



PAT McCRORY
Governor

NICHOLAS J. TENNYSON
Secretary

February 1, 2016

The Honorable Frank Iler, Co-Chairman
The Honorable John A. Torbett, Co-Chairman
The Honorable Bill Rabon, Co-Chairman
Joint Legislative Transportation Oversight Committee
North Carolina General Assembly
16 West Jones Street
Raleigh, NC 27601-1030

Dear Honorable Committee Members:

As directed by North Carolina General Statute § 136-89.193, and by way of this correspondence, the North Carolina Turnpike Authority (NCTA) and the North Carolina Department of Transportation (NCDOT) is submitting this Semiannual Report. This report covers the Authority's activities during the first six months of the 2016 state fiscal year (FY) covering from July 1, 2015 through December 31, 2015 and serves as an update to the FY 2015 Annual Report. The report is organized into the following four sections based on the project's development status: Operational Projects, Projects Under Construction, Projects Under Development, and Projects Under Consideration.

Section I – Operational Projects

Triangle Expressway

North Carolina's first modern toll road, the Triangle Expressway, is a six-lane toll road that utilizes all-electronic tolling (AET) technology. Customers are identified while traveling at highway speeds through free-flow "toll zones." Customers are encouraged to purchase an NC Quick Pass[®] electronic transponder that automatically deducts tolls from a pre-paid account and provides a 35 percent discount off the bill by mail toll rate. For travelers without a transponder, high-speed cameras mounted on gantries record the license plates, and invoices are sent by mail based on the vehicle's registration information.

During the first half of FY 2016 (July 2015 – December 2015), receipts totaling \$17.3 million have exceeded the 2009 certified revenue forecast by 31 percent. In comparison to the first half of FY 2015, the year-over-year (YOY) increase is approximately 30 percent. Similarly, transactions are about 10 percent higher than projected, with the YOY increase at around 24 percent.

The Old Holly Springs-Apex Road interchange project, also known as "Access 540," is located between the US 1 interchange and the NC 55 Bypass interchange on the southern end of the Triangle Expressway. Funding for the project is included in the NCDOT State Transportation Improvement Program (STIP) as project R-2635D, and it is being constructed to improve accessibility and north-south connectivity within southern Apex. During the first half of FY 2016, final roadway design plans have been completed and extra work orders have been prepared to incorporate the required additional AET infrastructure into the existing toll system. All environmental permits are expected in May 2016, with construction commencing soon after.



The Morrisville Parkway/NC 540 Interchange (STIP Project U-5315B) proposes to construct an interchange with the Triangle Expressway to provide increased connectivity and access. Planning and design are being managed by the Town of Cary, in coordination with NCDOT. Right-of-way, signing, and Intelligent Transportation Systems (ITS) plans are currently being finalized, and the construction contract is scheduled to be let in April 2017.

Section II – Projects Under Construction

Monroe Expressway

The Turnpike Authority is advancing construction of the approximately 20-mile Monroe Expressway, a controlled-access toll road on new location extending from US 74 near I-485 in eastern Mecklenburg County to US 74 between Wingate and Marshville in Union County. Right-of-way (ROW) acquisition, design and construction are currently underway. Monroe Bypass Constructors, LLC is serving as the design-build contractor for the project, which is expected to be open to traffic in November 2018. The total estimated project cost is \$771.1M, which is the total cost shown in the current plan of finance.

During the first half of FY 2016, major construction activities have continued to advance; approximately 50% of the corridor is currently under construction, generally progressing from east to west. In addition, ROW acquisition is approximately 67% complete, and preliminary signing (partial), ITS conduit, and AET gantry plans have been approved by NCDOT. During the remainder of the fiscal year, upcoming milestones include: completing ROW acquisition, beginning construction on the first of eight AET toll sites, and receiving the updated investment-grade traffic and revenue (T&R) study. In addition, a request for proposals (RFP) is being prepared to procure a contractor for the AET roadside toll collection system.

I-77 Express Lanes

NCDOT has identified I-77 as a significant corridor that needs improvement to maintain and enhance current and future mobility in the Charlotte-Mecklenburg region. The I-77 Express Lanes project includes approximately 26 miles of I-77 corridor improvements between the I-77/I-277 junction in Charlotte and NC 150 in Mooresville (Mecklenburg and Iredell Counties). The corridor is of high importance, serving as the primary north-south connector through the region.

I-77 Mobility Partners (Special Purpose Vehicle formed by Cintra Infraestructuras, S.A. for the project) held a groundbreaking ceremony on November 16, 2015. Final design is expected to be completed later in FY 2016 and the first segment of the express lanes is anticipated to open in July 2017. The NCTA/NCDOT will open an NC Quick Pass[®] storefront for Charlotte-area customers in the vicinity of the project approximately two to three months in advance of the first segment opening.

Section III – Projects Under Development

US 74 Express Lanes

Independence Boulevard (US 74) has been identified by NCDOT as a significant corridor that needs improvement to maintain and enhance current and future mobility in the Charlotte-Mecklenburg region. The purpose of the US 74 Express Lanes is to utilize dynamic pricing to provide immediate travel time reliability, or a speed of at least 45 miles per hour. Two phases of express lanes on US 74 are being studied by NCDOT, U-5526A (phase 1) and U-2509 (phase 2).

