PROJECT UPDATE

NORTH BUS RAPID TRANSIT

June 14, 2023

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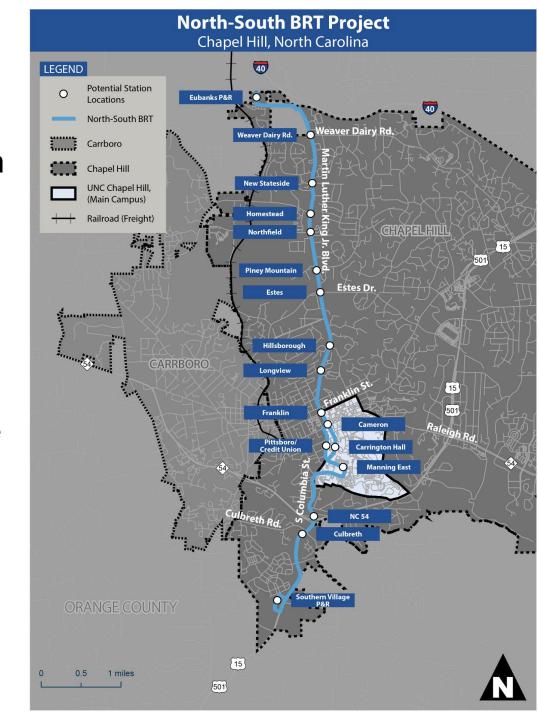
AGENDA

- Summary
- Project Overview & Timeline
- Updated Cost Estimate
- Options Evaluated
- Staff Recommendation & Next Steps



SUMMARY

- Detailed NSBRT cost estimates last calculated in 2021
- Significant and unanticipated inflation and cost increases have impacted project funding assumptions
- Staff have identified options reducing costs while maintaining the project's benefits, viability, and schedule
- This is an informational update describing that process and staff's next steps



NORTH-SOUTH BUS RAPID TRANSIT (NSBRT)

- 8.2 total miles including ~ 6 miles of curb-running lanes exclusively for transit
- Eubanks Road Park & Ride to Southern Village Park & Ride
- 14 high-capacity BRT buses arriving every 7minutes at peak
- World class stations with cutting edge amenities
- Multiuse path connecting to Everywhere-to-Everywhere greenway network
- Faster, more reliable transit connections to local and regional employment centers

PROJECT TIMELINE



WHAT DRIVES OVERALL PROJECT COST?

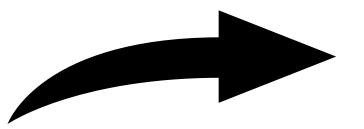
Highly sensitive to inflation and cost increases

	% of 2023 Cost *
Construction	<mark>50%</mark>
Right of Way	13%
Vehicles	15%
Professional Services	14%
Contingency	8%**
Total	100%
* of base year total project cost	

- Construction-related expenditures currently account for about 50% of estimated project cost
- FTA requires capital projects to include a very large contingency allocation (33% of the project's base year cost)

WHAT'S DRIVING INCREASES?

	Change from 2021	% of Increase
Inflation	+\$28.8M	<mark>68%</mark>
Increased NCDOT bid prices (i.e., roadway drainage)	+\$5M	11.7%
Vehicles (all-electric fleet)	+\$3.8M	8.9%
(2) New Longview Stations	+\$2.8M	6.8%
Misc.	+\$1.9M	4.6%
TOTAL INCREASE	\$42,487,052	<mark>100%</mark>



Estimated Inflation Rate				
	2019	2023		
2019	3.10%	1.80%		
2020	3.10%	2.10%		
<mark>2021</mark>	<mark>3.10%</mark>	<mark>8.00%</mark>		
<mark>2022</mark>	<mark>3.10%</mark>	<mark>6.00%</mark>		
<mark>2023</mark>	<mark>3.10%</mark>	<mark>5.00%</mark>		
<mark>2024</mark>	<mark>3.10%</mark>	<mark>4.00%</mark>		
2025	3.10%	3.50%		
2026	3.10%	3.50%		
2027	3.10%	3.50%		
2028	3.10%	3.50%		
2029	3.10%	3.50%		

- **INFLATION** accounts for 68% of the cost increase (\$28.8 million)
- INCREASED COST OF CONSTRUCTION, LABOR, AND MATERIALS in all categories
- **TIME** 2 years added to project timeline (moved launch year from 2025 (in 2021) to 2029 (in 2023))
- **VEHICLES** assumed launching with an all-electric fleet
- STATIONS added pair at Longview Street serving

