North Avenue Reconstruction Project
Context Sensitive Solutions
Advisory Group Meeting #5

ATTENDEES: Sign-in sheet attached
LOCATION: Brookfield Library, Sonia Bielmeier Community Room
PREPARED BY: Buddy Desai/CH2M
COPIES: Advisory Group Members File
MEETING DATE: February 17, 2016

The fifth Advisory Group meeting for the North Avenue Reconstruction Project was held on Wednesday, February 17, 2016 from 4:00 pm to 6:00 pm at the Brookfield Library. Buddy Desai of CH2M facilitated the meeting. 11 members of the Advisory Group were present at the meeting.

Materials Available at the Meeting
The Advisory Group was provided the following:

- Agenda
- Roll plots of the 4-lane divided and 5-lane with two-way-left-turn-lane alternatives were taped to the walls for group review and discussion

Introductions
Buddy Desai of CH2M facilitated the meeting and introduced members of the Waukesha County Public Works Department (County) and members of the consulting team. As the CSS Advisory Group is familiar with each other, they were not asked to provide self-introductions.

Review of CSS Meetings #1 – #4
Buddy continued the meeting by giving a PowerPoint presentation that included a summary of the first four CSS Advisory Group meetings. The entire presentation will be emailed to the Advisory Group with these notes and will be posted to the project’s website.

The first CSS Advisory Group meeting discussed a summary of issues affecting North Avenue today and the vision for North Avenue as we look to the future. The second CSS Advisory Group meeting involved an individual and group weighting exercise aimed at determining which issues carried more importance than others. The third CSS meeting dealt with the crash analysis, elements of the project’s Purpose and Need, and the draft roadway typical sections. The fourth CSS Advisory Group meeting discussed the drainage & stormwater process, the speed survey and traffic counts, the gap analysis (how long it takes to turn onto North Avenue) and the presentation of the four-lane divided and five-lane with a two-way left turn lane (TWLTL).
Refined Purpose and Need

Buddy then moved on to Meeting #5 topics. He began by indicating that the project team has developed a more thorough definition of the Purpose and Need for the North Avenue Reconstruction Project. The Purpose and Need is defined as:

- Roadway Deficiencies
  - Variable cross sections
  - Off-set intersections
  - Sub-standard vertical curves (hills/valleys)
- Safety
  - 250 crashes from 2010 through 2014
  - About 40% of crashes are injury crashes
- Traffic Demand
  - WisDOT forecasts show 12 to 22 percent traffic increase between 2015 and 2039
  - Difficulty turning onto and off North Avenue to/from side streets and driveways
- Traffic Operations
  - Some design year (2039) movements operate at LOS F during peak hours
    - Intersections with Pilgrim Square Drive, Highland Drive, and 124th Street
  - Other sections are expected to operate at unacceptable levels below LOS D during the peak hours
    - North Avenue through the Calhoun Road intersection
    - All existing two-lane roadway sections
- Transportation and Land Use Planning
  - North Avenue is designated in the National Highway System as principal arterial
  - SEWRPC 2035 Regional Transportation Plan proposes that North Ave be a 4-lane roadway through the entire corridor

Traffic Discussion

Brad Heimlich led a discussion on the traffic forecasts and traffic diversion forecasts for the year 2039 (the North Avenue Reconstruction Project design year). A summary of the information presented is as follows:

- SEWRPC provided three sets of microsimulation forecasts using their traffic model:
  - “Build” – with a 4-lane North Avenue and all other planned improvements (I-94 interchange, 4-lane Pilgrim, and 124th Street extension)
  - “No-Build” – without 4 lanes on North Avenue, but with all other planned improvements; note that this scenario consistently results in the lowest forecasts on North Avenue
  - “No-Build Scenario 2” – without 4 lanes on North Avenue and without the three other planned improvements listed above
- Year 2039 forecasted volumes were very similar under all three scenarios
  - Between Calhoun and Pilgrim: maximum difference is 2,500 vehicles per day (about 18%)
  - Between Pilgrim and Lilly: maximum difference is 1,500 vehicles per day (about 10%)
  - Between Lilly and 124th: differences are mostly within 2,500 vehicles per day (about 12%)
- None of these scenarios drop forecasted volumes enough to eliminate the need for additional capacity on North Avenue between Calhoun and 124th
After the presentation of the information above, one CSS Advisory Group member requested some time to discuss his traffic data gathering, and analysis of the data. A dialogue ensued regarding the data presented by the project team and the information Britt Mason shared with the Advisory Group. Topics discussed included:

- Single-tube and two-tube counts – who performed them and where
- The actual rate at which Brookfield and Elm Grove will grow
- Selecting which traffic volume projections to use in the analysis
- Whether improvements to other roads are drawing traffic off North Avenue
- Capitol and Blue Mound do not have any more “room” to take traffic off North Avenue

After considerable discussion, it was agreed that the issue would be tabled until after the formal Advisory Group meeting concluded.

Traffic Calming Discussion
Buddy presented the definition and goals of traffic calming.

- Traffic calming definition
  - Traffic calming is the combination of vertical and horizontal measures that:
    - Reduce the negative effects of motor vehicle use
    - Alter driver behavior
    - Improve conditions for non-motorized street users

- Traffic calming goals
  - Reduce Speed
    - Slow vehicles to increase safety for other users
  - Reduce traffic volume
    - Used to discourage vehicles “cutting through” residential or local access streets
    - This is not appropriate for arterials such as North Avenue

The traffic calming methods presented to the Advisory Group were Narrow Lanes (11’), Raised Right Turns/Crosswalks, Speed Humps/Tables, Roundabouts, Chicanes, Bump Outs, and Neighborhood Traffic Circles. Of these methods, only the Raised Right Turns/Crosswalks, Narrow Lanes (11’), and Roundabouts are appropriate to North Avenue. Buddy also presented the City of Brookfield’s Traffic Calming Guidelines which state, among other things, that traffic calming on roads under their jurisdiction apply only to residential and local streets only.

Revised Alternatives
The two roadway typical sections/alternatives that remain under consideration (the 4-lane Divided Section and the 5-Lane TWLTL), were discussed and the two typical sections were reviewed with the Advisory Group. Brad noted that each alternative had been revised since the last Advisory Group meeting. The total Right of Way (R/W) required for both alternatives is proposed to be 130’.

Buddy noted that the revisions included shifting the alignments in certain locations to avoid key impacts and showing additional median openings in the 4-lane Divided Section.

Roll Plots of Alternatives
Brad then walked the Advisory Group members through roll plots showing the 4-Lane Divided and 5-Lane TWLTL alternatives. Many individual and group discussions took place as Advisory Group members reviewed the two sets of alternatives.
Issues discussed during the walkthrough included:

- **Question** – Do we need a sidewalk on both sides of the road?
  - **Response** – The City of Brookfield asked for sidewalks on both sides of North Avenue.

- **Question** – Can you narrow the median to allow for sidewalks, or wider sidewalks?
  - **Response** – Yes, this can be considered.

- **Comment(s)** – A few Advisory Group members questioned whether the bike accommodation width as shown was sufficient to allow bikes to use the roadway and not be forced onto the sidewalk/path.

The meeting was adjourned at 6 p.m.