

UTRC - Technical Support for Use of NPMRDS Project TWG Meeting on NPMRDS Web-Tools SUNY AVAIL Meeting Minutes

Date: 4/10/2015

Time: 9:30 AM – 10:30 AM ET

Attendance

In Attendance at UAlbany:

Chris O'Neill - CDTC

Catherine Lawson - Albany Visualization and Informatics Lab

Alex Muro - AVAIL

Eric Krans - AVAIL

In attendance via GoToMeeting:

Jim Davis - NYSDOT

Patrick Lentlie - NYSDOT

Nathen Harp - NYSDOT

Michele Bager - NYSDOT

John Sterbentz - BMTS

Jody Binnix – GTC

Ali Mohseni – NYMTC

Ali Afshar - NYMTC

Munnesh Patel - NYMTC

Abdus Salam - NYMTC

Mohammed Rashid - NYMTC

Matthew Ryan - OCTC

Colin Smith – RSG

Agenda

NPMRDS Web-tools

(add agenda here)

Notes

Introduction

SUNY Albany introduced the meeting by reminding the working group that the NPMRDS website was available for review. The site requires login and SUNY Albany confirmed that the working group has received credentials.

SUNY Albany have been working on the project for about 7 weeks as of this meeting.

Demonstration of the Web Tool

SUNY Albany demonstrated the current version of the website. They demonstrated how to query the data, which currently spans from Jan 2014 to Jan 2015. They will be adding information to indicate what time span of data is available. They will also be fixing the time sliders to allow selection by 15 minutes increments

SUNY Albany has added an indicator showing loading in process. The NPMRDS are large data, so it can take 30 seconds to load the data for display. They will be doing more with caching for predefined reports to speed it up access to results. When working with the raw data via custom queries, this caching approach can't be employed. NYSDOT confirmed that they are investing in some better hardware to improve performance. SUNY Albany will be added pages to the site to provide access to some predefined reports. They demonstrated the maps are now zoomable and pannable.

SUNY Albany provided an overview of the measures that can be displayed. At the moment they are not doing any removal of outliers -- that will be done in the next step. Measures being displayed on the maps are:

- speed -- average speed
- congestion -- shown as a percentage relative to free flow speed. They are still working on the formulation of this and will be calculating an overall free flow speed for each segment as well as incorporating posted speeds to compare with too
- flow -- maximum speed in the time period selected
- time -- average travel for the segment (this is the raw data - average time for all vehicles on the link for each 15 minute increment), and everything else is derived from that)

SUNY Albany confirmed that they are currently filtering the zeros (missing values) before averaging, to avoid that skewing the averages.

There was discussion of developing a reliability measure relative to the average time, to indicate non-recurring delay for a particular time period. SUNY Albany confirmed that they are developing an approach to displaying changes over time.

Planned work

SUNY Albany presented plans for the next two months, and explained that beyond that plans will be dictated by the working group's feedback.

Planned Work for April (between now and May 1 webinar):

- developing more complicated measures based on list from NYSDOT
 - planning time index
 - 80th %ile
 - 95th %ile
 - Freeflow travel time/Avg Travel Time
 - Standard Deviation
 - also adding charts and graphs of those data

Planned Work for May:

- In May, ahead of the end of May meeting, SUNY Avail will be developing methods to aggregate the measures above into defined routes. They will add GUI features to allow defining and saving routes, and then calculate measures for the routes.
- SUNY AVAIL will also be moving to individual user accounts to facilitate separate users saving queries and routes that they have defined.

Discussion with Working Group

SUNY AVAIL explained that they have received some great comments from working group members so far. Between now and the next meeting they will be pulling together a google spreadsheet to allow working group members to enter their use cases and add comments describing bugs and feature requests, and which AVAIL will use it to respond and track. SUNY AVIAL will distribute the comments received so far to the group

There was a discussion of needs; SUNY AVAIL wanted to hear:

- what users are planning to use the tool for?
- additional comments on the current state of the tool and features requested

One comment was that being able to analyze over a whole corridor is really important. Also, being able to compare an incident situation with regular traffic would be helpful. Having a way to do this easily -- e.g. list of incidents and data related to them reported in an automated way would be useful. SUNY AVAIL said that they would like ideas for particularly useful use cases and can design reports around that. There was additional discussion of issues such as calculating averages over different time bounds. NYMTC described their experience with this from their work to date with the NPMRDS data. Sometimes the approach to defining measures may vary by functional class. For example, defining delay on express ways: cut off at 55mph (i.e. speed limit) so if speeds falls below free flow speed -- with most people doing say 65mph -- don't consider it as delay until speed goes below 55mph.

Next meetings/next steps:

- Date for next meeting: the next webinar is scheduled for May 1
- The team is considering replacing the planned May 29th meeting with a session at the NYSAMPO conference in early June
- AVAIL will be sending out a google spreadsheet to use for tracking comments, and starting to develop an agenda for May 1.