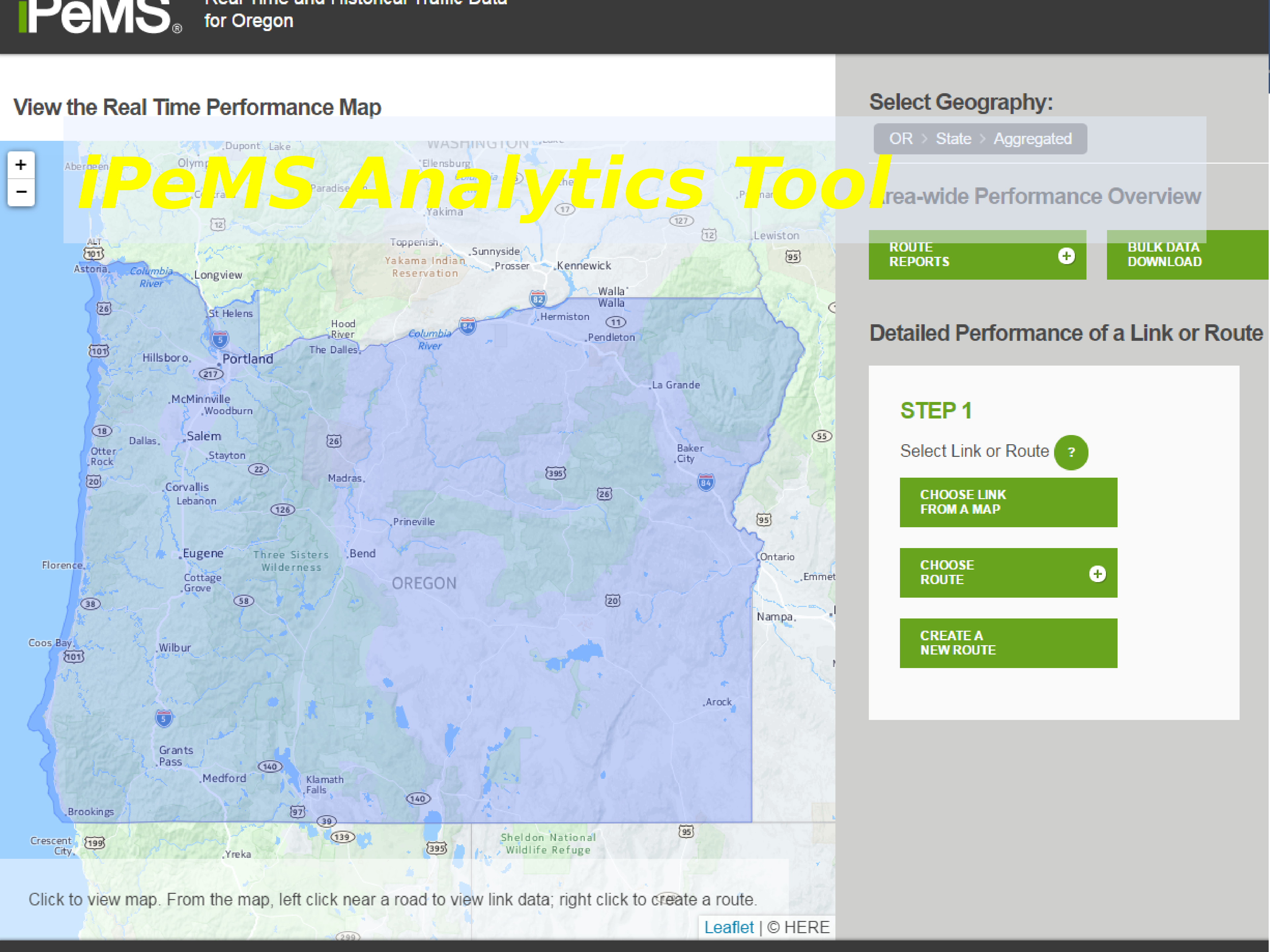
# ***iPeMS***

PORTAL Users Group Meeting
September 18, 2019

# iPeMS Analytics Tool



iPeMS
Real Time and Historical Traffic Data
for Oregon
+
−
Leaflet | © HERE
WASHINGTON
OREGON
Portland
Salem
Eugene
Bend
Medford
Astoria
Longview
St Helens
Hillsboro
McMinnville
Woodburn
Dallas
Stayton
Corvallis
Lebanon
Otter Rock
Florence
Cottage Grove
Coos Bay
Wilbur
Grants Pass
Klamath Falls
Brookings
Crescent City
Yreka
Hood River
The Dalles
Madras
Prineville
Three Sisters Wilderness
Yakima
Ellensburg
Toppenish
Yakama Indian Reservation
Sunnyside
Prosser
Kennewick
Hermiston
Walla Walla
Pendleton
La Grande
Baker City
Ontario
Nampa
Emmett
Arock
Lewiston
Sheldon National Wildlife Refuge
Columbia River

## View the Real Time Performance Map

Click to view map. From the map, left click near a road to view link data; right click to create a route.

## Select Geography:

OR > State > Aggregated

## Area-wide Performance Overview

ROUTE REPORTS ⊕
BULK DATA DOWNLOAD

## Detailed Performance of a Link or Route

### STEP 1

Select Link or Route ?

