

Regional Transit Center Relocation Study

Executive Summary



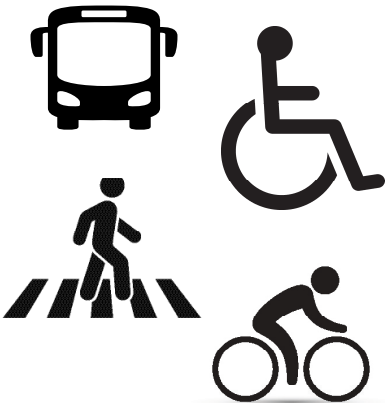
Study Purpose

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

Safety and Accessibility



Access & Connectivity



Speed & Reliability



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.

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.

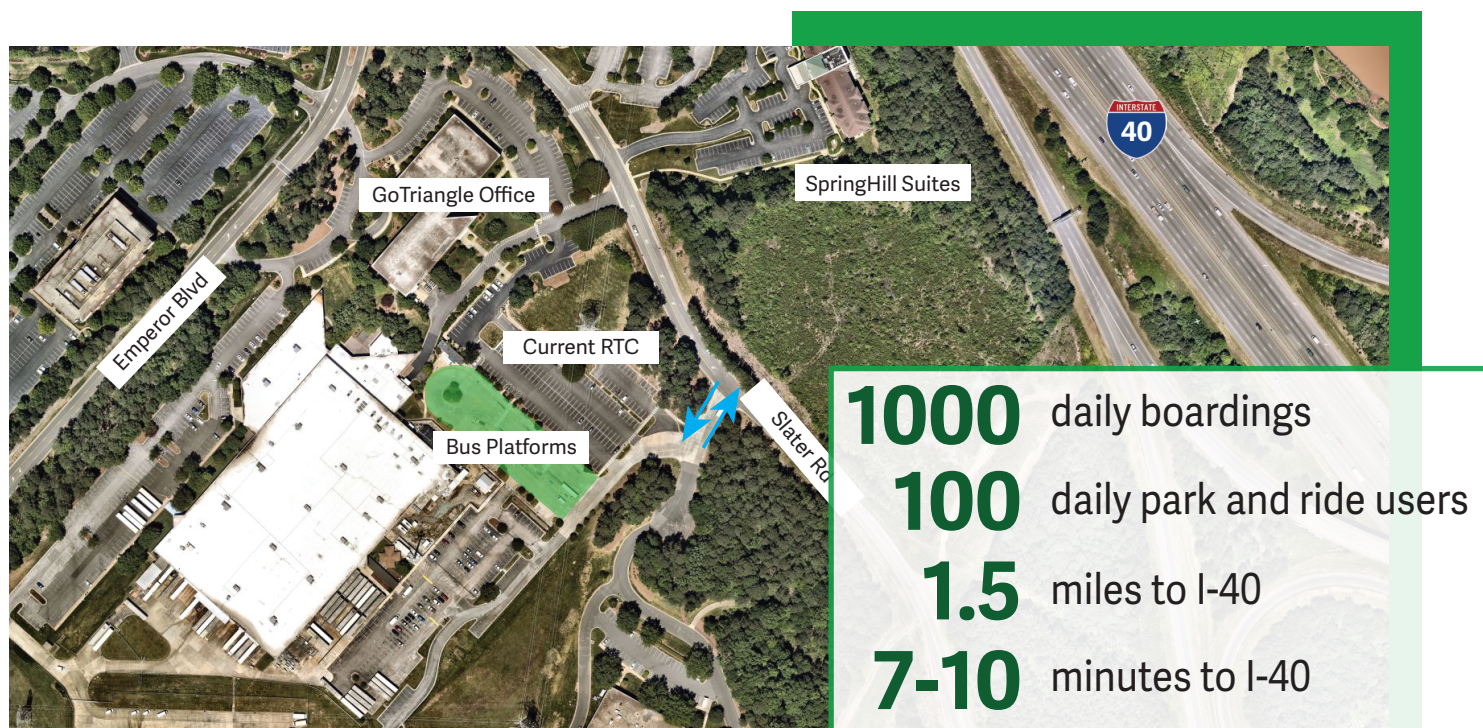


Figure 1 - Existing RTC Location

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.

"Not just more shelters, but shelters with roofs that protect riders from the sun and the rain."

"Better lighting and real-time bus information would help."

"The location should be more accessible from the highway for cars and buses. Make it as accessible as the Durham or GoRaleigh Stations."

