15 AM	9	679	688	0.68		355	5	360	0.84	16	2	18	0.50	1048	18	1066
6:30 AM - 7:30 AM	23	859	882	0.77		412	9	421	0.88	20	2	22	0.61	1303	22	1325
6:45 AM - 7:45 AM	31	972	1003	0.87		479	18	497	0.75	23	1	24	0.67	1500	24	1524
7:00 AM - 8:00 AM	44	996	1040	0.90		527	27	554	0.84	23	1	24	0.67	1594	24	1618
7:15 AM - 8:15 AM	51	989	1040	0.90		559	26	585	0.89	24	2	26	0.72	1625	26	1651
7:30 AM - 8:30 AM	45	942	987	0.96		583	22	605	0.92	24	3	27	0.75	1592	27	1619
7:45 AM - 8:45 AM	40	915	955	0.94		577	15	592	0.90	21	3	24	0.67	1547	24	1571
8:00 AM - 9:00 AM	26	879	905	0.89		578	8	586	0.93	20	2	22	0.79	1491	22	1513
8:15 AM - 9:15 AM	16	826	842	0.90		611	11	622	0.90	19	2	21	0.75	1464	21	1485
8:30 AM - 9:30 AM	16	760	776	0.86		648	12	660	0.93	16	1	17	0.61	1436	17	1453
8:45 AM - 9:45 AM	12	683	695	0.91		665	12	677	0.95	19	1	20	0.71	1372	20	1392
9:00 AM - 10:00 AM	12	627	639	0.84		657	9	666	0.94	18	1	19	0.79	1305	19	1324
9:15 AM - 10:15 AM	12	584	596	0.88		617	5	622	0.87	15		15	0.63	1218	15	1233
9:30 AM - 10:30 AM	5	567	572	0.97		615	7	622	0.87	15		15	0.63	1194	15	1209
9:45 AM - 10:45 AM	7	564	571	0.97		611	8	619	0.87	11		11	0.46	1190	11	1201
10:00 AM - 11:00 AM	5	556	561	0.95		627	8	635	0.89	9	1	10	0.50	1196	10	1206
10:15 AM - 11:15 AM	8	561	569	0.92		647	11	658	0.92	11	2	13	0.65	1227	13	1240
10:30 AM - 11:30 AM	8	544	552	0.89		634	9	643	0.97	16	2	18	0.64	1195	18	1213
10:45 AM - 11:45 AM	7	542	549	0.89		658	8	666	0.88	15	2	17	0.61	1215	17	1232
11:00 AM - 12:00 PM	6	569	575	0.93		663	12	675	0.89	16	1	17	0.61	1250	17	1267
11:15 AM - 12:15 PM	3	574	577	0.92		701	10	711	0.94	18	1	19	0.68	1288	19	1307
11:30 AM - 12:30 PM	3	603	606	0.96		714	12	726	0.96	11	1	12	0.50	1332	12	1344
11:45 AM - 12:45 PM	3	677	680	0.79		683	13	696	0.93	11	2	13	0.54	1376	13	1389
12:00 PM - 1:00 PM	5	701	706	0.82		676	9	685	0.92	6	2	8	0.33	1391	8	1399
12:15 PM - 1:15 PM	7	708	715	0.83		654	11	665	0.93	3	1	4	0.50	1380	4	1384
12:30 PM - 1:30 PM	11	715	726	0.84		637	11	648	0.97	4	1	5	0.63	1374	5	1379
12:45 PM - 1:45 PM	12	651	663	0.94		672	11	683	0.88	7		7	0.44	1346	7	1353
1:00 PM - 2:00 PM	14	660	674	0.90		674	15	689	0.89	7	1	8	0.50	1363	8	1371
1:15 PM - 2:15 PM	14	663	677	0.90		660	21	681	0.88	10	1	11	0.55	1358	11	1369
1:30 PM - 2:30 PM	13	672	685	0.91		662	17	679	0.88	10	1	11	0.55	1364	11	1375
1:45 PM - 2:45 PM	12	708	720	0.96		663	20	683	0.86	7	1	8	0.40	1403	8	1411
2:00 PM - 3:00 PM	12	690	702	0.94		682	17	699	0.88	10		10	0.50	1401	10	1411
2:15 PM - 3:15 PM	12	690	702	0.94		730	12	742	0.92	7	1	8	0.67	1444	8	1452
2:30 PM - 3:30 PM	11	707	718	0.93		765	15	780	0.97	11	1	12	0.60	1498	12	1510
2:45 PM - 3:45 PM	11	695	706	0.92		743	10	753	0.93	14	1	15	0.75	1459	15	1474
3:00 PM - 4:00 PM	7	718	725	0.94		754	15	769	0.95	18	2	20	0.63	1494	20	1514
3:15 PM - 4:15 PM	6	723	729	0.95		740	15	755	0.95	17	1	18	0.56	1484	18	1502
3:30 PM - 4:30 PM	7	728	735	0.93		744	15	759	0.94	15	1	16	0.50	1494	16	1510
3:45 PM - 4:45 PM	10	748	758	0.96		782	20	802	0.94	14	1	15	0.47	1560	15	1575
4:00 PM - 5:00 PM	13	757	770	0.96		826	20	846	0.87	9		9	0.75	1616	9	1625
4:15 PM - 5:15 PM	13	825	838	0.87		863	20	883	0.91	14		14	0.58	1721	14	1735
4:30 PM - 5:30 PM	17	867	884	0.91		863	21	884	0.91	16		16	0.67	1768	16	1784
4:45 PM - 5:45 PM	15	908	923	0.95		878	23	901	0.93	15		15	0.63	1824	15	1839
5:00 PM - 6:00 PM	16	929	945	0.97		903	22	925	0.87	16		16	0.67	1870	16	1886
5:15 PM - 6:15 PM	16	909	925	0.95		929	22	951	0.89	13		13	0.65	1876	13	1889
5:30 PM - 6:30 PM	9	878	887	0.94		965	24	989	0.93	12	2	14	0.58	1876	14	1890
5:45 PM - 6:45 PM	10	842	852	0.96		992	26	1018	0.95	17	5	22	0.55	1870	22	1892
6:00 PM - 7:00 PM	9	820	829	0.94		963	22	985	0.95	14	6	20	0.50	1814	20	1834

AM and PM Peak Hour

Wells + Associates, Inc.

McLean, Virginia

Turning Movement Count - Total Vehicles (15-Minute Interval)

PROJECT:	US Route 1 & Van Buren St. Signal Warrant	**DATE:**	11/8/2011	**SOUTHBOUND ROAD:**	Baltimore Avenue - 1
W+A JOB NO:	5404	**DAY:**	Tuesday	**NORTHBOUND ROAD:**	Baltimore Avenue - 1
INTERSECTION:	US Route 1 & Van Buren St.	**WEATHER:**	clear	**WESTBOUND ROAD:**	0
LOCATION:	Prince Georges County,MD	**COUNTED BY:**	Majda & Di	**EASTBOUND ROAD:**	Van Buren Street
		INPUTED BY:	agan		

Time Period	Southbound Baltimore Avenue - 1				Northbound Baltimore Avenue - 1					Eastbound Van Buren Street				North & South	East & West	Total
	Right	Thru	Total	PHF	Right	Thru	Left	Total	PHF	Right	Left	Total	PHF			
15 Minute Volumes																
6:00 AM - 6:15 AM	0	76	76			57	1	58		1	0	1		134	1	135
6:15 AM - 6:30 AM	0	94	94			58	1	59		1	0	1		153	1	154
6:30 AM - 6:45 AM	1	136	137			89	0	89		3	1	4		226	4	230
6:45 AM - 7:00 AM	4	200	204			105	2	107		8	1	9		311	9	320
7:00 AM - 7:15 AM	4	249	253			103	2	105		4	0	4		358	4	362
7:15 AM - 7:30 AM	14	274	288			115	5	120		5	0	5		408	5	413
7:30 AM - 7:45 AM	9	249	258			156	9	165		6	0	6		423	6	429
7:45 AM - 8:00 AM	17	224	241			153	11	164		8	1	9		405	9	414
8:00 AM - 8:15 AM	11	242	253			135	1	136		5	1	6		389	6	395
8:15 AM - 8:30 AM	8	227	235			139	1	140		5	1	6		375	6	381
8:30 AM - 8:45 AM	4	222	226			150	2	152		3	0	3		378	3	381
8:45 AM - 9:00 AM	3	188	191			154	4	158		7	0	7		349	7	356
9:00 AM - 9:15 AM	1	189	190			168	4	172		4	1	5		362	5	367
9:15 AM - 9:30 AM	8	161	169			176	2	178		2	0	2		347	2	349
9:30 AM - 9:45 AM	0	145	145			167	2	169		6	0	6		314	6	320
9:45 AM - 10:00 AM	3	132	135			146	1	147		6	0	6		282	6	288
10:00 AM - 10:15 AM	1	146	147			128	0	128		1	0	1		275	1	276
10:15 AM - 10:30 AM	1	144	145			174	4	178		2	0	2		323	2	325
10:30 AM - 10:45 AM	2	142	144			163	3	166		2	0	2		310	2	312
10:45 AM - 11:00 AM	1	124	125			162	1	163		4	1	5		288	5	293
11:00 AM - 11:15 AM	4	151	155			148	3	151		3	1	4		306	4	310
11:15 AM - 11:30 AM	1	127	128			161	2	163		7	0	7		291	7	298
11:30 AM - 11:45 AM	1	140	141			187	2	189		1	0	1		330	1	331
11:45 AM - 12:00 PM	0	151	151			167	5	172		5	0	5		323	5	328
12:00 PM - 12:15 PM	1	156	157			186	1	187		5	1	6		344	6	350
12:15 PM - 12:30 PM	1	156	157			174	4	178		0	0			335		335
12:30 PM - 12:45 PM	1	214	215			156	3	159		1	1	2		374	2	376
12:45 PM - 1:00 PM	2	175	177			160	1	161		0	0			338		338
1:00 PM - 1:15 PM	3	163	166			164	3	167		2	0	2		333	2	335
1:15 PM - 1:30 PM	5	163	168			157	4	161		1	0	1		329	1	330
1:30 PM - 1:45 PM	2	150	152			191	3	194		4	0	4		346	4	350
1:45 PM - 2:00 PM	4	184	188			162	5	167		0	1	1		355	1	356
2:00 PM - 2:15 PM	3	166	169			150	9	159		5	0	5		328	5	333
2:15 PM - 2:30 PM	4	172	176			159	0	159		1	0	1		335	1	336
2:30 PM - 2:45 PM	1	186	187			192	6	198		1	0	1		385	1	386
2:45 PM - 3:00 PM	4	166	170			181	2	183		3	0	3		353	3	356
3:00 PM - 3:15 PM	3	166	169			198	4	202		2	1	3		371	3	374
3:15 PM - 3:30 PM	3	189	192			194	3	197		5	0	5		389	5	394
3:30 PM - 3:45 PM	1	174	175			170	1	171		4	0	4		346	4	350
3:45 PM - 4:00 PM	0	189	189			192	7	199		7	1	8		388	8	396
4:00 PM - 4:15 PM	2	171	173			184	4	188		1	0	1		361	1	362
4:15 PM - 4:30 PM	4	194	198			198	3	201		3	0	3		399	3	402
4:30 PM - 4:45 PM	4	194	198			208	6	214		3	0	3		412	3	415
4:45 PM - 5:00 PM	3	198	201			236	7	243		2	0	2		444	2	446
5:00 PM - 5:15 PM	2	239	241			221	4	225		6	0	6		466	6	472
5:15 PM - 5:30 PM	8	236	244			198	4	202		5	0	5		446	5	451
5:30 PM - 5:45 PM	2	235	237			223	8	231		2	0	2		468	2	470
5:45 PM - 6:00 PM	4	219	223			261	6	267		3	0	3		490	3	493
6:00 PM - 6:15 PM	2	219	221			247	4	251		3	0	3		472	3	475
6:15 PM - 6:30 PM	1	205	206			234	6	240		4	2	6		446	6	452
6:30 PM - 6:45 PM	3	199	202			250	10	260		7	3	10		462	10	472
6:45 PM - 7:00 PM	3	197	200			232	2	234			1	1		434	1	435
Total	174	9408	9582		0	8839	188	9027		179	19	198		18609	198	18807

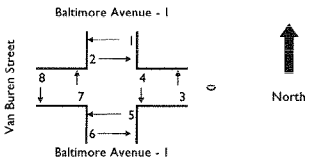
AM and PM Peak Hour

Wells + Associates, Inc.

