



Board of Directors

Operations Committee

October 17, 2019

Complete 540 Project Update



Rodger Rochelle, P.E.

Chief Engineer

Complete 540

Three Contracts



STIP Segments

R-2721 (A&B) and R-2828

Design-Build Contracts

R-2828

- The Lane Construction Corporation / Blythe Construction, Inc. JV
- Lead design firm – WSP USA Inc.
- \$403.2M

R-2721B

- Flatiron Constructors, Inc. / Branch Civil, Inc. JV
- Lead design firm - HDR Engineering, Inc. of the Carolinas
- \$160.0M

R-2721A

- Flatiron Constructors, Inc. / Branch Civil, Inc. JV
- Lead design firm - Gannett Fleming, Inc.
- \$183.5M

Complete 540 Design

R-2828

- 8.6 miles
- 157 design submittals, including right-of-way plans, hydraulics design, MOT plans, structure design
- Construction plans roughly 45% complete

R-2721B

- 4.9 miles
- 47 design submittals, including preliminary roadway plans, hydraulics design, structure design
- Construction plans roughly 30% complete

R-2721A

- 4.3 miles
- 33 design submittals, including preliminary roadway plans, culvert survey reports
- Construction plans roughly 20% complete

Complete 540 Right of Way

R-2721A

- 210 parcels
- 84 parcels settled
- 126 parcels remaining

R-2721B

- 217 parcels
- 102 parcels settled
- 115 parcels remaining

R-2828

- 189 parcels
- 14 parcels settled
- 175 parcels remaining



Complete 540 Permitting

401 Water Quality Certification

- NC Department of Environmental Quality-Division of Water Resources
- Issued February 2019

404 Permit

- US Army Corps of Engineers
- Imminent

Permit Modifications

- Frequent agency coordination meetings
- Permit modification will reflect final design details and result in reduced environmental impacts

Complete 540 Financing



David Roy

Director of Finance & Budget

Complete 540 Funding Sources*

\$501 million TIFIA Loan**

- Gross toll revenue pledge subordinate to the senior lien TriEx system toll revenue bonds
- DSRF funded to 100% of the lesser of three test, provided the 125% of average annual debt service is calculated on a forward basis resulting in on-going deposits

\$378 million Senior Lien Toll Revenue Bonds**

- Gross toll revenue pledge on parity with Series 2009, Series 2017 and Series 2018 Toll Revenue Bonds
- Common DSRF funded to 50% of the standard lesser of three test

\$112 million Senior Lien State Appropriation Revenue Bonds**

- Gross appropriation revenue pledge on parity with Series 2009B, Series 2018A and Series 2018B State Appropriation Bonds

\$243 million NCDOT GARVEE Bonds & \$81 million State Match

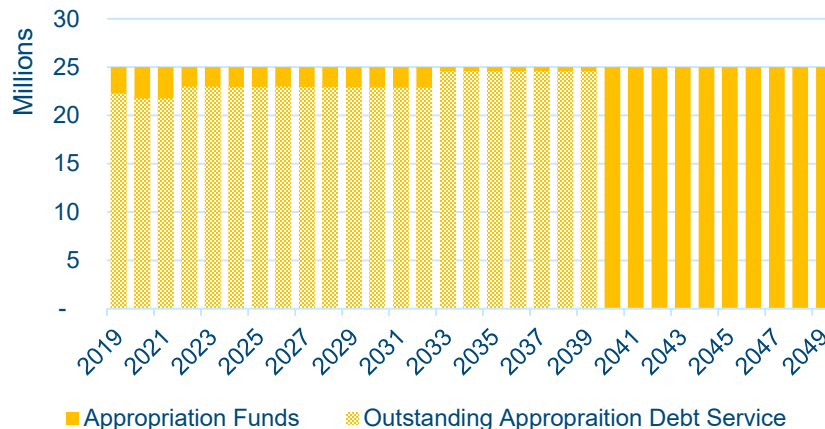
**\$81 million of NCDOT National Highway Performance Program Funds are currently available per the STIP, but not anticipated to be needed.*

***Estimates based on a plan of finance including interest rates as of October 3, 2019 plus applicable credit spreads and 50 bps of cushion.*

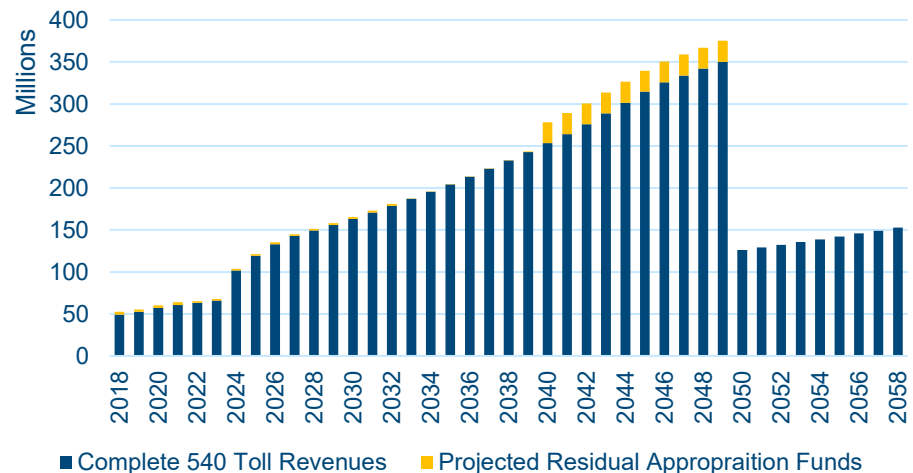
Leveraging Appropriation Revenues

- \$25 million annual appropriation is pledged to the outstanding Senior Lien Appropriation Bonds (lower left graphic)
- Excess appropriation revenues available after the payment of appropriation debt service is pledged to the Triangle Expressway Revenue Bonds (lower right graphic)
- The outstanding appropriation debt matures in 2039 and the appropriations are anticipated to continue at least through 2049
- \$25 million of annual revenues from 2040-2049 can be leveraged to finance the Complete 540 Project, which has always been anticipated

Appropriation Revenues
2019-2049



Trust Indenture Pledged Revenues



Appropriation Bonds vs Toll Bonds

- This cash flow can be leveraged through the issuance of Appropriation Bonds or Toll Revenue Bonds
- Because the available revenue stream becomes available beginning in 2040 (and cash flows are not available to support interest prior to that time), Capital Appreciation Bonds that mature in the amount of the available revenue will be issued
- Appropriation Bonds have a higher credit rating resulting in a lower interest rate on the debt than comparable toll revenue bonds
- The lower interest rate results in a higher amount of CAB proceeds (estimated to be \$11.8MM) available to fund the project, reducing the amount of higher cost toll revenue bonds needed

