



CATHERINE E. PUGH
MAYOR



HANOVER STREET CORRIDOR STUDY *includes the Vietnam Veterans Memorial Bridge*

Interagency Advisory Group (IAG) Meeting
Monday, January 22, 2018



MEETING NOTES

MEETING ATTENDEES

<u>Name</u>	<u>Organization</u>
Valorie LaCour	Baltimore City Department of Transportation
Linda Taylor-Newton	Baltimore City Department of Transportation
Graham Young	Baltimore City Department of Transportation
Ethan Cohen	Mayor's Office of Strategic Alliances
Patrick Terranova	Baltimore Development Corporation
Kate Dailey	MD Department of Commerce
Tyson Byrne	MD Department of Transportation
Kate Sylvester	MD Transit Administration
Kate Brower	Baltimore City Recreation and Parks
Jim Harkness	MD Transportation Authority
Jill Lemke	MD Port Administration
Dennis Simpson	AECOM
Josh Crunkleton	AECOM
Nick Corda	AECOM
Odessa Phillip	Assedo Consulting
Tyler Thomas	Assedo Consulting
Kyle Roberts	Sabra Wang & Associates

The purpose of the meeting was to present guiding principles of the study, potential bridge typical section information, and potential urban design concepts to the Interagency Advisory Group (IAG) and gather knowledgeable feedback for the presentation to be used at the upcoming public meeting on February 5, 2018.

After a round of introductions from the project team, the study overview/background was reviewed, and feedback received from stakeholders and the public to-date was presented. The following information was then presented:

Guiding Principles

Dennis Simpson, Consultant Project Manager for the Study Team, presented the following guiding principles that will inform the selection of corridor concepts, serve to guide design-related elements along the Hanover Street corridor, and establish a framework for the City to take a proactive approach for future phases of design and construction. These principles include:



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- Considering the historic and cultural context of the Vietnam Veterans Memorial Bridge (aesthetics, architectural importance, cultural preservation, and bringing back the original purpose of the bridge to connect neighborhoods);
- Community revitalization to enhance current and future development and promote social and economic growth;
- Safety through increased space in the corridor for pedestrians, bicycles, and traffic calming;
- Enhanced multimodal connectivity; and
- Providing safe and reliable access to retail, employment, and recreation.

Preliminary Bridge Options

Nick Corda, Consultant Structural Engineer, provided an overview of the preliminary bridge options under consideration.

- **Option 1:** *Full deck replacement (roadway only)* – short-term maintenance work; replacement of the top slab of deck above the precast planks, not including the movable span or sidewalk. (total cost \$10 million in 2018 dollars)
- **Option 2:** *Hydrodemolition (roadway only)* – short-term maintenance work; replacement of the top surface of the deck with a concrete overlay, not including movable span or sidewalk replacement. (total cost \$8.0 million in 2018 dollars)
- **Option 3:** *Four-lane section* – replacement of bridge deck, including precast planks, replacement of movable span steel grid deck, and pedestrian paths, barriers between vehicular and bicyclists, and the installation of new lighting. (total cost \$30.0 million in 2018 dollars)
- **Option 3A:** *Four-lane section with movable span rehabilitation option* – replacement of bridge deck (full depth including precast planks), replacement of movable span steel grid deck and mechanical/electrical operating systems, bicycle and pedestrian paths, replacement of outside barriers, installing new barriers between vehicular traffic, pedestrians, and bicyclists, and the installation of new lighting. (total cost \$70.0 million in 2018 dollars)
- **Option 3B:** *Four-lane section with fixed span option* – structural modifications to permanently fix the existing movable span, concrete filled steel grating of existing movable span, replacing outside barriers, installing new barriers between vehicular traffic, pedestrians, and bicyclists, and the installation of new lighting. (total cost \$50.0 million in 2018 dollars)



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- **Option 4:** *Separate pedestrian/bicycle bridge and general rehabilitation of the existing bridge to accommodate six travel lanes option* – construction of new parallel pedestrian/bicycle bridge; structural modifications to permanently fix the existing movable span, concrete filled steel grating of existing movable span, replacing outside barriers, installing new barriers between vehicular traffic, and the installation of new lighting. (total cost \$70.0 million in 2018 dollars)
- **Option 5:** *New six-lane bridge and demolition of existing bridge option* – demolition of existing bridge and construction of a new “signature” crossing (assuming a movable channel span), with dedicated pedestrian/bicycle paths. (total cost \$245.0 million in 2018 dollars)

Urban Design Concepts

Josh Crunkleton, Consultant Project Engineer, provided an overview of potential urban design concepts that are under consideration by the Study Team. These conceptual renderings are included in the presentation, are for information purposes, and are subject to change as the study progresses. Potential urban design elements include:

- Dedicated bicycle facilities,
- Enhanced bus shelters and benches for pedestrians
- Enhanced landscaping
- Enhanced public recreation space and art displays under the bridge (previously unused)
- Pedestrian lighting for enhanced safety
- Pedestrian stair connection to/from bridge and ground level
- Cleared vegetation on Gwynns Falls Trail to enhance safety
- Physical barrier separation between pedestrians and vehicular traffic on the bridge to enhance safety
- Enhanced pedestrian crosswalks
- Removed channelized right-turn movements to improve pedestrian safety

Traffic Analysis

Kyle Roberts, Consultant Traffic Engineer, discussed existing and proposed Level of Service (LOS), and network level traffic analysis. The following information was provided:

- All intersections within the project study area limits operate at a LOS D or better during morning and evening peak hours under existing conditions.