McLean, Virginia

Pedestrian Volume Survey

PROJECT: US Route 1 & Van Buren St. Signal Warrant
W + A JOB NO: 5404
INTERSECTION: US Route 1 & Van Buren St.
LOCATION: Prince Georges County,MD
DATE: 11/8/2011
DAY: Tuesday
WEATHER: clear
COUNTED BY: Majda
INPUTED BY: agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
One Hour Volumes													
6:00 AM - 7:00 AM			1							1			1
6:15 AM - 7:15 AM			1					1		1		1	2
6:30 AM - 7:30 AM			1				1	1		1		2	3
6:45 AM - 7:45 AM			1				2	1		1		3	4
7:00 AM - 8:00 AM							3	2				5	5
7:15 AM - 8:15 AM							3	1				4	4
7:30 AM - 8:30 AM							2	1				3	3
7:45 AM - 8:45 AM							1	1				2	2
8:00 AM - 9:00 AM							3					3	3
8:15 AM - 9:15 AM							4	1				5	5
8:30 AM - 9:30 AM							4	1				5	5
8:45 AM - 9:45 AM			1				4	3		1		7	8
9:00 AM - 10:00 AM			1				1	3		1		4	5
9:15 AM - 10:15 AM			1					2		1		2	3
9:30 AM - 10:30 AM			1					2		1		2	3
9:45 AM - 10:45 AM							2					2	2
10:00 AM - 11:00 AM							3					3	3
10:15 AM - 11:15 AM							3					3	3
10:30 AM - 11:30 AM							4					4	4
10:45 AM - 11:45 AM							4	1				5	5
11:00 AM - 12:00 PM							5	1				6	6
11:15 AM - 12:15 PM							6	2				8	8
11:30 AM - 12:30 PM							5	4				9	9
11:45 AM - 12:45 PM							3	4				7	7
12:00 PM - 1:00 PM							1	6				7	7
12:15 PM - 1:15 PM								6				6	6
12:30 PM - 1:30 PM								6				6	6
12:45 PM - 1:45 PM							1	7				8	8
1:00 PM - 2:00 PM							1	6				7	7
1:15 PM - 2:15 PM							1	5				6	6
1:30 PM - 2:30 PM							3	3				6	6
1:45 PM - 2:45 PM							2	2				4	4
2:00 PM - 3:00 PM							2	1				3	3
2:15 PM - 3:15 PM							2	3				5	5
2:30 PM - 3:30 PM							1	5				6	6
2:45 PM - 3:45 PM							2	4				6	6
3:00 PM - 4:00 PM							2	7				9	9
3:15 PM - 4:15 PM							2	6				8	8
3:30 PM - 4:30 PM							3	5				8	8
3:45 PM - 4:45 PM							11	5				16	16
4:00 PM - 5:00 PM							11	11				22	22
4:15 PM - 5:15 PM							11	12				23	23
4:30 PM - 5:30 PM							9	11				20	20
4:45 PM - 5:45 PM							1	11				12	12
5:00 PM - 6:00 PM							1	2				3	3
5:15 PM - 6:15 PM							3					3	3
5:30 PM - 6:30 PM							3					3	3
5:45 PM - 6:45 PM							2					2	2
6:00 PM - 7:00 PM							3	3				6	6
-													

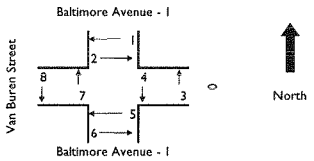
AM, Midday and PM Peak Hour Pedestrian Count

Wells + Associates, Inc.

McLean, Virginia

Pedestrian Volume Survey

PROJECT: US Route 1 & Van Buren St. Signal Warrant
W + A JOB NO: 5404
INTERSECTION: US Route 1 & Van Buren St.
LOCATION: Prince Georges County,MD
DATE: 11/8/2011
DAY: Tuesday
WEATHER: clear
COUNTED BY: Majda
INPUTED BY: agan



Time Period	Movement 1	2	3	4	5	6	7	8	1 + 2	3 + 4	5 + 6	7+ 8	Total
15 Minute Volumes													
6:00 AM - 6:15 AM													
6:15 AM - 6:30 AM													
6:30 AM - 6:45 AM													
6:45 AM - 7:00 AM			1										
7:00 AM - 7:15 AM								1					
7:15 AM - 7:30 AM							1						
7:30 AM - 7:45 AM							1						
7:45 AM - 8:00 AM							1	1					
8:00 AM - 8:15 AM													
8:15 AM - 8:30 AM													
8:30 AM - 8:45 AM													
8:45 AM - 9:00 AM							3						
9:00 AM - 9:15 AM							1	1					
9:15 AM - 9:30 AM													
9:30 AM - 9:45 AM			1					2					
9:45 AM - 10:00 AM													
10:00 AM - 10:15 AM													
10:15 AM - 10:30 AM													
10:30 AM - 10:45 AM							2						
10:45 AM - 11:00 AM							1						
11:00 AM - 11:15 AM													
11:15 AM - 11:30 AM							1						
11:30 AM - 11:45 AM							2	1					
11:45 AM - 12:00 PM							2						
12:00 PM - 12:15 PM							1	1					
12:15 PM - 12:30 PM								2					
12:30 PM - 12:45 PM								1					
12:45 PM - 1:00 PM								2					
1:00 PM - 1:15 PM								1					
1:15 PM - 1:30 PM								2					
1:30 PM - 1:45 PM							1	2					
1:45 PM - 2:00 PM								1					
2:00 PM - 2:15 PM													
2:15 PM - 2:30 PM							2						
2:30 PM - 2:45 PM								1					
2:45 PM - 3:00 PM													
3:00 PM - 3:15 PM								2					
3:15 PM - 3:30 PM							1	2					
3:30 PM - 3:45 PM							1						
3:45 PM - 4:00 PM								3					
4:00 PM - 4:15 PM								1					
4:15 PM - 4:30 PM							2	1					
4:30 PM - 4:45 PM							9						
4:45 PM - 5:00 PM								9					
5:00 PM - 5:15 PM								2					
5:15 PM - 5:30 PM													
5:30 PM - 5:45 PM							1						
5:45 PM - 6:00 PM													
6:00 PM - 6:15 PM							2						
6:15 PM - 6:30 PM													
6:30 PM - 6:45 PM													
6:45 PM - 7:00 PM							1	3					
Total	0	0	2	0	0	0	36	42					

AM, Midday and PM Peak Hour Pedestrian Count

Appendix J

Signal Warrant Analysis
US 1/Van Buren Intersection Traffic Forecasts

Table B.1
US 1 and Van Buren Street Signal Warrant
Diurnal Rates - Hourly Distribution of Daily Traffic (Percent)

Hour		Residential				Retail				Retail Passby			
		Rate (%)		Volume		Rate (%)		Volume		Rate (%)		Volume	
Begin	End	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
				ADT	*800*			*ADT*	*3,500*			*ADT*	*3,500*
12:00 AM	1:00 AM	0.6	0.2	5	2	1.0	1.0	35	35	1.0	1.0	35	35
1:00 AM	2:00 AM	0.3	0.1	2	1	1.0	0.5	35	18	1.0	0.5	35	18
2:00 AM	3:00 AM	0.2	0.1	2	1	0.0	0.0	0	0	0.0	0.0	0	0
3:00 AM	4:00 AM	0.1	0.1	1	1	0.0	0.0	0	0	0.0	0.0	0	0
4:00 AM	5:00 AM	0.0	0.1	0	1	0.0	0.0	0	0	0.0	0.0	0	0
5:00 AM	6:00 AM	0.0	0.4	0	3	0.0	0.0	0	0	0.0	0.0	0	0
6:00 AM	7:00 AM	0.3	1.8	2	14	0.4	0.0	14	0	0.4	0.0	14	0
7:00 AM	8:00 AM	0.8	6.6	**14**	**56**	0.5	0.5	**48**	**31**	0.5	0.5	**48**	**31**
8:00 AM	9:00 AM	1.1	7.3	9	58	0.5	0.5	18	18	0.5	0.5	18	18
9:00 AM	10:00 AM	1.5	3.7	12	30	1.0	1.0	35	35	1.0	1.0	35	35
10:00 AM	11:00 AM	1.2	2.5	10	20	3.8	3.3	133	114	3.8	3.3	133	114
11:00 AM	12:00 PM	2.2	2.4	18	19	3.8	4.2	133	147	3.8	4.2	133	147
12:00 PM	1:00 PM	2.5	2.5	20	20	3.8	4.1	133	144	3.8	4.1	133	144
1:00 PM	2:00 PM	2.2	2.6	18	21	3.5	3.8	121	131	3.5	3.8	121	131
2:00 PM	3:00 PM	2.7	2.0	22	16	4.5	3.9	158	137	4.5	3.9	158	137
3:00 PM	4:00 PM	3.3	2.3	26	18	4.8	4.8	168	166	4.8	4.8	168	166
4:00 PM	5:00 PM	4.9	2.6	39	21	4.9	5.2	170	182	4.9	5.2	170	182
5:00 PM	6:00 PM	7.1	2.4	**52**	**28**	5.2	5.5	**160**	**160**	5.2	5.5	**160**	**160**
6:00 PM	7:00 PM	5.7	3.4	46	27	3.7	4.2	130	145	3.7	4.2	130	145
7:00 PM	8:00 PM	3.8	2.5	30	20	2.7	2.7	95	93	2.7	2.7	95	93
8:00 PM	9:00 PM	3.6	1.7	29	14	2.1	2.2	74	75	2.1	2.2	74	75
9:00 PM	10:00 PM	3.2	1.2	26	10	1.0	0.9	33	32	1.0	0.9	33	32
10:00 PM	11:00 PM	1.7	0.8	14	6	1.0	1.0	35	35	1.0	1.0	35	35
11:00 PM	12:00 AM	1.0	0.6	8	5	1.0	1.0	35	35	1.0	1.0	35	35
Total		50	50	403	411	50	50	1,760	1,731	50	50	1,760	1,731

13-Hour Count Period
Peak hour trips based on Prince George's County rates

Table B.2
US 1 and Van Buren Street Signal Warrant
Trip Distribution

Land Use	Inbound/ Outbound	Southbound US 1			Westbound Middle Site Access			Northbound US 1		
		Right	Through	Left	Right	Through	Left	Right	Through	Left
Residential	Inbound	0%	0%	15%	0%	0%	0%	35%	5%	0%
	Outbound	0%	0%	0%	5%	0%	85%	0%	3%	0%
Retail	Inbound	0%	0%	50%	0%	0%	0%	15%	5%	0%
	Outbound	0%	0%	0%	15%	0%	50%	0%	5%	0%
Passby AM	Inbound	0%	-65%	65%	0%	0%	0%	10%	-10%	0%
	Outbound	0%	0%	0%	10%	0%	65%	0%	0%	0%
Passby PM	Inbound	0%	-50%	50%	0%	0%	0%	20%	-20%	0%
	Outbound	0%	0%	0%	20%	0%	50%	0%	0%	0%

Note:
XX% Inbound Trip distribution
XX% Outbound Trip Distribution

Table B.3
US 1 and Van Buren Street Signal Warrant
Diurnal Residential Trips

Hour		Southbound US 1		Westbound Middle Site Access		Northbound US 1		North & South	West	Total
Begin	End	Through	Left	Right	Left	Right	Through			
12:00 AM	1:00 AM	0	1	0	1	2	0	3	1	4
1:00 AM	2:00 AM	0	0	0	1	1	0	1	1	2
2:00 AM	3:00 AM	0	0	0	1	1	0	1	1	2
3:00 AM	4:00 AM	0	0	0	1	0	0	0	1	1
4:00 AM	5:00 AM	0	0	0	1	0	0	0	1	1
5:00 AM	6:00 AM	0	0	0	3	0	0	0	3	3
6:00 AM	7:00 AM	0	0	1	12	1	1	2	13	15
7:00 AM	8:00 AM	0	2	3	48	5	2	9	50	60
8:00 AM	9:00 AM	0	1	3	50	3	2	7	53	59
9:00 AM	10:00 AM	0	2	1	25	4	1	7	27	34
10:00 AM	11:00 AM	0	1	1	17	3	1	6	18	24
11:00 AM	12:00 PM	0	3	1	16	6	1	10	17	28
12:00 PM	1:00 PM	0	3	1	17	7	2	12	18	30
1:00 PM	2:00 PM	0	3	1	18	6	2	10	19	29
2:00 PM	3:00 PM	0	3	1	14	8	2	12	14	27
3:00 PM	4:00 PM	0	4	1	16	9	2	15	17	32
4:00 PM	5:00 PM	0	6	1	18	14	3	22	19	41
5:00 PM	6:00 PM	0	8	1	24	18	3	29	25	55
6:00 PM	7:00 PM	0	7	1	23	16	3	26	24	50
7:00 PM	8:00 PM	0	5	1	17	11	2	17	18	35
8:00 PM	9:00 PM	0	4	1	12	10	2	16	12	28
9:00 PM	10:00 PM	0	4	0	8	9	2	14	9	23
10:00 PM	11:00 PM	0	2	0	5	5	1	8	6	13
11:00 PM	12:00 AM	0	1	0	4	3	1	5	4	9
	Total	0	60	21	350	141	32	234	370	604