Phase 1 will convert bus lanes that currently exist between I-277 and Albemarle Road (NC 27), as well as the bus lanes that are currently being constructed from Albemarle Road to Wallace Lane to express lanes. Phase 2 involves widening and adding express lanes to Independence Boulevard (US 74) from Conference Drive in Charlotte to I-485 in Matthews.

The environmental document for phase 1 was approved in August 2015 and final design plans are under development. NCDOT conducted a series of stakeholder meetings with local government staff in August, October and December 2015, to discuss phase 2. The main purpose of these meetings was to present the conceptual designs, number of express lanes, interchanges and grade separation locations, and the overall vision for the express lanes system, while also obtaining additional input from local stakeholders regarding design refinements.

A public meeting will be held in early CY 2016 for phase 1 to share the design plans and answer citizen questions about the project. In addition, all engineering design work for phase 1, including signing, ITS, AET, and the gate control system is expected to advance to the 90% stage. Work on traffic forecasts, functional designs and technical studies for phase 2 will get underway in 2016.

I-485 Express Lanes

NCODT STIP project I-5507 proposes adding one express lane in each direction along I-485 (Charlotte Outer Loop) from I-77 to US 74 (Independence Boulevard). The purpose of this 16-mile project is to provide a reliable travel time option on this section of I-485.

Over the past six months, preliminary designs and costs estimates have been completed; a draft of the Level-2 T&R study was submitted to NCTA on January 8, 2016. Representatives from state and local government agencies met several times and narrowed down the number of alternatives being considered based on cost estimates, geometric constraints, local input, and other factors. The draft Categorical Exclusion is under development and anticipated to be approved by the Federal Highway Administration (FHWA) in March 2016, following completion and approval of the Air Quality Conformity process. Additional public involvement activities are anticipated during the second half of FY 2016, with a construction let date of May 2016.

Mid-Currituck Bridge

NCDOT STIP Project R-2576 calls for transportation improvements in the Currituck Sound area with focus on the consideration of a Mid-Currituck Bridge. The proposed action is a seven-mile long project including a two-lane bridge that spans Currituck Sound connecting the Currituck County mainland with its Outer Banks, and a separate two-lane bridge that spans Maple Swamp on the Currituck County mainland connecting Aydlett to US 158.

As of July 1, 2015, the final 2016-2025 STIP allocated funding for the Mid-Currituck Bridge beginning in FY 2019. During the first half of FY 2016, action by the legislature regarding the transportation budget advanced the funding schedule for right of way and construction by two years, now slated to begin in FY 2017.

The FHWA has completed its initial review of a partial draft of the reevaluation report of the Final Environmental Impact Statement (FEIS) approved in 2012. New studies related to submerged aquatic vegetation, wetlands, and traffic are being conducted. The new submerged aquatic vegetation study was recently completed, along with field work for new wetland delineations. Over the next six months, new traffic forecasts will be developed and the reevaluation report will be completed, including a decision of the adequacy of the 2012 FEIS and its findings.

Complete 540

The Complete 540 project is planned to complete the 540 Outer Loop around the Raleigh metropolitan area. This project begins where the current Triangle Expressway ends at NC 55 Bypass near Apex and Holly Springs. Complete 540 crosses southern and eastern Wake County and a portion of northwestern Johnston County before ending at the existing I-540 (US 64/264 Bypass – I-495) interchange near Knightdale.

The Draft Environmental Impact Statement (EIS), along with all technical documentation on the project, was approved for distribution in early November 2015. In early December 2015, NCDOT held three informal public meetings, and one formal public hearing, where citizens could review project information. The public and agency comment period on the Draft EIS closed on January 8, 2016. A decision on the Preferred Alternative for the project is anticipated in spring of 2016. The FEIS and the project's Record of Decision will follow the identification of the route for 540.

Construction is anticipated to be undertaken in three phases extending the existing Triangle Expressway eastward to US 401 (STIP Project R-2721), then to I-40 (R-2828), and on northward to US 64/264 Bypass (R-2829). Funding allocations for Complete 540 were also re-programmed due to the legislative action previously discussed (see Mid-Currituck Bridge discussion) and included updated costs estimates for each phase. The impacts to Complete 540 include advancing ROW and construction funding for R-2721 by one year (to FY 2017) and delaying funding for R-2828 by two years (pushed to FY 2024).

Section IV – Projects Under Consideration

The 2016-2025 STIP includes the potential toll projects in the following table as “unfunded future commitments” to occur after FY 2025:

STIP #	Route/Facility	From/Cross Street	To/Cross Street	Description
FS-1005A	I-40	Wade Avenue	I-440	Upgrade corridor, including additional general purpose and/or managed lanes
FS-1205A	I-40	NC 86	Wade Avenue	Construct managed lanes
FS-1305A	I-540	NC 54	US 64	Construct managed lanes
I-5702	I-40	US 15 / 501	I-440 / US 64	Construct managed lanes
I-5718	I-77	I-485	I-277 / NC 16	Construct managed lanes

Please feel free to contact me at (919) 707-2718 with any questions or concerns.

Sincerely,



Beau Memory
Executive Director
North Carolina Turnpike Authority