

**APPENDIX F: TOWN OF SOUTH HILL MEMORANDUM**



## **Future Recommendations and Operations:**

The final adopted recommendations for the corridor are:

### Intersection of US 58 with Maple Lane

- Construct right-turn lanes on eastbound and westbound Maple Lane. Traffic conditions at this location should be monitored into the future to determine if any additional improvements are needed.

### Intersection of US 58 with Country Lane

- Reconfigure the intersection to reduce traffic signal phasing by relocating the US 58 left-turn movements and southbound thru-movements from Country Lane.
- Reconstruct the westbound US 58 right-turn lane onto US BUS 58 as a continuous right-turn.

### US 58 and I-85 Interchange

- Reconstruct the interchange as either a Diverging Diamond Interchange (DDI) or Roundabouts configuration.
- Conduct an Interchange Modification Report (IMR) for approval from FHWA and VDOT.

### US 58 and Thompson Street

- Reconfigure intersection to right-in/right-out and re-route movements through interparcel connections between Thompson Street and Peebles Street.

### US 58 and Peebles Street

- Maintain access and lengthen eastbound left-turn lane as determined by a traffic capacity analysis. As development occurs, additional improvements will be required and final determination of appropriate traffic control shall be determined through a traffic signal warrant analysis, signal justification report, and approvals by District, State, and Federal officials.

### US 58 and Crowder Street

- Reconfigure intersection to right-in/right-out.

### US 58 and Cycle Lane

- Reconfigure the intersection to reduce traffic signal phasing by relocating eastbound and westbound left-turn movements on US 58 and northbound and southbound thru-movements from Cycle Lane.

### US 58 and High Street

- Reconstruct the intersection to a roundabout. As development occurs, the northbound approach on High Street may need to be reconfigured to permit only right-turn movements to maintain the capacity of the intersection. The northbound left-turns and through movements will use the Cycle Lane traffic signal via the interparcel connection between Cycle Lane and High Street.

Detailed configuration concepts and operational results are attached to this memo. Table 1 summarizes the delay and LOS for the US 58 at-grade intersections. Table 2 and Table 3 summarize the delay and travel times for the US 58 and I-85 interchange. It should be noted that the diverging diamond traffic signals are coordinated so that vehicles stop only once at a traffic light. Figures of the delay and LOS results are attached to this memo.

Intersection	Scenario	Overall Delay (LOS)	Delay per Lane Group by Approach (sec/veh) (Level of Service)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
<b>Maple Ln &amp; US 58</b>														
<b>AM Peak Hour</b>														
2018 Existing	2.0	A	8.1	0.0	0.0	7.9	0.0	0.0	12.7	11.1	11.1	11.7	11.7	11.7
			A	A	A	A	A	A	A	B	B	B	B	B
2040 No Development No Build	2.3	A	8.0	0.0	0.0	8.2	0.0	0.0	14.6	14.6	9.7	13.2	12.0	12.0
			B	A	A	A	A	A	B	B	A	B	A	A
2040 No Development Build	2.3	A	8.0	0.0	0.0	8.2	0.0	0.0	14.6	14.6	9.7	13.2	12.0	12.0
			B	A	A	A	A	A	B	B	A	B	A	A
2040 Development No Build	8.7	A	8.3	0.0	0.0	8.7	0.0	0.0	27.4	27.4	9.9	19.2	42.2	42.2
			A	A	A	A	A	A	D	D	A	C	E	E
2040 Development Build	8.7	A	8.3	0.0	0.0	8.7	0.0	0.0	27.4	27.4	9.9	19.2	42.2	42.2
			A	A	A	A	A	A	D	D	A	C	E	E
<b>PM Peak Hour</b>														
2018 Existing	1.9	A	7.7	0.0	0.0	8.8	0.0	0.0	11.5	9.5	9.5	11.5	11.5	11.5
			A	A	A	A	A	A	B	A	A	B	B	B
2040 No Development No Build	1.9	A	7.6	0.0	0.0	9.1	0.0	0.0	13.0	13.0	9.7	11.7	9.4	9.4
			A	A	A	A	A	A	B	B	A	B	A	A
2040 No Development Build	1.9	A	7.6	0.0	0.0	9.1	0.0	0.0	13.0	13.0	9.7	11.7	9.4	9.4
			A	A	A	A	A	A	B	B	A	B	A	A
2040 Development No Build	5.3	A	8.0	0.0	0.0	9.8	0.0	0.0	22.3	22.3	11.5	22.0	10.3	10.3
			A	A	A	A	A	A	C	C	B	C	B	B
2040 Development Build	5.3	A	8.0	0.0	0.0	9.8	0.0	0.0	22.3	22.3	11.5	22.0	10.3	10.3
			A	A	A	A	A	A	C	C	B	C	B	B
<b>Country Ln &amp; US 58</b>														
<b>AM Peak Hour</b>														
2018 Existing	22.4	C	40.3	17.0	15.8	40.5	17.6	14.3	45.4	37.9	38.4	36.7	26.8	27.1
			D	B	B	D	B	B	D	D	D	D	C	D
2040 No Development No Build	23.4	C	46.3	23.3	15.7	60.0	22.7	14.1	36.2	17.0	16.7	34.7	10.9	10.9
			D	C	B	E	C	B	D	B	B	C	B	B
2040 No Development Build	13.4	B	NA	17.1	0.1	33.0	17.0	0.5	25.4	26.3	25.4	20.0	33.2	17.2
			B	B	A	D	B	A	C	C	C	B	D	B
2040 Development No Build	24.6	C	46.3	24.2	15.8	60.0	27.4	14.5	36.2	17.0	16.7	35.5	10.8	10.8
			D	C	B	E	C	B	D	B	B	D	B	B
2040 Development Build	14.4	B	NA	18.3	0.0	36.3	20.3	0.7	25.4	26.3	25.4	19.3	32.5	16.5
			B	B	A	D	C	A	C	C	C	B	D	B
<b>PM Peak Hour</b>														
2018 Existing	32.3	C	53.7	23.9	22.2	55.8	23.9	15.9	55.9	52.1	57.5	43.2	27.1	26.8
			D	C	C	E	C	B	E	D	E	D	C	C
2040 No Development No Build	25.4	C	45.8	26.8	21.7	77.3	26.6	13.3	43.3	24.6	23.3	34.9	10.7	10.3
			D	C	B	E	C	B	D	C	C	C	B	B
2040 No Development Build	16.3	B	NA	16.8	0.1	31.8	15.8	1.0	26.9	30.5	26.8	25.3	32.8	16.8
			B	B	A	D	B	A	C	C	C	C	D	B
2040 Development No Build	30.0	C	45.8	32.2	21.7	77.3	30.4	15.2	43.3	25.0	23.7	43.8	10.7	10.3
			D	C	C	E	C	B	D	C	C	D	B	B
2040 Development Build	19.1	B	NA	26.4	0.1	39.7	23.7	1.5	23.6	25.4	17.2	28.2	33.3	17.3
			B	C	A	D	C	A	C	C	B	C	D	B

**Table 1: Town of South Hill US 58 At-Grade Intersection Operations**



**Table 2: Town of South Hill US 58 At-Grade Intersection Operations (Cont.)**

Intersection	Scenario	Overall Delay (LOS)	Delay per Lane Group by Approach (sec/veh)												
			Eastbound			Westbound			Northbound			Southbound			
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
<b>AM Peak Hour</b>															
Crowder St & US 58	2018 Existing	0.5	9.5 A	0.0 A	NA	NA	0.0 A	0.0 A	NA			12.8 B	NA	12.8 B	
		A	0.7 (A)			0.0 (A)			NA			12.8 (B)			
	2040 No Development No Build	0.4	8.5 A	0.0 A	NA	NA	0.0 A	0.0 A	NA			9.8 A	NA	9.8 A	
		A	0.5 (A)			0.0 (A)			NA			9.8 (A)			
	2040 No Development Build	0.2	NA	0.0 A	NA	NA	0.0 A	0.0 A	NA			NA	NA	10.1 B	
		A	0 (A)			0.0 (A)			NA			10.1 (B)			
	2040 Development No Build	0.3	9.4 A	0.0 A	NA	NA	0.0 A	0.0 A	NA			10.7 B	NA	10.7 B	
		A	0.5 (A)			0.0 (A)			NA			10.7 (B)			
	2040 Development Build	0.1	NA	0.0 A	NA	NA	0.0 A	0.0 A	NA			NA	NA	10.1 B	
		A	0 (A)			0.0 (A)			NA			10.1 (B)			
	<b>PM Peak Hour</b>														
	2018 Existing	1.0	9.8 A	0.0 A	NA	NA	0.0 A	0.0 A	NA			14.7 B	NA	14.7 B	
A			0.7 (A)			0.0 (A)			NA			14.7 (B)			
2040 No Development No Build	0.7	8.8 A	0.0 A	NA	NA	0.0 A	0.0 A	NA			10.4 B	NA	10.4 B		
		A	0.6 (A)			0.0 (A)			NA			10.4 (B)			
2040 No Development Build	0.4	NA	0.0 A	NA	NA	0.0 A	0.0 A	NA			NA	NA	10.3 B		
		A	0 (A)			0.0 (A)			NA			11.3 (B)			
2040 Development No Build	0.6	11.0 B	0.0 A	NA	NA	0.0 A	0.0 A	NA			12.2 B	NA	12.2 B		
		A	0.5 (A)			0.0 (A)			NA			12.2 (B)			
2040 Development Build	0.3	NA	0.0 A	NA	NA	0.0 A	0.0 A	NA			NA	NA	11.3 B		
		A	0 (A)			0.0 (A)			NA			11.3 (B)			
<b>AM Peak Hour</b>															
Cycle Ln & US 58	2018 Existing	13.9 B	34.0 C	9.4 A	3.7 A	37.3 D	13.3 B	7.1 A	33.6 C	33.6 C	32.6 C	31.5 C	31.5 C	30.9 C	
		B	11.9 (B)			12.6 (B)			33.5 (C)			31.2 (C)			
	2040 No Development No Build	14.8 B	36.8 D	10.5 B	8.3 A	43.2 D	13.9 B	11.1 B	30.3 C	30.3 C	28.9 C	37.8 D	37.8 D	35.7 D	
			B	12.8 (B)			13.8 (B)			30.2 (C)			36.6 (D)		
	2040 No Development Build	4.0 A	NA	2.3 A	0.0 A	NA	2.2 A	0.1 A	26.4 C	NA	25.2 C	27.5 C	NA	25.3 C	
			A	2.1 (A)			1.8 (A)			26.3 (C)			26.6 (C)		
	2040 Development No Build	23.8 C	41.2 D	19.7 B	15.8 B	41.1 D	22.1 C	14.7 B	34.5 C	34.5 C	29.1 C	41.1 D	41.1 D	38.4 D	
			C	20.7 (C)			23.1 (C)			33.4 (C)			39.9 (D)		
	2040 Development Build	6.9 A	NA	5.4 A	0.1 A	NA	6.0 A	0.1 A	18.3 B	NA	13.8 B	14.5 B	NA	13.8 B	
			A	4.4 (A)			5.0 (A)			17.7 (B)			14.2 (B)		
	<b>PM Peak Hour</b>														
	2018 Existing	18.3 B	36.9 D	15.8 B	5.7 A	54.7 D	17.5 B	7.8 A	31.5 C	31.5 C	30.3 C	29.1 C	29.1 C	26.8 C	
B			15.4 (B)			16.4 (B)			31.3 (C)			27.9 (C)			
2040 No Development No Build	25.6 C	42.4 D	22.3 C	17.0 B	77.3 E	24.6 C	20.3 C	27.6 C	27.6 C	26.2 C	39.4 D	39.4 D	33.6 C		
		C	22.7 (C)			25.0 (C)			27.3 (C)			36.7 (D)			
2040 No Development Build	6.9 A	NA	4.9 A	0.1 A	NA	4.3 A	0.2 A	20.9 C	NA	20.0 B	23.2 C	NA	20.3 C		
		A	4.1 (A)			3.2 (A)			20.7 (C)			22.0 (C)			
2040 Development No Build	31.3 C	42.4 D	29.0 C	22.0 C	45.4 D	30.3 C	20.3 B	44.7 D	44.7 D	26.6 C	39.4 D	39.4 D	33.6 C		
		C	27.7 (C)			30.2 (C)			41.5 (D)			36.7 (D)			
2040 Development Build	10.6 B	NA	10.3 B	0.3 A	NA	9.8 A	0.2 A	22.3 C	NA	13.5 B	15.0 B	NA	13.8 B		
		B	7.3 (A)			7.8 (A)			21.1 (C)			14.5 (B)			