Appropriation Revenue CAB Debt Service				
Year	Principal	Coupon	Compounded Interest	Debt Service
2040	14,274,250	2.81%	10,725,750	25,000,000
2041	13,795,000	2.84%	11,205,000	25,000,000
2042	13,324,250	2.87%	11,675,750	25,000,000
2043	12,861,750	2.90%	12,138,250	25,000,000
2044	12,467,000	2.91%	12,533,000	25,000,000
2045	12,082,250	2.92%	12,917,750	25,000,000
2046	11,706,750	2.93%	13,293,250	25,000,000
2047	11,340,750	2.94%	13,659,250	25,000,000
2048	10,984,250	2.95%	14,015,750	25,000,000
2049	10,636,750	2.96%	14,363,250	25,000,000
	123,473,000		126,527,000	250,000,000

Toll Revenue CAB Debt Service				
Year	Principal	Coupon	Compounded Interest	Debt Service
2040	13,136,000	3.23%	11,864,000	25,000,000
2041	12,642,750	3.26%	12,357,250	25,000,000
2042	12,161,000	3.29%	12,839,000	25,000,000
2043	11,690,750	3.32%	13,309,250	25,000,000
2044	11,285,250	3.33%	13,714,750	25,000,000
2045	10,891,750	3.34%	14,108,250	25,000,000
2046	10,509,750	3.35%	14,490,250	25,000,000
2047	10,139,250	3.36%	14,860,750	25,000,000
2048	9,780,000	3.37%	15,220,000	25,000,000
2049	9,431,500	3.38%	15,568,500	25,000,000
	111,668,000		138,332,000	250,000,000

Net Present Value Benefit

- Lower interest rates associated with the better credit of the State Appropriation CABs results in an increase in project construction proceeds from the CABs, which in turn reduces the amount of higher cost toll revenue bonds issued
- The significant reduction in the amount of Toll Revenue Bonds issued reduces the required deposits to the Debt Service Reserve Fund and Capitalized Interest fund, since no such deposits are required for the State Appropriation CABs, which further drives additional debt service benefits
 - With the CABs issued as State Appropriation Bonds, and the debt service from those bonds excluded from the requirement, the required deposit to cover Capitalized Interest and to fill the Debt Service Reserve Fund upon issuance of the 2019 Toll Revenue Bonds is reduced substantially
- The gross Toll Revenue Bond debt service benefit, including Senior Lien Bonds and the TIFIA Loan, totals \$35.4M resulting in a present value benefit of \$17.3 million

Sources and Uses

Sources

TIFIA Loan*	501,490,793
Toll Revenue Bonds (incl. premium**)	438,832,255
State Appropriation CABs	111,935,000
General Reserve Contribution	30,221,986
NCDOT GARVEE / State Match	324,000,000
Total Sources	1,406,480,034

Uses

Project Cost	1,295,436,829
Debt Service Reserve Funds	31,141,720
Costs of Issuance / UW Discount	4,923,828
Capitalized Interest Cost	74,977,656
Total Uses	1,406,480,034

Projected Coverage Ratios

Senior Lien Toll Revenue Bonds

- 1.67x Minimum
- 4.02x Average (through 2055)

TIFIA Loan

- 1.88x Minimum
- 2.55x Average (through 2055)

All-In

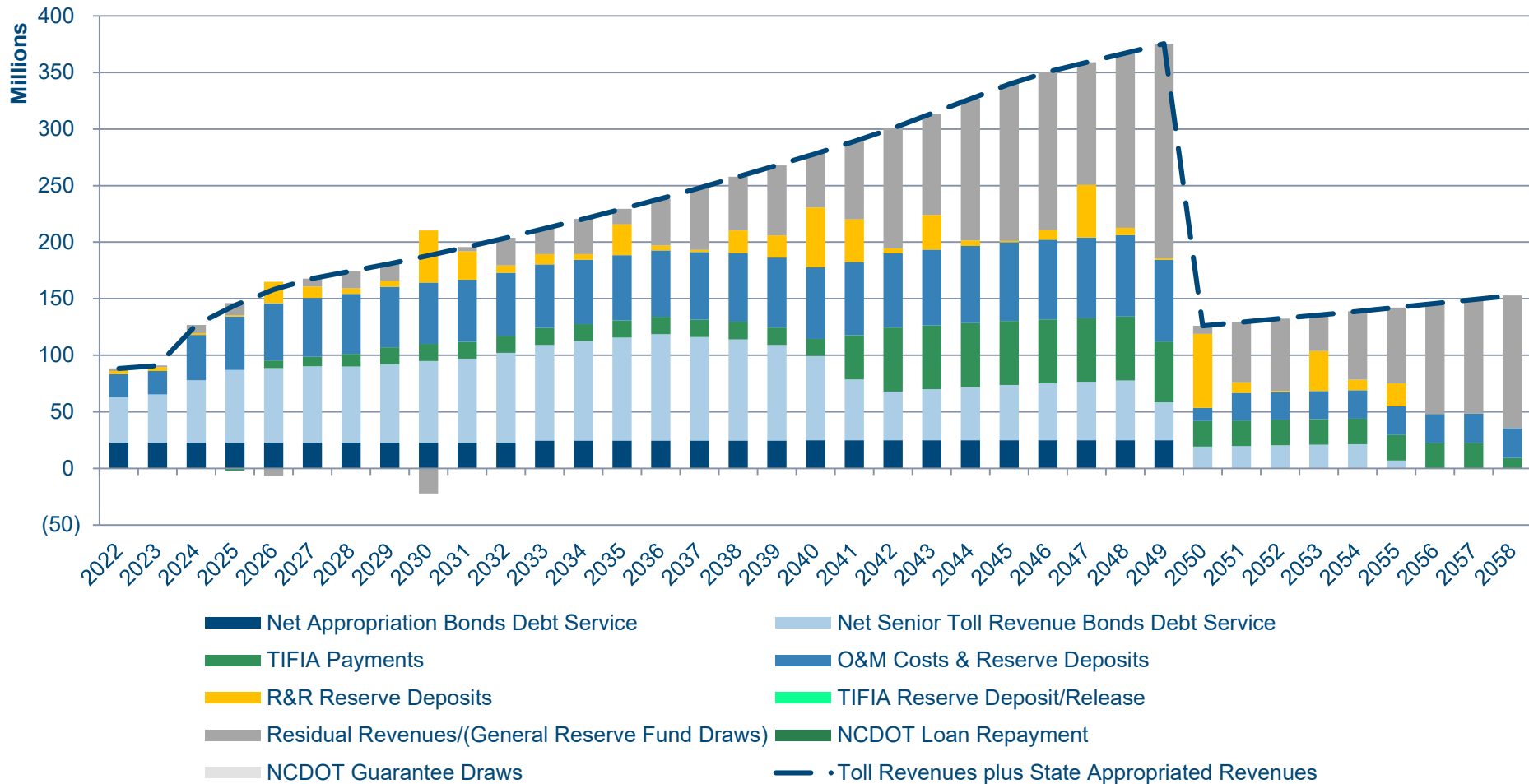
- 0.77x Minimum (shortfalls paid from General Reserve or NCDOT guarantee)
- 1.31x Average (through 2055)
- Minimum Projected General Reserve Balance: \$29,795,183

*TIFIA Loan is sized to 33% of eligible costs which includes Project Costs, Prior Costs, Costs of Issuance and certain other costs not shown above. Total eligible costs are projected to be \$1.51 billion.

