



CONGESTION MANAGEMENT PROCESS



2020 ANNUAL EVALUATION REPORT

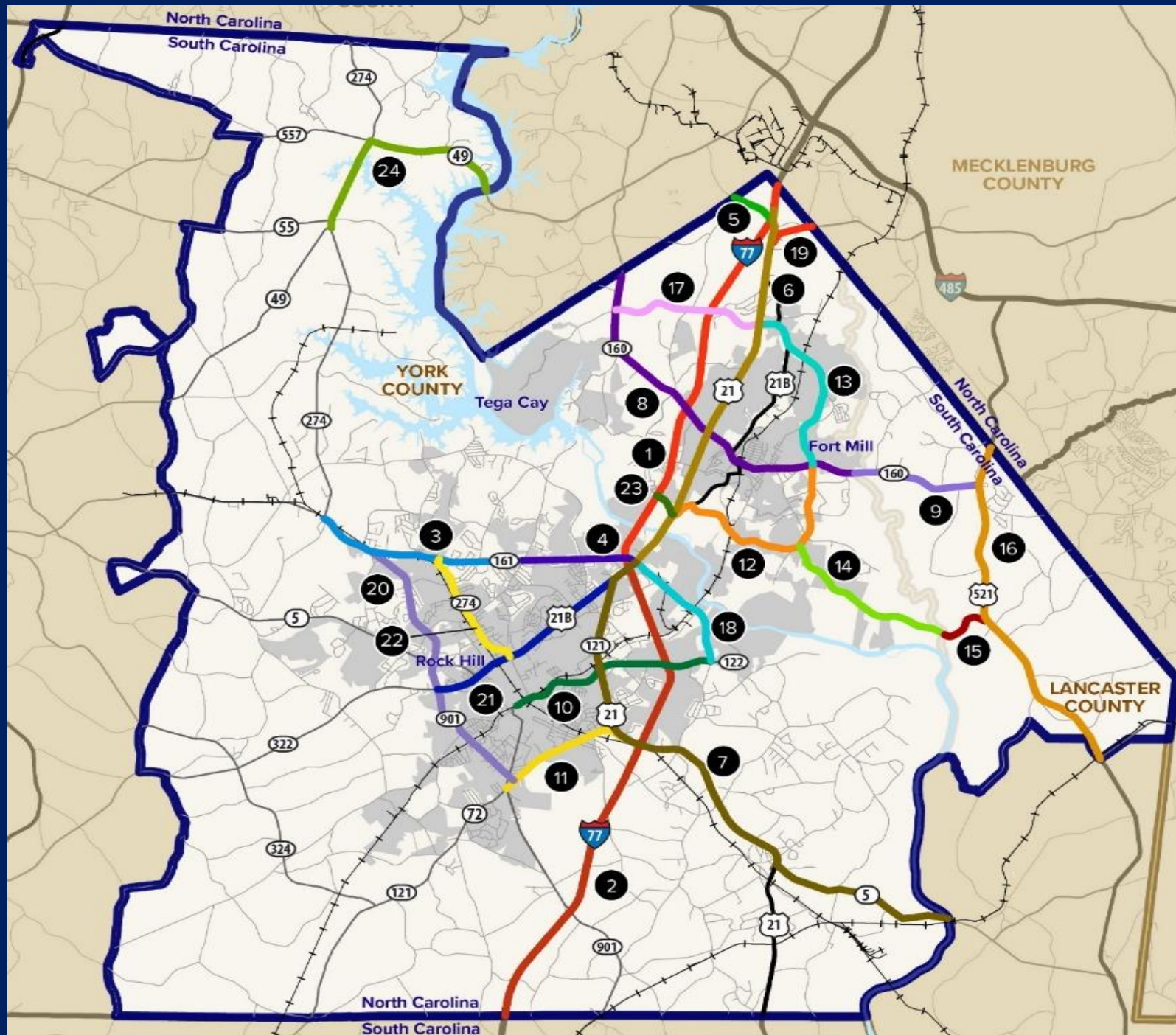


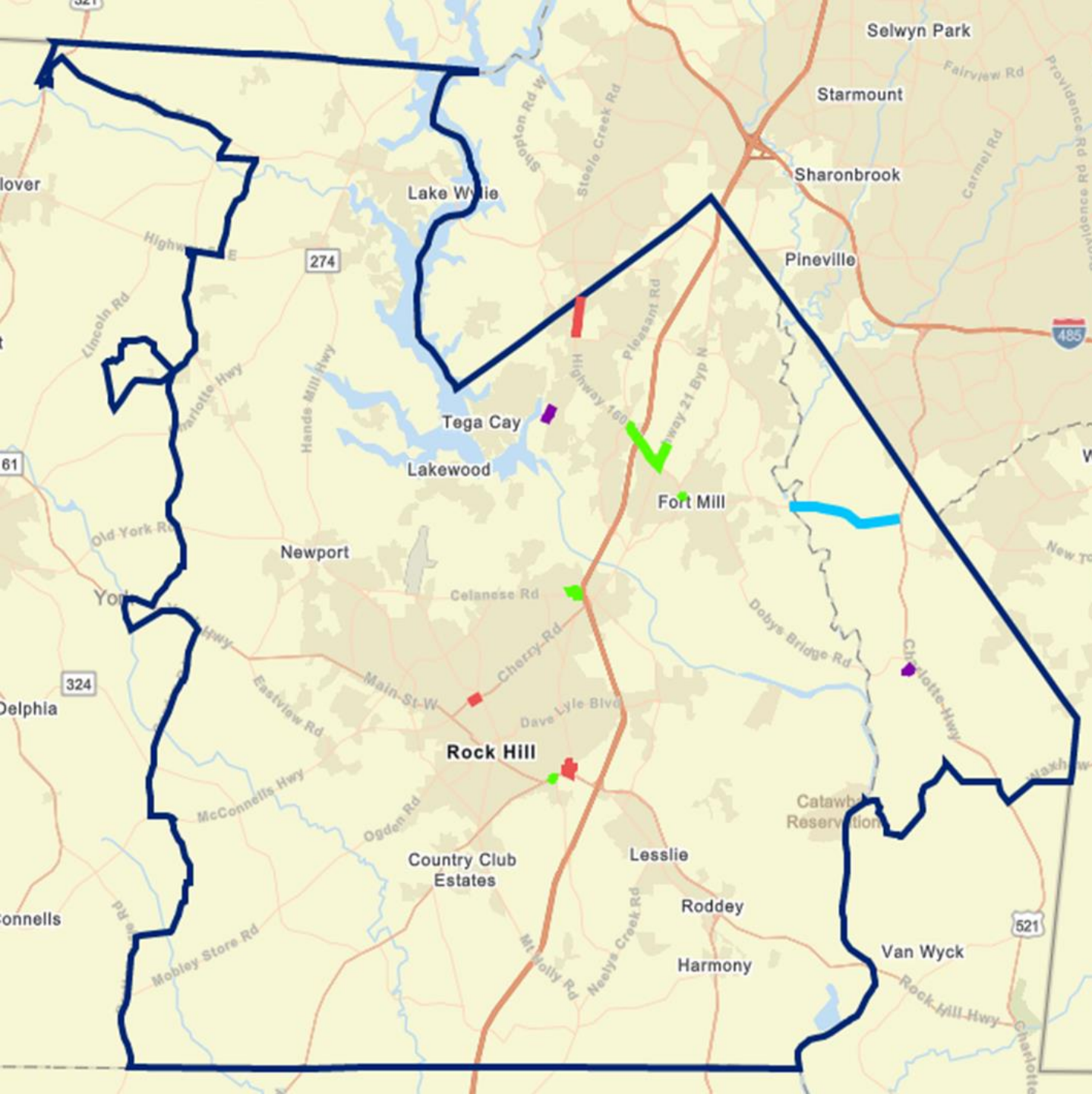
* Required for TMAs

+ Required for nonattainment and maintenance areas

REQUIREMENTS

CONGESTION MONITORING NETWORK





Recent Project Activity

Guideshare Projects

CMAQ Projects

TAP Projects

Pennies Projects



How are Reliability and Congestion Related?

