Peninsula BRT Categorical Exclusion (CE)

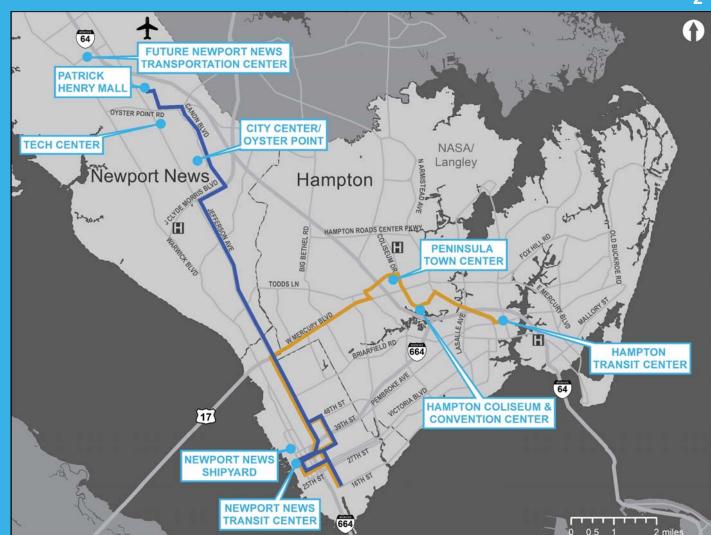


February 2021
Locally Preferred Alternative Discussion



Peninsula BRT CE

- Purpose:
 - Define a locally preferred alternative (LPA)
 - Obtain National Environmental Policy Act (NEPA) clearance and prepare the project for entrance into FTA Project Development phase
 - Detailed traffic impacts analysis
 - Engage the public and stakeholders to build excitement and support
 - Refine design and costs



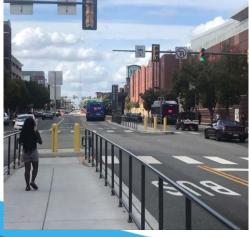


What is BRT?











What makes BRT Rapid?

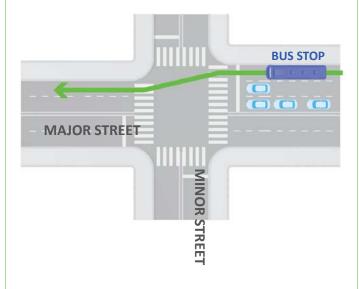
Dedicated Transit Lanes





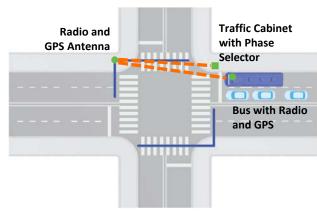
Queue Jumps

Bus bypass lane and special signal phase to allow buses to jump ahead of queued traffic



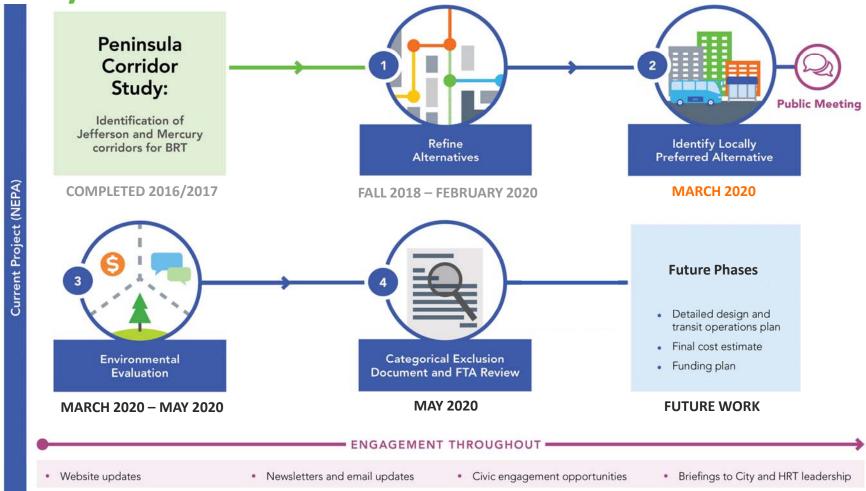
Transit Signal Priority (TSP)