**Estimated par amount of \$477 million and original issuance premium of \$69 million.

Projected Cash Flows

Flow of Funds Graphic



TIFIA Update



Provided Comments
on Draft TIFIA Loan
Agreement



Submitted TIFIA
Application



Finalize loan
agreement
documentation

Tentative Schedule

October 2019	
10/16/2019	NCTA Finance Committee Meeting Approval of Financing and Documents
Week of 10/28/2019	TIFIA Council on Credit and Finance
10/30/2019	Receive Final Public Credit Ratings
10/31/2019	NCTA Board Meeting – Approval of Financing and Documents

November 2019	
11/5/2019	LGC Meeting – Approval Financing and Documents
TBD	Post / Release POS and Investor Presentation
TBD	Bond Pricing
TBD	USDOT Secretary Approval
TBD	TIFIA Loan Closing / Bond Closing

Triangle Expressway 2020 Toll Rates



David Roy

Director of Finance & Budget

Triangle Expressway Toll Rate Schedule

**136-89.183
Powers of the
Authority**

**Toll Rate Policy
adopted
September 17, 2008**

Scheduled Average Toll Rate Increases	
Before 2017	5.0%
2017 – 2021	3.5%
2022 – 2036	3.0%
After 2036	2.0% or less

3.5% increase scheduled to take effect January 1, 2020

Triangle Expressway 2020 Toll Rates

		EXIT POINT									
		Begin Toll 147	Exit 3/2	Exit 69	Exit 66	Exit 62	Exit 59	Exit 57	Exit 56	Exit 55	Exit 54
ENTRY POINT	Begin Toll 147 - Toll N.C. 147 at I-40		\$ 0.39	\$ 0.87	\$ 1.08	\$ 1.95	\$ 2.43	\$ 3.03	\$ 3.03	\$ 3.33	\$ 3.48
	Exit 3/2 - Hopson Road / Davis Drive	\$ 0.39		\$ 0.87	\$ 1.08	\$ 1.95	\$ 2.43	\$ 3.03	\$ 3.03	\$ 3.33	\$ 3.48
	Exit 69 - Chapel Hill Road / N.C. 54	\$ 0.87	\$ 0.87		\$ 0.70	\$ 1.57	\$ 2.05	\$ 2.65	\$ 2.65	\$ 2.95	\$ 3.10
	Exit 66 - N.C. 55	\$ 1.08	\$ 1.08	\$ 0.70		\$ 0.87	\$ 1.35	\$ 1.95	\$ 1.95	\$ 2.25	\$ 2.40
	Exit 62 - Green Level West Road	\$ 1.95	\$ 1.95	\$ 1.57	\$ 0.87		\$ 0.48	\$ 1.08	\$ 1.08	\$ 1.38	\$ 1.53
	Exit 59 - U.S. 64	\$ 2.43	\$ 2.43	\$ 2.05	\$ 1.35	\$ 0.48		\$ 1.08	\$ 1.08	\$ 1.38	\$ 1.53
	Exit 57 - Old U.S. Hwy 1 / S. Salem St.	\$ 3.03	\$ 3.03	\$ 2.65	\$ 1.95	\$ 1.08	\$ 1.08		\$ 0.28	\$ 0.58	\$ 0.73
	Exit 56 - U.S. 1	\$ 3.03	\$ 3.03	\$ 2.65	\$ 1.95	\$ 1.08	\$ 1.08	\$ 0.28		\$ 0.30	\$ 0.45
	Exit 55 - Veridea Parkway	\$ 3.33	\$ 3.33	\$ 2.95	\$ 2.25	\$ 1.38	\$ 1.38	\$ 0.58	\$ 0.30		\$ 0.45
	Exit 54 - N.C. 55	\$ 3.48	\$ 3.48	\$ 3.10	\$ 2.40	\$ 1.53	\$ 1.53	\$ 0.73	\$ 0.45	\$ 0.45	

Class 1



Tolls shown for 2-AXLE vehicles
with an NC Quick Pass account

Morrisville Parkway Interchange Toll Rate Schedule



David Roy

Director of Finance & Budget

Morrisville Parkway Interchange

Construction Start:

- January 2018

Project Construction Cost:

- ~\$15.2 million

Projected to Open to Traffic:

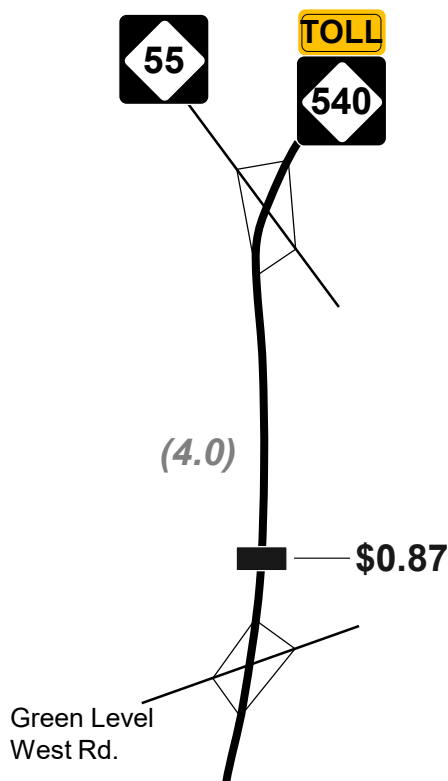
- Early 2020



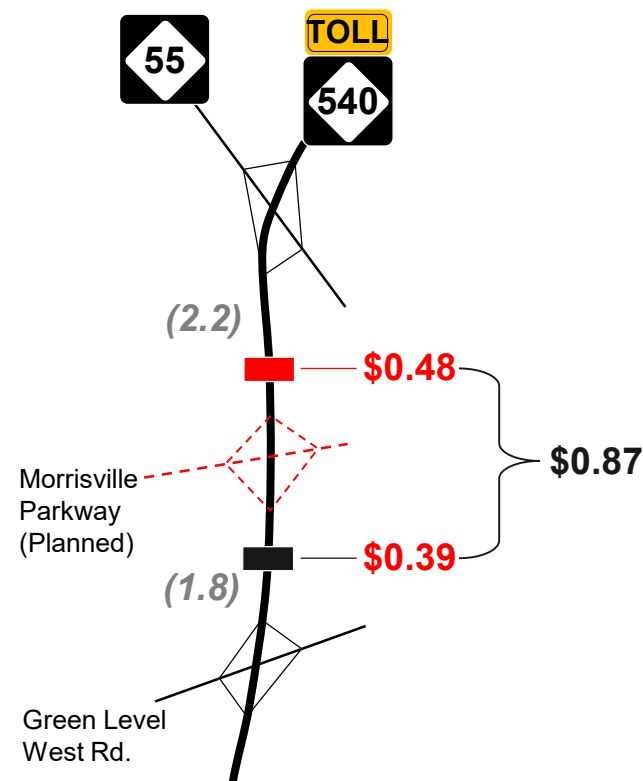
2020 Toll Rates for Mainline Toll Zones

Morrisville Parkway and Green Level West Road





Approved Toll Rate



Proposed Toll Rates



LEGEND

-  Planned Interchange
-  Planned Toll Zone
-  Interchange
-  Mainline Toll Zone

\$0.00 — Approved Class 1 ETC Toll Rate

\$0.00 — Proposed Class 1 ETC Toll Rate

(0.0) — Distance Between Interchanges (Miles)