Unreliability



Inconsistency or lack of dependability in trip travel time

RELIABILITY

Predictable recurrent travel delays



Congestion

Stop-and-go traffic and travel delays



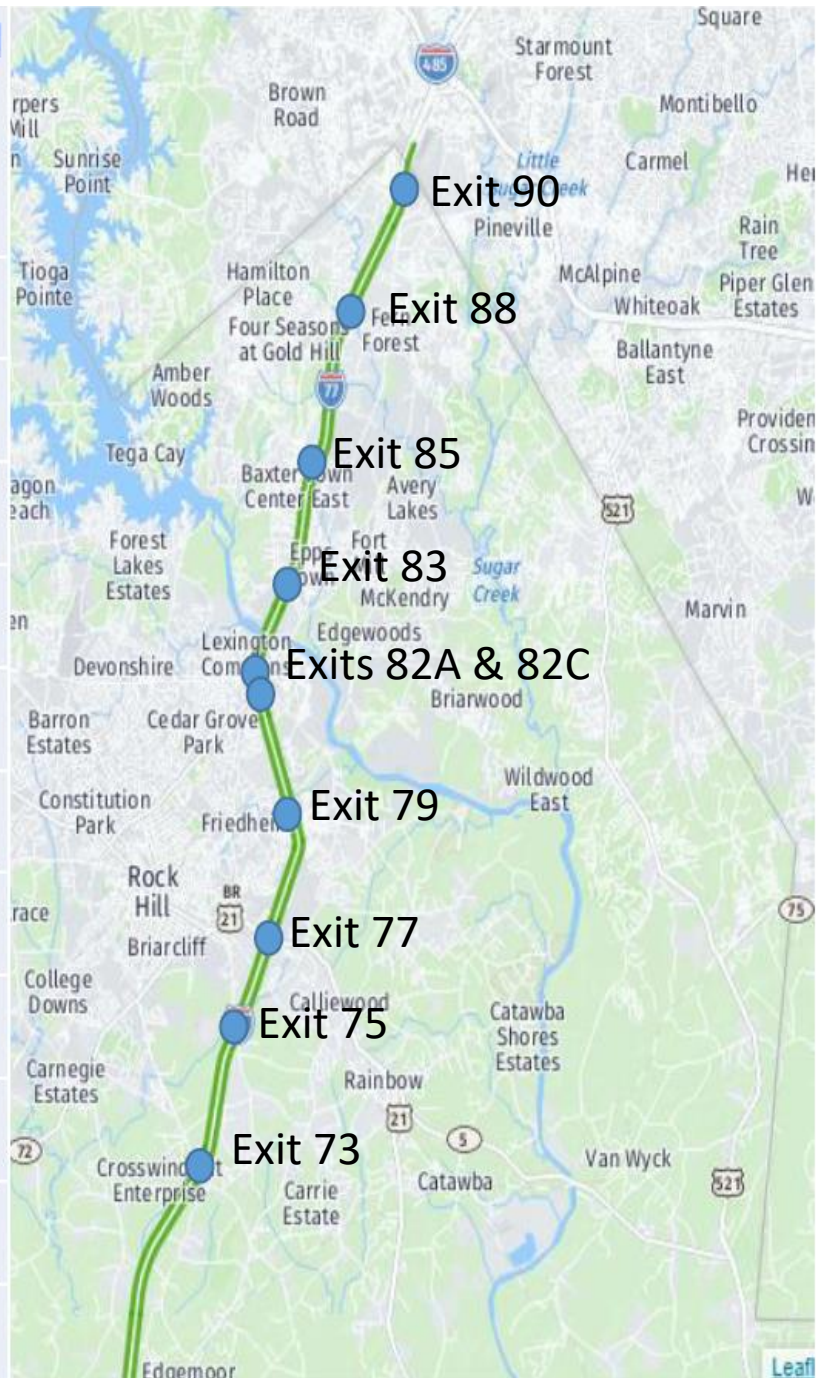
I-77 Reliability Percentage

	2017	2018	2019	2020
January	91.0%	90.9%	85.4%	86.0%
February	91.0%	85.5%	91.1%	86.0%
March	91.0%	85.5%	91.1%	98.3%
April	91.0%	85.5%	85.4%	100.0%
May	91.0%	85.5%	85.4%	100.0%
June	98.1%	90.9%	91.1%	100.0%
July	100.0%	98.1%	92.5%	100.0%
August	91.0%	90.9%	91.1%	100.0%
September	85.7%	83.9%	84.5%	100.0%
October	84.1%	83.9%	84.5%	
November	85.7%	83.9%	86.0%	
December	92.6%	90.9%	86.0%	
Year Average	91.02%	87.95%	87.84%	96.70%

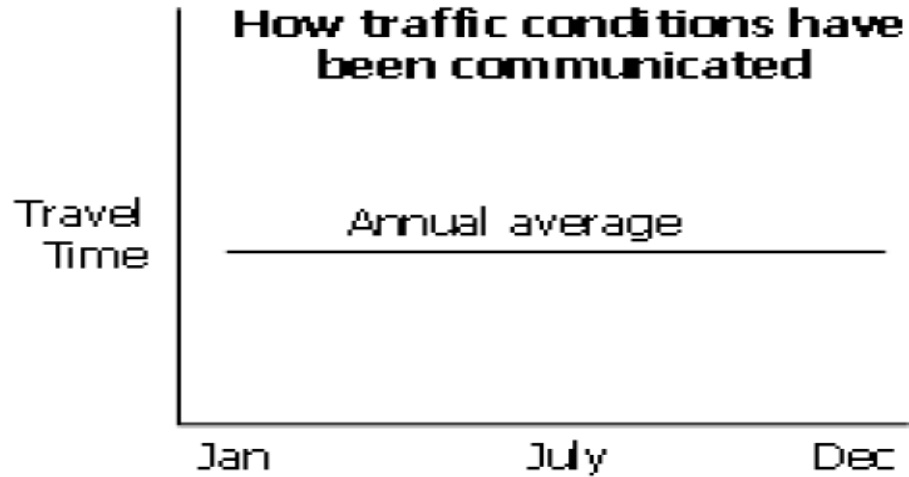
Year	Bi-Directional Traffic Volume
2015	145,000
2016	153,400
2017	152,700
2018	158,900
2019	176,500



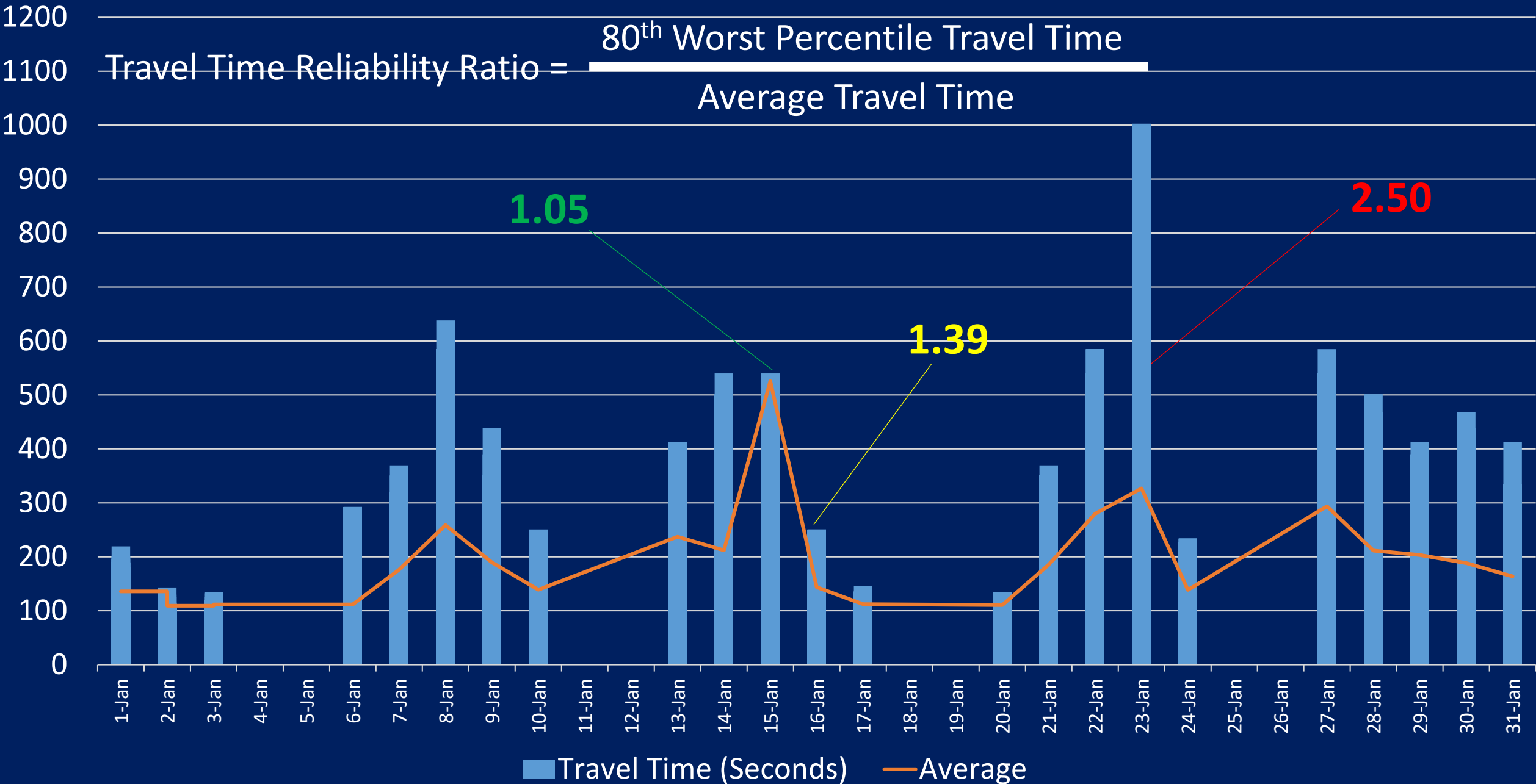
Segment of I-77 Corridor	Bi-Directional Traffic Volume (2019)
Exit 90	176,500
Exit 88	132,800
Exit 85	122,400
Exit 83	120,200
Exit 82C	120,900
Exit 82A	74,500
Exit 79	91,900
Exit 77	73,600
Exit 75	55,800
Exit 73	54,700
County Line	53,300



Travel Time Reliability Ratio



I-77 (Exit 88 to Exit 90 AM PEAK)



