# Appendix A: Advisory Committee Minutes



Friday, December 8, 2017 1:00 – 3:00 PM

## **MEETING SUMMARY**

#### **ATTENDEES**

John Welle, Aitkin County	Brad Estochen, MnDOT
Duane Hill, MnDOT D1 (Phone)	Michael Corbett, MnDOT
James Curran, MnDOT D2	Thomas Styrbicki, MnDOT
James Hallgren, MnDOT D3	Shaker Rabban, MnDOT
Steve Voss, MnDOT D3	Brad Utecht, MnDOT
Mary Safgren, MnDOT D4	Sheila Kauppi, MnDOT
Ronda Allis, MnDOT D6	Tim Ardvison, Stonebrooke Engineering
Susann Karnowski, MnDOT D8	Chris Chromy, Bolton & Menk
Edward Idzorek, MnDOT	Angie Bersaw, Bolton & Menk
Nicole George, MnDOT	Ross Tillman, Bolton & Menk
Paul Czech, MnDOT Metro (Phone)	

#### 1. Introductions

Angie asked each person on the Advisory Committee to introduce themselves.

Angie provided background on the need for the study and reviewed the study goal. All meeting handouts and the presentation are attached for reference.

Paul Czech stated the study's focus on the National Highway System (NHS) may miss some of the bigger transportation issues in Greater Minnesota which are likely not on the NHS system. Brad said that may be true but current MnSHIP investment direction and federal performance measures support the emphasis on NHS in Greater Minnesota for this study at this time.

### 2. Scope, Schedule and Methodology

Angie reviewed the overall study approach as outlined in the study overview, the study schedule and the role of the Advisory Committee. Ross explained each screening level in detail including the goal, criteria and data to be used.





## 3. Level 1 Test Case (TH 23)

Chris reviewed a few test segments showing Level 1 screening results on TH 23 between St. Cloud and I-35 and TH 10/371 from St. Cloud to Walker. Committee members that know these corridors felt the results seemed reasonable – the Level 1 Screening did identify mobility and reliability issues as expected on these corridors.

The committee requested Bolton & Menk illustrate the segments analyzed for each corridor and identify issues by direction.

## 4. Round Robin – Early Study Observations and Specific Concerns

Angie requested input from committee members on the study approach and/or any other specific concerns. The following summarizes Advisory Committee comments provided:

- Need to confirm speed data is accurate. Consider using middle of the day speeds rather than posted speed. Most states are going away from using posted speeds.
- Concern that some areas showing mobility issues are actually related to construction. Bolton & Menk will filter results by removing construction projects included in the STIP.
- Seasonal fluctuations need to be considered. Need to capture the summer tourism season but should exclude winter influences on speed.
- Ensure issues on NHS within communities are not excluded or washed out in segment analysis.
- Why are mobility/reliability issues showing up on interstates? Bolton & Menk to consider the influence heavy commercial trucks may have on interstate speeds.
- Provide screening results to MnDOT Districts for verification. There is a possibility that some districts may not have any high-priority issues and that is ok.
- Safety is a mobility issue and should be considered. A safety measure will be included in the Level 2 analysis.
- Consider transit routes and need for mobility on these routes in the Level 2 analysis.

Angie reported the next Advisory Committee Meeting is anticipated to be held in February.

<u>District Outreach Update:</u> The Project Management Team will send refined Level 1 Screening results to individual districts for verification prior to the next Advisory Committee Meeting.





## February 9, 2018 Update

Based on Advisory Committee input and MnDOT staff review, the following changes were incorporated to the Level 1 Screening:

- We have removed data that could have been affected by a roadway or bridge project identified in the STIP data
- We are only using non-winter months (May-Oct) to attempt to avoid data affected by inclement weather
- New data incorporates verified speed limit data we did not check all miles of the state, but we did look at the areas that were the most suspect in terms of what we were receiving for speed data from NPMRDS compared to the posted speed we were showing.
- We feel keeping the LOTTR threshold at the federal level of **1.5** is still reasonable we are flagging 223 miles
- In terms of speed index, we modified our method slightly which along with the edits mentioned above has reduced the amount of interstate mileage shown at the 0.95 level. That being said, the **0.90** level removes most of the interstate mileage and retains a good number of areas to look at further in level 2. At 0.90, we are flagging 1,044 miles. We may be picking up data from when the interstates were signed at 65MPH versus 70MPH using the 0.90 threshold alleviates the problem of us flagging speeds closer to 65MPH.