**Table 3: Town of South Hill US 58 At-Grade Intersection Operations (Cont.)**

Intersection	Scenario	Overall Delay (LOS)	Delay per Lane Group by Approach (sec/veh)												
			Eastbound			Westbound			Northbound			Southbound			
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	
<b>AM Peak Hour</b>															
High St & US 58	2018 Existing	1.3	8.9 A	0.0 A	0.0 A	8.1 A	0.0 A	0.0 A	20.5 C	20.5 C	20.5 C	10.4 B	10.4 B	10.4 B	
		A	0.3 (C)			0.1 (A)			20.5 (C)			10.4 (B)			
	2040 No Development No Build	0.9	8.8 A	0.0 A	0.0 A	8.4 B	0.0 A	0.0 A	15.5 C	15.5 C	15.5 C	10.3 B	10.3 B	10.3 B	
		A	0.3 (A)			0.1 (A)			15.5 (C)			10.3 (B)			
	2040 No Development Build	4.5	13.5 B	3.1 A	3.2 A	11.3 B	3.8 A	0.0 A	13.5 B	0.0 A	6.0 A	0.0 A	0.0 A	0.0 A	
		A	4.3 (A)			4.0 (A)			12.4 (B)			0.0 (A)			
	2040 Development No Build	2.6	10.1 B	0.0 A	0.0 A	8.7 A	0.0 A	0.0 A	27.4 D	27.4 D	27.4 D	11.7 B	11.7 B	11.7 B	
		A	0.3 (A)			0.9 (A)			27.4 (D)			11.7 (B)			
	2040 Development Build	5.1	14.7 B	4.3 A	3.8 A	11.1 B	3.6 A	0.0 A	NA	NA	2.7 A	0.0 A	0.0 A	0.0 A	
		A	5.4 (A)			5.0 (A)			2.7 (A)			0.0 (A)			
	<b>PM Peak Hour</b>														
	2018 Existing	3.2	8.9 A	0.0 A	0.0 A	9.1 A	0.0 A	0.0 A	46.7 E	46.7 E	46.7 E	15.1 C	15.1 B	15.1 B	
		A	0.3 (C)			0.1 (A)			46.7 (E)			15.1 (C)			
	2040 No Development No Build	1.3	8.9 A	0.0 A	0.0 A	9.0 B	0.0 A	0.0 A	17.9 C	17.9 C	17.9 C	11.2 B	11.2 B	11.2 B	
A		0.6 (A)			0.3 (A)			17.9 (C)			11.2 (B)				
2040 No Development Build	4.6	13.7 B	3.2 A	3.3 A	11.5 B	3.9 A	3.9 A	13.7 B	0.0 A	6.2 A	0.0 A	0.0 A	0.3 A		
	A	4.3 (A)			4.0 (A)			12.4 (B)			0.3 (A)				
2040 Development No Build	13.8	10.3 B	0.0 A	0.0 A	10.7 B	0.0 A	0.0 A	107.5 F	107.5 F	107.5 F	18.0 C	18.0 C	18.0 C		
	B	0.6 (A)			2.0 (A)			107.5 (F)			18.0 (C)				
2040 Development Build	5.4	15.5 B	4.7 A	4.3 A	11.3 B	3.7 A	3.7 A	NA	NA	2.7 A	0.0 A	0.0 A	0.3 A		
	A	5.7 (A)			5.7 (A)			2.7 (A)			0.3 (A)				

**Table 4: Town of South Hill US 58 At-Grade Intersection Operations (Cont.)**

Intersection	Scenario	Overall Delay (LOS)	Delay per Lane Group by Approach (sec/veh)											
			Eastbound			Westbound			Northbound			Southbound		
			LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
I-85 Southbound & US 58	<b>AM Peak Hour</b>													
	2040 No Build	See Travel Times												
	2040 Roundabout	4.2	NA	3.8	2.9	NA	3.1	3.0	NA			14.0	6.3	6.0
		A	3.7 (A)			3.0 (A)						9.2 (A)		
	2040 DDI	18.3	NA	22.7	0.0	NA	18.2	NA	NA			11.2	NA	18.2
		B	20.1 (C)			18.2 (B)						14.9 (B)		
	<b>PM Peak Hour</b>													
	2040 No Build	See Travel Times												
	2040 Roundabout	4.0	NA	4.2	2.9	NA	3.0	3.0	NA			14.4	6.7	6.4
		A	4.0 (A)			3.0 (A)						9.3 (A)		
2040 DDI	12.8	NA	24.2	0.0	NA	27.5	NA	NA			13.3	NA	16.1	
	B	20.3 (C)			27.5 (C)						14.9 (B)			
I-85 Northbound & US 58	<b>AM Peak Hour</b>													
	2040 No Build	See Travel Times												
	2040 Roundabout	4.9	10.6	3.0	NA	NA	4.9	3.0	13.5	5.2	3.1	NA		
		A	3.8 (A)			4.6 (A)			8.6 (A)					
	2040 DDI	17.9	NA	23.6	NA	NA	17.6	0.0	17.9	NA	11.5	NA		
		B	23.6 (C)			15.3 (B)			15.3 (B)					
	<b>PM Peak Hour</b>													
	2040 No Build	See Travel Times												
	2040 Roundabout	4.2	10.6	2.9	NA	NA	4.4	3.0	15.6	7.3	4.3	NA		
		A	3.4 (A)			4.2 (A)			8.4 (A)					
2040 DDI	22.2	NA	25.2	NA	NA	26.6	0.1	15.6	NA	14.9	NA			
	C	25.2 (C)			22.3 (C)			15.3 (B)						

**Table 5: US 58 & I-85 Interchange Operations**

Scenario	US 58 & I-85 Interchange Travel Times (sec)	
	Eastbound	Westbound
	<b>AM Peak Hour</b>	
2040 No Build	49	53
2040 Roundabout	47	45
2040 DDI	34	35
<b>PM Peak Hour</b>		
2040 No Build	55	59
2040 Roundabout	48	54
2040 DDI	34	34

**Table 6: US 58 & I-85 Interchange Travel Times**

Operationally, the recommendations improved delay in the AM and PM Peak Hours. Travel times in 2040 for both conditions improved as well.

The recommendations were also developed to reduce crashes. The following summarizes the anticipated reduction in crashes:

- Intersection of US 58 and Country Lane: Decreases crashes up to 25%
- US 58 and I-85 Interchange: DDI expected to decrease crashes up to 30% and Roundabouts would decrease crashes up to 20%
- Between Thompson Lane and High Street on US 58: Decreases crashes up to 40%

In addition to the benefits of reduced delay and improved safety, the recommendations support the Town of South Hill’s economic development efforts by providing the additional capacity on US 58 and intersecting roadways. It is important to note that each of the recommendations can be constructed independently. This flexibility allows for separate project submissions by the Town of South Hill and phasing of construction. The preferred recommendations are provided following this page containing detailed information, opinion of costs, and concepts.

**Attachments:**

US 58 Town of South Hill Study Area

US 58 Crash History

2018 Existing Turn Movement Counts

US 58 Town of South Hill Land Use

2040 No-Development within Town of South Hill: No Build Volumes

2040 No-Development within Town of South Hill: Build Volumes

2040 Development occurring within Town of South Hill: No Build Volumes

2040 Development occurring within Town of South Hill: Build Volumes

2018 Existing Operations

2040 No-Development within Town of South Hill: No Build Operations

2040 No-Development within Town of South Hill: Build Operations

2040 Development occurring within Town of South Hill: No Build Operations

2040 Development occurring within Town of South Hill: Build Operations

Concepts of Recommendations:

- Town of South Hill Overview
- Intersection of US 58 and Country Lane
- US 58 and I-85 Interchange
- US 58 Eastern Corporate Limits: US 58 intersections between Thompson Street and High Street

Independent Utility Considerations:

- Diverging Diamond Interchange with Town of South Hill Recommendations
- Roundabouts Interchange with Town of South Hill Recommendations



# US 58 Study Area - Town of South Hill



58

BUSINESS  
58

INTERSTATE  
85

58

Study Corridor



Maple Ln

South Hill Bypass

Country Ln

Thompson St

Peebles St

E Atlantic St

Shaw St

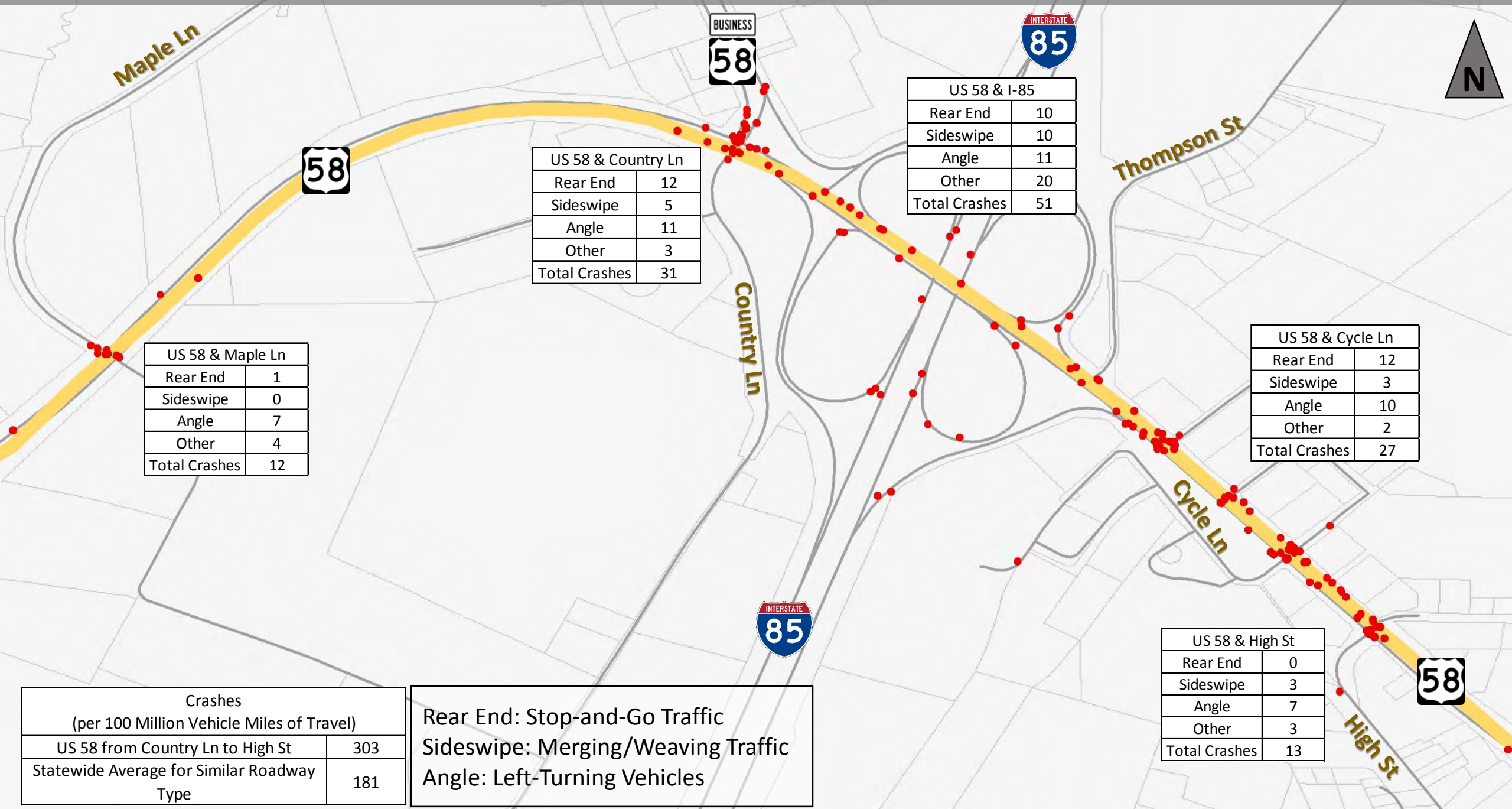
High St

Butts St

Raines St



# Crash Data (2013-2018)



US 58 & Maple Ln	
Rear End	1
Sideswipe	0
Angle	7
Other	4
<b>Total Crashes</b>	<b>12</b>

