Transportation Feasibility & Impact Analyses FY 2014

US 1 Corridor Study – Executive Summary and Mapping Updates

Technical Memorandum #1: Transportation Updates

June 2014

Gannett Fleming

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INTRODUCTION

Study Purpose

This study focuses on updating the US 1 Corridor Phase I and Phase II studies in regards to land use and transportation changes that alter previous recommendations. Development has continued to occur along the US 1 corridor since the completion of the Phase I study, and in some instances, those developments have impacted the recommendations of the two studies. The long range plan for the corridor is for US 1 to be upgraded to a freeway. However, as a result of rapid development, mobility along the corridor has decreased, as well as the level of service (LOS) of the signalized intersections. As the ultimate configuration for US 1 is approximately 20 years out in the future, there is a need to identify and evaluate potential interim solutions.

Technical Memorandum Purpose

The purpose of this technical memorandum is to document the land development changes since the conclusion of the Phase I and Phase II studies, catalog their effect on previous recommendations, and present recommendations for meeting the US 1 Corridor vision. In addition, this technical memorandum will identify locations along the Phase I section of US 1 where an interim solution in the form of converting intersections to superstreet configurations provides benefits justifying their implementation, similar to what was done for the Phase II study. To aid in future decisions, the mapping from the two studies has been merged together and updated per development and transportation changes.

LAND DEVELOPMENT AND TRANSPORTATION CHANGES

The existing conditions analysis for this project is based primarily on the findings of the Phase I and Phase II studies as well as the development changes that have occurred since the completion of those studies. The location and type of impact of these new developments has been cataloged through aerial photography, development proposals submitted to the US 1 Council of Planning, relevant land use development plans, and visual inspection of the project study area. The following table summarizes the findings and offers recommendations.

Table 1 - Land Development and Transportation Changes

Location	**Development Description**	**Frontage/ Backage Road Constructed (Y/N)**	**Comments**	**Recommendations**	**Mapping Changes**
Between Gresham Lake Rd. and Durant Rd.	Leith Honda, Crossroads Infiniti, Audi Raleigh	Y	A backage road was constructed as opposed to a frontage road as recommended in the Phase I study.	Adopt backage road as constructed.	Mapping has been updated accordingly. *See Figure 1*

Location	Development Description	Frontage/ Backage Road Constructed (Y/N)	Comments	Recommendations	Mapping Changes
Durant Rd. - SW quadrant	Leith Toyota	Y	A backage road was constructed as previously recommended, but in a slightly different location.	Adjust backage road connection on North side of Durant Rd to line up with southside connection. There are no environmental, cultural, or historical impacts with adjusting the connection.	Mapping has been updated accordingly. *See Figure 2*
Durant Rd. - NE quadrant	Strayer University North Raleigh Campus	Y	A backage road was constructed as previously recommended.	Update map to reflect this as an existing backage road.	Mapping has been updated accordingly. *See Figure 2*
Burlington Mills Rd. - NE quadrant	Capital City Auto Body Inc. & Choice Pool and Spa	N	These businesses will need to be acquired and relocated to accommodate the diamond interchange proposed for this intersection.	Recommend a study of the intersection to evaluate different interchange configurations to minimize impacts to businesses.	None
Falls of Neuse Rd. - NW quadrant	Rex Healthcare of Wakefield	N	Preferred alternative resulting from FY 14 Hot Spot study is a diverging diamond interchange.	Adjust mapping accordingly.	None
Common Oaks Dr. – SW quadrant	MSI Radiology	N	The overpass connection previously proposed does not line with the current location of Common Oaks Dr.	Adjust the location of the overpass and connection to Ligon Mills Rd extension. There are no environmental, cultural, or historical impacts associated with re-aligning the connection.	Mapping has been updated accordingly. *See Figure 3*

Location	Development Description	Frontage/ Backage Road Constructed (Y/N)	Comments	Recommendations	Mapping Changes
Caveness Farms Ave. - SE quadrant	Chili's Bar & Grill, Red Robin Gourmet Burgers, Texas Roadhouse	N	Parking area impacted by proposed right of way	None	None
NC 98 Bypass - SE quadrant	Villas of Wake Forest	N	Previously proposed local road would go through the subdivision.	Re-align proposed local road. The re-alignment would cross a stream as it did in its previous location. Environmental impacts should be similar to as previously identified.	Mapping has been updated per recommendation. *See Figure 4*
Jenkins Rd. - SE quadrant	Kohl's	N	Affects Ligon Mills Extension and a stormwater pond.	Re-align Ligon Mills Extension to avoid impacts to Kohl's. With the exception of the stormwater pond, there are no environmental, cultural, or historical impacts associated with re-aligning Ligon Mills extension.	Mapping has been updated per recommendation. *See Figure 5*
McDowell Dr.– SE quadrant	Townhomes	N	Affects location of the proposed local road connecting Stadium Dr. and Harris Rd.	Re-align the proposed local road to the east. No environmental, cultural, or historical impacts associated with the re-alignment.	Mapping has been updated per recommendation. *See Figure 6*

Location	Development Description	Frontage/ Backage Road Constructed (Y/N)	Comments	Recommendations	Mapping Changes
Harris Rd. - NE quadrant	Harris Teeter	N	The now-existing Harris Teeter influences the future interchange configuration and backage road.	Follow the new concept forwarded by CAMPO converting the previously recommended diamond interchange to a partial cloverleaf.	Mapping has been updated to reflect the new concept. *See Figure 7*
Holden Rd. - NE quadrant	Sheetz Gas Station	N	Impacts future diamond interchange.	Recommend the intersection be evaluated for different interchange configurations.	None
Green Rd. - SE quadrant	Tractor Supply Co.	N	Parcel impacted by proposed right of way. No impacts to building or pavement.	None	None
NC 96 - SE quadrant	Food Lion, CVS Pharmacy, Anytime Fitness	N	Affects the future diamond interchange and backage road.	Reconfigure the future interchange to a partial cloverleaf and re-align the backage road.	Mapping has been updated to reflect the new concept. *See Figure 8*
Park Ave. - SE quadrant	Shopping plaza (strip mall)	N	Affects the frontage road and connection to Park Avenue. In order to make the connection between US 1 and Park Avenue the strip mall will need to be acquired.	None	None

The following figures illustrate the recommendations outlined in the table above. Please note, the mapping updates can be found in Appendix C – Map Set.

Before

After

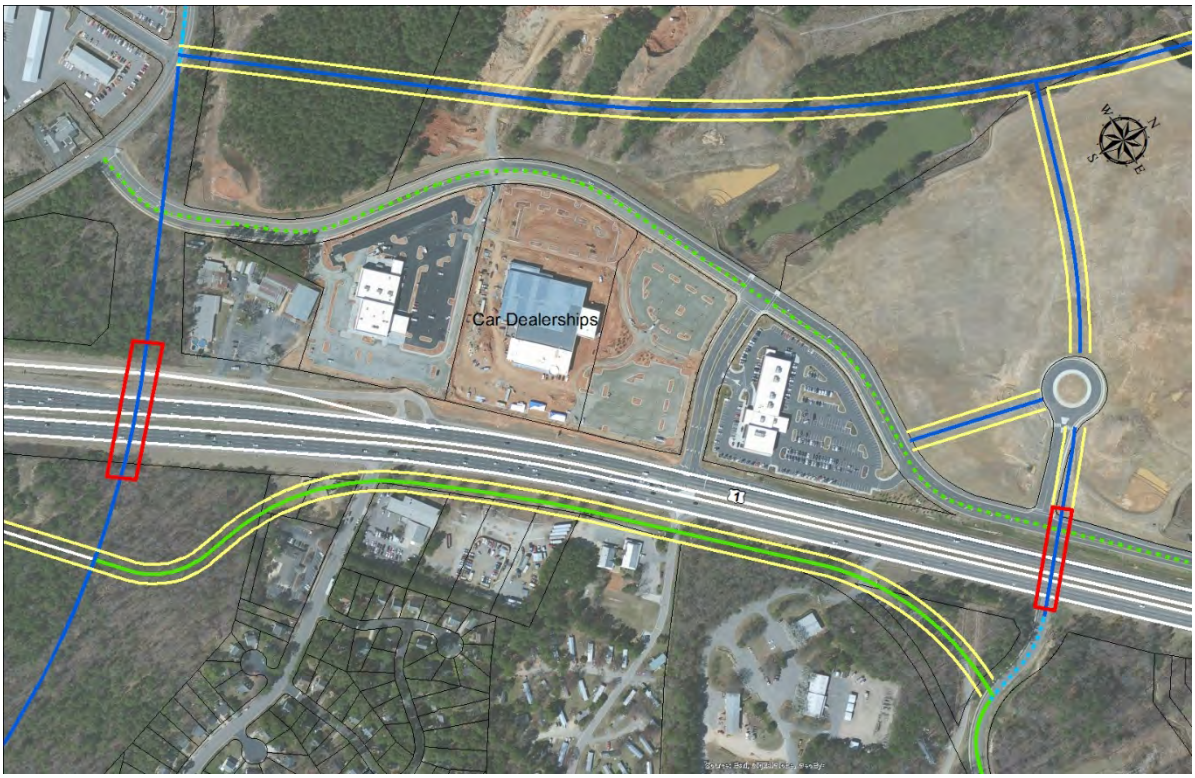


Figure 1 - Car dealerships north of Gresham Lake Rd.

Before

After

Figure 2 - US 1 and Durant Rd.

Before

After

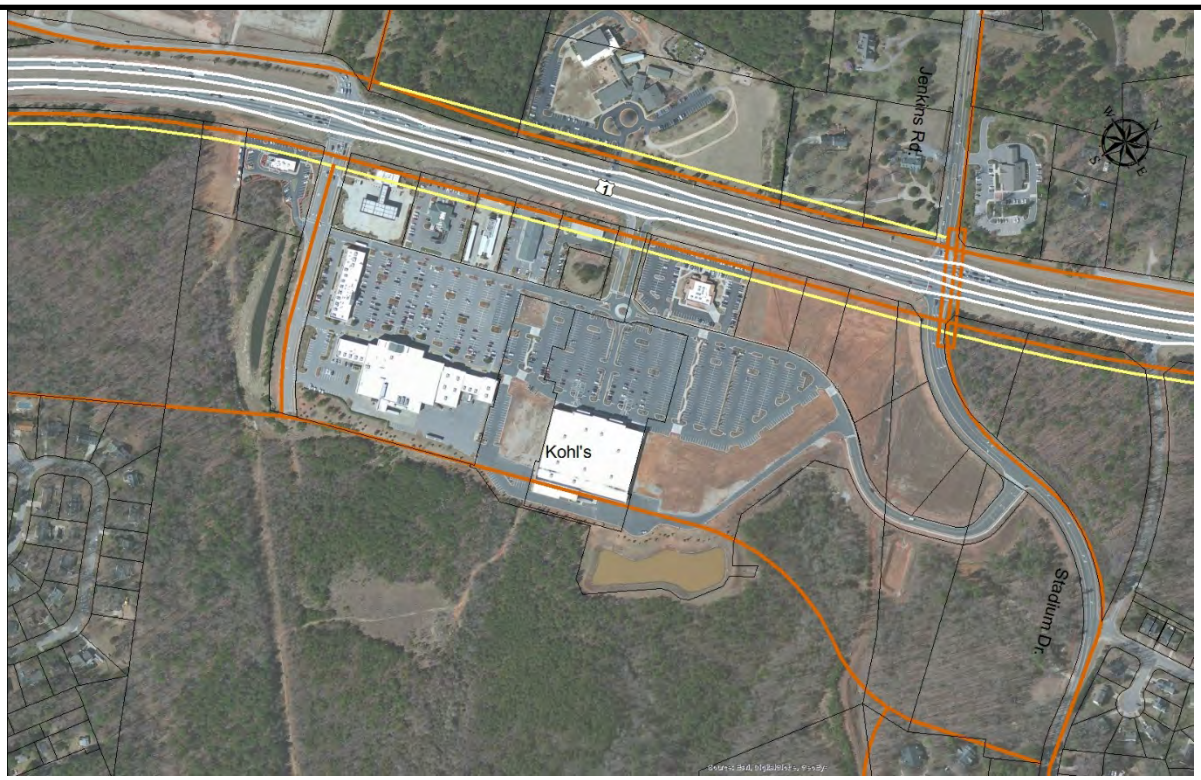
Figure 3 - US 1 and Common Oaks Dr.

Before

After

Figure 4 - US 1 and NC 98 Bypass

Before



After

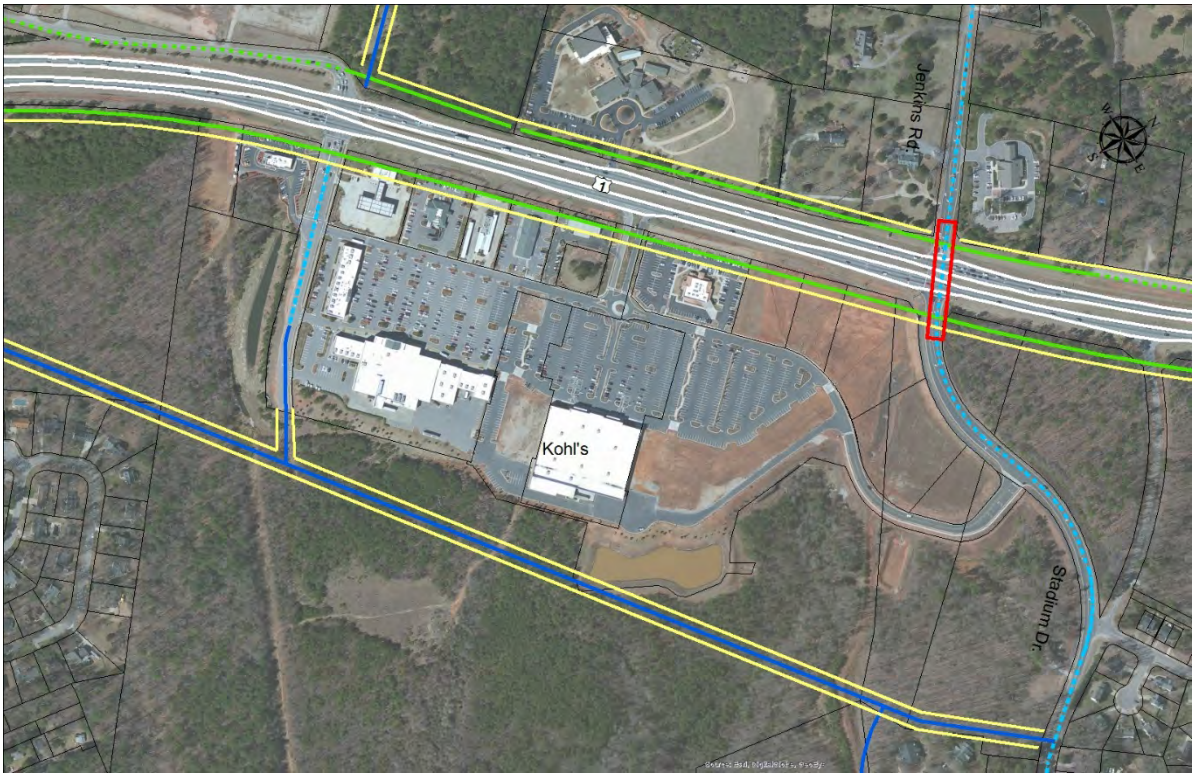


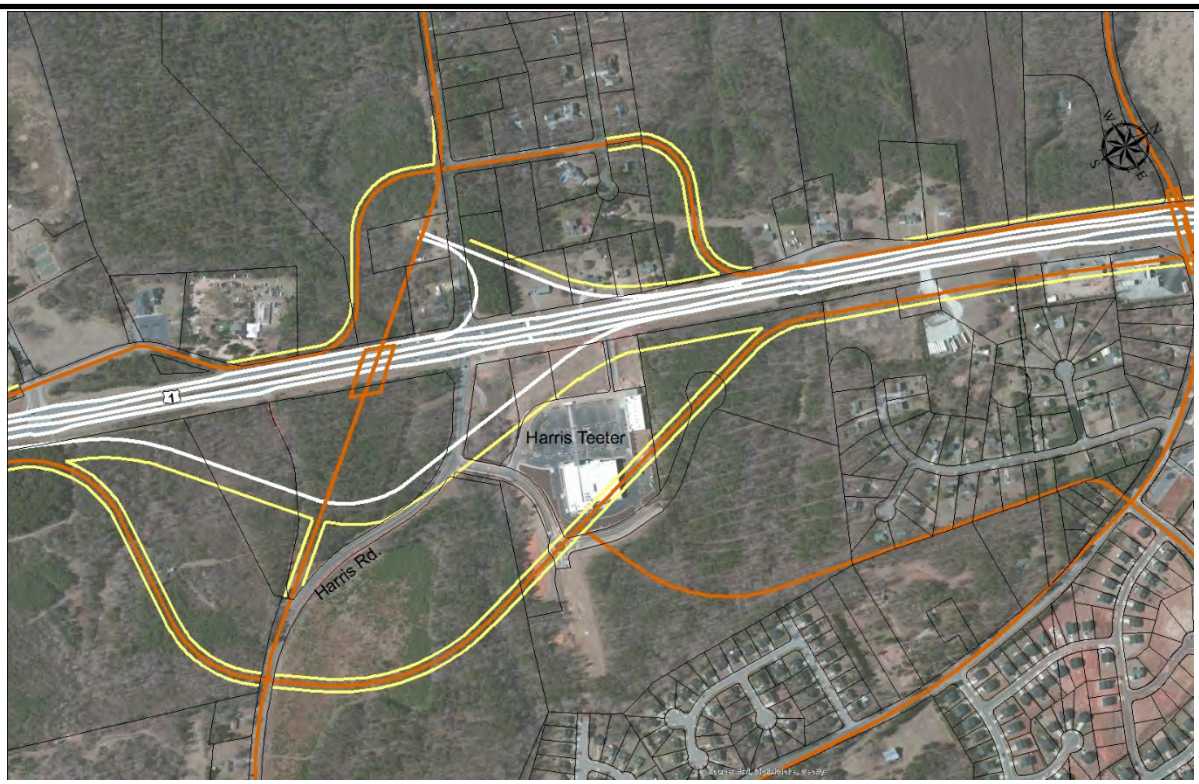
Figure 5 - US 1 and Jenkins Rd.

