SR 1 Widening
SR 273 to Roth Bridge

Public Workshop
April 8, 2013
5:00 PM – 8:00 PM
May B. Leasure Elementary School
Agenda

- Project Limits
- Project Purpose & Need
- Environmental (NEPA) Process
- Transportation Alternatives
- Summary
Project Limits

- North of SR 273 to Roth Bridge
Purpose & Need

- Address congestion
- Improve system connectivity
- Improve local access
- Improve safety
- Ensure emergency access & evacuation
A total of 284 reported crashes between January 2008 and December 2010

DelDOT has identified 4 locations with frequent accidents requiring improvements (HEP):

- SR 273 through the SR 1 interchange
- US 40 through the SR 1 interchange
- Hamburg Road through the US 13 intersection
- SR 1 northbound near the diverge to US 13
### Purpose & Need
Existing Conditions (2011)

#### Existing Traffic
*(based on actual traffic data collected)*

<table>
<thead>
<tr>
<th>Location</th>
<th>2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 1 between US 40 and SR 273</td>
<td>76,500</td>
</tr>
<tr>
<td>SR 1 between the Roth Bridge and US 13</td>
<td>79,500</td>
</tr>
</tbody>
</table>
## Purpose & Need

### Future Conditions (2040)

#### Projected Traffic

*Based on WILMAPCO, NCC approved model*

<table>
<thead>
<tr>
<th>Location</th>
<th>2011</th>
<th>2040</th>
<th>Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>SR 1 between US 40 and SR 273</td>
<td>76,500</td>
<td>125,000</td>
<td>63%</td>
</tr>
<tr>
<td>SR 1 between the Roth Bridge and US 13</td>
<td>79,500</td>
<td>140,000</td>
<td>76%</td>
</tr>
</tbody>
</table>

*Delaware Department of Transportation*
How do we begin to address these transportation problems?
DEVELOP PROJECT PURPOSE AND NEED

IDENTIFY ENVIRONMENTAL RESOURCES
• Communities
• Cultural Resources
• Natural Resources

IDENTIFY RECOMMENDED ALTERNATIVE
• While balancing public, agency and stakeholder interests, DelDOT recommends an alternative to Federal Highway Administration (FHWA) that best meets the purpose and need for the project.

DEVELOP TRANSPORTATION ALTERNATIVES & IDENTIFY IMPACTS
• Evaluate Options
• Impacts Are Based On Limits Of Disturbance

NEPA DOCUMENT APPROVAL
DRAFT
• Draft Environmental Document – documents alternatives analysis and describes the recommended alternative, resource impacts and conceptual mitigation.
• Public and Agency Comment Period and Workshop

FINAL
• Final Environmental Document – Addresses public and agency comments, final definition of project, conceptual mitigation plan
• FHWA Approval of Selected Alternative

FINAL DESIGN
• Final Mitigation Plans and Permits
• Right-of-way Acquisition
• Design Plans

CONSTRUCTION
Transportation Alternatives

- Proposed Alternatives
  - Interchange Improvements Alternatives
    - SR 273
    - Tybouts
    - US 40 interchange – minor traffic flow improvements
    - SR 72
  - Mainline Widening – additional lane alternatives
    - Work within existing corridor
    - Meet current FHWA design requirements
SR 273 Interchange

Existing Conditions
Accidents displayed are from a 3-yr study, conducted from 2008 - 2011.
Replaces left turn onto NB SR 1 from EB SR 273 with free-flow loop ramp
Replaces left turn onto NB SR 1 from EB SR 273 with free-flow loop ramp
Replaces SB on ramp with free-flow loop ramp
Replaces SB on ramp with free-flow loop ramp
Incorporates a partial interchange at Newtown Road – NB on/SB off, reducing the amount of NB and SB traffic using ramps on SR 273.
Incorporates a partial interchange at Newtown Road – NB on/SB off, reducing the amount of NB and SB traffic using ramps on SR 273.
SR 273 Interchange

Option 2

Adds a NB SR 1 on ramp from School Bell Road, reducing the amount of NB traffic using ramps on SR 273
Adds a NB SR 1 on ramp from School Bell Road, reducing the amount of NB traffic using ramps on SR 273.
SR 273 Interchange

Option 2

Replaces SB on ramp with free-flow loop ramp
Replaces SB on ramp with free-flow loop ramp
US 40 Interchange
Operational Improvements

• Improvements to increase the merge area for acceleration/deceleration onto and off of SR 1
• Safety improvements are needed to meet current DelDOT standards
Tybouts Interchange

Existing Conditions
Proposed Improvements
Tybouts Interchange

Allows 2 continuous SB SR 1 lanes of traffic
Eliminates intersection – Red Lion Rd (SR 71) & US 13

Replaces NB Red Lion Road left turn with a direct connection to NB US 13
Improves access from SB SR 1 and SB US 13 onto Red Lion Rd (SR 71), by eliminating stop condition & improving geometry.
Improves safety – US 13 & Hamburg Rd
Avoids Tybouts Landfill Superfund Site
SR 72 Interchange

Option 1

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Option 1

Replaces left turn onto NB SR 1 with free-flow loop ramp
SR 72 Interchange
Option 1

Splits traffic accessing NB SR 1
SR 72 Interchange

Option 1

Adds a new right turn lane on SB US 13
All interchange movements from SR 72 are free-flowing
All interchange movements from SR 72 are free-flowing.
Mainline Widening

- Three Alternatives
  - Outside-Outside Widening
  - West Side Widening
  - East Side Widening
Mainline Widening

- Outside-Outside Widening Alternative

**SR 273 to Tybouts**
OUTSIDE / OUTSIDE WIDENING

**Tybouts to Roth Bridge**
OUTSIDE / OUTSIDE WIDENING
Mainline Widening

- West Side Widening Alternative

**SR 273 to Tybouts**
West Side Widening

**Tybouts to Roth Bridge**
West Side Widening
Mainline Widening

- East Side Widening Alternative

**East Side Widening**

- SR 273 to Tybouts
- Tybouts to Roth Bridge

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Summary

- Thank you for being part of our public workshop.
- Our Project Team welcomes your discussion and comments at the various display board stations.
- Your comments may be submitted by:
  - Completing the comment form provided at tonight’s public workshop
  - Visiting the project website: sr1.deldot.gov
  - E-mailing DelDOT Public Relations: dot-public-relations@state.de.us
  - Writing to DelDOT Public Relations: 800 Bay Road, Dover, Delaware 19901
- Next Public Workshop:
  - April 18, 2013 (6:00 PM – 9:00 PM): Wilbur Elementary School
  - Summer 2013: Noise Analysis Results