US 58 & Country Ln	
Rear End	12
Sideswipe	5
Angle	11
Other	3
<b>Total Crashes</b>	<b>31</b>

US 58 & I-85	
Rear End	10
Sideswipe	10
Angle	11
Other	20
<b>Total Crashes</b>	<b>51</b>

US 58 & Cycle Ln	
Rear End	12
Sideswipe	3
Angle	10
Other	2
<b>Total Crashes</b>	<b>27</b>



US 58 & High St	
Rear End	0
Sideswipe	3
Angle	7
Other	3
<b>Total Crashes</b>	<b>13</b>

Crashes (per 100 Million Vehicle Miles of Travel)	
US 58 from Country Ln to High St	303
Statewide Average for Similar Roadway Type	181

**Rear End: Stop-and-Go Traffic**  
**Sideswipe: Merging/Weaving Traffic**  
**Angle: Left-Turning Vehicles**



# 2018 Existing Turn Movement Counts

- Legend**
-  Signalized Intersection
  -  Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour

**1** MAPLE LN

**2** E ATLANTIC ST / HAMMER ST

**3** E ATLANTIC ST / COUNTRY LN

**4** I-85 SOUTHBOUND RAMP

**5** I-85 NORTHBOUND RAMP

**6** THOMPSON ST

**7** PEEBLES ST

**8** CROWDER ST

**9** CYCLE LN

**10** HIGH ST

(3)	(194)	(5)	↶	10	(10)		↶	32	(70)
4	319	15	↑	9	(10)				
↷	↓	↵	↷	2	(5)				
(4)	2	↶	↶	↑	↶		↑		
(4)	17	↓	35	220	8		425		
(54)	46	↷	(25)	(260)	(1)		(674)		

(35)	(64)	(700)	↶	384	(568)		↶	169	(218)
30	24	293	↑	305	(154)		↑	560	(559)
↷	↓	↵	↷	26	(13)				
(35)	23	↶	↶	↑	↶		↶		
(224)	200	↓	3	18	19				
(15)	9	↷	(13)	(71)	(82)				

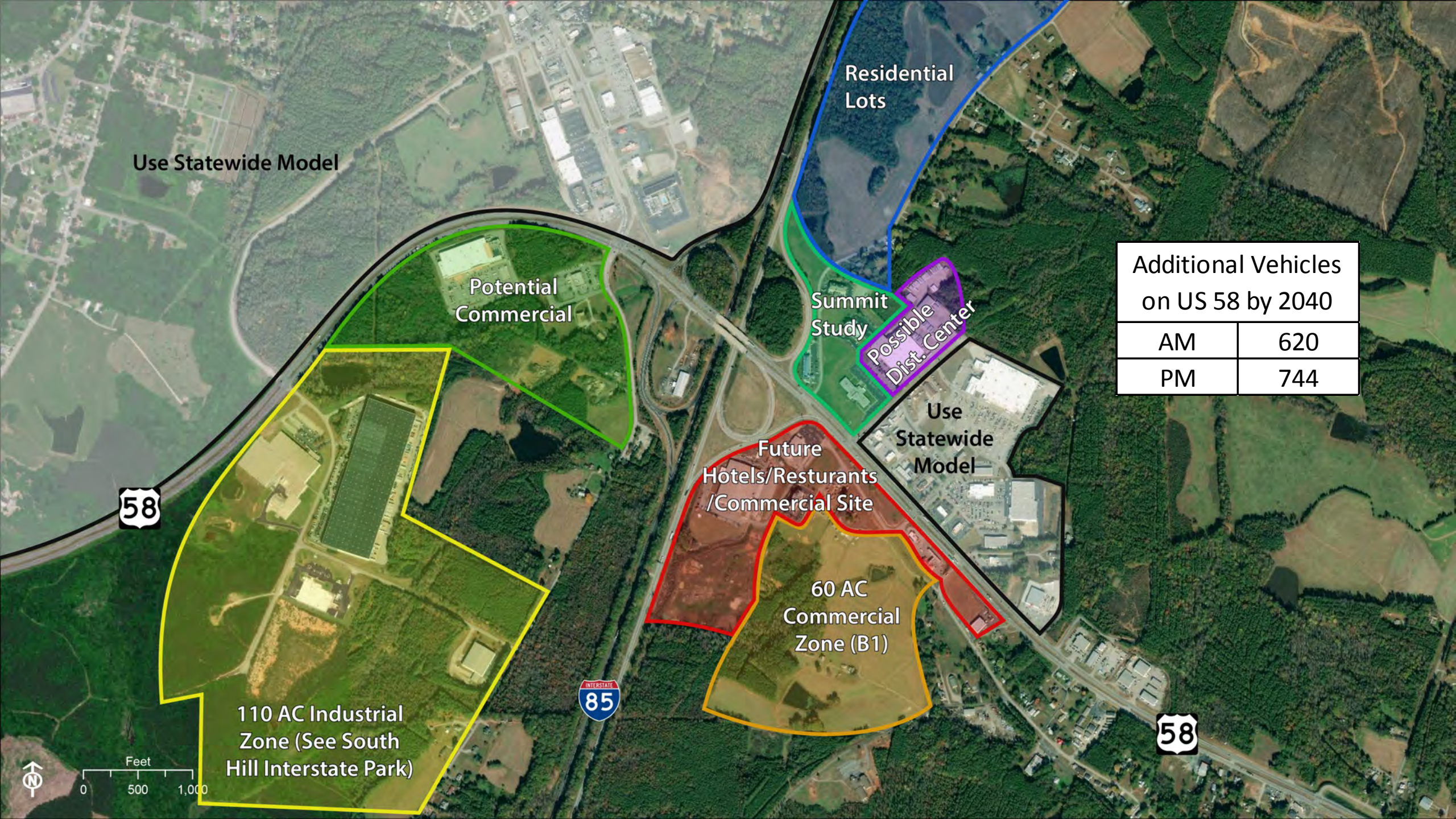
(93)			↶	97	(140)		↶	5	(9)
140			↑	589	(684)		↑	650	(814)
↷									
(975)	568	↶					↶		
(83)	85	↓					↓		
		↷							

(102)	(2)		↶	6	(3)		↶	1	(4)
41	3		↑	614	(721)		↑	601	(665)
↷									
(128)	38	↶					↶		
(902)	549	↓					↓		
		↷							

(120)	(6)	(135)	↶	86	(120)		↶	0	(4)
38	2	26	↑	540	(502)		↑	581	(571)
↷	↓	↵	↷	3	(12)		↷	8	(20)
(59)	60	↶	↶	↑	↶		↶		
(639)	419	↓	24	3	3				
(150)	40	↷	(47)	(6)	(12)				

(10)	(1)	(0)	↶	0	(4)		↶		
1	0	0	↑	581	(571)		↑		
↷	↓	↵	↷	8	(20)				
(54)	20	↶	↶	↑	↶		↶		
(636)	378	↓	47	0	8				
(96)	50	↷	(53)	(0)	(17)				





Use Statewide Model

Potential Commercial

Residential Lots

Summit Study

Possible Dist. Center

Future Hotels/Restaurants/Commercial Site

Use Statewide Model

60 AC Commercial Zone (B1)

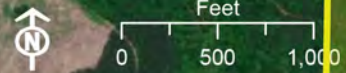
110 AC Industrial Zone (See South Hill Interstate Park)

Additional Vehicles on US 58 by 2040	
AM	620
PM	744

58



INTERSTATE 85

58





**2040 Development occurring within Town of South Hill:  
No Build Volumes**

- Legend**
-  Signalized Intersection
  -  Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour

**1** MAPLE LN

**2** E ATLANTIC ST / HAMMER ST

**3** E ATLANTIC ST / COUNTRY LN

**4** I-85 SOUTHBOUND RAMP

**5** I-85 NORTHBOUND RAMP

**6** THOMPSON ST

**7** PEEBLES ST

**8** CROWDER ST

**9** CYCLE LN

**10** HIGH ST

(3)	(315)	(57)	↶	49	(171)		↶	32	(70)
4	395	119	↑	22	(64)				
↷	↓	↷	↷	14	(58)				
(4)	2		↷	↶	↑	↷		↑	
(5)	135		↓	35	318	62		551	
(54)	46		↷	(25)	(373)	(20)		(858)	

(35)	(68)	(832)	↶	506	(748)		↶	248	(340)
34	28	347	↑	481	(319)		↑	843	(887)
↷	↓	↷	↷	26	(13)				
(37)	25		↷	↶	↑	↷			↷
(496)	335		↓	3	20	19		(1181)	621
(15)	9		↷	(13)	(73)	(82)		(229)	80



(101)			↶	143	(219)		↶	10	(23)
156			↑	935	(1126)		↑	999	(1284)
↷									
(1238)	691		↷					(88)	34
(83)	85		↷					(1150)	657

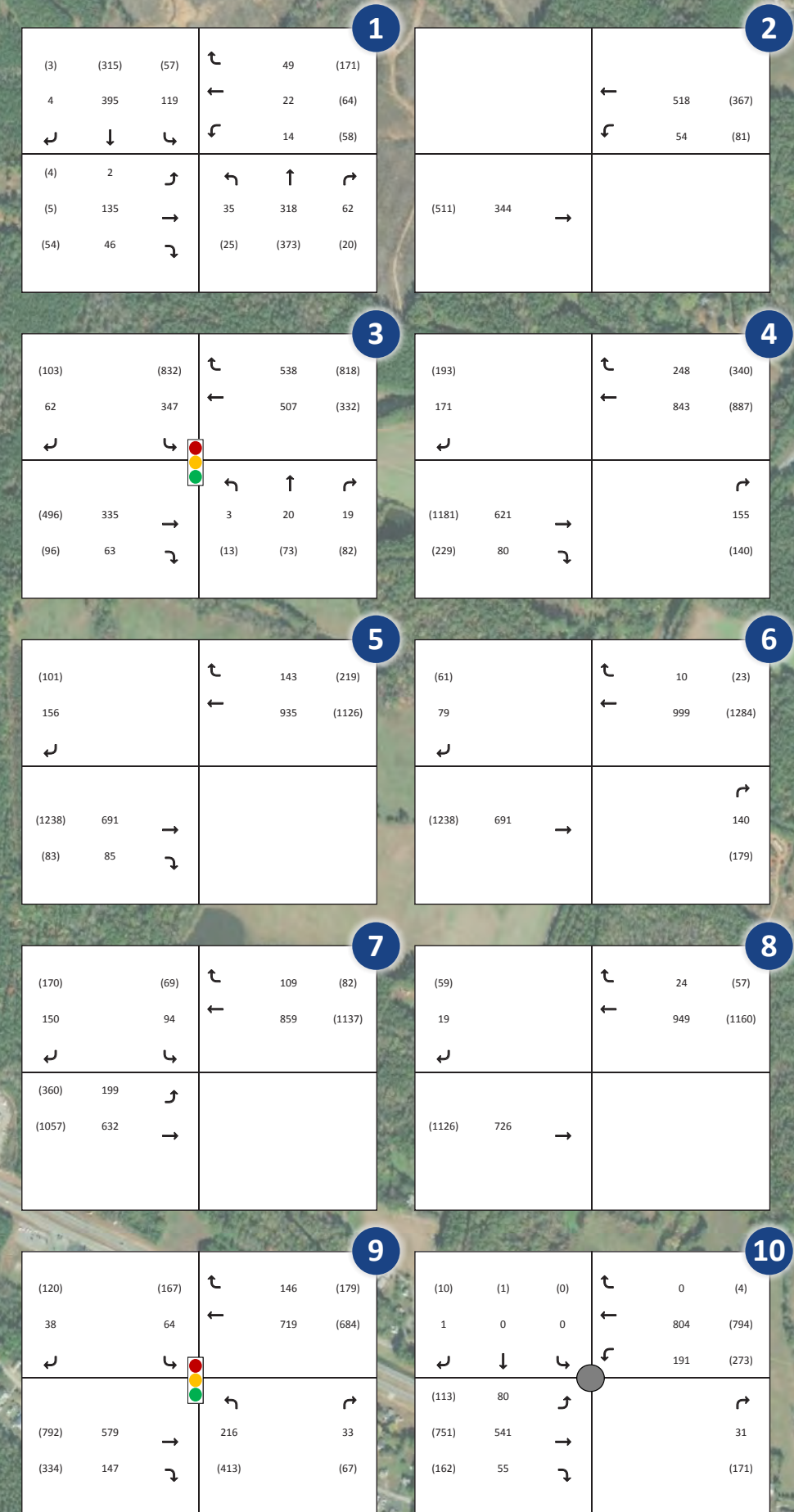
(170)	(63)		↶	109	(82)		↶	1	(4)
150	71		↑	859	(1137)		↑	949	(1160)
↷									
(206)	128		↷					(66)	37
(1145)	703		↓					(1142)	737