Before

After

Figure 6 - Proposed Local Road Connecting Stadium Dr. and Harris Rd.

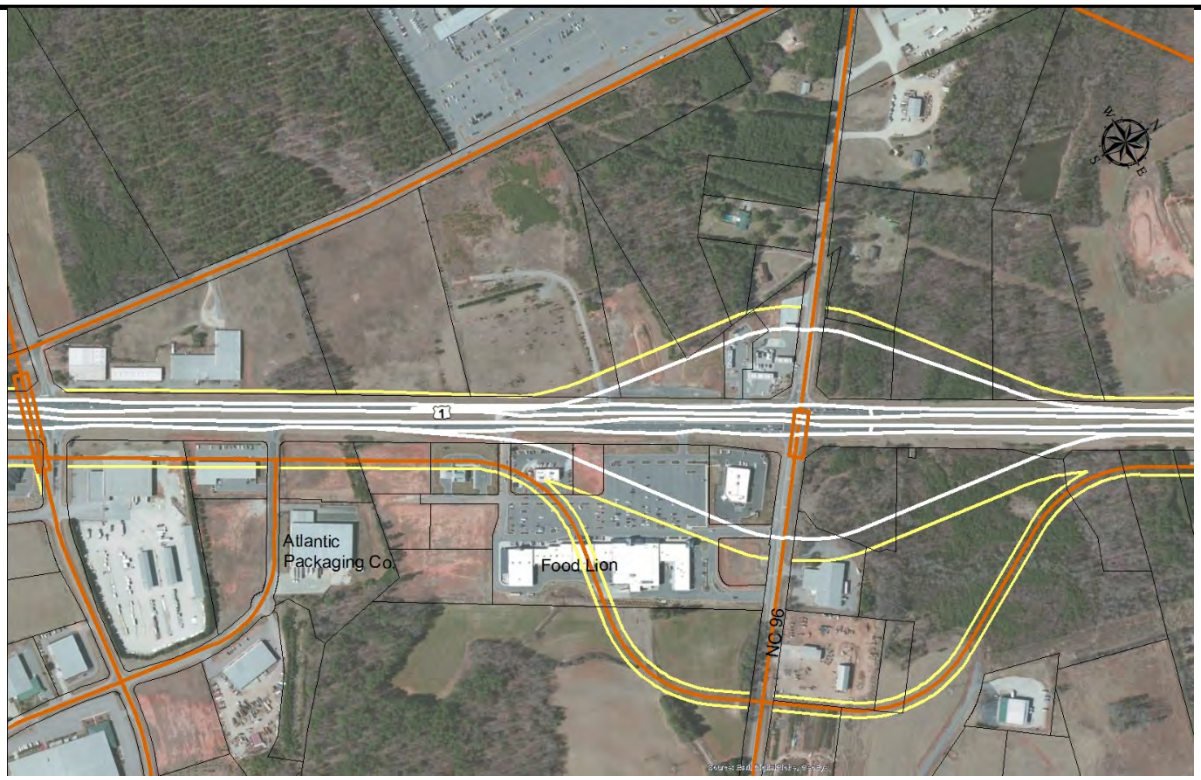
Before



After

Figure 7 - US 1 and Harris Rd.

Before



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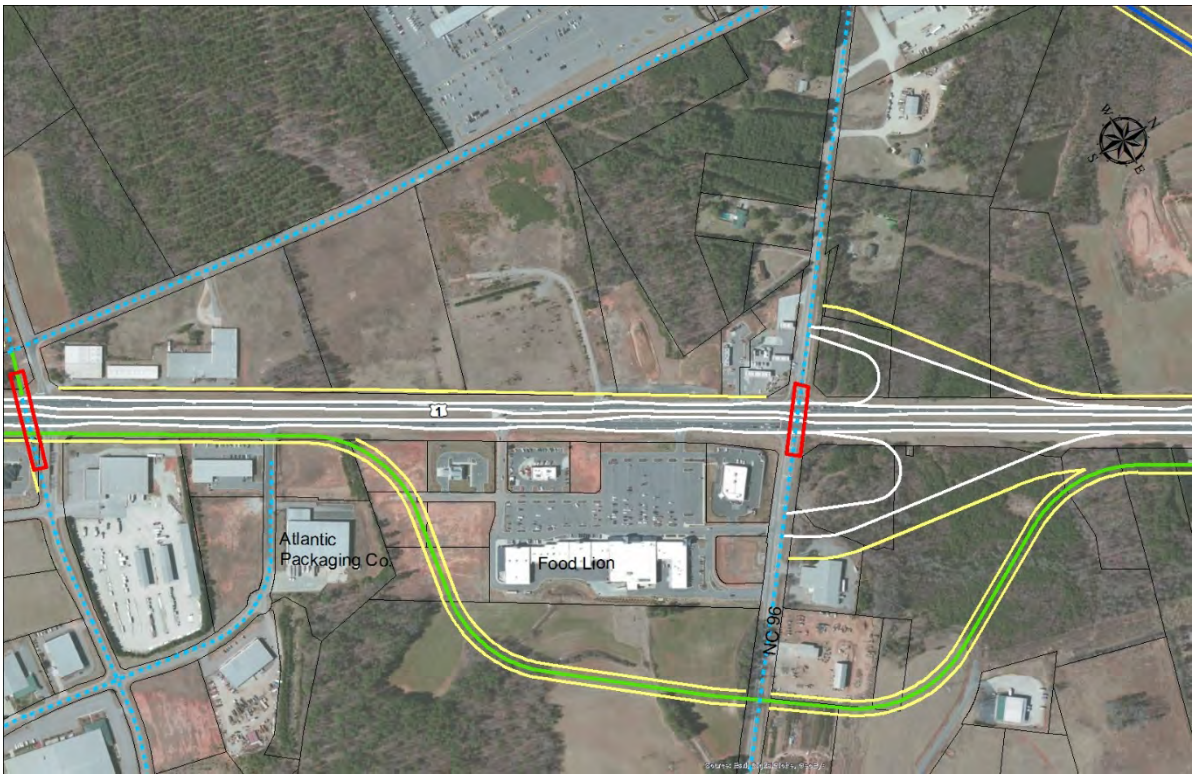


Figure 8 - US 1 and NC 96

IDENTIFICATION AND EVALUATION OF TRANSPORTATION IMPROVEMENTS

The traffic analysis has determined the impacts and proposed improvements to key intersections along the corridor. This effort focuses on the potential for superstreet configurations at identified key intersections. A superstreet configuration, or directional crossover with median u-turns, eliminates a full movement intersection by removing the through and left movements of the side streets. The through and left movements must turn right at the intersection and are directed to a median u-turn crossover located 800 to 1,000 feet down the main roadway, in this case US 1. This reduces the amount of green time during a given traffic signal cycle required for the side street (whereby the main line is stopped and delayed for the crossing traffic) and reallocates that to the main line traffic, allowing more main line traffic to proceed through the intersection thereby reducing delay and increasing Level-of Service (LOS). The upstream median u-turns are often signalized, however the green times associated with these movements are reduced and coordination with the main intersection creates a smooth flow for the main line traffic. The benefits of this configuration include increased through put at the congested main intersection and potentially increased safety by removing several conflict points.

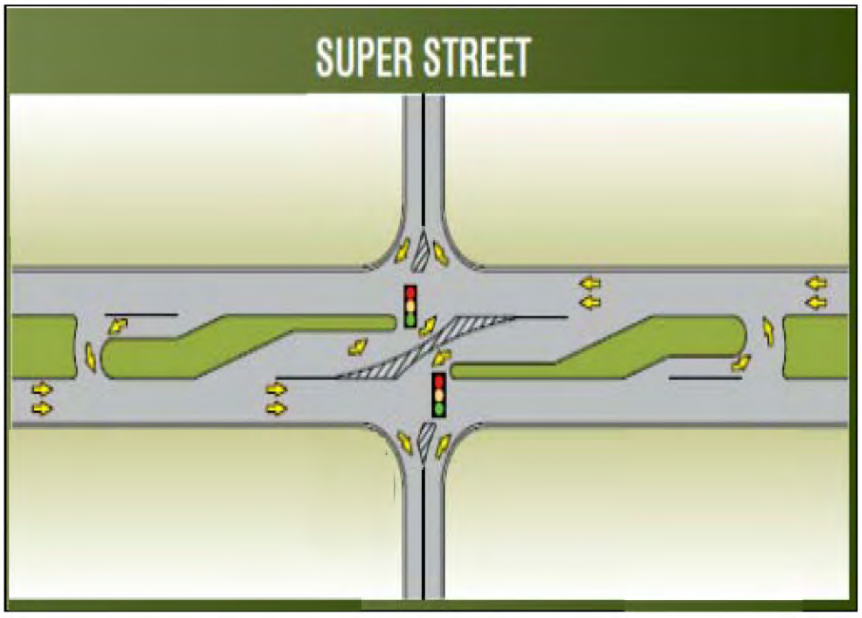


Figure 9 - Superstreet

As a basis for the analysis, the 2030 Triangle Regional macroscopic model was provided by CAMPO. Average Daily Traffic volumes (ADT) for the build out years 2015, 2020, and 2030 were returned from model outputs. Model inputs include proposed roadway improvements, origin-destination data, as well as future developments and other traffic generators. Model outputs for the three build out years can be found in the appendix.

To determine the location of the key intersections for potential superstreet analysis, a set of criteria was developed to evaluate existing and future data sets. These criteria included:

- Main line traffic volumes in conjunction with Level-of-Service (LOS)
- High crash intersections
- Existing wide medians (>35 feet)
- High left turn volume
- Overall geometry

The mainline LOS criteria table was taken from the Phase II study. The description of this table was given as follows:

Level of service (LOS) thresholds are used to characterize traffic capacity on highways and roadways. The LOS approach uses a standardized technique that results in categorizing a roadway or highway from LOS A to LOS F. LOS A represents uncongested flow. LOS F represents extreme congestion and high levels of delay. In general, LOS D is used as the desired threshold when examining urban facilities and LOS C is preferred for rural facilities. LOS for various types of highways and roadways is presented below in Table 2.

To provide an initial capacity analysis of the corridor, LOS thresholds for average daily traffic were determined for the existing 4-lane rural highway as well as potential for future typical sections that are being considered for the US 1 improvements. NCLOS planning level capacity software was used to estimate the daily LOS thresholds. The LOS thresholds are shown in Table 2.

It needs to be noted that LOS for freeways and arterials cannot be directly compared. In some cases, a freeway may operate at a worse LOS than an arterial with similar volumes. This apparent discrepancy is because the LOS ratings are based on a driver's perception of the quality of flow. On a freeway even small reductions in speed are perceived negatively although the drivers can continue to flow at a relatively high speed without stops. With an arterial or superstreet, however, the average driver is conditioned to accept a certain amount of delay including, by necessity, stopping at red lights. In general, a freeway will almost always provide relatively continuous flow with no stops except at very high levels of congestion and breakdown conditions.

Table 2 - Level of Service Thresholds for 4 Typical Sections

Facility Type	**Level of Service Thresholds (vehicles per day) 4 lane section**				
	LOS A	LOS B	LOS C	LOS D	LOS E
Rural Highway	16,400	26,800	38,700	52,000	55,200
Principal Arterial	16,000	29,800	31,700	34,200	37,700
Superstreet	**36,400**	**39,600**	**41,900**	**45,200**	**49,700**
Freeway	18,100	29,600	42,700	53,800	60,800

Notes:
1. ADT lookup table developed using NCLOS software.

2. Daily volumes based on assumption of 10% peak hour percentage and 60-40 directional split.
3. Principal arterial analysis assumes 50% green time for US 1 throughs. Superstreet analysis assumes 65% green time for US-1 throughs.

Roadway segments that fell within the superstreet ADT range with a LOS of D or better were considered for superstreet analysis.

High crash intersections were determined from section 2.7 of the Phase I study. These locations were not necessarily above the statewide median threshold but were among the higher rates along the corridor. These locations include:

- Durant Road / Perry Creek Road
- New Falls of Neuse Road / South Main Street
- I-540
- Gresham Lake Road
- Burlington Mill Road
- Jenkins Road / Stadium Drive

Median widths were determined from a desktop survey of the corridor. Median widths needed to be wide enough to accommodate u-turns and associated storage lanes (>35 feet). Although narrower median widths could accommodate superstreet geometrics, this would require u-turn bulb outs and therefore would impact development along the corridor. From this survey it was determined that the medians from the Burlington Mills Road area north had a median with an approximate width of 40 feet.

Existing high left turn volumes were also determined from a desktop survey. Any intersection that currently had dual left turn lanes were assumed to have a high left turn volume warranting the need for the dual lanes. This criterion is useful to determine if the installation of a superstreet would remove high green-times used to protect side-street left-turns from the intersection and transferring that time to the main line.

Overall geometric conditions of the intersections along the corridor were also analyzed. Intersections that included the following were removed from consideration since they were assumed to not have the through or left turning volume, or throughput connectivity (connecting of towns or major developments) to benefit from a conversion to a superstreet:

- T-intersection – No side street through traffic to warrant removal from the main intersection and diversion with a superstreet.
- Signalized driveway – Generally no side street through traffic or throughput to other areas to warrant removal from the main intersection and diversion with a superstreet.
- Left-over – Generally no side street through traffic to warrant removal from the main intersection and diversion with a superstreet.
- Unsignalized – Generally not enough side street traffic to benefit from a superstreet conversion.

The resultant intersections for potential analysis of a superstreet configuration were presented to the US 1 Council of Planning and associated pros and cons are detailed below.

Table 3 - Potential Superstreet Locations

INTERSECTION	PRO	CON	Advance to Detailed Study?
Durant Rd / Perry Creek Rd	• Side street dual lefts • Higher accident rate	• **Slated for Freeway upgrade** • Larger intersection • Heavy volumes	No
Burlington Mills Rd	• Volumes fall within range • Intersection function may benefit from superstreet as recommended by US 1 Council of Planning • Traffic coming from Rolesville	• **Western leg is an entrance to a shopping center**	Yes
New Falls of Neuse Rd / Main St (US-1A)	• Volumes fall within range • Side street dual lefts currently present • Higher accident rate	• **Slated for Freeway upgrade** • Larger intersection • Adjacent intersections may affect performance	No
Jenkins Rd	• Side street dual lefts currently present • Midrange accident rate • **Through traffic coming from Wake Forrest to residential area**	• Volumes well under the LOS of A threshold for a super street	Yes
Purnell Rd / Harris Rd	• Side street dual lefts currently present	• **Slated for Diamond Interchange** • Volumes well under the LOS of A threshold for a super street • No major connection of side street except to US 1A to the east	No

INTERSECTION	PRO	CON	Advance to Detailed Study?
Holden Rd	• Heavy volumes • Removing cross street traffic would increase corridor progression. • **Traffic coming from Youngsville**	• Slated for Diamond Interchange • Minor anticipated development	Yes
NC 96	• Volumes fall within range • Side street dual lefts currently present • Wide median	• **Slated for Diamond Interchange**	No

US 1, from I-540 to just south of NC 98 is now on the State Transportation Improvement Program (STIP) to upgrade the facility to a freeway with construction in 2023. Certain intersections have been slated for diamond interchanges through the Phase I and Phase II studies. Though this does not necessarily eliminate those intersections from a potential analysis, the cost-benefit of designing and constructing a superstreet intersection as an interim improvement would need to far outweigh the cost to remove it and construct a diamond interchange.