I-77 Reliability

INTERSTATE RELIABILITY

84.5%

↓ 7.8%

1 MONTH CHANGE

↑ 0.7%

1 YEAR CHANGE

FREIGHT RELIABILITY

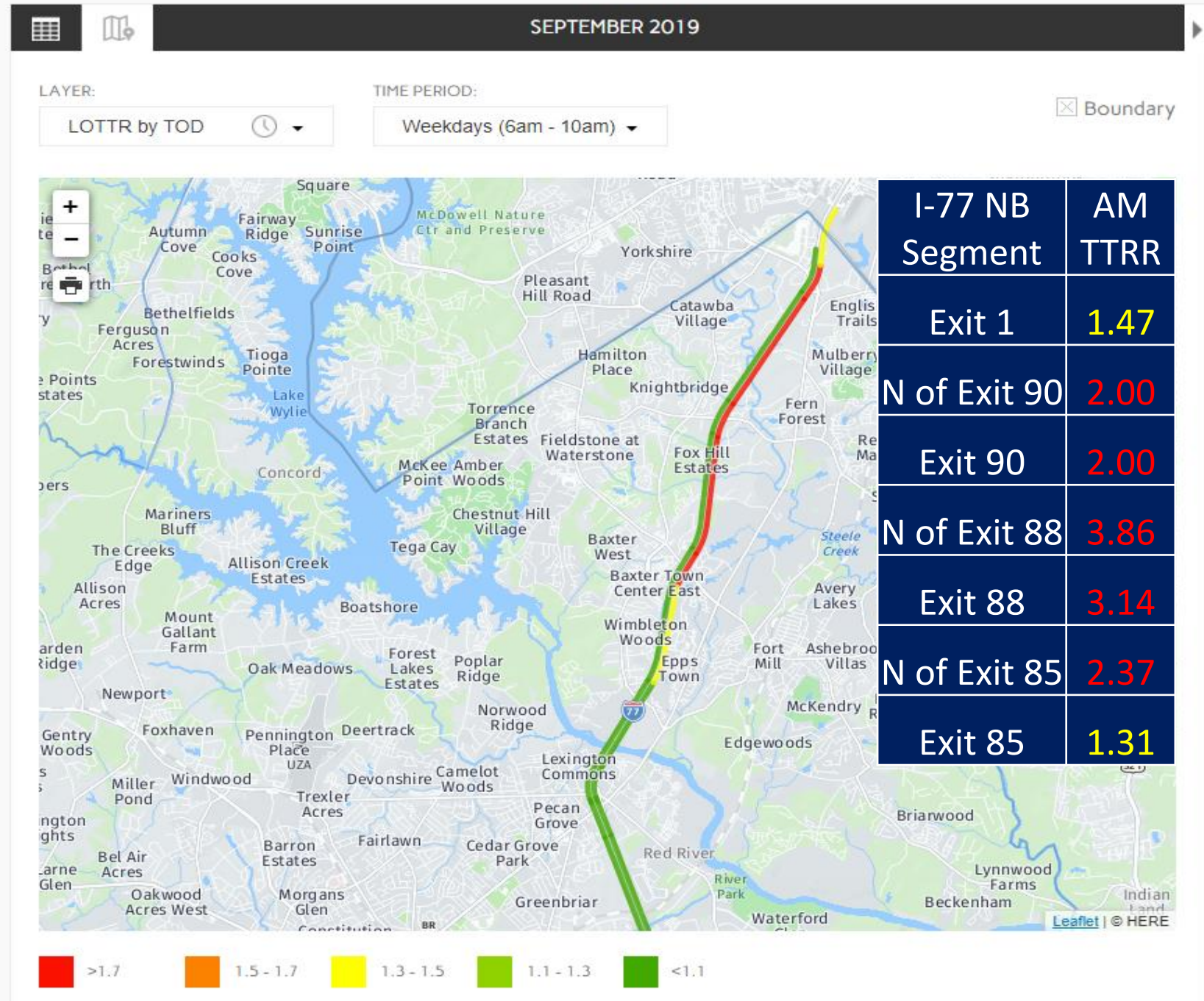
1.49

↑ 7.4%

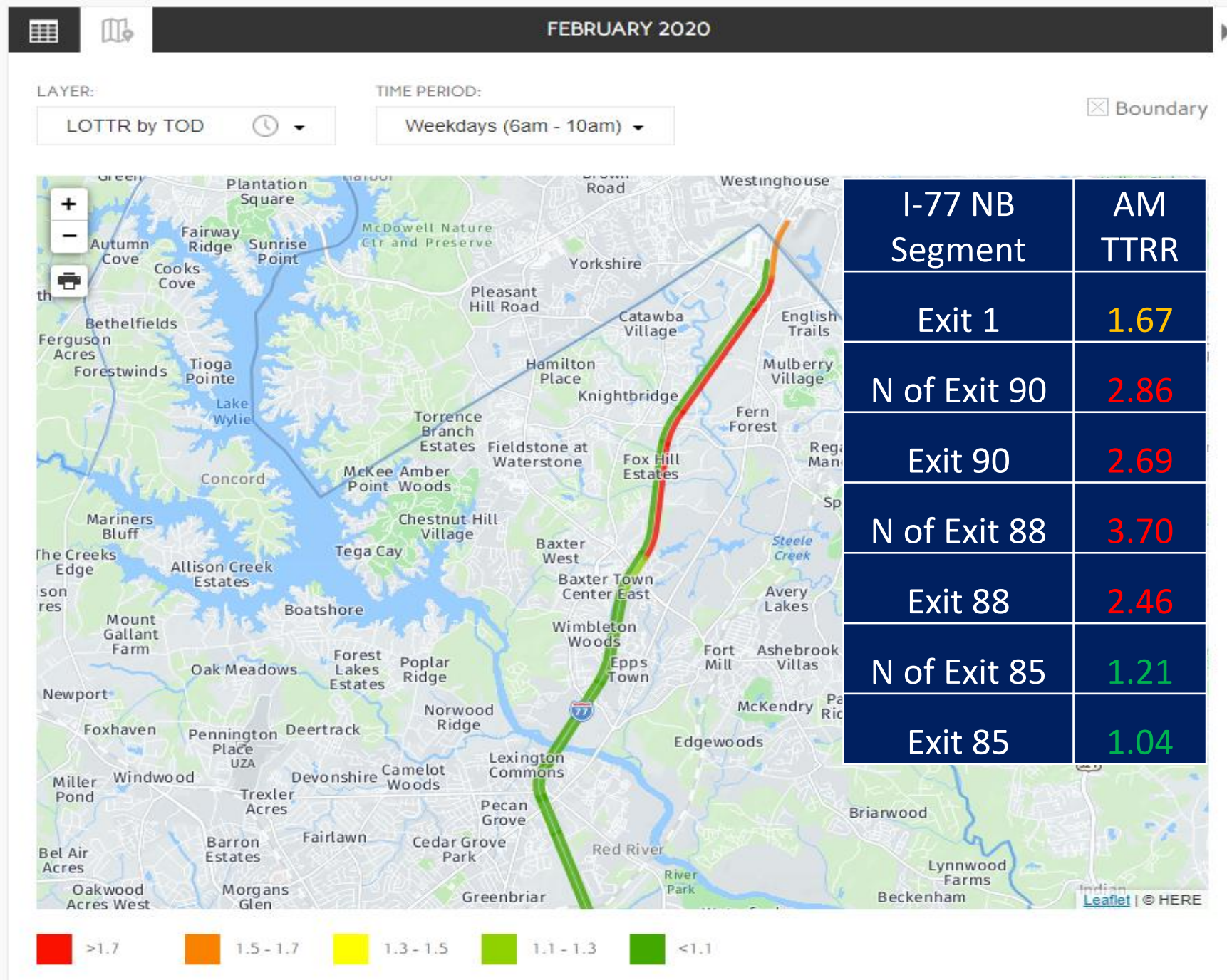
1 MONTH CHANGE

↓ 0.7%

1 YEAR CHANGE

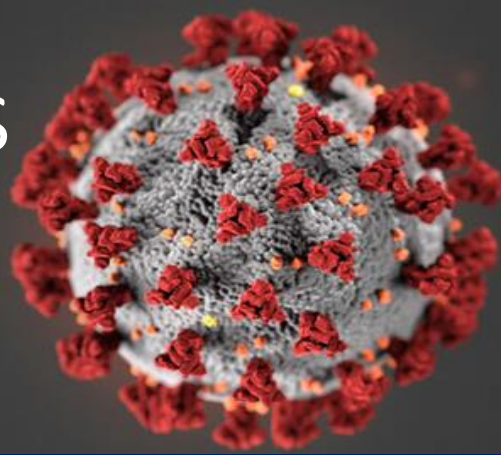


6AM-10AM Weekday



Coronavirus Impacts (COVID-19)

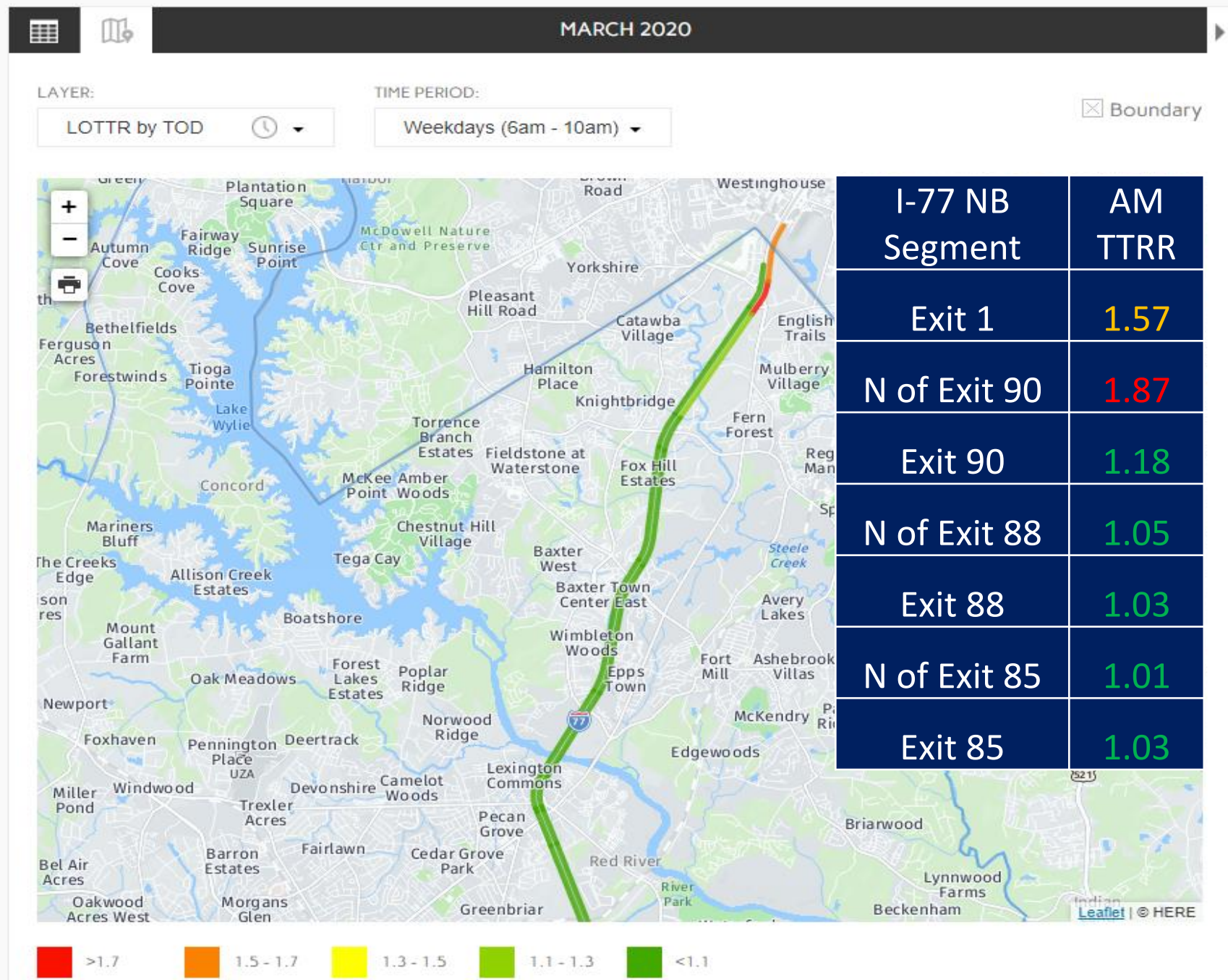
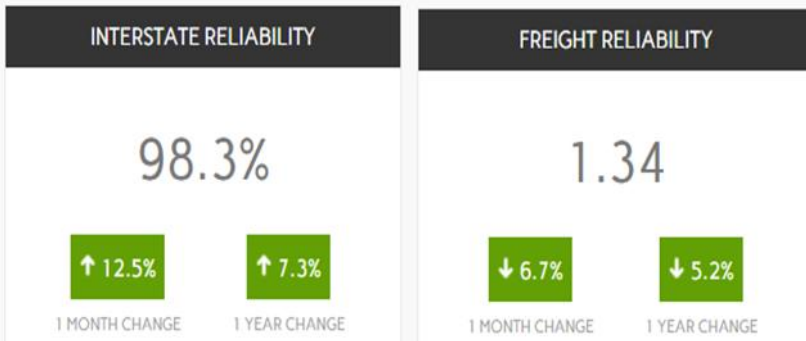
North Carolina & South Carolina