(120)	(6)	(135)	↶	86	(120)		↶	0	(4)
38	23	26	↑	808	(784)		↑	888	(866)
↷	↓	↷	↷	84	(72)			107	(201)
(59)	60		↷	↶	↑	↷		(54)	20
(765)	557		↓	104	23	33		(751)	541
(328)	124		↷	(260)	(53)	(67)		(162)	55





## 2040 Development occurring within Town of South Hill: Build Volumes

- Legend**
-  Signalized Intersection
  -  Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour





**2040 No development occurring within Town of South Hill: No Build Volumes**

- Legend**
-  Signalized Intersection
  -  Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour

**1** MAPLE LN

**2** E ATLANTIC ST / HAMMER ST

**3** E ATLANTIC ST / COUNTRY LN

**4** I-85 SOUTHBOUND RAMP

**5** I-85 NORTHBOUND RAMP

**6** THOMPSON ST

**7** PEEBLES ST

**8** CROWDER ST

**9** CYCLE LN

**10** HIGH ST

(3)	(170)	(8)	↶	21	(12)		↶	32	(70)
4	282	22	↑	13	(11)				
↷	↓	↷	↷	5	(5)				
(4)	2	↷	↶	↑	↷		↑		
(4)	25	↓	35	311	10		470		
(54)	46	↷	(25)	(314)	(1)		(719)		

(37)	(68)	(739)	↶	425	(609)	(185)	↶	169	(218)
34	28	330	↑	271	(131)	156	↑	566	(567)
↷	↓	↷	↷	26	(13)	↷			
(37)	25	↷	↶	↑	↷	(934)	579	↷	116
(278)	300	↓	3	20	19	(165)	69	↷	(129)
(15)	9	↷	(13)	(73)	(82)				

(93)			↶	97	(140)	(20)	(13)	↶	7	(9)
140			↑	594	(692)	44	19	↑	647	(812)
↷						↷		↷		
(980)	611	↷				(33)	27	↷		106
(83)	85	↷	(947)	584				↓		(158)

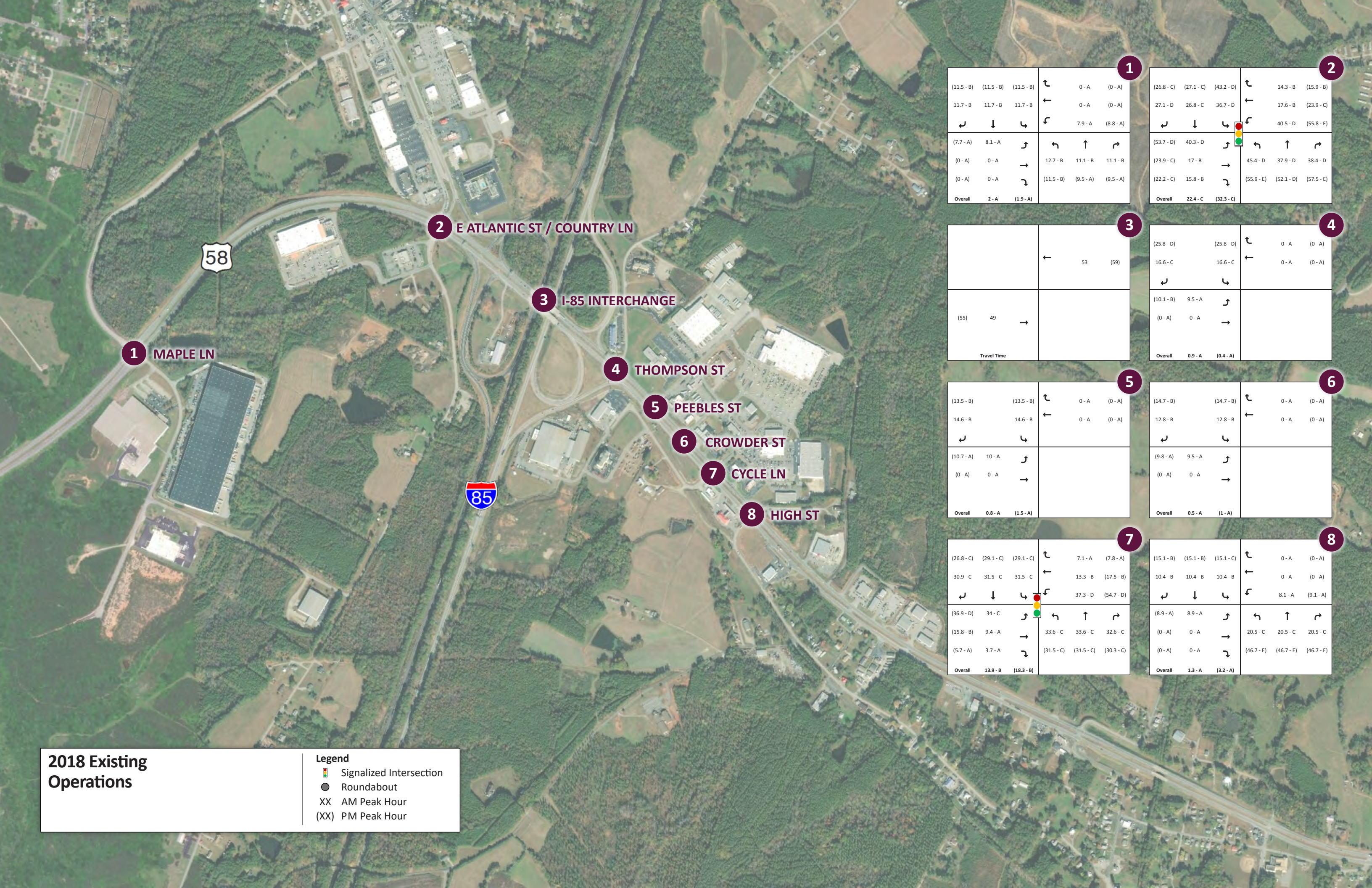
(102)		(8)	↶	6	(3)	(59)	(10)	↶	1	(6)
41		5	↑	613	(719)	19	4	↑	600	(663)
↷		↷				↷		↷		
(128)	38	↷				(66)	37	↷		
(990)	671	↓	(926)	637				↓		

(120)	(6)	(135)	↶	86	(120)	(10)	(1)	(0)	↶	0	(4)
38	2	26	↑	537	(500)	1	0	0	↑	581	(571)
↷	↓	↷	↷	6	(14)	↷	↓	↷	↷	8	(20)
(59)	60	↷	↶	↑	↷	(54)	20	↷	↶	↑	↷
(727)	540	↓	26	3	4	(724)	500	↓	47	0	8
(150)	41	↷	(49)	(6)	(12)	(96)	50	↷	(53)	(0)	(17)









**1** MAPLE LN

**2** E ATLANTIC ST / COUNTRY LN

**3** I-85 INTERCHANGE

**4** THOMPSON ST

**5** PEEBLES ST

**6** CROWDER ST

**7** CYCLE LN

**8** HIGH ST

(11.5 - B)	(11.5 - B)	(11.5 - B)	↶	0 - A	(0 - A)
11.7 - B	11.7 - B	11.7 - B	↵	0 - A	(0 - A)
↷	↓	↸	↶	7.9 - A	(8.8 - A)
(7.7 - A)	8.1 - A	↷	↶	↑	↷
(0 - A)	0 - A	→	12.7 - B	11.1 - B	11.1 - B
(0 - A)	0 - A	↷	(11.5 - B)	(9.5 - A)	(9.5 - A)
<b>Overall</b>	<b>2 - A</b>	<b>(1.9 - A)</b>			

(26.8 - C)	(27.1 - C)	(43.2 - D)	↶	14.3 - B	(15.9 - B)
27.1 - D	26.8 - C	36.7 - D	↵	17.6 - B	(23.9 - C)
↷	↓	↸	↶	40.5 - D	(55.8 - E)
(53.7 - D)	40.3 - D	↷	↶	↑	↷
(23.9 - C)	17 - B	→	45.4 - D	37.9 - D	38.4 - D
(22.2 - C)	15.8 - B	↷	(55.9 - E)	(52.1 - D)	(57.5 - E)
<b>Overall</b>	<b>22.4 - C</b>	<b>(32.3 - C)</b>			

			←	53	(59)
(55)	49	→			
<b>Travel Time</b>					

(25.8 - D)	(25.8 - D)	↶	0 - A	(0 - A)
16.6 - C	16.6 - C	↵	0 - A	(0 - A)
↷	↸			
(10.1 - B)	9.5 - A	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>0.9 - A</b>	<b>(0.4 - A)</b>		

(13.5 - B)	(13.5 - B)	↶	0 - A	(0 - A)
14.6 - B	14.6 - B	↵	0 - A	(0 - A)
↷	↸			
(10.7 - A)	10 - A	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>0.8 - A</b>	<b>(1.5 - A)</b>		

(14.7 - B)	(14.7 - B)	↶	0 - A	(0 - A)
12.8 - B	12.8 - B	↵	0 - A	(0 - A)
↷	↸			
(9.8 - A)	9.5 - A	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>0.5 - A</b>	<b>(1 - A)</b>		

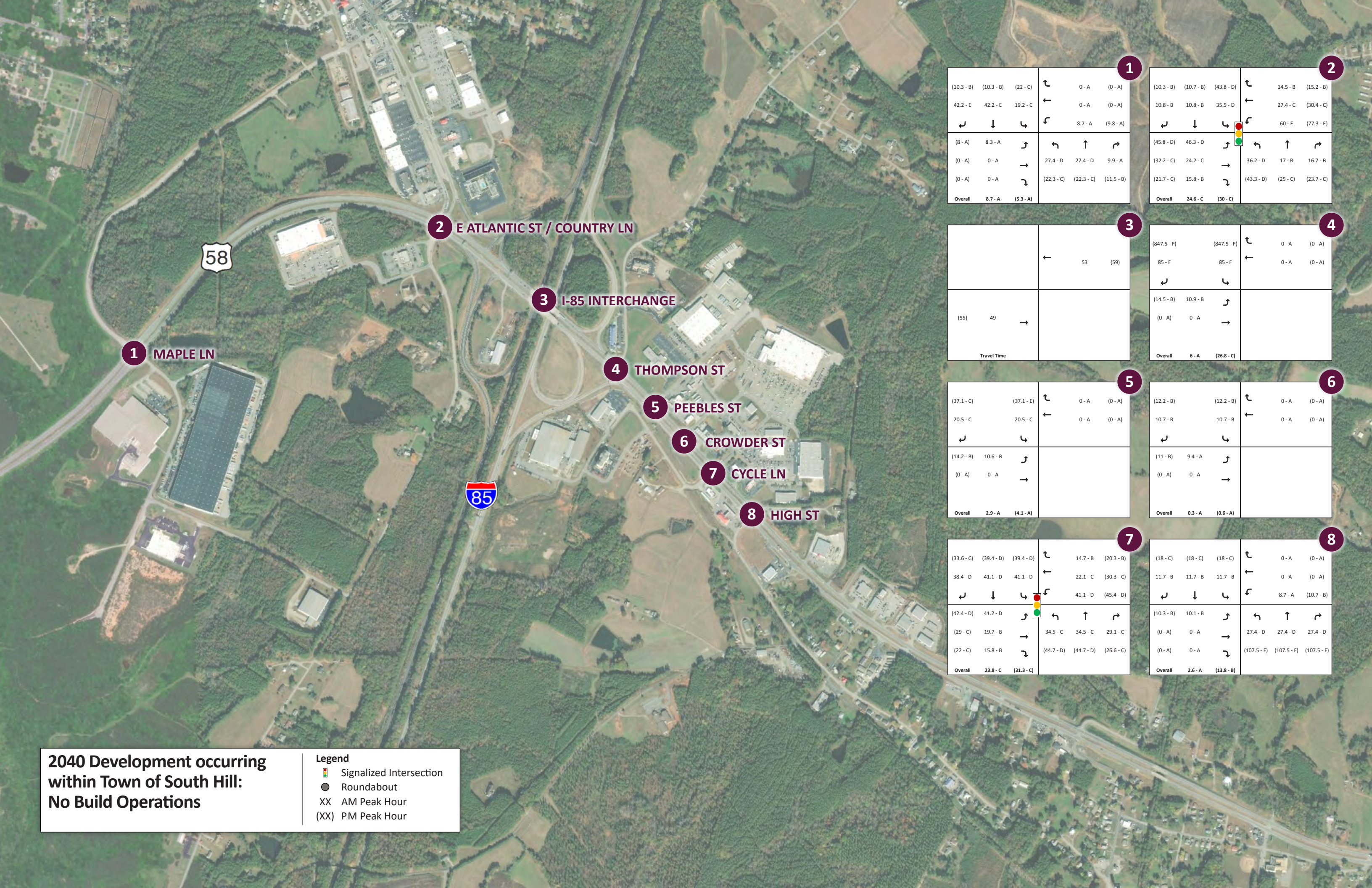
(26.8 - C)	(29.1 - C)	(29.1 - C)	↶	7.1 - A	(7.8 - A)
30.9 - C	31.5 - C	31.5 - C	↵	13.3 - B	(17.5 - B)
↷	↓	↸	↶	37.3 - D	(54.7 - D)
(36.9 - D)	34 - C	↷	↶	↑	↷
(15.8 - B)	9.4 - A	→	33.6 - C	33.6 - C	32.6 - C
(5.7 - A)	3.7 - A	↷	(31.5 - C)	(31.5 - C)	(30.3 - C)
<b>Overall</b>	<b>13.9 - B</b>	<b>(18.3 - B)</b>			

