The following are responses to Council questions raised in December 2018, both prior to the 12/05/2018 Business Meeting agenda that the item originally appeared on (before being postponed to 01/16/2019), as well as the Council orientation sessions attended by some Council Members on 12/18/2018 and 12/19/2018.

Council Member Question: Can you provide an update on funding and local match for the project?

The current cost estimates for the North-South Bus Rapid Transit project are \$123.2M - \$134.7 (YOE). The cost estimates will be better refined and updated as the project moves through Environmental and 30% Design over the next 12-15 months (FTA Project Development) and we will also determine if there is a reasonable plan for scaling the project.

The current financial plan assumes 80% (\$98.5M - \$100M) of project funding to come through federal sources (e.g. FTA Small Starts) and 20% (\$24.6M - \$34.1M) from non-federal sources. The FTA initially indicated that the project would need to demonstrate a commitment of at least half the non-federal share (\$12.3M - \$17M) by November 2019 to stay in project Development and to be considered for moving into Project Design. At this time \$6.5M of non-federal funds are committed to the project through Orange County Transit Plan, leaving a gap of \$5.8M - \$10.5M. There does not appear to be additional capacity within the Orange County Transit Plan over the next several years.

After the project was removed from the most recent State Strategic Transportation Investment (STI) process by the DCHC-MPO, to help ensure maximum scoring and funding for the DOLRT project, a working group of DCHC-MPO, Town of Chapel Hill/Chapel Hill Transit and GoTriangle staff was developed to explore non-federal funding sources. Unfortunately, non-federal funding options outside of STI are very limited - most MPO or State programs are funded with federal resources and are not able to be used as non-federal match. While the working group believes that a share of the non-federal funding could potentially come from naming rights and fundraising and local road improvements (e.g. Eubanks Road redevelopment), these options need to be explored further and are not likely viable by November 2019.

Based on the findings of the working group and the current constraints of the Orange County Transit Plan, staff is recommending that we explore with FTA the possibility of extending the November 2019 deadline in order for the project to be considered in the next STI (July 2019) process (note that this is a competitive process and funding is not guaranteed), while continuing to work on other non-federal funding options.

Council Member Question: Which neighborhoods, local businesses and stakeholders were represented at these events on Oct. 22, 23, and Nov. 7?

Staff response: In our public outreach sessions, we did not track specifically business representatives vs. citizens, however, we held the meetings in different locations across the project corridor to encourage folks from different neighborhoods, business/property owners, existing users of NS route, auto drivers along Martin Luther King Jr. Boulevard, bike and pedestrian users of the corridor to attend, additionally the Chamber and Downtown Partnership are involved on the projects guiding Committees. As we move into 30% design, we will continue to provide public input opportunities and are willing to meet with any neighborhood and/or interest group.

Council Member Question: Just to confirm but would the CHT complete 30% engineering and environmental review of the revised LPA by end of July 2019?

Staff Response: Yes, assuming a January 2019 adoption of the revised LPA.

Council Member Question: What would the transition between, say, the portions that are "dedicated Center Lane - Construct" and the portions that are "dedicated curb lane - Convert" in the third diagram to the right on p. 73 of the presentation?

Staff Response: The transition from dedicated curb lane to mixed traffic will be done with traffic light "jump" where applicable to get the bus ahead of traffic. In other locations the bus will merge with mixed traffic.

Council Member Question: Following up on the Committees' recommendations referenced on p. 79 of packet, how much of a ridership gain would there be with an extension to Durham Technical Community College? How much costs in capital or operating and maintenance would that kind of extension require?

Staff response: The study showed expected ridership to range from 100-150 new customers per day, which could be better served by improvements to local/regional express routes currently operating in the area. The capital cost ranged from \$1.47M to \$13.8M, with annual operating and maintenance costs over the LPA ranging from \$250k – to \$2.24M depending on which level of BRT service was provided. The low ridership and high cost per rider and mile would also likely be detrimental to the project in the FTA scoring process. The final Technical Memorandum: Assessing the Feasibility of Extending North-South BRT Service to Hillsborough is attached the memo for the item.

Council Member Question: Regarding the "Dedicated Curb Lane Construct," what kind of impacts might there be on property owners whose property run along portions of the road with this dedicated lane?

Staff response: In general, the road and multi-use path will get closer to the house with the road being widened and the multi-use path wider than the existing 5' sidewalk (if there is s/w in front of the house).