CHOOSE LINK FROM A MAP
CHOOSE ROUTE ⊕
CREATE A NEW ROUTE

# *Understanding the Data*

- This is vehicle probe data. It is a non-statistical sample of what is actually on the road
- Collected through a variety of sources, including Mobile Devices, Portable Navigation, Commercial Fleet, Sensors, etc
- Speed/Travel Time Data only (no volumes)
- No vehicles => no data (usually late PM)
- No vehicle => historical data

# *Understanding the Data*

- Network Coverage

  - Highways and arterials in State of Oregon and Clark County, WA

- Data Quality

  - More data points in higher populated areas

- Traffic Message Channel (TMC)

  - Unique identifier code

  - Length varies

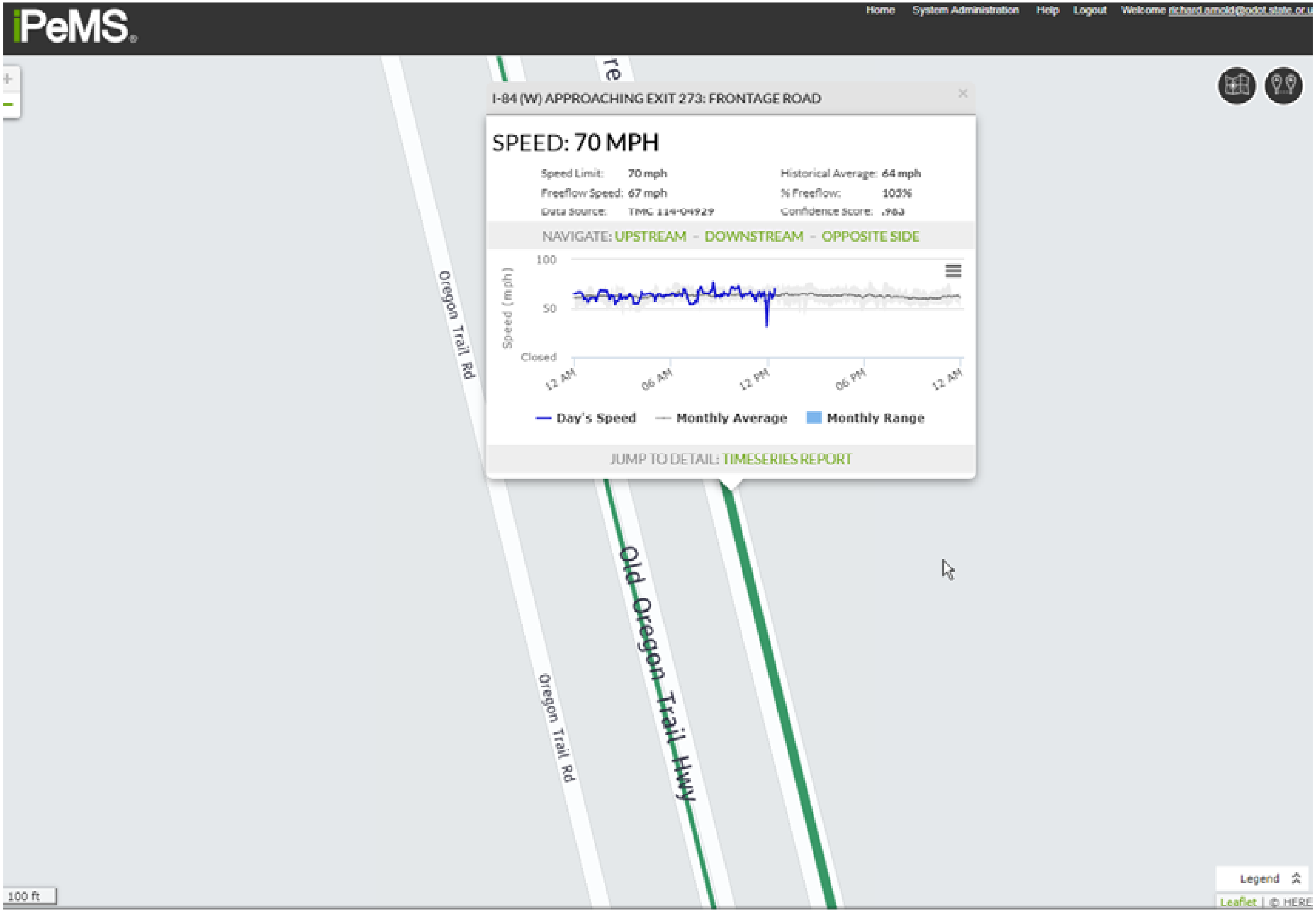
- Data Granuality

  - 5 minutes, 15 minutes, hour, day

# *iPeMS Uses*

- Create and save your own routes
- Select date range
- Select performance measures to display
- Create reports
- Export data to text or excel files
- Bulk data download

# *TMC Link Display*


iPeMS
Home
System Administration
Help
Logout
Welcome richard.arnold@odot.state.or.u
Oregon Trail Rd
Old Oregon Trail Hwy
100
50
Closed
Speed (mph)
12 AM
06 AM
12 PM
06 PM
12 AM
Day's Speed
Monthly Average
Monthly Range
100 ft
Legend
Leaflet | © HERE