(15.1 - B)	(15.1 - B)	(15.1 - C)	↶	0 - A	(0 - A)
10.4 - B	10.4 - B	10.4 - B	↵	0 - A	(0 - A)
↷	↓	↸	↶	8.1 - A	(9.1 - A)
(8.9 - A)	8.9 - A	↷	↶	↑	↷
(0 - A)	0 - A	→	20.5 - C	20.5 - C	20.5 - C
(0 - A)	0 - A	↷	(46.7 - E)	(46.7 - E)	(46.7 - E)
<b>Overall</b>	<b>1.3 - A</b>	<b>(3.2 - A)</b>			

**2018 Existing Operations**

- Legend**
- Signalized Intersection
  - Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour





1

(10.3 - B)	(10.3 - B)	(22 - C)	↶	0 - A	(0 - A)
42.2 - E	42.2 - E	19.2 - C	↵	0 - A	(0 - A)
↶	↓	↷	↶	8.7 - A	(9.8 - A)
(8 - A)	8.3 - A	↷	↶	↑	↷
(0 - A)	0 - A	→	27.4 - D	27.4 - D	9.9 - A
(0 - A)	0 - A	↷	(22.3 - C)	(22.3 - C)	(11.5 - B)
<b>Overall</b>	<b>8.7 - A</b>	<b>(5.3 - A)</b>			

2

(10.3 - B)	(10.7 - B)	(43.8 - D)	↶	14.5 - B	(15.2 - B)
10.8 - B	10.8 - B	35.5 - D	↵	27.4 - C	(30.4 - C)
↶	↓	↷	↶	60 - E	(77.3 - E)
(45.8 - D)	46.3 - D	↷	↶	↑	↷
(32.2 - C)	24.2 - C	→	36.2 - D	17 - B	16.7 - B
(21.7 - C)	15.8 - B	↷	(43.3 - D)	(25 - C)	(23.7 - C)
<b>Overall</b>	<b>24.6 - C</b>	<b>(30 - C)</b>			

2 E ATLANTIC ST / COUNTRY LN

3 I-85 INTERCHANGE

3

			←	53	(59)
(55)	49	→			
<b>Travel Time</b>					

4

(847.5 - F)	(847.5 - F)	↶	0 - A	(0 - A)
85 - F	85 - F	↵	0 - A	(0 - A)
↶	↷			
(14.5 - B)	10.9 - B	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>6 - A</b>	<b>(26.8 - C)</b>		

1 MAPLE LN

4 THOMPSON ST

5 PEEBLES ST

6 CROWDER ST

7 CYCLE LN

8 HIGH ST

5

(37.1 - C)	(37.1 - E)	↶	0 - A	(0 - A)
20.5 - C	20.5 - C	↵	0 - A	(0 - A)
↶	↷			
(14.2 - B)	10.6 - B	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>2.9 - A</b>	<b>(4.1 - A)</b>		

6

(12.2 - B)	(12.2 - B)	↶	0 - A	(0 - A)
10.7 - B	10.7 - B	↵	0 - A	(0 - A)
↶	↷			
(11 - B)	9.4 - A	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>0.3 - A</b>	<b>(0.6 - A)</b>		

7

(33.6 - C)	(39.4 - D)	(39.4 - D)	↶	14.7 - B	(20.3 - B)
38.4 - D	41.1 - D	41.1 - D	↵	22.1 - C	(30.3 - C)
↶	↓	↷	↶	41.1 - D	(45.4 - D)
(42.4 - D)	41.2 - D	↷	↶	↑	↷
(29 - C)	19.7 - B	→	34.5 - C	34.5 - C	29.1 - C
(22 - C)	15.8 - B	↷	(44.7 - D)	(44.7 - D)	(26.6 - C)
<b>Overall</b>	<b>23.8 - C</b>	<b>(31.3 - C)</b>			

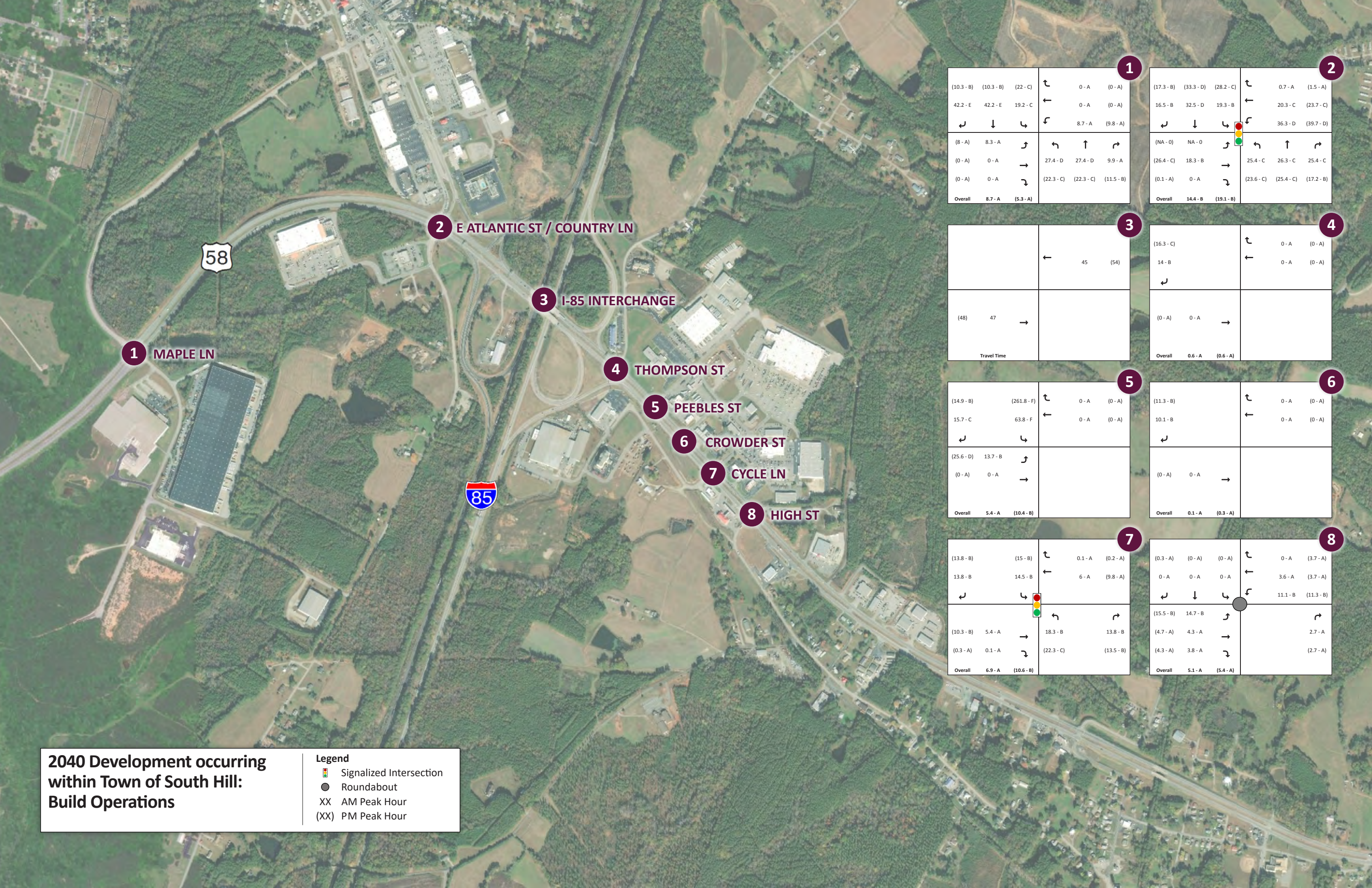
8

(18 - C)	(18 - C)	(18 - C)	↶	0 - A	(0 - A)
11.7 - B	11.7 - B	11.7 - B	↵	0 - A	(0 - A)
↶	↓	↷	↶	8.7 - A	(10.7 - B)
(10.3 - B)	10.1 - B	↷	↶	↑	↷
(0 - A)	0 - A	→	27.4 - D	27.4 - D	27.4 - D
(0 - A)	0 - A	↷	(107.5 - F)	(107.5 - F)	(107.5 - F)
<b>Overall</b>	<b>2.6 - A</b>	<b>(13.8 - B)</b>			

**2040 Development occurring within Town of South Hill: No Build Operations**

- Legend**
- Signalized Intersection
  - Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour





**1** MAPLE LN

**2** E ATLANTIC ST / COUNTRY LN

**3** I-85 INTERCHANGE

**4** THOMPSON ST

**5** PEEBLES ST

**6** CROWDER ST

**7** CYCLE LN

**8** HIGH ST

(10.3 - B)	(10.3 - B)	(22 - C)	↶	0 - A	(0 - A)
42.2 - E	42.2 - E	19.2 - C	↵	0 - A	(0 - A)
↷	↓	↷	↶	8.7 - A	(9.8 - A)
(8 - A)	8.3 - A	↷	↶	↑	↷
(0 - A)	0 - A	→	27.4 - D	27.4 - D	9.9 - A
(0 - A)	0 - A	↷	(22.3 - C)	(22.3 - C)	(11.5 - B)
<b>Overall</b>	<b>8.7 - A</b>	<b>(5.3 - A)</b>			

(17.3 - B)	(33.3 - D)	(28.2 - C)	↶	0.7 - A	(1.5 - A)
16.5 - B	32.5 - D	19.3 - B	↵	20.3 - C	(23.7 - C)
↷	↓	↷	↶	36.3 - D	(39.7 - D)
(NA - 0)	NA - 0	↷	↶	↑	↷
(26.4 - C)	18.3 - B	→	25.4 - C	26.3 - C	25.4 - C
(0.1 - A)	0 - A	↷	(23.6 - C)	(25.4 - C)	(17.2 - B)
<b>Overall</b>	<b>14.4 - B</b>	<b>(19.1 - B)</b>			

			←	45	(54)
(48)	47	→			
<b>Travel Time</b>					

(16.3 - C)		↶	0 - A	(0 - A)
14 - B		↵	0 - A	(0 - A)
↷				
(0 - A)	0 - A	→		
<b>Overall</b>	<b>0.6 - A</b>	<b>(0.6 - A)</b>		