3100

question responses



102

participants



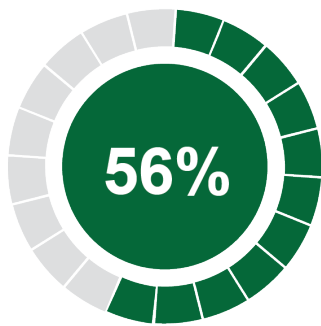
60

free response comments

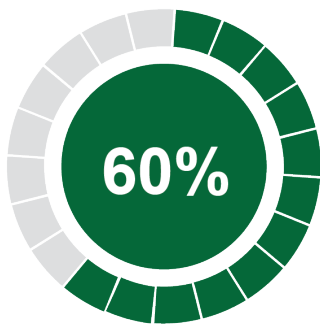


Rider Experience

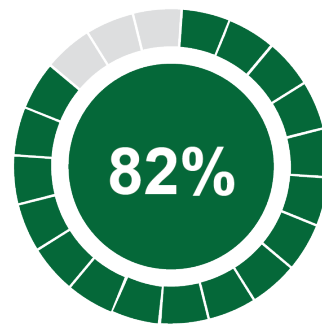
As a result of the virtual public outreach, the following feedback was gathered. This feedback was used to inform the evaluation criteria for site selection.



Missed a connection due to a bus delay



Would like to have shops and services near the RTC



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

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



61%
more shelters



48%
wifi access



48%
wayfinding signage



44%
more benches

Site Selection Process

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

Site Evaluation

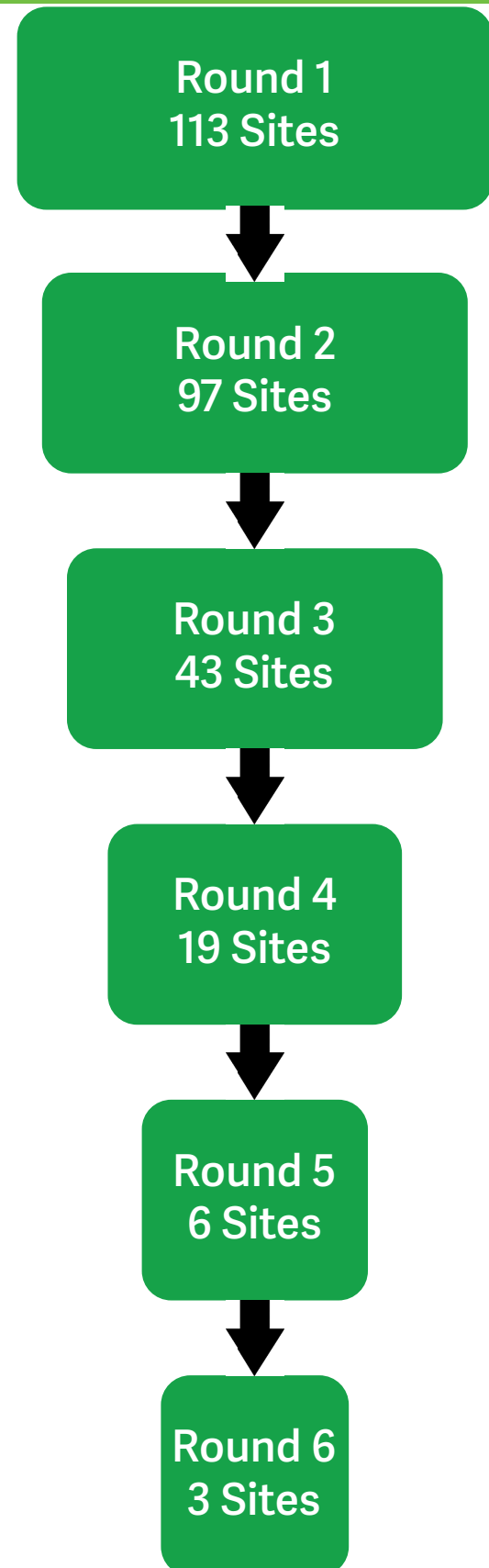
A scorecard was developed to evaluate the most likely RTC locations, including a no-build option to remain at the existing RTC location.

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.



