Board members present | Will Allen III, Michael Fox (left 2:37 p.m.), Brenda Howerton, Sig Hutchinson, Valerie Jordan (arr. 12:29 p.m., left 1:31 p.m.), Vivian Jones, Elaine O’Neal, Michael Parker, Jennifer Robinson, Stelfanie Williams (arr. 12:42 p.m., left 3:02 p.m.)

Board members absences | Corey Branch (excused), Renée Price

Chair Sig Hutchinson officially called the meeting to order at 12:01 p.m. A quorum was present.

I. Adoption of Agenda
Action: On motion by Jones and second by Allen the agenda was adopted. Upon vote by roll call, the motion was carried unanimously.

II. Opening
Chair Hutchinson welcomed participants to the meeting to hear an update on the Greater Triangle Commuter Rail project. He offered a special thanks and welcome to NCRR Board Chairman Bill Bell, President and CEO Carl Warren and other board members.

Chuck Lattuca offered appreciation to NCRR; NCDOT; the counties of Durham, Johnston and Wake; CAMPO and DCHC MPO for their work over the past 18 months on this study and for the efforts to educate Triangle residents, stakeholders and elected officials on the project.

Carl Warren thanked GoTriangle for the invitation to participate and offered NCRR’s enthusiasm about the potential and possibilities for commuter rail.

III. Orientation
Katharine Eggleston stated that GoTriangle staff and the consultant team will present an update on the Greater Triangle Commuter Rail project. She has offered thanks to the staff of the study partners for their support and collaboration. The presentation is attached and hereby made a part of these minutes.

Eggleston then provided an overview of the project and the Phase 1 feasibility study:
- North Carolina Railroad Company owns the 317-mile corridor.
- Class I freight rail provider Norfolk Southern operates and maintains the railroad through a long-term lease with NCRR.
- Amtrak operates four intercity passenger rail routes in the corridor, including the Carolinian and the Piedmont, which are sponsored by NCDOT.
- Added capacity in the NCRR corridor for commuter rail would require additional infrastructure, including added tracks.
• Projected ridership is an important criteria for qualifying for federal funding, which is critical for the Greater Triangle Commuter Rail project. Phase 1 of the feasibility study determined that the area between Durham and Garner or Durham and Clayton would be most likely to qualify for federal funding and this area was carried forward for this phase of more detailed feasibility study.

• Ridership is projected at 10,000 daily riders by 2040, with the service providing a faster trip between major destinations that the bus network is able to today and a trip that is time competitive with driving in many cases.

• The initial capital investment was estimated at $1.8-$2.1 billion, with operating costs of $29-$37 million annually.

• April 2022 is the target date for completion of the technical study. The modeling study being led by Norfolk Southern directly impacts the schedule and although those results are expected soon, they have not been received.

• The MOU allocated six months for deliberation to decide whether to move forward with the project based on the feasibility study results.

Eggleston asked the board for input following the presentation on this question: “Can regional boards decide whether and how to move forward with the project [including local cost shares] based on the information expected to be available this spring.” She added that additional effort will be required for answers to some questions:

• Norfolk Southern infrastructure requirements and cost estimate for an all-day service plan. Current modeling by Norfolk Southern is for the baseline service plan of 30 minute service in peaks with limited service midday and in the evenings.

• Decisions about vehicles and station accessibility approach.

• Whether the end point is Garner or Clayton in Johnston County.

• Signed railroad term sheets.

Eggleston added that due to the scale and complexity of the project, some information will know be known until a greater level of design is achieved during an implementation phase as opposed to a study phase. This information includes the third-party agreements, a greater certainty of project cost and schedule and the potential of FRA grants for complementary projects.

IV. Public Engagement

Liz Raskopf provided an update on public engagement efforts. She highlighted the establishment of a downtown Durham information hub and the canvassing of businesses to provide information to the community, with a focus on black and Hispanic-owned businesses. Staff has created an email group to receive information on the project, with over 2,612 names. A webinar conducted in November focused on proposed stations had 281 attendees with over 500 post-presentation views. Over 100 questions were asked during the webinar to which staff has responded. Staff continues to maintain and update the dedicated commuter rail project website and is active in online discourse about the project.
V. Railroad Agreements

Tom Henry advised that GoTriangle will need to complete a rigorous federal process satisfying federal requirements and expectations in order to successfully implement this project. In addition to demonstrating financial and technical capacity to carry out the project, federal law requires that GoTriangle also demonstrate legal capacity. This includes third party agreements with the other railroads allowing GoTriangle to construct, operate and maintain a passenger rail system on a long-term basis. Henry added that as this project is in an active railroad corridor, GoTriangle will have to navigate a variety of expectations already cemented in agreements between current users of the corridor and the owner.

