Triangle Rail Study Comment Resolution Matrix

Date:	6/30/2025	
Agency	**Comment**	**HDR Team Response Notes**
CAMPO	In the data dictionary section, the Attractiveness to State Criteria is not defined; I'd also be interested in knowing how/whether there will be identified triggers for when that matrix needs to or should be updated. For instance, if the SPOT criteria changed, presumably the attractiveness to state criteria would change – it would be helpful to understand their analysis of what made them judge high, medium or low in that regard in the first place so that it can be updated in a way consistent with original thought process.	Updated Data Dictionary to address state criteria in greater detail
CAMPO	I'm also expecting to still see the list of "next steps" or recommended future studies for this work as well. Is that still under development?	Future studies memo completed
Town of Apex	can we update the cost in the spreadsheet for the Apex station to the Town's cost estimate from a study conducted last year at $13.455 million instead of the high level cost estimate (link to their feasibility study: 9d742e4a-4fc6-4ee4-8eda-1f8b3e4dfc0d).	The unit cost for new stations in this study accounts for soft costs such as design fees, administrative/management fees, permits, and other contigencies. This estimate also anticipates some trackwork that does not appear to be in the Mobility Hub estimate. The costs in the Mobility hub estimate include bicycle, pedestrian and public realm enhancements that are not part of the Triangle Rail study estimate. Both studies are valid and appear to be measuring some different things and some that are the same (such as the platform).
Town of Apex	could the spreadsheet have a bit more of an explanation on what the projects listed are, i.e. explain what a siding is, what a yard expansion is, what a siding to main track conversion is, etc.	Added 'Glossary of Railroad Terms' tab Yard expansion has been updated to Yard modification. The Wake Forest to Raleigh Yard FSP design does not increase capacity of the NCDOT Capital Yard. It does makes changes to its routing to the north.
CAMPO	The last item Apex wanted to highlight was the Veridea Spur from Downtown Apex to the proposed Veridea development.	The project team believes that the Veridea Spur is a compelling idea, but is not a good fit for this report. FRA's approach to passenger rail buildout that we've discussed this year centers on markets between MSAs and metro areas. Veridea's travel markets are very likely to be within Wake County and other parts of the Triangle region, not the Triad or Wilmington. Apex is far ahead of where federal policy is in terms of how well the Town has been integrating development and rail planning at Veridea. There will need to be evolution in Federal policy to increase the chance of FRA funding programs investing in a connection to Veridea. As Veridea builds out, this question should be revisited over time, especially if federal policy changes.
NCDOT Rail	Decision Tree: Category 1 (grade separations): I suggest adding that they also increase fluidity/capacity and increase reliability.	addressed in local decision tree document
NCDOT Rail	Decision Tree: Category 2 (stations): I suggest adding station tracks to this category as well. They are often as or more important.	addressed in local decision tree document
NCDOT Rail	Decision Tree: Category 4 (interlocking/sidings): The discussion about sidings vs. interlocking is extremely case by case and not absolute as presented.	addressed in local decision tree document

NCDOT Rail	Decision Tree: Category 6 (Cary to Raleigh): I think this is only true when you include the stations and all of their approaches in the critical segment as well. This section is already double tracked; single tracked sections immediately outside of the double tracked section severely constrain the timing and location of train meets--requiring them to be in the segment. For instance, a 3rd main near I-40 (Raleigh/Cary border) isn't as helpful to the meeting of Raleigh-Durham trains as full double tracking from Fetner through Cary to Clegg. The same is true in Raleigh. Trains can not simultaneously enter and exit the existing Raleigh station tracks. Also note that the S-line transaction will not involve the station itself or the S-Line on the NCRR. The southern extent is further north.	addressed in local decision tree document
NCDOT Rail	Decisionmaking Framework Considerations: Please use NC-Line, not H-Line. It was renamed some years ago.	addressed
NCDOT Rail	Decisionmaking Framework Considerations: Corridors that are not in CID are at least 2 years behind. How much depends on a lot that is beyond our control: FRA actions, chance of future success, etc.	addressed
NCDOT Rail	Project Matrix: We will not comment on project cost estimates without a lot more time to investigate and involve the rest of the division.	addressed in data dictionary
NCDOT Rail	Project Matrix: The projects should include high level platforms and separation of freight and passenger tracks in stations on the SE Corridor (as existing at Raleigh Union Station and in the track/platform for Charlotte Gateway). These are key for travel time, capacity, and reliability, in addition to accessibility. Other lines are TBD pending completion of service development plans.	capital costs were increased in the Project Matrix to account for high platform implementation on the SE Corridor
NCDOT Rail	Project Matrix: Full double track from Mebane to Raleigh should be a sketch ultimate goal to achieve the goals to the corridors that overlap this section (and to a lesser extent, corridors that intersection it).	addressed in decisionmaking framework doc
NCDOT Rail	Project Matrix: If/when additional track Raleigh-Cary is appropriate, we may want to consider a shorter passenger train crossover, like the Franconia Bypass project by VPRA, rather than longer sections of 3rd track with conflicting moves in level junctions. This idea has not been evaluated, but may be more effective in achieving the goals. This would be especially relevant for service patterns that cross from north to south or vis versa (e.g. Sanford to Franklinton).	addressed in local decision tree document
NCDOT Rail	Project Matrix: Sanford-Franklinton is missing construction of the R2R project North of Wake Forest.	addressed in the project matrix