I-84 (W) APPROACHING EXIT 273: FRONTAGE ROAD

SPEED: 70 MPH

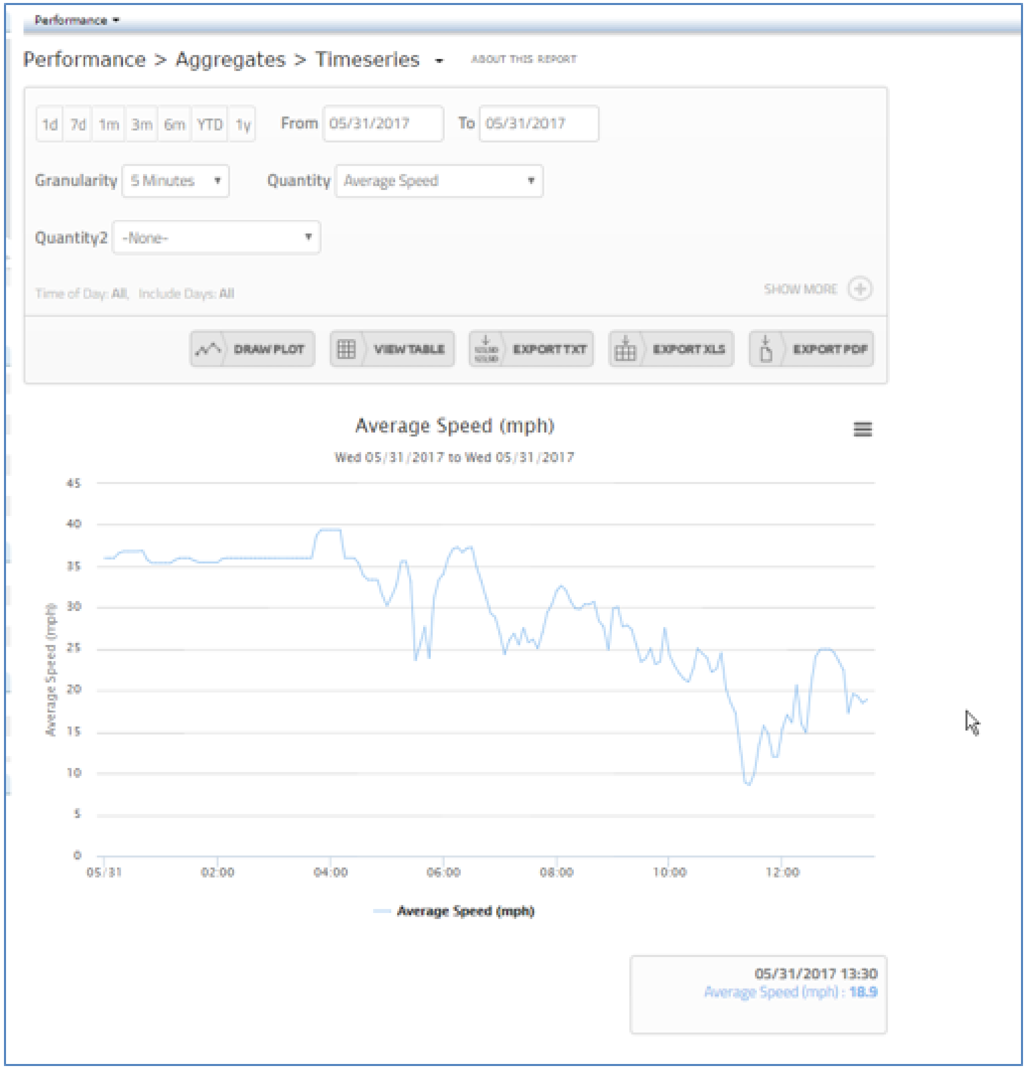
Speed Limit: 70 mph
Freeflow Speed: 67 mph
Data Source: TMC 114-04929
Historical Average: 64 mph
% Freeflow: 105%
Confidence Score: .983

NAVIGATE: UPSTREAM - DOWNSTREAM - OPPOSITE SIDE

JUMP TO DETAIL: TIMESERIES REPORT

# *Time Series Report*

Figure 3: TIMESERIES Report Window



Performance ▾
Performance > Aggregates > Timeseries ▾
ABOUT THIS REPORT
1d 7d 1m 3m 6m YTD 1y
SHOW MORE
DRAW PLOT
VIEW TABLE
EXPORT TXT
EXPORT XLS
EXPORT PDF
Average Speed (mph)
Wed 05/31/2017 to Wed 05/31/2017
Average Speed (mph)
45
40
35
30
25
20
15
10
5
0
05/31
02:00
04:00
06:00
08:00
10:00
12:00
Average Speed (mph)