March 9, 2018 10:00 am – 12:00 pm

## **MEETING SUMMARY**

## **ATTENDEES**

John Welle, Aitkin County	Mark Nelson, MnDOT
Duane Hill, MnDOT D1 (Phone)	Michael Corbett, MnDOT
James Curran, MnDOT D2	Thomas Styrbicki, MnDOT
James Hallgren, MnDOT D3	Shaker Rabban, MnDOT
Steve Voss, MnDOT D3	Brad Utecht, MnDOT
Shiloh Wahl, MnDOT D4 (Phone)	Ross Tillman, Bolton & Menk
Susann Karnowski, MnDOT D8	Kate Miner, Stonebrooke Engineering
Nicole George, MnDOT	Chris Chromy, Bolton & Menk
Edward Idzorek, MnDOT	Angie Bersaw, Bolton & Menk
Brad Estochen, MnDOT	

## 1. Introductions and Study Recap

Angie provided a brief recap on study progress since the last Advisory Committee Meeting in December 2017.

#### 2. Level 1 Results

Angie stated the goal of the Level 1 screening was to screen out NHS segments with no mobility or reliability issues. She noted Districts were asked to review the Level 1 screening to verify and/or suggest changes to what is carried forward into the Level 2 evaluation based on their local knowledge.

Ross reviewed the Level 1 screening and District input as follows:

- 9,300 total NHS centerline miles studied
- Level 1 screening removed approximately 76% of segments and 87% of the total miles





- District review removed an additional 112 segments and added 24 segments that did not pass the Level 1 screening
- In summary, 940 segments of 1,265 miles are proposed to move on to Level 2 screening

Some Advisory Committee members commented their review of the initial screening results felt subjective since they naturally default to what they know. The Advisory Committee agreed to move all NHS segments into the detailed Level 2 screening to remove this subjectivity.

## 3. Level 2 Approach

Angie presented draft evaluation criteria for the Advisory Committee's consideration. With the revised approach agreed to earlier, all NHS segments will now be evaluated at one time using the proposed evaluation criteria:

- Mobility and Reliability Prioritize locations with high variability in travel times and consistent mobility issues.
  - o Level of Travel Time Reliability (LOTTR) Exhibits a reliability issue based on the 80<sup>th</sup> percentile travel time/50<sup>th</sup> percentile travel time
  - Speed Index Exhibits a mobility issue based on historic average speed/posted speed
  - Exhibits both a LOTTR and Speed Index issue
- **Safety** Prioritize locations that have a higher number of crashes and traffic volume as compared to other locations throughout the State
  - Critical Crash Index Provides a relative score based on the number of crashes and traffic volume for a segment as compared to similar locations
  - Fatal and Serious Crash Index Provides a relative score based on the number of fatal and serious injury crashes for a segment
- **System Role and Route Characteristics** *Prioritize locations that serve the greatest* amount of regional trips, freight traffic, and tourism.
  - Traffic Volume Total AADT
  - HCAADT Number of heavy commercial vehicles
  - o Trip Length Average trip length (sum of passenger car and truck data from Streetlight)
  - Rail Number of trains per day
  - Tourism Provides access to a state park or is a scenic byway.

The Advisory Committee suggested the following changes:

- Tourism consider other destinations/events such as casinos and consider a buffer boundary (i.e., within five miles of a casino) for the tourism destination
- Trip length be clear its an average length measure







Ross reviewed weighting options using the proposed evaluation criteria. The following comments were suggested:

- How often does a location meet LOTTR and Speed Index? Are we double counting with a criteria of "Both LOTTR and Speed Index"? Ross said it is not double counting but does put additional emphasis on locations that meet both.
- Suggestion to weight the safety criteria of critical crash index and fatal and serious crashes equally.
- Should safety be greater?
- This is a mobility/reliability study so that category should receive the highest percentage of points. Should safety be measured at all?
- Suggestion to factor the LOTTR by traffic volumes.
- Give HCADT more weight than the other system role and route characteristic criteria.

The Advisory Committee recommended moving forward with Weighting Option #1 with the following changes:

- Weight safety criteria equally
- Factor LOTTR by traffic volume and remove AADT as a criteria from the system role and route characteristics category
- Increase HCADT weight and decrease trip length weight

## 4. Solutions Toolbox - Review Framework

Ross introduced the idea of a solutions toolbox and showed examples of what this could contain. This included a list of potential low-cost, high-benefit intersection and segment solutions. Each solution in the toolbox would include a page outlining the pros/cons of the solution, where best applied, and magnitude of potential costs. The Advisory Committee suggested adding road diets (4 to 3-lane conversions) and access management to the list of potential solutions. Brad reiterated the focus of the solutions toolbox is on atgrade, low-cost improvements that could be funded with the Greater MN Mobility Investment Category (approximately \$24M available over two years).