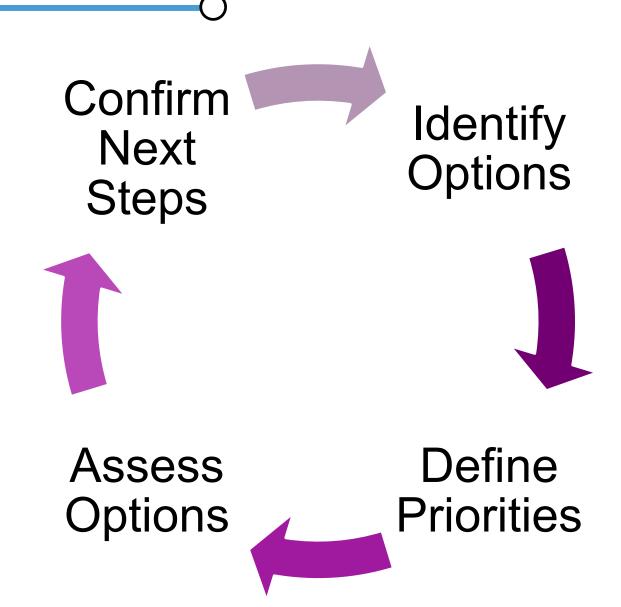
UPDATED PROJECT COST ASSUMPTIONS

	2021	2023
Total Project Cost*	\$155M	\$197M
Anticipated Service Launch Date	2025	2029
Federal Transit Administration (FTA) Small Starts Grant (Assumed "Federal Share")	\$124M (80% of total cost)	\$150M (Maximum allowed)
Required Non-federal Share (Assumed "Local Match")	\$31M	\$47M
<u>Committed</u> Non-Federal Share (County Transit Plan + Transit Partners contribution (estimated))	\$31.1 (\$29.1M + \$2M)	\$31.1 (\$29.1M + \$2M)
Non-federal (Local) Funding Gap	\$0	\$16.6M
* At year of expenditure (YOE), 2029		

WHAT DOES THIS MEAN FOR NSBRT?

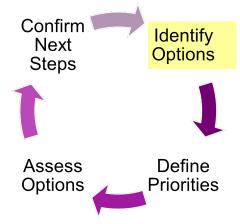
- Cost increases have created a \$16.6 million gap in non-federal (local) funding
- Does not impact August 2023 request for updated FTA Project Rating (requires 50% (\$23.5M based on 2023 cost estimates) of non-federal (local) revenue to be committed;
 NSBRT currently has \$31.1M committed)
- Could impact planned 2024 request for FTA Small Starts Grant Agreement which requires commitment of 100% (\$47M, using 2023 cost estimates) of non-federal (local) revenue
- NCDOT funding may cover cost increases, but availability/amounts will not be confirmed until early 2024; staff are currently coordinating with local and regional partners on state NSBRT funding requests (submitted in September 2023)
- Transit staff have identified immediate next steps to reduce costs and maintain project benefits, viability, and schedule

PROCESS



PROCESS: IDENTIFY OPTIONS

Staff considered three approaches to manage cost increases prior to submitting an FTA grant request in 2024:









EXAMPLES:

- Transit vehicles (type, number)
- Multiuse path (MUP) (scope, specifications)
- Stations (number, amenities, design)
- Corridor guideway design (number of lanes, type of lanes)

EXAMPLES

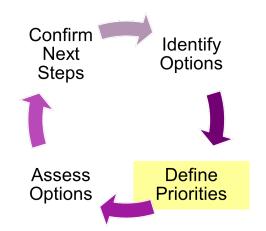
- Sponsorship (BRT naming rights, station sponsorship)
- **Debt financing** (commercial or inter-county loan)
- Identify additional non-federal funding:
 - State
 - Local (Transit Partners)
 - Private

EXAMPLES:

- Delay requesting FTA grant agreement until additional funding can be identified
- Pause project indefinitely until additional funding is identified, or costs descrease