13-Hour Forecast Period

Table B.4
US 1 and Van Buren Street Signal Warrant
Diurnal Retail Trips

Hour		Southbound US 1		Westbound Middle Site Access		Northbound US 1		North & South	West	Total
Begin	End	Through	Left	Right	Left	Right	Through			
12:00 AM	1:00 AM	0	18	5	18	5	4	26	23	49
1:00 AM	2:00 AM	0	18	3	9	5	3	25	11	37
2:00 AM	3:00 AM	0	0	0	0	0	0	0	0	0
3:00 AM	4:00 AM	0	0	0	0	0	0	0	0	0
4:00 AM	5:00 AM	0	0	0	0	0	0	0	0	0
5:00 AM	6:00 AM	0	0	0	0	0	0	0	0	0
6:00 AM	7:00 AM	0	7	0	0	2	1	10	0	10
7:00 AM	8:00 AM	0	24	5	16	7	4	35	20	55
8:00 AM	9:00 AM	0	9	3	9	3	2	13	11	25
9:00 AM	10:00 AM	0	18	5	18	5	4	26	23	49
10:00 AM	11:00 AM	0	67	17	57	20	12	99	74	173
11:00 AM	12:00 PM	0	67	22	74	20	14	100	96	196
12:00 PM	1:00 PM	0	67	22	72	20	14	100	93	194
1:00 PM	2:00 PM	0	60	20	66	18	13	91	85	176
2:00 PM	3:00 PM	0	79	20	68	24	15	117	89	206
3:00 PM	4:00 PM	0	84	25	83	25	17	126	108	234
4:00 PM	5:00 PM	0	85	27	91	25	18	128	118	246
5:00 PM	6:00 PM	0	80	24	80	24	16	120	104	224
6:00 PM	7:00 PM	0	65	22	73	19	14	98	94	192
7:00 PM	8:00 PM	0	47	14	46	14	9	71	60	131
8:00 PM	9:00 PM	0	37	11	38	11	7	55	49	104
9:00 PM	10:00 PM	0	17	5	16	5	3	25	20	45
10:00 PM	11:00 PM	0	18	5	18	5	4	26	23	49
11:00 PM	12:00 AM	0	18	5	18	5	4	26	23	49
	Total	0	880	260	866	264	175	1319	1125	2444

13-Hour Forecast Period

Table B.5
US 1 and Van Buren Street Signal Warrant
Diurnal Retail Passby Trips

Hour		Southbound US 1		Westbound Middle Site Access		Northbound US 1		North & South	West	Total
Begin	End	Through	Left	Right	Left	Right	Through			
12:00 AM	1:00 AM	0	23	4	23	4	0	26	26	53
1:00 AM	2:00 AM	0	23	2	11	4	0	26	13	39
2:00 AM	3:00 AM	0	0	0	0	0	0	0	0	0
3:00 AM	4:00 AM	0	0	0	0	0	0	0	0	0
4:00 AM	5:00 AM	0	0	0	0	0	0	0	0	0
5:00 AM	6:00 AM	0	0	0	0	0	0	0	0	0
6:00 AM	7:00 AM	-9	9	0	0	1	-1	0	0	0
7:00 AM	8:00 AM	-31	31	3	20	5	1	6	23	29
8:00 AM	9:00 AM	-11	11	2	11	2	2	4	13	17
9:00 AM	10:00 AM	-23	23	4	23	4	3	7	26	33
10:00 AM	11:00 AM	-86	86	11	74	13	10	23	85	109
11:00 AM	12:00 PM	-86	86	15	96	13	16	29	110	140
12:00 PM	1:00 PM	-67	67	29	72	27	-27	0	100	100
1:00 PM	2:00 PM	-60	60	26	66	24	-24	0	92	92
2:00 PM	3:00 PM	-79	79	27	68	32	-32	0	96	96
3:00 PM	4:00 PM	-84	84	33	83	34	-34	0	116	116
4:00 PM	5:00 PM	-85	85	36	91	34	-34	0	127	127
5:00 PM	6:00 PM	-80	80	32	80	32	-32	0	112	112
6:00 PM	7:00 PM	-65	65	29	73	26	-26	0	102	102
7:00 PM	8:00 PM	-47	47	19	46	19	-19	0	65	65
8:00 PM	9:00 PM	-37	37	15	38	15	-15	0	53	53
9:00 PM	10:00 PM	0	17	6	16	7	-7	17	22	39
10:00 PM	11:00 PM	0	18	7	18	7	-7	18	25	42
11:00 PM	12:00 AM	0	18	7	18	7	-7	18	25	42
	Total	-851	948	307	925	307	-231	173	1232	1405

13-Hour Forecast Period

Table B.6
US 1 and Van Buren Street Signal Warrant
Diurnal Total Trips (1-Hour Interval)

Hour		Southbound US 1		Westbound Middle Site Access		Northbound US 1		North & South	West	Total
Begin	End	Through	Left	Right	Left	Right	Through			
12:00 AM	1:00 AM	0	41	9	42	10	4	55	50	106
1:00 AM	2:00 AM	0	41	4	21	10	3	53	25	78
2:00 AM	3:00 AM	0	0	0	1	1	0	1	1	2
3:00 AM	4:00 AM	0	0	0	1	0	0	0	1	1
4:00 AM	5:00 AM	0	0	0	1	0	0	0	1	1
5:00 AM	6:00 AM	0	0	0	3	0	0	0	3	3
6:00 AM	7:00 AM	-9	16	1	12	4	0	12	13	25
7:00 AM	8:00 AM	-31	57	11	83	17	7	50	94	144
8:00 AM	9:00 AM	-11	21	7	70	7	6	23	77	101
9:00 AM	10:00 AM	-23	42	10	65	13	8	40	76	116
10:00 AM	11:00 AM	-86	154	29	148	37	23	128	177	305
11:00 AM	12:00 PM	-86	156	38	185	39	31	140	223	363
12:00 PM	1:00 PM	-67	136	51	161	54	-11	112	212	324
1:00 PM	2:00 PM	-60	123	47	149	48	-10	101	196	297
2:00 PM	3:00 PM	-79	161	49	150	63	-15	129	199	328
3:00 PM	4:00 PM	-84	172	59	182	68	-15	141	241	382
4:00 PM	5:00 PM	-85	176	65	200	73	-14	150	264	415
5:00 PM	6:00 PM	-80	168	57	184	74	-13	149	241	391
6:00 PM	7:00 PM	-65	136	52	168	61	-9	124	221	344
7:00 PM	8:00 PM	-47	99	33	110	44	-7	88	143	231
8:00 PM	9:00 PM	-37	78	27	87	36	-5	71	114	185
9:00 PM	10:00 PM	0	37	12	40	21	-2	56	51	107
10:00 PM	11:00 PM	0	37	13	40	17	-3	51	53	104
11:00 PM	12:00 AM	0	36	12	39	15	-3	48	52	100
	Total	-851	1888	587	2140	712	-24	1726	2727	4453

Note: Table B.6 = Tables B.3+B.4+B.5
13-Hour Forecast Period

Table B.7
US 1 and Van Buren Street Signal Warrant
Diurnal Total Trips (15-Min Interval)

Hour		Southbound US 1		Westbound Middle Site Access		Northbound US 1		North & South	Subtotal	West	Subtotal	Total
Begin	End	Through	Left	Right	Left	Right	Through					
6:00 AM	6:15 AM	-2	4	0	3	1	0	3	9	3	10	19
6:15 AM	6:30 AM	-2	4	0	3	1	0	3		3		
6:30 AM	6:45 AM	-2	4	0	3	1	0	3		3		
6:45 AM	7:00 AM	-2	4	0	3	1	0	3	41	3	74	114
7:00 AM	7:15 AM	-8	14	3	21	4	2	13		23		
7:15 AM	7:30 AM	-8	14	3	21	4	2	13		23		
7:30 AM	7:45 AM	-8	14	3	21	4	2	13		23		
7:45 AM	8:00 AM	-8	14	3	21	4	2	13	30	23	81	111
8:00 AM	8:15 AM	-3	5	2	17	2	1	6		19		
8:15 AM	8:30 AM	-3	5	2	17	2	1	6		19		
8:30 AM	8:45 AM	-3	5	2	17	2	1	6		19		
8:45 AM	9:00 AM	-3	5	2	17	2	1	6	36	19	76	112
9:00 AM	9:15 AM	-6	11	3	16	3	2	10		19		
9:15 AM	9:30 AM	-6	11	3	16	3	2	10		19		
9:30 AM	9:45 AM	-6	11	3	16	3	2	10		19		
9:45 AM	10:00 AM	-6	11	3	16	3	2	10	106	19	152	258
10:00 AM	10:15 AM	-22	39	7	37	9	6	32		44		
10:15 AM	10:30 AM	-22	39	7	37	9	6	32		44		
10:30 AM	10:45 AM	-22	39	7	37	9	6	32		44		
10:45 AM	11:00 AM	-22	39	7	37	9	6	32	137	44	212	349
11:00 AM	11:15 AM	-22	39	9	46	10	8	35		56		
11:15 AM	11:30 AM	-22	39	9	46	10	8	35		56		
11:30 AM	11:45 AM	-22	39	9	46	10	8	35		56		
11:45 AM	12:00 PM	-22	39	9	46	10	8	35	119	56	215	333
12:00 PM	12:15 PM	-17	34	13	40	13	-3	28		53		
12:15 PM	12:30 PM	-17	34	13	40	13	-3	28		53		
12:30 PM	12:45 PM	-17	34	13	40	13	-3	28		53		
12:45 PM	1:00 PM	-17	34	13	40	13	-3	28	104	53	200	304
1:00 PM	1:15 PM	-15	31	12	37	12	-3	25		49		
1:15 PM	1:30 PM	-15	31	12	37	12	-3	25		49		
1:30 PM	1:45 PM	-15	31	12	37	12	-3	25		49		
1:45 PM	2:00 PM	-15	31	12	37	12	-3	25	25	49	49	74
2:00 PM	2:15 PM	-20	40	12	38	16	-4	32	129	50	199	328
2:15 PM	2:30 PM	-20	40	12	38	16	-4	32		50		
2:30 PM	2:45 PM	-20	40	12	38	16	-4	32		50		
2:45 PM	3:00 PM	-20	40	12	38	16	-4	32		50		
3:00 PM	3:15 PM	-21	43	15	45	17	-4	35	141	60	241	382
3:15 PM	3:30 PM	-21	43	15	45	17	-4	35		60		
3:30 PM	3:45 PM	-21	43	15	45	17	-4	35		60		
3:45 PM	4:00 PM	-21	43	15	45	17	-4	35		60		
4:00 PM	4:15 PM	-21	44	16	50	18	-3	38	150	66	264	415
4:15 PM	4:30 PM	-21	44	16	50	18	-3	38		66		
4:30 PM	4:45 PM	-21	44	16	50	18	-3	38		66		
4:45 PM	5:00 PM	-21	44	16	50	18	-3	38		66		
5:00 PM	5:15 PM	-20	42	14	46	19	-3	37	149	60	241	391
5:15 PM	5:30 PM	-20	42	14	46	19	-3	37		60		
5:30 PM	5:45 PM	-20	42	14	46	19	-3	37		60		
5:45 PM	6:00 PM	-20	42	14	46	19	-3	37		60		
6:00 PM	6:15 PM	-16	34	13	42	15	-2	31	124	55	221	344
6:15 PM	6:30 PM	-16	34	13	42	15	-2	31		55		
6:30 PM	6:45 PM	-16	34	13	42	15	-2	31		55		
6:45 PM	7:00 PM	-16	34	13	42	15	-2	31		55		

Highest 8-Hour Vehicular Volume

Wells + Associates, Inc.