## 5. Next Steps – District/Area Workshops

Angie reviewed the next step of the study is to schedule workshops with each MnDOT District and area representatives to discuss and confirm the evaluation results. She said in some cases it may be clear what solution is needed and in others there may be too many variables. The Advisory Committee agreed it may be difficult to get to solutions at all locations with the data available. They agreed the workshop objectives may be to confirm







the list of problem locations and put locations into one of the following buckets if possible:

- Stand-alone, low cost improvement (i.e., range of solutions are known)
- Scoping for larger planned or programmed project
- Unprogrammed, complex issue with additional study needed

The Advisory Committee recommended Bolton & Menk contact each MnDOT District representative to schedule workshops in April and May. Districts were encouraged to invite other local stakeholders (MPOs, RDCs, etc.) to the workshops as desired.







June 26, 2018 10:00 am – 12:00 pm

## **MEETING SUMMARY**

#### **ATTENDEES**

Datrick Weidemann, MnDOT	Ted Erickson Degion 5
Patrick Weidemann, MnDOT	Tad Erickson, Region 5
Duane Hill, MnDOT D1 (Phone)	Michael Corbett, MnDOT
James Curran, MnDOT D2 (Phone)	Phillip Schafner, MnDOT
Greg Ous, MnDOT D7	Shaker Rabban, MnDOT
Steve Voss, MnDOT D3	Brad Utecht, MnDOT
Shiloh Wahl, MnDOT D4 (Phone)	Ross Tillman, Bolton & Menk
Susann Karnowski, MnDOT D8	Kate Miner, Stonebrooke Engineering
Nicole George, MnDOT (Phone)	Chris Chromy, Bolton & Menk
Edward Idzorek, MnDOT (Phone)	Angie Bersaw, Bolton & Menk
Mao Yang, MnDOT	

## 1. Introductions and Study Recap

Angie provided a brief recap on study progress since the last Advisory Committee Meeting in March 2018.

## 2. District Workshop Summaries

Angie reviewed a summary of comments/questions that came up at District Workshops that were held in April and May of 2018:

- Study goal Several asked about the study's focus on NHS routes only. Some commented that NHS routes are typically Greater MN Districts best functioning routes. What other funding sources are available to address mobility in Greater MN on non-NHS routes?
- Evaluation Criteria District 7 staff expressed concerns with the evaluation criteria. They felt safety was rated too high for a study focused on





mobility/reliability and were concerned the mobility bonus was double counting the mobility issue.

- Availability of data for future use Several asked about having access to the data for before/after comparisons to understand the effectiveness of low-cost improvements. Many were also interested in having access to the data for other potential uses.
- Crash data at the time of the original scoring analysis the 2015-2017 crash data was not available and therefore the reliability data was looking at different years than the crash data. Every district recommended updating the analysis with the most recent crash data for consistency now that it's available.
- Funding Each workshop had several questions on the Greater MN Mobility funding and how it would be distributed. Brad noted this is on the agenda for today's meeting.
- Data segmentation Each District had a few locations that were questioned due to how the NPRMDS data was segmented. Ross said due to how the data is provided, this is not something that can be changed easily. He said it would require manually creating segments and supplementing the new segments with other data sources such as Streetlight.

Angie reviewed District Workshop Summaries that were prepared for each of the seven Districts. She noted comments and requests for clarification were being accepted on the District Workshop Summaries for another few weeks.

#### 3. Options for Study Conclusion

Angie reported that based on input from the District Workshops, the project team has requested Bolton & Menk/Stonebrooke move forward with rerunning the scoring results with updated crash data and following upon questions identified by Districts. Once these tasks are completed, the project team will send revised scoring lists and responses to comments to each District for review.

Angie then presented the following study conclusion options for the Advisory Committees consideration:

- Additional data segmentation Although this was something each district identified as a need, the project team does not recommend it due to the effort required for potentially low return (i.e., results may not change) and data credibility concerns since it would require mixing datasets. MnDOT staff also noted the pilot project with Streetlight has ended and MnDOT is working on an RFP to select a new vendor. This could take several months and would require a delay in the study in order to have access to the Streetlight-type data. The Advisory Committee concurred with the project team's recommendation to dismiss this option for the reasons discussed.
- Further evaluate potential solutions Ross reviewed this option. Patrick felt this option treads into project development which is the responsibility of the districts,







not a central office planning study. Other district representatives felt this would be ok if the project team was working closely with district staff. Several Advisory Committee members stated this would be helpful but recognized the risk in still lacking enough data to get closer to a range of solutions at a particular location.

Develop a mobility checklist – Ross presented the idea to develop a checklist to
determine potential mobility benefits based on a locations characteristics. There
was support from Advisory Committee members for this option if somehow
linked as a user guide to the solutions toolbox.

