



Session 5: ODOT Investing for a Data Driven Decision Making Future

The Use of RITIS for Transportation Analysis and Modeling

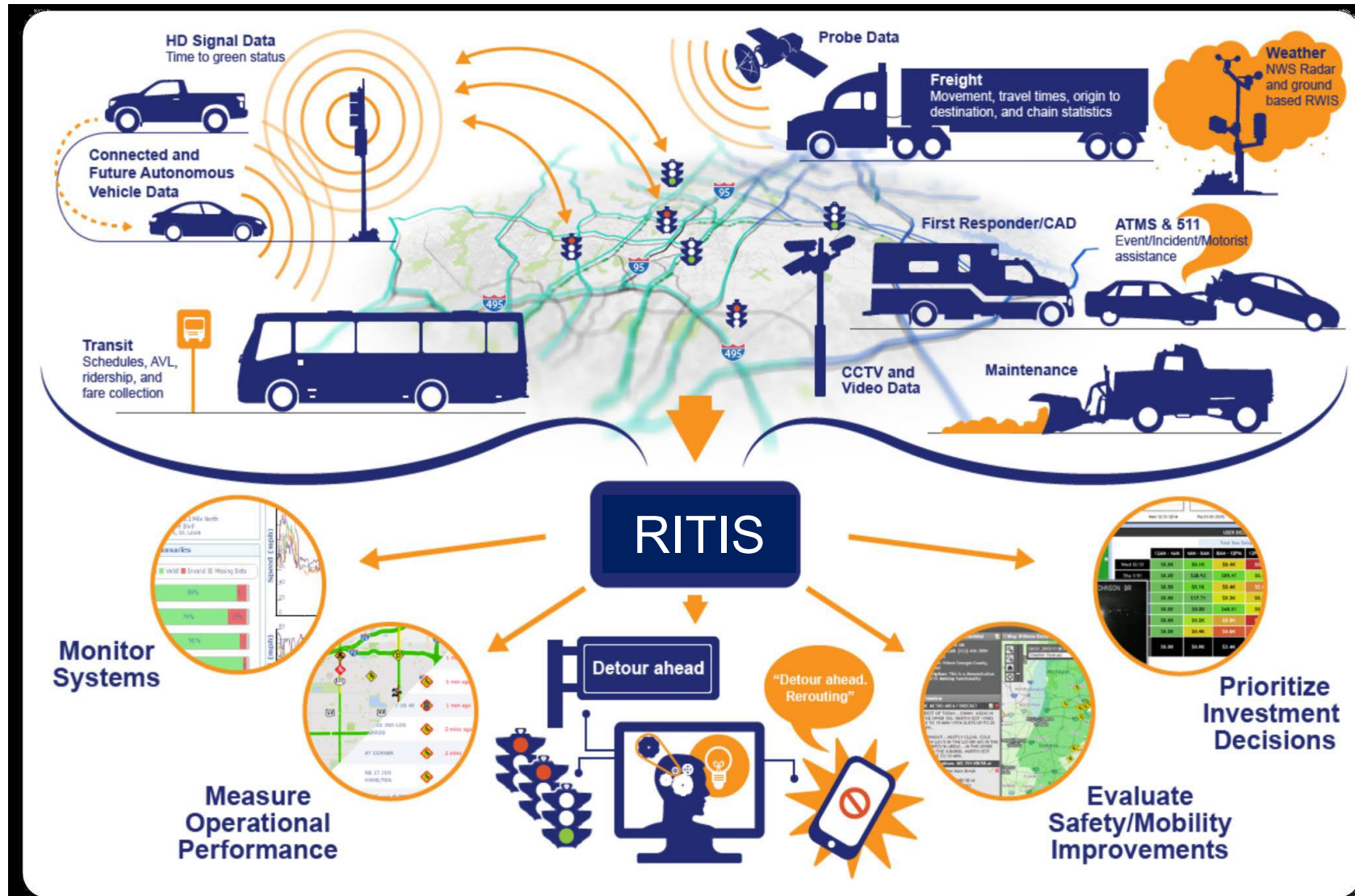
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March 8, 2022

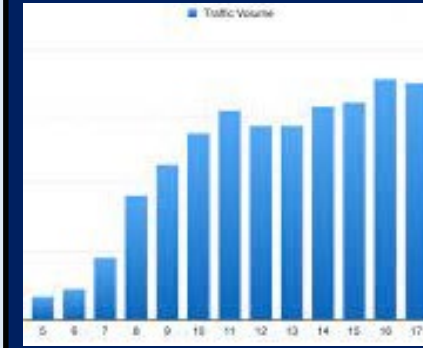


Regional Integrated Transportation Information System (RITIS)



Data

- ❖ Probe (INRIX speeds)
- ❖ Incidents
- ❖ Weather
- ❖ Volume profiles
- ❖ Traffic Cameras
- ❖ ODOT detectors



RITIS Access

Who can have access?

