

FAST

Freeway, Arterial, Street, and Tactical transit study for the Research Triangle metropolitan area

Project Impetus and Overview

- NCDOT spearheaded a follow-up study to the 2020-21 FAST study ([documents¹](#)), with an overall objective of prioritizing transit.
- This follow-up effort, “FAST 2.0” transit study – Freeway, Arterial, Street, and Tactical transit ([overview²](#), [documents³](#))– was being managed by NCDOT; the consultant was WSP.
- The study focused on ways to advance the implementation of transit priority infrastructure; i.e., to make our freeways

and streets “transit ready”. This included accelerating BRT linkages to RTP and RDU from downtown Raleigh, Durham, Chapel Hill, and Cary. It also included the advancement of “SMART” freeways (Simplified Methods to Accelerate Relief for Traffic) to create better operations for transit and all vehicles at lower costs and impacts.

- The study formally began in February 2024 and concluded in Fall 2025.

Geography

The FAST transit study incorporated a review of potential dynamic transit priority shoulders, key linkages with proposed BRT corridors and extensions, and other transit priority measures for several of the freeways and primary arterials in the core metropolitan Triangle area, including Wake, Durham, Orange, Johnston, and Chatham counties.

There was also an examination of potential connections in counties in the extended metropolitan area and environs, including Franklin, Nash, Wilson, Granville, Lee, Harnett, Alamance, Person, Wayne, and Moore.

Outreach and Funding Partners

- There was ongoing outreach with stakeholders on concepts, ideas, and express designs of proposed transit priority elements. This outreach took the form of curated focus groups, presentations, and other engagement mechanisms.
- NCDOT maintained a streamlined project webpage to provide effective study outreach.
- The Regional Transportation Alliance (RTA) highlighted the results of the study at the “RTA Transportation Brunch 2025: Moving Towards a FAST Transit Future” event on August 8, 2025.
- There were 16 funding partners: cities of Raleigh and Durham; towns of Cary and Chapel Hill; counties of Wake, Durham, Orange, Chatham, Johnston; Triangle West TPO, CAMPO; GoTriangle; Research Triangle Foundation; Central Pines Regional Council, NCDOT, and RTA.

Deliverables

The FAST study created specific project recommendations, including express designs, that aim to advance transit priority infrastructure solutions. These included:



Express designs or feasibility studies of potential freeway platform exchange stations along I-40 near RDU Airport and Research Triangle Park



Direct freeway/BRT ramp linkages at key locations

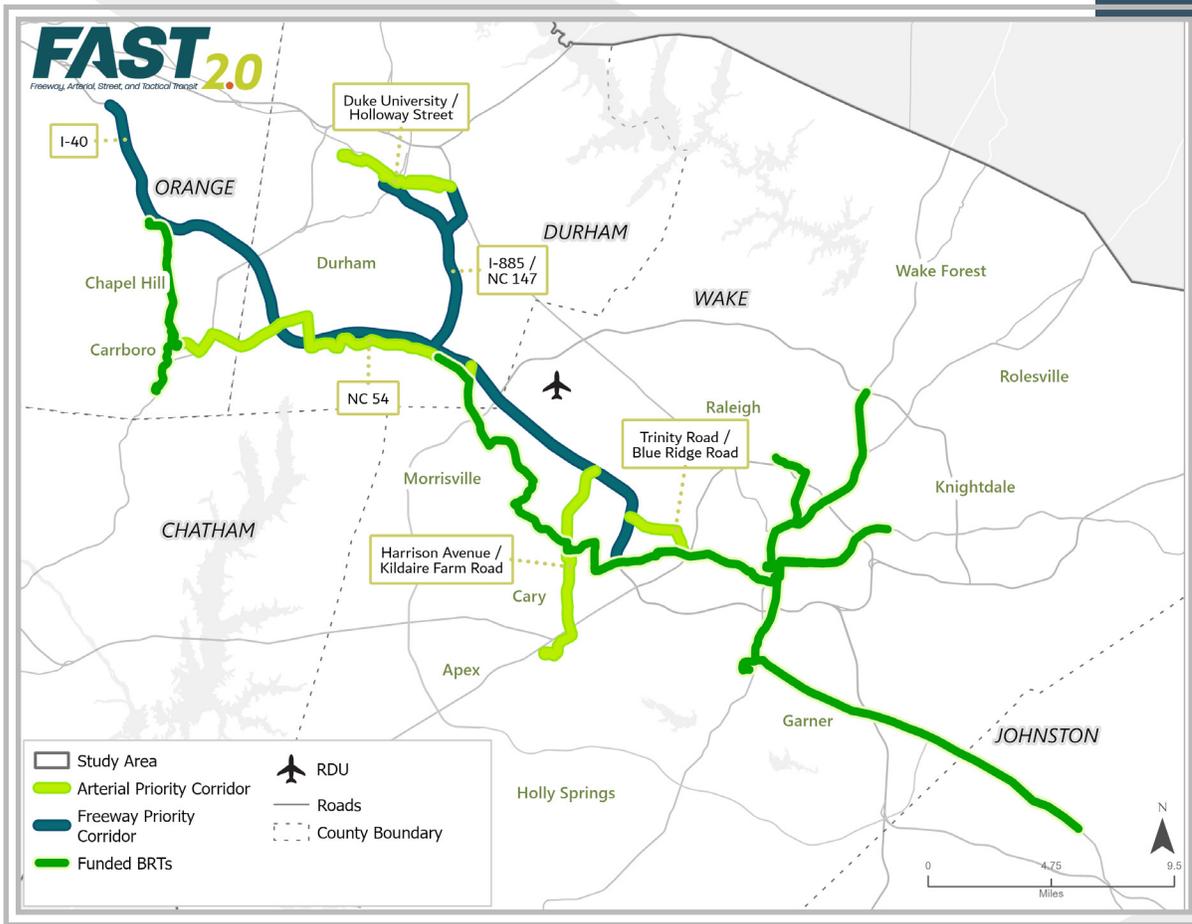


An implementation framework for activating dynamic transit priority shoulders and accelerating SMART infrastructure along specific freeway segments

The FAST study also identified vital policy changes to help advance transit in the Triangle market and across North Carolina.

1 <https://www.ncdot.gov/divisions/integrated-mobility/multimodal-planning/Pages/fast-study-documents.aspx>
2 <https://www.ncdot.gov/divisions/integrated-mobility/multimodal-planning/Pages/fast-study.aspx>
3 <https://connect.ncdot.gov/municipalities/PlanningGrants/Pages/Fast-2-0.aspx>

Priority Corridor Deliverables



With stakeholder input, the FAST study identified priority corridors that could foster enhanced transit infrastructure in the near term and developed concept designs along each of the priority corridors, with recommended transit infrastructure.

Each of the concept designs for the priority corridors identified transit design elements that could be implemented to advance transit priority infrastructure along the corridor. Those proposed recommendations were visualized along each corridor, such as along Blue Ridge Road, shown below.