McLean, Virginia

Table B.8a. Total Future Traffic Forecasts + Existing Vehicular Counts (1-Hour Interval)

PROJECT: US Route 1 and Van Buren Signal Warrant
W+A JOB NO: 5404
INTERSECTION: US Route 1 & Van Buren St.
LOCATION: Prince Georges County, MD

DATE: 3/1/2012
DAY:
WEATHER:
COUNTED BY:
INPUTED BY: James

SOUTHBOUND ROAD: Baltimore Avenue - 1
NORTHBOUND ROAD: Baltimore Avenue - 1
WESTBOUND ROAD: 0
EASTBOUND ROAD: Van Buren Street

Time Period	Southbound Baltimore Avenue - 1					Westbound 0				Northbound Baltimore Avenue - 1					Eastbound Van Buren Street				North & South	East & West	Total
	Right	Thru	Left	Total	PHF	Right	Left	Total	PHF	Right	Thru	Left	Total	PHF	Right	Left	Total	PHF			
One Hour Volumes																					
6:00 AM - 7:00 AM	5	497	16	518	0.63	1	12	13	1.00	4	309	4	318	0.73	13	2	15	0.42	836	28	864
6:15 AM - 7:15 AM	9	664	27	700	0.67	3	30	33	0.35	7	357	5	370	0.83	16	2	18	0.50	1070	51	1121
6:30 AM - 7:30 AM	23	839	37	899	0.76	6	48	53	0.57	11	416	9	435	0.86	20	2	22	0.61	1334	75	1410
6:45 AM - 7:45 AM	31	946	47	1024	0.87	8	65	74	0.78	14	485	18	516	0.75	23	1	24	0.67	1541	98	1638
7:00 AM - 8:00 AM	44	965	57	1066	0.90	11	83	94	1.00	17	534	27	578	0.85	23	1	24	0.67	1644	118	1762
7:15 AM - 8:15 AM	51	963	48	1062	0.90	10	80	90	0.96	15	566	26	607	0.89	24	2	26	0.72	1669	116	1784
7:30 AM - 8:30 AM	45	921	39	1005	0.95	9	77	85	0.91	12	590	22	624	0.91	24	3	27	0.75	1629	112	1741
7:45 AM - 8:45 AM	40	899	30	969	0.95	8	73	81	0.87	10	583	15	608	0.89	21	3	24	0.67	1577	105	1682
8:00 AM - 9:00 AM	26	868	21	915	0.90	7	70	77	1.00	7	584	8	599	0.93	20	2	22	0.79	1514	99	1614
8:15 AM - 9:15 AM	16	812	27	854	0.90	8	69	77	1.00	9	617	11	637	0.90	19	2	21	0.75	1492	98	1589
8:30 AM - 9:30 AM	16	743	32	791	0.87	9	68	76	0.99	10	655	12	677	0.92	16	1	17	0.61	1468	93	1561
8:45 AM - 9:45 AM	12	663	37	712	0.91	9	66	76	0.99	12	672	12	696	0.95	19	1	20	0.71	1408	96	1504
9:00 AM - 10:00 AM	12	604	42	658	0.84	10	65	76	1.00	13	665	9	687	0.94	18	1	19	0.79	1345	95	1440
9:15 AM - 10:15 AM	12	545	70	627	0.90	15	86	101	0.57	19	629	5	653	0.89	15		15	0.63	1280	116	1396
9:30 AM - 10:30 AM	5	512	98	616	0.94	20	107	126	0.71	25	631	7	662	0.86	15		15	0.63	1278	141	1420
9:45 AM - 10:45 AM	7	493	126	627	0.96	25	127	152	0.86	31	631	8	669	0.87	11		11	0.46	1296	163	1459
10:00 AM - 11:00 AM	5	470	154	629	0.96	29	148	177	1.00	37	650	8	695	0.90	9	1	10	0.50	1324	187	1511
10:15 AM - 11:15 AM	8	475	155	637	0.92	32	157	189	0.85	37	672	11	721	0.93	11	2	13	0.65	1358	202	1560
10:30 AM - 11:30 AM	8	458	155	621	0.90	34	167	200	0.90	38	661	9	708	0.98	16	2	18	0.64	1329	218	1547
10:45 AM - 11:45 AM	7	456	155	618	0.90	36	176	212	0.95	39	687	8	734	0.89	15	2	17	0.61	1352	229	1581
11:00 AM - 12:00 PM	6	483	156	644	0.93	38	185	223	1.00	39	694	12	746	0.90	16	1	17	0.61	1390	240	1630
11:15 AM - 12:15 PM	3	493	151	646	0.93	41	179	220	0.99	43	722	10	775	0.94	18	1	19	0.68	1421	239	1660
11:30 AM - 12:30 PM	3	527	146	675	0.97	44	173	217	0.97	46	724	12	783	0.95	11	1	12	0.50	1458	176	1634
11:45 AM - 12:45 PM	3	606	141	749	0.81	48	167	215	0.96	50	682	13	745	0.94	11	2	13	0.54	1495	175	1670
12:00 PM - 1:00 PM	5	635	136	776	0.83	51	161	212	1.00	54	665	9	727	0.92	6	2	8	0.33	1503	114	1617
12:15 PM - 1:15 PM	7	643	133	783	0.84	50	158	208	0.98	52	643	11	706	0.94	3	1	4	0.50	1489	106	1595
12:30 PM - 1:30 PM	11	652	130	792	0.85	49	155	204	0.96	51	626	11	688	0.97	4	1	5	0.63	1481	156	1637
12:45 PM - 1:45 PM	12	589	127	728	0.94	48	152	200	0.94	50	662	11	722	0.89	7		7	0.44	1450	154	1604
1:00 PM - 2:00 PM	14	600	123	737	0.90	47	149	196	1.00	48	664	15	727	0.89	7	1	8	0.50	1464	204	1668
1:15 PM - 2:15 PM	14	598	133	745	0.91	47	149	197	0.99	52	649	21	722	0.89	10	1	11	0.55	1466	208	1674
1:30 PM - 2:30 PM	13	602	142	758	0.93	48	150	197	0.99	56	649	17	722	0.89	10	1	11	0.55	1479	208	1688
1:45 PM - 2:45 PM	12	634	151	797	0.96	48	150	198	1.00	59	649	20	728	0.87	7	1	8	0.40	1525	206	1731
2:00 PM - 3:00 PM	12	611	161	784	0.94	49	150	199	1.00	63	667	17	746	0.89	10		10	0.50	1530	209	1739
2:15 PM - 3:15 PM	12	610	164	785	0.95	51	158	209	0.87	64	715	12	791	0.92	7	1	8	0.67	1576	217	1794
2:30 PM - 3:30 PM	11	626	166	803	0.94	54	166	220	0.91	65	750	15	830	0.96	11	1	12	0.60	1633	232	1865
2:45 PM - 3:45 PM	11	612	169	792	0.93	56	174	230	0.96	67	728	10	805	0.93	14	1	15	0.75	1597	245	1843
3:00 PM - 4:00 PM	7	634	172	813	0.95	59	182	241	1.00	68	739	15	822	0.95	18	2	20	0.63	1635	261	1896
3:15 PM - 4:15 PM	6	639	173	818	0.96	61	186	247	0.93	69	725	15	810	0.95	17	1	18	0.56	1627	265	1892
3:30 PM - 4:30 PM	7	644	174	824	0.93	62	191	253	0.96	71	730	15	815	0.94	15	1	16	0.50	1640	269	1908
3:45 PM - 4:45 PM	10	663	175	848	0.96	63	195	259	0.98	72	768	20	860	0.94	14	1	15	0.47	1708	274	1981
4:00 PM - 5:00 PM	13	672	176	861	0.96	65	200	264	1.00	73	812	20	905	0.88	9		9	0.75	1766	273	2040
4:15 PM - 5:15 PM	13	741	174	928	0.88	63	196	259	0.98	73	850	20	943	0.91	14		14	0.58	1871	273	2144
4:30 PM - 5:30 PM	17	785	172	973	0.91	61	192	253	0.96	74	850	21	944	0.92	16		16	0.67	1918	269	2187
4:45 PM - 5:45 PM	15	827	170	1012	0.95	59	188	247	0.93	74	865	23	962	0.93	15		15	0.63	1974	262	2236
5:00 PM - 6:00 PM	16	849	168	1033	0.97	57	184	241	1.00	74	890	22	987	0.87	16		16	0.67	2019	257	2277
5:15 PM - 6:15 PM	16	833	160	1009	0.95	56	180	236	0.98	71	917	22	1010	0.89	13		13	0.65	2019	249	2268
5:30 PM - 6:30 PM	9	806	152	967	0.93	55	176	231	0.96	68	954	24	1046	0.93	12	2	14	0.58	2013	245	2258
5:45 PM - 6:45 PM	10	773	144	928	0.95	53	172	226	0.94	65	982	26	1073	0.95	17	5	22	0.55	2000	248	2248
6:00 PM - 7:00 PM	9	755	136	901	0.94	52	168	221	1.00	61	954	22	1037	0.95	14	6	20	0.50	1938	241	2178

Highest 8-Hour Vehicular Volume

Wells + Associates, Inc.

McLean, Virginia

Table B.8b. Total Future Traffic Forecasts + Existing Vehicular Counts (15-Minute Interval)

PROJECT: US Route 1 and Van Buren Signal Warrant
W+A JOB NO: 5404
INTERSECTION: US Route 1 & Van Buren St.
LOCATION: Prince Georges County,MD

DATE: 3/1/2012
DAY:
WEATHER:
COUNTED BY:
INPUTED BY: James

SOUTHBOUND ROAD: Baltimore Avenue - 1
NORTHBOUND ROAD: Baltimore Avenue - 1
WESTBOUND ROAD: 0
EASTBOUND ROAD: Van Buren Street

Time Period	Southbound Baltimore Avenue - 1					Westbound 0				Northbound Baltimore Avenue - 1					Eastbound Van Buren Street				North & South	East & West	Total
	Right	Thru	Left	Total	PHF	Right	Left	Total	PHF	Right	Thru	Left	Total	PHF	Right	Left	Total	PHF			
15 Minute Volumes																					
6:00 AM - 6:15 AM	0	74	4	78		0	3	3		1	57	1	59		1	0	1		137	4	141
6:15 AM - 6:30 AM	0	92	4	96		0	3	3		1	58	1	60		1	0	1		156	4	160
6:30 AM - 6:45 AM	1	134	4	139		0	3	3		1	89	0	90		3	1	4		229	7	236
6:45 AM - 7:00 AM	4	198	4	206		0	3	3		1	105	2	108		8	1	9		314	12	326
7:00 AM - 7:15 AM	4	241	14	260		3	21	23		4	105	2	111		4	0	4		371	27	398
7:15 AM - 7:30 AM	14	266	14	295		3	21	23		4	117	5	126		5	0	5		421	28	449
7:30 AM - 7:45 AM	9	241	14	265		3	21	23		4	158	9	171		6	0	6		436	29	465
7:45 AM - 8:00 AM	17	216	14	248		3	21	23		4	155	11	170		8	1	9		418	32	450
8:00 AM - 8:15 AM	11	239	5	256		2	17	19		2	136	1	139		5	1	6		395	25	420
8:15 AM - 8:30 AM	8	224	5	238		2	17	19		2	140	1	143		5	1	6		381	25	406
8:30 AM - 8:45 AM	4	219	5	229		2	17	19		2	151	2	155		3	0	3		384	22	406
8:45 AM - 9:00 AM	3	185	5	194		2	17	19		2	155	4	161		7	0	7		355	26	381
9:00 AM - 9:15 AM	1	183	11	195		3	16	19		3	170	4	177		4	1	5		372	24	396
9:15 AM - 9:30 AM	8	155	11	174		3	16	19		3	178	2	183		2	0	2		357	21	378
9:30 AM - 9:45 AM	0	139	11	150		3	16	19		3	169	2	174		6	0	6		324	25	349
9:45 AM - 10:00 AM	3	126	11	140		3	16	19		3	148	1	152		6	0	6		292	25	317
10:00 AM - 10:15 AM	1	124	39	164		7	37	44		9	134	0	143		1	0	1		307	45	352
10:15 AM - 10:30 AM	1	122	39	162		7	37	44		9	180	4	193		2	0	2		355	46	401
10:30 AM - 10:45 AM	2	120	39	161		7	37	44		9	169	3	181		2	0	2		342	46	388
10:45 AM - 11:00 AM	1	102	39	142		7	37	44		9	168	1	178		4	1	5		320	49	369
11:00 AM - 11:15 AM	4	129	39	172		9	46	56		10	156	3	169		3	1	4		341	60	401
11:15 AM - 11:30 AM	1	105	39	145		9	46	56		10	169	2	181		7	0	7		326	63	389
11:30 AM - 11:45 AM	1	118	39	158		9	46	56		10	195	2	207		1	0	1		365	57	422
11:45 AM - 12:00 PM	0	129	39	168		9	46	56		10	175	5	190		5	0	5		358	61	419
12:00 PM - 12:15 PM	1	139	34	174		13	40	53		13	183	1	198		5	1	6		372	59	431
12:15 PM - 12:30 PM	1	139	34	174		13	40	53		13	171	4	189		0	0	0		363	0	363
12:30 PM - 12:45 PM	1	197	34	232		13	40	53		13	153	3	170		1	1	2		402	55	457
12:45 PM - 1:00 PM	2	158	34	194		13	40	53		13	157	1	172		0	0	0		366	0	366
1:00 PM - 1:15 PM	3	148	31	182		12	37	49		12	161	3	177		2	0	2		358	51	409
1:15 PM - 1:30 PM	5	148	31	184		12	37	49		12	154	4	171		1	0	1		354	50	404
1:30 PM - 1:45 PM	2	135	31	168		12	37	49		12	188	3	204		4	0	4		371	53	424
1:45 PM - 2:00 PM	4	169	31	204		12	37	49		12	159	5	177		0	1	1		380	50	430
2:00 PM - 2:15 PM	3	146	40	189		12	38	50		16	146	9	171		5	0	5		360	55	415
2:15 PM - 2:30 PM	4	152	40	196		12	38	50		16	155	0	171		1	0	1		367	51	418
2:30 PM - 2:45 PM	1	166	40	207		12	38	50		16	188	6	210		1	0	1		417	51	468
2:45 PM - 3:00 PM	4	146	40	190		12	38	50		16	177	2	195		3	0	3		385	53	438
3:00 PM - 3:15 PM	3	145	43	191		15	45	60		17	194	4	215		2	1	3		406	63	469
3:15 PM - 3:30 PM	3	168	43	214		15	45	60		17	190	3	210		5	0	5		424	65	489
3:30 PM - 3:45 PM	1	153	43	197		15	45	60		17	166	1	184		4	0	4		381	64	445
3:45 PM - 4:00 PM	0	168	43	211		15	45	60		17	188	7	212		7	1	8		423	68	491
4:00 PM - 4:15 PM	2	150	44	196		16	50	66		18	181	4	203		1	0	1		399	67	466
4:15 PM - 4:30 PM	4	173	44	221		16	50	66		18	195	3	216		3	0	3		437	69	506
4:30 PM - 4:45 PM	4	173	44	221		16	50	66		18	205	6	229		3	0	3		450	69	519
4:45 PM - 5:00 PM	3	177	44	224		16	50	66		18	233	7	258		2	0	2		482	68	550
5:00 PM - 5:15 PM	2	219	42	263		14	46	60		19	218	4	240		6	0	6		503	66	570
5:15 PM - 5:30 PM	8	216	42	266		14	46	60		19	195	4	217		5	0	5		483	65	549
5:30 PM - 5:45 PM	2	215	42	259		14	46	60		19	220	8	246		2	0	2		505	62	568
5:45 PM - 6:00 PM	4	199	42	245		14	46	60		19	258	6	282		3	0	3		527	63	591
6:00 PM - 6:15 PM	2	203	34	239		13	42	55		15	245	4	264		3	0	3		503	58	561
6:15 PM - 6:30 PM	1	189	34	224		13	42	55		15	232	6	253		4	2	6		477	61	538
6:30 PM - 6:45 PM	3	183	34	220		13	42	55		15	248	10	273		7	3	10		493	65	558
6:45 PM - 7:00 PM	3	181	34	218		13	42	55		15	230	2	247			1	1		465	56	521
Total	174	8641	1519	10335		476	1757	2233		559	8829	188	9575		179	19	198		19910	2325	22235