Public agencies
within Oregon
and Clark County,
WA

Consultants
working on a
public agency
contract

Universities



RITIS Use Cases

- Covid traffic data reporting
- Region 1 Traffic Performance Report
- Before-After analysis
- Work zone traffic monitoring
- Safety corridor traffic evaluation (excessive speeds)
- Traffic model calibrations
- MAP-21 PM3 Reporting



Portland Region

2020

Traffic Performance Report



Oregon Department of Transportation: Region 1
December 2021

I-5 closed in North Portland (near Rosa Parks Way)

Monday, December 6, 2021

Armed carjacking suspect fleeing police drove wrong way on I-5, shot at person in another vehicle, and was fatally shot by police.

Injuries included: I-5 NB & SB lanes were shut down from 10:30 AM to 5:30PM (7 hours) for crime scene investigation.

- 1 fatality
- 1 wounded

I-5 traffic re-routed: WSDOT re-routed I-5 SB traffic across Oregon to I-205. ODOT rerouted I-5 N traffic to parallel routes.



Widespread congestion on Multnomah Co and Clark Co roadways

WSDOT officials reported 10-mile back-ups on I-205 SB during early PM rush hour traffic



20,900 hr
(+95%)

Multnomah County
90-95% increased in vehicle-hours of delay and delay cost on the day of the incident vs normal Mondays



\$618k
(+90%)



25,700 hr
(+430%)

Clark County
430% increased in vehicle-hours of delay and delay cost on the day of the incident vs normal Mondays



\$809k
(+430%)



RITIS Demo

What's New
11/12/21

REGION EXPLORER
Explore the relationships between bottlenecks and traffic events in real-time and in the past.
[Tutorial](#) [Help](#)

MASSIVE DATA DOWNLOADER
Download raw probe data from our archive for offline analysis.
[Tutorial](#) [Help](#) [History](#)

CONGESTION SCAN
Analyze the rise and fall of congested conditions on a stretch of road.
[Tutorial](#) [Help](#) [History](#)

TREND MAP
Create animated maps of roadway conditions.
[Tutorial](#) [Help](#) [History](#)

PERFORMANCE CHARTS
Chart performance metrics over time.
[Tutorial](#) [Help](#) [History](#)

PERFORMANCE SUMMARIES
Report on Buffer Time Index, Planning Time Index, and other performance metrics.
[Tutorial](#) [Help](#) [History](#)

BOTTLENECK RANKING
Rank bottlenecks and discover which ones have the greatest impact.
[Tutorial](#) [Help](#) [History](#)

USER DELAY COST ANALYSIS
Put a dollar amount on how much a road's performance impacts its users.
[Tutorial](#) [Help](#) [History](#)

DASHBOARD
Create your own personal dashboards to monitor corridor performance in regions of interest.
[Tutorial](#) [Help](#)

NPMRDS COVERAGE MAP
Explore the coverage completeness of the NPMRDS on a month-by-month basis.
[Tutorial](#) [Help](#)

TRAVEL TIME DELTA RANKING
Rank roads based on their change in travel time performance between two time periods.
[Tutorial](#) [Help](#) [History](#)

TRAVEL TIME COMPARISON
Chart travel times to compare performance for different time periods.
[Tutorial](#) [Help](#) [History](#)

TEMPORAL COMPARISON MAPS
Analyze performance metrics of any road segment by one or more time ranges.
[Help](#) [History](#)

TUTORIALS
Learn how to use each of the tools in the suite.

MAP-21
Create a dashboard widget to monitor states', MPOs', and Urbanized Areas' performances against the new MAP-21 ruling.
[Help](#)



Questions?



More Information on RITIS Access:

<https://www.oregon.gov/odot/Data/Pages/RITIS.aspx>

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