- March 10th – State of Emergency declared in North Carolina
- March 13th – State of Emergency declared in South Carolina
- March 14th – Closure of all public schools in North Carolina
- March 15th – Closure of all public schools in South Carolina
- March 17th – Charlotte and Mecklenburg Co State of Emergency
- March 19th – Order of non-essential SC state employees to stay home
- March 27th – Statewide stay-at-home order issued in North Carolina
- April 1st – Closure of all non-essential businesses in South Carolina
- April 6th – Issue of statewide “home or work” order in South Carolina



6AM to 10AM Weekday



6AM – 10AM Weekday

INTERSTATE RELIABILITY

100.0%

↑ 1.7%

1 MONTH CHANGE

↑ 14.6%

1 YEAR CHANGE

FREIGHT RELIABILITY

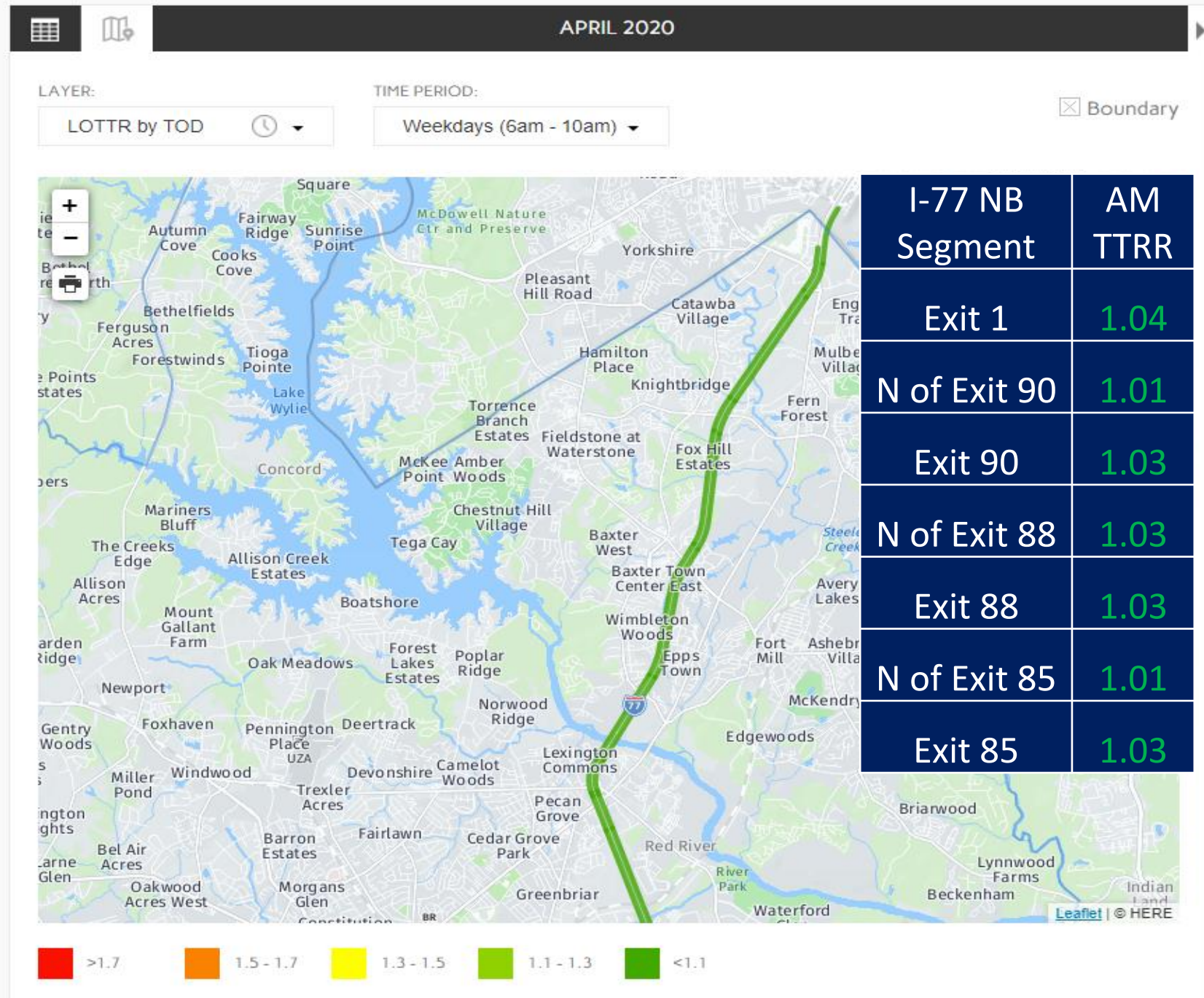
1.07

↓ 25.2%

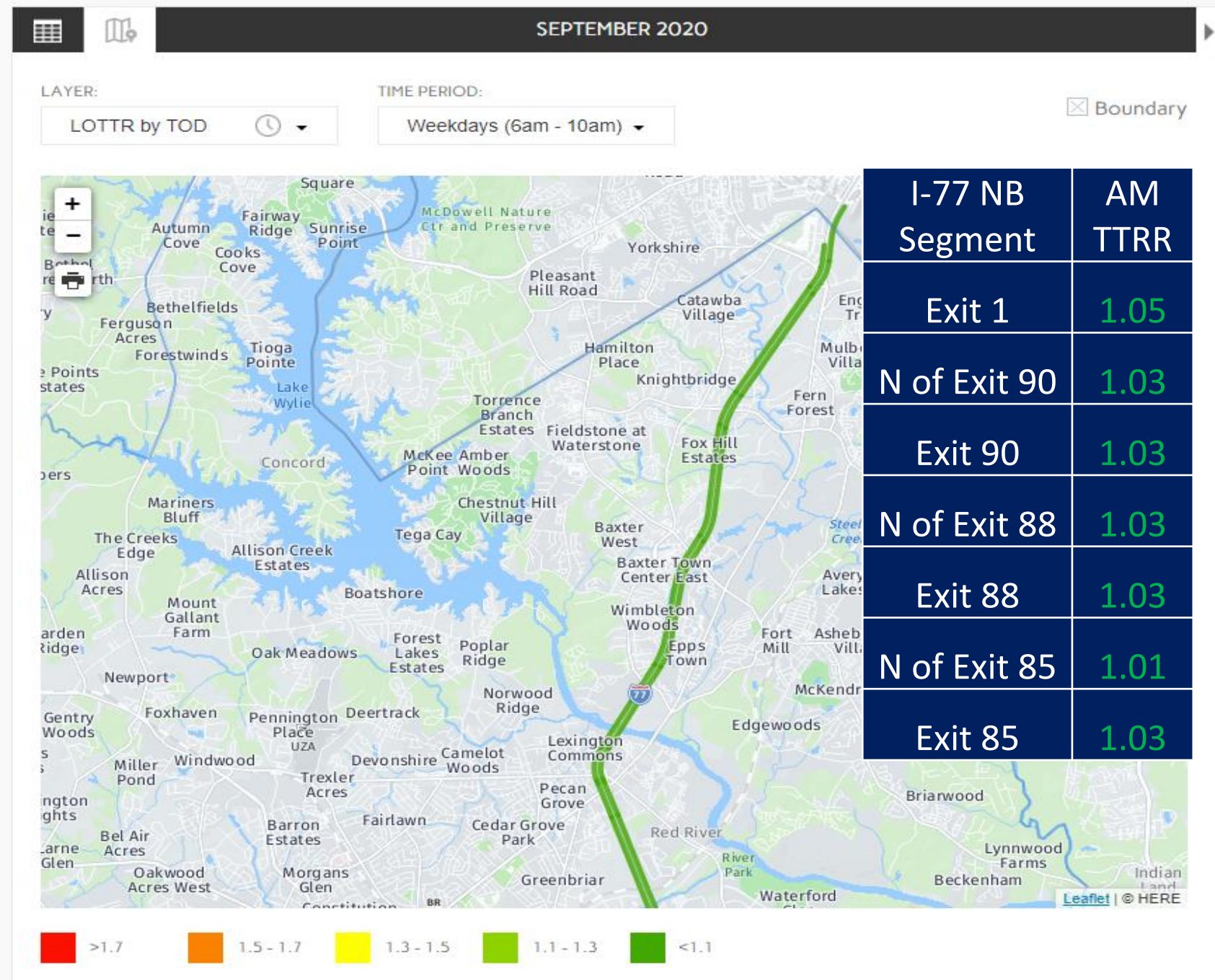
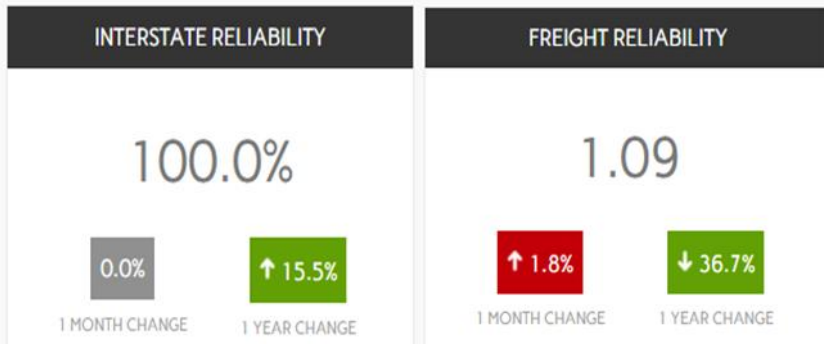
1 MONTH CHANGE

