

Probe Data Applications for Traveler Information, Work Zone Delay, and Queue Detection

Brent Atkinson

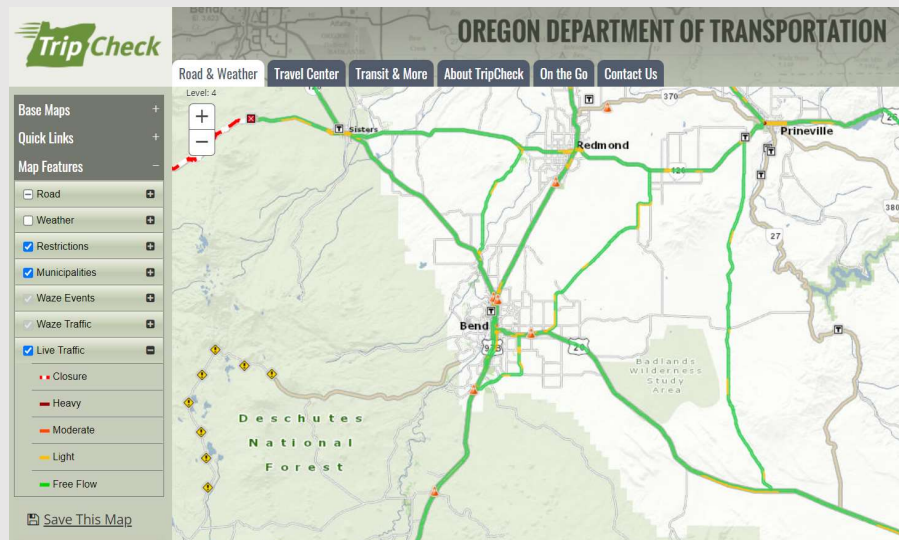
Traveler Information and Operations Performance Measures Coordinator

Introduction

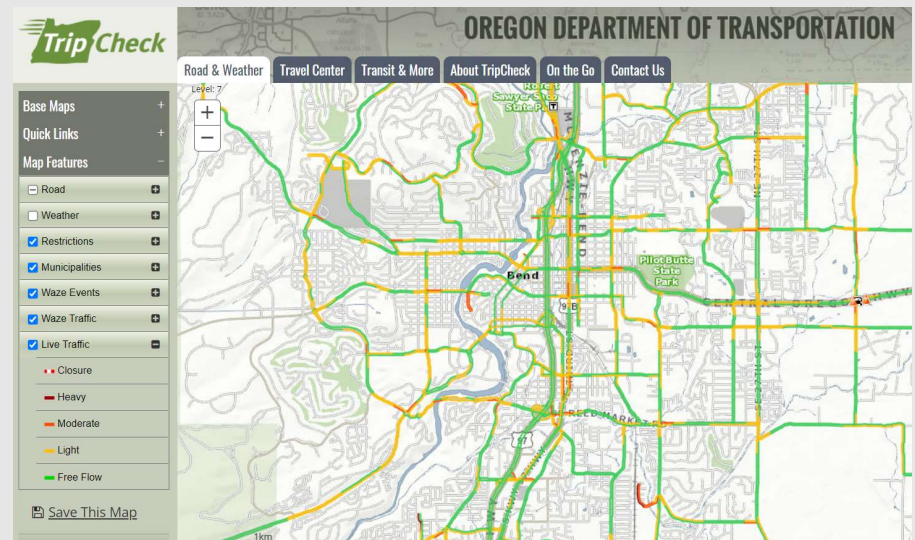
- Timeline
- Inrix Data
- Operational applications of probe data

Traveler Information – Live Traffic Layer

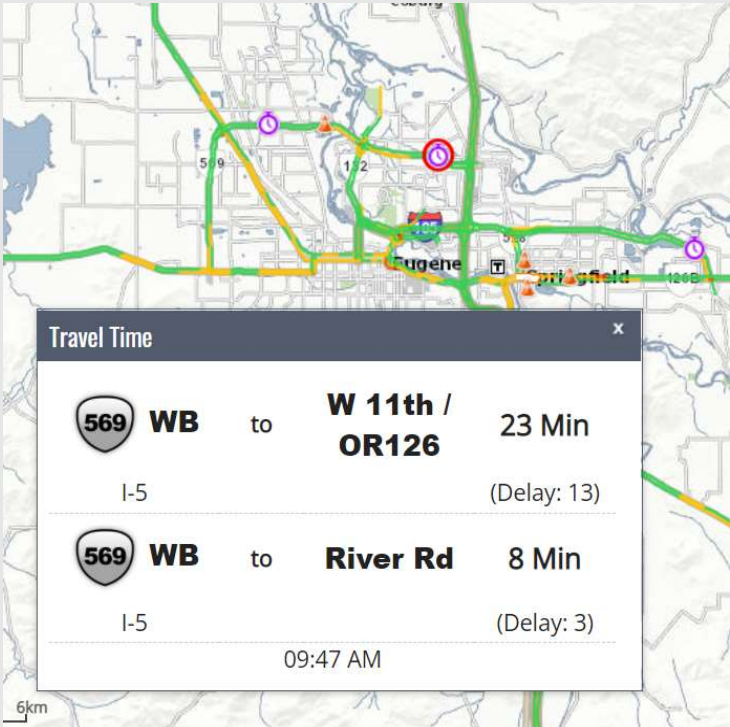
Level four zoom



Live traffic density increases as you zoom in closer



Travel Time



Work Zone Delay

TRAVEL TIME ADMINISTRATION

Home INRIX Map Configuration

Travel Time Inrix Map Route: I-84 Mitchell Point test

Level: 5

Basemaps

Route Commands

Clear Starts over.

Refresh Refresh page.

