

Presentation to

FMTF

May 26, 2016

Overview of the

Howard Street Tunnel Double-Stack Clearance Project

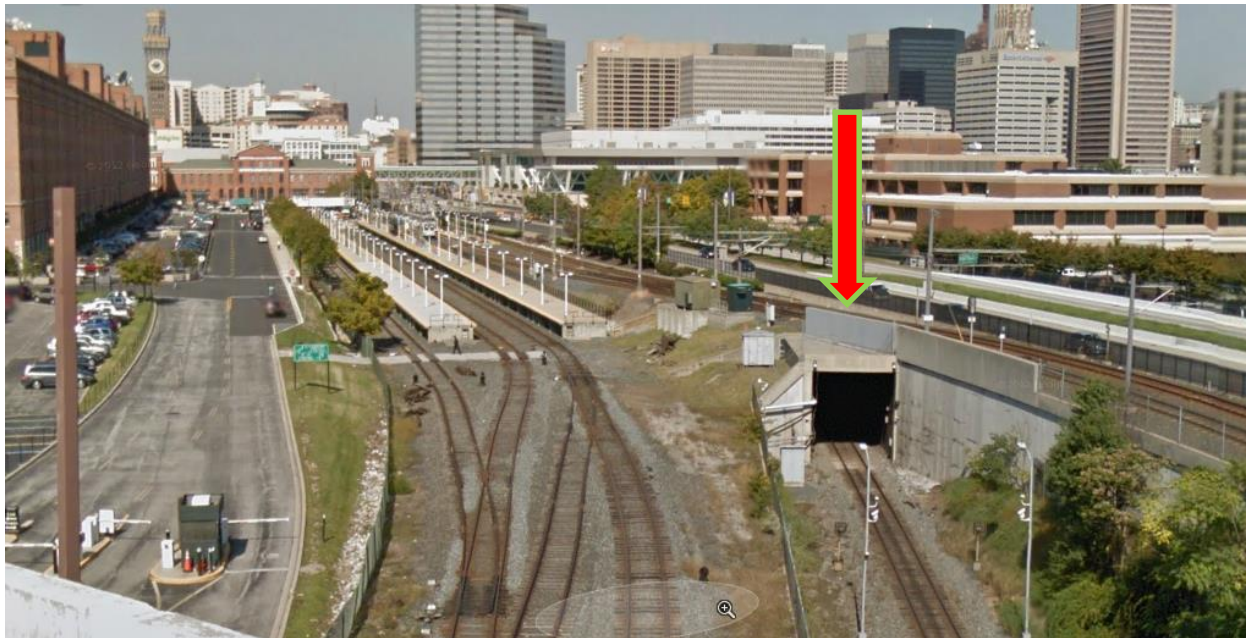


Howard Street Tunnel

Howard Street Tunnel - Background

- Completed in 1895
- 1.7 mile, single-track freight tunnel under downtown Baltimore
- Owned and maintained by CSX Transportation, Inc

Howard Street Tunnel – Southern Portal



Baltimore's Major Rail Tunnels



Howard Street Tunnel

- Howard Street Tunnel is located on CSX's I-95 Rail Corridor
 - Supports approximately 20 trains per day
- Existing tunnel is the single biggest obstacle preventing double-stack rail service at the Port of Baltimore
- The tunnel has been the subject of numerous studies and reports
 - For years, the cost estimate to clear the tunnel for double-stack was \$1-3 billion



Inside Howard Street Tunnel

Port of Baltimore

Requirements for a 21 st Century Port	
Characteristics	Port of Baltimore
Deep Water Channel (50-foot)	✓
Deep Water Docking Berth (50-foot)	✓
Modern Equipment such as Super-Post-Panamax Cranes	✓
Highly Efficient and Productive Workforce	✓
On-Dock Ship/Truck/Train Transfer Facility	✓
Easy and Convenient Access to Highway Freight Network	✓
Double-Stack Rail Capacity	✗