↓ 37.4%

1 YEAR CHANGE



6AM – 10AM Weekday



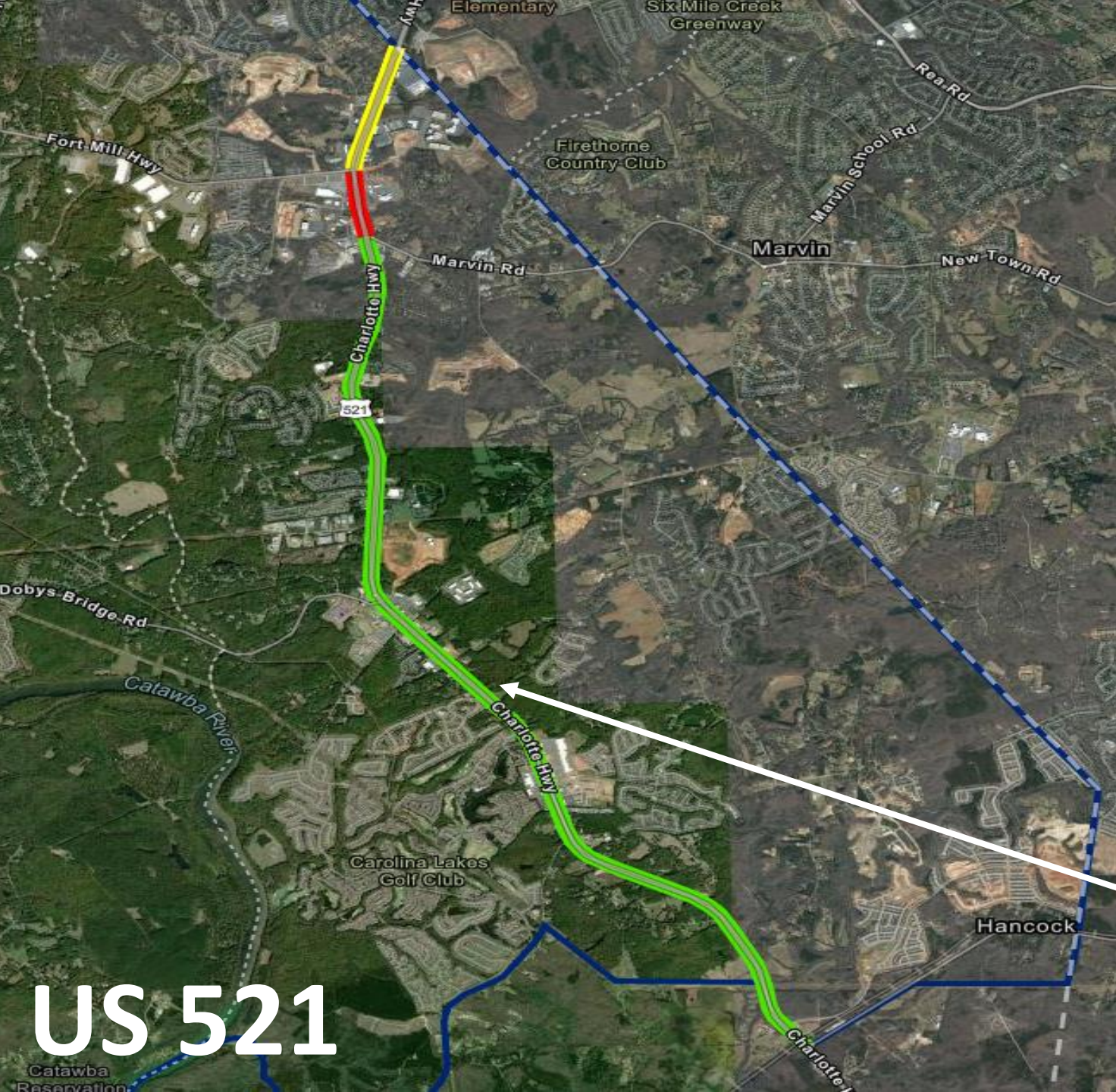


US 521

AM TTRR

Road	Direction	Segment	19 AM TTRR	20 AM TTRR
US 521	NB	SC 160 to State Line	1.23	1.28
US 521	NB	Marvin to SC 160	1.44	1.45
US 521	NB	Waxhaw HWY to Marvin	1.21	1.13

Year	2015	2016	2017	2018	2019
Traffic Volume	37,700	37,700	37,800	38,900	39,700



US 521

PM TTRR

Road	Direction	Segment	19 PM TTRR	20 PM TTRR
US 521	SB	State Line to SC 160	2.00	1.39
US 521	SB	SC 160 to Marvin Rd	1.66	1.70
US 521	SB	Marvin Rd to Waxhaw HWY	1.21	1.16

Year	2015	2016	2017	2018	2019
Traffic Volume	14,400	14,300	15,900	16,300	19,500

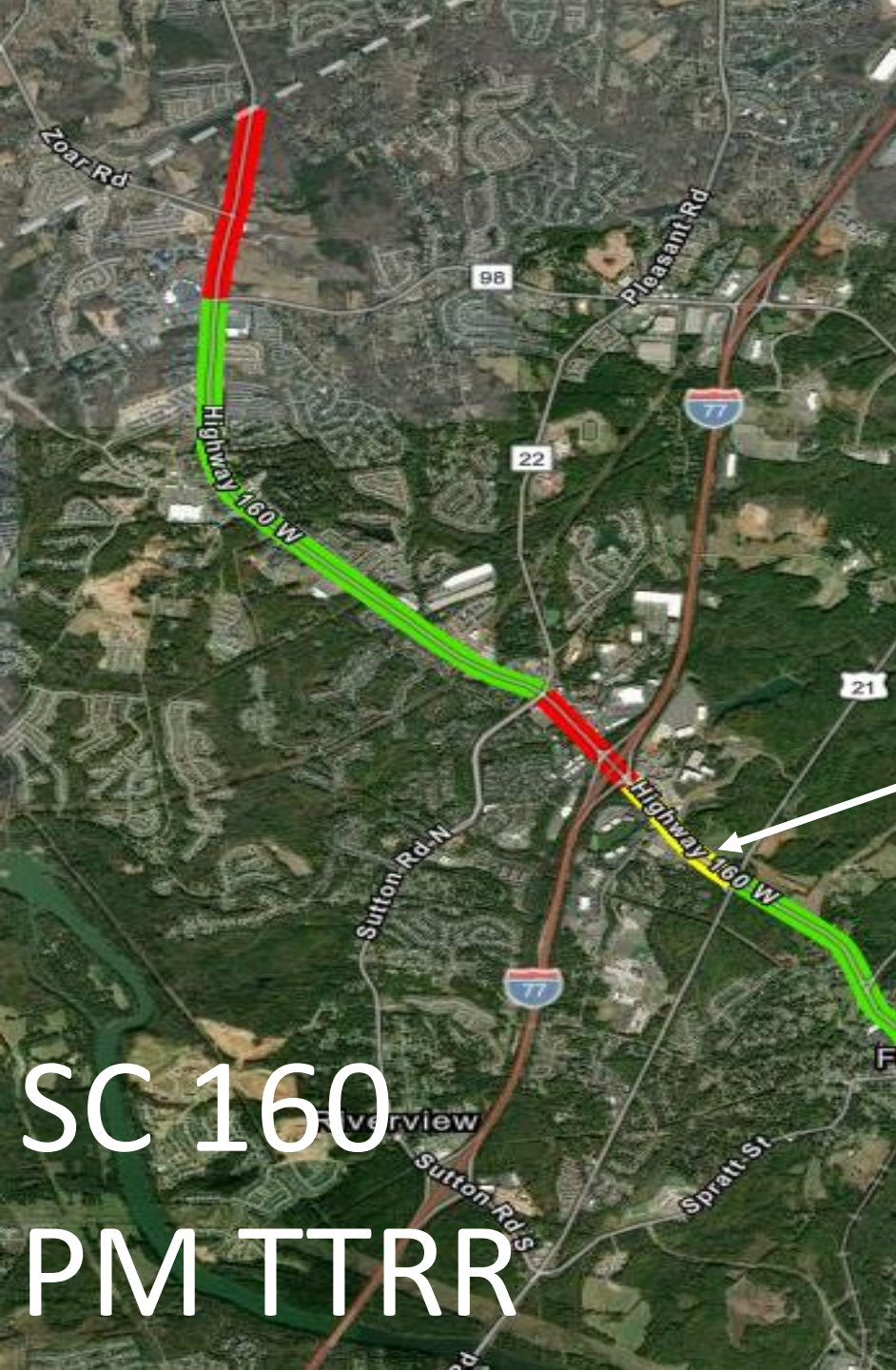


Road	Direction	Segment	19 AM TTRR	20 AM TTRR
SC 160	Southbound	State Line to Gold Hill	1.41	1.34
SC 160	Southbound	Gold Hill to Pleasant / Sutton	1.39	1.21
SC 160	Southbound	Pleasant / Sutton to I-77	2.11	1.52
SC 160	Southbound	I-77 Interchange	1.89	1.66
SC 160	Southbound	I-77 to US 21	1.39	1.36
SC 160	Southbound	US 21 to Main	1.22	1.17
SC 160	Southbound	Main to US 521	1.29	1.17

Year	2015	2016	2017	2018	2019
Traffic Volume	30,100	29,700	28,100	29,200	32,600

SC 160
AM TTRR





Road	Direction	Segment	19 PM TTRR	20 PM TTRR
SC 160	Northbound	Gold Hill to State Line	1.66	1.57
SC 160	Northbound	Pleasant / Sutton to Gold Hill	1.24	1.23
SC 160	Northbound	I-77 to Pleasant / Sutton	1.44	1.66
SC 160	Northbound	I-77 Interchange	1.83	1.70
SC 160	Northbound	US 21 to I-77	1.57	1.42
SC 160	Northbound	Main to US 21	1.36	1.29
SC 160	Northbound	US 521 to Main	1.38	1.23

