September 28, 2017

My35 Metrics Workshop September 21, 2017 Meeting Minutes

1:00 Greetings and Introductions

Link to Agenda and Sign-in sheet

My 35 Metric Workshop Presentation: Link to Metrics Workshop Presentation

- 1:15 <u>Presentations by attendees on current performance metrics practices in the region.</u> Five-minute presentations by each of the following organizations:
  - TxDOT (GEC Kimley-Horn), Brian Shewski, link to presentation

Brian reviewed the work his team has completed using Google traffic data to study variations in travel times on IH-35. They have used this information to make decisions on construction-related closures. It has enabled TxDOT to allow the contractor more time to work on weekends, and as a result, reduced the closure time at Oltorf from two to one weekend.

#### Group comments:

- 1. Robert Turner thinks he has segment data for IH-35. He is going to check and get back to Brian.
- 2. The group discussed needing to collect more data than just segments along IH-35, so that we can understand regional mobility impacts that result from IH-35 closures. The segments need to be defined, and "before" data needs to start being collected now.
- 3. Discussed challenges with communicating the benefits of this data to a layperson in a short amount of time.
- TxDOT (GEC AECOM), John Song, <u>link to presentation</u>

John reviewed the real time tool his team is developing for TxDOT.

- 1. Takes multiple data sources and pulls them into one dashboard.
- 2. Has real-time and planning features built into it.

- 3. Uses Lonestar, HERE, and Google data. Included data being collected with ITS Construction Trailers.
- 4. Tentative name: CCAT Construction Communication Assistance Team

## Group comments:

- Karen commented the tool gives them a good snapshot of equipment status, but she wants a platform that summarizes work effort, coordination internal to TxDOT and with regional partners, and responses. She needs a one-stop shop instead of depending on spreadsheets, emails and phone calls.
- 2. John to coordinate with CTR when CCAT is completed, so that we can brainstorm the analytics contained within the planning feature of the metrics platform.

## • TTI, Tim Lomax, link to presentation

Tim reviewed TTI's ongoing work related to congestion: Texas 100 speed, delay, performance measures and solutions. Emphasized the need to break down results into metrics and language people can understand.

## Group comments:

- 1. Discussion as to whether the Top 100 congested roadway segments could be more readily available throughout the year, instead of waiting for the annual list to be published. Since the listing includes a reliability index, we need the years' worth of data to assess the 95th percentile travel time.
- Discussed adding the Top 100 Congested Roadways in Texas to the My35 TIS.

# CTRMA, Fabiola Newman, <u>link to presentation</u>

Fabiola reviewed metrics being collected at the CTRMA TMC, and the data sources being used. To date, data sharing has been limited to the media. CTRMA is participating in the Waze Connected Citizen Program, and plans to share incident and road closures via this tool.

#### Group comments:

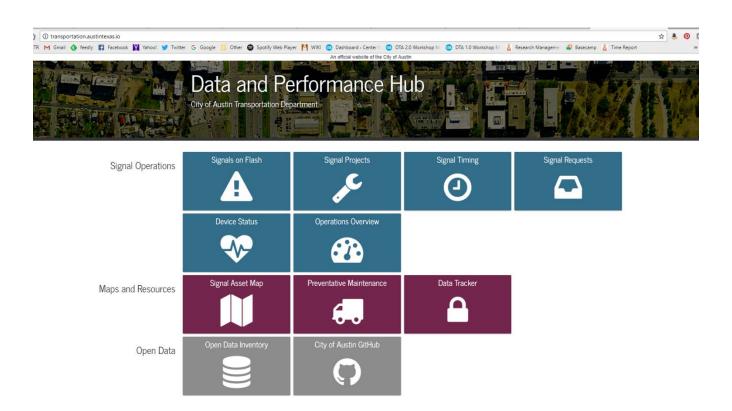
1. Natalia (CTR) confirmed there currently is not a way to pull raw data from CTRMA into other platforms.