Recent Developments

- In 2015, CSX notified MDOT there may be a cost-effective solution to clearing the Howard Street Tunnel for double-stack
- In late 2015, CSX and MDOT agreed to jointly fund a study to investigate the feasibility of clearing the Howard Street Tunnel for double-stack
- The feasibility study was completed in early 2016 and found:
 - The existing tunnel is structurally sound and has many years of useful life
 - Engineering advances now allow for the tunnel to be improved at a much lower cost than previously thought
 - In addition to the tunnel, there are nine overhead bridge clearances that also need to be addressed in order to create a double-stack clearance route to/from Seagirt Marine Terminal

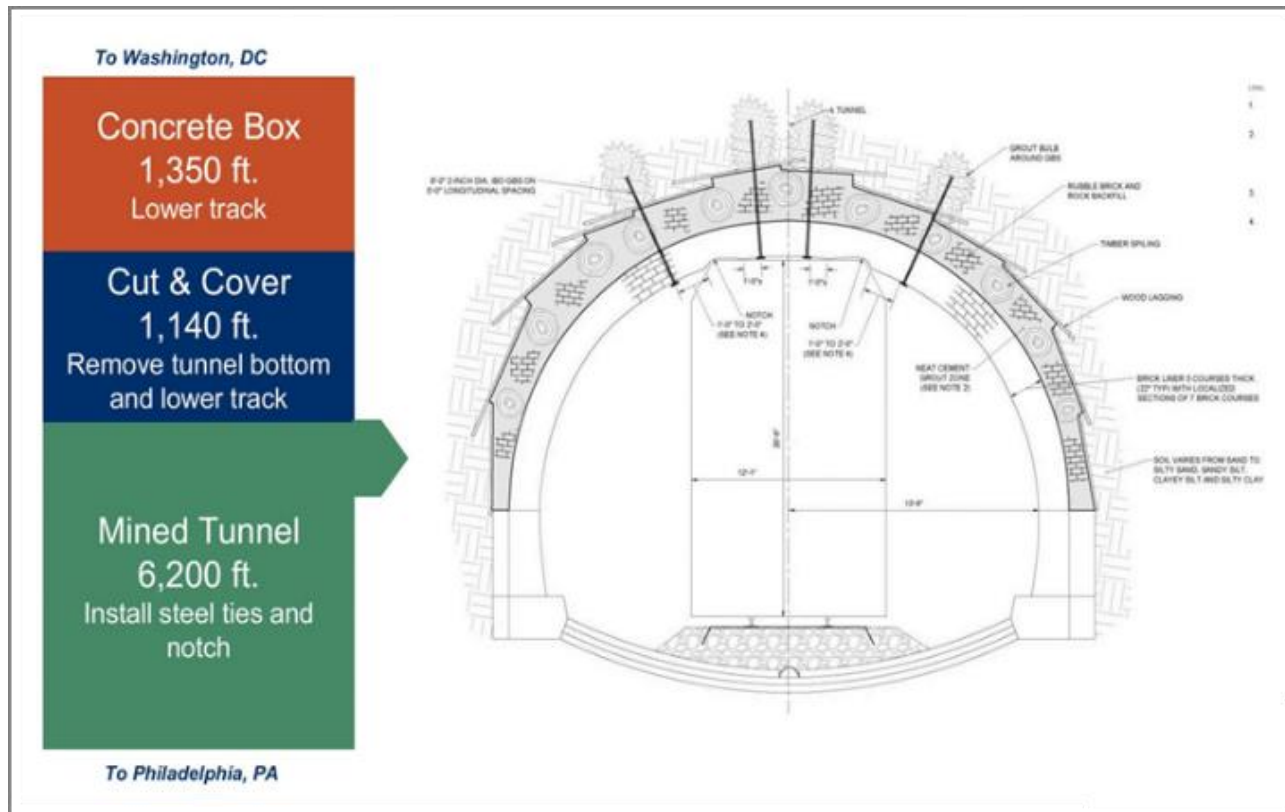
Howard Street Tunnel Project

- The feasibility study concluded it is possible to create a double-stack clearance route to Seagirt Marine Terminal for \$445 million in approximately 6 years