From 05/31/2017 To 05/31/2017

Granularity 5 Minutes

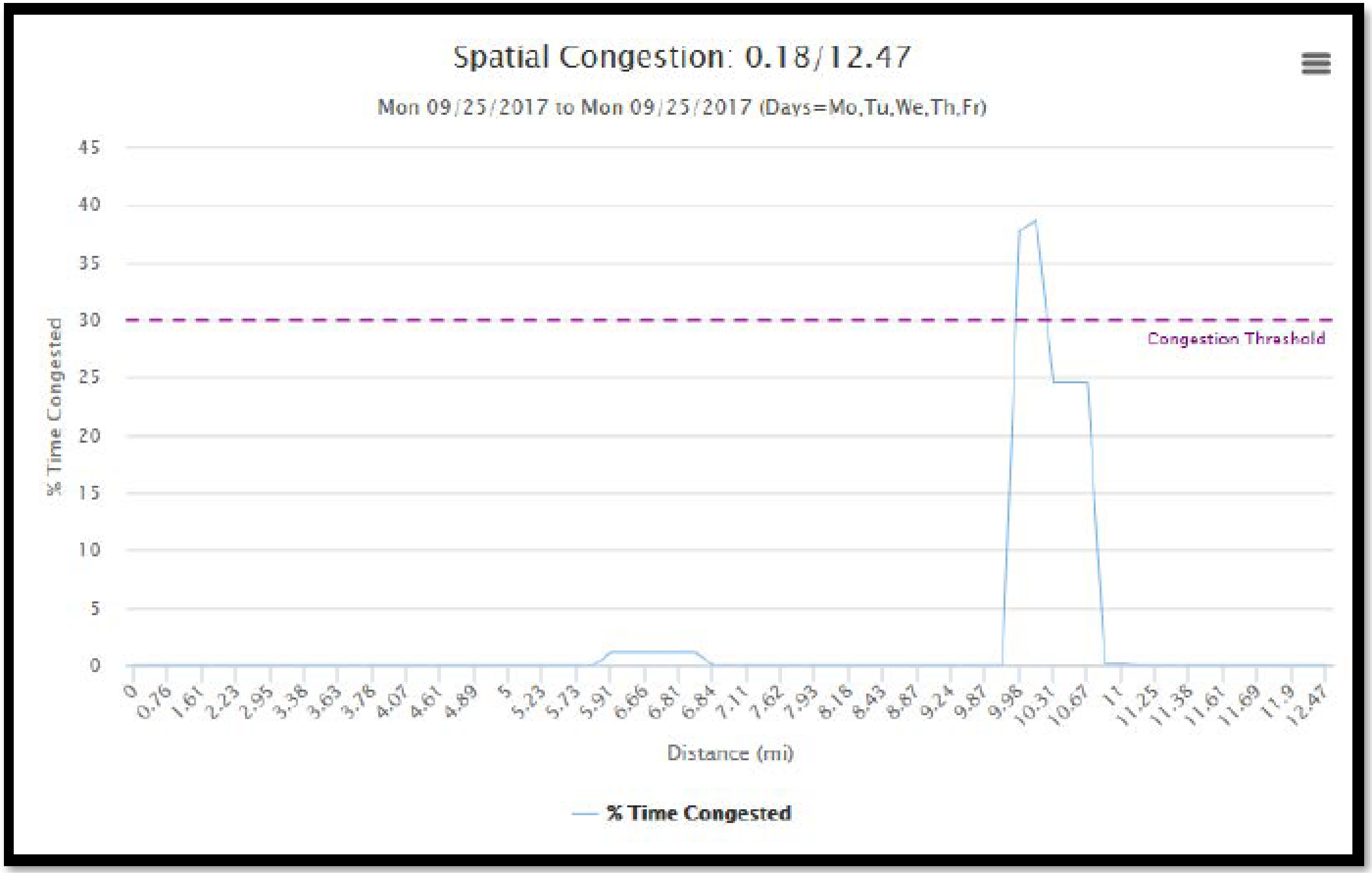
Quantity Average Speed

Quantity2 -None-

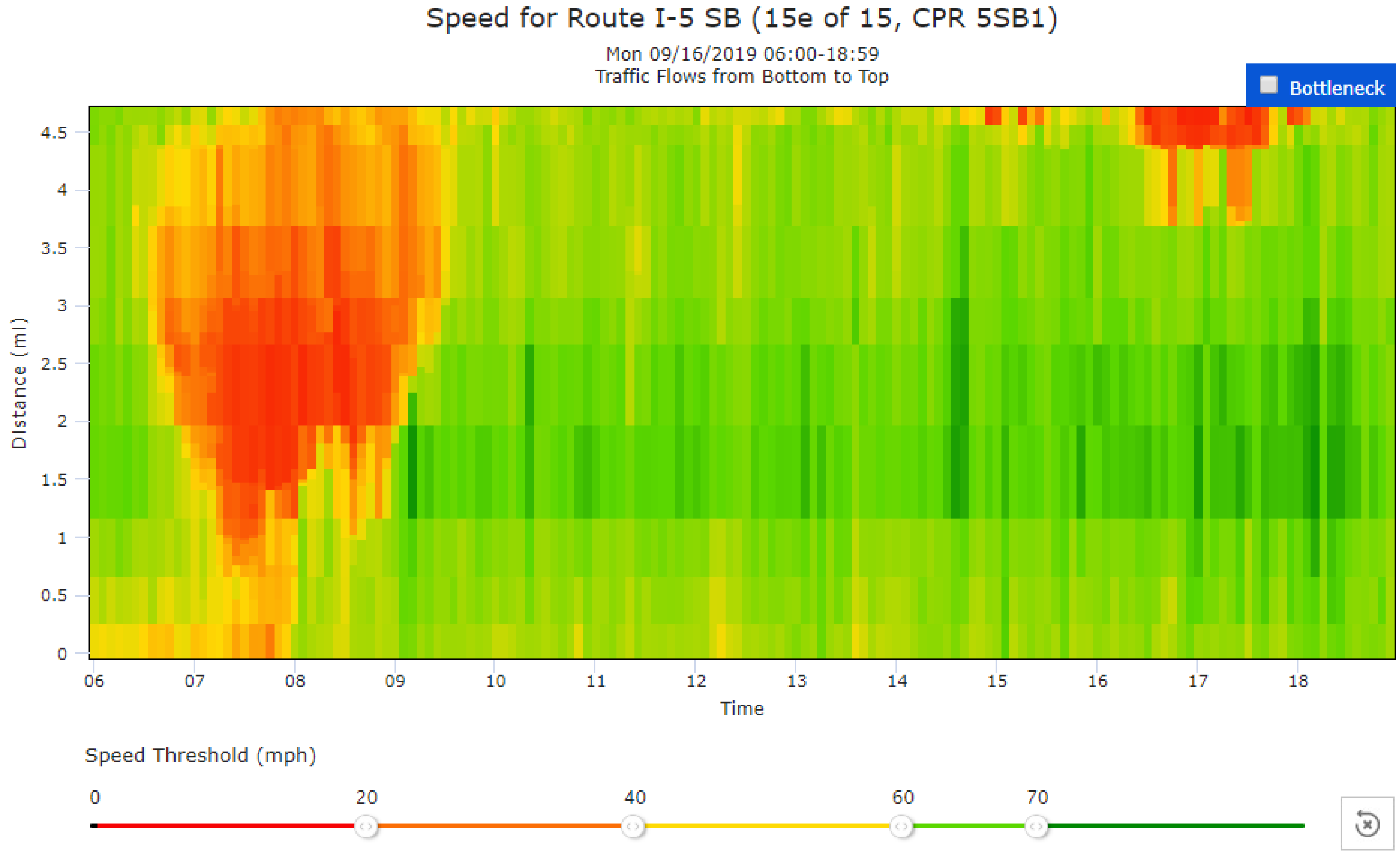
Time of Day: All, Include Days: All

05/31/2017 13:30
Average Speed (mph) : 18.9

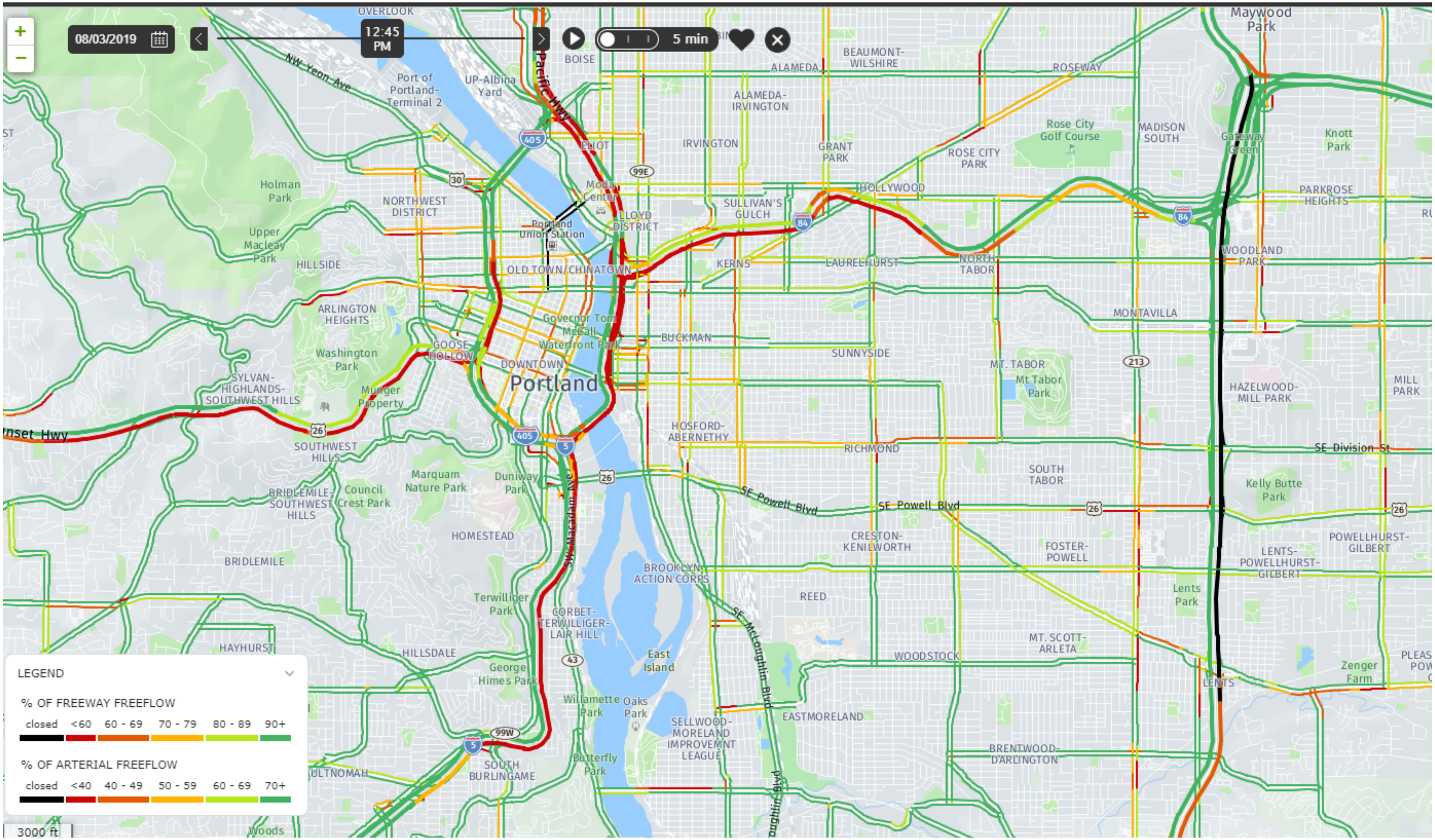
# ***Spatial Congestion Report***



# Contours Report ( Time-Space Heat Map)


Speed for Route I-5 SB (15e of 15, CPR 5SB1)
Mon 09/16/2019 06:00-18:59
Traffic Flows from Bottom to Top
☐ Bottleneck
Distance (mi)
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
06
07
08
09
10
11
12
13
14
15
16
17
18
Time
Speed Threshold (mph)
0
20
40
60
70

