Appendix A: Project Planning and Development
A-6 Tappan Zee Bridge Capital Costs through 2025
### TZB PROJECTS - 15 YEAR NEEDS
#### 2010-2025

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>ESTIMATE (mil)</th>
<th>YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replacement of Gusset Plates (B946.1) <em>currently in design</em></td>
<td>$2.5</td>
<td>2011</td>
</tr>
<tr>
<td>Security Improvements - Phase 4</td>
<td>$3.0</td>
<td>2011</td>
</tr>
<tr>
<td>Substructure Repairs (B905.5) <em>currently in design</em></td>
<td>$25.0</td>
<td>2012</td>
</tr>
<tr>
<td>Replace Maintenance Inspection Travelers</td>
<td>$5.0</td>
<td>2013</td>
</tr>
<tr>
<td>Electrical Upgrades to Caisson Pumps and Controls</td>
<td>$4.0</td>
<td>2013</td>
</tr>
<tr>
<td>Paint West Deck Truss Spans &amp; Main Towers</td>
<td>$35.0</td>
<td>2015</td>
</tr>
<tr>
<td>Various Infrastructure and Facilities Improvements</td>
<td>$5.0</td>
<td>2015</td>
</tr>
<tr>
<td>Steel Repairs- West Deck Truss</td>
<td>$16.0</td>
<td>2016</td>
</tr>
<tr>
<td>Replacement of EDT Wearing Surface</td>
<td>$5.0</td>
<td>2016</td>
</tr>
<tr>
<td>Replacement of East Deck Truss Fascia &amp; Open Scupper</td>
<td>$30.0</td>
<td>2017</td>
</tr>
<tr>
<td>Replacement of East Trestle Spans Deck</td>
<td>$20.0</td>
<td>2017</td>
</tr>
<tr>
<td>Fender Piles - Spans 1-166</td>
<td>$4.0</td>
<td>2018</td>
</tr>
<tr>
<td>Substructure Repairs- Phase 2</td>
<td>$50.0</td>
<td>2018</td>
</tr>
<tr>
<td>Ship Collision Protection - Auxillary Channel</td>
<td>$20.0</td>
<td>2019</td>
</tr>
<tr>
<td>ITS</td>
<td>$5.0</td>
<td>2019</td>
</tr>
<tr>
<td>Bridge Joint Repair/Replacement</td>
<td>$5.0</td>
<td>2020</td>
</tr>
<tr>
<td>East Deck Truss - Painting/Overlay</td>
<td>$30.0</td>
<td>2020</td>
</tr>
<tr>
<td>Steel Repairs - EDT &amp; Main Towers</td>
<td>$25.0</td>
<td>2021</td>
</tr>
<tr>
<td>Dredging (B538)</td>
<td>$4.0</td>
<td>2022</td>
</tr>
<tr>
<td>Replace Causeway Spans (B519)</td>
<td>$755.0</td>
<td>2023</td>
</tr>
<tr>
<td>Seismic Retrofit (B541)</td>
<td>$275.0</td>
<td>2023</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$1,323.5</strong></td>
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</table>

### PROJECTS CURRENTLY UNDERWAY

<table>
<thead>
<tr>
<th>DESCRIPTION</th>
<th>COST (mil)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deck Contract #1 TANY 05-31B : In Construction</td>
<td>$203.79 (est. total)</td>
</tr>
<tr>
<td>Steel Repairs - East Deck Truss TANY 08-41B - In Construction</td>
<td>$29.17 (bid amt.)</td>
</tr>
<tr>
<td>Deck Contract #2 TANY 10-9: In Construction</td>
<td>$146.88 (bid amt.)</td>
</tr>
<tr>
<td>TANY 09-41 Phase 3 Security Improvements: In Construction</td>
<td>$1.70 (bid amt.)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$381.54</strong></td>
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