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- Lane configurations, improvements, and volumes for 2040 were coordinated with the MDTA I-95 Access Improvements Study.
- 2040 No-Build analysis
 - 3 intersections operate with LOS F during the AM peak hour
 - Hanover Street at Wells Street
 - Hanover Street at McComas Street
 - Hanover Street at Blue Street
 - 5 intersections operate with LOS E or LOS F during the PM peak hour
 - Hanover Street at Wells Street
 - Hanover Street at McComas Street
 - Hanover Street at Blue Street
 - Hanover Street at Red Street
 - Hanover Street at Cromwell Street
- 2040 Build analysis
 - 1 intersection operates with LOS E during the AM peak hour
 - Hanover Street at Wells Street
 - 2 intersections operate with LOS E or LOS F during the PM peak hour
 - Hanover Street at Wells Street
 - Hanover Street at McComas Street
 - Improved results due to roadway improvements, turn restrictions, and signal timing improvements
- Due to intersection queues north of bridge, the bridge cross section (4 lanes, 5 lanes, or 6 lanes) will not have a significant impact on corridor travel time

Next Steps

The next steps for the project include:

- February 5, 2018 public meeting at the Brooklyn Library
- Draft project report, including the outline of corridor recommendations, cost information, and identifying key factors needed to advance the project
- Final project report
- Continued public outreach through summer 2018

Questions/Discussions

The following questions and additional items were discussed:



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- Suggestion to add a summary table to the preliminary bridge options section to compare the options
- Why wouldn't you just use bridge Option 4?
 - Under this option, the existing span would have to be permanently fixed (requiring USCG approval) and all pedestrian and bicycle traffic would be shifted to a new parallel bridge. Removing all pedestrian and bicycles from the existing bridge and roadway approaches where all modes currently travel would require additional analysis.
- Is there a bridge Option 4B that would be a combination of Option 3 with the addition of a pedestrian bridge?
 - These preliminary options show removing all pedestrian and bicycle traffic from the existing bridge if a new parallel bridge is constructed for pedestrians and bicycles. These are preliminary options that will require additional analysis in future stages of the project.
- Have you been looking at larger circulation options in the corridor? Are you accepting the Hanover Street/Potee Street one-way pair as a given? Are there studies and options looking at changing this configuration?
 - This study is not proposing to remove the one-way pair, but does not preclude this in the future. The study is looking at traffic calming and separating pedestrian and bicycle traffic so that the corridor is safer for all users.
- Did anyone look at development opportunities such as MedStar Hospital property and City property?
 - This study did not specifically look at these options, but they can be identified as potential opportunities in the project report.
- Why do the project limits stop at Reedbird Avenue, without looking at the bridges to the south?
 - The study limits were determined during the development of the TIGER grant application. They did not extend further to the south as the team needed to identify logical termini for the project, with the bridge as the focus. Other DOT studies are or will be conducted that will include and impact areas to the south of the study area.



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- At what time does it become viable to change land use and zoning?
 - This process is outside of the scope of the current study. Existing land use types located within the study area include residential, commercial, industrial, park/recreation, private/institutional, and transportation.
- Is there potential savings if one option is done now and one later?
 - Options 1 and 2 are considered short-term maintenance repairs and not full rehabilitation. It is likely that even with the short-term maintenance that there will not be much of a cost savings later with a rehabilitation option.
- Was there regional modeling completed as part of I-95 Access Improvement Study?
 - Yes, the travel demand modeling completed for the I-95 Access Improvement Study was also used for this study.
- Has Baltimore City Department of Transportation found an option that they favor at this point in the study?
 - There is currently no preferred option. The BCDOT is evaluating all options and seeking public input.
- Were you comparing 3 lanes in each direction to 2 lanes? What was there a difference in LOS between these two?
 - The traffic analysis shows that the bridge typical section (three lanes in each direction or two lanes in each direction) does not have a large impact on traffic operations – traffic queuing will be present in the future due to increased volumes and the addition of three signalized intersections between McComas Street and Cromwell Street.
- Suggestion to add a graphic showing where the separate pedestrian bridge would be located (Middle Branch Park to West Covington Park) in the presentation.
- Could the existing bridge be cantilevered to add pedestrian space?
 - No, the existing bridge was previously widened and cannot support additional cantilevered width.
- Does the study include recommendations north of the bridge?
 - Improvements north of the bridge are assumed by the Port Covington development.
- The City is forecasting to 2040 based on the Master Plan for Port Covington.



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- How long would it take to get a decision on this opening issue?
 - Discussion with the US Coast Guard is necessary before a timeframe can be estimated.

Action Items	Responsibility
Send Kate Sylvester a copy of the notes to date	Odessa Phillip
Send Meeting Minutes to IAG	Odessa Phillip
Update presentation to reflect IAG Meeting	Josh Crunkleton