# OREGON RITIS

## Data Fusion and Analytics Platform

Regional Integrated Transportation Information System

#### Innovative Analysis Tools Improve Transportation System Performance

RITIS combines and analyzes data from multiple sources, such as INRIX® probe speed data, traffic incident data, work zone information, weather, speed limits, and roadway volume profiles, to enhance real-time analysis and historic reporting capabilities. Data in Oregon's RITIS system is available from 2016 to present.



# Oregon implemented RITIS to help agencies make *data -driven* decisions that reduce delays and costs for transportation system users.

#### Who Can Use RITIS?

RITIS is available to all ODOT staff and Oregon public agencies such as cities, counties and metropolitan planning organizations. Consultants and universities who perform work for a public agency in Oregon can also access RITIS. Access to RITIS is free of charge! Organizations must sign an INRIX data use agreement when requesting a RITIS account at <u>www.ritis.org</u>.

#### Resources

Training sessions, Oregon's RITIS Handbook, frequently asked questions, and other helpful materials are available on <u>ODOT's</u> <u>RITIS webpage</u>.

Anyone is welcome to join Oregon's RITIS Users Group! Contact Ben Chaney in ODOT's Transportation Planning Analysis Unit to join.



For information about Oregon RITIS contact: ODOT Transportation Planning and Analysis Unit Ben Chaney, PE | RITIS@odot.oregon.gov

# **RITIS** FOR WORK ZONE MANAGEMENT

RITIS has numerous tools to help construction traffic managers monitor and respond to work zone traffic issues as they occur, and anticipate and reduce work zone delays as construction plans are prepared.

### Monitoring and Responding to Work Zone Delays

By giving construction offices a real-time view of traffic conditions at highway construction sites, RITIS significantly reduces the time, effort and personnel needed to monitor work zones. In the past, probe cars driving back and forth through construction zones were often used to monitor traffic delays. Using RITIS, construction managers can now monitor work zone queues, delays, and speeds from their desks, with a click on the RITIS map. And, traffic management staff can set notifications in RITIS so that they receive an immediate notice of traffic delays that exceed established thresholds, such as 20 minutes on weekdays or 15 minutes on weekends.



signing for the traveling public.

### Anticipating Work Zone Traffic Issues

RITIS is also helpful to plan for cases when known events coincide with construction activities. For example, we can use historic data for holiday travel dates to anticipate how heavier volumes or different peak periods over a holiday weekend might impact travel through a work zone. Adjusting work zone traffic control before problems occur helps to minimize delays for the traveling public.



### Post Action Evaluation of Work Zone Decisions

Using RITIS, we can look back to see how drivers responded to different traffic control strategies and official detours. For example, RITIS can help to compare tradeoffs between complete highway closures to get the work done fast and partial closures that extend traffic impacts over a longer period. This forensic information helps us know where to focus attention on secondary roads if those same traffic management strategies are used again. And, if a certain strategy was not effective, RITIS can help us understand why, so the strategy can be altered, or avoided, in the future.

Example User Delay Cost Evaluation for OR-217, from US-26 to I-5												
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2023	\$2.4M	\$2.1M	\$2.2M	\$2.2M	\$2.6M	\$2.4M	\$1.9M	\$1.7M	\$2M	\$2M	\$2.2M	
2022	\$0.9M	\$1.4M	\$1.5M	\$2.7M	\$2.2M	\$2.5M	\$2M	\$3.1M	\$2.8M	\$2.6M	\$2.4M	\$2.8M
2021	\$0.3M	\$1M	\$0.8M	\$1M	\$0.9M	\$1.3M	\$1.3M	\$1M	\$1.1M	\$1.3M	\$1.6M	\$2.2M
2020	\$1.5M	\$1.2M	\$0.4M	\$0M	\$0M	\$0.1M	\$0.2M	\$0.3M	\$0.4M	\$0.6M	\$0.6M	\$0.9M