Morrisville Parkway Interchange

Toll Schedule Changes

- Proposed toll rates are consistent with current Triangle Expressway tolling conventions
- New interchange and new toll zones will not affect current rate schedule for existing toll zones
- The cost of travel will not change for motorists traveling between NC 55 and Green Level Road West.
- These toll rates are consistent with rates in the 2018 Triangle Expressway Traffic and Revenue Study used for bond refinancing
- Proposed rates will not negatively affect toll revenue on the Triangle Expressway

Calendar Year (1)	Mainline Section between NC 55 and Morrisville Parkway (2.2 miles)						Mainline Section between Morrisville Parkway and Green Level West Road (1.8 miles)					
	Class 1 (two axles)		Class 2 (three axles)		Class 3 (four or more axles)		Class 1 (two axles)		Class 2 (three axles)		Class 3 (four or more axles)	
	ETC	BBM	ETC	BBM	ETC	BBM	ETC	BBM	ETC	BBM	ETC	BBM
2020	\$0.48	\$0.73	\$0.96	\$1.46	\$1.92	\$2.92	\$0.39	\$0.60	\$0.78	\$1.20	\$1.56	\$2.40
2021	0.49	0.76	0.98	1.52	1.96	3.04	0.41	0.63	0.82	1.26	1.64	2.52
2022	0.51	0.78	1.02	1.56	2.04	3.12	0.42	0.65	0.84	1.30	1.68	2.60
2023	0.52	0.80	1.04	1.60	2.08	3.20	0.43	0.66	0.86	1.32	1.72	2.64
2024	0.54	0.83	1.08	1.66	2.16	3.32	0.45	0.69	0.90	1.38	1.80	2.76
2025	0.55	0.85	1.10	1.70	2.20	3.40	0.46	0.71	0.92	1.42	1.84	2.84
2026	0.57	0.88	1.14	1.76	2.28	3.52	0.47	0.72	0.94	1.44	1.88	2.88
2027	0.59	0.90	1.18	1.80	2.36	3.60	0.49	0.75	0.98	1.50	1.96	3.00
2028	0.61	0.93	1.22	1.86	2.44	3.72	0.50	0.77	1.00	1.54	2.00	3.08
2029	0.62	0.96	1.24	1.92	2.48	3.84	0.52	0.80	1.04	1.60	2.08	3.20
2030	0.64	0.99	1.28	1.98	2.56	3.96	0.53	0.82	1.06	1.64	2.12	3.28
2031	0.66	1.01	1.32	2.02	2.64	4.04	0.55	0.85	1.10	1.70	2.20	3.40
2032	0.68	1.05	1.36	2.10	2.72	4.20	0.57	0.88	1.14	1.76	2.28	3.52
2033	0.70	1.07	1.40	2.14	2.80	4.28	0.58	0.89	1.16	1.78	2.32	3.56
2034	0.72	1.11	1.44	2.22	2.88	4.44	0.60	0.92	1.20	1.84	2.40	3.68
2035	0.74	1.14	1.48	2.28	2.96	4.56	0.62	0.95	1.24	1.90	2.48	3.80
2036	0.76	1.17	1.52	2.34	3.04	4.68	0.63	0.97	1.26	1.94	2.52	3.88
2037	0.77	1.19	1.54	2.38	3.08	4.76	0.65	1.00	1.30	2.00	2.60	4.00
2038	0.79	1.22	1.58	2.44	3.16	4.88	0.66	1.02	1.32	2.04	2.64	4.08
2039	0.80	1.23	1.60	2.46	3.20	4.92	0.68	1.05	1.36	2.10	2.72	4.20
2040	0.82	1.26	1.64	2.52	3.28	5.04	0.69	1.06	1.38	2.12	2.76	4.24
2041	0.84	1.29	1.68	2.58	3.36	5.16	0.70	1.08	1.40	2.16	2.80	4.32
2042	0.86	1.32	1.72	2.64	3.44	5.28	0.71	1.09	1.42	2.18	2.84	4.36
2043	0.87	1.34	1.74	2.68	3.48	5.36	0.74	1.14	1.48	2.28	2.96	4.56
2044	0.89	1.37	1.78	2.74	3.56	5.48	0.75	1.16	1.50	2.32	3.00	4.64
2045	0.91	1.40	1.82	2.80	3.64	5.60	0.76	1.17	1.52	2.34	3.04	4.68
2046	0.93	1.43	1.86	2.86	3.72	5.72	0.77	1.19	1.54	2.38	3.08	4.76
2047	0.95	1.46	1.90	2.92	3.80	5.84	0.79	1.22	1.58	2.44	3.16	4.88
2048	0.97	1.49	1.94	2.98	3.88	5.96	0.80	1.23	1.60	2.46	3.20	4.92
2049	0.99	1.52	1.98	3.04	3.96	6.08	0.82	1.26	1.64	2.52	3.28	5.04
2050	1.00	1.54	2.00	3.08	4.00	6.16	0.84	1.29	1.68	2.58	3.36	5.16
2051	1.02	1.57	2.04	3.14	4.08	6.28	0.86	1.32	1.72	2.64	3.44	5.28
2052	1.04	1.60	2.08	3.20	4.16	6.40	0.87	1.34	1.74	2.68	3.48	5.36
2053	1.06	1.63	2.12	3.26	4.24	6.52	0.89	1.37	1.78	2.74	3.56	5.48
2054	1.08	1.66	2.16	3.32	4.32	6.64	0.91	1.40	1.82	2.80	3.64	5.60
2055	1.10	1.69	2.20	3.38	4.40	6.76	0.93	1.43	1.86	2.86	3.72	5.72
2056	1.13	1.74	2.26	3.48	4.52	6.96	0.94	1.45	1.88	2.90	3.76	5.80
2057	1.15	1.77	2.30	3.54	4.60	7.08	0.96	1.48	1.92	2.96	3.84	5.92
2058	1.17	1.80	2.34	3.60	4.68	7.20	0.99	1.52	1.98	3.04	3.96	6.08