Henry explained that GoTriangle is preparing term sheets as a basis for future MOUs with the railroads. The results of Norfolk Southern’s modeling study will help define operational and physical characteristics of the system that will be incorporated into the legal agreements. He shared a list of the numerous agreements that will be required for the project including specific agreements for planning, design and property; construction and operation.

Byron Smith noted that the liability and indemnification and insurance issues have been resolved. GoTriangle also will have to deal with CSX and Amtrak operations in portions of the corridor.

VI. Planning Study Status

STV consultant team project manager Monica Barrow presented the goals for the phase 2 feasibility study:

- **Refine the project concept** - Phase 1 identified station locations and assumed 8-2-8-2 train schedule [40 trains per day]. Phase 2 refined the schedule and provided that to Norfolk Southern for simulation. Considerable interest has been raised in a more robust service scenario for all-day service with half-hourly service in morning and afternoon peaks and hourly service at other times of day for a total of 44 daily trains. Barrow stated that another round of modeling by Norfolk Southern would be required. Refining the concept includes considerations of additional track; bridge widenings and replacements; modifications to at-grade crossings; vehicle storage and maintenance facility and the rolling stock [trains]. Additional GoTriangle must comply with the Americans with Disabilities Act [ADA] for accessibility.

- **Estimate benefits**
- **Update cost estimates and potential for FTA funding**
- **Document risks**

**Vehicle Accessibility**

Tim Potens, transportation planner with STV, discussed accessibility for folks who need assistance boarding. He stated that there are other considerations with accessibility such as enhancements for the sight and hearing impaired. He explained that in a shared use corridor with freight, intercity passenger trains and commuter rail trains there is a mix of train heights, widths and lengths. He said that results in gaps between the platform and the train [vertical gap - between the platform and train floor; horizontal gap - between the platform and train].
Federal regulations for accessibility are contained in the ADA:

- Commuter rail systems must provide accessible boarding to every car in a train.
- Commuter rail systems or stations where the track is used by passenger trains only must provide level boarding [no vertical nor horizontal gap between the platform and train and no intervention or assistance needed for boarding passengers].
- Commuter rail systems and stations where the track is shared with freight operations may achieve accessibility using level-entry boarding, car-borne lifts bridge plates or ramps, mini-high platforms or station-based lifts.

Potens said the NCRR/NS corridor does not permit high platforms on tracks shared with freight and low-level platforms are limited to 8 inches in height, which is very low and no rolling stock has a floor this low. These requirements mean that level boarding is not possible on shared tracks without constructing dedicated station tracks or using another method from the list above. He shared pictures and videos from other commuter rail systems to demonstrate these options. Potens said bridge plates, mini-high platforms and car-borne lifts are common in the industry and were the approach assumed in phase 1.

He said a more in-depth evaluation of dedicated tracks for accessibility was conducted in the Phase 2 study. It was determined to be physically feasible, with greater infrastructure impacts and property acquisitions to increase size of station area. The preliminary cost estimate for level boarding [dedicated tracks] is around $270 million, doubling the cost for stations in the corridor. Operationally, level boarding performs modestly better regarding delay to freight trains, but there are no anticipated time savings for commuter rail trains. Regarding rolling stock, diesel locomotives and diesel multiple units are compatible with level boarding or assisted boarding.

Potens said a comparison with peer commuter rail systems was conducted. Of 24 systems opened or constructed in the ADA was adopted, 14 operate locomotives pulling coaches and ten use diesel multiple units. The systems are evenly split between level and assisted boarding. Of those with assisted boarding, they typically operate in shared use corridors, with Class I railroads and higher levels of freight traffic. These systems also commonly use locomotives and coaches with mini-high platforms or car-borne lifts. The systems with level boarding typically operate in exclusive or low-traffic corridors controlled by the transit agency with diesel multiple unit trains serving platforms with level boarding. Potens added that level boarding would be unique in a shared corridor like the NCRR/NS corridor.

