



NORTH CAROLINA
Department of Transportation

I-77 South Express Lanes

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I-77 South Express Lanes

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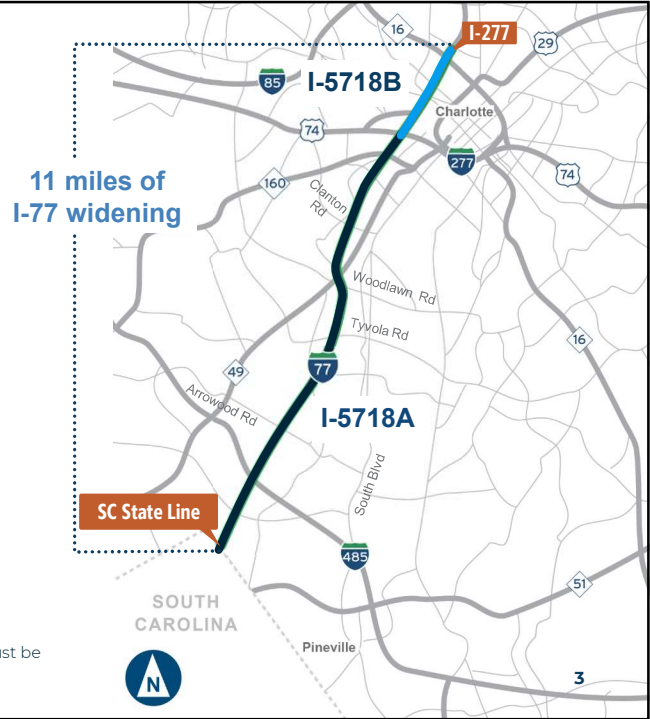
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Project Overview

- Last widened in 1990s, from four-lanes to six-lanes.
- STIP Project I-5718¹:
 - The addition of express lanes or general purpose and express lanes.
 - Reconstruction of interchanges and non-interchange bridges.
 - Addition of access points and direct connectors to the express lanes.
- Total Project Cost (YOE²): \$3.7 billion
- Crash rates for this segment of I-77 are 2.5x higher than the statewide average for urban interstates
 - Crash rates are directly related to congestion
 - Congestion will continue to increase

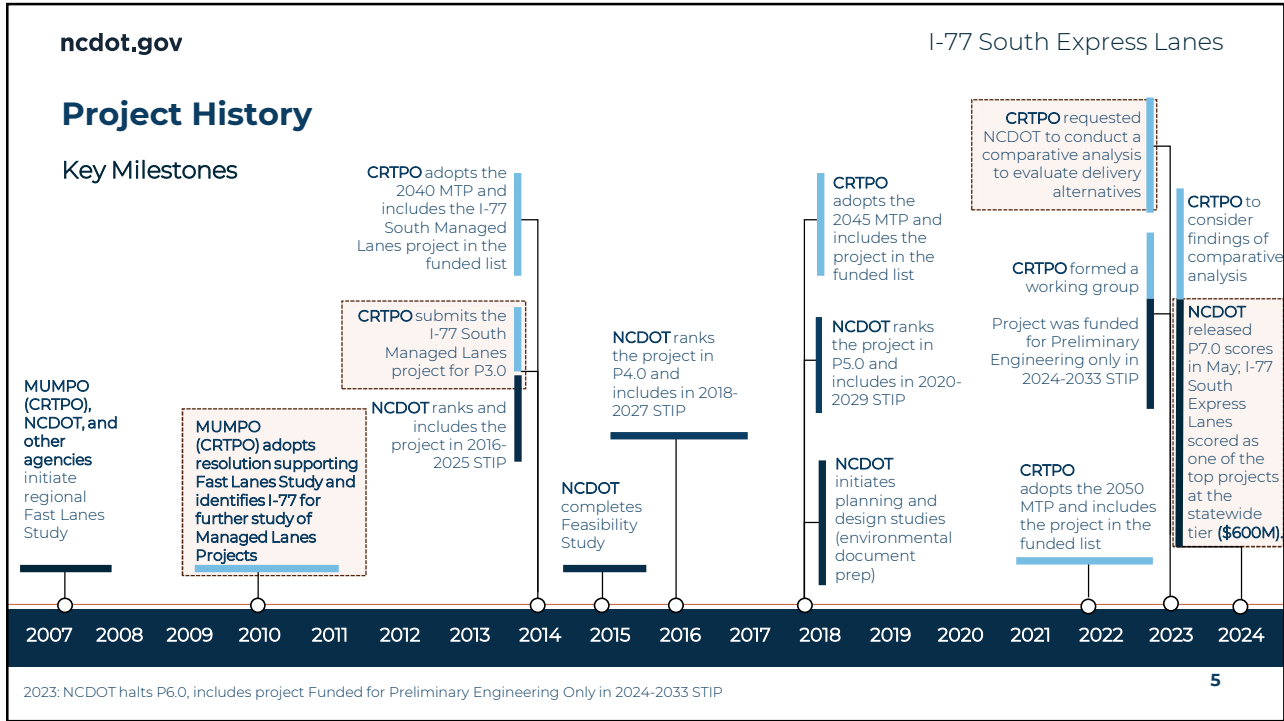
(1) Per state law, NCGS §136-89.183(a)(2), toll projects in North Carolina must be requested/approved by the local planning organization