Year	2015	2016	2017	2018	2019
Traffic Volume	19,000	19,300	21,200	22,000	22,100

SC 160
PM TTRR

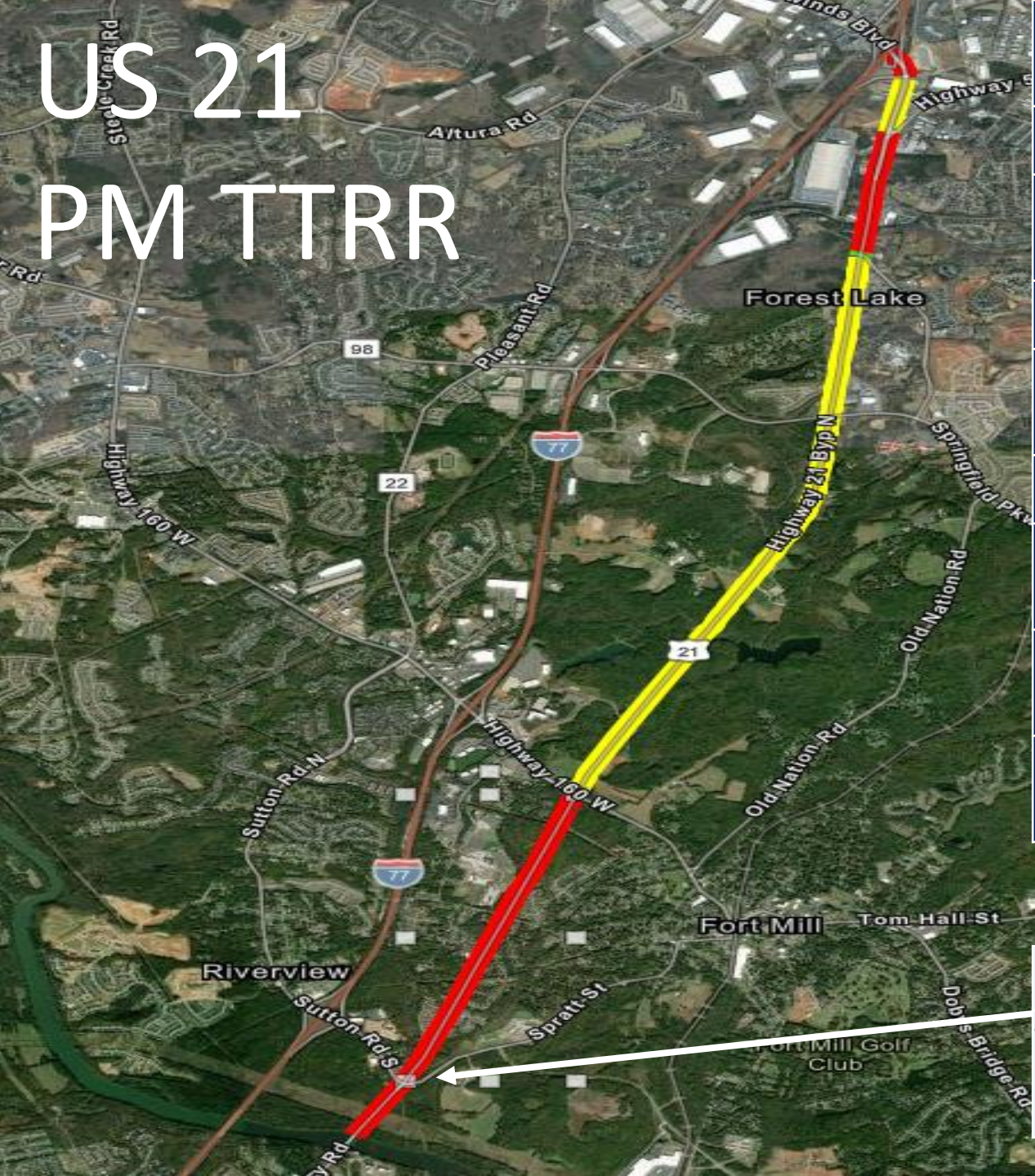
US 21 AM TTRR



Road	Direction	Segment	19 AM TTRR	20 AM TTRR
US 21	Northbound	Springhill Farm to I-77	1.57	1.68
US 21	Northbound	SC 51 to Springhill Farm	1.66	1.52
US 21	Northbound	SC 51 Intersection	1.44	1.47
US 21	Northbound	Old Nation to SC 51	1.71	1.39
US 21	Northbound	Old Nation Intersection	3.42	1.49
US 21	Northbound	Gold Hill to Old Nation	4.33	1.41
US 21	Northbound	SC 160 to Gold Hill	1.30	1.19
US 21	Northbound	Sutton / Spratt to SC 160	1.35	1.28
US 21	Northbound	Sutton / Spratt Intersection	1.54	1.47
US 21	Northbound	Catawba River to Sutton / Spratt	2.00	1.62

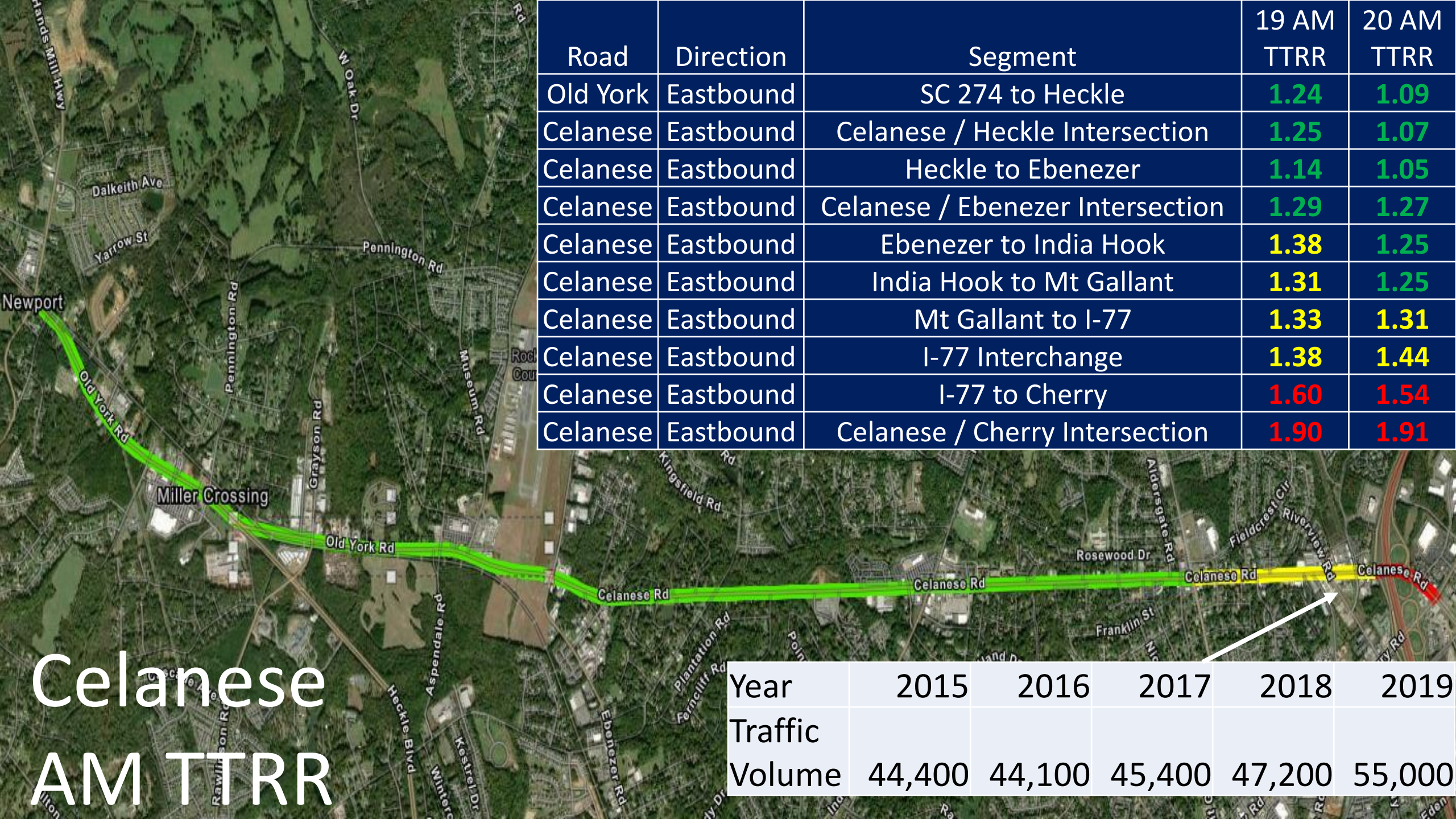
Year	2015	2016	2017	2018	2019
Traffic Volume	23,000	23,900	22,000	22,900	24,000

US 21 PM TTRR



Road	Direction	Segment	19 PM TTRR	20 PM TTRR
US 21	Southbound	I-77 to Springhill Farm	1.78	1.92
US 21	Southbound	Springhill Farm to SC 51	1.47	1.35
US 21	Southbound	SC 51 to Old Nation	1.53	1.50
US 21	Southbound	Old Nation Intersection	1.29	1.33
US 21	Southbound	Old Nation to SC 160	1.34	1.32
US 21	Southbound	SC 160 to Sutton / Spratt	2.27	1.52
US 21	Southbound	Sutton / Spratt Intersection	1.92	1.77
US 21	Southbound	Sutton / Spratt to Catawba River	1.70	1.58

