Deeper Dive
Priority Corridors

After identifying candidate corridors for near- and long-term transit projects, the study team took a deeper dive into two corridors, developing conceptual improvements to illustrate the nature of potential alternatives and their general impacts. This task focused on identifying specific projects, treatments, and strategies to accelerate the creation of transit advantages along the regional FAST networks. Illustrative examples of the types of improvements being considered help generate meaningful feedback from stakeholders and the general public. An important outcome of this plan is identifying agency responsibilities and project triggers, constraints, and contingencies.

The Team coordinated with stakeholders to recognize opportunities to integrate FAST proposals with planned or pending roadway and transit projects. Recent and ongoing transit studies (such as CAMPO's BOSS and RED bus lane studies; Go Triangle's Regional Transit Center planning and Commuter Rail Study; Orange and Durham Counties' transit plan updates; and the five BRT corridor plans) were carefully reviewed to ensure that FAST enhancements are optimized to best complement these local and regional transit initiatives.

Deeper Dive Methodology

In order to demonstrate the potential of the **F**reeway **A**nd **S**treet based **T**ransit (FAST) network in the Triangle region, the Project sought to apply the methodology and tools to two corridors. FAST network routes would represent a new type of service. Infrastructure improvements would be designed to improve the speed and reliability of bus operations, on a localized, targeted basis. While the overall approach to the FAST network is defined in previous sections, the on-the-ground reality of what this approach would mean and what it could look like had to be evaluated on identified corridors. Working with stakeholders and funding partners, this analysis identified two corridors and feasibility was tested.

In choosing the two corridors for analysis, a variety of factors were considered. Illustrative corridors traverse a variety of environments, from freeway to limited access corridors to neighborhood and downtown segments. The tested corridors were meant to be regionally significant and of sufficient promise to be early implementation candidates. The corridors could have existing public transportation service, but the overall purpose was to think about how a new service could operate with the associated improvements. The two corridors chosen were the US 70 Corridor from I-540 (near RDU Airport) east to downtown Raleigh and the NC 147 Corridor (Future I-885) from Research Triangle Park north to downtown Durham.

As a first step, the analysis looked at the regional information collected in the earlier part of the study. Existing transit service and ridership were considered, along with proposed long-term BRT and Commuter Rail transit improvements in the Triangle region. Roadway and travel factors such as congestion, volume/capacity and corridor conditions were considered on a segment basis. Adjacent land use, activity centers and origin/destination patterns also underlied the analysis.

As each corridor was evaluated, it was broken down by segment. Segments were determined primarily by similarity of operating environment, regardless of length. Interventions were then evaluated on a segment basis using a few key determinants:

- Focusing on reliability and travel time improvements that could be completed in the short- and mid-term without full reconstruction
- Making more significant interventions in places most needed, for example in congested or high ridership segments
- Considering the totality of the transit experience, including station access, pedestrian connections and adjacent land use/activity
- Parallel construction or implementability with ongoing or planned improvement projects by others
- The physical layout of the corridor and its constraints
- Impacts on other corridor operations including vehicle congestion and parking
- Safety

Complete segment-by-segment concepts were then completed on a planning level. These concepts were developed using the playbook of improvements, with a realistic "transit first" approach where transit accommodations are at minimum equivalized with other modes. As segments differ in character, varying transit improvements are recommended along the corridor, often in combination for individual segments. Where applicable, the analysis also recommended potential route deviations to serve a larger potential group of users, or to corridors with less congestion or greater potential for improvement. Segment by segment details for each of these corridors are included in the subsequent section.