- From North St to Homestead Rd, the widening is all to the outside, so the curb will move out 4'-8' (as much as 12' near intersections).
- If there is sidewalk in front of the house today, that would get replaced with the multiuse path, which is 5'-8' wider than the sidewalk, so that back edge will get 10'-16' closer to a house/building.

- With the back edge of the multi-use path being pushed out, it will either be above or below the existing ground, so will slope up or down at 3:1 (which can be mowed) or potentially a short retaining wall added to eliminate or reduce impacts.
- Driveways would be tied back to the roadway using the same material as the existing driveway (prop. concrete driveway for existing concrete driveway, gravel for gravel drive, etc.)
- Existing trees that would be in the proposed ROW or easement would be removed, but are paid for in the ROW settlement. For a tree in the "front yard" that is inside the existing ROW and additional ROW is needed, the tree may need to be removed, but they are not paid for the tree because is in the existing ROW.
- There are properties along the corridor that do not have curb and gutter or sidewalk that would get both. This could eliminate possible drainage issues and ditches in the front yard.

Council Member Question: How wide are travel lanes right now along the NS route? Does the width vary in different stretches of the route?

Staff response: Travel lanes and turn lanes are generally 12' wide except for the section of Columbia St thru downtown and campus where they are as narrow as 10'. The outside lanes on MLK Jr. Blvd between North St and the YMCA are slightly wider because the 2' gutter was paved over to provide better accommodations for bikes (though the Committees did not consider this an existing bike facility). There is little to no difference in traffic operations if the lane is 11' or 12' wide. It is beneficial to have outside lanes a little wider to help vehicles turning right off of a road (a benefit to the wider curbside guideway)

Council Member Question: Would intersection improvements for safety referred to on p. 87 of the packet include timed bike signals for bicyclists and pedestrians to allow them to cross first?

Staff response: Yes

Council Member Question: Just confirming but does Chapel Hill right now only have one green conflict pavement marking (at Rosemary Street)? Is there any sense of how often that one is used by cyclists?

Staff response: Yes, we currently do not track usage of that, we will follow up with planning and engineering to see if it can be done in the future.

Council Member Question: What kind of particular feedback have you been getting from the key stakeholders, neighborhoods, local businesses and the University?

Staff Response: From the public input sessions held in 2016 to most recent, we have had consistent support for the project and many ask when will the service begin and will it have Saturday/Sunday service. We recently have received questions regarding entering/exiting neighborhoods and businesses along the corridor. Questions regarding station lights having a negative impact on residences.

Council Member Question: When does the FTA become involved?

Staff Response: Anytime federal funds may be used. We are currently in FTA's Project Development Phase, so we are following guidance provided by FTA.

Council Member Question: What is the expected multiuse path width and can you provide examples of similar paths?

Staff Response: Our plans are currently to have 12 feet of path on both sides of the road, however there may be points when it will be narrower due to right-of-way impacts. For reference, the Bolin Creek Trail is 10 feet wide. The following are some examples of multiuse paths – these are examples only and not design ideas for the North South BRT project.



Figure 1.5 – Artist's impression of Rapid Transit central running within South Bristol.





Council Member Question: What are the personal property impacts?

Staff Response: Although we anticipate little to no impacts to personal property, we will not have that information available until we are through 30% design.

Council Member Question: What is the number of passenger car trips that will be removed from the corridor as a result of BRT?

Staff Response: Our interests in this project are to increase mobility in the corridor among all modes, particularly for transit, bicycle and pedestrians. We currently have around 4,500 daily rides in the corridor with an anticipated 8,500 daily rides when BRT opens. In the absence of BRT (or high levels of transit) we anticipate that many of these additional trips would have been potentially taken in passenger cars rather than public transportation and would require higher levels of parking on campus/downtown.

Arguments for Center Running Guideway:

- It eliminates conflicts with right-turning vehicles and bicycles
- generally gives exclusive signal phasing for transit vehicles
- Break up wide streets in a way that can improve pedestrian crossings.
- Fewer conflicts with parking, stopping, and turning vehicles.
- They are preferable to curbside bus lanes on streets with high-turnover parking and heavy right-turn volumes
- Capacity, reliability, and performance of curbside busways can be hampered by vehicles obstructing the right lane, such as right-turning vehicles, stopped taxis and rideshare (e.g.

Uber/Lyft) vehicles, delivery trucks, garbage collectors, and mail trucks. Median busways on the other hand, are only affected by left-turning vehicles