- Howard Street Tunnel Project consists of three components:
 1. Howard Street Tunnel Improvements
 - \$265 million
 2. Overhead Bridge Clearances
 - \$160 million
 3. Drainage Improvements
 - \$20 million

Howard Street Tunnel Improvements

- Work includes modifications to the existing tunnel floor and ceiling to create 21-foot vertical clearance



Overhead Bridge Clearances

Location	Clearance Method
Mount Royal Avenue	Track Lowering
North Avenue	Bridge Modification
Sisson Street	Track Lowering
Huntingdon Avenue	Track Lowering
Charles Street Tunnel	Track Lowering
St. Paul and Calvert Street Tunnel	Track Lowering
Guilford Road	Bridge Modification
Barclay Street*	Track Lowering
Greenmount Avenue	Track Lowering
Harford Road	Bridge Modification

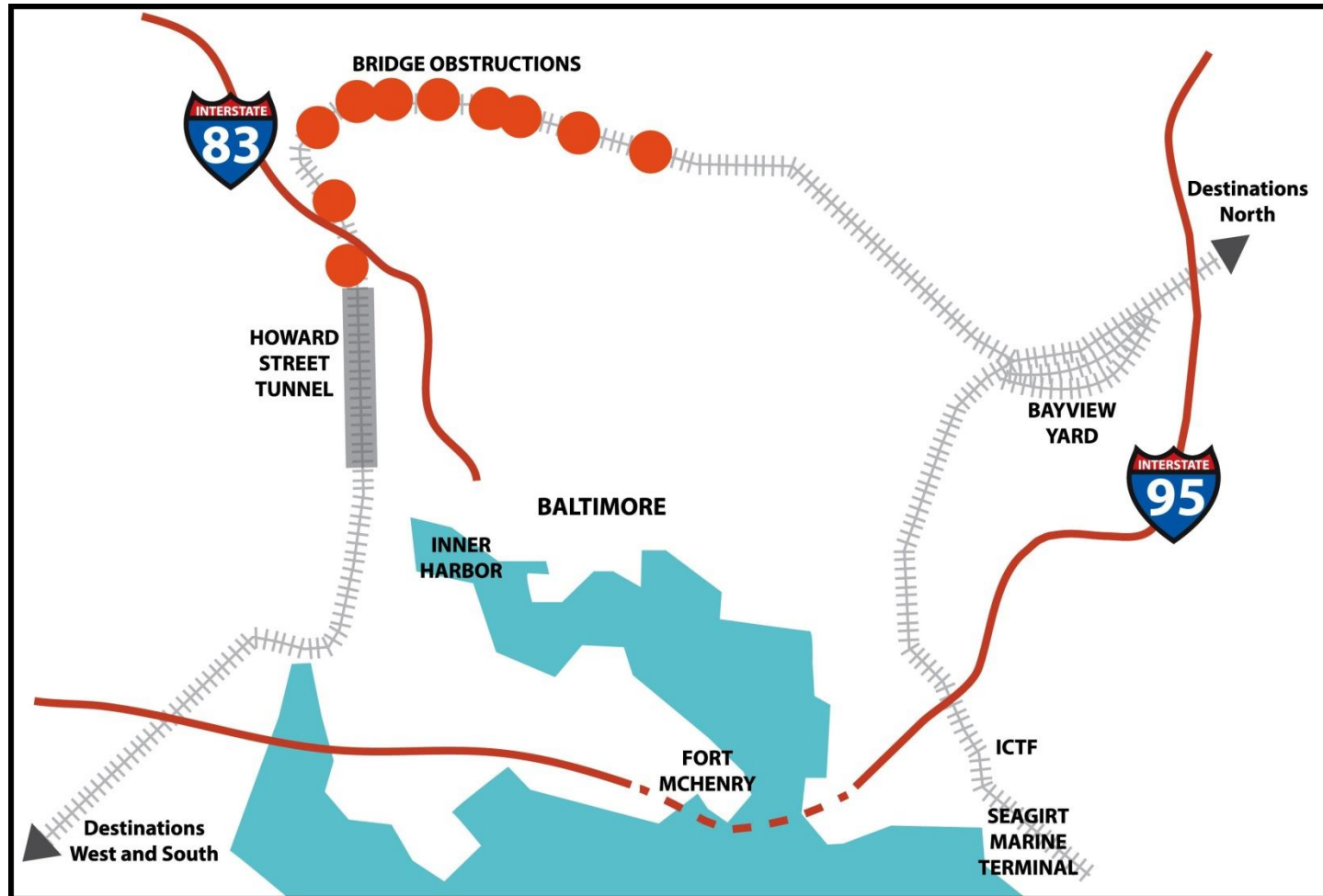
*Bridge already has clearance but will require track lowering due to proximity to Greenmount Avenue