(14.9 - B)	(261.8 - F)	↶	0 - A	(0 - A)
15.7 - C	63.8 - F	↵	0 - A	(0 - A)
↷	↷			
(25.6 - D)	13.7 - B	↷		
(0 - A)	0 - A	→		
<b>Overall</b>	<b>5.4 - A</b>	<b>(10.4 - B)</b>		

(11.3 - B)		↶	0 - A	(0 - A)
10.1 - B		↵	0 - A	(0 - A)
↷				
(0 - A)	0 - A	→		
<b>Overall</b>	<b>0.1 - A</b>	<b>(0.3 - A)</b>		

(13.8 - B)	(15 - B)	↶	0.1 - A	(0.2 - A)
13.8 - B	14.5 - B	↵	6 - A	(9.8 - A)
↷	↷	↶		
(10.3 - B)	5.4 - A	→	18.3 - B	13.8 - B
(0.3 - A)	0.1 - A	↷	(22.3 - C)	(13.5 - B)
<b>Overall</b>	<b>6.9 - A</b>	<b>(10.6 - B)</b>		

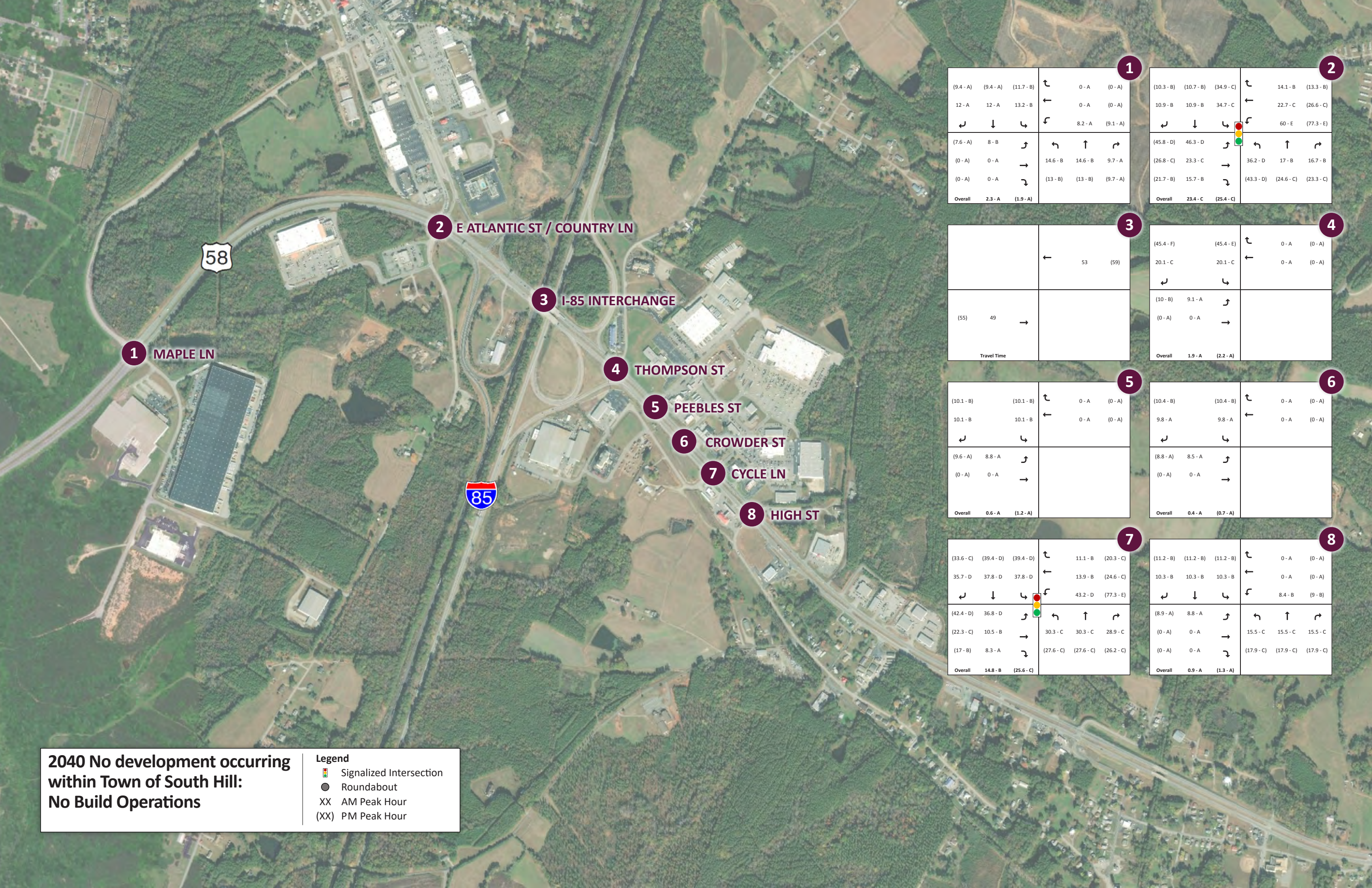
(0.3 - A)	(0 - A)	(0 - A)	↶	0 - A	(3.7 - A)
0 - A	0 - A	0 - A	↵	3.6 - A	(3.7 - A)
↷	↓	↷	↶	11.1 - B	(11.3 - B)
(15.5 - B)	14.7 - B	↷			
(4.7 - A)	4.3 - A	→			2.7 - A
(4.3 - A)	3.8 - A	↷			(2.7 - A)
<b>Overall</b>	<b>5.1 - A</b>	<b>(5.4 - A)</b>			

**2040 Development occurring within Town of South Hill: Build Operations**

**Legend**

- Signalized Intersection
- Roundabout
- XX AM Peak Hour
- (XX) PM Peak Hour





1			2		
(9.4 - A)	(9.4 - A)	(11.7 - B)	↶	0 - A	(0 - A)
12 - A	12 - A	13.2 - B	↵	0 - A	(0 - A)
↶	↓	↷	↶	8.2 - A	(9.1 - A)
(7.6 - A)	8 - B	↷	↶	↑	↷
(0 - A)	0 - A	→	14.6 - B	14.6 - B	9.7 - A
(0 - A)	0 - A	↷	(13 - B)	(13 - B)	(9.7 - A)
<b>Overall</b>	<b>2.3 - A</b>	<b>(1.9 - A)</b>			

1			2		
(10.3 - B)	(10.7 - B)	(34.9 - C)	↶	14.1 - B	(13.3 - B)
10.9 - B	10.9 - B	34.7 - C	↵	22.7 - C	(26.6 - C)
↶	↓	↷	↶	60 - E	(77.3 - E)
(45.8 - D)	46.3 - D	↷	↶	↑	↷
(26.8 - C)	23.3 - C	→	36.2 - D	17 - B	16.7 - B
(21.7 - B)	15.7 - B	↷	(43.3 - D)	(24.6 - C)	(23.3 - C)
<b>Overall</b>	<b>23.4 - C</b>	<b>(25.4 - C)</b>			

3			4		
			←	53	(59)
(55)	49	→			
<b>Travel Time</b>					

3			4		
(45.4 - F)	(45.4 - E)	↶	0 - A	(0 - A)	
20.1 - C	20.1 - C	↵	0 - A	(0 - A)	
↶	↷				
(10 - B)	9.1 - A	↷			
(0 - A)	0 - A	→			
<b>Overall</b>	<b>1.9 - A</b>	<b>(2.2 - A)</b>			

5			6		
(10.1 - B)	(10.1 - B)	↶	0 - A	(0 - A)	
10.1 - B	10.1 - B	↵	0 - A	(0 - A)	
↶	↷				
(9.6 - A)	8.8 - A	↷			
(0 - A)	0 - A	→			
<b>Overall</b>	<b>0.6 - A</b>	<b>(1.2 - A)</b>			

5			6		
(10.4 - B)	(10.4 - B)	↶	0 - A	(0 - A)	
9.8 - A	9.8 - A	↵	0 - A	(0 - A)	
↶	↷				
(8.8 - A)	8.5 - A	↷			
(0 - A)	0 - A	→			
<b>Overall</b>	<b>0.4 - A</b>	<b>(0.7 - A)</b>			

7			8		
(33.6 - C)	(39.4 - D)	(39.4 - D)	↶	11.1 - B	(20.3 - C)
35.7 - D	37.8 - D	37.8 - D	↵	13.9 - B	(24.6 - C)
↶	↓	↷	↶	43.2 - D	(77.3 - E)
(42.4 - D)	36.8 - D	↷	↶	↑	↷
(22.3 - C)	10.5 - B	→	30.3 - C	30.3 - C	28.9 - C
(17 - B)	8.3 - A	↷	(27.6 - C)	(27.6 - C)	(26.2 - C)
<b>Overall</b>	<b>14.8 - B</b>	<b>(25.6 - C)</b>			

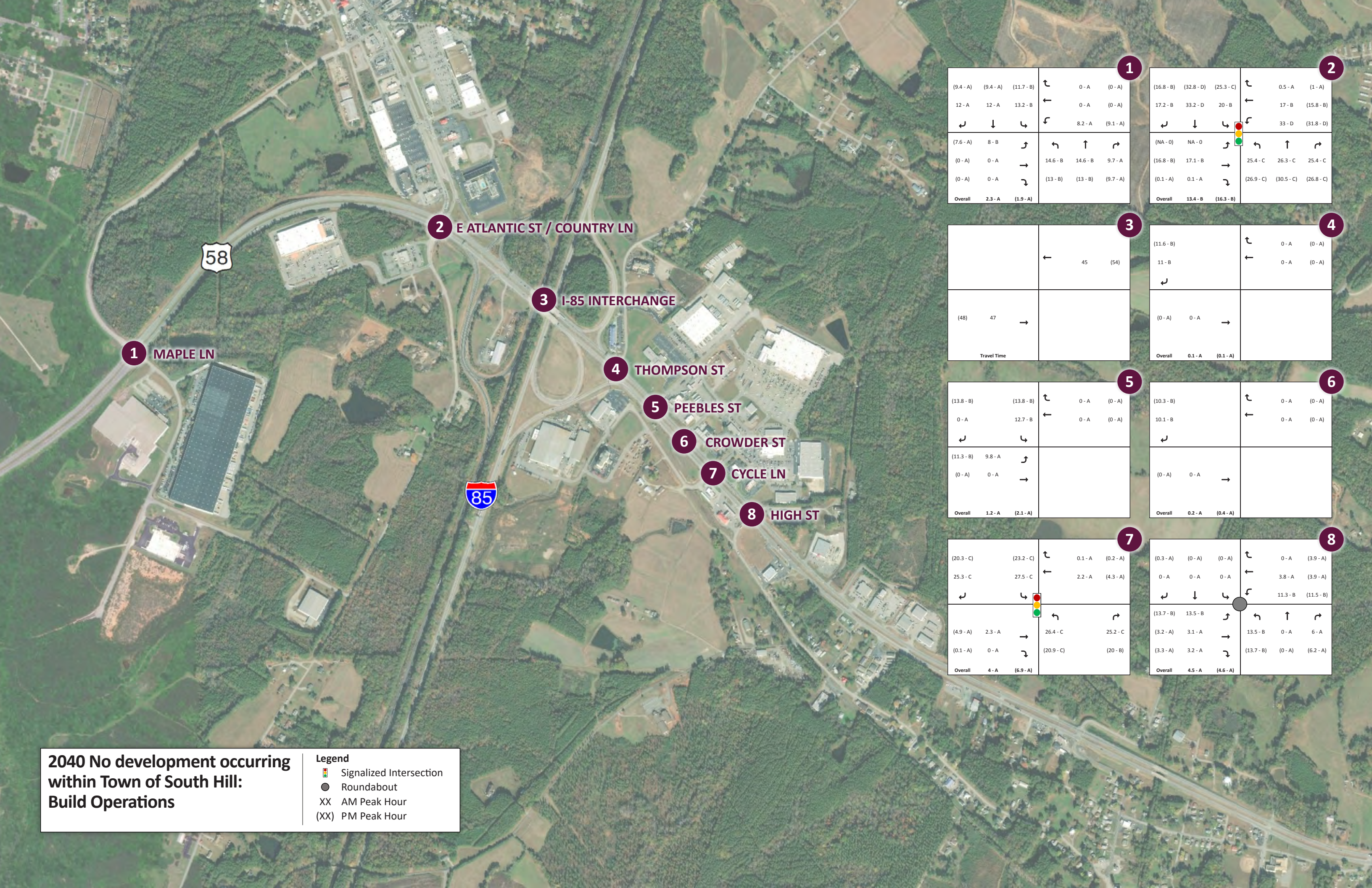
7			8		
(11.2 - B)	(11.2 - B)	(11.2 - B)	↶	0 - A	(0 - A)
10.3 - B	10.3 - B	10.3 - B	↵	0 - A	(0 - A)
↶	↓	↷	↶	8.4 - B	(9 - B)
(8.9 - A)	8.8 - A	↷	↶	↑	↷
(0 - A)	0 - A	→	15.5 - C	15.5 - C	15.5 - C
(0 - A)	0 - A	↷	(17.9 - C)	(17.9 - C)	(17.9 - C)
<b>Overall</b>	<b>0.9 - A</b>	<b>(1.3 - A)</b>			

