Meeting Notes

Portland Regional Signal System
User Needs Meeting #2

Thursday, March 28, 2019

1:00 p.m. – 3:00 p.m.

DKS Large Conference Room
Portland, OR

Name	Agency	Name	Agency
Willie Rotich	PBOT	Jim Gelhar	Gresham
Peter Koonce	PBOT	Tina Nguyen	Beaverton
Mark Haines	PBOT	Jabra Khasho	Beaverton
Caleb Winter	Metro	Dennis Mitchell	DKS
Shaun Quayle	Washington County	Pam O'Brien	DKS
Bikram Raghubansh	Clackamas County	Maggie Lin	DKS
Carl Olson	Clackamas County	Jim Peters	DKS

Continued discussion on User Needs and Constraints.

Performance Monitoring (signal performance measures)

- Needs to be "easy" to set up and configure for the ATSPMs. The current system (UDOT source code) requires a lot of configuration to define channels and detectors.
- Need all performance measures that are currently in the Purdue data set (see UDOT performance measures website).
    - Queue length PM would be nice to have
    - Nice to have existing travel-time data integrated into system
    - Need TSP PM
- A default layout (template) would be nice to have
- Need a standard detector numbering or labeling scheme?
- Software needs to be able to pull the data from existing detectors.
- Would be nice to have the ATSPM a part of the native central system rather than a third-party system. (important, but not primary factor for choosing system).
- Would like nicer graphics than UDOT graphs.
- Nice to have ability to show and compare trends from reports and provide warning/alert.
- Need ability to write query to export raw data for other analysis (e.g. consultant requesting raw data)
- Need to be able to export reports into PDF format, export raw data to tabular format or SQL database, export to GIS format.

- Need reports that are user configurable.
- Need reports that automated each day.
- Need to assign triggers when data is outside of a certain range. Notify via email, etc. when it goes out of a range.
- Need automation that informs when it's time to go look at a corridor or intersection.
- Need to filter by date and time ranges.
- Desirable to have the ATSPM recommend a change to split or offset

Alerts

- Need to know the health of the detection
- Need to know health of the comm

External systems

- Need to provide data push for 3rd parties to grab (TTS, etc.)
- Need link to TTIP, need to publish API to TTIP for SPAT and other data
- Need to push data to Portal
- Need to work with center to center Transit Signal Priority (TSP) system and existing infrared TSP system
- Video management system interface would be optional.

Constraints

- 170 Controllers (several versions of Wapiti) – Portland would like to maintain communications to these intersections.
- 2070 Controllers (with NWS Voyage, Trafficware, SCATS) – Portland would like to maintain communications with intersections operating NWS Voyage.
- ATC Controllers (with Intelight) – required
- Work with Fiber, Copper, Wireless, Cell

Need inventory of controllers per agency.

Prefer to keep all the traffic signals accessible with one system, but realistically, it may require two systems during the transition period.

Use Cases

- For Use Case #4 (performance monitoring) add pulling logs to the general steps.
- For Use Case #5 (instant implementation of pre-defined signal plans) add placing a min/max/ped recall on a phase and time broadcast.
- Maybe add a Use Case related to User Access/Privileges (read only, edit, etc.)
- Maybe add a Use Case related to Data Export (Portal, TTS, etc.)
- Maybe add a Use Case related to Asset Management

Next Steps

- User Needs Summary
- Draft Use Cases