Drainage Improvements

- CSX needs to address standing water/drainage issues at the southern end of the tunnel
 - Requires reconstruction of 48 inch water line beneath Howard Street Tunnel



Location Map



Feasibility Study Outcomes

- Once the feasibility study was complete, MDOT and CSX discussed next steps
- CSX informed MDOT they were unable to fund construction entirely on their own and would need financial assistance from others
- MDOT and CSX subsequently agreed the project would be a good candidate for the recently created FASTLANE program

FASTLANE Grant Program

FASTLANE Grant Program

- The current federal surface transportation authorization – Fixing America's Surface Transportation (FAST) Act – was signed into law on December 4, 2015
- The FAST Act established a number of new discretionary programs including Nationally Significant Freight and Highway Projects (NSFHP), also known as, Fostering Advancements in Shipping and Transportation for the Long-term Achievement of National Efficiencies (FASTLANE)

FASTLANE Grant Program

Fiscal Year	2016	2017	2018	2019	2020
Authorization	\$800 million	\$850 million	\$900 million	\$950 million	\$1 billion

- The FAST Act authorized the FASTLANE program at \$4.5 billion over five years
 - Including \$800 million this year
- Program includes \$500 million set aside for “freight rail, water (including ports), or other freight intermodal projects” that can be awarded at any time
 - The remaining funding is for highway projects
- On February 26, 2016, U.S. Department of Transportation announced the first round of FASTLANE funding
 - April 14, 2016 – deadline for this year’s FASTLANE applications

FASTLANE Eligibility Requirements

- Applicant must be a non-federal, public entity such as a State or local government
- Total project cost must exceed \$100 million, with a minimum FASTLANE award of \$25 million
- Project must have matching funds
 - FASTLANE can only cover 60% of total project costs
 - Total federal funding cannot exceed 80%
- Projects must generate national or regional economic, mobility or safety benefits

FASTLANE Application

- On April 14, 2016, MDOT submitted a FASTLANE grant application for the Howard Street Tunnel Project
- The scope of work for the FASTLANE grant application only included the tunnel work and overhead bridge work
 - In order to allow CSX to progress with the drainage improvements immediately, that work was not included in the FASTLANE application

Source	Amount	Percentage
Federal FASTLANE Request	\$155 million	36 %
State Match	\$145 million	34 %
CSX Match*	\$125 million	30%
TOTAL	\$ 425 million	100%

* CSX is also funding the drainage improvement project at a cost of \$20 million

Next Steps

- MDOT expects U.S. Department of Transportation to announce FASTLANE awards this summer
- If FASTLANE funding is awarded, the project can be completed in approximately 6 years
 - Planning, final design, permitting – 2 years
 - Construction – 4 years

THANK YOU

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Mount Royal Avenue



North Avenue



Sisson Street



Huntingdon Avenue



Charles Street Tunnel



St Paul/Calvert Street Tunnel



Guilford Avenue



Barclay Street



Greenmount Avenue



Harford Road

