Compass Advisory Team Meeting
Thursday May 18, 2017

Meeting Notes

Present: Dr. Teresa Adams/UW-Madison (phone); Lance Burger/Northwest Region (phone); Scott Bush/Compass Program Manager; Javier Vidal Carreras/UW-Madison (phone); Brandon Dammann/Wood County; Bob Hanifl/Southwest Region; Jeff Hess/North Central Region; Todd Hogan/Southwest Region; Bill McNary/Bureau of Traffic Operations (phone); Mike Ostrenga/Northwest Region; Doug Passineau/Wood County; and Iver Peterson/Southwest Region.

1. Compass Advisory Team Membership

Three new members were welcomed to the team, including:

- Brandon Dammann, Wood County Patrol Superintendent *(for Rob Bonham, Sauk County)*
- Jeff Hess, WisDOT North Central Region System Planning and Operations Manager *(for Gary Brunner, Northwest Region)*
- Bob Platteter, Buffalo County Highway Commissioner *(for Tom Lorfeld, Columbia County)*

There are two vacant seats on the team, including a County Patrol Superintendent seat *(formerly held by Dan Raczkowski/Marathon County)* and the seat for the WisDOT Program Management Section Chief *(formerly held by Mark Woltmann).* Scott will work to fill the patrol superintendent seat, and the other seat is contingent upon WisDOT filling the position.

2. May 19, 2016 Meeting Notes

The draft notes from the 2016 meeting were reviewed. Scott asked for comments and edits in the next week. (*no comments were received within this timeframe, so the notes were accepted as written*).

3. Draft *2016 Compass Annual Report*

The draft report was reviewed and discussed. Key observations from the 2016 field data include:

- 2.66 GPA. The MAPSS grade point average increased from 2.61 in 2015 to 2.66 in 2016. This is the overall GPA for the 29 Compass features. The condition level is below the WisDOT goal of a 3.00 GPA.
- Three "F" Grades. Drop-off on unpaved shoulders and cracking on paved shoulders continued to receive failing grades. Flumes received an "F" grade for the first time.
- Features Below Target. Two features were below their fiscally-constrained maintenance target, including drop-off on unpaved shoulders, and Flumes.
- Changing Grade Levels: Based on backlog changes of one to three percentage points, seven features improved one grade level and two features had a one grade level decline since 2015.
- Performance-Based Maintenance Initiative: Conditions improved for three features receiving PBM funding, including unpaved drop-off and cross slope, and cracking on paved shoulders.

The 2016 pavement condition data was also discussed. The pavement data is collected biennially and is used in the WisDOT Pavement Maintenance Management System. PMMS summary tables illustrate conditions by pavement type (asphalt and concrete) and along four condition levels (excellent, good, moderate, and bad). The Compass report provides state condition data by lane mileage and associated system percentage. The report also identifies region condition data by their percentage of roadway mileage.

A one page summary of system conditions was also presented, along with a table "Maintenance Priorities and 2016 Conditions". The table illustrates A through F level of service conditions for each Compass feature, listed by maintenance priority. The table provides information on competing demands, trade-offs, and potential expenditure strategies.

Next week Scott will distribute the draft report to the advisory team. He asked the team to review the document and provide comments to him within two weeks. The final report will be posted on the Compass website, discussed with Compass raters at their annual training, and a link to the report will be sent to state and county staff.

4. Region 2016 Conditions: Region Accomplishments and Challenges

The 2016 Compass field data was also presented as a peer group analysis at the region level. Condition data is annually prepared at the region level to provide them with insight into what they do well and what are their challenges. A Region Scorecard is prepared for each region, and identifies the following metrics:

- Region GPA, and the Regions with the Highest and Lowest GPA;
- Region GPA by Contribution Category;
- Region GPA by Element;
- Highest and Lowest Backlog Levels in the Region; and
- Conditions Better and Worse than Targeted

The same data is also portrayed visually, with a table illustrating a continuum of conditions from better (left) to worse (right). The visualizations identify region feature backlog levels and associated level of service grades, the statewide average, and the fiscally-constrained maintenance target. The visualizations are prepared each year to cater to people who prefer a graphic depiction of data over a tabular form.

5. 2017 MAPSS Performance Measures Report

The April 2017 MAPSS Performance Scorecard was reviewed. MAPSS is the performance management system for WisDOT and stands for the department goals (M-Mobility, A-Accountability, P-Preservation, S-Safety, S-Service). The Compass data first appears each year in the April quarterly MAPSS Report. The MAPSS position is currently vacant and the April report is late. The 2017 MAPSS Report will include the 2016 Compass data collected between August 15, 2016 and October 15, 2016.

The Compass grade point average is the MAPSS performance measure the department uses for highway maintenance. The GPA is calculated by averaging the individual grades for the 29 features rated in the Compass program. The 2016 GPA to be used in the 2017 MAPSS report is 2.66, below the WisDOT goal of a 3.00 GPA.

Other performance measures impacted by routine maintenance activities were discussed, including one-page summaries on:

- State highway pavement condition (backbone)
- State highway pavement condition (non-backbone)
- State bridge condition
- Winter response

6. 2017 Compass Training Schedule and Emphasis Areas

The 2017 training schedule was discussed, along with a status on training registrations. Twenty-two people have registered for the two-day introductory course and about 100 past raters are registered for the refresher training. The two-day course includes one day of classroom training and one day rating roadways in the field. The refresher training includes a combination of classroom and field training. The evaluation of protective barriers will be emphasized at training this summer, to ensure accurate and consistent evaluation of the Critical Safety feature.

7. Compass Quality Assurance Project – Changing Goals Over Time

The annual Quality Assurance project was discussed with the team. A map was distributed showing when counties have undergone a QA review. The QA process in 2016 focused on new raters, to ensure consistent ratings from the outset. The QA will select segments with several features present, to maximize rating comparisons.

8. New WisDOT Culvert Inspection Initiative

WisDOT is developing a statewide culvert inspection program to structure a consistent evaluation process and inspection cycle. More information will be shared with the team as the program is finalized. The culvert evaluation may be dropped from the Compass evaluation once the final statewide process is up and running. Approximately 400 culverts are inspected each year through the Compass field review process.

9. Leveraging Compass Data – Inventory Estimates and Drainage Deficiencies

Inventory estimates for several highway assets are prepared each year from the Compass field review. Multiple years of observation frequencies are aggregated to estimate the statewide inventory for ditches, culverts, drains, flumes, storm sewer systems, fences, and special pavement markings. The data requires each Compass segment to be 1/10 mile or 528 feet in length. The inventory estimates are used to prepare more accurate price tags for improving the maintenance condition of Compass assets.

For example, over ten years of Compass data illustrates an average of 3.26 culverts have been evaluated along each centerline mile of state highway. Based on the state system of approximately 11,228 centerline miles (net, without connecting highways), there are an estimated 37,000 culverts on the state trunk network (Interstates, U.S. highways, and state trunk highways).

The field review data also identifies the maintenance fix for deficient drainage assets, so more accurate price tags can also be calculated for these highway features. For example, nine years of Compass data illustrates that on average 69% of deficient culverts require a cleaning, while 31% of deficient culverts need to be replaced.

10. Next Meeting: May 17, 2018 in Wisconsin Rapids (i.e. 3rd Thursday in May)

11. Adjourn