Although the intersection of Burlington Mills Road is an entrance to a shopping center (signalized driveway) the US 1 Council of Planning suggested that this intersection also be analyzed for a superstreet. Further, though this is a signalized driveway, Burlington Mills Road is an east-west collector connecting US 1 to US-401 and the Town of Rolesville, thereby making this a worthy intersection of study.

The intersections furthered for detailed study include:

- Burlington Mills Road
- Jenkins Road / Stadium Drive
- Holden Road

Turning movement counts for the intersections of Burlington Mills Road and Jenkins Road/Stadium Drive were provided from previous traffic analyses in the area. Although Holden Road appeared a worthy candidate for analysis, no previously collected turning movement counts were available for analysis. Also, during discussions with the steering committee, this intersection had previously been examined and a potential superior solution would be to upgrade the existing signal and create dual left turn lanes on US1. Therefore this intersection was not studied in detail for this analysis. The turning movement counts had existing years of 2008 for the intersection of Jenkins Road / Stadium Drive and 2012 for the intersection of Burlington Mills Road. The data for Jenkins Road / Stadium Drive was grown to 2012 to complete the existing analysis. Traffic data can be found in Appendix A – Traffic Analysis.

To analyze the study intersections in the build-out years a growth rate was developed by examining the model output volumes at the above two detailed analysis locations. Specific growth calculations were done at these locations since the project corridor is over 13.5 miles long and passes through or around various communities with differing densities and traffic flow variables. Growth rates were calculated to be between 2% and -2% depending upon the location and the comparison of the various model years. Looking at average growth rates, the Burlington Mills area was found to have a growth rate of 0.85% per year and the Jenkins Road/Stadium Drive area was found to have a 1.9% per year growth rate. Growth calculations can be found in Appendix A – Traffic Analysis. A Synchro microscopic model was created at the two study intersections for the existing conditions, no-build (signalized) conditions in 2030, and a superstreet configuration in 2030. The results of the analysis are below with Synchro outputs found in Appendix A.

Table 4 - Synchro Analysis Results

YEAR	PEAK PERIOD	BURLINGTON MILLS ROAD Level of Service		JENKINS ROAD/Stadium Drive Level of Service	
		No Build	Superstreet	No Build	Superstreet
2012	AM	E	B	E	B
	PM	C	A	E	B
2020	AM	E	C	F	C
	PM	B	B	F	B
2030	AM	F	D	F	E
	PM	D	B	F	D

The results of the analysis indicate that the intersections will benefit from a superstreet configuration by having a LOS of D or better in most instances. The intersection of Jenkins Road / Stadium Drive has a LOS of E for the morning peak period in 2030. Operationally the feasibility of a superstreet configuration will benefit these locations. It is recommended that a detailed superstreet analysis be conducted for these locations using up-to-date traffic data to determine optimal intersection design and configuration. Superstreet concepts for these three intersections can be found in Appendix B – Superstreet Concepts.

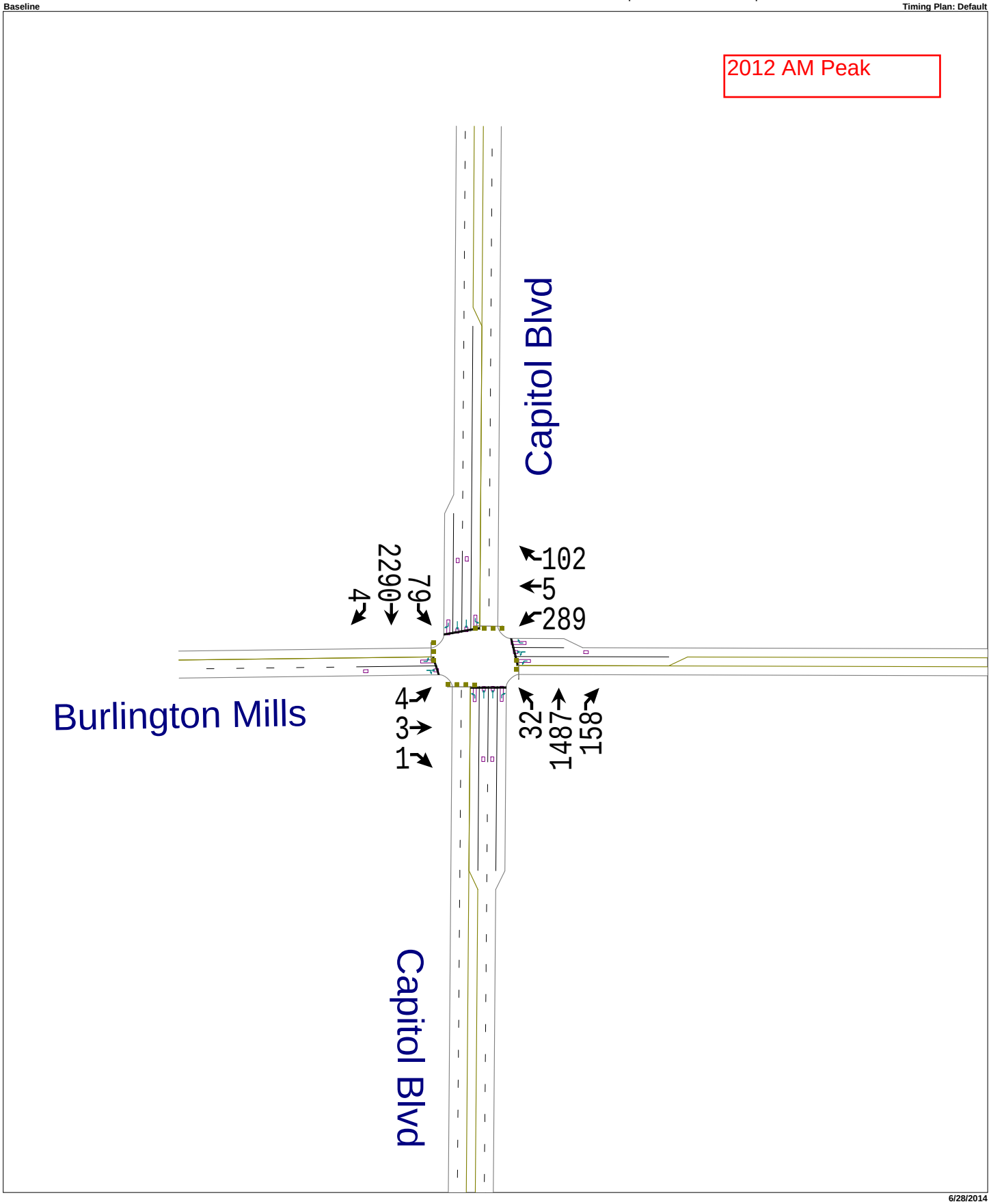
For each intersection, the cost for implementing the superstreet configuration will include upgrading the signal at the main intersection, constructing concrete separators, median crossovers with associated u-turn bulb outs. It is estimated the cost to implement the interim solution would be approximately plus or minus $300k per location.

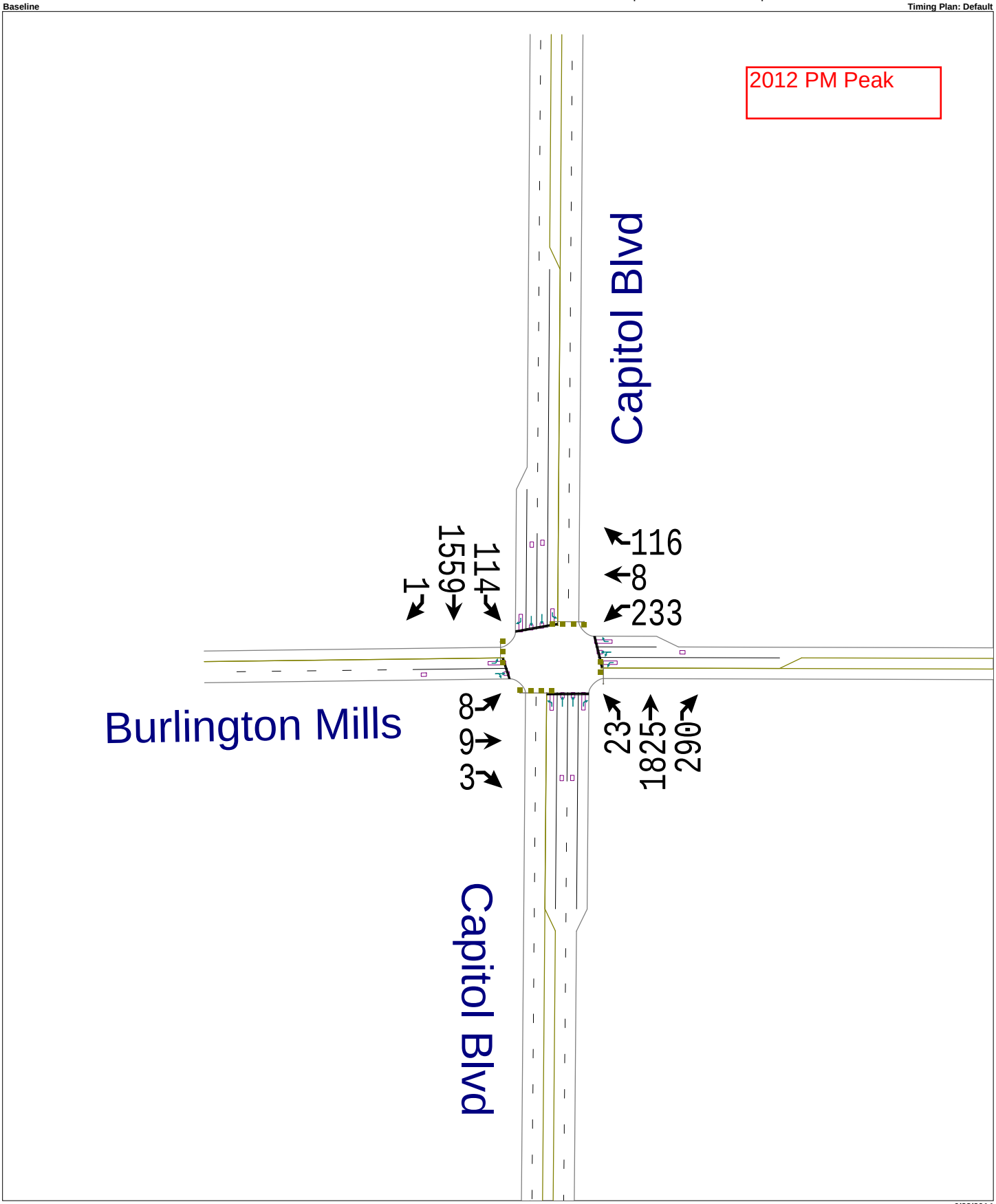
MAPPING UPDATE

The GIS mapping developed during the Phase I and Phase II studies was provided and has been merged together into one database. Similar features have been color coded for consistency and to help users differentiate between types of facilities. All line work has been reviewed and adjusted as necessary to reflect current conditions and development that has occurred over the past few years. A map set can be found in Appendix C.

APPENDIX A

Traffic Analysis


2012 AM Peak
Capitol Blvd
Burlington Mills
Capitol Blvd
4
2290
79
102
5
289
4
3
1
32
1487
158

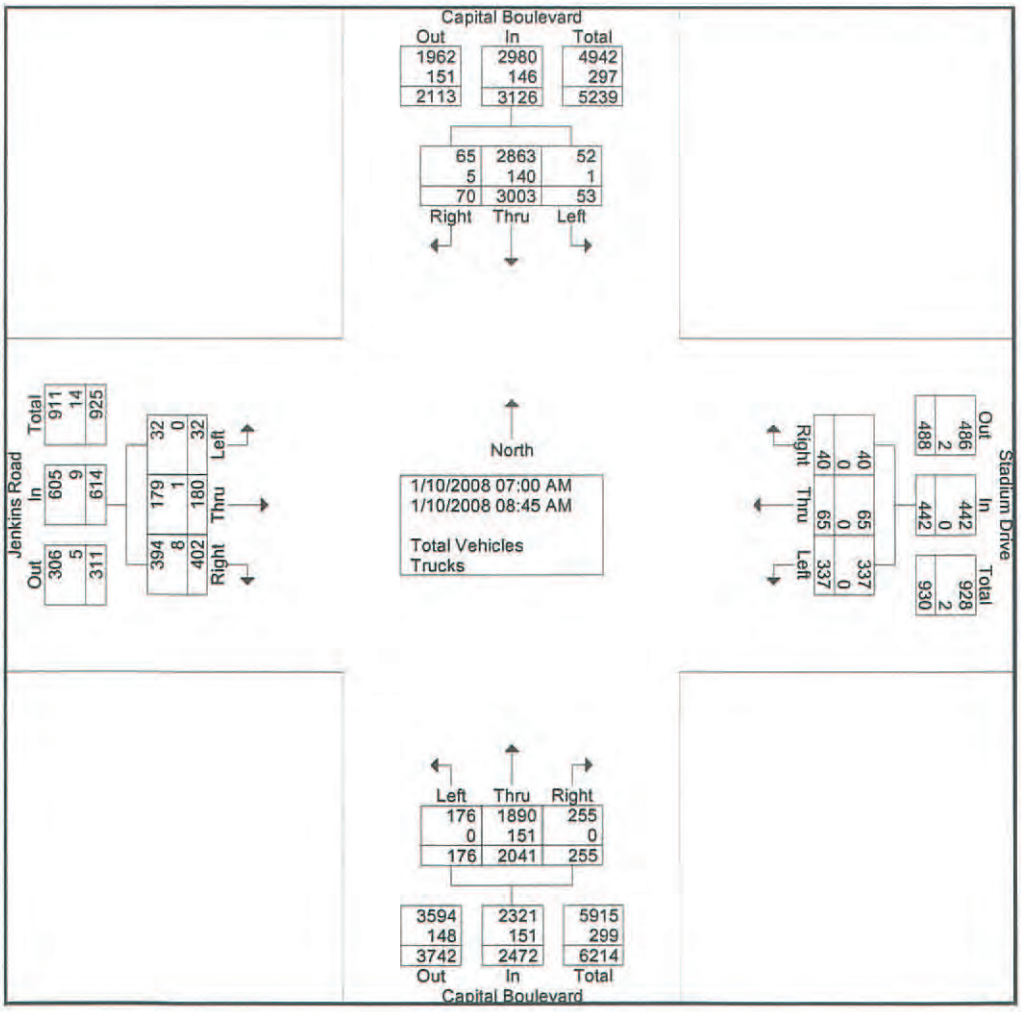

2012 PM Peak
Capitol Blvd
Capitol Blvd
Burlington Mills
1
1559
114
116
8
233
8
9
3
23
1825
290

Wilbur Smith Associates
421 Fayetteville Street, Suite 1303
Raleigh, NC 27601

File Name : Cap Jenkins AM Combine
Site Code : 00000412
Start Date : 1/10/2008
Page No : 1

