The Project Overview
Settlers Landing in Hampton to I-564 in Norfolk (10 miles)

I-64 improvements include 6 lanes of highway and construction of 8 lane bridge/tunnel

Two (2) new bored tunnels will serve Eastbound traffic

Two (2) existing HRBT tunnels will serve Westbound traffic
The Project Overview

- Tunnel crossing
  - ~ 8000 ft. across Hampton Roads Channel
- Island improvements
- Marine bridges
  - ~ 9000 ft. across Hampton Roads waterway
  - ~ 5000 ft. across Willoughby Bay
- Landside highway widening
  - ~ 1 mile in Hampton
  - ~ 4 miles in Norfolk
The Path to Award
Design-Build (DB) and Design-Build-Finance-Operate-Maintain (DBFOM) methods evaluated

The “Public Sector Analysis and Competition” report identified the DB option as providing better value to the Commonwealth:
- Under DB, project will be supported fully by public funds, with no private financing
- Under DBFOM, the projected revenue generation of the facility is insufficient for value-creating transfer of revenue risk to the private sector

Code of Virginia § 33.2-119. Limitation on tolling.
- “…no toll may be imposed or collected on un-tolled lanes or components of a highway, bridge, or tunnel without approval from the General Assembly…”

Toll revenue forecasts support less than 10% of construction costs
- Under DBFOM, public contribution would still be needed to cover more than 90% of project construction costs
Preserves the option to operate the facility as part of a potential future Regional Express Lane Network

Preserves the flexibility to bundle O&M of project with O&M of a potential future Regional Express Lane Network

VDOT Design-Build program documents/procedures not suitable for this project

PPTA could increase competition and deliver better value to the Commonwealth:
- Provides contractual flexibility for complex risk profiles
- Includes iterative process that invites feedback and collaboration from the proposers

Public sector risk allocation
- Continued responsibility for routine O&M,
- Lifecycle management and revenue risks/rewards retained by public sector

Private sector risk allocation
- Optimal risk transfer of design and construction risks
<table>
<thead>
<tr>
<th>ACTIVITY</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPTA Steering Committee</td>
<td>Dec 12, 2017</td>
</tr>
<tr>
<td>Request for Qualifications (RFQ) Issuance</td>
<td>Dec 15, 2017</td>
</tr>
<tr>
<td>Shortlist Announcement</td>
<td>Apr 26, 2018</td>
</tr>
<tr>
<td>PPTA Steering Committee</td>
<td>May 9, 2018</td>
</tr>
<tr>
<td>Draft request for Proposals (RFP) Release</td>
<td>May 22, 2018</td>
</tr>
<tr>
<td>Proprietary/ATC Meetings (6 rounds)</td>
<td>Jun-Oct, 2018</td>
</tr>
<tr>
<td>Final RFP Release</td>
<td>Sept 27, 2018</td>
</tr>
<tr>
<td>Addenda 1 to Final RFP</td>
<td>Nov 28, 2018</td>
</tr>
<tr>
<td>Addenda 2 to Final RFP</td>
<td>Dec 14, 2018</td>
</tr>
<tr>
<td>Addenda 3 to Final RFP</td>
<td>Dec 19, 2018</td>
</tr>
<tr>
<td>Technical Proposal Submission</td>
<td>Jan 15, 2019</td>
</tr>
<tr>
<td>Technical Proposal Evaluation</td>
<td>Feb 5, 2019</td>
</tr>
<tr>
<td>Price Proposal Submission</td>
<td>Feb 8, 2019</td>
</tr>
<tr>
<td>Price Proposal Evaluation</td>
<td>Feb 11, 2019</td>
</tr>
<tr>
<td>Project Award</td>
<td>April 3, 2019</td>
</tr>
</tbody>
</table>

- Design-Build, Best Value Procurement
  Two proposals were received

- Both technical proposals responsive

- The determination of the Best Value Proposal was based on the following formula:

  \[
  \text{Technical Proposal Score (max. 40 points)} + \text{Price Proposal Score (max. 60 points)} = \text{Total Proposal Score (max. 100 points)}
  \]

- Highest Technical and Financial Score

- Successful Proposer: Hampton Roads Connector Partners

- DB Contract Value: $3.29B
The Successful Team

A World-Class Team
## Sources of Funds

<table>
<thead>
<tr>
<th>AVAILABLE FUNDS</th>
<th>AMOUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HRTAC (Debt &amp; Cash)</td>
<td>$3,208,469,581</td>
</tr>
<tr>
<td>Toll-Backed Bond Proceeds</td>
<td>$345,000,000</td>
</tr>
<tr>
<td>SMART SCALE</td>
<td>$200,000,000</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>$3,753,469,581</strong></td>
</tr>
<tr>
<td>VDOT – Bridge &amp; SGR (South Island Trestle Bridge)</td>
<td>$108,527,646</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$3,861,997,227</strong></td>
</tr>
</tbody>
</table>
The Design-Build Timeline
The Design-Build Timeline

- **Contract Execution + LNTP1**
  - 04/15/19

- **LNTP2 + LNTP3**
  - 9 months after LNTP1
  - 1/2020

- Anticipated JPA Approval Date
  - LNTP1 = NTP
  - 540 days (18 months) after LNTP1
  - October 2020

- **Substantial Completion**
  - 06/30/25

- **Contractual - Substantial Completion Deadline**
  - 09/01/25

- **Contractual - Final Completion Deadline**
  - 11/01/25

- **Permanent Works over 55 months**
- Launch & Receiving pit ready for TBM
- TBM Assembly and Mining
- Commissioning and Testing North & South Marine Trestles
- Land Works I-64 Widening

- **Design and Investigation Works for Environmental Permitting**
- 6 MONTH OF SCOPE VALIDATION
- **LNTP 2**
- LNTP2: Authorization for TBM Procurement

- **LNTP 3**
- LNTP3: Launching Pit Construction to start

- **LNTP 1**
- 2019 2020 2021 2022 2023 2024 2025
Project Unique Features
The South Island
Bored Tunnel
Variable Density Tunnel Boring Machine (TBM)

SHIELD: Waterproof space of work to erect the rings of the tunnel

TBM CUTTERHEAD: rotate to dig and excavate the ground

GANTRY: Power Supply and Muck excavation through slurry

RING ERECTION: Thrust Rams retract to install segments one by one
EXIT SHAFT :
TBM through headwall at the exit

U-TURN :
Rotation of TBM on the North Island to bore the second tube
Traffic Management

- **Active Transportation Management System (ATMS)**
  - Lane Use Signals (LUS) over all lanes and shoulders
  - Gantries every ½ mile along the corridor
  - Dynamic message signs, vehicle detection, variable speed limit signs, CCTV
  - Corridor Management for incidents and congestion

- **Tunnel Supervisory Control and Data Acquisition (SCADA) Systems, new and existing tunnels**
  - Management: Overheight Detection, Dangerous Cargo Switches, Traffic Stoppages
  - Power: Switchgear, Motor Control Centers, UPS, Generators, Transfer Switches
  - Ventilation: Jet Fans, Air Quality, Pressurization
  - Fire Detection: Smoke Detectors, Linear Heat Detectors
  - Fire Suppression: Deluge Fire Suppression Systems
  - New Primary and Secondary Tunnel Control Rooms
  - Pumps: Drainage, Fire Protection

- Reconfiguration of existing EB Tunnel to support WB traffic

- Capacity in all roadside cabinets for future connected vehicle technology
Thank you