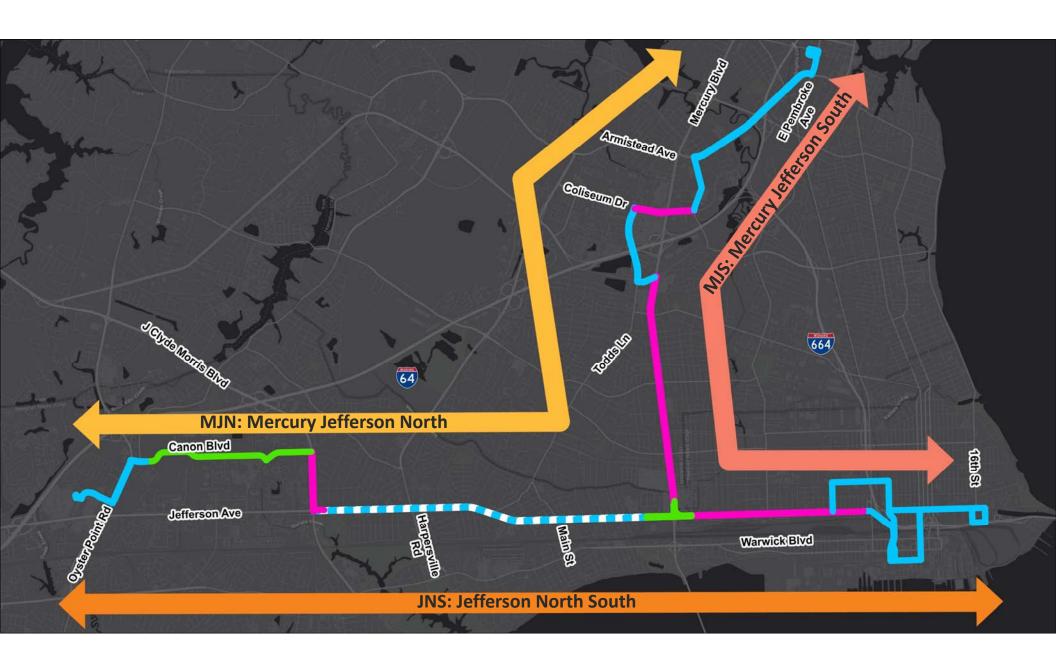
Bus communicates with traffic signals to extend green time and reduce delay





Study Process





Traffic Analysis Results – Travel Time

Route		2019 Existing		2040 No Build	2040 Build	
				XA		
JNS Jefferson North South	NB	32 minutes	70 minutes	33 minutes	37 minutes	41 minutes Within 15% of auto 29 minute bus savings
	SB	29 minutes	70 minutes	31 minutes	33 minutes	36 minutes Within 10% of auto 35 minute bus savings
MJS Mercury Jefferson South	NB/EB	34 minutes	101 minutes	36 minutes	38 minutes	43 minutes Within 15% of auto 58 minute bus savings
	WB/SB	30 minutes	101 minutes	31 minutes	33 minutes	37 minutes Within 15% of auto 64 minute bus savings
MJN Mercury Jefferson North	WB/NB	37 minutes	70 minutes	39 minutes	42 minutes	49 minutes Within 15% of auto 21 minute bus savings
	SB/EB	39 minutes	70 minutes	41 minutes	43 minutes	50 minutes Within 15% of auto 20 minute bus savings
PENINSULA						VINSULA





Costs & Ridership



Capital Costs

Segment	Segment Length	Cost (2020)	Cost/Mile (2020)	Cost Share
Jefferson North South	15.2 miles	\$141.5M	\$9.3M	60%
Mercury (East of Jefferson Avenue)	7.4 miles	\$93.8M	\$12.7M	40%
Total	22.6 miles	\$235.3M	-	100%

- Costs are all-inclusive
- Costs to not reflect anticipated federal and state funding assistance