NCDOT Rail	Grammar-based editing/comments: - reword first sentence under Principle 2, missing "in" and might want to use full titles of the rail-road companies upon first mention. - reword second sentence from "... and the views of ... may vary by ...." to "... and their respective views of ... may vary." - under Principle 3, ---- reword: "... to extend the Piedmont to Wake Forest..." to "... to extend the Piedmont service to Wake Forest ..." ---- reword: "... Plans or rail projects ..." to "... Plans of rail projects ..." - reword first sentence under Potential Cost-Sharing Models - it is awkward, "sharing cost-county costs". Content-based editing/comments: - under Principle 2, it is not the "H-line" but rather the "NC-Line" (it was renamed a few years ago). - consider mentioning that RJ Corman leases Fuquay-Varina to Raleigh from NS and this is the NS-Line; consider mentioning it is the VF-Line from Fuquay-Varina to Fayetteville. - should there be any mention of how dispatchers prioritize trains or is this too in the weeds? - clean up the terminology under Principle 4. ---- "... several criteria for rail projects, passenger rail projects ..." --> "... several Specific Improve-ment Types (SIT codes) for rail projects, intercity passenger rail-focused projects ..." ---- "Statewide" --> "Statewide Mobility", "Regional" --> "Regional Impact", "Division" --> "Divi-sion Needs" ---- "The current SPOT process ..." --> "The current SPOT Rail Mode scoring methodology ..." ---- "... investing in EXISTING passenger rail service over developing new track and adding new service." --> "... investing in EXISTING intercity passenger rail corridors over developing new track and services outside of current routes." ---- "Those grade separations that also close other at-grade crossings ..." --> "Those grade separa-tions that close two or more at-grade crossings ..." ---- "Stations within 16 miles ..." --> "Intercity passenger stations within 16 miles ..." ---- "... models than add ridership." --> "... models than primarily add new ridership." Decision Tree editing/comments:	All text edits were addressed. The project team agrees that dispatching implications reflect a level of detail beyond the scope of this study.
Durham County	The spreadsheet is good – but kind of overwhelming! It is hard to synthesize all of the in-formation into conclusions about priority. Could there be a filtering, scoring, or ranking sys-tem that could be added to help?	Added two worksheets to project matrix workbook sorting projects by Fed Attractiveness in one sheet and Fed Attractiveness in the other.
Durham County	Is there a map that shows the mileposts for easier reference? Here is the DOT rail map that includes MP information: https://ncdot.maps.arcgis.com/apps/mapviewer/index.html?webmap=352556db969240c99a06a179f56b8403	added to project Matrix
Durham County	Is there already an idea for the Regional Heavy Maintenance Yard at MP 47.1 – which must be in west Durham/east Orange County?	see below
Durham County	I see now that the Maintenance Facility would be in Orange County near Mt. Hermon Church Road. Is that location strategic? In other words, does it mean that there could be trains stored there overnight that then go east from Durham to Raleigh at an earlier hour than the current Piedmont service? If so, sounds great. I would like to see some description of the benefits of the location.	The engineering team's main criteria for finding a location for this facility (in a high-level scan like this) were: significant acreage, relatively central to reduce non-revenue train movements, and it assumed that the NCDOT Rail yard could take on some capacity. Since west of Duke Forest had a lot of room, on the NCRR line, and opposite side of the region from Raleigh, the team identified this potential location. The GTCR study did not look in Orange County. This site would need more due diligence to confirm if it was potentially viable.

Durham County	Not being a railroad engineer, I also am eager to learn more about what some of these po-tential projects may specifically include. “Track & Systems - Bypass Track and Interlocking modifications at D&S junction” is a lot of money ($170M) and so it seems like it must in-clude a significant amount of work or span over a more significant distance than just at the junction (but I don’t know and maybe I just don’t really have a good concept of the project!)	There are a lot of high-cost items associated with making adjustments to the control point. Special trackwork (turnouts/crossovers), signals, signal houses are some of them . All of the rough order of magnitude costs also include both the hard and soft costs (not just construction) associated with the project.
Durham County	Is the “Attractiveness to Fed Criteria” potentially going to change based on new administra-tion priorities? Or are these criteria typically consistent from administration to administra-tion?	Addressed in Principle 5 of the Decision-making Framework document
Durham County	I don’t see any RCE eligible potential projects in the table. Are there any? Or are the embedded in other projects?	There are no RCE grade crossings in the spreadsheet as the permutations for the outcomes and their potential scores are theoretically infinite. Generally, freight railroads are most likely to agree to a grade separation in one location if they also get closures in two others. It's possible that the closures could be on a different rail track in the freight company's in-state rail network, or 50 to 100 miles in another direction on the NC Line. The SPOT score or RCE exposure score for any grade separation would depend not only on the crossing being grade separated and its cost, but also the exposure scores of the other closings that were agreed to.
Durham County	The Local Project Prioritization Decision Tree says this: CATEGORY 1: GRADE CROSSING ELIMINATIONS Whether by introducing a new grade separation, or simply closing an existing grade crossing, each closure moves the railroad closer to being a sealed corridor which improves safety for rail and road stakeholders alike. When there are multiple grade crossings along the same rail line, the at-grade cross-ings with the greatest car traffic offer the greatest benefits, as the daily rail traffic through each at-grade crossing may be identical. I took this to mean that grade crossing eliminations are a high priority and a “low hanging fruit” that should be pursued. I am surprised to hear that none are identified. There are a lot so perhaps it is overwhelming to list all of them. Perhaps critical ones or the ones “with the greatest car traffic” or “greatest benefits” should be listed?	see above