

CRAB Systemic Safety Project Selection Tool

Methods for Collecting Additional Data Elements / Training Plan Meeting Notes

To: SSPST Workgroup

From: Eric Hagenlock

Subject: Methods for Collecting Additional Data Elements / Training Plan

Date: April 28th, 2015

Time: 1:30 PM – 3:00 PM

In Attendance

In Person: Mathew Enders, Dan Dovey, Mike Kroll, Derek Pohle, Walt Olsen, Jeff Le Cates, Don Zimmer, Jacky Nguyen, Chris Andrews, Scott Ackerman

By Phone: Henry Perrin, Vijay Kulkarni, Grant DeJongh, Matt Griswold

Agenda

Item 1 – Project Status

1. Introduced Jacky Nguyen, our project software developer
2. Project is on schedule if not slightly ahead of schedule
3. Four new inventories created, 1 inventory enhanced (reference points / intersections)
4. SSPST Module development underway for 1 month

Item 2 – Methods for Collecting Additional Data Elements

Data Collection Methods/Tools

1. County Developed (Excel, MS Access)
 - a. King – GIS for determining horizontal curves
 - b. Grant – Inclinator for determining vertical curves
2. CRAB Developed (SignRate, VisRate)
3. 3rd Party

Importing Data

1. Contact CRAB database administrator, Kathy O'Shea
2. County/CRAB work together to prepare schema of desired data elements to import

3. County/CRAB work to ensure data accurately conforms to schema
4. CRAB then accepts data and imports it into Mobility database
5. County and CRAB can discuss the need for periodic/continual updates using the process created

Item 3 – Training Plan

WebHelp:

http://www.crab.wa.gov/Technology/Mobility/Help40/Overview_1.htm

Classroom Training:

<http://www.crab.wa.gov/Technology/Mobility/pgs/registers.cfm>

Item 4 – Demonstration of Additional Data Elements and SSPST Module

1. Data Elements

- a. CRAB will develop a list of default values for county lookups for workgroup members to review
- b. Bus Stop
 - i. Stop Type – Pull Out / In Lane
 - ii. Stop has Structures (Yes/No)
 1. If Yes, do they meet clear zone standards
- c. Vertical Curve
 - i. Calculate rate of grade change
 1. $rate = (entering_grade - exiting_grade) / Length$
 - ii. Add linking of vertical curves like horizontal curves
 - iii. Identify combination curve by showing horizontal that intersect vertical and vice versa
- d. Horizontal Curve
 - i. Curve is linked if one begins at the same milepost where the other ends (same for vertical)
 - ii. We talked about allowing overlapping mileposts, but prompt the user to be sure they want to do this. Will be a very rare occurrence of a split roadway. **Does anyone have an example? If not, we are going to disallow this until it is asked for. Without it being used correctly it could allow for more bad data than good.**
- e. Intersections

- i. A couple ideas on skew angle
 - 1. Allow a negative number to know which direction the skew occurs
 - 2. Allow input of 16 compass points (N,NW,NNW,etc.) instead of 8 to increase skew accuracy
 - 3. Allow input of compass direction to calculate skew
 - 4. Add a checkbox for simple data entry/collection, Is Skewed? Yes/No
- 2. SSPST Module
 - a. Discussed the 4 major components of the SSPST module:
 - i. Identify Focus Crash Types, Facility Types and Risk Factors
 - ii. Screen and Prioritize Candidate Locations
 - iii. Select Countermeasures
 - iv. Prioritize Projects (Some parts of this phase would exist outside of Mobility application)
 - b. Demonstrated the 3 steps of component 1:
 - i. Focus Crash Types
 - 1. When moving crash types forward to step 2, we've decided to add an option to the users that focus crash types can be an AND or an OR, e.g.:
 - a. Run off the Road AND Young Driver
 - b. Run off the Road OR Young Driver
 - ii. Focus Facility Types
 - iii. Identify and Evaluate Risk Factors
 - 1. Will include intersections in access density formula assuming project segments aren't broken at intersections
 - 2. CRAB will develop a list of default risk factors for the workgroup to evaluate

Item 5 – Help File / BETA

- 1. All counties are encouraged to review our WebHelp at:
http://www.crab.wa.gov/Technology/Mobility/Help40/Overview_1.htm
- 2. All counties are invited to review the new inventories in a limited BETA.
Email me at eric@crab.wa.gov if you are interested and I will set it up.

Item 6 – Conclusion: Next Steps

1. CRAB will forward information regarding default lookup values, e.g., state of clear zone, sight distance state, etc. to workgroup for evaluation and feedback.
2. CRAB will forward information regarding risk factors, including formula/query information and analysis graphs to workgroup for evaluation and feedback.
3. A meeting will be scheduled in mid to late summer to demonstrate and discuss the SSPST Module