Highest 8-Hour Vehicular Volume

Appendix K

Signal Warrant Analysis
MUTCD Signal Warrant Guidelines

CHAPTER 4C. TRAFFIC CONTROL SIGNAL NEEDS STUDIES

Section 4C.01 Studies and Factors for Justifying Traffic Control Signals

Standard:

01 **An engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location.**

02 **The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:**

Warrant 1, Eight-Hour Vehicular Volume
Warrant 2, Four-Hour Vehicular Volume
Warrant 3, Peak Hour
Warrant 4, Pedestrian Volume
Warrant 5, School Crossing
Warrant 6, Coordinated Signal System
Warrant 7, Crash Experience
Warrant 8, Roadway Network
Warrant 9, Intersection Near a Grade Crossing

03 **The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.**

Support:

04 Sections 8C.09 and 8C.10 contain information regarding the use of traffic control signals instead of gates and/or flashing-light signals at highway-rail grade crossings and highway-light rail transit grade crossings, respectively.

Guidance:

05 *A traffic control signal should not be installed unless one or more of the factors described in this Chapter are met.*

06 *A traffic control signal should not be installed unless an engineering study indicates that installing a traffic control signal will improve the overall safety and/or operation of the intersection.*

07 *A traffic control signal should not be installed if it will seriously disrupt progressive traffic flow.*

08 *The study should consider the effects of the right-turn vehicles from the minor-street approaches. Engineering judgment should be used to determine what, if any, portion of the right-turn traffic is subtracted from the minor-street traffic count when evaluating the count against the signal warrants listed in Paragraph 2.*

09 *Engineering judgment should also be used in applying various traffic signal warrants to cases where approaches consist of one lane plus one left-turn or right-turn lane. The site-specific traffic characteristics should dictate whether an approach is considered as one lane or two lanes. For example, for an approach with one lane for through and right-turning traffic plus a left-turn lane, if engineering judgment indicates that it should be considered a one-lane approach because the traffic using the left-turn lane is minor, the total traffic volume approaching the intersection should be applied against the signal warrants as a one-lane approach. The approach should be considered two lanes if approximately half of the traffic on the approach turns left and the left-turn lane is of sufficient length to accommodate all left-turn vehicles.*

10 *Similar engineering judgment and rationale should be applied to a street approach with one through/left-turn lane plus a right-turn lane. In this case, the degree of conflict of minor-street right-turn traffic with traffic on the major street should be considered. Thus, right-turn traffic should not be included in the minor-street volume if the movement enters the major street with minimal conflict. The approach should be evaluated as a one-lane approach with only the traffic volume in the through/left-turn lane considered.*

11 *At a location that is under development or construction and where it is not possible to obtain a traffic count that would represent future traffic conditions, hourly volumes should be estimated as part of an engineering study for comparison with traffic signal warrants. Except for locations where the engineering study uses the satisfaction of Warrant 8 to justify a signal, a traffic control signal installed under projected conditions should have an engineering study done within 1 year of putting the signal into stop-and-go operation to determine if the signal is justified. If not justified, the signal should be taken out of stop-and-go operation or removed.*

12 *For signal warrant analysis, a location with a wide median, even if the median width is greater than 30 feet, should be considered as one intersection.*

Option:

13 At an intersection with a high volume of left-turn traffic from the major street, the signal warrant analysis may be performed in a manner that considers the higher of the major-street left-turn volumes as the "minor-street" volume and the corresponding single direction of opposing traffic on the major street as the "major-street" volume.

14 For signal warrants requiring conditions to be present for a certain number of hours in order to be satisfied, any four sequential 15-minute periods may be considered as 1 hour if the separate 1-hour periods used in the warrant analysis do not overlap each other and both the major-street volume and the minor-street volume are for the same specific one-hour periods.

15 For signal warrant analysis, bicyclists may be counted as either vehicles or pedestrians.

Support:

16 When performing a signal warrant analysis, bicyclists riding in the street with other vehicular traffic are usually counted as vehicles and bicyclists who are clearly using pedestrian facilities are usually counted as pedestrians.

Option:

17 Engineering study data may include the following:

A. The number of vehicles entering the intersection in each hour from each approach during 12 hours of an average day. It is desirable that the hours selected contain the greatest percentage of the 24-hour traffic volume.
B. Vehicular volumes for each traffic movement from each approach, classified by vehicle type (heavy trucks, passenger cars and light trucks, public-transit vehicles, and, in some locations, bicycles), during each 15-minute period of the 2 hours in the morning and 2 hours in the afternoon during which total traffic entering the intersection is greatest.
C. Pedestrian volume counts on each crosswalk during the same periods as the vehicular counts in Item B and during hours of highest pedestrian volume. Where young, elderly, and/or persons with physical or visual disabilities need special consideration, the pedestrians and their crossing times may be classified by general observation.
D. Information about nearby facilities and activity centers that serve the young, elderly, and/or persons with disabilities, including requests from persons with disabilities for accessible crossing improvements at the location under study. These persons might not be adequately reflected in the pedestrian volume count if the absence of a signal restrains their mobility.
E. The posted or statutory speed limit or the 85th-percentile speed on the uncontrolled approaches to the location.
F. A condition diagram showing details of the physical layout, including such features as intersection geometrics, channelization, grades, sight-distance restrictions, transit stops and routes, parking conditions, pavement markings, roadway lighting, driveways, nearby railroad crossings, distance to nearest traffic control signals, utility poles and fixtures, and adjacent land use.
G. A collision diagram showing crash experience by type, location, direction of movement, severity, weather, time of day, date, and day of week for at least 1 year.

18 The following data, which are desirable for a more precise understanding of the operation of the intersection, may be obtained during the periods described in Item B of Paragraph 17:

A. Vehicle-hours of stopped time delay determined separately for each approach.
B. The number and distribution of acceptable gaps in vehicular traffic on the major street for entrance from the minor street.
C. The posted or statutory speed limit or the 85th-percentile speed on controlled approaches at a point near to the intersection but unaffected by the control.
D. Pedestrian delay time for at least two 30-minute peak pedestrian delay periods of an average weekday or like periods of a Saturday or Sunday.
E. Queue length on stop-controlled approaches.

Section 4C.02 Warrant 1, Eight-Hour Vehicular Volume

Support:

01 The Minimum Vehicular Volume, Condition A, is intended for application at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

02 The Interruption of Continuous Traffic, Condition B, is intended for application at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

03 It is intended that Warrant 1 be treated as a single warrant. If Condition A is satisfied, then Warrant 1 is satisfied and analyses of Condition B and the combination of Conditions A and B are not needed. Similarly, if Condition B is satisfied, then Warrant 1 is satisfied and an analysis of the combination of Conditions A and B is not needed.

Standard:

04 **The need for a traffic control signal shall be considered if an engineering study finds that one of the following conditions exist for each of any 8 hours of an average day:**

A. The vehicles per hour given in both of the 100 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; or

B. The vehicles per hour given in both of the 100 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

In applying each condition the major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of these 8 hours.

Option:

05 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 70 percent columns in Table 4C-1 may be used in place of the 100 percent columns.

Guidance:

06 *The combination of Conditions A and B is intended for application at locations where Condition A is not satisfied and Condition B is not satisfied and should be applied only after an adequate trial of other alternatives that could cause less delay and inconvenience to traffic has failed to solve the traffic problems.*

Standard:

07 **The need for a traffic control signal shall be considered if an engineering study finds that both of the following conditions exist for each of any 8 hours of an average day:**

A. The vehicles per hour given in both of the 80 percent columns of Condition A in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection; and

B. The vehicles per hour given in both of the 80 percent columns of Condition B in Table 4C-1 exist on the major-street and the higher-volume minor-street approaches, respectively, to the intersection.

These major-street and minor-street volumes shall be for the same 8 hours for each condition; however, the 8 hours satisfied in Condition A shall not be required to be the same 8 hours satisfied in Condition B. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Table 4C-1. Warrant 1, Eight-Hour Vehicular Volume

Condition A—Minimum Vehicular Volume

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%[a]	80%[b]	70%[c]	56%[d]	100%[a]	80%[b]	70%[c]	56%[d]
1	1	500	400	350	280	150	120	105	84
2 or more	1	600	480	420	336	150	120	105	84
2 or more	2 or more	600	480	420	336	200	160	140	112
1	2 or more	500	400	350	280	200	160	140	112

Condition B—Interruption of Continuous Traffic

Number of lanes for moving traffic on each approach		Vehicles per hour on major street (total of both approaches)				Vehicles per hour on higher-volume minor-street approach (one direction only)			
Major Street	Minor Street	100%[a]	80%[b]	70%[c]	56%[d]	100%[a]	80%[b]	70%[c]	56%[d]
1	1	750	600	525	420	75	60	53	42
2 or more	1	900	720	630	504	75	60	53	42
2 or more	2 or more	900	720	630	504	100	80	70	56
1	2 or more	750	600	525	420	100	80	70	56

[a] Basic minimum hourly volume

[b] Used for combination of Conditions A and B after adequate trial of other remedial measures

[c] May be used when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

[d] May be used for combination of Conditions A and B after adequate trial of other remedial measures when the major-street speed exceeds 40 mph or in an isolated community with a population of less than 10,000

Option:

08 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Section 4C.03 Warrant 2, Four-Hour Vehicular Volume

Support:

01 The Four-Hour Vehicular Volume signal warrant conditions are intended to be applied where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 for the existing combination of approach lanes. On the minor street, the higher volume shall not be required to be on the same approach during each of these 4 hours.**

Option:

03 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-2 may be used in place of Figure 4C-1.