Groups Printed- Total Vehicles - Trucks

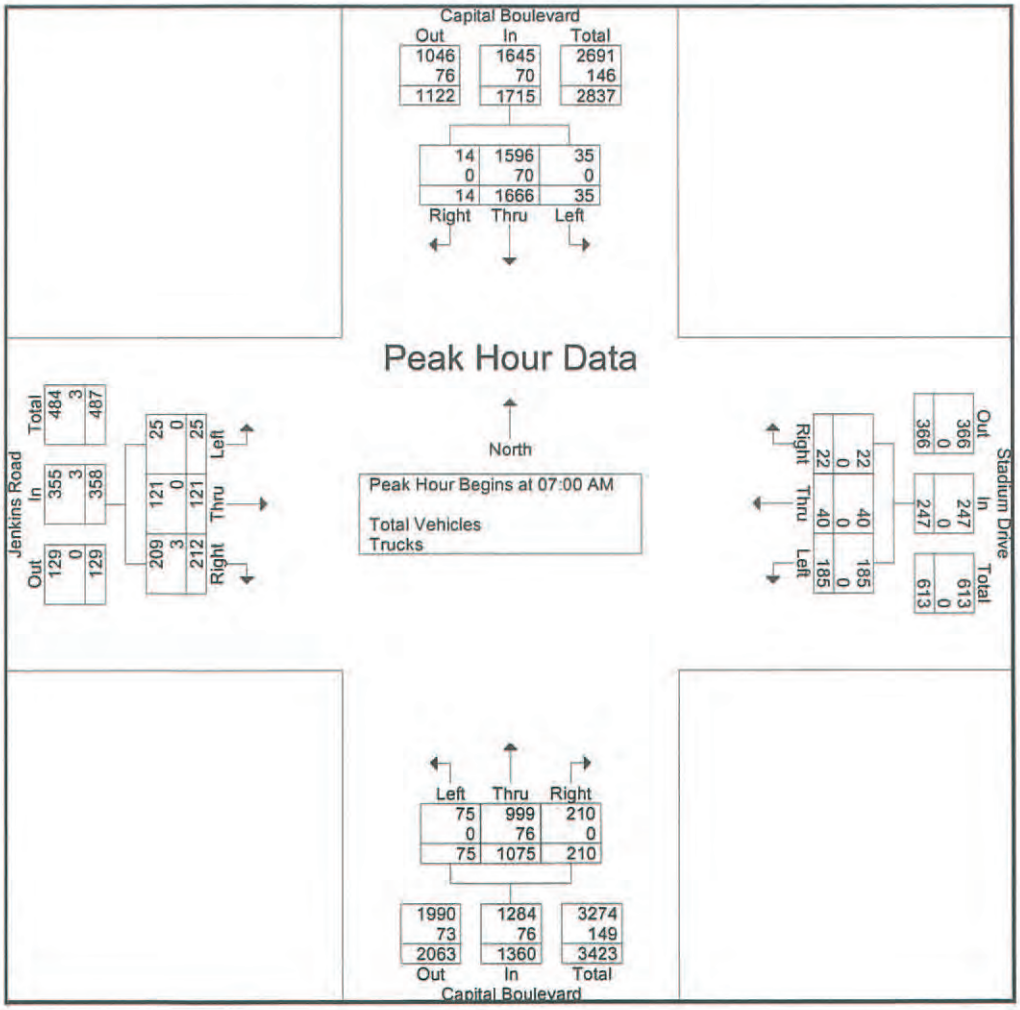
	Capital Boulevard From North				Stadium Drive From East				Capital Boulevard From South				Jenkins Road From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	6	526	5	537	2	2	39	43	14	186	16	216	61	16	5	82	878
07:15 AM	1	360	8	369	4	8	50	62	41	301	21	363	57	26	5	88	882
07:30 AM	2	433	12	447	8	15	43	66	77	280	13	370	38	35	7	80	963
07:45 AM	5	347	10	362	8	15	53	76	78	308	25	411	56	44	8	108	957
Total	14	1666	35	1715	22	40	185	247	210	1075	75	1360	212	121	25	358	3680
08:00 AM	14	345	4	363	8	9	56	73	10	243	22	275	56	12	0	68	779
08:15 AM	11	381	6	398	2	6	28	36	14	256	33	303	36	15	2	53	790
08:30 AM	23	318	3	344	4	4	30	38	11	260	19	290	53	17	2	72	744
08:45 AM	8	293	5	306	4	6	38	48	10	207	27	244	45	15	3	63	661
Total	56	1337	18	1411	18	25	152	195	45	966	101	1112	190	59	7	256	2974
Grand Total	70	3003	53	3126	40	65	337	442	255	2041	176	2472	402	180	32	614	6654
Apprch %	2.2	96.1	1.7		9	14.7	76.2		10.3	82.6	7.1		65.5	29.3	5.2		
Total %	1.1	45.1	0.8	47	0.6	1	5.1	6.6	3.8	30.7	2.6	37.2	6	2.7	0.5	9.2	
Total Vehicles	65	2863	52	2980	40	65	337	442	255	1890	176	2321	394	179	32	605	6348
% Total Vehicles	92.9	95.3	98.1	95.3	100	100	100	100	100	92.6	100	93.9	98	99.4	100	98.5	95.4
Trucks	5	140	1	146	0	0	0	0	0	151	0	151	8	1	0	9	306
% Trucks	7.1	4.7	1.9	4.7	0	0	0	0	0	7.4	0	6.1	2	0.6	0	1.5	4.6



Wilbur Smith Associates
421 Fayetteville Street, Suite 1303
Raleigh, NC 27601

File Name : Cap Jenkins AM Combine
Site Code : 00000412
Start Date : 1/10/2008

	Capital Boulevard From North				Stadium Drive From East				Capital Boulevard From South				Jenkins Road From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	**6**	**526**	5	**537**	2	2	39	43	14	186	16	216	**61**	16	5	82	878
07:15 AM	1	360	8	369	4	8	50	62	41	301	21	363	57	26	5	88	882
07:30 AM	2	433	**12**	447	**8**	**15**	43	66	77	280	13	370	38	35	7	80	**963**
07:45 AM	5	347	10	362	8	15	**53**	**76**	**78**	**308**	**25**	**411**	56	**44**	**8**	**108**	957
Total Volume	14	1666	35	1715	22	40	185	247	210	1075	75	1360	212	121	25	358	3680
% App. Total	0.8	97.1	2		8.9	16.2	74.9		15.4	79	5.5		59.2	33.8	7		
PHF	.583	.792	.729	.798	.688	.667	.873	.813	.673	.873	.750	.827	.869	.688	.781	.829	.955
Total Vehicles	14	1596	35	1645	22	40	185	247	210	999	75	1284	209	121	25	355	3531
% Total Vehicles	100	95.8	100	95.9	100	100	100	100	100	92.9	100	94.4	98.6	100	100	99.2	96.0
Trucks	0	70	0	70	0	0	0	0	0	76	0	76	3	0	0	3	149
% Trucks	0	4.2	0	4.1	0	0	0	0	0	7.1	0	5.6	1.4	0	0	0.8	4.0



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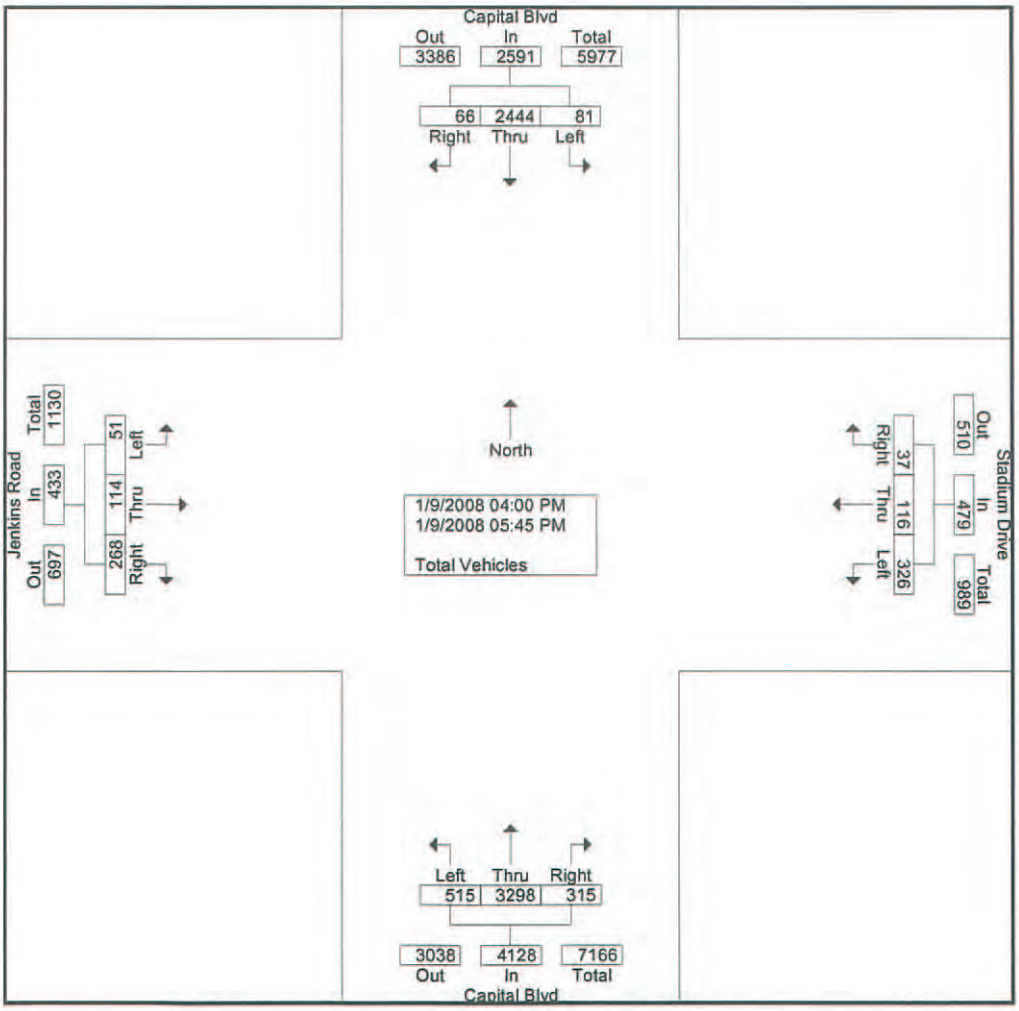
421 Fayetteville Street, Suite 1303
Raleigh, NC 27601

File Name : Cap Jenkins PM Combine
Site Code : 00000422
Start Date : 1/9/2008
Page No : 1

Groups Printed- Total Vehicles

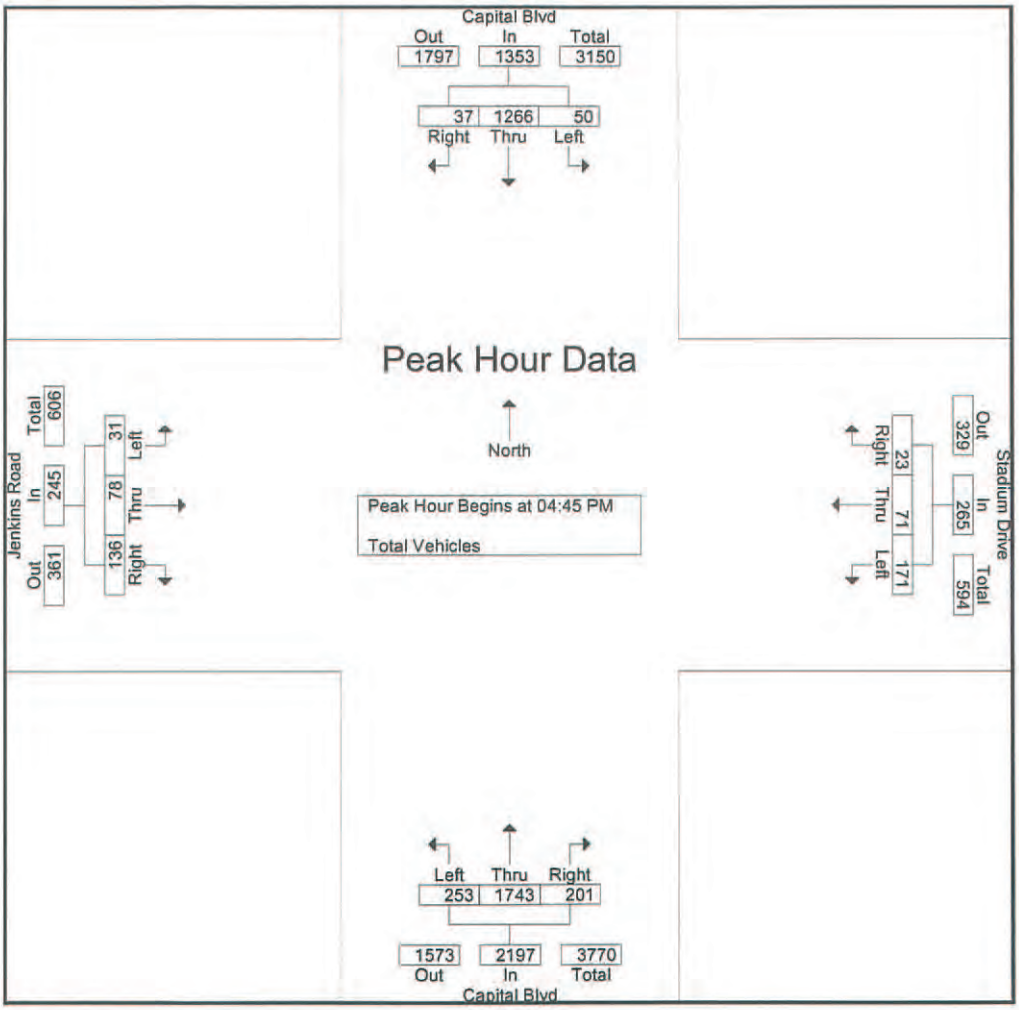
	Capital Blvd From North				Stadium Drive From East				Capital Blvd From South				Jenkins Road From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
04:00 PM	6	261	6	273	2	11	33	46	34	363	45	442	32	2	6	40	801
04:15 PM	11	308	7	326	3	14	45	62	25	371	56	452	27	12	8	47	887
04:30 PM	7	325	8	340	8	12	35	55	33	407	57	497	39	12	4	55	947
04:45 PM	6	287	7	300	8	20	31	59	59	383	63	505	29	48	8	85	949
Total	30	1181	28	1239	21	57	144	222	151	1524	221	1896	127	74	26	227	3584
05:00 PM	6	382	9	397	7	19	46	72	45	476	63	584	30	10	5	45	1098
05:15 PM	13	343	7	363	2	20	50	72	44	444	55	543	46	11	12	69	1047
05:30 PM	12	254	27	293	6	12	44	62	53	440	72	565	31	9	6	46	966
05:45 PM	5	284	10	299	1	8	42	51	22	414	104	540	34	10	2	46	936
Total	36	1263	53	1352	16	59	182	257	164	1774	294	2232	141	40	25	206	4047
Grand Total	66	2444	81	2591	37	116	326	479	315	3298	515	4128	268	114	51	433	7631
Apprch %	2.5	94.3	3.1		7.7	24.2	68.1		7.6	79.9	12.5		61.9	26.3	11.8		
Total %	0.9	32	1.1	34	0.5	1.5	4.3	6.3	4.1	43.2	6.7	54.1	3.5	1.5	0.7	5.7	



Wilbur Smith Associates
421 Fayetteville Street, Suite 1303
Raleigh, NC 27601

File Name : Cap Jenkins PM Combine
Site Code : 00000422
Start Date : 1/9/2008
Page No : 2

	Capital Blvd From North				Stadium Drive From East				Capital Blvd From South				Jenkins Road From West				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:45 PM																	
04:45 PM	6	287	7	300	**8**	**20**	31	59	**59**	383	63	505	29	**48**	8	**85**	949
05:00 PM	6	**382**	9	**397**	7	19	46	**72**	45	**476**	63	**584**	30	10	5	45	**1098**
05:15 PM	**13**	343	7	363	2	20	**50**	72	44	444	55	543	**46**	11	**12**	69	1047
05:30 PM	12	254	**27**	293	6	12	44	62	53	440	**72**	565	31	9	6	46	966
Total Volume	37	1266	50	1353	23	71	171	265	201	1743	253	2197	136	78	31	245	4060
% App. Total	2.7	93.6	3.7		8.7	26.8	64.5		9.1	79.3	11.5		55.5	31.8	12.7		
PHF	.712	.829	.463	.852	.719	.888	.855	.920	.852	.915	.878	.940	.739	.406	.646	.721	.924



Gannett Fleming

SUBJECT GROWTH RATE — SHEET NO. 1 OF

JOB NO. 52810

BY WTW DATE 6-13-14 CHKD. BY DATE — US-1

- BURLINGTON MILLS AREA — 0.85%/YEAR GROWTH RATE

• FROM MODEL

2015 - 59477		53116
2020 - 62185		55247
2030 - 45968		45968

$62185 = 59477(1+i)^5$ $i = 0.9\%$

2015 - 2020	0.89%	0.79%
2020 - 2030	-2.98%	-1.82%
2015 - 2030	-1.70%	-0.96%

- EXISTING TRAFFIC COUNTS 2012

2030 - 2012 = 18 $(1+0.0085)^{12}$ = 1.16 GROWTH FACTOR

2020 - 2012 = 8 $(1+0.0085)^{8}$ = 1.07

- JENKINS RD AREA — 1.9%/YR GROWTH RATE

• FROM MODEL

2015 - 21150		20733
2020 - 23132		22137
2030 - 28886		27216

2015 - 2020	1.81%	1.32%
2020 - 2030	2.25%	2.09%
2015 - 2030	2.10%	1.83%

- EXISTING TRAFFIC COUNTS 2008.