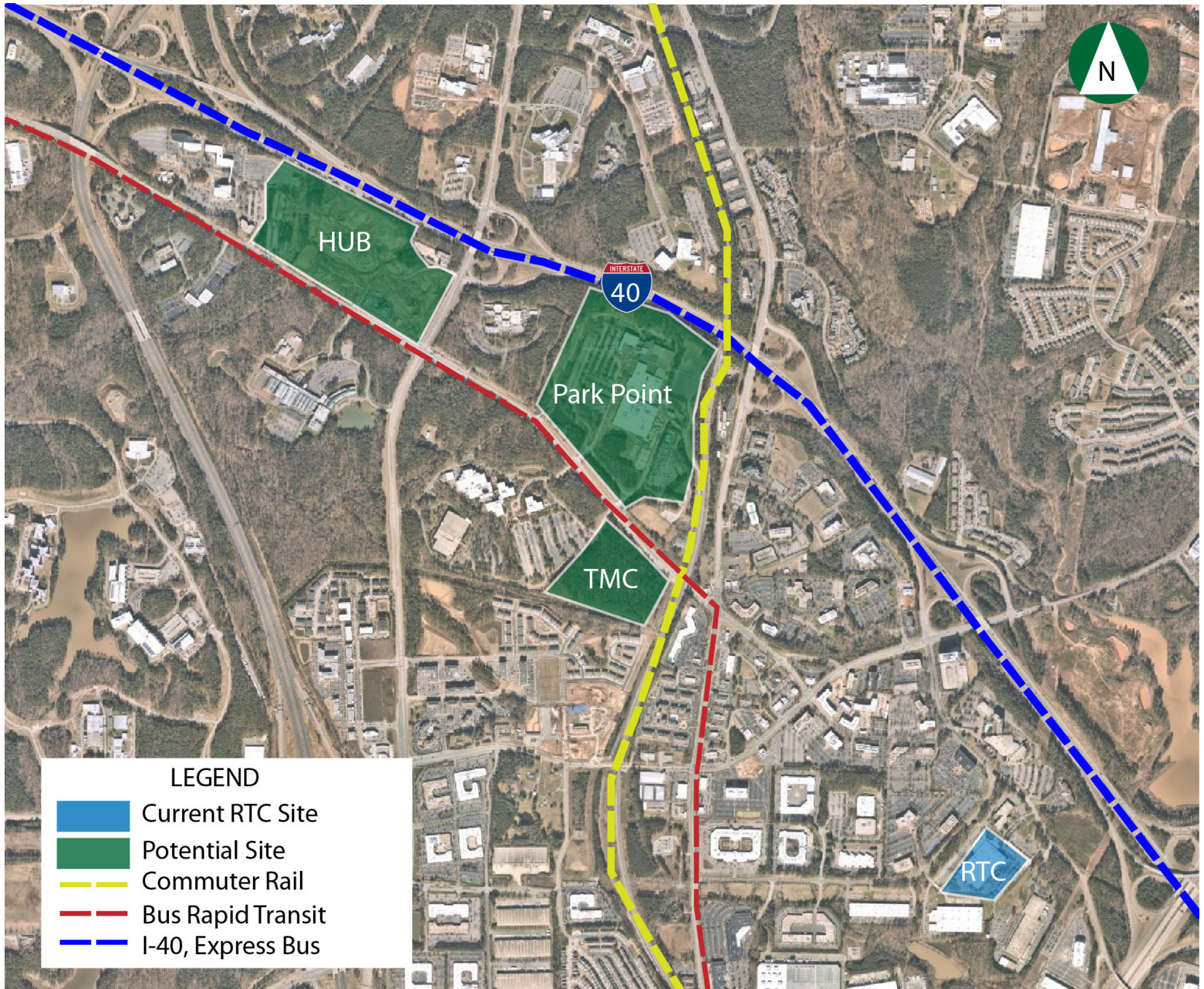


Figure 2 - Final Three Potential Sites

Goal	HUB	Park Point	TMC	Existing
Mobility Increase bus speed and reliability				
Community Locate near shops, services, and opportunities for walkable redevelopment				
Viability Support cost effective delivery of the project				
Accessibility Promote access to existing nearby jobs				
Multimodal Provide connections between planned investments in BRT and rail				
Average	4.10	3.22	4.16	1.64

Figure 3 - Site Evaluation Scorecard Results

Conceptual Program

The conceptual program includes a passenger bus boarding platform with a canopy and several pedestrian crosswalks to the parking area. On-site amenities include an enclosed building with a 5,000 square foot multipurpose space, a drop-off loop for paratransit riders, microtransit (Morrisville’s system will also connect here), and taxis, a pass sales booth, and a comfort station. The parking area will have a minimum of 50 parking spaces for passengers and employees with the option of growing to 150 spaces.

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. Connections to a proposed commuter rail station will be provided by a future commuter rail project.