Potens stated that the Accessible Services Advisory Committee would be consulted and the discussion would continue with NCRR before a recommendation is made.

Allen asked about Norfolk Southern’s maintenance windows. Eggleston stated that will to be discussed actively. Monica Barrow added how mid-day work windows are modeled will influence what Norfolk Southern applies to alternate service scenarios that GoTriangle could ask them to model.

Chair Hutchinson called for a break from 1:25 -1:30 p.m. Jordan left during the break.
Corridor Screening
Patrick Livingston, STV engineer, discussed the corridor screening process to identify key engineering or constructability risks and determine areas that require extra attention to improve the project definition and reduce risk to the preliminary cost estimate [with contingencies] and implementation schedule. He added that no risk items were determined to potentially derail the project; however, some risk areas were noted for future study and mitigation. Raleigh Union Station was elevated to “high risk” status due to the complexity of the area, potential challenges to operational reliability and the West Street extension project. Four grade crossings were identified for potential attention due to proximity to proposed stations or suboptimal existing configuration: Plum Street in Durham, Rush and St. Mary’s streets in Raleigh and Yeager Road in Garner. Eight additional crossings have volumes or crash history that suggest potential for separation or closure. These are subject to study in the environmental phase and local input.

Cary Concepts
Livingston then discussed downtown Cary, one of two areas of specific focus, with the goals being:

- Add required track capacity
- Provide compatibility with plans for new multimodal facility
- Improve pedestrian/cyclist mobility
- Minimize impacts to roadways, traffic and historic structures
- Comply with Norfolk Southern, CSX and NCDOT requirements

Livingston said monthly meetings with the town of Cary were held since May 2020. Three initial concepts were discussed and led to the generation of two concepts that are moving out of this phase of study. One is a low-level platform option with no impacts to nearby historic structures and avoids a renegotiation of a railroad control point that previously took several years to negotiate. This cost for this concept is the same as the Phase 1 estimate for the Cary station. The other concept also avoids impacts to historic properties and renegotiation of the railroad control point; however, this concept has high-level platforms to accommodate level boarding with dedicated tracks. This concept is approximately $15 million more than the phase 1 estimate. He shared images of the area and visualizations of the concepts of Harrison Avenue.

Durham Concepts
Moriah Ellington reiterated the challenges in Durham from aged infrastructure, low clearance under bridges, the curvy nature of the track and the tight congested corridor. She added that the goals in Durham are:

- Add required track capacity
- Improve clearance under rail bridges
- Improve pedestrian/cyclist mobility
- Preserve connection between Durham Station and train station
- Minimize impacts to roadway, traffic and historic structures
- Comply with Norfolk Southern, CSX and NCDOT requirements
Six initial concepts were identified in Durham and stakeholder engagement with various interested parties, NCDOT and NCRR was conducted. Discussions led to the refining of these concepts and the addition of others, ultimately with two concepts having the best ability to meet the established goals with the fewest impacts – one with a low-level platform and the other a high-level platform. Ellington shared images of the area and visualizations of the concepts for Chapel Hill Street and Gregson at Duke Street.

Both concepts include more elements that were assumed in Phase 1 – raising existing and proposed tracks along with additional structural work. The low-level platform option is approximately $15 million more; the high-level platform, with additional tracks, is approximately $35 million more.

Monica Barrow stated the planning study will conclude by using the Norfolk Southern modeling results to inform additional infrastructure requirements that may not have been assumed, which will modify the capital cost. She reiterated that capital cost, along with ridership, is a key driver of the potential for federal funding.

VII. Project metrics
Jay Heikes recapped two opportunity analysis reports previously presented by TJCOG and information on Tri-Rail in south Florida, a peer commuter rail system.

**Affordable Housing**
- 27% of the region's permanent or legally binding affordable housing is located within a half mile of the proposed rail corridor, which is 4% of the region's land area.
- The corridor presents significant opportunities for local governments to increase permanent affordable housing proximate to station areas on land owned by public agencies and institutional partners.
- In Durham, a partnership between the city, county and Durham housing authority will create more than 1,800 new units of affordable housing in and around town and proximate to frequent bus service and future potential rail stations.
- Households that spend more than 45% of their combined income on housing, utilities and transportation are considered cost-burdened. Over half the region's residents are considered cost-burdened.

