North Avenue Reconstruction Project

CSS Meeting #7
July 27, 2016
Agenda

• Review of CSS Advisory Group Meetings 1 - 6
• Alternatives Features and Review
• Next Steps & Schedule Update
• Alternatives Assessment
• Adjourn
REVIEW OF CSS ADVISORY GROUP MEETINGS 1 – 6
CSS Meeting #1

• Issues affecting North Avenue
  – Speeding, access, lack of bike/ped facilities, good visual setting, RR crossing delays & safety, roadway configuration

• Vision for the future North Avenue
  – Better intersection configurations, safety, address speeding, stormwater treatment, stormwater treatment
CSS Meeting #2

• Individual and group weighting exercises
  – Improve access to/from North Avenue
  – Address speeding/safety
  – Improve curves/intersections
CSS Meeting #3

• Crash analysis & discussion

• Review of “draft” Purpose and Need
  – Safety, capacity, roadway deficiencies, consistency with local plans

• Proposed typical sections

• Locations for traffic counts and speed study
CSS Meeting #4

• Drainage & stormwater process discussion
• Speed survey and traffic counts results and discussion
• Walk through of the initial alternatives
CSS Meeting #5

• Refined Purpose and Need
• Traffic Discussion
• Traffic Calming
• Revised Alternatives
CSS Meeting #6

- Demographic Data
- Level of Service
- Cultural Resources
  - Update
    - Farmstead may have an “adverse effect”
    - Bank and park properties will have a “de minimis” impact
      - No adverse effect to the activities, features, or attributes qualifying a park, recreation area, or refuge for protection under Section 4(f)

- Public Information Meeting Debrief
ALTERNATIVE FEATURES AND REVIEW
Four-Lane Divided

• 11’ inside lanes
• 14’ outside lanes to accommodate bicycles
• 30’ raised median
• Median openings at major cross streets
  — *Not* provided at Brook Springs, N 147th, Mount Zion Woods, San Fernando, Tru, Arrowhead, and N 131st
Four-Lane Divided

• Acceptable Level of Service of C/D
• Update signalized intersections
  – Calhoun, Pilgrim Parkway, Lilly Road, 124\textsuperscript{th} Street
• Pedestrian accommodations
  – Sidewalk or multi-use path
Five-Lane TWLTL

• 11’ inside lanes
• 14’ outside lanes to accommodate bicycles
• 14’ center two-way left turn lane
• Acceptable Level of Service of C/D
• Updated signalized intersections
  – Calhoun, Pilgrim Parkway, Lilly Road, 124th Street
• Pedestrian accommodations
  – Sidewalk or multi-use path
Assessment of the Build Alternatives

• Impacts to the natural and human environments were similar for both alternatives

• Focus on other elements of the alternatives
  – Safety
  – Traffic operations
  – Stormwater treatment
  – Public input
Assessment of the Build Alternatives

• Safety – Four-Lane Divided Alternative
  – Safer as it minimizes conflict points and provides safer two-stage crossing for cars
  – Separates opposing directions of travel
  – Refuge for pedestrians wishing to cross North Ave.
  – Safer for minor approaches for stop controlled intersections
Assessment of the Build Alternatives

• Traffic Operations – Four-Lane Divided Alternative
  – Better operations for traffic on North Avenue
  – Better operations for minor approaches at stop-controlled intersections
  • Storage for two turning vehicles
Selection of the Preferred Alternative

• Stormwater Management – Four-Lane Divided Alternative
  – Reduced impervious area (approximately 0.4 ac)
  – Slightly smaller retention pond at Lilly Road
  – More efficient use of R/W to manage stormwater
  – Dedicated opportunities for sustainable stormwater management in the median
    • Bio-swales/bio-retention
Median Treatment Option – Infiltration Trench (EXAMPLE PLAN CONFIGURATION)
Selection of the Preferred Alternative

• Public Input – Four-Lane Divided Alternative
  – Maintain visual context
    • Raised median allows for landscaping opportunities
  – Input from public information meeting (24 comments)
    • Four lane divided
      – Five in favor, three against
    • Five lane TWLTL
      – Five in favor, five against
    • Roundabout
      – Zero in favor, six against
    • Three lane TWLT
      – Three in favor, zero against
NEXT STEPS AND SCHEDULE UPDATE
Next Steps

• EA Approved – October 2016
• Public Hearing – October/November 2016
• CSS 8 – October 26, 2016
  – Preview the Preferred Alternative and EA
• CSS 9 & 10 – December 2016/May 2017
  – Design updates
• Finding of No Significant Impact (FONSI) – Early 2017
ALTERNATIVES ASSESSMENT
**Alternatives Assessment Form**

**North Avenue Reconstruction Project**

July 2016

Please leave your completed evaluation matrix with a study team member at the end of today's meeting. If you would like more time to complete the matrix, it can be completed after today's meeting and sent by August 17th to:

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<table>
<thead>
<tr>
<th>Purpose &amp; Need Elements</th>
<th>Evaluation Criteria</th>
<th>Standard</th>
<th>No-Build</th>
<th>Five-Lane TWTLT</th>
<th>Four-Lane Divided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving Traffic Efficiency</td>
<td>Are future traffic volumes accommodated?</td>
<td>An alternative should adequately accommodate projected traffic volumes by providing an appropriate Level of Service (LOS)</td>
<td></td>
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<tr>
<td>Improving Safety</td>
<td>Are identified high crash locations addressed?</td>
<td>An alternative should include improvements that address high crash locations</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Addressing Roadway Deficiencies</td>
<td>Are steep hills, sharp curves, narrow lanes and lack of shoulders addressed?</td>
<td>An alternative should address the horizontal (curve) and vertical (grade) deficiencies, as well as provide adequate lane widths and shoulder areas</td>
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</tbody>
</table>

**CSS Advisory Group Goals & Objectives**

| Improve access between North Avenue | Is ability to turn onto/off North Avenue improved? | An alternative should provide safe access for vehicles desiring to enter/exit North Avenue | | | |
| Addressing high crash locations addressed? | | An alternative should address high crash locations | | | |
| Improve crashes/intersections | Are problematic curves and intersections along North Avenue addressed? | An alternative should include design improvements at problematic curves and intersections along North Avenue | | | |
| Protect the natural environment/maintain rural character | Has the alternative been developed in a manner that is sensitive to the natural environment and visual context? | An alternative should avoid/minimize impacts to the natural environment and incorporate design elements that reflect the context of the community | | | |
| Accommodate bicycle and pedestrian facilities included? | | An alternative should have a bias toward providing for safe bicycle and pedestrian use | | | |