PORTAL ARCHIVE

➤ Portland, OR - Vancouver, WA  
Transportation Data Archive

➤ Begun in 2004

➤ Policy of open data

➤ Publicly funded

➤ Focus on open source software

➤ Database + User Interface + APIs

➤ Data: Freeway, arterial, transit, WIM,  
signal, travel time, weather, VMS/VAS…

➤ Users: Agencies, consultants, researchers
PORTAL ARTERIAL DATA SOURCES

➤ City of Portland Traffic Signal Data
  ➤ Files exported every 5 minutes from TransSuite system (volumes, MOE logs, and more...)
➤ City of Portland and Oregon DOT Travel Times
  ➤ Custom bluetooth sensors - integrated travel time capture and matching system; “real-time” XML data feed to PSU
➤ Vancouver, WA - Travel times
  ➤ Travel times from BlueMAC software; anonymized ids for future research
  ➤ API for retrieval
➤ Vancouver, WA - Wavetronix data (volumes)
➤ Vancouver, WA - SPAT data (coming soon)
SYSTEM DETECTOR - VOLUMES
SYSTEM DETECTOR - VOLUMES

Volume Chart  Plan Table

System Detectors Map

Detectors List

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<th>lat</th>
<th>lon</th>
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System Detectors Volume Chart

System Detectors Volume Chart

2016-04-05

213
214
System Detectors - Volumes - EB and WB
### PLAN TABLE

#### CONTROLLERS MAP

**#6018 BURNSIDE/BROADWAY**

**2016-04-19**

#### PLAN TABLE

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**Portland State University**
REGIONAL INTEGRATED TRAVEL TIME ARCHITECTURE

- ODOT Bluetooth Data Collection Unit
- Agency / CoP Bluetooth Data Collection Unit
- ODOT Match Process
- Unique ID Capture Scripts
- ODOT Travel Time Calculation
- PSU Portal
- Segment Travel Times
- Regional Travel Time Data
- [Image of PSU Portal interface]
REGIONAL INTEGRATED TRAVEL TIME INTERFACE
LESSONS LEARNED

➤ Network, network, network...

➤ Data integration...

➤ 3 traffic signal systems (TransSuite, Wavetronix, ATMS.NOW)

➤ 2-3 Travel Time Systems (City of Portland, Oregon DOT)

➤ And sometimes the communication is pretty difficult...
INCORPORATING INCIDENTS INTO THE UI
ADDING STATION LOCATION INFORMATION

Two Quantity Chart

- Highway: WA I-5
- Direction: South
- Number of Lanes: 3
- Milepost: 4.25
- Detector Type: Wavetronix
- Detector Location: Between Ramps
- Agency: WSDOT
- Region: Unknown

Date Range
- Start: 4/20/2016
- End: 4/20/2016

Time Range
- Start: 00:00
- End: 23:59

Quantities
- 1st: Speed
- 2nd: Volume (VPLPH)

Configuration
- Resolution: 1hr
- Group: No

Select Lane: All

Update Charts

Downstream Station: 63rd St

Opposite Direction: 78th (will be replaced on BSTT)

Upstream Station: 86th

Speed (mph) and Volume (VPLPH) at WA I-5 SB at 78th (will be replaced on BSTT) 04/20/2016 00:00 to 23:59

SuMTU/THSa with 1 Hour resolution for lane: all

- Speed (mph)
- Volume (VPLPH)
Thank you. Questions?

tufte@pdx.edu