2030 - 2008: 22 $(1+0.019)^{22}$ = 1.51 GROWTH FACTOR

2012 - 2008 = 4 $(1+0.019)^{4}$ = 1.08 GROWTH FACTOR EXIST

2030 - 2012 = 18 $(1+0.019)^{18}$ = 1.04 GROWTH FACTOR FUTURE

2020 - 2008 = 12 $(1+0.019)^{12}$ = 1.25 GROWTH FACTOR MID-

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	4	3	289	5	102	32	1487	158	79	2290	4
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases	4		8		8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	7.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	70.0	13.0	15.0	72.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	18.3%	10.8%	58.3%	10.8%	12.5%	60.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	8.8	10.0	11.3	10.0	10.0	7.0	64.2	79.7	8.6	71.1	84.2
Actuated g/C Ratio	0.09	0.10	0.11	0.10	0.10	0.07	0.62	0.77	0.08	0.69	0.82
v/c Ratio	0.03	0.02	1.79	0.03	0.41	0.30	0.75	0.14	0.60	1.04	0.00
Control Delay	40.2	41.0	407.2	45.2	9.9	54.4	17.5	1.3	64.2	49.6	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.2	41.0	407.2	45.2	9.9	54.4	17.5	1.3	64.2	49.6	0.0
LOS	D	D	F	D	A	D	B	A	E	D	A
Approach Delay		40.6		300.2			16.6			50.0	
Approach LOS		D		F			B			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.2	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.79	
Intersection Signal Delay: 59.7	Intersection LOS: E
Intersection Capacity Utilization 98.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Volume (vph)	25	121	185	40	75	999	210	35	1666	14
Turn Type	pm+pt	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases	4						2			6
Detector Phase	7	4	3	8	5	2	3	1	6	7
Switch Phase										
Minimum Initial (s)	7.0	10.0	7.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	15.0	24.0	13.0	70.0	15.0	13.0	70.0	13.0
Total Split (%)	10.8%	18.3%	12.5%	20.0%	10.8%	58.3%	12.5%	10.8%	58.3%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	23.0	16.0	9.0	23.2	7.0	66.6	81.6	7.0	64.0	77.0
Actuated g/C Ratio	0.19	0.13	0.08	0.19	0.06	0.56	0.68	0.06	0.53	0.64
v/c Ratio	0.11	1.44	0.86	0.21	0.87	0.61	0.22	0.41	1.06	0.02
Control Delay	35.0	249.8	85.1	34.9	115.8	20.3	2.7	66.7	66.7	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.0	249.8	85.1	34.9	115.8	20.3	2.7	66.7	66.7	0.0
LOS	C	F	F	C	F	C	A	E	E	A
Approach Delay		234.8		72.5		23.0			66.2	
Approach LOS		F		E		C			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.44	
Intersection Signal Delay: 68.0	Intersection LOS: E
Intersection Capacity Utilization 102.3%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	8	9	233	8	116	23	1825	290	114	1559	1
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases	4		8		8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	7.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	71.0	13.0	14.0	72.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	18.3%	10.8%	59.2%	10.8%	11.7%	60.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	9.0	10.2	11.5	10.2	10.2	7.0	65.2	80.7	8.0	74.2	87.2
Actuated g/C Ratio	0.09	0.10	0.11	0.10	0.10	0.07	0.63	0.78	0.08	0.71	0.84
v/c Ratio	0.06	0.07	1.45	0.05	0.46	0.22	0.91	0.25	0.93	0.68	0.00
Control Delay	40.9	39.3	262.8	45.2	13.1	52.3	25.4	1.7	109.8	12.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.9	39.3	262.8	45.2	13.1	52.3	25.4	1.7	109.8	12.5	0.0
LOS	D	D	F	D	B	D	C	A	F	B	A
Approach Delay		40.0		176.7			22.5			19.1	
Approach LOS		D		F			C			B	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.8	
Natural Cycle: 130	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.45	
Intersection Signal Delay: 34.4	Intersection LOS: C
Intersection Capacity Utilization 91.3%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Volume (vph)	31	78	171	71	253	1743	201	50	1266	37
Turn Type	pm+pt	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases	4						2			6
Detector Phase	7	4	3	8	5	2	3	1	6	7
Switch Phase										
Minimum Initial (s)	7.0	10.0	7.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	26.0	72.0	13.0	13.0	59.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	21.7%	60.0%	10.8%	10.8%	49.2%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	22.8	15.8	7.0	18.4	20.0	68.6	81.6	7.0	53.0	66.0
Actuated g/C Ratio	0.19	0.13	0.06	0.15	0.17	0.57	0.68	0.06	0.44	0.55
v/c Ratio	0.14	0.94	1.02	0.40	1.03	1.03	0.22	0.58	0.97	0.05
Control Delay	36.9	80.3	125.4	47.4	109.4	55.7	4.9	77.6	49.8	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.9	80.3	125.4	47.4	109.4	55.7	4.9	77.6	49.8	0.1
LOS	D	F	F	D	F	E	A	E	D	A
Approach Delay		74.8		97.7		57.2			49.5	
Approach LOS		E		F		E			D	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 119.8	
Natural Cycle: 130	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.03	
Intersection Signal Delay: 58.4	Intersection LOS: E
Intersection Capacity Utilization 97.1%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Volume (vph)	8	396	32	1491	161	79	2579	9
Turn Type	Over	Over	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	1	5	2		1	6	
Permitted Phases					2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	13.0	25.0	13.0	65.0	65.0	25.0	77.0	77.0
Total Split (%)	14.4%	27.8%	14.4%	72.2%	72.2%	27.8%	85.6%	85.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	7.0	16.6	7.0	61.4	61.4	16.6	78.6	78.6
Actuated g/C Ratio	0.08	0.18	0.08	0.68	0.68	0.18	0.87	0.87
v/c Ratio	0.03	0.78	0.26	0.69	0.16	0.27	0.93	0.01
Control Delay	0.1	39.8	41.1	7.9	0.5	34.8	6.2	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0
Total Delay	0.1	39.8	41.1	8.0	0.5	34.8	7.6	0.0
LOS	A	D	D	A	A	C	A	A
Approach Delay				7.9			8.4	
Approach LOS				A			A	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 10.8 — Intersection LOS: B
Intersection Capacity Utilization 87.1% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBR	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations								
Volume (vph)	358	247	75	1024	331	35	1851	54
Turn Type	Perm	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases			5	2		1	6	
Permitted Phases	5	1			2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	21.0	15.0	21.0	75.0	75.0	15.0	69.0	69.0
Total Split (%)	23.3%	16.7%	23.3%	83.3%	83.3%	16.7%	76.7%	76.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	14.8	7.9	14.8	70.1	70.1	7.9	63.2	63.2
Actuated g/C Ratio	0.16	0.09	0.16	0.78	0.78	0.09	0.70	0.70
v/c Ratio	0.88	0.65	0.31	0.45	0.30	0.27	0.89	0.06
Control Delay	55.0	17.4	38.0	3.4	0.9	40.1	13.3	1.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	55.0	17.4	38.0	3.4	0.9	40.1	13.5	1.5
LOS	D	B	D	A	A	D	B	A
Approach Delay				4.6			13.6	
Approach LOS				A			B	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Yellow, Master Intersection
Natural Cycle: 75
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 14.3 — Intersection LOS: B
Intersection Capacity Utilization 78.8% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Volume (vph)	20	357	23	1833	299	114	1782	9
Turn Type	Over	Over	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	1	5	2		1	6	
Permitted Phases					2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	13.0	22.0	13.0	68.0	68.0	22.0	77.0	77.0
Total Split (%)	14.4%	24.4%	14.4%	75.6%	75.6%	24.4%	85.6%	85.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	7.0	15.0	7.0	63.0	63.0	15.0	78.6	78.6
Actuated g/C Ratio	0.08	0.17	0.08	0.70	0.70	0.17	0.87	0.87
v/c Ratio	0.07	0.80	0.19	0.82	0.28	0.43	0.64	0.01
Control Delay	0.4	45.9	43.6	8.6	0.5	42.5	2.3	0.0
Queue Delay	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Total Delay	0.4	45.9	43.6	8.9	0.5	42.5	2.3	0.0
LOS	A	D	D	A	A	D	A	A
Approach Delay				8.1			4.7	
Approach LOS				A			A	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 9.7 — Intersection LOS: A
Intersection Capacity Utilization 73.2% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBR	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations								
Volume (vph)	245	265	253	1774	279	50	1437	108
Turn Type	Perm	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases			5	2		1	6	
Permitted Phases	5	1			2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	29.0	17.0	29.0	73.0	73.0	17.0	61.0	61.0
Total Split (%)	32.2%	18.9%	32.2%	81.1%	81.1%	18.9%	67.8%	67.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	19.6	10.3	19.6	67.7	67.7	10.3	58.4	58.4
Actuated g/C Ratio	0.22	0.11	0.22	0.75	0.75	0.11	0.65	0.65
v/c Ratio	0.46	0.77	0.79	0.80	0.27	0.30	0.75	0.12
Control Delay	27.8	38.3	45.8	3.5	0.3	39.1	11.5	1.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.8	38.3	45.8	3.5	0.3	39.1	11.5	1.4
LOS	C	D	D	A	A	D	B	A
Approach Delay				7.7			11.7	
Approach LOS				A			B	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NET and 6:SWT, Start of Yellow
Natural Cycle: 60
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 12.1 — Intersection LOS: B
Intersection Capacity Utilization 73.0% — ICU Level of Service C
Analysis Period (min) 15

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	4	3	289	5	102	32	1487	158	79	2290	4
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases	4		8		8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	7.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	70.0	13.0	15.0	72.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	18.3%	10.8%	58.3%	10.8%	12.5%	60.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	8.9	10.1	11.3	10.1	10.1	7.0	64.2	79.7	8.7	71.2	84.2
Actuated g/C Ratio	0.09	0.10	0.11	0.10	0.10	0.07	0.62	0.77	0.08	0.69	0.82
v/c Ratio	0.03	0.03	1.92	0.03	0.44	0.32	0.80	0.15	0.64	1.12	0.00
Control Delay	40.5	41.8	461.9	45.2	11.6	55.0	19.4	1.4	66.5	78.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.5	41.8	461.9	45.2	11.6	55.0	19.4	1.4	66.5	78.0	0.0
LOS	D	D	F	D	B	E	B	A	E	E	A
Approach Delay		41.1		340.9			18.4			77.5	
Approach LOS		D		F			B			E	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.3	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.92	
Intersection Signal Delay: 78.6	Intersection LOS: E
Intersection Capacity Utilization 104.0%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Volume (vph)	25	121	185	40	75	999	210	35	1666	14
Turn Type	pm+pt	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases	4						2			6
Detector Phase	7	4	3	8	5	2	3	1	6	7
Switch Phase										
Minimum Initial (s)	7.0	10.0	7.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	15.0	24.0	13.0	70.0	15.0	13.0	70.0	13.0
Total Split (%)	10.8%	18.3%	12.5%	20.0%	10.8%	58.3%	12.5%	10.8%	58.3%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	23.0	16.0	9.0	20.6	7.0	66.6	81.6	7.0	64.0	77.0
Actuated g/C Ratio	0.19	0.13	0.08	0.17	0.06	0.56	0.68	0.06	0.53	0.64
v/c Ratio	0.13	1.67	1.00	0.27	1.01	0.71	0.26	0.48	1.23	0.02
Control Delay	35.3	344.9	111.8	37.4	147.7	22.8	3.4	70.4	134.4	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	344.9	111.8	37.4	147.7	22.8	3.4	70.4	134.4	0.1
LOS	D	F	F	D	F	C	A	E	F	A
Approach Delay		323.1		93.0		26.9			132.0	
Approach LOS		F		F		C			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.67	
Intersection Signal Delay: 110.8	Intersection LOS: F
Intersection Capacity Utilization 114.2%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	8	9	233	8	116	23	1825	290	114	1559	1
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases	4		8		8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	7.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	71.0	13.0	14.0	72.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	18.3%	10.8%	59.2%	10.8%	11.7%	60.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	11.1	10.4	14.1	12.8	12.8	7.0	65.3	80.2	8.0	71.8	84.8
Actuated g/C Ratio	0.10	0.10	0.13	0.12	0.12	0.07	0.61	0.75	0.08	0.67	0.80
v/c Ratio	0.06	0.08	1.54	0.04	0.44	0.23	1.00	0.28	1.02	0.78	0.00
Control Delay	38.4	39.6	299.3	43.6	12.5	54.9	41.7	2.3	134.1	18.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	39.6	299.3	43.6	12.5	54.9	41.7	2.3	134.1	18.0	0.0
LOS	D	D	F	D	B	D	D	A	F	B	A
Approach Delay		39.2		200.2			36.5			25.9	
Approach LOS		D		F			D			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.6	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.54	
Intersection Signal Delay: 46.3	Intersection LOS: D
Intersection Capacity Utilization 96.2%	ICU Level of Service F
Analysis Period (min) 15	

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Volume (vph)	31	78	171	71	253	1743	201	50	1266	37
Turn Type	pm+pt	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases	4						2			6
Detector Phase	7	4	3	8	5	2	3	1	6	7
Switch Phase										
Minimum Initial (s)	7.0	10.0	7.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	26.0	72.0	13.0	13.0	59.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	21.7%	60.0%	10.8%	10.8%	49.2%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	23.0	16.0	7.0	18.6	20.0	68.6	81.6	7.0	53.0	66.0
Actuated g/C Ratio	0.19	0.13	0.06	0.16	0.17	0.57	0.68	0.06	0.44	0.55
v/c Ratio	0.16	1.07	1.19	0.46	1.19	1.20	0.25	0.67	1.12	0.05
Control Delay	37.3	113.8	172.3	49.5	157.5	120.0	5.5	85.6	97.5	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.3	113.8	172.3	49.5	157.5	120.0	5.5	85.6	97.5	0.1
LOS	D	F	F	D	F	F	A	F	F	A
Approach Delay		104.2		128.7		113.8			94.4	
Approach LOS		F		F		F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.20	
Intersection Signal Delay: 107.7	Intersection LOS: F
Intersection Capacity Utilization 107.7%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Volume (vph)	8	396	32	1491	161	79	2579	9
Turn Type	Over	Over	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	1	5	2		1	6	
Permitted Phases					2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	13.0	25.0	13.0	65.0	65.0	25.0	77.0	77.0
Total Split (%)	14.4%	27.8%	14.4%	72.2%	72.2%	27.8%	85.6%	85.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	7.0	17.5	7.0	60.5	60.5	17.5	78.6	78.6
Actuated g/C Ratio	0.08	0.19	0.08	0.67	0.67	0.19	0.87	0.87
v/c Ratio	0.03	0.81	0.28	0.74	0.17	0.27	0.99	0.01
Control Delay	0.2	42.9	40.9	9.4	0.6	34.6	11.9	0.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	33.8	0.0
Total Delay	0.2	42.9	40.9	9.4	0.6	34.6	45.6	0.0
LOS	A	D	D	A	A	C	D	A
Approach Delay				9.2			45.1	
Approach LOS				A			D	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 130
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.99
Intersection Signal Delay: 32.1 — Intersection LOS: C
Intersection Capacity Utilization 92.1% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBR	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations								
Volume (vph)	358	247	75	1024	331	35	1851	54
Turn Type	Perm	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases			5	2		1	6	
Permitted Phases	5	1			2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	21.0	15.0	21.0	75.0	75.0	15.0	69.0	69.0
Total Split (%)	23.3%	16.7%	23.3%	83.3%	83.3%	16.7%	76.7%	76.7%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	15.0	8.6	15.0	69.4	69.4	8.6	63.0	63.0
Actuated g/C Ratio	0.17	0.10	0.17	0.77	0.77	0.10	0.70	0.70
v/c Ratio	1.01	0.83	0.35	0.52	0.35	0.29	1.04	0.07
Control Delay	78.4	38.6	35.2	3.9	0.7	41.3	41.4	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	78.4	38.6	35.2	3.9	0.7	41.3	41.4	1.8
LOS	E	D	D	A	A	D	D	A
Approach Delay				4.8			40.3	
Approach LOS				A			D	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Yellow, Master Intersection
Natural Cycle: 110
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.04
Intersection Signal Delay: 30.9 — Intersection LOS: C
Intersection Capacity Utilization 89.6% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Volume (vph)	20	357	23	1833	299	114	1782	9
Turn Type	Over	Over	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	1	5	2		1	6	
Permitted Phases					2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	13.0	22.0	13.0	68.0	68.0	22.0	77.0	77.0
Total Split (%)	14.4%	24.4%	14.4%	75.6%	75.6%	24.4%	85.6%	85.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	7.0	15.4	7.0	62.6	62.6	15.4	78.6	78.6
Actuated g/C Ratio	0.08	0.17	0.08	0.70	0.70	0.17	0.87	0.87
v/c Ratio	0.08	0.84	0.20	0.89	0.29	0.45	0.69	0.01
Control Delay	0.5	48.8	43.2	11.0	0.4	42.3	2.6	0.1
Queue Delay	0.0	0.0	0.0	0.9	0.0	0.0	0.0	0.0
Total Delay	0.5	48.8	43.2	12.0	0.4	42.3	2.6	0.1
LOS	A	D	D	B	A	D	A	A
Approach Delay				10.7			5.0	
Approach LOS				B			A	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.89
Intersection Signal Delay: 11.2 — Intersection LOS: B
Intersection Capacity Utilization 77.6% — ICU Level of Service D
Analysis Period (min) 15