# Animation Report



08/03/2019

12:45 PM

5 min

LEGEND

% OF FREEWAY FREEFLOW

| closed | <60 | 60 - 69 | 70 - 79 | 80 - 89 | 90+ |
|---|---|---|---|---|---|

% OF ARTERIAL FREEFLOW

| closed | <40 | 40 - 49 | 50 - 59 | 60 - 69 | 70+ |
|---|---|---|---|---|---|

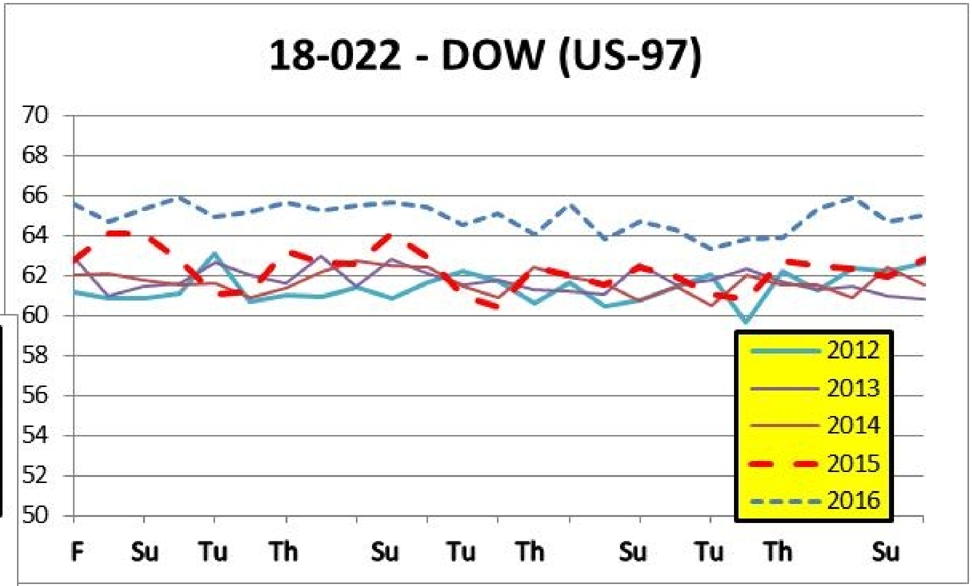
OVERLOOK
NW Yeon Ave
Port of Portland-Terminal 2
UP-Albina Yard
Pacific Hwy
BOISE
ALAMEDA
BEAUMONT-WILSHIRE
ROSEWAY
Maywood Park
ALAMEDA-IRVINGTON
Rose City Golf Course
MADISON SOUTH
Gateway Green
Knott Park
405
ELIOT
IRVINGTON
GRANT PARK
ROSE CITY PARK
Holman Park
30
99E
NORTHWEST DISTRICT
Moda Center
SULLIVAN'S GULCH
HOLLYWOOD
PARKROSE HEIGHTS
Portland Union Station
LLOYD DISTRICT
84
Upper Macleay Park
HILLSIDE
OLD TOWN/CHINATOWN
KERNS
LAURELHURST
NORTH TABOR
WOODLAND PARK
ARLINGTON HEIGHTS
Governor Tom McCall Waterfront Park
MONTAVILLA
BUCKMAN
Washington Park
GOOSE HOLLOW
SUNNYSIDE
MT. TABOR
Mt Tabor Park
213
DOWNTOWN
Portland
SYLVAN-HIGHLANDS-SOUTHWEST HILLS
Munger Property
HAZELWOOD-MILL PARK
MILL PARK
Sunset Hwy
26
HOSFORD-ABERNETHY
RICHMOND
SE Division St
SOUTHWEST HILLS
5
SOUTH TABOR
Marquam Nature Park
Duniway Park
SW Macadam Ave
Kelly Butte Park
BRIDLEMILE-SOUTHWEST HILLS
Council Crest Park
SE Powell Blvd
HOMESTEAD
CRESTON-KENILWORTH
FOSTER-POWELL
POWELLHURST-GILBERT
LENTS-POWELLHURST-GILBERT
BRIDLEMILE
BROOKLYN ACTION CORPS
Lents Park
REED
Terwilliger Park
CORBETT-TERWILLIGER-LAIR HILL
SE McLoughlin Blvd
HAYHURST
HILLSDALE
43
East Island
WOODSTOCK
MT. SCOTT-ARLETA
LENTS
Zenger Farm
George Himes Park
Willamette Park
Oaks Park
SELLWOOD-MORELAND IMPROVEMENT LEAGUE
EASTMORELAND
99W
SOUTH BURLINGAME
Butterfly Park
BRENTWOOD-DARLINGTON
MULTNOMAH
Woods
3000 ft

