



NORTH AVENUE RECONSTRUCTION PROJECT

North Avenue Reconstruction Project

*CSS Meeting #3
October 14, 2015*



NORTH AVENUE RECONSTRUCTION PROJECT

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



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REVIEW OF CSS ADVISORY GROUP MEETINGS 1 & 2



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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
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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
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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)



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Summary – Individual Weighting

Goal Letter	Goal	Number Selecting	Total Point Value
A	Accommodate bikes/peds	8	26
B	Address speeding/safety	10	36
C	Improve curves, intersections, lighting, and signing	11	29
D	Improve access to/from North Avenue	12	37
E	Maintain/create visual appeal	11	28
F	Protect the natural environment	6	23



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Summary – Group Weighting

Goal Letter	Goal	Number Selecting	Total Point Value
A	Accommodate bikes/peds	5	12
B	Address speeding/safety	4	16
C	Improve curves, intersections, lighting, and signing	5	12
D	Improve access to/from North Ave.	5	16
E	Maintain/create visual appeal	4	11
F	Protect the natural environment	2	8



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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



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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



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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



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CRASH ANALYSIS & DISCUSSION

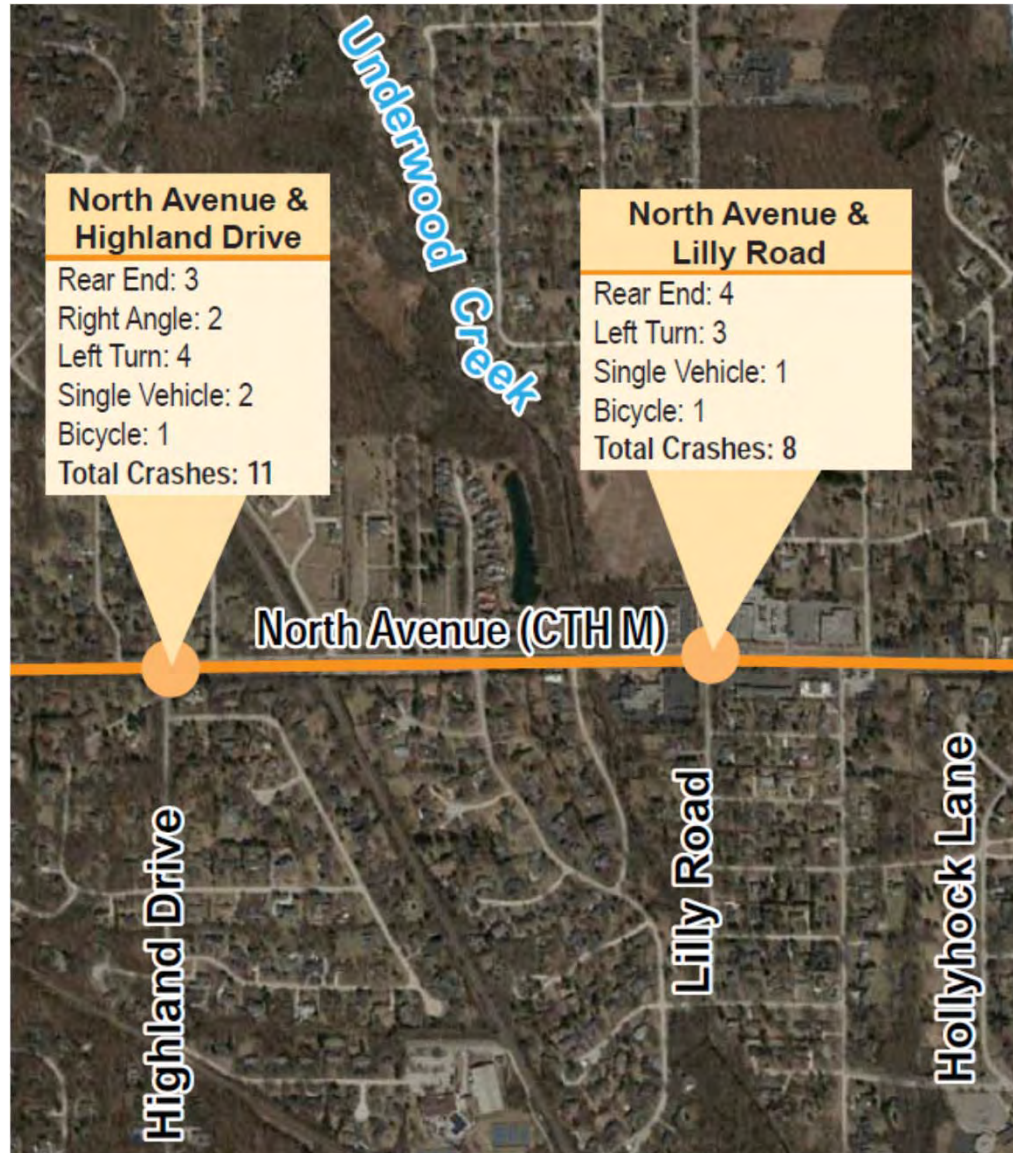


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Key Takeaways from Crash Analysis

- 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



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ELEMENTS OF THE DRAFT PURPOSE AND NEED



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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



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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



NORTH AVENUE

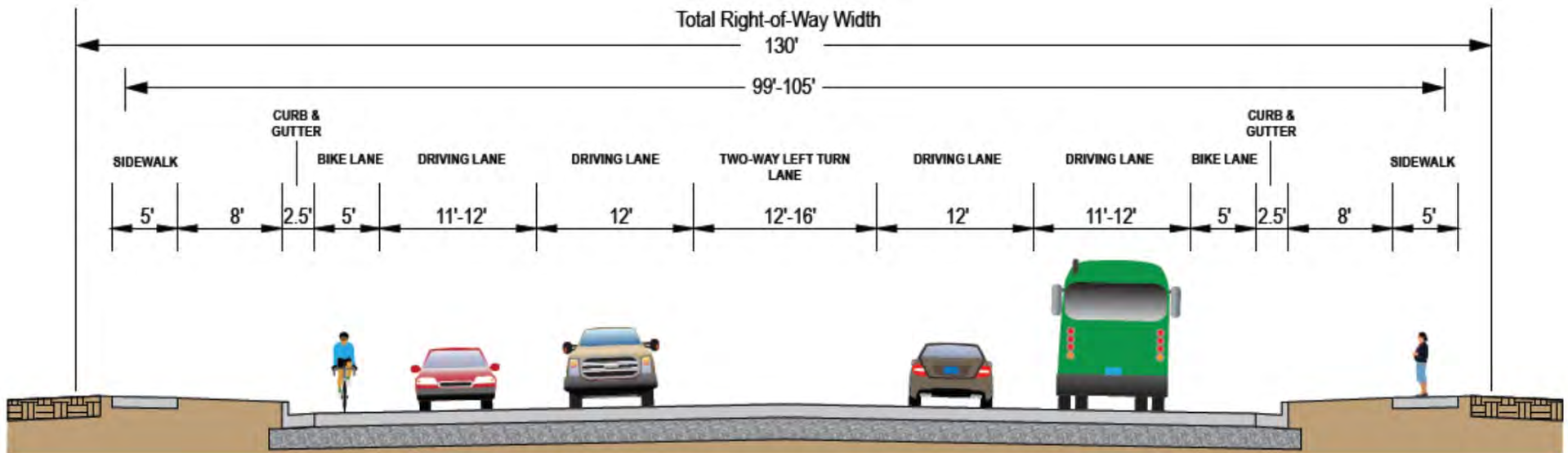
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PROPOSED ROADWAY CROSS SECTIONS



