Lehigh Valley Transportation Study

SUBJECT: 13th Street Interchange Improvements

COUNTY ......................... Northampton  
S.R./SEC. ......................... 2017/TSI  
A.D.T. ............................. 4,426  
TRUCK A.D.T. ...................... 221 (5%)  
MPMS NUMBER ...................... 107725  
LENGTH .............................. 0.96 miles  
FED.-AID SYSTEM .................. On-NHS  
DECADE OF INVESTMENT .......... No  
CAPITAL BUDGET .................. Yes  
DETOUR LENGTH .................. N/A  
EST LET DATE .................... 6/21/2018  
OPEN TO TRAFFIC ................ 12/17/2018

DESCRIPTION/LOCATION:
This project involves improvements to the State Route 22 / 13th Street interchange in the City of Easton and Wilson Borough, Northampton County. The work will include State Route 8010 Ramp A, State Route 8010 Ramp B, State Route 8010 Ramp C, State Route 8010 Ramp D, and a portion of State Route 2017 and State Route 2019.

BRIDGE TABLE:

<table>
<thead>
<tr>
<th>BR Key</th>
<th>Route</th>
<th>Intersecting Feature</th>
<th>Bridge Length</th>
<th>Bridge Width</th>
<th>Deck Area</th>
<th>SD</th>
<th>Suff. Rating</th>
<th>ADT</th>
<th>ADTT</th>
<th>Dist Rank</th>
<th>County Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>28729</td>
<td>2017</td>
<td>SR 22 (LR 773)</td>
<td>99</td>
<td>70.5</td>
<td>6,980</td>
<td>N</td>
<td>93.3</td>
<td>4,426</td>
<td>233</td>
<td>1,144</td>
<td>172</td>
</tr>
<tr>
<td>28737</td>
<td>2019</td>
<td>Bushkill Creek</td>
<td>93</td>
<td>46</td>
<td>4,278</td>
<td>N</td>
<td>63.2</td>
<td>16,310</td>
<td>326</td>
<td>691</td>
<td>87</td>
</tr>
</tbody>
</table>

REQUEST:
To add $3,800,000 for the Construction phase on the 2017 LVTS TIP.

TOTAL ESTIMATED COST:

<table>
<thead>
<tr>
<th>Funding</th>
<th>Study</th>
<th>PE</th>
<th>UTL</th>
<th>ROW</th>
<th>CON</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$3,040,000</td>
<td>$3,040,000</td>
</tr>
<tr>
<td>State</td>
<td>$92,735</td>
<td>$15,000</td>
<td>$0</td>
<td>$0</td>
<td>$760,000</td>
<td>$867,735</td>
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<tr>
<td>Total</td>
<td>$92,735</td>
<td>$15,000</td>
<td>$0</td>
<td>$0</td>
<td>$3,800,000</td>
<td>$3,907,735</td>
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</table>

REQUESTED COST (Construction):

<table>
<thead>
<tr>
<th>Funding</th>
<th>Programmed</th>
<th>Request</th>
<th>Net Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal (STP)</td>
<td>$0</td>
<td>$3,040,000</td>
<td>$3,040,000</td>
</tr>
<tr>
<td>State (581)</td>
<td>$0</td>
<td>$760,000</td>
<td>$760,000</td>
</tr>
<tr>
<td>Local</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Total</td>
<td>$0</td>
<td>$3,800,000</td>
<td>$3,800,000</td>
</tr>
</tbody>
</table>

DISCUSSION:
1. This interchange project was originally going to be reconstructed under MPMS# 103938. The goals of this long-range project were to convert the existing interchange into a diverging diamond interchange (DDI), replace the State Route 22 structure over 13th Street, replace the Wood Avenue Structure over State Route 22, and replace the traffic signal at the 13th Street...
and Wood Avenue intersection with a modern roundabout at a total estimated Construction cost of approximately $50 million.

2. A preventative bridge maintenance project was recently completed on the State Route 2017 (Wood Avenue) structure over State Route 22. During construction, the traffic control plan did not allow left turns to be made coming from the State Route 22 eastbound 13th Street exit. This temporary traffic control condition worked well, so Easton city officials reached out to LVTS and District 5-0 and requested to make this temporary condition permanent. A recommendation was made to postpone the interchange reconstruction project (MPMS# 103938) and break out a lower-cost improvement project (MPMS# 107725) in the short term.

3. The scope of this improvement project will include pavement preservation, bridge work, and intersection improvements.

4. Pavement preservation will include bituminous milling and a bituminous overlay, roadway patching, concrete island and mountable curbing updates, shoulder upgrades, guide rail and pavement marking updates, safety upgrades, and other miscellaneous construction items.

5. Work to be completed on the SR 22 (LR 73) and Bushkill Creek bridges will include scarifying deck and performing latex overlay, adding weep-holes and other drainage upgrades around wingwalls, and replacing/modifying bridge barriers and end transitions.

6. The Wood Avenue/13th Street traffic signal will be upgraded by replacing the existing span wires with mast arms. Pedestrian facilities, traffic islands, and other miscellaneous traffic signal items will also be improved.

**FUNDING SOURCE:**

1. The primary funding source for this project is the Highway and Bridge Line Item Reserve (MPMS #102201). Supplemental sources include the Utility phases of the Lehigh Race Street Intersection (MPMS #57433) and Water Street (State Route 3004) over Saucon Creek (MPMS #89641) projects, which are being pushed out to align with anticipated need and are fully carried on the 2019 Draft TIP. Additional sources are the Center Street Resurface project (MPMS #96429), which has excess funding remaining over the low bid amount; the Hamilton Boulevard Resurface project (MPMS #94863), which has a de-obligation available; and the Preliminary Engineering (PE) phase of the State Route 1015 over Martins Creek project (MPMS #85930), which is being used for a funding swap.

**OPTIONS:**

1. Approve the request as submitted and fund the Construction phase from the current TIP.

2. Deny the request and complete the work under the original project (MPMS #103938), which will not begin PE until the 3rd four years of the Twelve-Year Program (TYP).

**RECOMMENDATION:**

Option 1.
13th Street Interchange Improvements