**2040 No development occurring within Town of South Hill: No Build Operations**

**Legend**

- Signalized Intersection
- Roundabout
- XX AM Peak Hour
- (XX) PM Peak Hour







(9.4 - A)	(9.4 - A)	(11.7 - B)	↶	0 - A	(0 - A)	(16.8 - B)	(32.8 - D)	(25.3 - C)	↶	0.5 - A	(1 - A)
12 - A	12 - A	13.2 - B	↵	0 - A	(0 - A)	17.2 - B	33.2 - D	20 - B	↵	17 - B	(15.8 - B)
↷	↓	↷	↶	8.2 - A	(9.1 - A)	↷	↷	↷	↷	33 - D	(31.8 - D)
(7.6 - A)	8 - B	↷	↶	↑	↷	(NA - 0)	NA - 0	↷	↶	↑	↷
(0 - A)	0 - A	↷	14.6 - B	14.6 - B	9.7 - A	(16.8 - B)	17.1 - B	↷	25.4 - C	26.3 - C	25.4 - C
(0 - A)	0 - A	↷	(13 - B)	(13 - B)	(9.7 - A)	(0.1 - A)	0.1 - A	↷	(26.9 - C)	(30.5 - C)	(26.8 - C)
<b>Overall</b>	<b>2.3 - A</b>	<b>(1.9 - A)</b>				<b>Overall</b>	<b>13.4 - B</b>	<b>(16.3 - B)</b>			

			←	45	(54)	(11.6 - B)			↶	0 - A	(0 - A)
						11 - B			↵	0 - A	(0 - A)
						↷					
(48)	47	→				(0 - A)	0 - A	→			
<b>Travel Time</b>						<b>Overall</b>	<b>0.1 - A</b>	<b>(0.1 - A)</b>			

(13.8 - B)	(13.8 - B)	↶	0 - A	(0 - A)	(10.3 - B)				↶	0 - A	(0 - A)
0 - A	12.7 - B	↵	0 - A	(0 - A)	10.1 - B				↵	0 - A	(0 - A)
↷	↷				↷						
(11.3 - B)	9.8 - A	↷			(0 - A)	0 - A	→				
(0 - A)	0 - A	↷									
<b>Overall</b>	<b>1.2 - A</b>	<b>(2.1 - A)</b>			<b>Overall</b>	<b>0.2 - A</b>	<b>(0.4 - A)</b>				

(20.3 - C)	(23.2 - C)	↶	0.1 - A	(0.2 - A)	(0.3 - A)	(0 - A)	(0 - A)	↶	0 - A	(3.9 - A)
25.3 - C	27.5 - C	↵	2.2 - A	(4.3 - A)	0 - A	0 - A	0 - A	↵	3.8 - A	(3.9 - A)
↷	↷	↷			↷	↷	↷	↷	11.3 - B	(11.5 - B)
(4.9 - A)	2.3 - A	↷	26.4 - C	25.2 - C	(13.7 - B)	13.5 - B	↷	↶	↑	↷
(0.1 - A)	0 - A	↷	(20.9 - C)	(20 - B)	(3.2 - A)	3.1 - A	↷	13.5 - B	0 - A	6 - A
<b>Overall</b>	<b>4 - A</b>	<b>(6.9 - A)</b>			(3.3 - A)	3.2 - A	↷	(13.7 - B)	(0 - A)	(6.2 - A)
					<b>Overall</b>	<b>4.5 - A</b>	<b>(4.6 - A)</b>			

**2040 No development occurring within Town of South Hill: Build Operations**

- Legend**
-  Signalized Intersection
  -  Roundabout
  - XX AM Peak Hour
  - (XX) PM Peak Hour



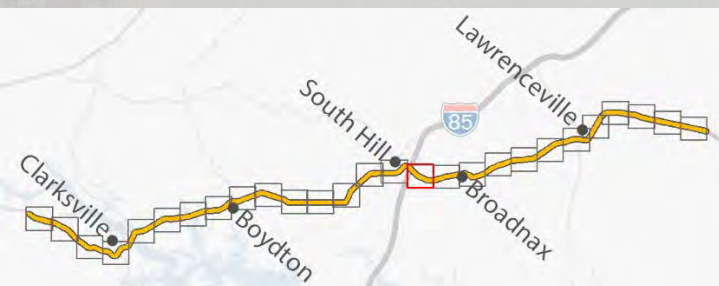


SEE FIGURE 25  
FOR I-85 INTERCHANGE

SEE FIGURE 24  
FOR COUNTRY LN

SEE FIGURE 26  
FOR THOMPSON ST TO  
HIGH ST SEGMENT

**Route 58 Arterial Management Plan  
Figure 23  
South Hill Area Summary**





HALIFX COUNTY LINE

BRUNSWICK COUNTY LINE

# Route 58 Arterial Management Plan

## Figure 24

### Intersection #49: US 58 with Country Ln Town of South Hill

**Recommendation:** Reconfigure the existing intersection and traffic signal to a three-phase signal. Permit only through and right-turn movements on US 58. Permit only left and right-turn movements from US 58 BUS southbound onto US 58 and full movements from Country Ln northbound. Construct U-turn area west of existing intersection to permit movements destined to Country Ln from US 58 westbound or US 58 BUS southbound. Remove existing I-85 off ramp onto US 58 BUS and construct continuous flow right-turn lane from US 58 westbound onto US 58 BUS. Eastbound US 58 left-turns to be managed at Maple Lane or interchange (depending on interchange configuration).

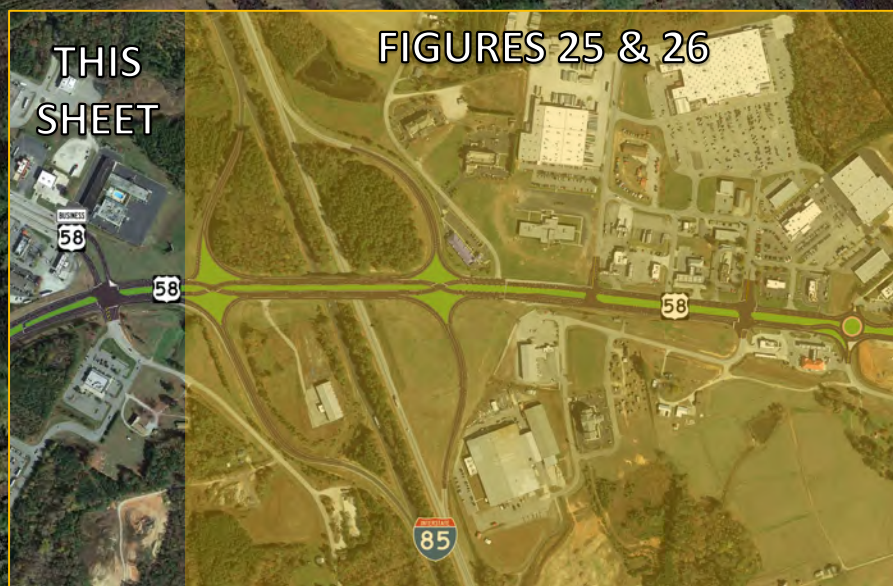
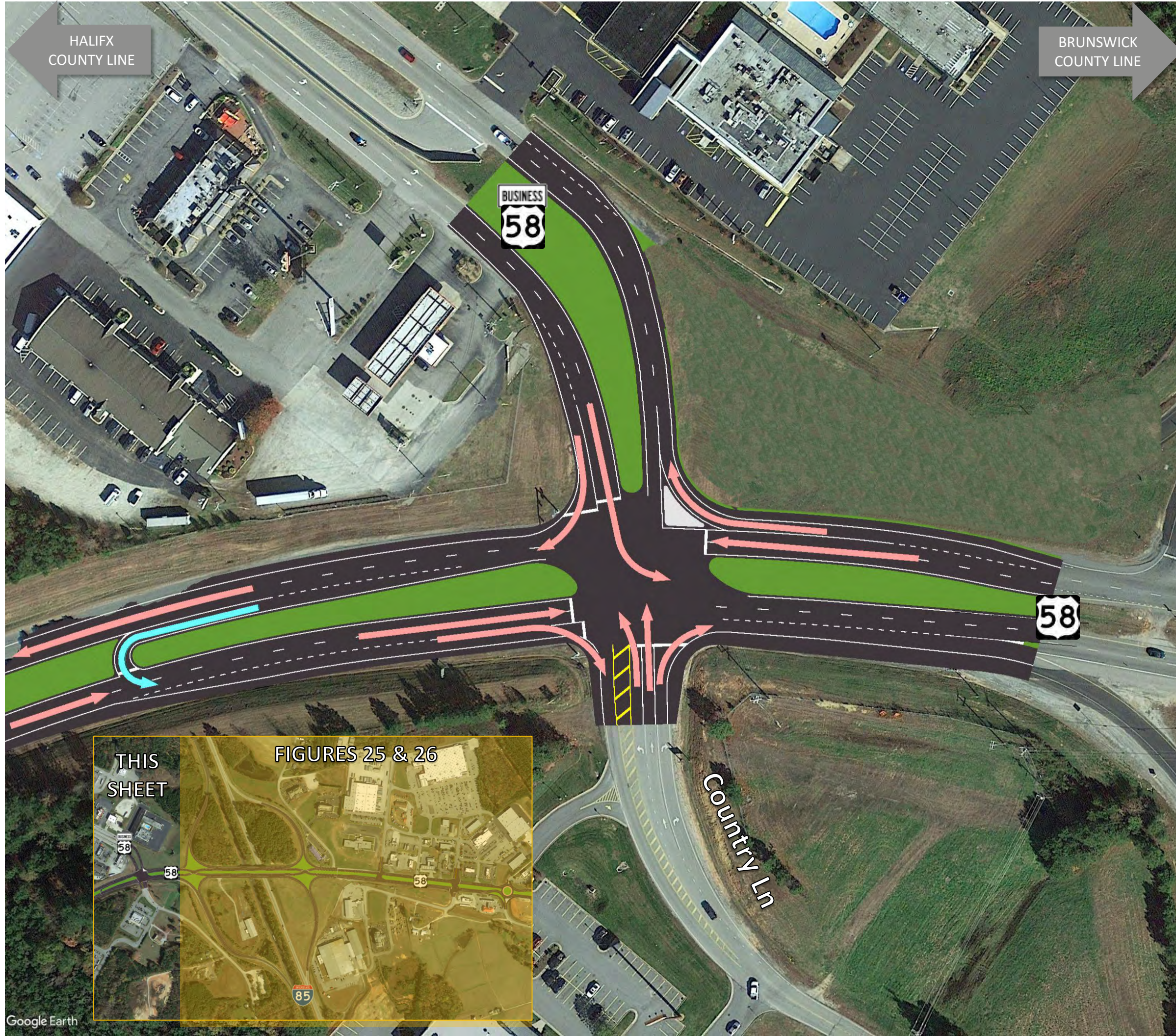
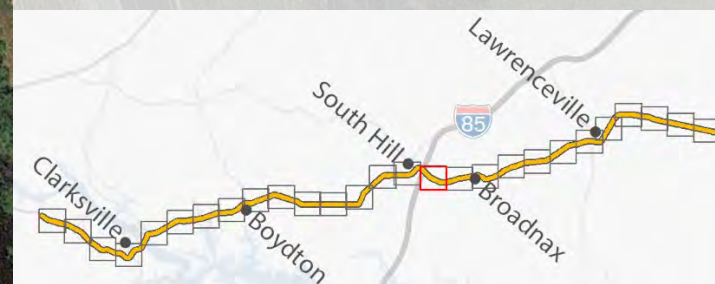
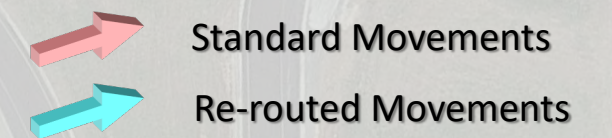
**ROW Impacts:** All improvements are within the ROW

**Improvement Type:** Congestion Mitigation, Economic Development, Safety, Travel Time Preservation

#### Operations:

2040 Future Delay (sec - LOS)	No Build	Build
AM	24.6-C	17.4-C
PM	30.4-C	20.4-C

**Cost:** \$1.9M to \$3.1M





HALIFX COUNTY LINE

BRUNSWICK COUNTY LINE

# Route 58 Arterial Management Plan Figure 25 I-85 Interchange Town of South Hill

**Recommendation:** Reconfigure interchange to Diverging Diamond Interchange or a Roundabouts Interchange (Inset). Interchange will require an Interchange Modification Report (IMR) to be submitted to the FHWA to determine ultimate configuration.