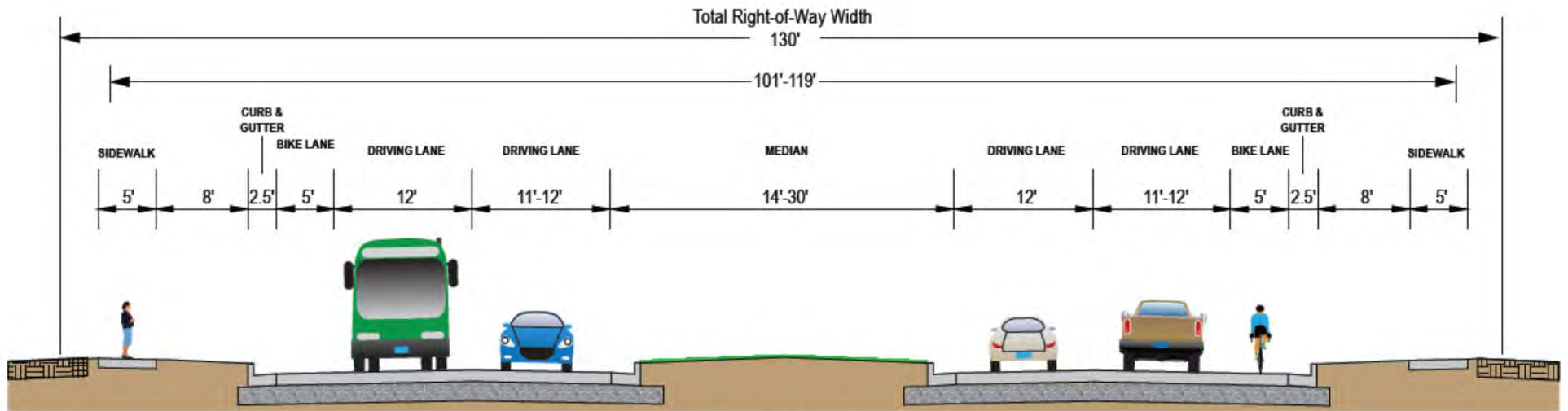
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5-Lane Roadway with TWLTL



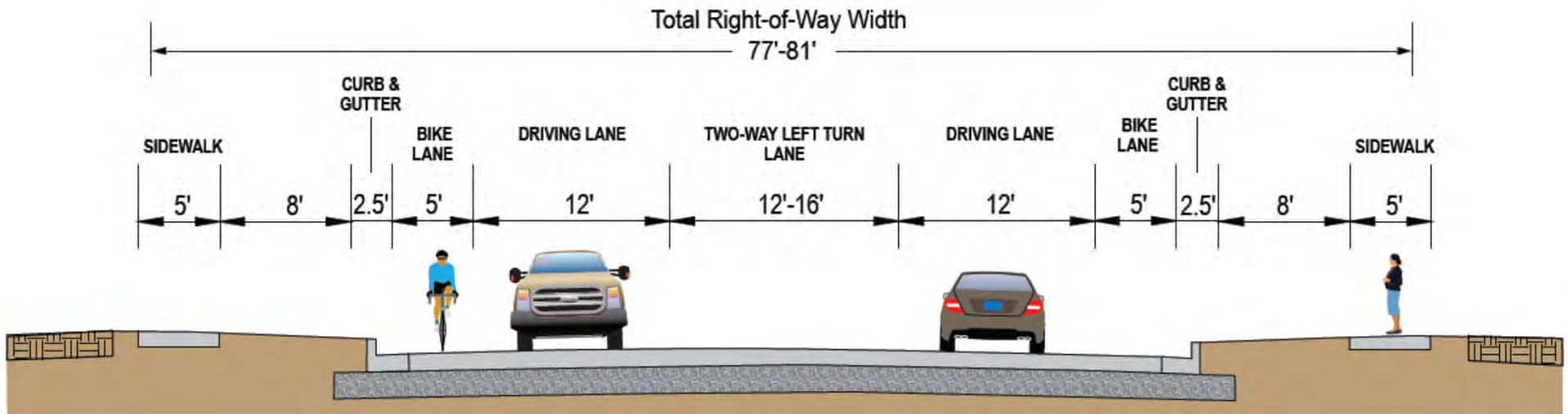
TYPICAL WIDTH OF A 5-LANE ROADWAY (WITH TWO-WAY LEFT-TURN LANE)

4-Lane Roadway with Median



TYPICAL WIDTH OF A 4-LANE ROADWAY

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





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TRAFFIC COUNTS AND SPEED STUDY UPDATE



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Turning Movement Counts

- 6AM to 9AM during September and October at:
 - 166th St
 - Glen Cove-Wirth Park
 - Mount Kisco-Walnut Grove
 - Hollyhock Lane



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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



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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)