Monroe Expressway 2020 Toll Rates



David Roy

Director of Finance & Budget

Monroe Expressway Toll Rate Schedule

**136-89.183
Powers of the
Authority**

**Toll Rate Policy
adopted
September 17, 2008**

Scheduled Average Toll Rate Increases	
2019 – 2025	2.3%
2025 – 2040	2.1%

2.3% increase scheduled to take effect January 1, 2020

Monroe Expressway 2020 Toll Rates

		EXIT POINT							
		Exit 255	Exit 257	Exit 259	Exit 260	Exit 264	Exit 266	Exit 270	Exit 273
ENTRY POINT	Exit 255 - U.S. 74 (West)		\$ 0.27	\$ 0.59	\$ 0.78	\$ 1.34	\$ 1.60	\$ 2.17	\$ 2.60
	Exit 257 - Indian Trail-Fairview Rd.	\$ 0.27		\$ 0.32	\$ 0.51	\$ 1.07	\$ 1.33	\$ 1.90	\$ 2.33
	Exit 259 - Unionville-Indian Trail Rd.	\$ 0.59	\$ 0.32		\$ 0.19	\$ 0.75	\$ 1.01	\$ 1.58	\$ 2.01
	Exit 260 - N. Rocky River Rd.	\$ 0.78	\$ 0.51	\$ 0.19		\$ 0.56	\$ 0.82	\$ 1.39	\$ 1.82
	Exit 264 - U.S. 601	\$ 1.34	\$ 1.07	\$ 0.75	\$ 0.56		\$ 0.26	\$ 0.83	\$ 1.26
	Exit 266 - Morgan Mill Rd.	\$ 1.60	\$ 1.33	\$ 1.01	\$ 0.82	\$ 0.26		\$ 0.57	\$ 1.00
	Exit 270 - Austin Chaney Rd.	\$ 2.17	\$ 1.90	\$ 1.58	\$ 1.39	\$ 0.83	\$ 0.57		\$ 0.43
	Exit 273 - U.S. 74 (East)	\$ 2.60	\$ 2.33	\$ 2.01	\$ 1.82	\$ 1.26	\$ 1.00	\$ 0.43	

Class 1

Tolls shown for 2-AXLE vehicles
with an NC Quick Pass account

I-77 Express Lanes Update



Andy Lelewski, P.E.
Director of Program Development



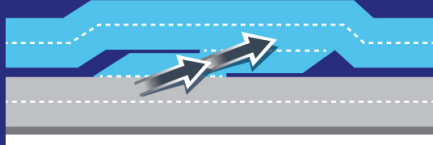
Open

ACCESS POINTS

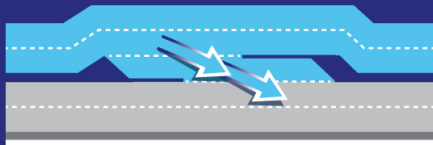
T TRANSFER AREA



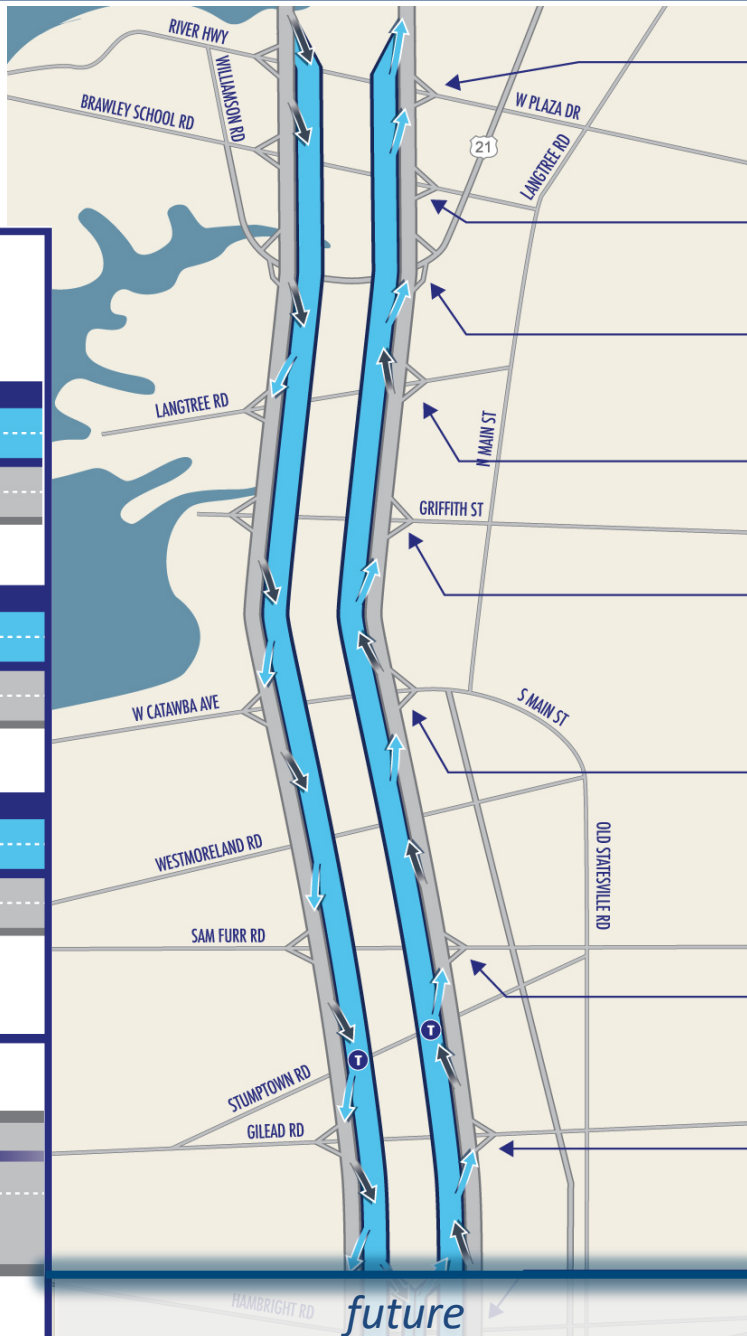
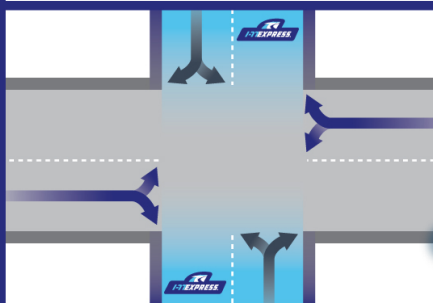
ENTRANCE ONLY