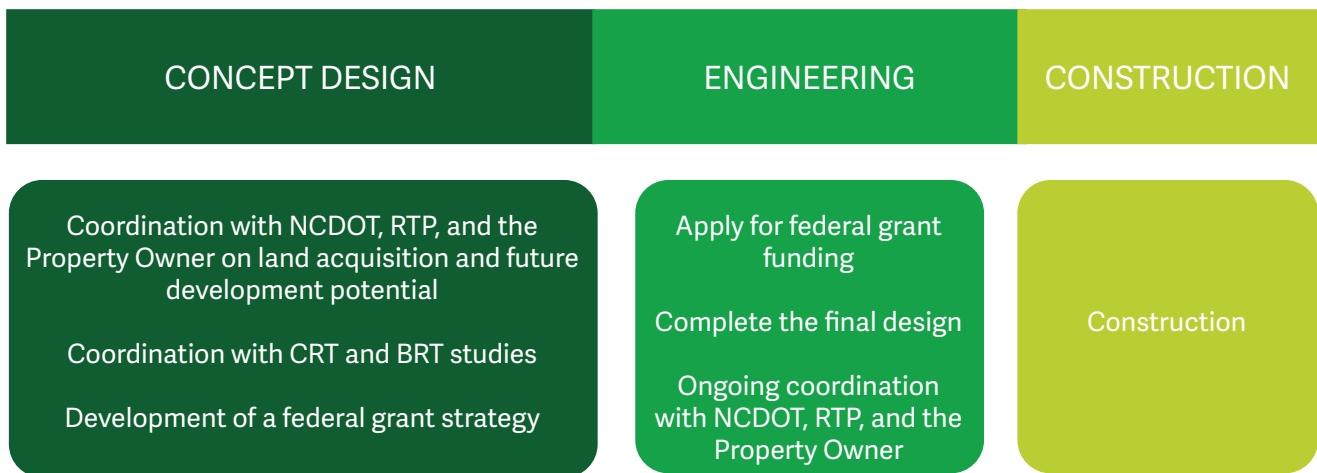
The cost estimate for the conceptual program ranges from \$25-30 million and will be refined as the conceptual program is finalized and engineering proceeds.



Figure 4 - Site Concept

Next Steps

A timeline for the next steps is shown here. 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.



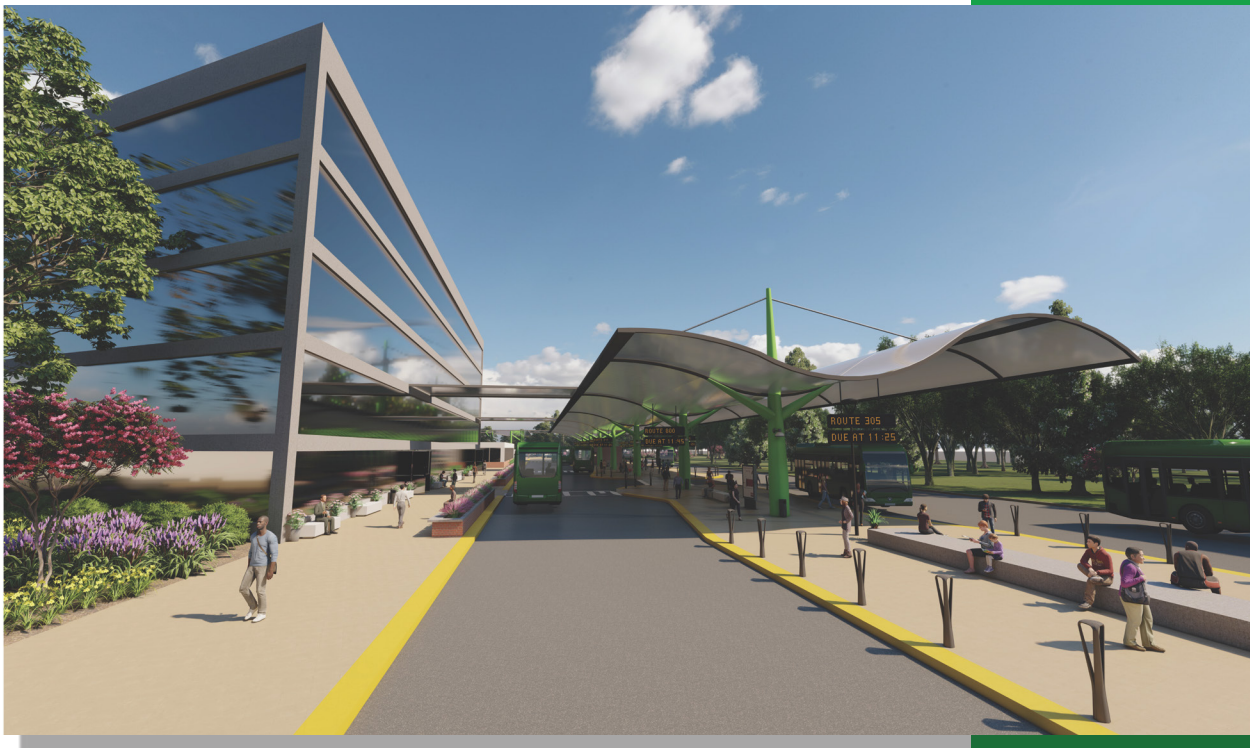


Figure 5 - Site Concept Renderings



