

# Regional Transit Center Relocation Study

**Executive Summary** 



# **Study Purpose**

GoTriangle has occupied the current Regional Transit Center (RTC) at 4600 Emperor Boulevard in Durham since 2008, with the intention of relocating to a site more easily accessible from major highways, and adjacent to planned investments in bus rapid transit and rail service.

GoTriangle began the RTC Relocation Study in 2019 to evaluate opportunities for relocating the RTC to provide enhanced functionality, connectivity, reliability. In alignment with this purpose, the following goals were set:

#### ► Safety & Accessibility:

Improve safety and accessibility for all users and vehicles

#### ➤ Access & Connectivity:

Increase transit access to regional destinations and multi-modal connections

#### ► Speed & Reliability:

Provide a better experience for riders and increase operational efficiency



# **Existing Conditions**

The existing RTC is served by ten bus routes, with over 1000 riders passing through each day. In addition, there are more than 100 daily park and ride users that use this facility. The GoTriangle headquarters building is also located on-site and is owned by GoTriangle, while the park and ride and RTC facility are on leased property.

The current RTC has operational and access challenges, including delays due to congestion, a shared entrance, exit and circulation paths for buses and cars, and 1.5-mile distance through several signalized intersections to reach I-40, all of which contribute to reliability challenges for passengers and GoTriangle.



Figure 1 - Existing RTC Location



The number and layout of platforms are insufficient to serve the amount of activity at the RTC. The platform space is constrained with minimal separation between passengers and transit vehicles which poses safety challenges and presents an unconformable experience for riders. Lastly, the shelters are insufficient to protect riders from the elements and are unable to be expanded due to the proximity of overhead high-voltage transmission lines. All of the operational, access, and safety challenges contribute to the late arrival of buses at the RTC and cause issues for transit riders accessing bus routes. Adequate resolution of all of these existing challenges is not feasible on the current site without a complete reconstruction, but can be addressed through the development of a new facility.

## **Public Outreach**

GoTriangle conducted several types of virtual public outreach in the Spring of 2020 as a result of the COVID-19 pandemic. Educational content was shared with the public through PowerPoint, Video, Social Media, and the GoTriangle website. An online survey launched in April 2020 and was open for comment until June 2020. This outreach resulted in over 3,100 responses from 102 participants who shared an additional 60 written comments. Robust in-person and online public engagement will be included in future phases of the project, including effective strategies for ensuring equitable participation learned during the pandemic.



## **Rider Experience**

As a result of the virtual public outreach, the following feedback was gathered. This feedback was used to inform the evaluation criteria for site selection.



Missed a connection due to a bus delay



When asked what could improve rider experience at platforms, the survey respondents offered the following insights:





61% more shelters





shops and services near the RTC



Indicated bus speed is "Important" or "Very Important"





## **Site Selection Process**

To assess possible locations, a parcel search was conducted resulting in initial list of 113 sites. Using an iterative and criteriadriven search process, including proximity to the highway network lease of access, and size of site, the list was eventually reduced to six potential sites.

### **Site Evaluation**

A scorecard was developed to evaluate the most likely RTC locations, including a no-build option to remain at the existing RTC location.

The categories included:

- Mobility increase bus speed and reliability
- **Community** proximity to shops, services, and opportunities for walkable redevelopment
- Viability support for cost effective delivery of the project
- Accessibility promote access to existing nearby jobs
- Multimodal provide connections between planned investments in BRT and rail

The final three sites were the HUB, Park Point, and Triangle Metro Center (TMC), as shown on Page 7. Each of these sites were additionally identified as opportunities for public-private partnership to leverage the transit investment to support transit oriented development. The study team coordinated with NCDOT, RTP, and Durham County Transportation and Planning staff to assess the ability of the final three sites to meet the site evaluation criteria and support the components of the conceptual program.

The scorecard on page 8 shows the results of these criteria applied to the final three sites plus the existing regional transit center.





Figure 2 - Final Three Potential Sites

6







Figure 3 - Site Evaluation Scorecard Results

### **Conceptual Program**

The conceptual program includes ten bus boarding bays, with the potential for two additional bays, plus two bays for buses that are out-of-service. On-site amenities include an enclosed building with a waiting area, a drop-off loop for paratransit riders, microtransit (Morrisville's system will also connect here), and taxi area, and a boarding platform with a pass sales booth and comfort station.

The platform will be covered with a canopy and will have several pedestrian crosswalks to the parking area. A future BRT line is planned to run along NC-54 as shown in the concept design. A signalized intersection is proposed for the bus-only entrance to facilitate efficient movements for the buses exiting the RTC. This signalized intersection will also be beneficial in the event that the BRT stops are located in the same vicinity, providing a safe and comfortable crossing of NC-54 between the BRT stops and the RTC.

The cost estimate for the conceptual program ranges from \$25-30 million and will be refined as the conceptual program is finalized and engineering proceeds.



Figure 4 - Site Concept



#### **Next Steps**

A timeline for the next steps is shown here. The project design will kick off in the summer of 2021, with construction beginning in 2023 and continuing through 2024. Throughout concept design, the team will closely collaborate with NCDOT, the county transit plans, local service providers, and Research Triangle Park (RTP) to ensure that any overlapping projects are considered. This includes close coordination with the future commuter rail, bus rapid transit, and Triangle Bikeway projects, as a key feature of the preferred location is connectivity to other modes of transportation to enhance access to destinations in and around Research Triangle Park. To fund the facility, GoTriangle will secure local funding from the county transit plans and seek federal grants.

CONCEPT DESIGN	ENGINEERING	CONSTRUCTION
SPRING 2021	2021-2023	2023-2024
Coordination with NCDOT, RTP, and the Property Owner on land acquisition and future development potential Coordination with CRT and BRT studies Development of a federal grant strategy	Apply for federal grant funding Complete the final design Ongoing coordination with NCDOT, RTP, and the Property Owner	Construction







Figure 5 - Site Concept Renderings





