North Avenue Reconstruction Project

CSS Meeting #3

October 14, 2015
Agenda

• Convene the Meeting
• Review of CSS Advisory Group Meetings 1 & 2
• Crash Analysis and Discussion
• Elements of the Draft Purpose and Need
• Proposed Roadway Cross-Sections
• Adjourn
REVIEW OF CSS ADVISORY GROUP MEETINGS 1 & 2
Summary of Issues Affecting North Avenue

- Access to/from feeder streets, driveways, and North Avenue
- Railroad crossing delays & safety
- Speeding
- Too much commercial traffic
- Good visual setting
- Lack of bike/ped accommodations
- Hills reduce visibility
- Inconsistent roadway configuration
- Poor signage
- Stormwater management
Summary of the Future of North Avenue

- Bike/Pedestrian accommodations
- Lighting – safety, light pollution
- Better intersection configurations
- Address railroad crossing safety
- Stormwater treatment
- Maintain/create visual appeal
- Address sight lines at sharp curves & hills
- Improve travel to/from North Avenue
- Improved signing
- Better cross section transitions
Weighting Exercise

A. Accommodate bikes/pedestrians

B. Address speeding/safety

C. Improve curves, intersections, lighting, and signing

D. Improve access to/from North Avenue

E. Maintain/create visual appeal

F. Protect the natural environment (e.g. stormwater management)
## Summary – Individual Weighting

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<th>Goal Letter</th>
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<th>Number Selecting</th>
<th>Total Point Value</th>
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<td>Improve curves, intersections, lighting, and signing</td>
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<td>E</td>
<td>Maintain/create visual appeal</td>
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## Summary – Group Weighting

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Recap of Public Meeting #1

• Approximately 80 attendees
• 24 written comments
• Common themes
  – Support for complete 4-lane expansion
  – Support for developing a 3-lane option
  – Not in support of the project
  – Traffic has significantly increased which makes it hard to turn onto and off of North Avenue and causes congestion
Recap of Public Meeting #1

• Common themes
  – Traffic has not increased and is not a concern
  – Concerns and questions over how much personal property will be taken and how that process will occur
  – There is lack of enforcement in the area for speeding
  – Increasing the number of lanes will only increase speeding and cause more safety concerns
  – Desire to bury power lines
  – Many concerns with the railroad crossing
Recap of Public Meeting #1

• Common themes
  – Sidewalks and bike lanes are necessary
  – Better signal phasing at points along the corridor
  – Surface drainage problems
  – Desire for the area to remain a residential neighborhood, noting that expanding the road will make it more commercial
  – The road is in excellent condition and does not need to be upgraded
CRASH ANALYSIS & DISCUSSION
NORTH AVENUE RECONSTRUCTION PROJECT

North Avenue & Calhoun Road
- Rear End: 35
- Right Angle: 2
- Left Turn: 16
- Sideswipe: 2
- Single Vehicle: 2
- Total Crashes: 57

North Avenue & Pilgrim Road
- Rear End: 31
- Right Angle: 2
- Left Turn: 9
- Sideswipe: 1
- Single Vehicle: 1
- Total Crashes: 44

North Avenue & Pilgrim Square Drive
- Rear End: 5
- Right Angle: 1
- Left Turn: 2
- Total Crashes: 8

North Avenue (CTH M)

N. Calhoun Road

Pilgrim Road (CTH M)
NORTH AVENUE RECONSTRUCTION PROJECT

North Avenue & Highland Drive
- Rear End: 3
- Right Angle: 2
- Left Turn: 4
- Single Vehicle: 2
- Bicycle: 1
- Total Crashes: 11

North Avenue & Lilly Road
- Rear End: 4
- Left Turn: 3
- Single Vehicle: 1
- Bicycle: 1
- Total Crashes: 8

North Avenue (CTH M)

Highland Drive

Underwood Creek

Lilly Road

Hollyhock Lane
Key Takeaways from Crash Analysis

• Trend of rear-end crashes along the two-lane segment of the corridor that are associated with turning vehicles

• No identifiable trend of crashes at the 2-4-2 transition locations
  – The bigger problem seems to be turning vehicles mentioned above

• Crash concerns at the Highland Drive intersection
  – Two areas of concern – sight distance and confusion due the westbound lane drop
Key Takeaways from Crash Analysis

• Westbound North Avenue at Pilgrim Square Drive
  – Appears to be a hot spot for rear end collisions

• Few “segment” crashes in the four-lane divided section

• Numerous crashes at the median opening just west of 124th Street
ELEMENTS OF THE DRAFT PURPOSE AND NEED
Elements of Draft Purpose and Need

• Safety
  – One fatality
  – Crashes throughout corridor
    • Both at intersections and in segments in between
  – Rear end and left turn crashes most prevalent
  – Significant number of access points

• Capacity
  – Existing vs. future Level of Service
Elements of Draft Purpose and Need

• Consistency with Local Plans
  – SEWRPC 2035 Regional Transportation Plan
  – City of Brookfield 2035 Comprehensive Plan (2009)
  – A Comprehensive Development Plan for Waukesha County (2009)
  – All list North Avenue as 4-lanes throughout corridor

• Roadway Deficiencies
  – Doesn’t meet driver expectation
    • Various cross sections – transition from 2-lane to 4-lane; lane drops; turn lanes
  – Variable shoulder width
  – Not consistent for bikes/peds
PROPOSED ROADWAY CROSS SECTIONS
5-Lane Roadway with TWLTL
4-Lane Roadway with Median
3-Lane Roadway with TWLTL

TYPICAL WIDTH OF A 3-LANE ROADWAY (WITH TWO-WAY LEFT TURN LANE)
Application will be determined based on:

• Traffic volumes and operations
  – Average Daily Traffic
  – Peak hour analysis at intersections

• Crashes/Safety

• Number and location of access points

• Public input

• Impacts
TRAFFIC COUNTS AND SPEED STUDY UPDATE
Turning Movement Counts

• 6AM to 9AM during September and October at:
  – 166th St
  – Glen Cove-Wirth Park
  – Mount Kisco-Walnut Grove
  – Hollyhock Lane
24-hour Mechanical Traffic Counts

• Taken at the following locations:
  – 500’ west of Calhoun, Eastbound only
  – 500’ east of Calhoun
  – 500’ west of Pilgrim Parkway
  – 500’ north of North Ave along Pilgrim Parkway
  – 500’ south of North Ave along Pilgrim Parkway
  – 500’ east of Pilgrim Parkway
  – 150’ west of Highland Road
  – 150’ east of Highland Road, WB only
  – 150’ west of Lilly Road
  – 300’ east of Lilly Road
  – 1,600’ west of 124th Street
  – 300’ west of 124th Street
Speed Surveys

• Off-peak period speed surveys of traffic at:
  – 2-lane segment between East Hillsdale and Glen Cove
  – 2-lane segment between West Rockway and East Rockway
  – 4-lane segment between Mount Zion Road and Mount Kisco-Walnut Grove
  – 2-lane segment between Hollyhock Lane and Arrowhead Court
Next Steps

• Finalize Purpose and Need
• Develop initial alternatives
• CSS Advisory Group meeting #4
  – Present initial alternatives to CSS Advisory Group (December 2015)
• CSS Advisory Group meeting #5
  – Narrowed range of alternatives (February 2016)
• Public Meeting #2
  – Narrowed range of alternatives (February 2016)