Section 4C.04 Warrant 3, Peak Hour

Support:

01 The Peak Hour signal warrant is intended for use at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

Standard:

02 **This signal warrant shall be applied only in unusual cases, such as office complexes, manufacturing plants, industrial complexes, or high-occupancy vehicle facilities that attract or discharge large numbers of vehicles over a short time.**

03 **The need for a traffic control signal shall be considered if an engineering study finds that the criteria in either of the following two categories are met:**

- **A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:**
  1. **The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and**
  2. **The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and**
  3. **The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.**
- **B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 for the existing combination of approach lanes.**

Option:

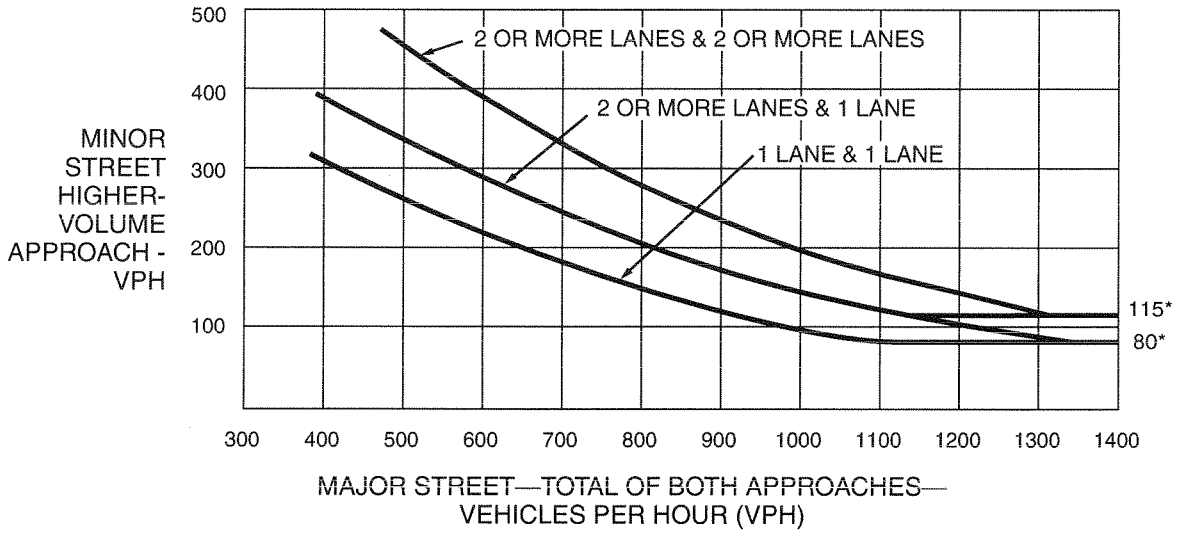
04 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-4 may be used in place of Figure 4C-3 to evaluate the criteria in the second category of the Standard.

05 If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal may be operated in the flashing mode during the hours that the volume criteria of this warrant are not met.

Guidance:

06 *If this warrant is the only warrant met and a traffic control signal is justified by an engineering study, the traffic control signal should be traffic-actuated.*

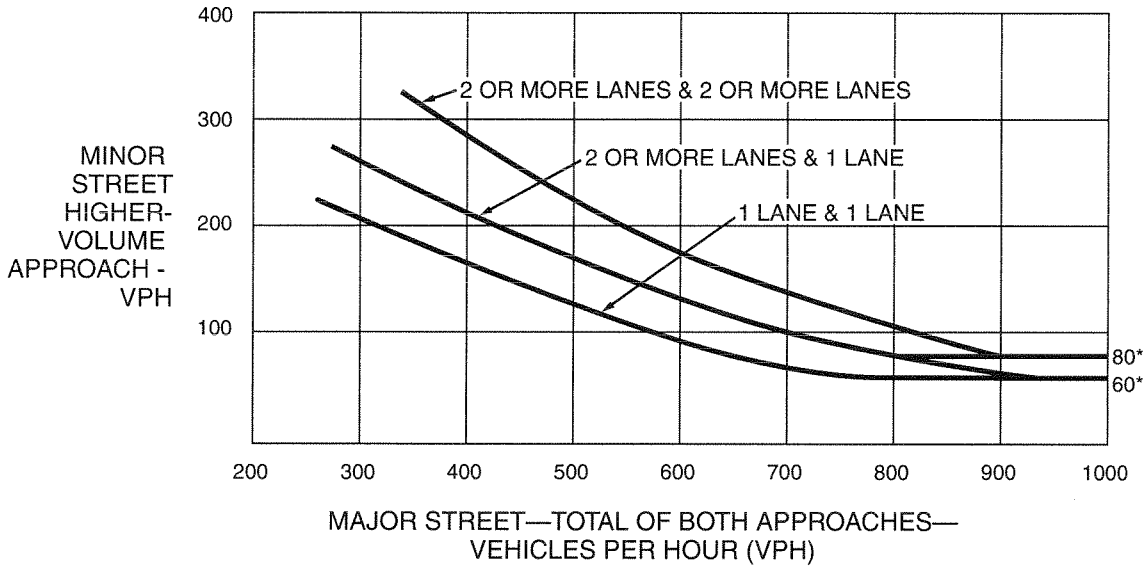
Figure 4C-1. Warrant 2, Four-Hour Vehicular Volume



*Note: 115 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 80 vph applies as the lower threshold volume for a minor-street approach with one lane.

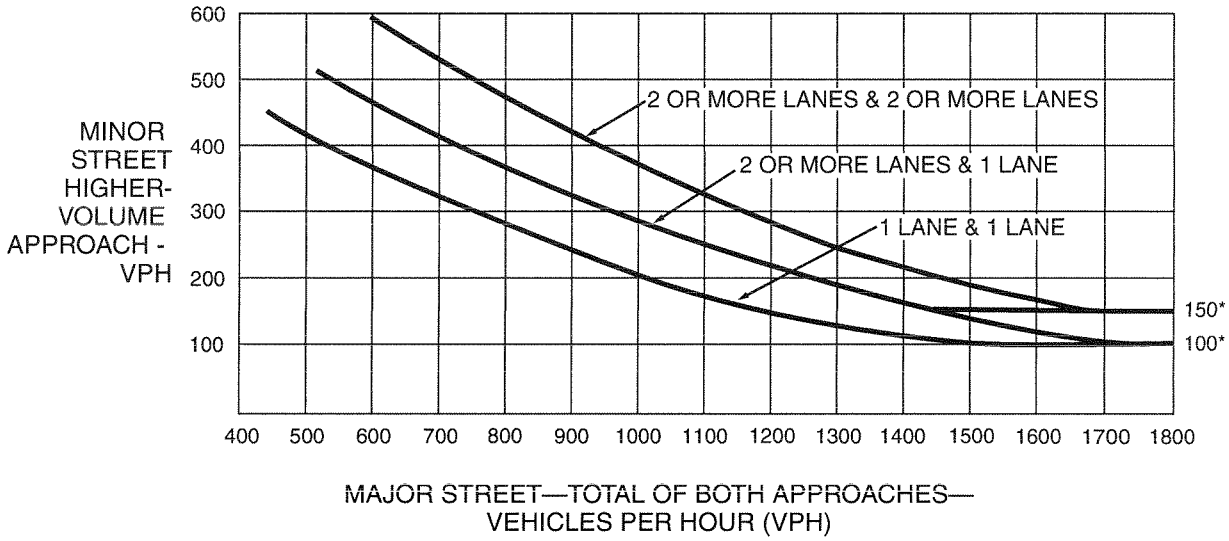
Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

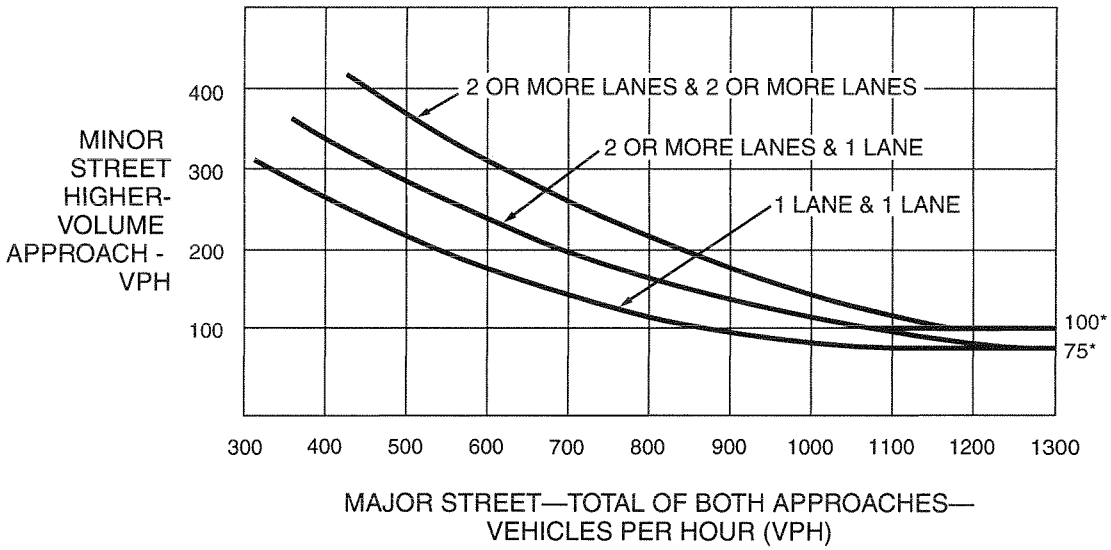
Figure 4C-3. Warrant 3, Peak Hour



*Note: 150 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 100 vph applies as the lower threshold volume for a minor-street approach with one lane.

Figure 4C-4. Warrant 3, Peak Hour (70% Factor)

(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)



*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

Section 4C.05 Warrant 4, Pedestrian Volume

Support:

01 The Pedestrian Volume signal warrant is intended for application where the traffic volume on a major street is so heavy that pedestrians experience excessive delay in crossing the major street.

Standard:

02 **The need for a traffic control signal at an intersection or midblock crossing shall be considered if an engineering study finds that one of the following criteria is met:**

A. For each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the curve in Figure 4C-5; or

B. For 1 hour (any four consecutive 15-minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 4C-7.

Option:

03 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 35 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, Figure 4C-6 may be used in place of Figure 4C-5 to evaluate Criterion A in Paragraph 2, and Figure 4C-8 may be used in place of Figure 4C-7 to evaluate Criterion B in Paragraph 2.

Standard:

04 **The Pedestrian Volume signal warrant shall not be applied at locations where the distance to the nearest traffic control signal or STOP sign controlling the street that pedestrians desire to cross is less than 300 feet, unless the proposed traffic control signal will not restrict the progressive movement of traffic.**

05 **If this warrant is met and a traffic control signal is justified by an engineering study, the traffic control signal shall be equipped with pedestrian signal heads complying with the provisions set forth in Chapter 4E.**

Guidance:

06 *If this warrant is met and a traffic control signal is justified by an engineering study, then:*

A. If it is installed at an intersection or major driveway location, the traffic control signal should also control the minor-street or driveway traffic, should be traffic-actuated, and should include pedestrian detection.

B. If it is installed at a non-intersection crossing, the traffic control signal should be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs, and should be pedestrian-actuated. If the traffic control signal is installed at a non-intersection crossing, at least one of the signal faces should be over the traveled way for each approach, parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the crosswalk or site accommodations should be made through curb extensions or other techniques to provide adequate sight distance, and the installation should include suitable standard signs and pavement markings.

C. Furthermore, if it is installed within a signal system, the traffic control signal should be coordinated.

Option:

07 The criterion for the pedestrian volume crossing the major street may be reduced as much as 50 percent if the 15th-percentile crossing speed of pedestrians is less than 3.5 feet per second.

08 A traffic control signal may not be needed at the study location if adjacent coordinated traffic control signals consistently provide gaps of adequate length for pedestrians to cross the street.

Section 4C.06 Warrant 5, School Crossing

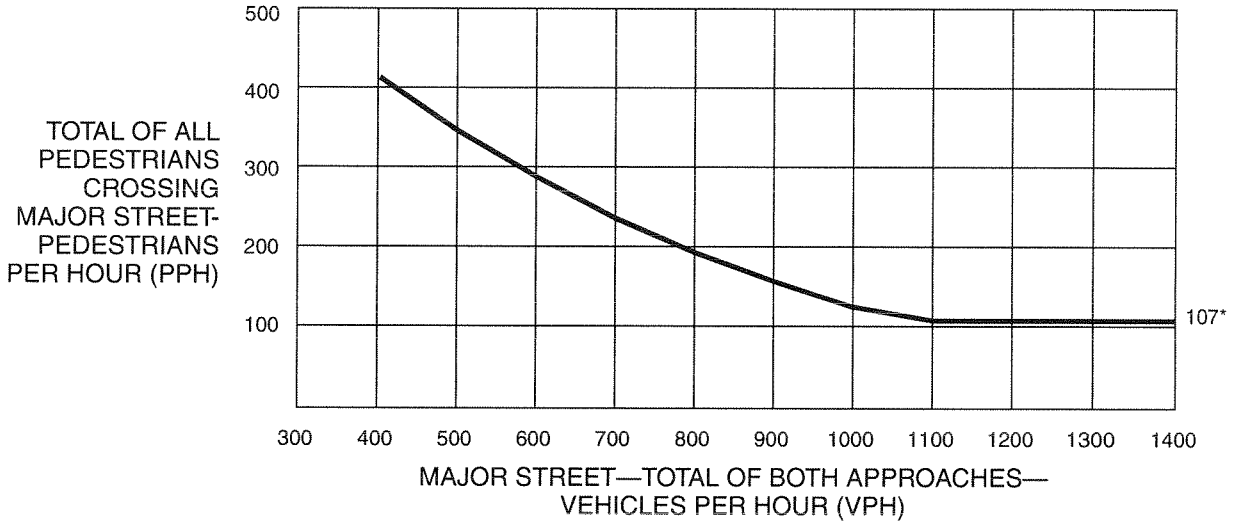
Support:

01 The School Crossing signal warrant is intended for application where the fact that schoolchildren cross the major street is the principal reason to consider installing a traffic control signal. For the purposes of this warrant, the word "schoolchildren" includes elementary through high school students.