Test Check waypoints.

Promote

Route Name: I-84 Mitchell Point test

Corridor: I84 EB

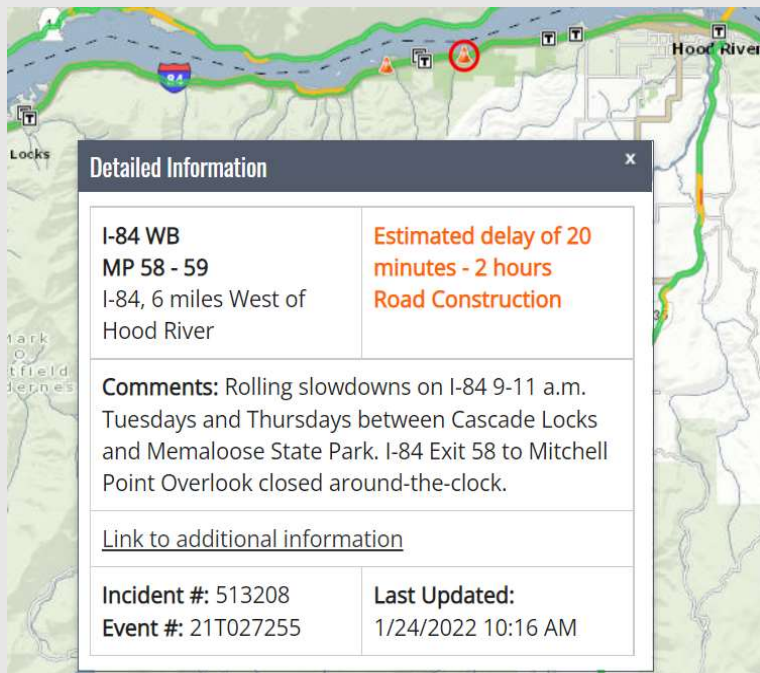
Create Create new route.

To create a new route:

INRIX Route Details	
Inrix Route Id	11954692
Odot Route Id	324
Inrix Route Text	Via I-84
Average Speed	64
Travel Time Minutes	15
Route Quality	3
Uncongested Time	15
Has Closure	False
Abnormality Minutes	0
Total Distance	15
Route Status	0
Status Id	0
Status Text	OK
Call Message	GetRoute success

WayPoints		
#	Latitude	Longitude
1	45.66431	-121.8925
2	45.67765	-121.8555
3	45.69022	-121.7307
4	45.70434	-121.6103
5		
6		
7		
8		
9		
10		

Click to add title



Detailed Information

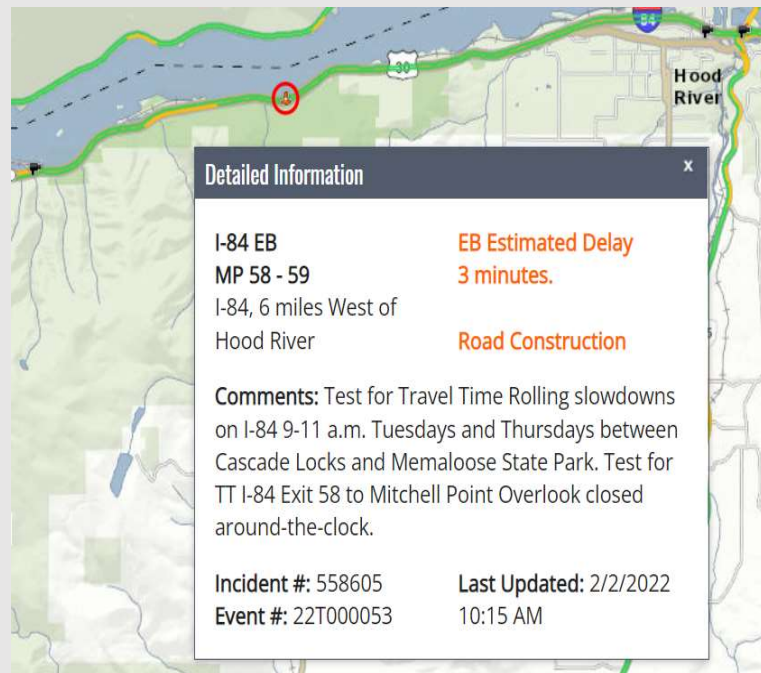
I-84 WB MP 58 - 59 I-84, 6 miles West of Hood River	Estimated delay of 20 minutes - 2 hours Road Construction
--	--

Comments: Rolling slowdowns on I-84 9-11 a.m. Tuesdays and Thursdays between Cascade Locks and Memaloose State Park. I-84 Exit 58 to Mitchell Point Overlook closed around-the-clock.

[Link to additional information](#)

Incident #: 513208 Event #: 21T027255	Last Updated: 1/24/2022 10:16 AM
--	--

Before



Detailed Information

I-84 EB MP 58 - 59 I-84, 6 miles West of Hood River	EB Estimated Delay 3 minutes. Road Construction
--	--

Comments: Test for Travel Time Rolling slowdowns on I-84 9-11 a.m. Tuesdays and Thursdays between Cascade Locks and Memaloose State Park. Test for TT I-84 Exit 58 to Mitchell Point Overlook closed around-the-clock.

Incident #: 558605 Event #: 22T000053	Last Updated: 2/2/2022 10:15 AM
--	---

After

Possible Next Steps

- Add travel time to additional routes where ODOT does not have roadside devices.
- Add actual travel delay to incidents (crashes, for example) similar to construction.
- Explore application of queue warning.



Thank you!

- ODOT Operations & ITS Traveler Information & Operations Performance Measures Coordinator
- Brent.D.Atkinson@odot.oregon.gov
- 503.986.3977