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBR	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations								
Volume (vph)	245	265	253	1774	279	50	1437	108
Turn Type	Perm	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases			5	2		1	6	
Permitted Phases	5	1			2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	29.0	17.0	29.0	73.0	73.0	17.0	61.0	61.0
Total Split (%)	32.2%	18.9%	32.2%	81.1%	81.1%	18.9%	67.8%	67.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	21.1	10.7	21.1	67.3	67.3	10.7	56.9	56.9
Actuated g/C Ratio	0.23	0.12	0.23	0.75	0.75	0.12	0.63	0.63
v/c Ratio	0.50	0.86	0.85	0.93	0.31	0.33	0.89	0.14
Control Delay	28.9	47.9	41.2	5.0	0.2	35.8	17.0	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
Total Delay	28.9	47.9	41.2	5.0	0.2	35.8	17.1	3.1
LOS	C	D	D	A	A	D	B	A
Approach Delay				8.4			16.7	
Approach LOS				A			B	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NET and 6:SWT, Start of Yellow
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.93
Intersection Signal Delay: 14.9 — Intersection LOS: B
Intersection Capacity Utilization 82.9% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	4	3	289	5	102	32	1487	158	79	2290	4
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases	4		8		8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	7.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	70.0	13.0	15.0	72.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	18.3%	10.8%	58.3%	10.8%	12.5%	60.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	9.1	10.3	11.5	10.3	10.3	7.0	64.2	79.7	8.8	71.4	84.4
Actuated g/C Ratio	0.09	0.10	0.11	0.10	0.10	0.07	0.62	0.77	0.08	0.69	0.81
v/c Ratio	0.03	0.03	2.07	0.03	0.47	0.34	0.88	0.16	0.68	1.21	0.00
Control Delay	40.2	41.5	526.2	45.0	13.5	56.2	23.1	1.6	69.9	119.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	40.2	41.5	526.2	45.0	13.5	56.2	23.1	1.6	69.9	119.0	0.0
LOS	D	D	F	D	B	E	C	A	E	F	A
Approach Delay		40.9		388.5			21.7			117.2	
Approach LOS		D		F			C			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 103.7	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 2.07	
Intersection Signal Delay: 105.2	Intersection LOS: F
Intersection Capacity Utilization 111.4%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Volume (vph)	25	121	185	40	75	999	210	35	1666	14
Turn Type	pm+pt	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases	4						2			6
Detector Phase	7	4	3	8	5	2	3	1	6	7
Switch Phase										
Minimum Initial (s)	7.0	10.0	7.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	15.0	24.0	13.0	70.0	15.0	13.0	70.0	13.0
Total Split (%)	10.8%	18.3%	12.5%	20.0%	10.8%	58.3%	12.5%	10.8%	58.3%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	23.0	16.0	9.0	20.6	7.0	66.6	81.6	7.0	64.0	77.0
Actuated g/C Ratio	0.19	0.13	0.08	0.17	0.06	0.56	0.68	0.06	0.53	0.64
v/c Ratio	0.15	2.02	1.21	0.33	1.22	0.85	0.31	0.57	1.48	0.02
Control Delay	35.7	495.6	170.2	40.4	207.3	28.9	4.5	76.9	245.3	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.7	495.6	170.2	40.4	207.3	28.9	4.5	76.9	245.3	0.0
LOS	D	F	F	D	F	C	A	E	F	A
Approach Delay		463.5		137.6		35.3			239.9	
Approach LOS		F		F		D			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 2.02	
Intersection Signal Delay: 182.3	Intersection LOS: F
Intersection Capacity Utilization 133.0%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Volume (vph)	8	9	233	8	116	23	1825	290	114	1559	1
Turn Type	pm+pt	NA	pm+pt	NA	Perm	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8		5	2	3	1	6	7
Permitted Phases	4		8		8			2			6
Detector Phase	7	4	3	8	8	5	2	3	1	6	7
Switch Phase											
Minimum Initial (s)	7.0	10.0	7.0	10.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	22.0	13.0	71.0	13.0	14.0	72.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	18.3%	10.8%	59.2%	10.8%	11.7%	60.0%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	11.1	10.4	14.2	12.9	12.9	7.0	65.2	80.2	8.0	71.7	84.8
Actuated g/C Ratio	0.10	0.10	0.13	0.12	0.12	0.07	0.61	0.75	0.08	0.67	0.80
v/c Ratio	0.06	0.09	1.67	0.04	0.47	0.26	1.09	0.30	1.11	0.84	0.00
Control Delay	38.4	40.1	352.7	43.4	12.4	55.7	69.6	2.7	156.0	20.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.4	40.1	352.7	43.4	12.4	55.7	69.6	2.7	156.0	20.8	0.0
LOS	D	D	F	D	B	E	E	A	F	C	A
Approach Delay		39.5		235.0			60.4			30.0	
Approach LOS		D		F			E			C	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 106.6	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.67	
Intersection Signal Delay: 63.0	Intersection LOS: E
Intersection Capacity Utilization 102.5%	ICU Level of Service G
Analysis Period (min) 15	

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBL	EBT	WBL	WBT	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations										
Volume (vph)	31	78	171	71	253	1743	201	50	1266	37
Turn Type	pm+pt	NA	Prot	NA	Prot	NA	pm+ov	Prot	NA	pm+ov
Protected Phases	7	4	3	8	5	2	3	1	6	7
Permitted Phases	4						2			6
Detector Phase	7	4	3	8	5	2	3	1	6	7
Switch Phase										
Minimum Initial (s)	7.0	10.0	7.0	10.0	7.0	10.0	7.0	7.0	10.0	7.0
Minimum Split (s)	13.0	22.0	13.0	22.0	13.0	22.0	13.0	13.0	22.0	13.0
Total Split (s)	13.0	22.0	13.0	22.0	26.0	72.0	13.0	13.0	59.0	13.0
Total Split (%)	10.8%	18.3%	10.8%	18.3%	21.7%	60.0%	10.8%	10.8%	49.2%	10.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lead	Lag	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	Max	None	None	Max	None
Act Effct Green (s)	23.0	16.0	7.0	18.6	20.0	66.0	79.0	7.0	53.0	66.0
Actuated g/C Ratio	0.19	0.13	0.06	0.16	0.17	0.55	0.66	0.06	0.44	0.55
v/c Ratio	0.21	1.30	1.44	0.55	1.44	1.50	0.31	0.82	1.36	0.07
Control Delay	38.2	194.0	262.0	53.0	252.0	254.2	6.7	105.1	195.6	0.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	194.0	262.0	53.0	252.0	254.2	6.7	105.1	195.6	0.1
LOS	D	F	F	D	F	F	A	F	F	A
Approach Delay		174.3		187.8		231.3			186.9	
Approach LOS		F		F		F			F	

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Natural Cycle: 150	
Control Type: Semi Act-Uncoord	
Maximum v/c Ratio: 1.50	
Intersection Signal Delay: 210.2	Intersection LOS: F
Intersection Capacity Utilization 124.8%	ICU Level of Service H
Analysis Period (min) 15	

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Volume (vph)	8	396	32	1491	161	79	2579	9
Turn Type	Over	Over	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	1	5	2		1	6	
Permitted Phases					2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	13.0	25.0	13.0	65.0	65.0	25.0	77.0	77.0
Total Split (%)	14.4%	27.8%	14.4%	72.2%	72.2%	27.8%	85.6%	85.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	7.0	18.2	7.0	59.8	59.8	18.2	78.6	78.6
Actuated g/C Ratio	0.08	0.20	0.08	0.66	0.66	0.20	0.87	0.87
v/c Ratio	0.03	0.86	0.30	0.82	0.19	0.29	1.08	0.01
Control Delay	0.2	48.1	41.3	11.2	0.6	34.5	46.1	0.0
Queue Delay	0.0	0.0	0.0	0.1	0.0	0.0	10.5	0.0
Total Delay	0.2	48.1	41.3	11.3	0.6	34.5	56.7	0.0
LOS	A	D	D	B	A	C	E	A
Approach Delay				10.9			55.8	
Approach LOS				B			E	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.08
Intersection Signal Delay: 39.2 — Intersection LOS: D
Intersection Capacity Utilization 98.5% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBR	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations								
Volume (vph)	358	247	75	1024	331	35	1851	54
Turn Type	Perm	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases			5	2		1	6	
Permitted Phases	5	1			2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	20.0	25.0	20.0	65.0	65.0	25.0	70.0	70.0
Total Split (%)	22.2%	27.8%	22.2%	72.2%	72.2%	27.8%	77.8%	77.8%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	14.0	16.3	14.0	61.7	61.7	16.3	64.0	64.0
Actuated g/C Ratio	0.16	0.18	0.16	0.69	0.69	0.18	0.71	0.71
v/c Ratio	1.30	0.75	0.46	0.71	0.46	0.18	1.23	0.08
Control Delay	181.0	39.1	34.6	8.7	2.7	29.7	120.7	2.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	181.0	39.1	34.6	8.7	2.7	29.7	120.7	2.5
LOS	F	D	C	A	A	C	F	A
Approach Delay				8.7			115.8	
Approach LOS				A			F	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NET and 6:SWT, Start of Yellow, Master Intersection
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.30
Intersection Signal Delay: 78.4 — Intersection LOS: E
Intersection Capacity Utilization 106.2% — ICU Level of Service G
Analysis Period (min) 15

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

Lane Group	EBR	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations								
Volume (vph)	20	357	23	1833	299	114	1782	9
Turn Type	Over	Over	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	5	1	5	2		1	6	
Permitted Phases					2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	13.0	22.0	13.0	68.0	68.0	22.0	77.0	77.0
Total Split (%)	14.4%	24.4%	14.4%	75.6%	75.6%	24.4%	85.6%	85.6%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	7.0	15.7	7.0	62.3	62.3	15.7	78.6	78.6
Actuated g/C Ratio	0.08	0.17	0.08	0.69	0.69	0.17	0.87	0.87
v/c Ratio	0.08	0.89	0.22	0.97	0.32	0.48	0.74	0.01
Control Delay	0.5	54.6	42.8	16.9	0.4	42.0	3.7	0.1
Queue Delay	0.0	0.0	0.0	7.1	0.0	0.0	0.1	0.0
Total Delay	0.5	54.6	42.8	24.1	0.4	42.0	3.7	0.1
LOS	A	D	D	C	A	D	A	A
Approach Delay				21.0			6.0	
Approach LOS				C			A	

Intersection Summary

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Yellow, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.97
Intersection Signal Delay: 17.2 — Intersection LOS: B
Intersection Capacity Utilization 83.3% — ICU Level of Service E
Analysis Period (min) 15

Splits and Phases: 1: US-1 & Burlington Mills

Lane Group	EBR	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations								
Volume (vph)	245	265	253	1774	279	50	1437	108
Turn Type	Perm	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases			5	2		1	6	
Permitted Phases	5	1			2			6
Detector Phase	5	1	5	2	2	1	6	6
Switch Phase								
Minimum Initial (s)	7.0	7.0	7.0	10.0	10.0	7.0	10.0	10.0
Minimum Split (s)	13.0	13.0	13.0	22.0	22.0	13.0	22.0	22.0
Total Split (s)	26.0	15.0	26.0	75.0	75.0	15.0	64.0	64.0
Total Split (%)	28.9%	16.7%	28.9%	83.3%	83.3%	16.7%	71.1%	71.1%
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	20.0	9.0	20.0	69.0	69.0	9.0	58.0	58.0
Actuated g/C Ratio	0.22	0.10	0.22	0.77	0.77	0.10	0.64	0.64
v/c Ratio	0.64	1.18	1.08	1.10	0.37	0.47	1.06	0.17
Control Delay	33.9	135.5	80.7	52.2	0.2	39.7	48.3	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	3.8	0.0
Total Delay	33.9	135.5	80.7	52.2	0.2	39.7	52.2	4.2
LOS	C	F	F	D	A	D	D	A
Approach Delay				49.0			48.5	
Approach LOS				D			D	

Intersection Summary

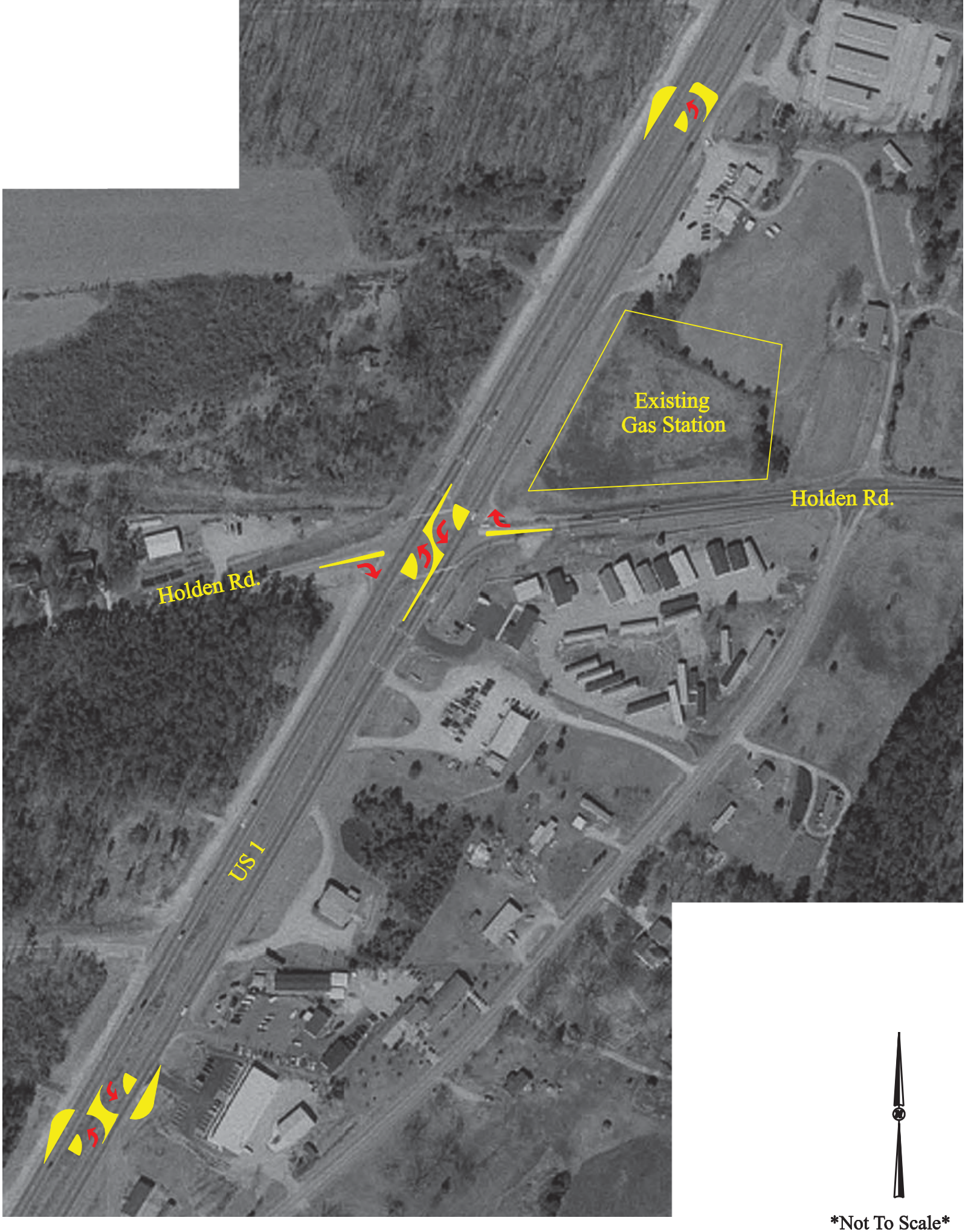
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 6 (7%), Referenced to phase 2:NET and 6:SWT, Start of Yellow
Natural Cycle: 150
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.18
Intersection Signal Delay: 53.2 — Intersection LOS: D
Intersection Capacity Utilization 98.0% — ICU Level of Service F
Analysis Period (min) 15