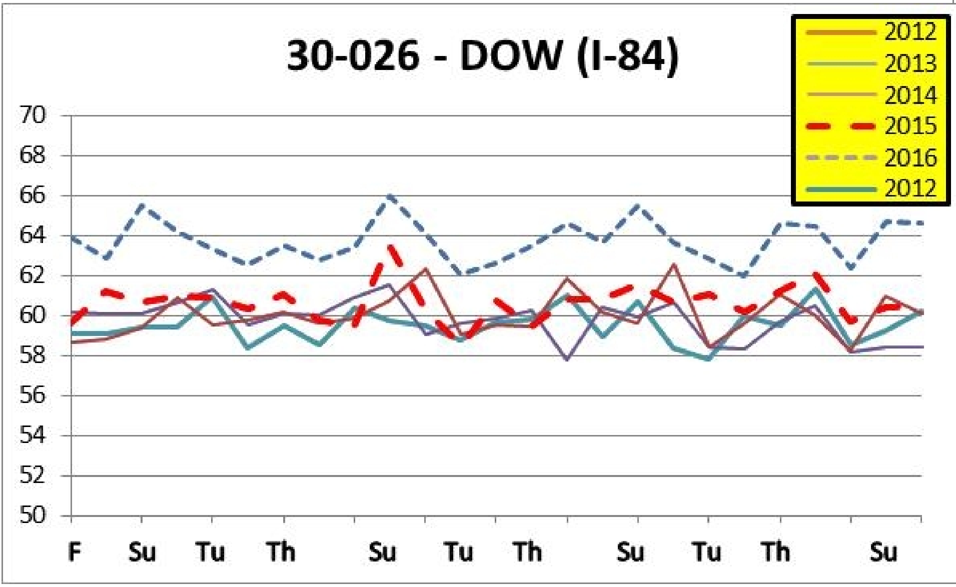
# Types of Applications (ODOT)

- Corridor performance
  - -Trends (annual, monthly, etc)
  - -Before/after construction
- Work zone analysis
- Bottleneck analysis
  - -Identify locations, categorize severity
  - -Congestion “heat map” scans
- Construction before/after studies
- Reliability analysis