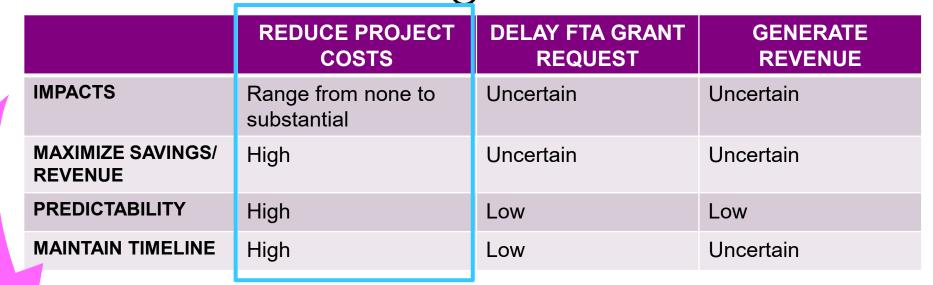
PROCESS: DEFINE PRIORITIES

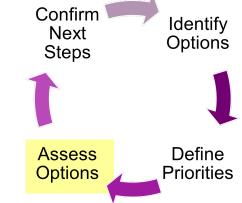
Staff prioritized options and strategies:



- Minimizing negative impacts to users, operations, and project viability
- Maximizing cost savings and/or revenue generation
- Resulting in predictable outcomes (versus uncertain outcomes)
- Maintaining or reducing the project's timeline
- Leaving opportunities to revisit, if additional resources are identified

PROCESS: ASSESS OPTIONS





	IMPACT METRICS				
	PROJECT RATING	POTENTIAL SAVINGS	OPERATIONS	ENVIRONMENTAL REVIEW	USER EXPERIENCE
Vehicles (Launch with diesel buses instead of allelectric fleet)	Minimal	\$8-9M	Minimal	None	Minimal
Multiuse path (MUP) One side of MLK only; complete sidewalk network on other side	None	\$8-12M	None	Minimal	Minimal
Stations (Remove 2 stations at Longview St.)	None*	\$2.5-3.5M	None	Minimal	Moderate
Corridor guideway design (Operate BRT in mixed traffic south of Culbreth/ Mt. Carmel Church)	Substantial	\$7-10M	Substantial	None	Substantial

^{*} Not included in 2019 Project Rating Request

NEXT STEPS

Confirm
Next
Steps

Identify
Options

I. CONTINUE SEEKING ADDITIONAL NON-FEDERAL FUNDING: In addition to cost-saving actions, staff will continue investigating and pursuing revenue-generating mechanisms, including NCDOT SPOT 7.0 funding, sponsorships, local tax levies, and/or fees



2. REDUCE PROJECT COSTS TO MAINTAIN PROJECT DEVELOPMENT TIMELINE

- i. Revise vehicle assumptions: Launch NSBRT with diesel buses
- ii. Adjust scope of multiuse path (MUP): Plan for MUP on one side of MLK (side TBD, based on ROW and other considerations) and complete the sidewalk network on other side; strengthen greenway connections and improve pedestrian connections along and across MLK

3. RESTORE PROJECT ELEMENTS WHEN FEASIBLE

- i. Restore electric fleet if/when additional local funding is committed (i.e., state SPOT 7.0) and/or replace diesel vehicles with electric during normal replacement cycle
- ii. Restore bidirectional MUP if additional local funding is committed or by pursuing alternative sources

	IMPACT METRICS				
	PROJECT RATING	POTENTIAL SAVINGS	OPERATIONS	ENV. REVIEW	USER EXPERIENCE
Revise BRT Vehicles	Minimal	\$8-9M	Minimal	None	Minimal
Adjust scope of multiuse path (MUP)	None	\$8-12M	None	Minimal	Minimal

RECAP | NEXT STEPS

- Significant and unanticipated inflation and cost increases have impacted project funding assumptions since they were last estimated in 2021
- Staff have identified and assessed options reducing costs while maintaining the project's benefits, viability, and schedule
- This informational update describes the decision-making process and next steps, prior to Town Council's summer break

BALANCE SHEET

	COST	EST. SAVINGS
Total Project Cost*	\$197M	
FTA Small Starts Grant (maximum request)	(\$150M)	
Committed Non-Federal (Local) Share (County Transit Tax + est. Transit Partners contribution)	(\$31.1M)	
Revise BRT Vehicles		(\$8-9M)
Rescope multiuse path (MUP)		(\$8-12M)
BALANCE	\$16.6M	(\$16-21M)

^{*} Year of Expenditure (YOE), 2029







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