Splits and Phases: 2: US-1 & Jenkins Rd/Stadium Dr

APPENDIX B

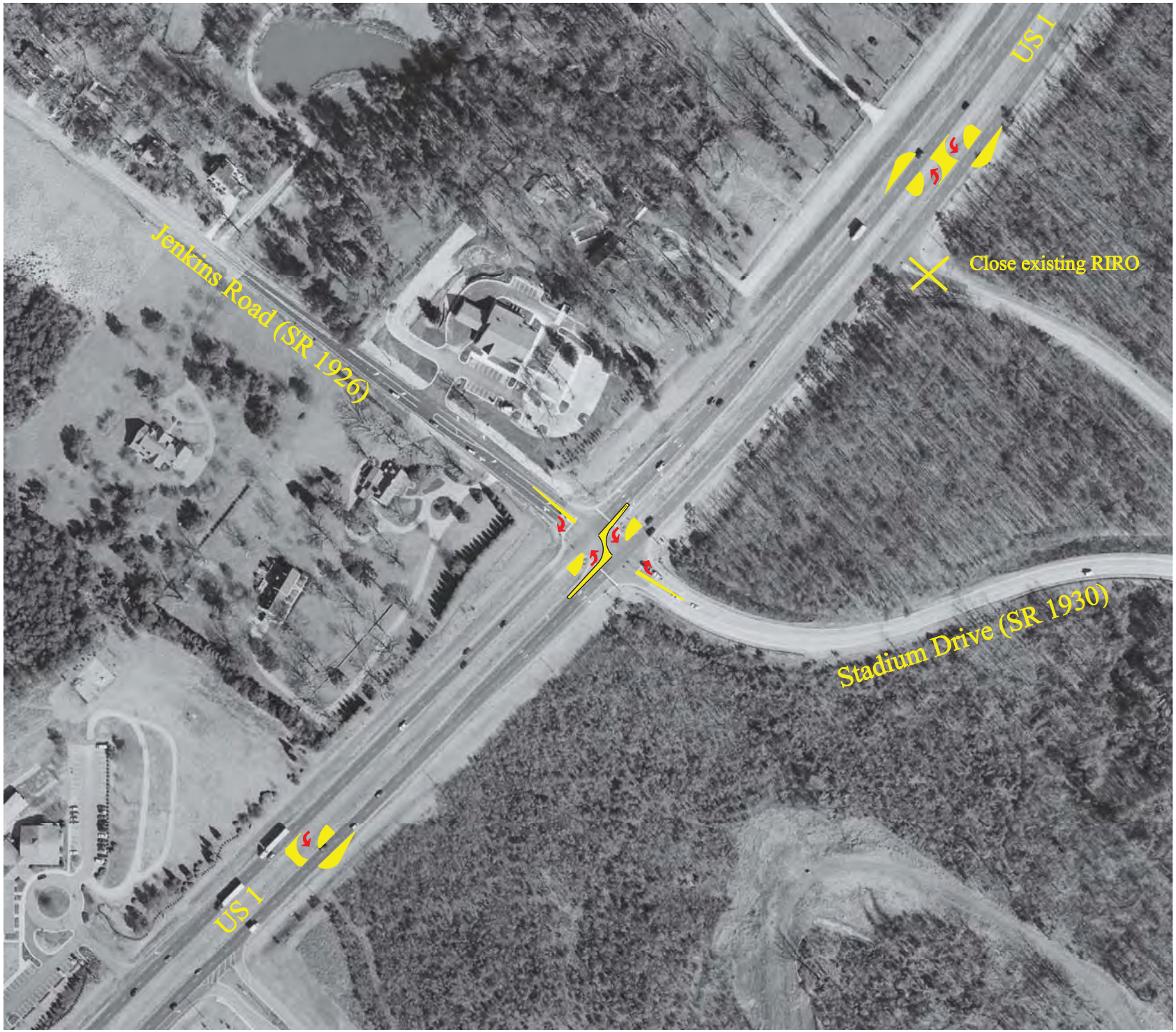
Superstreet Concepts


Burlington Mills Road
US 1



Not To Scale

8.) US 1 and Holden Rd. Intersection

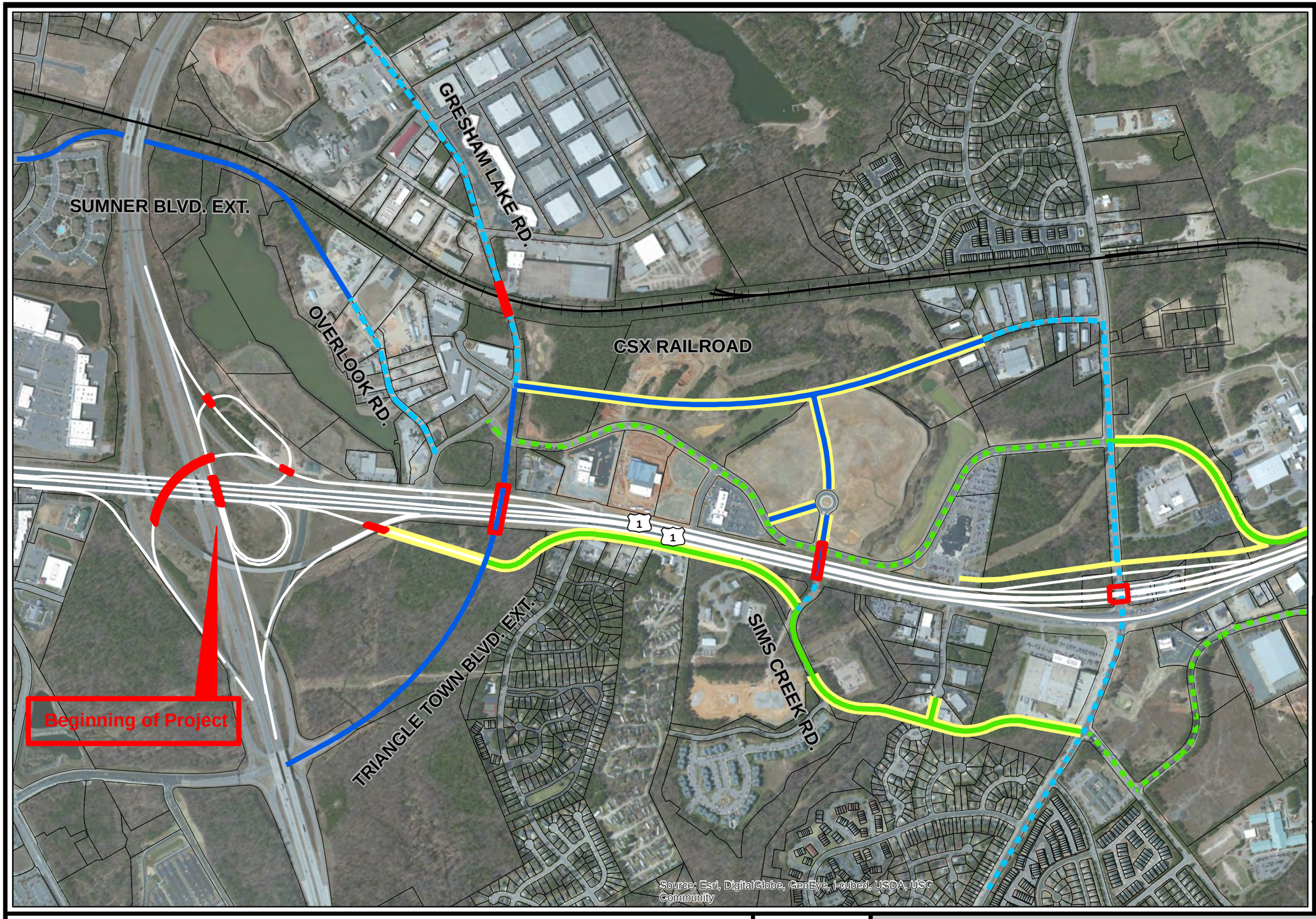


2.) US 1 and Jenkins Road Intersection

Not To Scale

APPENDIX C

Map Set



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

Gannett Fleming

Excellence Delivered As Promised

MAPPING UPDATE

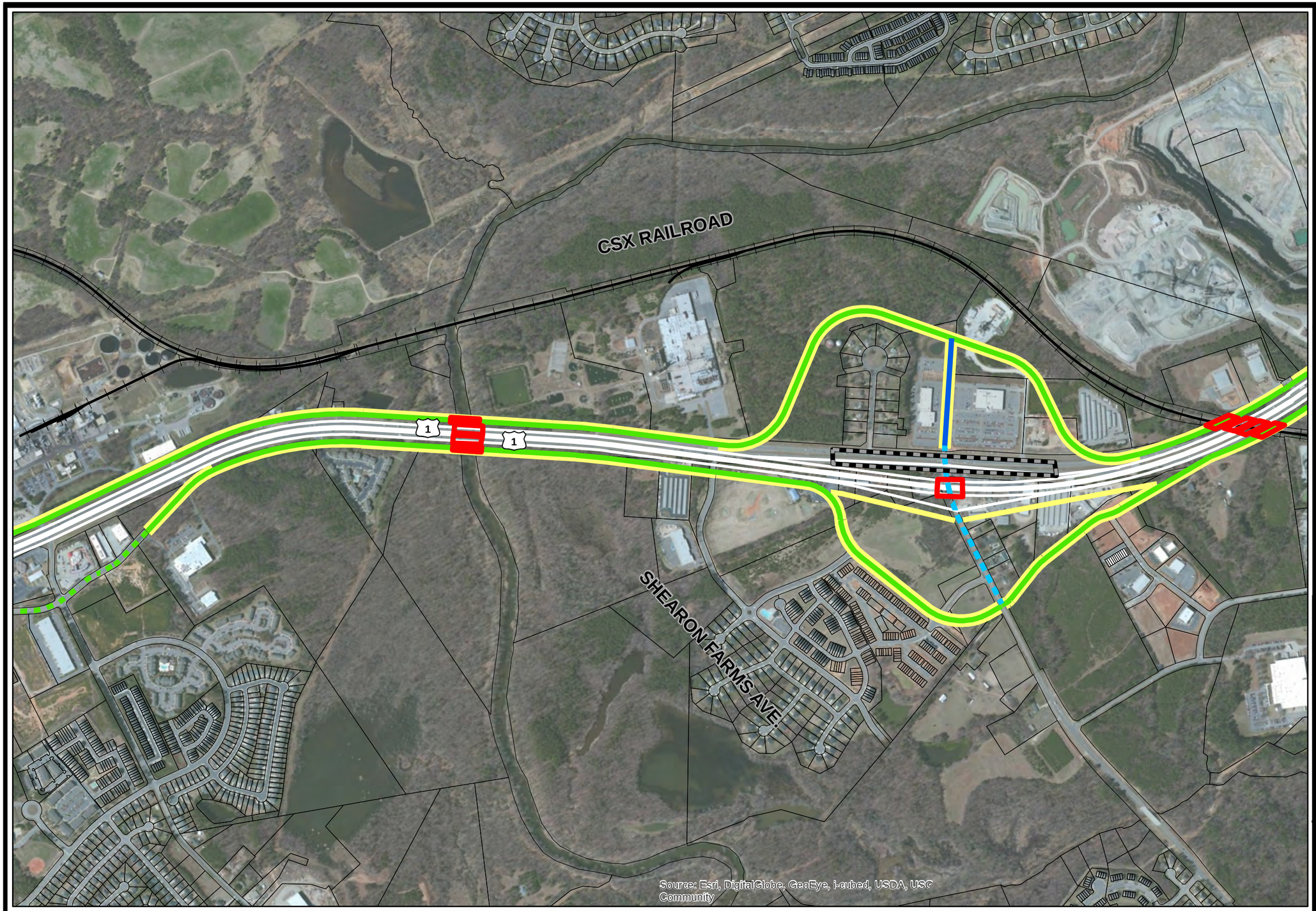
0 625 1,250 2,500 3,750 5,000 Feet

W N S E

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 1



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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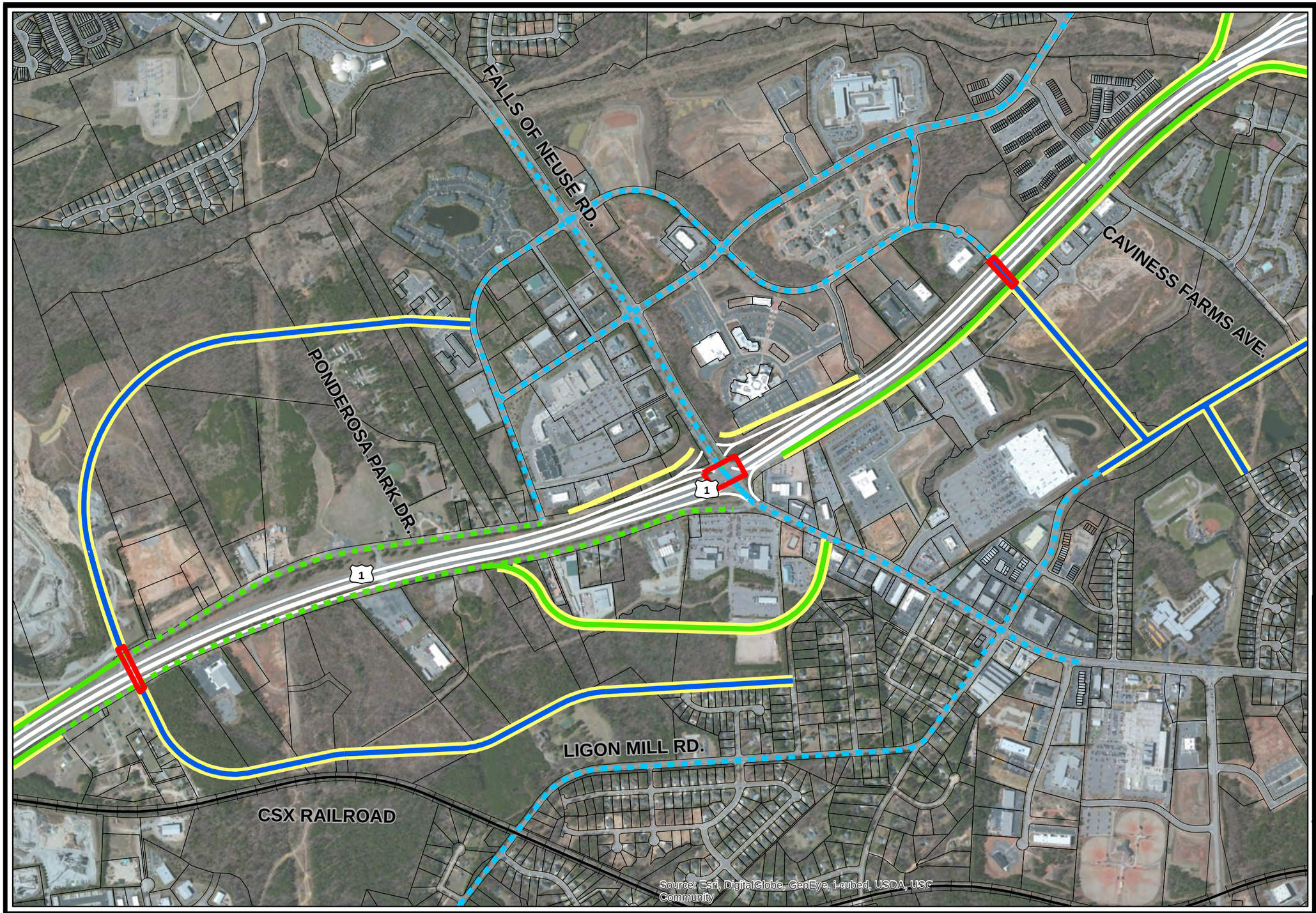
MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 2



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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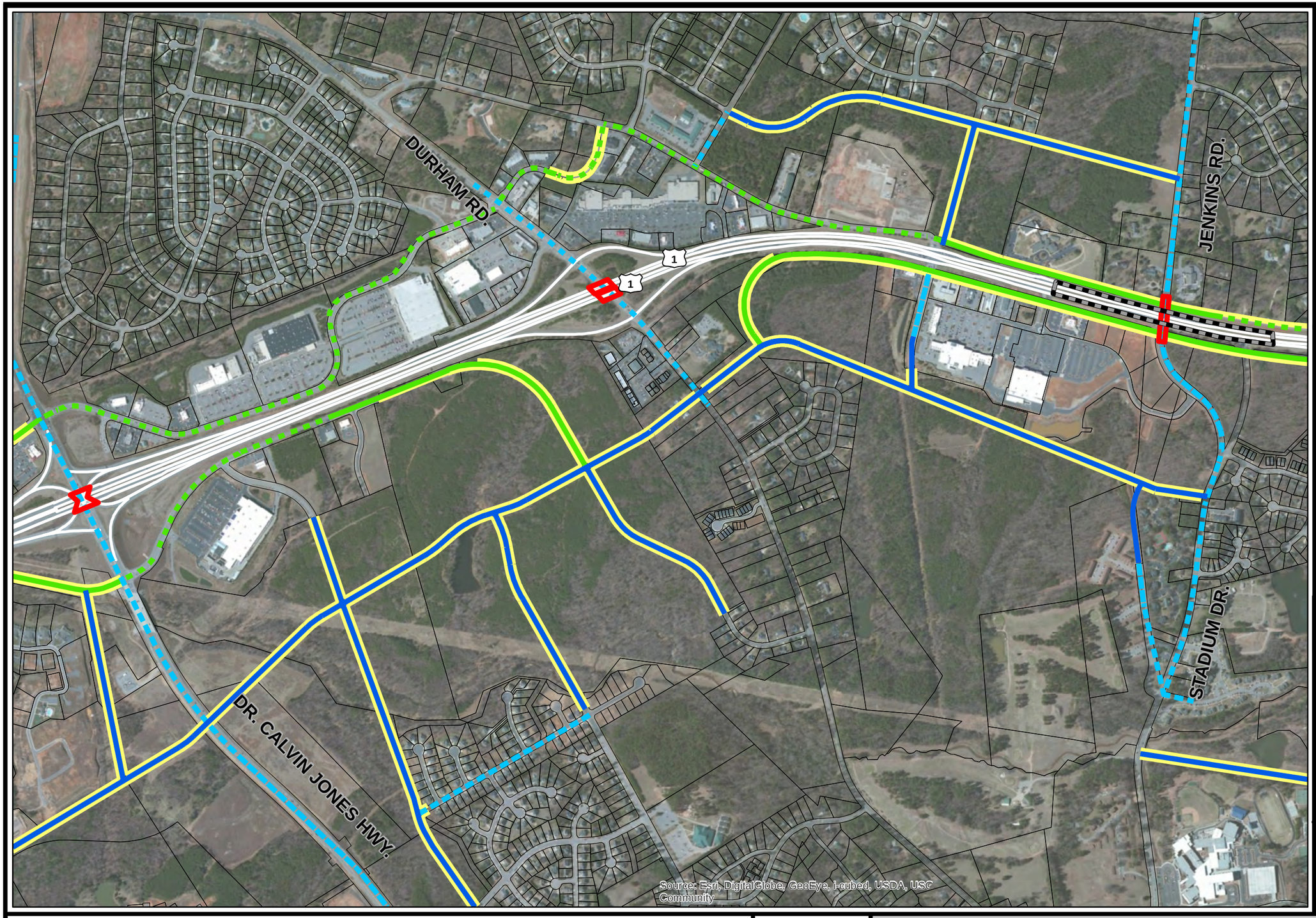
MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 3