**Travel Market Analysis**
- Eight of the ten largest job hubs in the region are located along the proposed rail line - more than 280,000 today, accounting for more than 30% of the region's total employment.
- Nearly 70,000 residents live in transportation disadvantaged communities along the corridor. Fast and reliable rail service has the potential to open up more of our region to these transportation disadvantaged communities increasing their access to opportunity.
- The Greater Triangle Commuter Rail project would provide a choice for cost burdened families to save money by driving less.
**Peer System Tri-Rail**
Tri-Rail is similar to the proposed Greater Triangle Commuter Rail project as it spans three counties, is located in a fast-growing and diverse region, serving a variety of destinations with strong connections to local transit, and is not focused just on bringing workers to single downtown destination but rather serves multiple destinations along its 73 mile corridor.

Tri-Rail began in 1989. Today the service runs 50 weekday trains with 30 on the weekends and holidays. It provides peak service every 20-30 minutes and 60 minutes during midday and the evening. Prior to the pandemic there were approximately 15,000 weekday trips.

Initially the service was temporary, as mitigation for a major construction project on I-95 and focused on peak times. Initial demographics show ridership was predominantly white, non-Hispanic. After the service became permanent, the route was extended and significant infrastructure investment was made. More trains were added, decreasing headways and increasing midday and evening service. Following these improvements, demographics of the system are now more representative of the region.

**Economic Impact**
Kyle Vangel of HR&A shared results of the economic impact study for the Greater Triangle Commuter Rail [GTCR] project:

- GCR will provide a 2.4 times return on the initial capital investment, with $2.1 billion in federal and local investment generating a $5 billion increase in gross regional product over the first 20 years of operations.
- The Commuter Rail will help develop and sustain a region that thrives economically and ecologically, by enhancing the quality of life of commuters, fostering better connectivity between workers and employers, and encouraging compact development patterns that are economically and environmentally resilient.
- Workers would experience increased personal incomes as a result of increased economic activity in the region, with cumulative growth of nearly $3.7 billion by 2050 – equating to $2,050 in additional income per employee.
- Commuter rail is expected to serve over 100,000 riders every weekday, saving 4,186 hours daily at a value of $12.25 per hour saved or $12.9 million annually.

Fox left.

**VIII. Cost-Sharing Discussions**
Steve Schlossberg recapped the cost assumptions for the Greater Triangle Commuter Rail project:

- Total project cost is consistent with the phase 1 estimate.
- Construction is anticipated to start in FY2026 and be complete in FY2030.
- FTA would contribute 50% of the cost through Full Funding Grant Agreement.
- Federally-backed TIFIA loan would fund 30% of the cost, to be repaid over 35 years from Wake and Durham transit plan funds.
- Cash and conventional debt from the Wake and Durham transit plans would provide the remaining 20% of the cost.
• Operations will begin in 2030 with a first year cost projected at $41 million, which are expected to grow at 2.5% per year.
• Funding for operations and maintenance will be from a mix of local funds, farebox revenues and federal apportionment.
• Debt service expenditures will begin in year two of operations and continue for 35 years.

Schlossberg pointed out the project currently has a funding gap, with Wake County committed to 66.7% and Durham 20% of the non-federal share. The 13.3% difference equates to approximately $130 million. Discussions with the counties continue with various solutions being considered for raising the additional funds.

IX. Wrap-up / Next Steps
Katharine Eggleston asked if the Board has the information it needs, based on what was presented today and what is expected to be delivered over the next several months, to make a decision on the project.

X. Discussion
Parker asked what the Board will be asked to commit to when making a decision to proceed with the project. Eggleston stated that implementation scenarios are being prepared that will show the schedule and associated costs for each phase.

Williams left.

Hutchinson thanked staff and partners from NCRR who participated today.

After the meeting staff followed up on several questions posted in the meeting chat

XI. Adjournment
Action: Chair Hutchinson adjourned the meeting at 3:08 p.m.

Prepared by:

Michelle C. Dawson, CMC
Clerk to the Board