Standard:

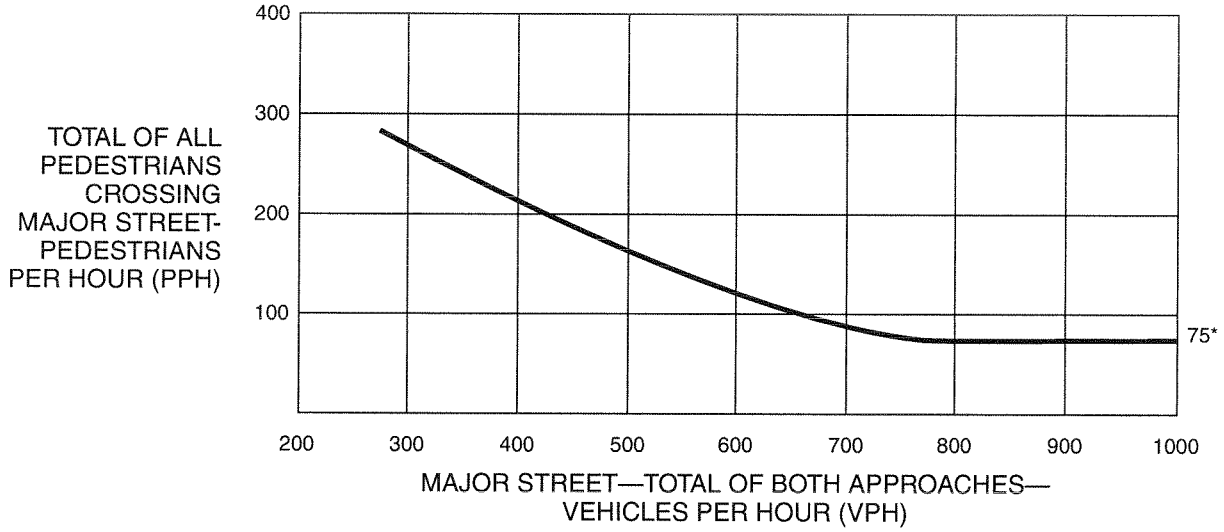
02 **The need for a traffic control signal shall be considered when an engineering study of the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of schoolchildren at an established school crossing across the major street shows that the number of adequate gaps in the traffic stream during the period when the schoolchildren are using the crossing is less than the number of minutes in the same period (see Section 7A.03) and there are a minimum of 20 schoolchildren during the highest crossing hour.**

Figure 4C-5. Warrant 4, Pedestrian Four-Hour Volume



*Note: 107 pph applies as the lower threshold volume.

Figure 4C-6. Warrant 4, Pedestrian Four-Hour Volume (70% Factor)

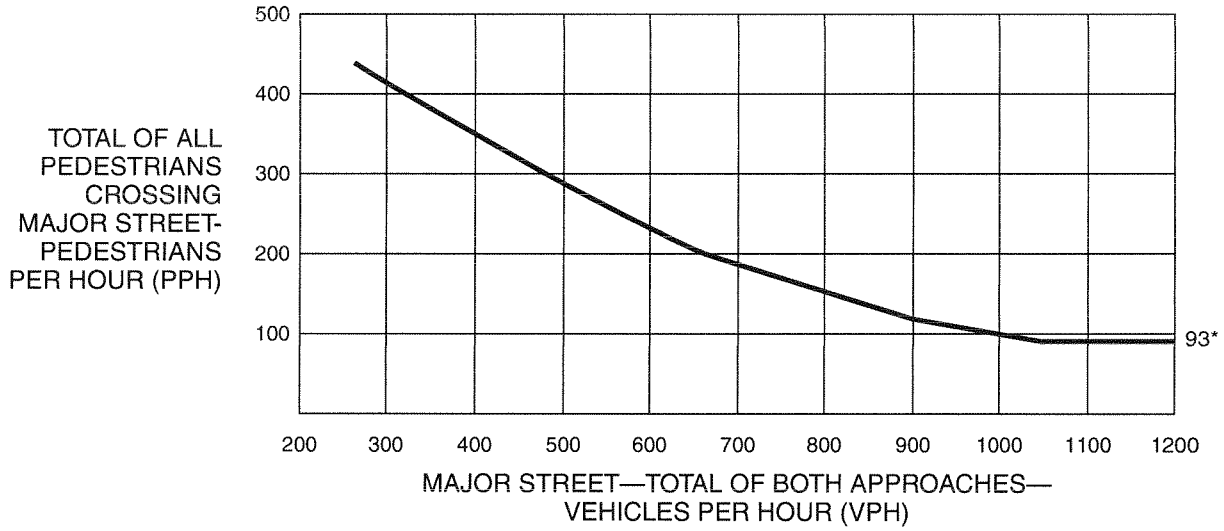


*Note: 75 pph applies as the lower threshold volume.

Figure 4C-7. Warrant 4, Pedestrian Peak Hour

*Note: 133 pph applies as the lower threshold volume.

Figure 4C-8. Warrant 4, Pedestrian Peak Hour (70% Factor)



*Note: 93 pph applies as the lower threshold volume.

03 **Before a decision is made to install a traffic control signal, consideration shall be given to the implementation of other remedial measures, such as warning signs and flashers, school speed zones, school crossing guards, or a grade-separated crossing.**

04 **The School Crossing signal warrant shall not be applied at locations where the distance to the nearest traffic control signal along the major street is less than 300 feet, unless the proposed traffic control signal will not restrict the progressive movement of traffic.**

Guidance:

05 *If this warrant is met and a traffic control signal is justified by an engineering study, then:*

A. *If it is installed at an intersection or major driveway location, the traffic control signal should also control the minor-street or driveway traffic, should be traffic-actuated, and should include pedestrian detection.*

B. *If it is installed at a non-intersection crossing, the traffic control signal should be installed at least 100 feet from side streets or driveways that are controlled by STOP or YIELD signs, and should be pedestrian-actuated. If the traffic control signal is installed at a non-intersection crossing, at least one of the signal faces should be over the traveled way for each approach, parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the crosswalk or site accommodations should be made through curb extensions or other techniques to provide adequate sight distance, and the installation should include suitable standard signs and pavement markings.*

C. *Furthermore, if it is installed within a signal system, the traffic control signal should be coordinated.*

Section 4C.07 Warrant 6, Coordinated Signal System

Support:

01 Progressive movement in a coordinated signal system sometimes necessitates installing traffic control signals at intersections where they would not otherwise be needed in order to maintain proper platooning of vehicles.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that one of the following criteria is met:**

A. On a one-way street or a street that has traffic predominantly in one direction, the adjacent traffic control signals are so far apart that they do not provide the necessary degree of vehicular platooning.

B. On a two-way street, adjacent traffic control signals do not provide the necessary degree of platooning and the proposed and adjacent traffic control signals will collectively provide a progressive operation.

Guidance:

03 *The Coordinated Signal System signal warrant should not be applied where the resultant spacing of traffic control signals would be less than 1,000 feet.*

Section 4C.08 Warrant 7, Crash Experience

Support:

01 The Crash Experience signal warrant conditions are intended for application where the severity and frequency of crashes are the principal reasons to consider installing a traffic control signal.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that all of the following criteria are met:**

A. Adequate trial of alternatives with satisfactory observance and enforcement has failed to reduce the crash frequency; and

B. Five or more reported crashes, of types susceptible to correction by a traffic control signal, have occurred within a 12-month period, each crash involving personal injury or property damage apparently exceeding the applicable requirements for a reportable crash; and

C. For each of any 8 hours of an average day, the vehicles per hour (vph) given in both of the 80 percent columns of Condition A in Table 4C-1 (see Section 4C.02), or the vph in both of the 80 percent columns of Condition B in Table 4C-1 exists on the major-street and the higher-volume minor-street approach, respectively, to the intersection, or the volume of pedestrian traffic is not less than 80 percent of the requirements specified in the Pedestrian Volume warrant. These major-street and minor-street volumes shall be for the same 8 hours. On the minor street, the higher volume shall not be required to be on the same approach during each of the 8 hours.

Option:

03 If the posted or statutory speed limit or the 85th-percentile speed on the major street exceeds 40 mph, or if the intersection lies within the built-up area of an isolated community having a population of less than 10,000, the traffic volumes in the 56 percent columns in Table 4C-1 may be used in place of the 80 percent columns.

Section 4C.09 Warrant 8, Roadway Network

Support:

01 Installing a traffic control signal at some intersections might be justified to encourage concentration and organization of traffic flow on a roadway network.

Standard:

02 **The need for a traffic control signal shall be considered if an engineering study finds that the common intersection of two or more major routes meets one or both of the following criteria:**

- **A. The intersection has a total existing, or immediately projected, entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday and has 5-year projected traffic volumes, based on an engineering study, that meet one or more of Warrants 1, 2, and 3 during an average weekday; or**
- **B. The intersection has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).**

03 **A major route as used in this signal warrant shall have at least one of the following characteristics:**

- **A. It is part of the street or highway system that serves as the principal roadway network for through traffic flow.**
- **B. It includes rural or suburban highways outside, entering, or traversing a city.**
- **C. It appears as a major route on an official plan, such as a major street plan in an urban area traffic and transportation study.**

Section 4C.10 Warrant 9, Intersection Near a Grade Crossing

Support:

01 The Intersection Near a Grade Crossing signal warrant is intended for use at a location where none of the conditions described in the other eight traffic signal warrants are met, but the proximity to the intersection of a grade crossing on an intersection approach controlled by a STOP or YIELD sign is the principal reason to consider installing a traffic control signal.

Guidance:

02 *This signal warrant should be applied only after adequate consideration has been given to other alternatives or after a trial of an alternative has failed to alleviate the safety concerns associated with the grade crossing. Among the alternatives that should be considered or tried are:*

- *A. Providing additional pavement that would enable vehicles to clear the track or that would provide space for an evasive maneuver, or*
- *B. Reassigning the stop controls at the intersection to make the approach across the track a non-stopping approach.*

Standard:

03 **The need for a traffic control signal shall be considered if an engineering study finds that both of the following criteria are met:**

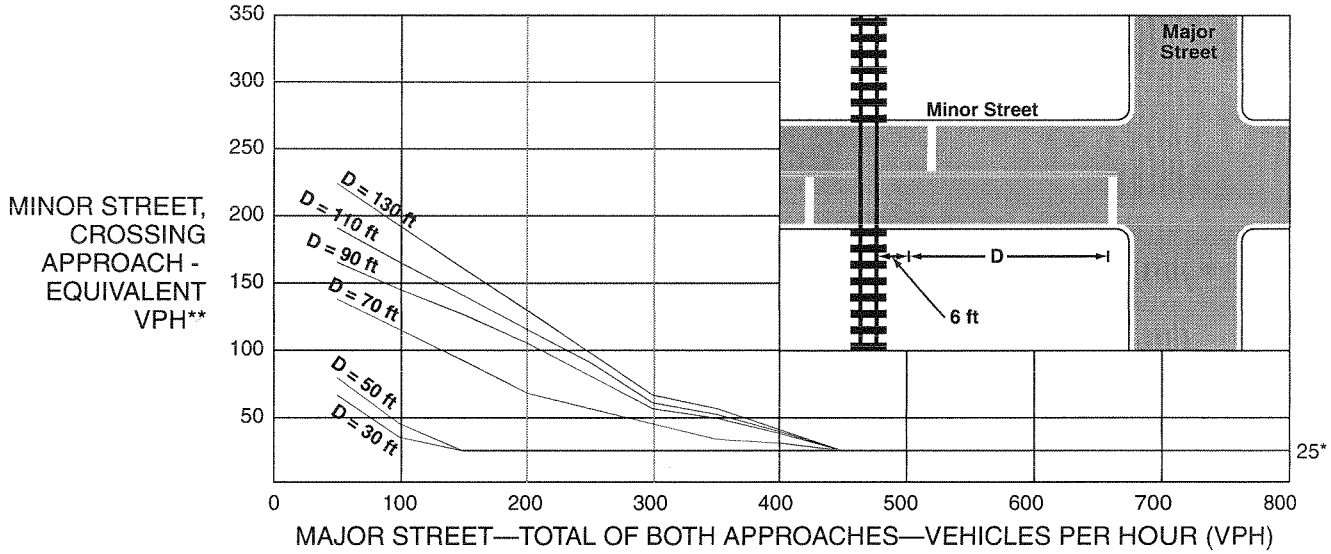
- **A. A grade crossing exists on an approach controlled by a STOP or YIELD sign and the center of the track nearest to the intersection is within 140 feet of the stop line or yield line on the approach; and**
- **B. During the highest traffic volume hour during which rail traffic uses the crossing, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the minor-street approach that crosses the track (one direction only, approaching the intersection) falls above the applicable curve in Figure 4C-9 or 4C-10 for the existing combination of approach lanes over the track and the distance D, which is the clear storage distance as defined in Section 1A.13.**