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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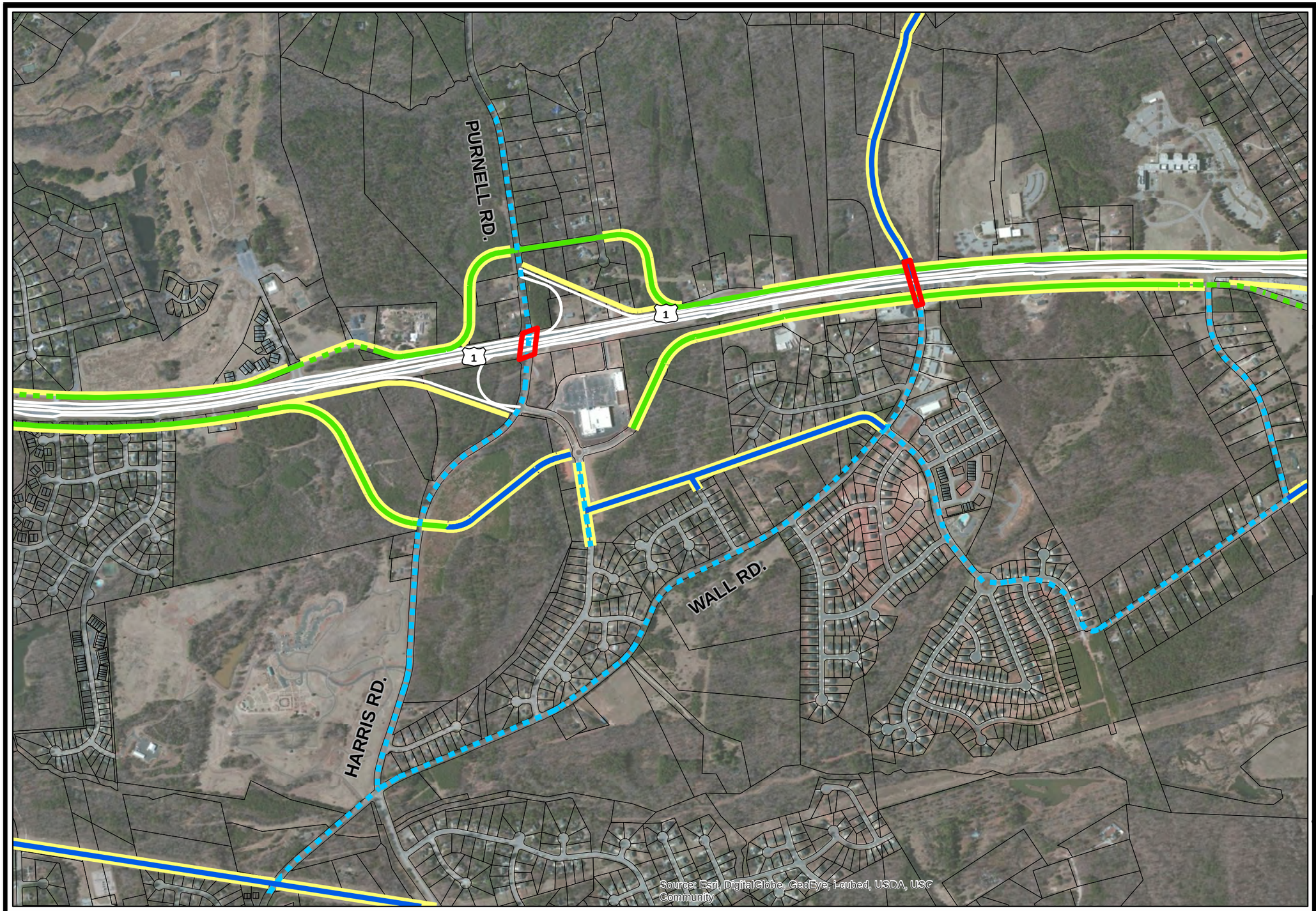
MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 4



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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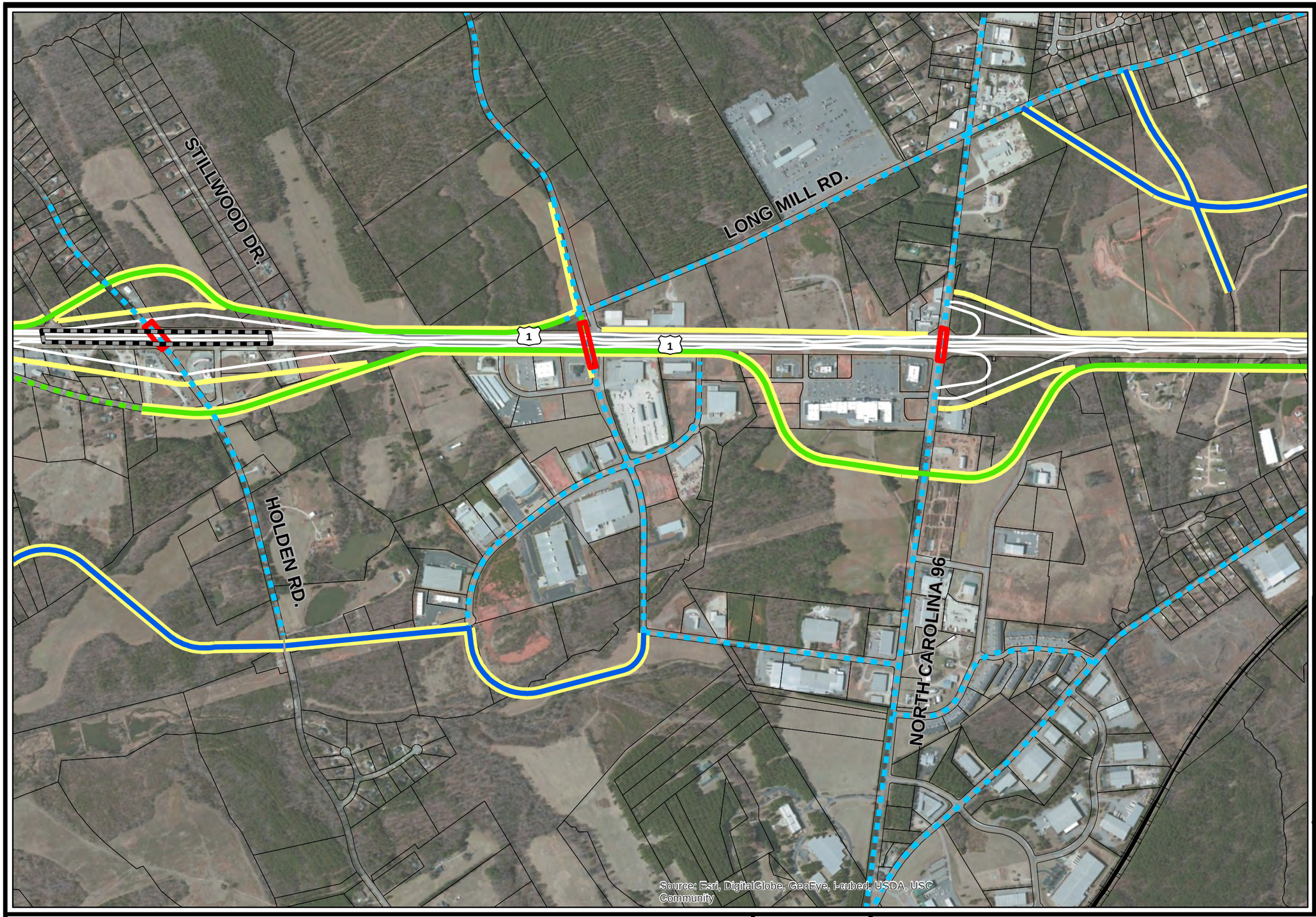
MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 5



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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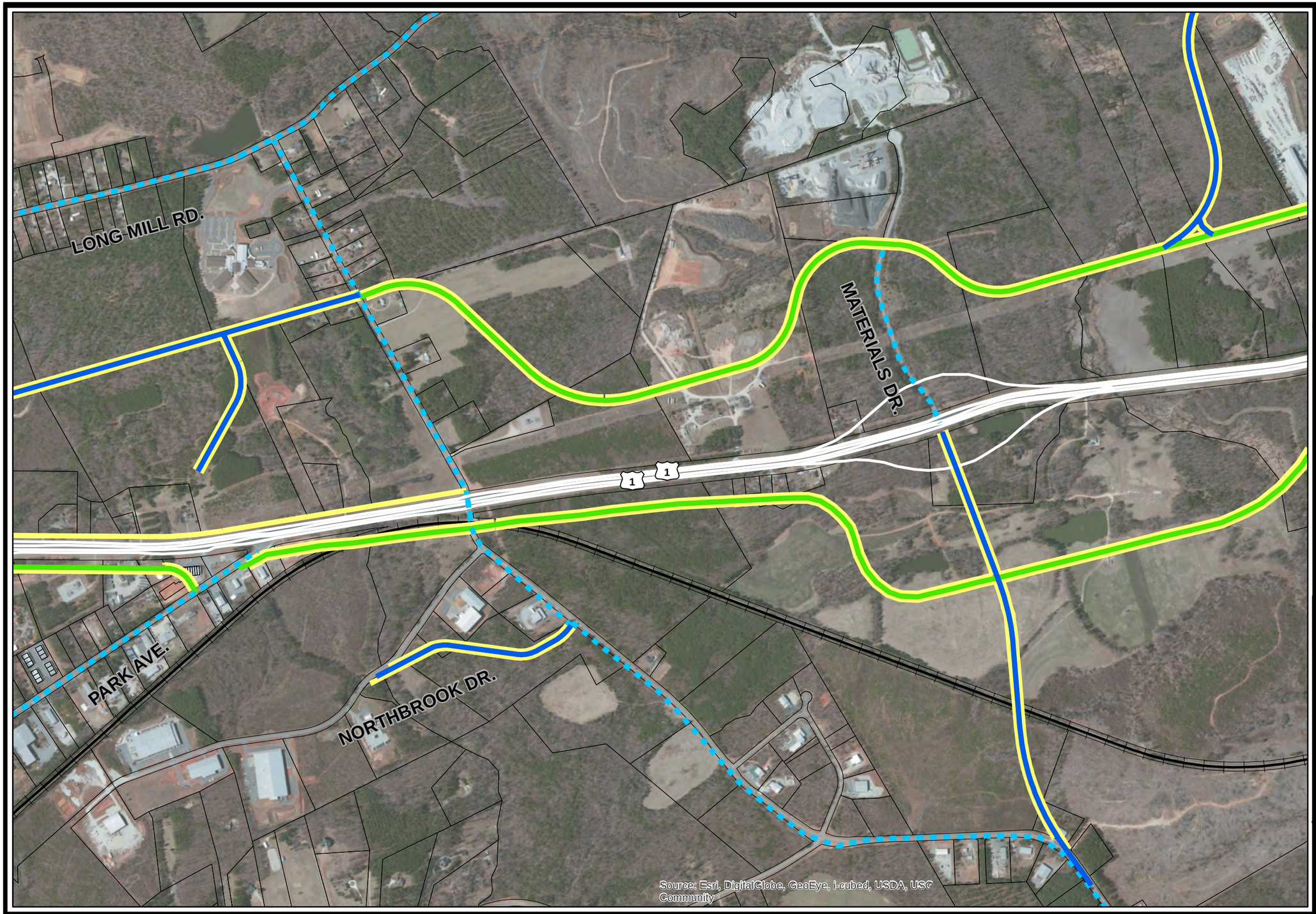
MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 6



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 7

LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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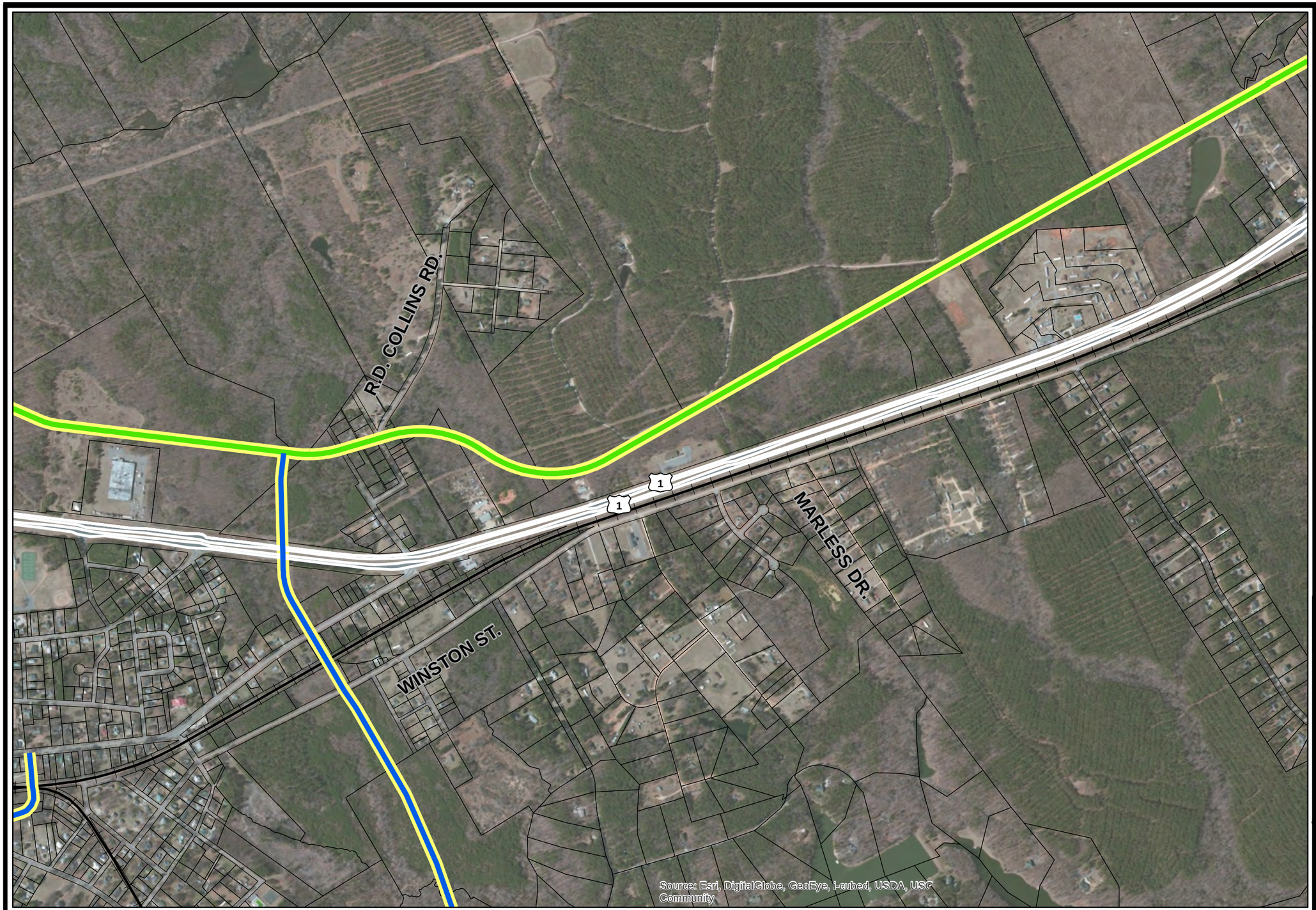
MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 8



LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

Proposed Freeway Improvements

Railroad

Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 9

LEGEND

US 1 Section (Superstreet)

Proposed Structure

Proposed R/W

Proposed Frontage/Backage Road

Existing Frontage/Backage Road

Proposed Local Roads

Existing Local Roads

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Parcel Boundary

North Carolina Capital Area Metropolitan Planning Organization

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MAPPING UPDATE

0 625 1,250 2,500 3,750 5,000 Feet

US 1 CORRIDOR STUDY

Date: 7/14/2014

Map 10