

# TransPort / Minutes

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**Meeting:** TransPort Meeting  
**Date/Time:** Wednesday, December 13, 2017, 1:00 p.m. to 2:30 p.m.  
**Place:** ODOT Region 1, 123 NW Flanders, Portland, OR, room A/B

## Attendees

Stacey Shetler  
Kristin Tufte  
A.J O'Connor  
Jon Makler  
Willie Rotich  
Ali Razmpa  
A.J. O'Connor  
Adrian Pearmine

## Affiliation

Washington County  
Portland State University  
Oregon Department of Transportation  
Oregon Department of Transportation  
City of Portland  
Oregon Department of Transportation  
TriMet  
TriMet

## Metro Staff Present

Caleb Winter	Metro
Ted Leybold	Metro
Ben Kahn	Metro

## Introductions and Announcements

Committee members, partners and staff were introduced. Partners were asked for updates.

## Round Table Updates

- Stacy Shetler said that they have updated their ITS Network switch, and Durham/Tualatin-Sherwood has entered phase II.
- Kristin Tufte said that their (Intelligent Transportation System) ITS infrastructure has been installed. There are a lot of new updates on the PORTAL website. At present, they are working on completing the input of data by the end of the year. TREC is also hiring someone to help manage the PORTAL program. Lastly, they are working to expand the extent of PORTAL and coordinating with the City of Portland's PUDL program.
- Clackamas has upgraded their ITS switches as well. Sunnyside is close to completion and Blue Mac is up and running.
- Willie Rotich stated that the central signal system replacement project is in progress. They are looking towards January, 2018 for Request for Proposal (RFP). Three more signs are being put up: one on Burnside Road, one in Washington County and one near Caruthers on the way to Oregon Health Science University (OHSU). Additionally, Swan Island ITS will be replacing cameras and sensors. Other projects include the Northeast ITS along Columbia and MLK from Broadway to Columbia ITS and pedestrian crossing improvements. Willie also mentioned they had attended the recent Smart Cities workshop in San Diego.
- ITE's winter workshop will take place on January 2, 2018 at Oregon Department of Transportation (ODOT) region 1.

- C-TRAN is halfway through the design phase of the next transit signal priority on 99, going to construction in spring 2018. Clark County STEVE is underway. There was a Smart Cities forum in Vancouver last week, which focused on public sector.
- TriMet had a network outage in August, which forced TriMet to redesign the entire network. TriMet is nearly complete with the redesigning.
- East Metro Connections ITS is at 100% design. Construction begins in late spring, 2018.
- The regional Transportation Investment Generating Economic Recovery (TIGER) grant is moving along and is scheduled to be completed in spring, 2018.

### **Vehicular Detector Analysis Tool**

Ali Razmpa from ODOT presented on the Vehicular Detector Analysis (VDA) Tool. The tool provides metrics of hourly traffic volumes and controls for errors and variance in order to complement traffic studies and simulations. The VDA tool aims to control for the variance of traffic volumes by removing output errors and outliers. Therefore, it would provide users a reliable average hourly volume.

- Stacy asked if the tool could be adapted to measure real-time traffic volumes. Work group members speculate that is possible with PORTAL. He then asked for an explanation on how the tool would be used to verify traffic volumes. Ali explained that if a data point is below or above the 25<sup>th</sup> and 75<sup>th</sup> percentile, then it is an outlier and is removed. Work group members discussed the viability of measuring vehicle speed using VDA, which appears to be challenging.

### **Rail Operations Optimization Technology (ROOT)**

A.J. O'Connor and Adrian Pearmine presented the ROOT project, which seeks to increase the efficiency of LRT operations and real-time rider information, including the Transit Tracker smartphone app. TriMet received an unsolicited inquiry from Siemens to develop a pilot to connect six or seven light rail vehicles with a sensor that collects maintenance diagnostics, global positioning system (GPS) info, and other data that improves the ability to address maintenance issues and overall efficiency of service. Siemens agreed to bear all costs, with the prospect of profit sharing if the pilot is successful. TriMet will monitor the vehicles for six months to determine if the pilot is a success. If successful, TriMet will implement the project for its entire light rail system.

Another part of Siemens's proposal is to monitor rail signal timing to improve operation efficiency, particularly near the Gateway and Rose Quarter Transit Centers, where coordinating and queuing trains is a major issue. A challenge is that there are several vintages of MAX trains, with multiple software applications, vendors, and other issues. The Internet of Things (IOT) must navigate these different vendors and proprietary software applications. In spite of Siemens's unsolicited proposal, TriMet will likely be putting out an RFP to address other aspects of this project. Siemens is interested in this because it allows them to further develop this project for other rail networks. TriMet feels this project will be of interest to TransPort and help build a foundation for further information optimization technology that can be used for a variety of applications.

- Stacy asked if they were already collecting this kind of data from buses. A.J. responded that they can but don't due to a variety of factors. Stacy asked if there are opportunities to make rail crossings more efficient. A.J. said that it is possible and there are opportunities, but that it was not the focus of this current project. Adrian added that the hardware has the capability to integrate with CVs.
- Caleb Winter asked if this would lead to better and more passenger-facing data. A.J. said that increased granularity will improve Transit Tracker. Adrian added that it will have the capacity to include on-board wifi, but that is was not a consideration at this time.

**Adjourn**

Caleb wrapped up the meeting with an update regarding ITS architecture tools and gauged interest in a tutorial to learn about additional updates.

Jon Makler adjourned the meeting at 2:10 p.m.