EXIT ONLY



D DIRECT CONNECTION TO LAKEVIEW AND HAMBRIGHT ROADS



EXIT 36
W Plaza Dr

EXIT 35
Brawley School Rd

EXIT 33
US21/Williamson Rd

EXIT 31
Langtree Rd

EXIT 30
Griffith St

EXIT 28
Catawba Ave

EXIT 25
Sam Furr Rd

EXIT 23
Gilead Rd

D EXIT
Hambright Rd



I-77 EXPRESS

GENERAL PURPOSE LANES

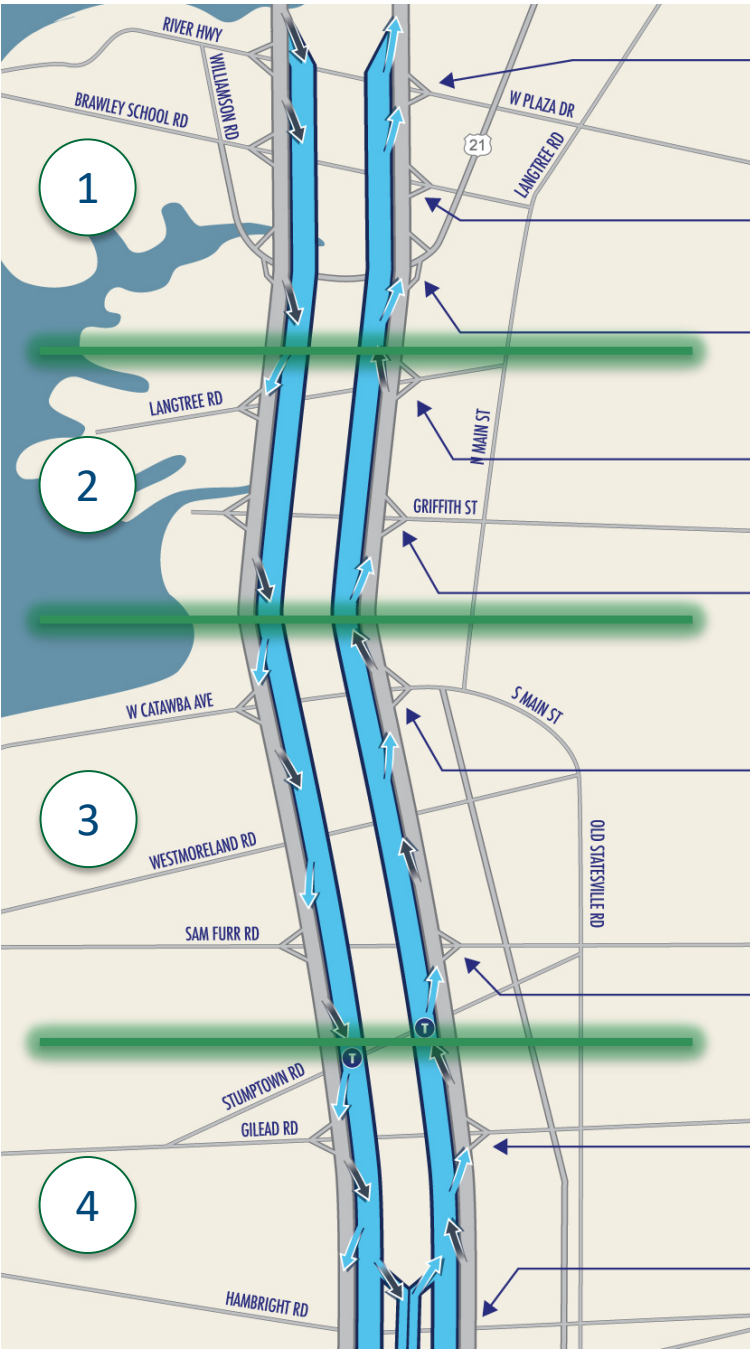
D DIRECT CONNECTION FROM EXISTING ROAD

T TRANSFER AREA

EXIT

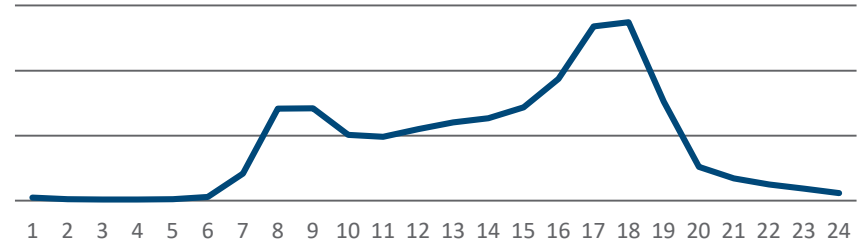
ENTRANCE



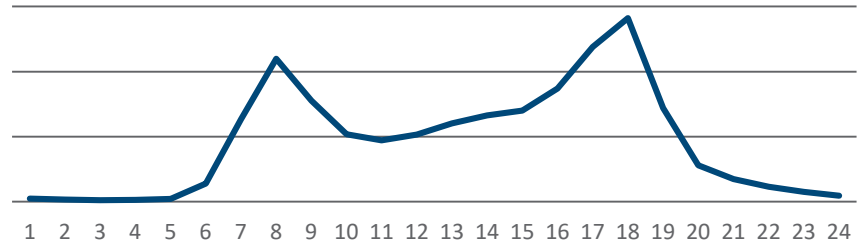


- EXIT 36**
W Plaza Dr
- EXIT 35**
Brawley School Rd
- EXIT 33**
US 21/Williamson Rd
- EXIT 31**
Langtree Rd
- EXIT 30**
Griffith St
- EXIT 28**
Catawba Ave
- EXIT 25**
Sam Furr Rd
- EXIT 23**
Gilead Rd
- D EXIT**
Hambright Rd