(2) Year-of-expenditure



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Project History



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Fast Lanes Study & Purpose of Express Lanes

July 2009
Charlotte Region **Fast Lanes** Study
FINAL REPORT

- Why not just add more general-purpose lanes?
 - Adding more general-purpose lanes only provides short-term relief.
 - As traffic continues to grow, the new lanes return to the same congestion level as before due to "induced demand."
 - General-purpose lanes do not provide the option for reliable travel times.
- Why express lanes? (<https://crtpo.org/resources/fast-lanes/>)
 - Offer a long-term, sustainable solution to issues including (rising travel demand, growing rush-hour congestion, etc.) by providing travel time savings and trip reliability.
 - Generates funds, in financial constrained environment for construction, as well as the maintenance and operations costs.
- MPO adopted the Fast Lanes Study in 2010.

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Comparative Analysis Overview

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Comparative Analysis Overview

- At the request of CRTPO, an analysis was conducted comparing the Traditional Toll Delivery and Public-Private Partnership (P3) Toll Delivery methods
 - Analysis initiated in July 2023
 - Outside team of advisors conducted analysis
 - Multiple presentations given to CRTPO board; with results presented on August 21
 - [Comparative Analysis Supplemental Report](#)
- Key analysis inputs
 - [\\$600 million state funding allocation during P7.0 \(May 2024\)](#)
 - Received initial construction costs and traffic and revenue forecast (May 2024)
 - Optimized project costs (July 2024)
 - Updated traffic and revenue findings which included commercial vehicles (July 2024)

Team of Advisors

HNTB
Program/Commercial

KPMG
Financial

RS&H
Environmental/Design

pfm
Financial

Stantec
Traffic & Revenue

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Comparative Analysis – Overview of Delivery Approaches

Summary of Delivery Approaches that were Analyzed:

	Traditional Toll Delivery	P3 Toll Delivery
Description	<ul style="list-style-type: none"> State Owned, Operated and Tolled Express Lanes NCDOT/NCTA would be responsible for design, construction, financing, operations, and maintenance of the Project 	<ul style="list-style-type: none"> State Owned, Developer Operated and Tolled Express Lanes A private entity (a Developer) designs, builds, finances, operates, and maintains (DBFOM) the Project under an Agreement with the State
Project Funding Options	<ul style="list-style-type: none"> Public Toll Revenue Backed Debt State Funds 	<ul style="list-style-type: none"> Private Toll Revenue Backed Debt Private Equity State Funds
Procurement	<ul style="list-style-type: none"> Design-Build 	<ul style="list-style-type: none"> DBFOM
Other NC Toll Projects with Similar Delivery Method	<ul style="list-style-type: none"> Triangle Expressway Monroe Expressway I-485 Express Lanes 	<ul style="list-style-type: none"> I-77 North Express Lanes