**ROW Impacts:** All improvements are within the ROW

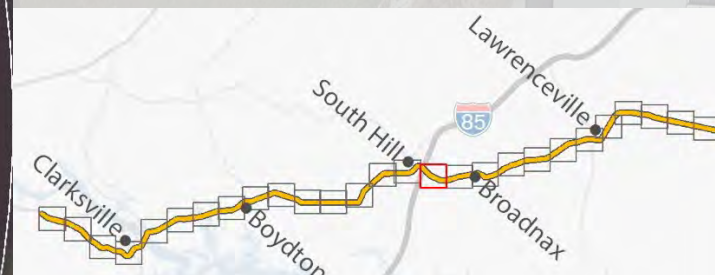
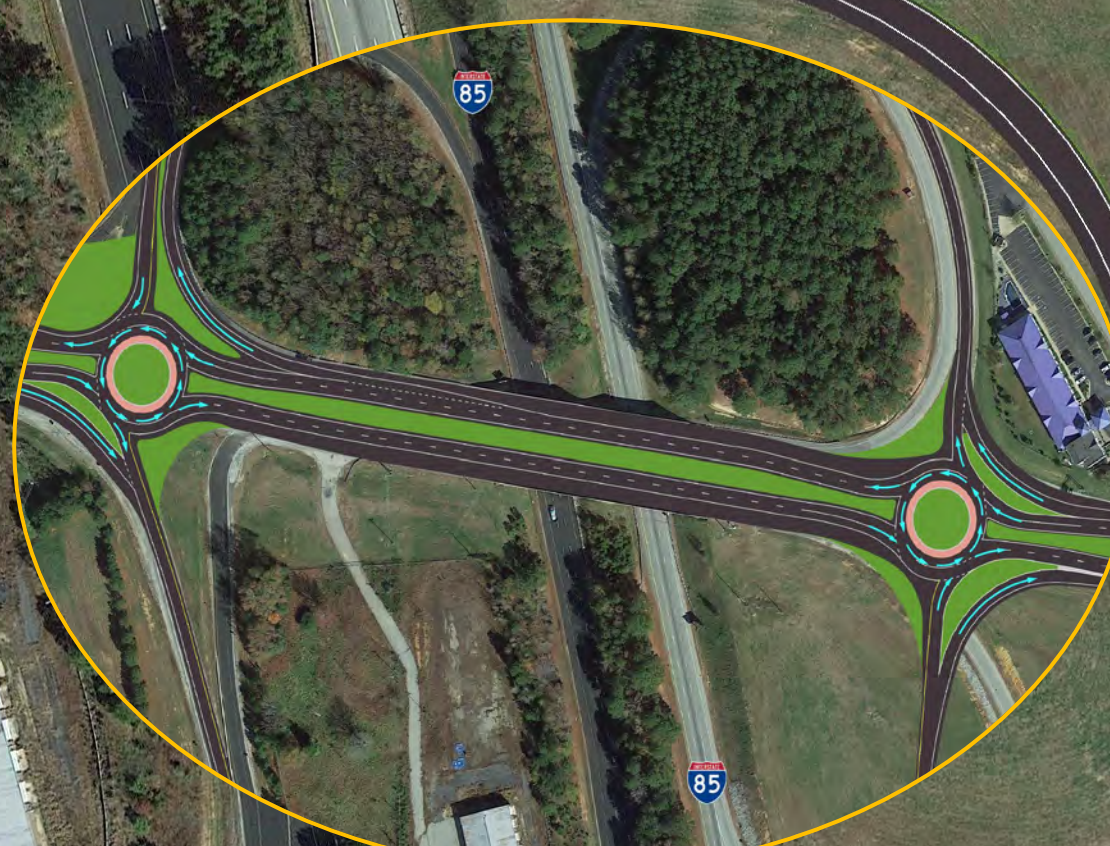
**Improvement Type:** Economic Development, Safety, Travel Time Preservation

### Traffic Operations & Safety:

**Traffic Operations** Reduced travel times for vehicles due to reduced weave and merge areas.

**Safety** Decreased risk of side-swipes and rear end crashes on both I-85 and US 58.

**Cost:** \$7.7M to \$28.0M





HALIFX COUNTY LINE

BRUNSWICK COUNTY LINE

**Route 58 Arterial Management Plan  
Figure 26  
US 58 Eastern Corporate Limits  
Town of South Hill**

**Interim Recommendation:** Reconfigure Thompson St intersection to right-in/right-out only, improve storage length of eastbound US 58 left-turn lane onto Peebles St, reconfigure Crowder St intersection to right-in/right-out only, reconfigure Cycle Lane to a two-phase signal, and construct a roundabout at the intersection of High St. Construct inter-parcel connections to maintain access between Thompson St and Peebles St, and between Cycle Ln and High St. Town maintained streets should be investigated further to determine pavement condition and capacity improvements to maintain efficient traffic flow.

**Long-term Recommendation:** As development occurs, additional improvements will be needed at the intersection of Peebles St and US 58. These improvements may require reviews and approvals by district, state, and FHWA officials. The roundabout at High St will need to be reconfigured to remove northbound left and thru movements to maintain capacity of the corridor.

**ROW Impacts:** All improvements on US 58 are within the ROW. Inter-parcel connections and Town maintained street improvement may require significant ROW acquisition.


**Improvement Type:** Economic Development, Safety, Travel Time Preservation

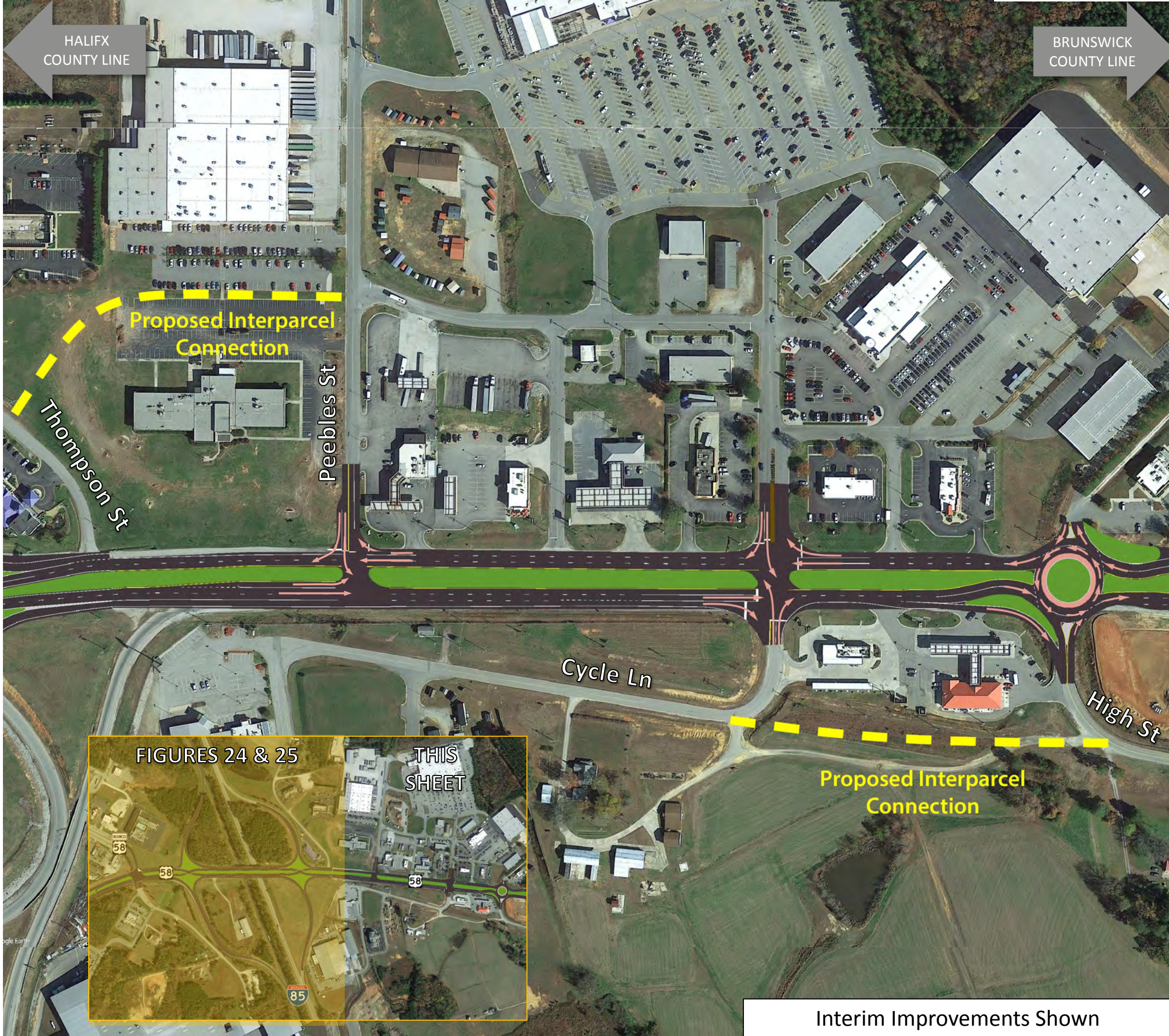
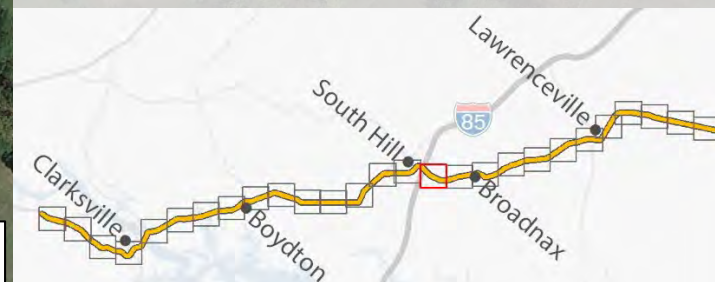
**Traffic Operations:**

2040 Travel Times (min)	Eastbound US 58		Westbound US 58	
	No Build	Build	No Build	Build
AM	1:02	0:54	1:02	0:58
PM	1:32	1:17	1:38	1:26

**US 58 Improvements:** \$6.4M to \$8.3M

**Town Street Improvements:** \$1.6M to \$10.0M

 Standard Movements



**Proposed Interparcel Connection**

**Interim Improvements Shown**



# DDI + Configurations

DDI	
Low	High
\$7,693,139	\$26,022,638

High St Roundabout	
Low	High
\$4,875,000	\$6,075,000

BUSINESS  
58

58

Country Lane	
Low	High
\$1,907,000	\$3,046,850

Thompson St to Cycle Ln	
Low	High
\$1,499,500	\$2,294,000

INTERSTATE  
85



# Roundabouts + Configurations

Roundabouts	
Low	High
\$10,202,305	\$14,593,499

Roundabouts	
Low	High
\$10,202,305	\$14,593,499

High St Roundabout	
Low	High
\$4,875,000	\$6,075,000

BUSINESS  
58

58



Country Lane	
Low	High
\$1,907,000	\$3,046,850

Thompson St to Cycle Ln	
Low	High
\$1,499,500	\$2,294,000

INTERSTATE  
85