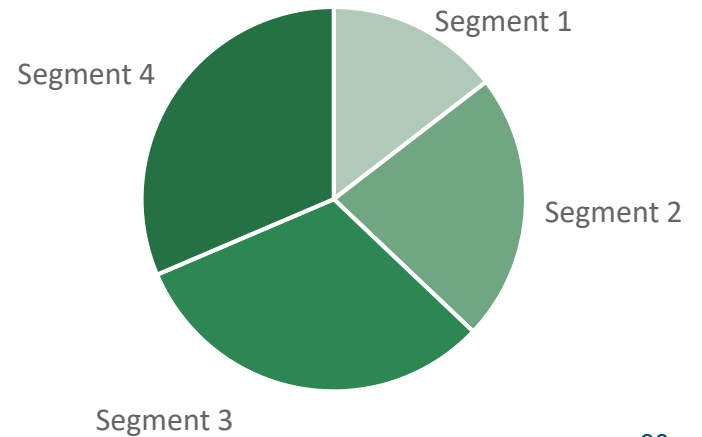
Northbound Transactions



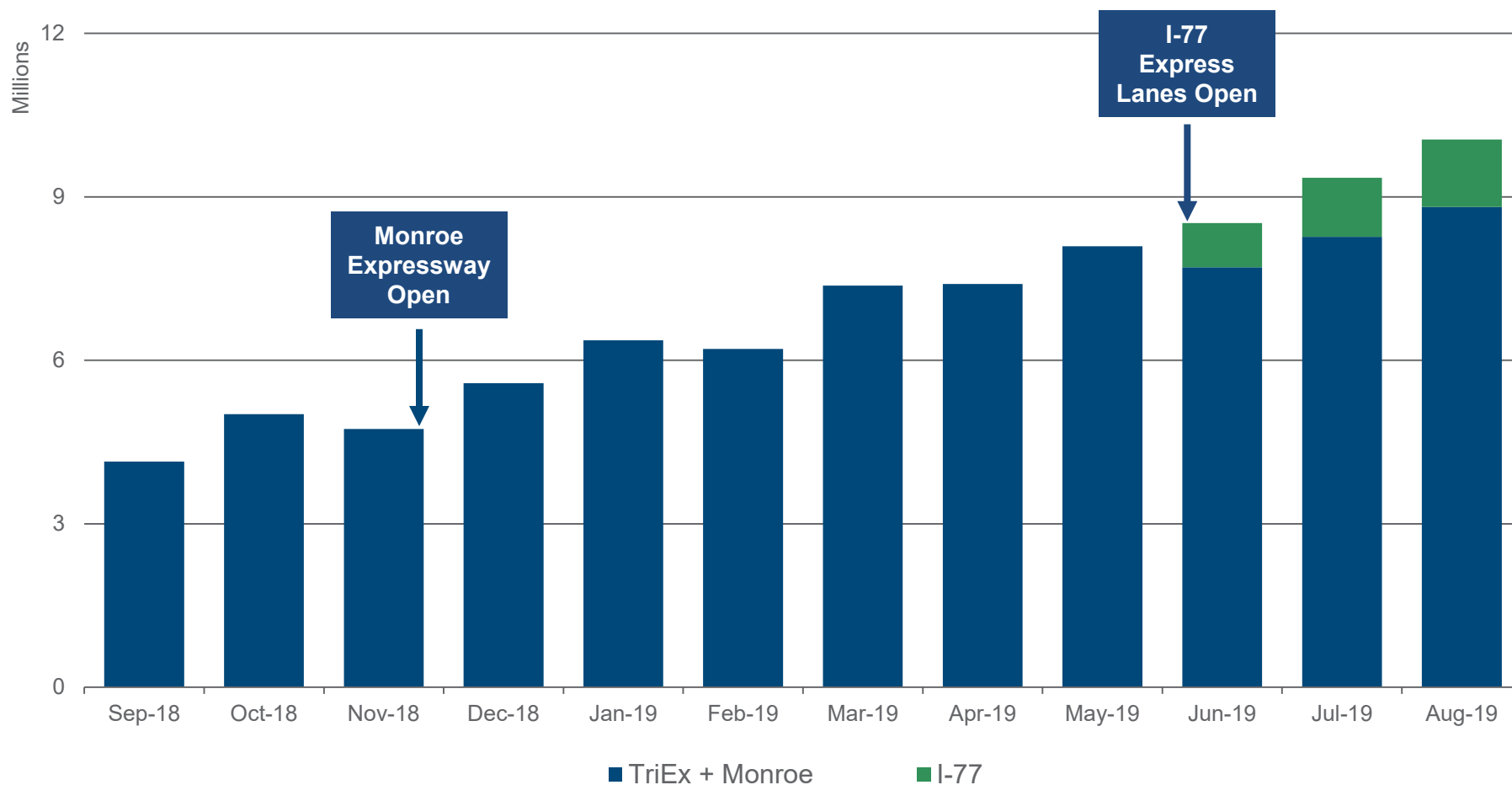
Southbound Transactions



Total Transactions



Total Posted Transactions



Future

ACCESS POINTS

T TRANSFER AREA



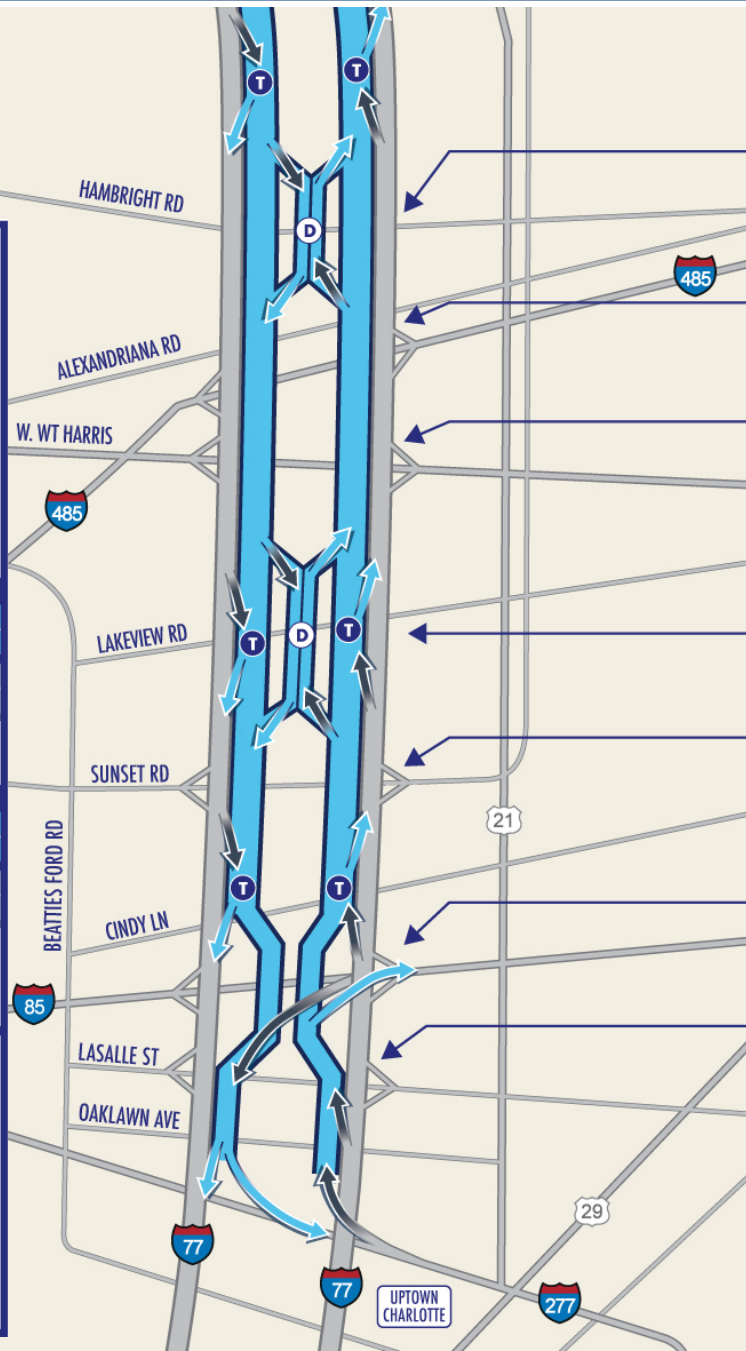
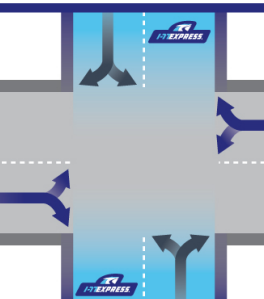
ENTRANCE ONLY