# City of Austin, Jen Duthie, <a href="http://transportation.austintexas.io/">http://transportation.austintexas.io/</a>

Jen discussed the City's goals for open data, and progress in developing tools that can be used to better assess the performance of the Austin Transportation Department and its resources. She reviewed the Data and Performance Hub, an online dashboard they have recently developed that pulls its data from the City's Open Data Portal.

#### Group comments:

- 1. There was a lot of interest from the group on the Data and Performance Hub web interface. The link to the Hub is provided above, so that attendees can explore its capabilities.
- 2. Karen mentioned this type of interface may be a good starting point for what she is looking for related to regional partner and interdepartmental collaboration.



# • UT CTR, Natalia Ruiz-Juri, link to presentation

Natalia discussed the performance measures that can be developed using the National Performance Management Research Data Set (NPMRDS). This is free travel time data available in five minute increments, and is updated each month. Travel Time Index and Buffer Index and two performance measures that can be calculated with this data, which are understandable to the traveling public.

## Group comments:

- The buffer index and travel time indices calculated with this data could be useful in communicating congestion information to the public and agencies.
- There was discussion of using this information to inform drivers of the travel time comparison between IH-35 and SH 130, based on recent historical temporal data. A discussion about the current travel time information being provided to drivers on the DMS signs followed.

## 3:00 The goal of computing performance metrics.

Natalia presented a short summary of performance metrics and system performance criteria outlined in MAP-21 for congestion, mobility, accessibility, and safety. This was following by input from the TxDOT PIOs and the entire group about what we are trying to measure, what performance measures we need, and who we want to inform. CTR provided a list of reliability and congestion metrics (link).

#### Notes are summarized below:

#### What we need to do:

- 1. Understand how much this delay/shutdown/closure is costing us. Cost can be defined in terms of dollars, time, delay, etc.
- 2. Understand what the information means to the commuter. The performance measure needs to be tangible.
- 3. We need a metric/message powerful enough to change people's behavior. We are going to be asking people to significantly re-route due to closures from construction. The message (and data behind it) needs to be that powerful.
- 4. Use metrics to make better decisions, so the result is less impact on the traveling public.
- 5. Assess "success" of facility (toll) use volumes.
- 6. Safety want to be proactive.
- 7. Communicate effectively to public (like the Mayor's tweet when Pres. Obama was in town).
- 8. Demonstrate value to decision makers (e.g., TxDOT DE)
- 9. Show the improvement we've created to the public, decision makers, regional partners, our own team.

#### What we need to measure:

- 1. Diversion to other facilities
  - a. Establish a way to measure
  - b. Tools to successfully move people
- 2. O-D of trips with this we can understand mobility, not just congestion
- 3. Both corridor and network performance
- 4. Temporal distribution of performance
- 5. Travel times
- 6. Throughput (need plan for collecting "before" data) volumes
- 7. Through travel times within a range (temporal). Determine if we've achieved diversion to other facilities
- 8. Crash recovery statistics
- 9. Construction time savings.

# Typical data sources for system performance evaluation, and what's available in Austin.

With time running short, Natalia very briefly discussed data sources, and the pros and cons of fixed sensors versus probe vehicles.

# 4:00 <u>Data workflows, and availability of software tools to support system performance assessment</u>

The group was unable to get to this portion of the agenda. There was discussion of meeting again for another workshop, and that this topic could be covered then.

#### 4:10 Wrap-up and next steps

The group took a tour of the TACC facility at the end of the workshop.

#### Next Steps

- 1. Karen charged every person in the room to think creatively, and come to her with ideas for performance metrics development as well as team collaboration facilitation.
- 2. CTR will take a few weeks to develop ideas for performance metrics, prepare exhibits, and facilitate follow-up discussions. Another workshop may be scheduled based on feedback from TxDOT.
- 3. CTR to explore NPMRDS travel time data and develop temporal travel time recommendations for posting on SH 130/IH-35 DMSs.
- 4. Individual follow-up discussions:
  - a. John Song to coordinate with CTR when CCAT is completed to brainstorm the analytics contained within the planning feature of the metrics platform.
  - b. Robert Turner to follow-up with Brian Shewski on availability of additional travel time data.
  - c. Others?