## 4. Greater MN Mobility Investment Category

Brad presented information about the funding available in 2022 and 2023 from the Greater MN Mobility Investment Category. Below is Advisory Committee feedback on the following discussion topics:

- Use of Funding Advisory Committee suggested flexibility to use funding for projects and/or additional study.
- Distribution Options Advisory Committee seemed to support the option to
  distribute funds to districts rather than a centralized program. Brad presented a
  few options for distribution. The Advisory Committee requested the percent of
  VMT option be changed to percent of NHS VMT. Brad will revise and bring back
  further details for discussion at the next Advisory Committee meeting. The
  Committee asked about the MPO role and whether or not a location would get
  more points or be included on the list if in an MPO plan. Brad reported this will
  also be revisited and discussed at the next Advisory Committee meeting.
- Selection Process & Evaluation Criteria Brad presented a few considerations for selection process and evaluation criteria. The Advisory Committee recommended keeping it simple since this program is only available for two years at this point. Brad reported he would take the feedback into consideration and bring this topic back for further discussion at the next meeting.

## 5. Next Steps and Schedule

The project team will rerun the scoring results with updated crash data and share these results along with any additional follow-ups with the Districts. A final Advisory Committee meeting is anticipated in September.







**September 12, 2018 10:00 am – 12:00 pm** 

## **MEETING SUMMARY**

#### **ATTENDEES**

Patrick Weidemann, MnDOT (Phone)	Tad Erickson, Region 5 (Phone)
Duane Hill, MnDOT D1 (Phone)	Mary Safgren, MnDOT D3
Darren Laesch, MnDOT D2	Phillip Schafner, MnDOT (Phone)
Ronda Allis, MnDOT D7	Shaker Rabban, MnDOT (Phone)
Steve Voss, MnDOT D3	Brad Utecht, MnDOT
Shiloh Wahl, MnDOT D4 (Phone)	Mark Nelson, MnDOT
Susann Karnowski, MnDOT D8	Kate Miner, Stonebrooke Engineering
Nicole George, MnDOT (Phone)	Ross Tillman, Bolton & Menk
Edward Idzorek, MnDOT	Angie Bersaw, Bolton & Menk

#### 1. Introductions and Study Recap

Angie provided a brief recap on study progress since the last Advisory Committee Meeting in June 2018. She presented an updated graphic that represents the revised study approach agreed to at the last meeting showing one evaluation phase to identify mobility/reliability problem locations with scores of 5 or greater. The revised approach also includes the study's conclusion with a toolbox of potential solutions for future consideration at problem locations.

## 2. Review Updated Scoring Results

Angie reviewed the updated scoring tables developed as a result of the Advisory Committee's direction to rerun the analysis with updated crash data from the years 2015-2017. Angie noted the updated scoring tables were shared with Districts prior to the Advisory Committee meeting. She said only Districts 2 and 7 provided comments/questions on the revised scoring results. She encouraged other Districts to review and contact the project team with any further questions.





## 3. Greater MN Mobility Investment Updates

Brad provided an update on the Greater MN Mobility Investment Category. He said approximately \$13 million is available in 2022 and 2023. Brad presented the following uses of the funding for discussion:

- Eligible locations identified location (score >5) as part of this study or identified project in an MPO long-range plan
- Projects standalone project (would need to be scored) or add on to a programmed or planned project (would not need to be scored)
- Additional study/evaluation corridor studies or intersection evaluation

The Advisory Committee recommended NHS locations identified in an MPO plan should be scored and added to the District tables even if the score is <5. These locations would then be eligible for Greater MN Mobility Investment funding.

Brad presented the following funding distribution options for the committee's consideration:

- Option 1 funds distributed by NHS VMT
- Option 2a funds distributed by number of identified locations with a score >5
- Option 2b funds distributed by the total score of identified locations

The Advisory Committee recommended Option 1 since it provides a stable funding amount for both years.

Brad presented two options for project selection evaluation criteria. The Advisory Committee recommended keeping the process simple and using the study's evaluation criteria since the locations are already scored.

## 4. Study Wrap-Up

Ross reviewed the solutions toolbox user guide that was developed to complement the toolbox. It is intended to help users get to a range of potential solutions for a problem location based on the type of issue, either LOTTR or Speed Index, that is occurring at that location.

#### 5. Next Steps and Schedule

Angie reported the final step of the study is to develop a study report to document the methodology used to identify and evaluate (or score) locations. She said a primary component of the report will be fact sheets for each location with scores >5. Kate reviewed an example of a fact sheet. The intent is for this to be an easy reference back to the context of each particular location, the scoring results, and potential follow-ups noted along with any District and/or local input on the location.

Angie said a draft report will be provided to the Advisory Committee for review in October.