EXIT ONLY



D DIRECT CONNECTION TO LAKEVIEW AND HAMBRIGHT ROADS



D EXIT
Hambright Rd

EXIT 19
I-485

EXIT 18
WT Harris Blvd

D EXIT
Lakeview Rd

EXIT 16
Sunset Rd

EXIT 13
I-85

EXIT 12
Lasalle St

map source: i77express.com



I-77 EXPRESS

GENERAL PURPOSE LANES

D DIRECT CONNECTION FROM EXISTING ROAD

T TRANSFER AREA

EXIT

ENTRANCE



Lakeview Road DC



I-77 / I-277 Interchange



Sunset Road Interchange



Next Steps

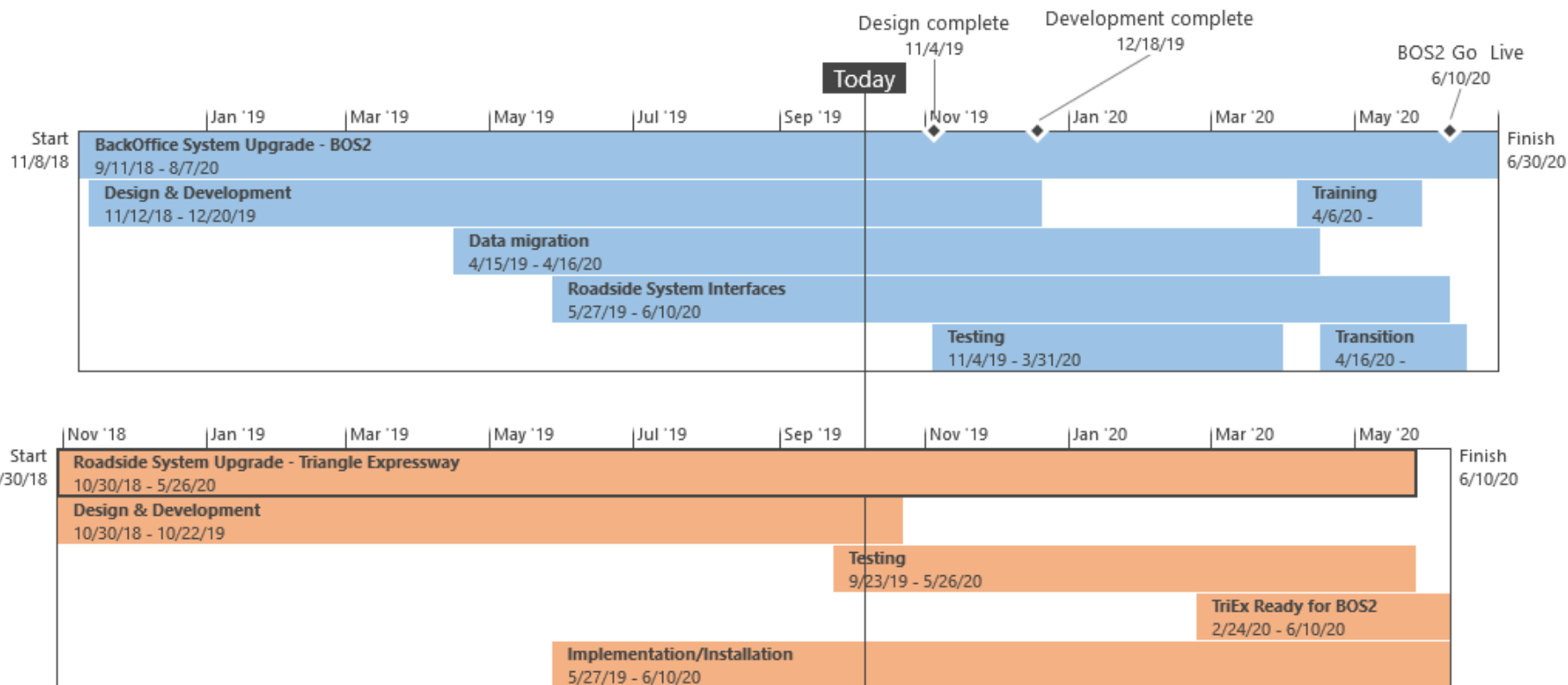
- I-77 Mobility Partners currently commissioning ITS and Toll Collection System
- Systems testing in late October (2-3 week process)
- Systems final acceptance expected in mid-November

Technology Timeline Update



Manish Chourey
Chief Technology Officer

Technology Timeline Projections



Key Technology Program Considerations

Project	Risk	Mitigation
All - CSC, BOS and Roadside	Concurrent transition with Roadside, BOS and CSC go live	1. Plans underway to De-couple Roadside, BOS and CSC simultaneous conversion would change the deployment approach
Roadside Triangle Expressway Upgrade	Roadside Vendor failed the factory acceptance test (FAT), delaying deployment	1. Meeting with Project Principal 2. Requested recovery plan
BOS Data Migration	Data Migration transition and validation behind schedule	1. Independent data level migration (NCTA) 2. Additional NCTA SME review
BOS Test Phases	UAT, CVT and SIT different phases of tests have limited schedule slack built	1. UAT dry run test witnessed by NCTA 2. Develop timeline to allow adequate time to review and approve test activities
BOS – Roadside Interfaces	Transaction Interface (ICD) is changing between Roadside/ BOS1 and /BOS2 creating schedule dependency	1. Develop interface on BOS2 to enable forward and backward compatibility

Key Technology Initiatives

Project	Description	Status
SAS – Enterprise Reporting Tool	<ol style="list-style-type: none"> 1. Provide a cloud based standard reporting for Traffic and Revenue reporting 2. Develop different subject-areas (data-marts) for Roadside, Backoffice and Operations 3. Share standards with other toll agencies (TXDOT, CTRMA, FTE) 	Kick-off meeting held on 9/25
Adoption of Finance Use Case (SAP)	<ol style="list-style-type: none"> 1. Texas (TXDOT) agency has adopted Agile methodology to develop back office system 2. Tolling agencies (TXDOT, CTRMA, FTE, NCTA) will share finance their developed use cases to enable standard financial reporting 	Kick-off meeting held on 10/1
E-ZPass Interop Hub Updates	<ol style="list-style-type: none"> 1. Tolling agencies desire National Interoperability (NIOP) 2. Disagreements on standards for data exchange and settlement is leading to delays in adoption of newer technologies 	Discussions with E-ZPass agencies
Impact of License Plate Replacement (HB 211)	<p>NC DMV will be replacing license plates every 7 years</p> <ol style="list-style-type: none"> 1. Provide NCTA requirements to improve plate read accuracy 2. Understand if plate numbers would be changed, requires interface modifications for better customer service 3. Request approaches for improving Dealer-plate registrations 	Kick-off meeting held on 10/10
Transponder Inventory Management as a service	<ol style="list-style-type: none"> 1. As our demand for transponder continues to increase, explore opportunities to engage 3rd party to fulfill transponder requests 	Explore opportunities

Triangle Expressway Contract Update

Dennis Jernigan, P.E.
Director of Highway Operations

TriEx Contracts Update

- Mowing
- Lighting
- Morrisville Parkway Landscaping
- Environmental Sites
- Resurfacing
- Striping and Markers Study (Supplement to Existing)
- Paint Removal

Striping/Marker Evaluation

- Inlaid Paint
- Inlaid Thermoplastic
- Surface-Mounted Cold Applied Plastic
- Inlaid Cold Applied Plastic
- Inlaid Raised Pavement Marker
- Inlaid Cradle-Mounted Pavement Marker

Barrier



Sign Supports



Gantries



Bridge Components



Thank You!