Comparative Analysis - Traditional Toll Delivery

The Traditional Toll Delivery approach is not currently financially feasible

- NCDOT cannot currently fund a Traditional Toll Delivery. The analysis shows that even with the \$600 million of STIP funding the Project still has a \$1.3 billion funding gap.
- The funding gap is reflective of increasing construction cost exceeding forecasted revenues:
 - Escalating Cost:** the Project cost has tripled since its original STIP submission, with its total cost now exceeding the state transportation improvement program’s annual budget.
 - Less Funding Capacity:** the Project lacks sufficient funding due to more conservative revenue assumptions, which are necessary to meet public debt financing requirements.
- Insufficient funding would cause years of delay, and each year of delay increases costs ~\$100 million due to inflation, which could stall the project indefinitely.
 - If the project does not move forward, there will not be an opportunity for \$100 million of bonus allocation in the upcoming STIP

Preliminary engineering work would stop, and the Project would need to be re-scored with updated cost and revenue projections for P8.0.

Comparative Analysis - P3 Toll Delivery

The P3 Toll Delivery approach is likely financially feasible

- The P3 Toll Delivery approach significantly reduces the funding gap by transferring financial risks to the Developer, allowing the project to move forward with less public funding.
 - **Private Capital Investment:** Private developers bring their own equity into the project, which covers a significant portion of the Project's cost, reducing the need for state funds.
 - **Debt Capacity:** Private developers can often secure debt from lenders using aggressive financial assumptions, such as higher socioeconomic forecasts, due to the strong financial incentives of the developers who have a direct financial interest in the Project's success.
- The analysis shows that the \$600 million of STIP funding would likely be sufficient to cover any needed public contribution for this project.
 - The Project would be eligible for \$100 million of bonus allocation in the upcoming STIP.

If CRTPO were to request NCDOT to move forward with a P3 delivery process, the Project would likely be committed in the 2026-2035 STIP from P7.0.

Potential Next Steps

Potential Next Steps

- If CRTPO were to request NCDOT to move forward with a P3 delivery process for the I-77 South Express Lanes project:
 - CRTPO could create a working group to partner with NCDOT to develop project objectives and priorities to inform indicative terms such as:
 - Optimizing the utilization of the Express Lanes (and General-Purpose Lanes).
 - Encouraging a competitive procurement process to receive multiple fixed-price bids.
 - Increasing transparency of the business during all phases of the project (construction, operations, etc.).
 - Providing benefits to transit.
 - NCDOT would provide draft key terms to the full CRTPO board at least 60 days in advance of any public advertisement to allow for time to review and act if indicative terms are not acceptable to CRTPO.
 - CRTPO could rescind support at any point up until NCDOT publicly advertises a Request For Qualifications (RFQ).



NCDOT is not advocating for a particular path forward and will continue to partner with CRTPO to identify transportation solutions to support mobility throughout the region.

Summary of Potential Next Steps

Direction Needed from CRTPO

Opt to <u>not</u> pursue a P3 Toll Delivery:	Opt to pursue a P3 Toll Delivery:
<ul style="list-style-type: none"> • Project would not be committed for construction in the 2026-2035 STIP. • All work on the Project would stop. • Due to no funding source, the Project would be on hold indefinitely. • The Project cost would escalate ~\$100 million each year of delay based on current cost estimates and inflationary assumptions. 	<ul style="list-style-type: none"> • NCDOT would partner with the CRTPO working group to define objectives and priorities prior to beginning the procurement process. <ul style="list-style-type: none"> • Objectives would inform key contract terms. • NCDOT would provide draft key terms to the full CRTPO board at least 60 days prior to RFQ advertisement. <ul style="list-style-type: none"> • <u>CRTPO could rescind support at any point up until NCDOT publicly advertises an RFQ.</u> • NCDOT would continue to regularly update CRTPO on the status of contract development and procurement schedule.

NCDOT is not advocating for a particular path forward and will continue to partner with CRTPO to identify transportation solutions to support mobility throughout the region.