Annual Operations and Maintenance Costs

Route	Cost (2020)	Hampton (2020)	Newport News (2020)
Local Bus Service Changes	\$0.3M	\$0.1M	\$0.2M
BRT Service	\$4.8M	\$1.7M	\$3.1M
BRT Infrastructure	\$1.3M	\$0.4M	\$0.8M
Total	\$6.4M	\$2.3M	\$4.1M



BRT Projected Ridership

Pouto	Horizon Year Ridership		
Route	Weekday	Annual	
JNS: Jefferson North South	1,700	520,000	
MJN: Mercury Jefferson North	1,400	428,000	
MJS: Mercury Jefferson South	1,100	337,000	
Total	4,200	1,285,000	

Ridership is in addition to what local bus service attracts today





Next Steps



What's Next?

February - March

- City Council Workshops
- Phase 1
 Architectural
 analysis

April

- Citizen information newsletter & activities
- Phase 1
 Architectural
 analysis*

May

• Draft CE

• Citizen

information

June

newsletter

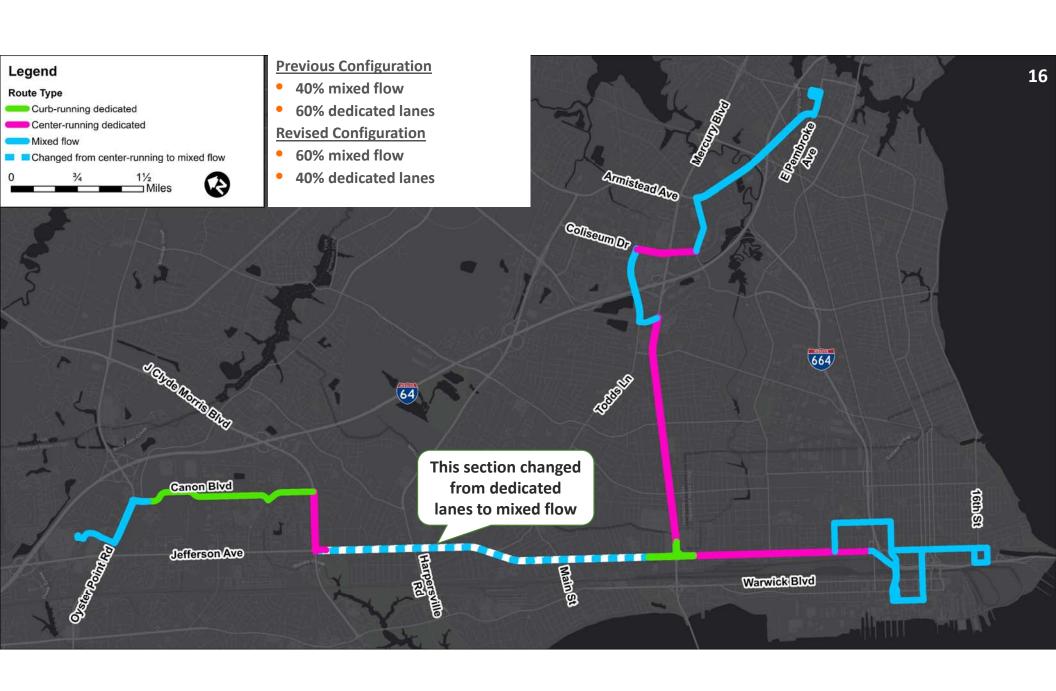
- Final CE
- Peninsula BRT adopted into 2045 LRTP

*Based on Phase 1 findings, a Phase 2 Architectural analysis may be required

Peninsula BRT CE Recommendation

- Recommend endorsement of LPA
 - HRT does <u>NOT</u> need a funding commitment from the cities at this time
 - Helps position the project to be eligible for future federal funding under the CIG program
 - Details of project can be adjusted in collaboration with cities in the future without the need to redo the CE





Conceptual Design – Typical Sections



 $\frac{\text{CENTER RUNNING BRT}}{\underset{\text{N.T.s.}}{\underline{\text{N.T.s.}}}}$

Conceptual Design – Typical Sections



 $\frac{\text{CURB RUNNING BRT}}{\frac{\text{N.T.S.}}{}}$