Guidance:

04 *The following considerations apply when plotting the traffic volume data on Figure 4C-9 or 4C-10:*

- *A. Figure 4C-9 should be used if there is only one lane approaching the intersection at the track crossing location and Figure 4C-10 should be used if there are two or more lanes approaching the intersection at the track crossing location.*

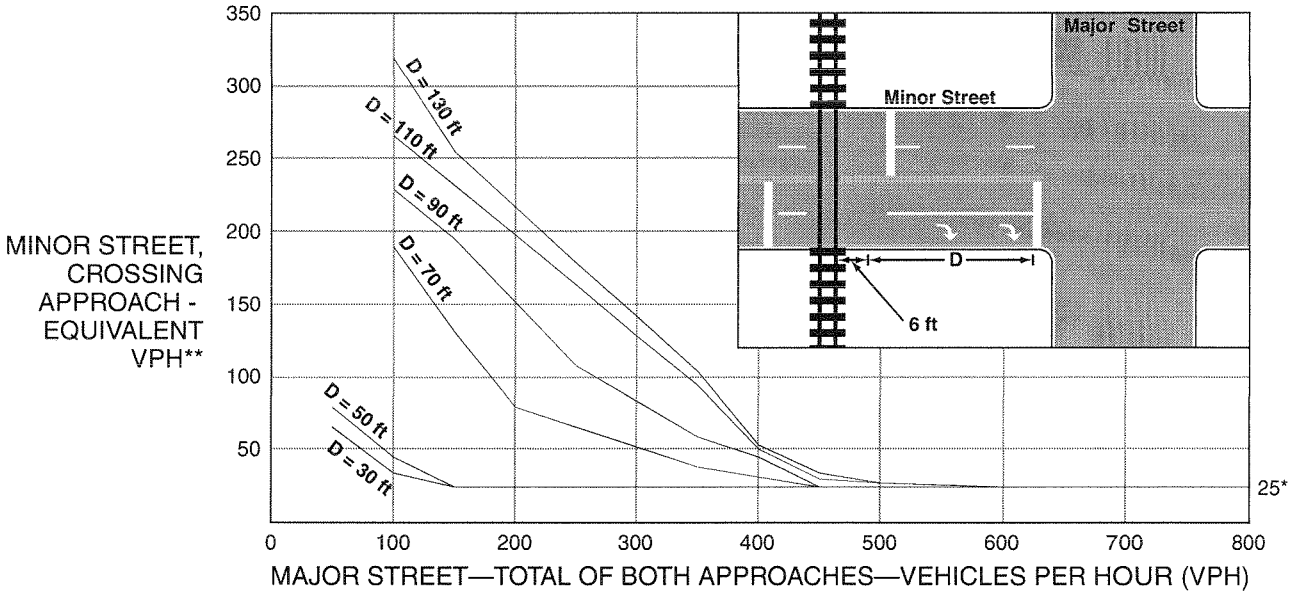
Figure 4C-9. Warrant 9, Intersection Near a Grade Crossing (One Approach Lane at the Track Crossing)



* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

Figure 4C-10. Warrant 9, Intersection Near a Grade Crossing (Two or More Approach Lanes at the Track Crossing)



* 25 vph applies as the lower threshold volume

** VPH after applying the adjustment factors in Tables 4C-2, 4C-3, and/or 4C-4, if appropriate

B. After determining the actual distance D, the curve for the distance D that is nearest to the actual distance D should be used. For example, if the actual distance D is 95 feet, the plotted point should be compared to the curve for D = 90 feet.

C. If the rail traffic arrival times are unknown, the highest traffic volume hour of the day should be used.

Option:

05 The minor-street approach volume may be multiplied by up to three adjustment factors as provided in Paragraphs 6 through 8.

06 Because the curves are based on an average of four occurrences of rail traffic per day, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-2 for the appropriate number of occurrences of rail traffic per day.

07 Because the curves are based on typical vehicle occupancy, if at least 2% of the vehicles crossing the track are buses carrying at least 20 people, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-3 for the appropriate percentage of high-occupancy buses.

08 Because the curves are based on tractor-trailer trucks comprising 10% of the vehicles crossing the track, the vehicles per hour on the minor-street approach may be multiplied by the adjustment factor shown in Table 4C-4 for the appropriate distance and percentage of tractor-trailer trucks.

Standard:

09 **If this warrant is met and a traffic control signal at the intersection is justified by an engineering study, then:**

A. The traffic control signal shall have actuation on the minor street;

B. Preemption control shall be provided in accordance with Sections 4D.27, 8C.09, and 8C.10; and

C. The grade crossing shall have flashing-light signals (see Chapter 8C).

Guidance:

10 *If this warrant is met and a traffic control signal at the intersection is justified by an engineering study, the grade crossing should have automatic gates (see Chapter 8C).*

Table 4C-2. Warrant 9, Adjustment Factor for Daily Frequency of Rail Traffic

Rail Traffic per Day	Adjustment Factor
1	0.67
2	0.91
3 to 5	1.00
6 to 8	1.18
9 to 11	1.25
12 or more	1.33

Table 4C-3. Warrant 9, Adjustment Factor for Percentage of High-Occupancy Buses

% of High-Occupancy Buses* on Minor-Street Approach	Adjustment Factor
0%	1.00
2%	1.09
4%	1.19
6% or more	1.32

* A high-occupancy bus is defined as a bus occupied by at least 20 people.

Table 4C-4. Warrant 9, Adjustment Factor for Percentage of Tractor-Trailer Trucks

% of Tractor-Trailer Trucks on Minor-Street Approach	Adjustment Factor	
	D less than 70 feet	D of 70 feet or more
0% to 2.5%	0.50	0.50
2.6% to 7.5%	0.75	0.75
7.6% to 12.5%	1.00	1.00
12.6% to 17.5%	2.30	1.15
17.6% to 22.5%	2.70	1.35
22.6% to 27.5%	3.28	1.64
More than 27.5%	4.18	2.09

Appendix L

Signal Warrant Analysis
TEAPAC Signal Warrant Analysis Results

Signal Warrant Analysis 06/10/12
US 1 and Van Buren Street 11:26:49
Prince Georges' County, Maryland

TEAPAC[Ver 8.23.05] - MUTCD Warrant Analysis

Conditions Used for Warrant Analysis	2009 MUTCD

Intersection # 1	
Major Street Direction	NorthSouth
Number of Lanes in North-South direction	2
Number of Lanes in East-West direction	2
Approach speed on major street is greater than 40 mph	No
Isolated community has population less than 10,000	No
Signal will not seriously disrupt progressive traffic flow	Yes
Trials of other remedies have failed to improve conditions	No
Number of accidents correctable by a signal	0
Peak hour stop sign delay for worst minor approach (veh-hours)	0
Number of accidents correctable by a multi-way stop	0
Peak hour average delay for all minor approaches (sec/veh)	0

TEAPAC[Ver 8.23.05] - Warrant Analysis for Traffic Signal

Warrant 1A Analysis - 8-Hour Minimum Vehicular Volume

Start Time	1600	1500	1700	1800	1145	1045	1245	1400	Req.
Minor Volume	264	240	240	220	214	209	200	200	200
Major Volume	1768	1634	2022	1938	1492	1352	1448	1529	600
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8

Number of 1-hour periods meeting the warrant	8
Signal will not seriously disrupt progressive traffic flow	Yes

>> WARRANT 1A IS MET <<

Warrant 1B Analysis - 8-Hour Interruption of Continuous Traffic

Start Time	1615	1515	1715	1115	1415	1215	1315	1015	Req.
Minor Volume	258	246	235	218	210	208	197	187	100
Major Volume	1873	1627	2021	1420	1575	1486	1465	1358	900
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8

Number of 1-hour periods meeting the warrant	10
Signal will not seriously disrupt progressive traffic flow	Yes

>> WARRANT 1B IS MET <<

Signal Warrant Analysis
US 1 and Van Buren Street
Prince Georges' County, Maryland

06/10/12
11:26:49

TEAPAC[Ver 8.23.05] - Warrant Analysis for Traffic Signal

Warrant 1A Analysis (80%) - 8-Hour Minimum Vehicular Volume

Start Time	1600	1500	1700	1100	1800	1200	1400	1300	Req.
Minor Volume	264	240	240	220	220	212	200	196	160
Major Volume	1768	1634	2022	1390	1938	1499	1529	1463	480
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8

Number of 1-hour periods meeting the warrant 9

Warrant 1B Analysis (80%) - 8-Hour Interruption of Continuous Traf

Start Time	1615	1515	1715	1115	1415	1215	1315	1015	Req.
Minor Volume	258	246	235	218	210	208	197	187	80
Major Volume	1873	1627	2021	1420	1575	1486	1465	1358	720
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	8

Number of 1-hour periods meeting the warrant 11

Warrant 1C Analysis - 8-Hour Combination of Warrants

80% of Warrants 1A and 1B are met	Yes
Signal will not seriously disrupt progressive traffic flow	Yes
Trials of other remedies have failed to reduce delays	No

>> WARRANT 1C IS NOT MET <<

Warrant 2 Analysis - 4-Hour Vehicular Volume

Start Time	1530	1630	1730	1430	1130	1230	1030	1330	Req.
Minor Volume	252	252	230	220	216	204	198	198	——
Minor Reqrmt	115	115	115	115	115	115	115	115	<--
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	4

Number of 1-hour periods meeting the warrant	9
Signal will not seriously disrupt progressive traffic flow	Yes

>> WARRANT 2 IS MET <<

Signal Warrant Analysis 06/10/12
US 1 and Van Buren Street 11:26:49
Prince Georges' County, Maryland

TEAPAC[Ver 8.23.05] - Warrant Analysis for Traffic Signal

Warrant 3A Analysis - Peak Hour Delay

Start Time	1545	1645	1445	1745	1145	1045	1245	1345	Req.
Minor Volume	258	246	230	225	214	209	200	199	150
Total Volume	1982	2237	1841	2248	1719	1578	1655	1731	800
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1

Number of 1-hour periods meeting the warrant	9
Signal will not seriously disrupt progressive traffic flow	Yes
Delay for worst minor approach (must be at least 5 veh-hours)	0

>> WARRANT 3A IS NOT MET <<

Warrant 3B Analysis - Peak Hour Volume

Start Time	1600	1500	1700	1100	1800	1200	1400	1300	Req.
Minor Volume	264	240	240	220	220	212	200	196	———
Minor Reqrmt	150	160	150	218	150	185	179	196	<--
Warrant Met?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	1

Number of 1-hour periods meeting the warrant	8
Signal will not seriously disrupt progressive traffic flow	Yes

>> WARRANT 3B IS MET <<

Warrant 7 Analysis - Crash Experience

80% of Warrant 1A or 1B is met	Yes
Signal will not seriously disrupt progressive traffic flow	Yes
Trials of other remedies have failed to reduce accidents	No
Number of correctable accidents (must be 5 or more per year)	0

>> WARRANT 7 IS NOT MET <<

Summary of MUTCD Traffic Signal Warrant Analysis

Warrant 1A 8-Hour Minimum Vehicular Volume	MET
Warrant 1B 8-Hour Interruption of Continuous Traffic	MET
Warrant 1C 8-Hour Combination of Warrants	NOT MET
Warrant 2 4-Hour Vehicular Volume	MET
Warrant 3A Peak Hour Delay	NOT MET
Warrant 3B Peak Hour Volume	MET
Warrant 7 Crash Experience	NOT MET

>> Traffic Signal Warrant is MET <<