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
# Port of Baltimore

## Requirements for a 21st Century Port

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Port of Baltimore</th>
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</thead>
<tbody>
<tr>
<td>Deep Water Channel (50-foot)</td>
<td>✔</td>
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<tr>
<td>Deep Water Docking Berth (50-foot)</td>
<td>✔</td>
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<tr>
<td>Modern Equipment such as Super-Post-Panamax Cranes</td>
<td>✔</td>
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<tr>
<td>Highly Efficient and Productive Workforce</td>
<td>✔</td>
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<tr>
<td>On-Dock Ship/Truck/Train Transfer Facility</td>
<td>✔</td>
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<tr>
<td>Easy and Convenient Access to Highway Freight Network</td>
<td>✔</td>
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<tr>
<td>Double-Stack Rail Capacity</td>
<td>✗</td>
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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.
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

<table>
<thead>
<tr>
<th>Location</th>
<th>Clearance Method</th>
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<tbody>
<tr>
<td>Mount Royal Avenue</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>North Avenue</td>
<td>Bridge Modification</td>
</tr>
<tr>
<td>Sisson Street</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>Huntingdon Avenue</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>Charles Street Tunnel</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>St. Paul and Calvert Street Tunnel</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>Guilford Road</td>
<td>Bridge Modification</td>
</tr>
<tr>
<td>Barclay Street*</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>Greenmount Avenue</td>
<td>Track Lowering</td>
</tr>
<tr>
<td>Harford Road</td>
<td>Bridge Modification</td>
</tr>
</tbody>
</table>

*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
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
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).
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

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Authorization</td>
<td>$800 million</td>
<td>$850 million</td>
<td>$900 million</td>
<td>$950 million</td>
<td>$1 billion</td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Federal FASTLANE Request</td>
<td>$155 million</td>
<td>36 %</td>
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<tr>
<td>State Match</td>
<td>$145 million</td>
<td>34 %</td>
</tr>
<tr>
<td>CSX Match*</td>
<td>$125 million</td>
<td>30%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$ 425 million</strong></td>
<td><strong>100%</strong></td>
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* 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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