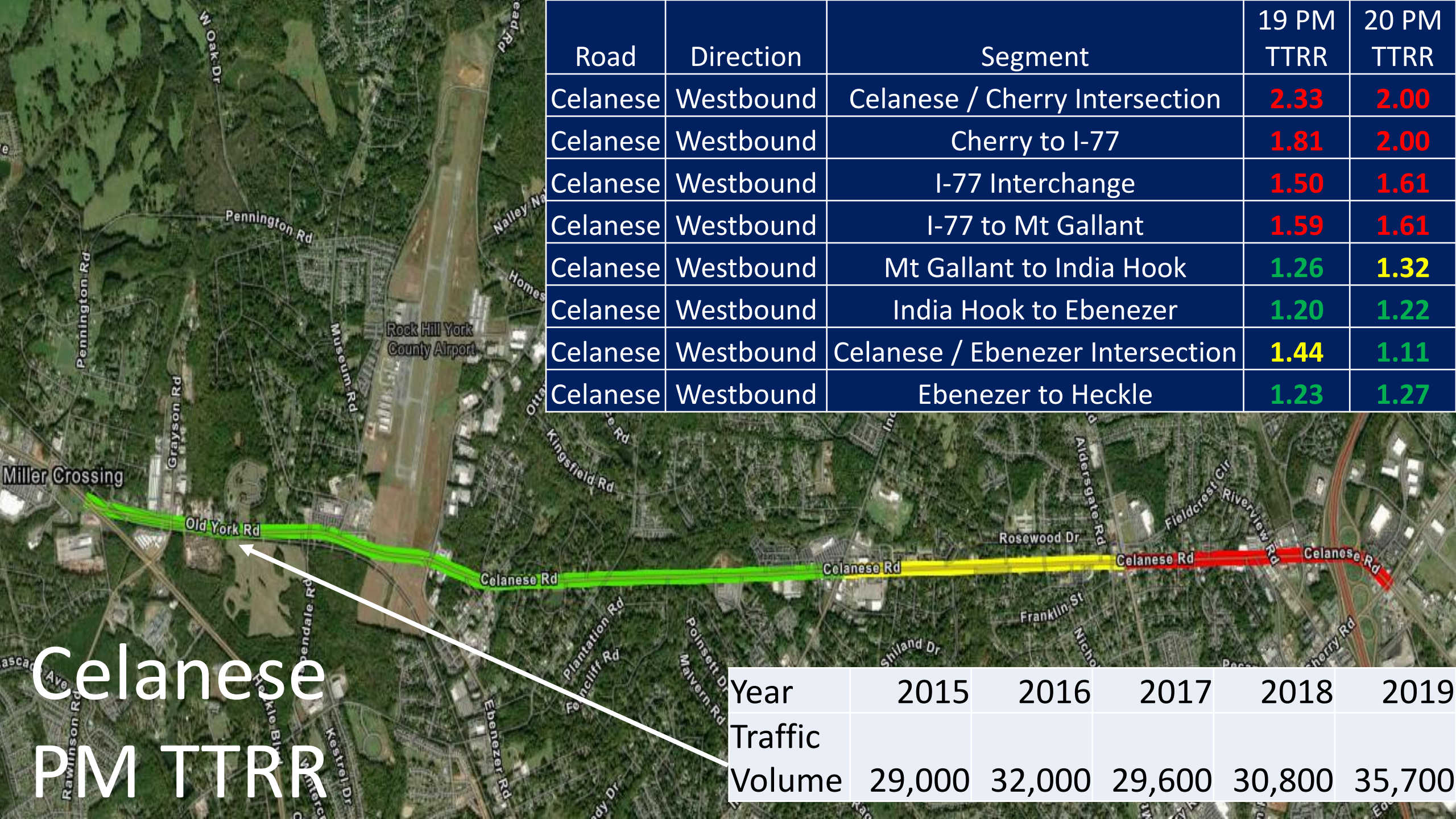
Year	2015	2016	2017	2018	2019
Traffic Volume	25,800	27,600	28,700	28,700	29,900



Road	Direction	Segment	19 AM TTRR	20 AM TTRR
Old York	Eastbound	SC 274 to Heckle	1.24	1.09
Celanese	Eastbound	Celanese / Heckle Intersection	1.25	1.07
Celanese	Eastbound	Heckle to Ebenezer	1.14	1.05
Celanese	Eastbound	Celanese / Ebenezer Intersection	1.29	1.27
Celanese	Eastbound	Ebenezer to India Hook	1.38	1.25
Celanese	Eastbound	India Hook to Mt Gallant	1.31	1.25
Celanese	Eastbound	Mt Gallant to I-77	1.33	1.31
Celanese	Eastbound	I-77 Interchange	1.38	1.44
Celanese	Eastbound	I-77 to Cherry	1.60	1.54
Celanese	Eastbound	Celanese / Cherry Intersection	1.90	1.91

Celanese
AM TTRR

Year	2015	2016	2017	2018	2019
Traffic Volume	44,400	44,100	45,400	47,200	55,000

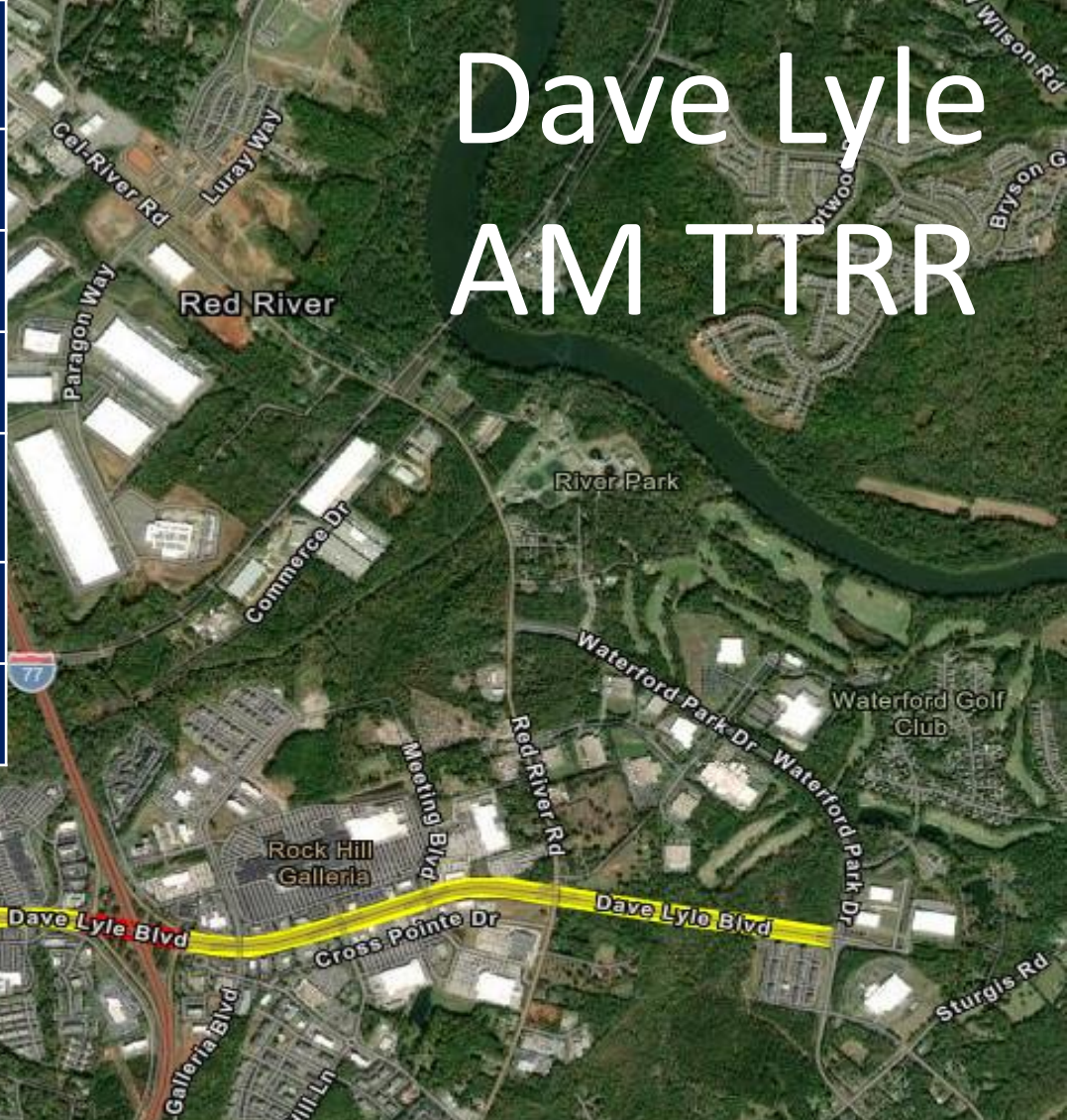


Road	Direction	Segment	19 PM TTRR	20 PM TTRR
Celanese	Westbound	Celanese / Cherry Intersection	2.33	2.00
Celanese	Westbound	Cherry to I-77	1.81	2.00
Celanese	Westbound	I-77 Interchange	1.50	1.61
Celanese	Westbound	I-77 to Mt Gallant	1.59	1.61
Celanese	Westbound	Mt Gallant to India Hook	1.26	1.32
Celanese	Westbound	India Hook to Ebenezer	1.20	1.22
Celanese	Westbound	Celanese / Ebenezer Intersection	1.44	1.11
Celanese	Westbound	Ebenezer to Heckle	1.23	1.27

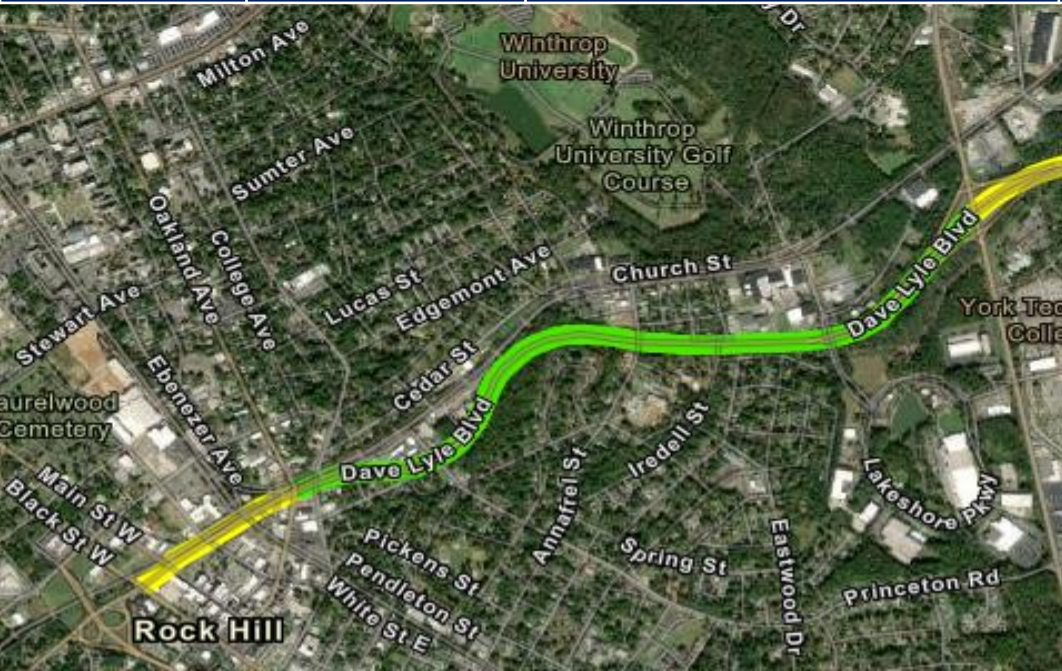
Celanese
PM TTRR

Year	2015	2016	2017	2018	2019
Traffic Volume	29,000	32,000	29,600	30,800	35,700

Road	Direction	Segment	19 AM TTRR	20 AM TTRR
Dave Lyle	Eastbound	I-77 to Waterford Park	1.42	1.49*
Dave Lyle	Eastbound	I-77 Interchange	1.58	1.58
Dave Lyle	Eastbound	Anderson to I-77	1.36	1.34
Dave Lyle	Eastbound	Dave Lyle / Anderson Intersection	1.16	1.12
Dave Lyle	Eastbound	Oakland to Anderson	1.15	1.15
Dave Lyle	Eastbound	Black to Oakland	1.36	1.34

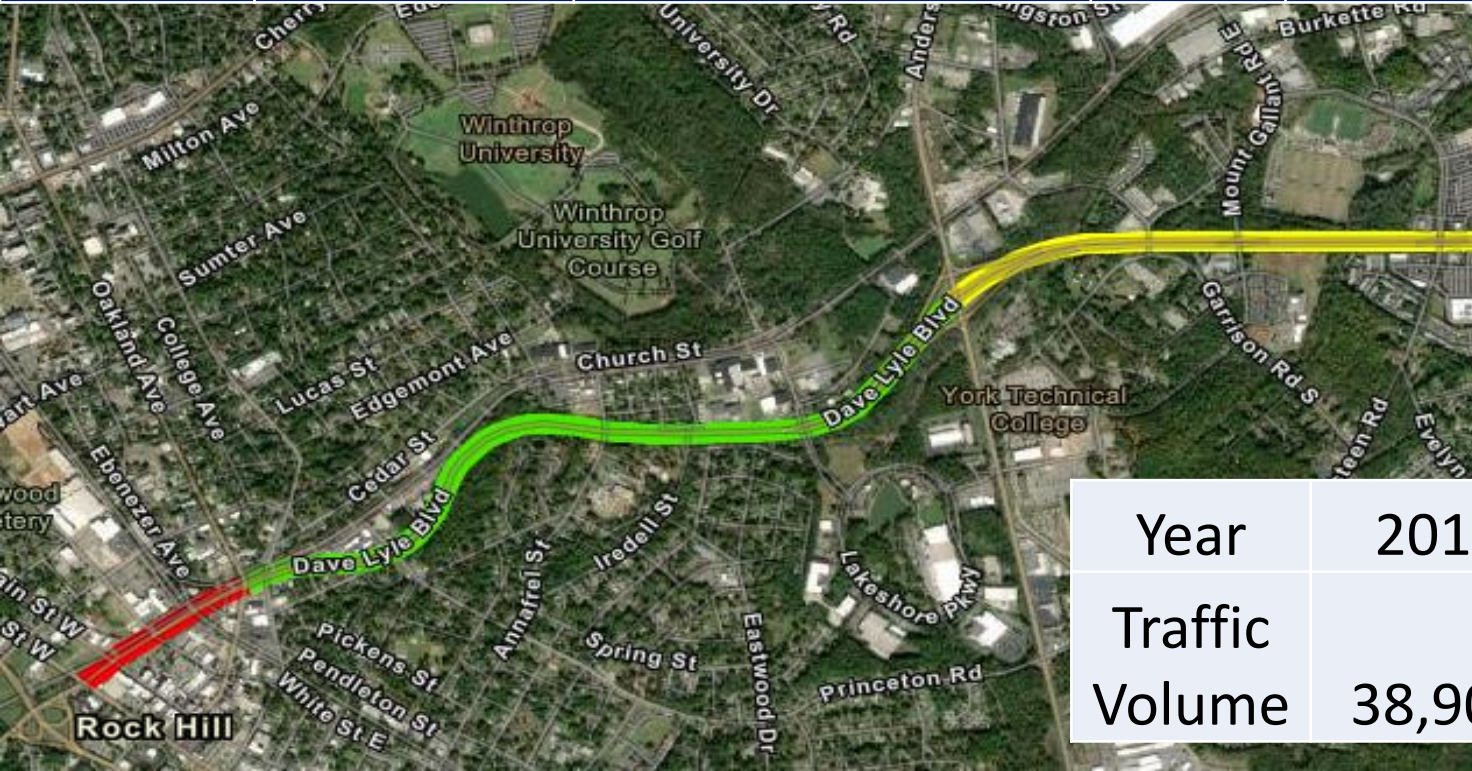


Dave Lyle AM TTRR

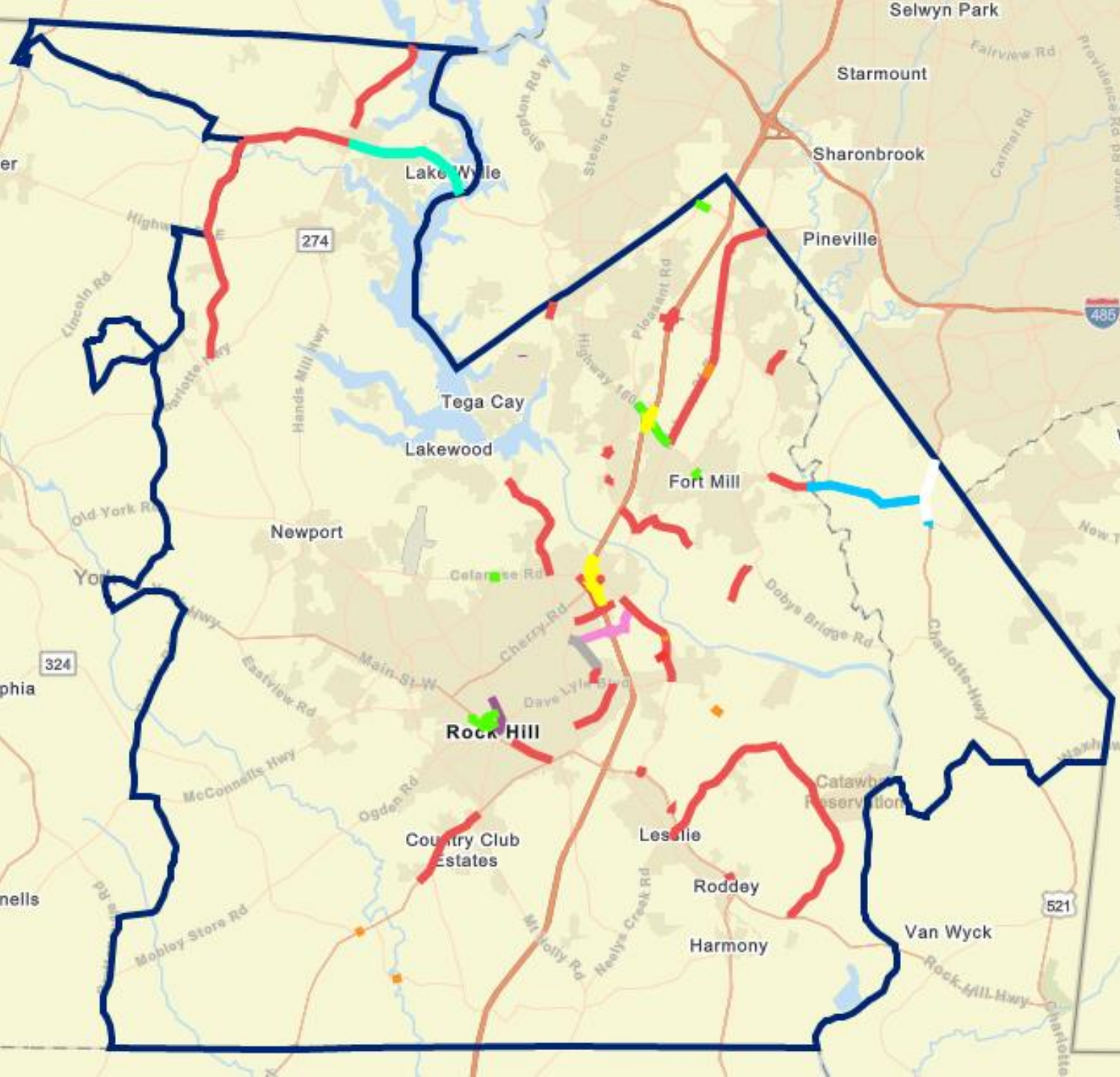


Year	2015	2016	2017	2018	2019
Traffic Volume	18,800	19,700	20,800	20,700	23,500

Road	Direction	Segment	19 PM TTRR	20 PM TTRR
Dave Lyle	WESTBOUND	Oakland to Black	1.53	1.57
Dave Lyle	WESTBOUND	Anderson to Oakland	1.17	1.16
Dave Lyle	WESTBOUND	Dave Lyle / Anderson Intersection	1.16	1.12
Dave Lyle	WESTBOUND	I-77 to Anderson	1.42	1.44
Dave Lyle	WESTBOUND	I-77 Interchange	1.35	1.42
Dave Lyle	WESTBOUND	Waterford Park to I-77	1.50	1.50



Year	2015	2016	2017	2018	2019
Traffic Volume	38,900	38,200	37,400	37,300	41,500



Regional Priorities

Guideshare Projects

CMAQ Projects

TAP Projects

Pennies Projects

SIB Projects

INFRA Project

SCDOT Bridge Projects

Developer Funded

Lancaster Co Project

RFATS Corridor Study

QUESTIONS?