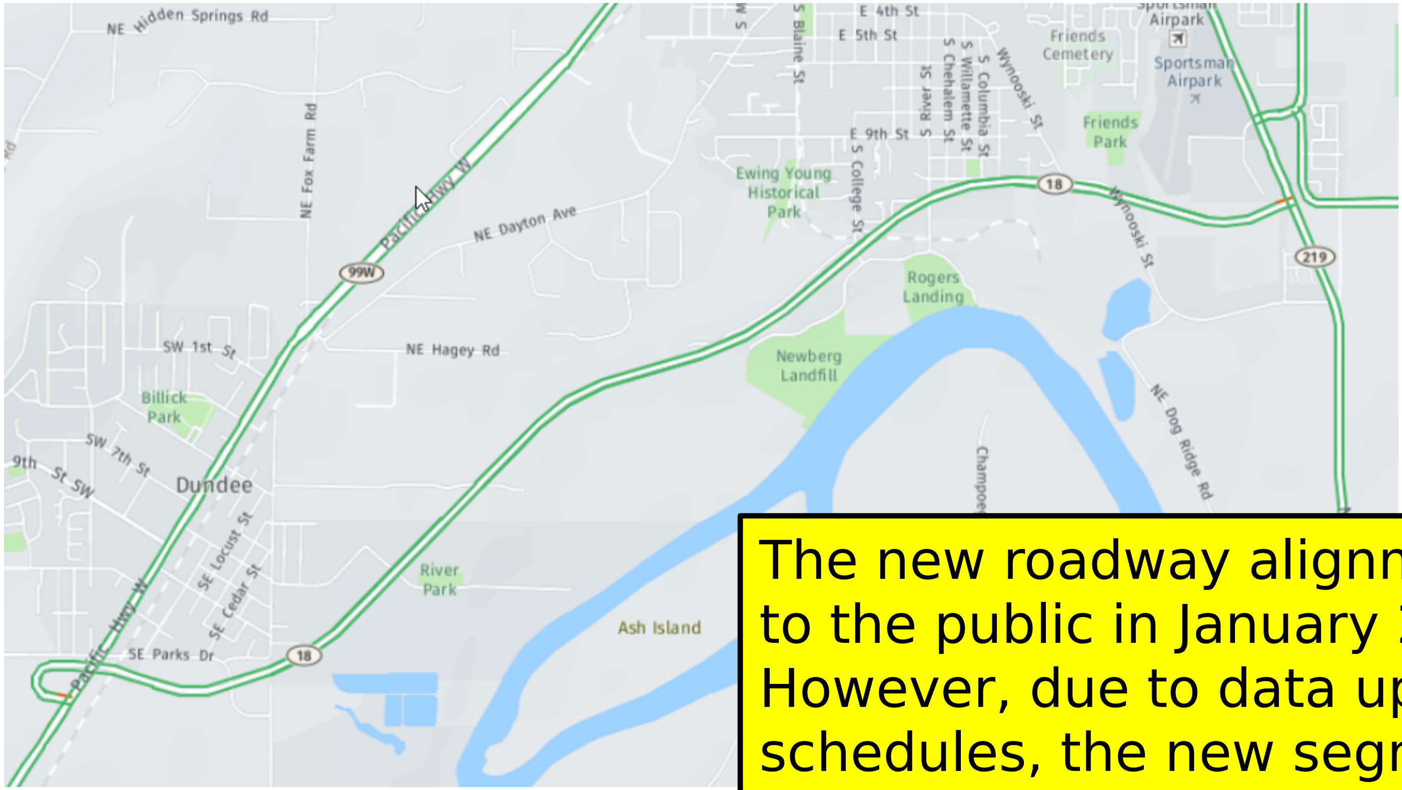
# *Example: Before & After*

- Speed Limit Changes in Central & Eastern Oregon





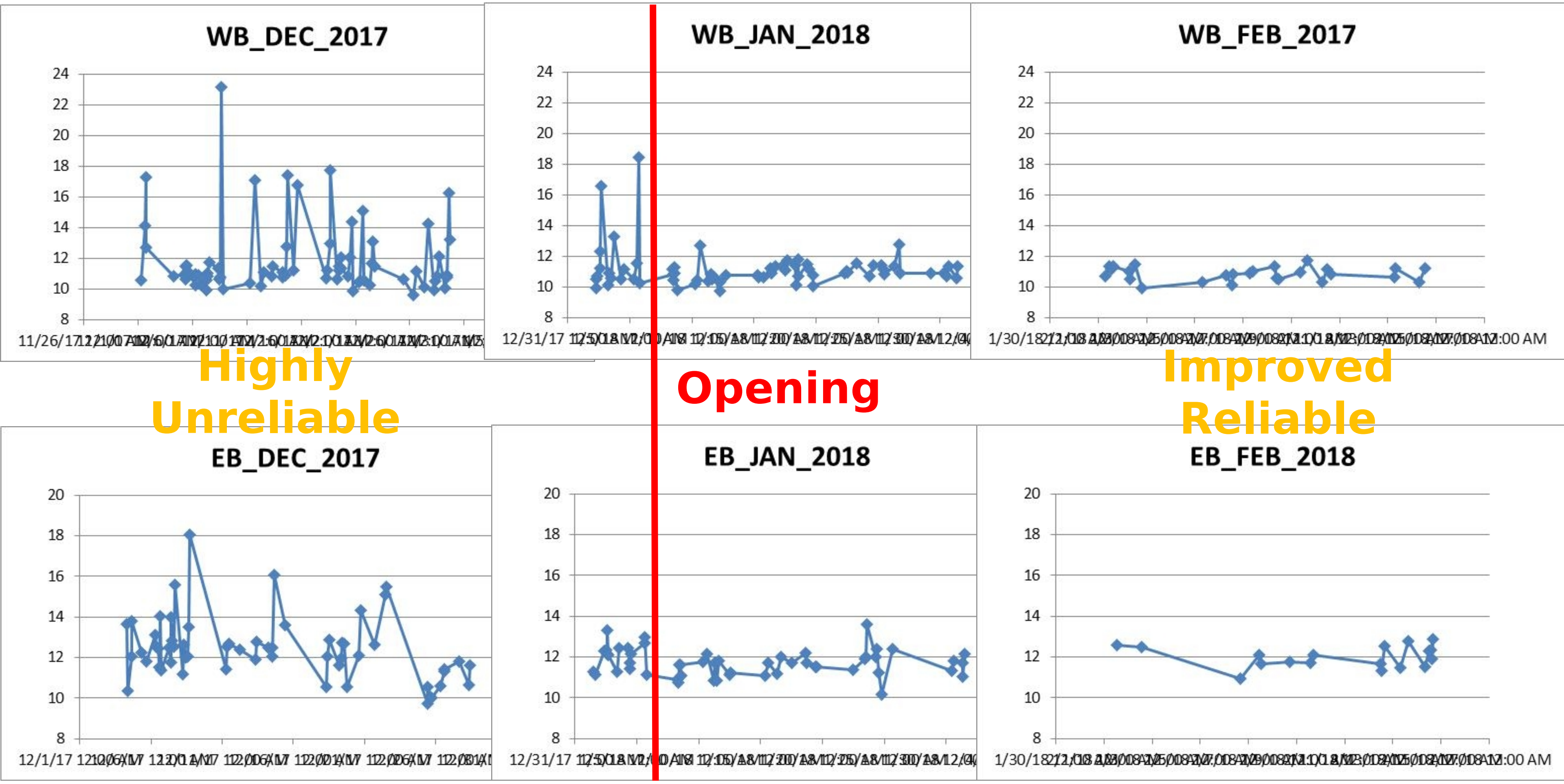
# *Example: Newberg-Dundee Bypass*


NE Hidden Springs Rd
NE Fox Farm Rd
Pacific Hwy W
99W
NE Dayton Ave
NE Hagey Rd
SW 1st St
Billick Park
SW 7th St
9th St SW
Dundee
SE Locust St
SE Cedar St
Pacific Hwy W
SE Parks Dr
18
River Park
Ash Island
Ewing Young Historical Park
Newberg Landfill
Rogers Landing
E 4th St
E 5th St
E 9th St
S Blaine St
S College St
S River St
S Chehalem St
S Willamette St
S Columbia St
Wynooski St
Friends Cemetery
Friends Park
Sportsman Airpark
Sportsman Airpark
18
Wynooski St
219
NE Dog Ridge Rd
Champoeg

The new roadway alignment opened to the public in January 2018. However, due to data update schedules, the new segments were not immediately available; the Before/After study could only be done on the OR99W segment.

# *Example: Newberg-Dundee Bypass*

## *Initial Look (Travel Times)*



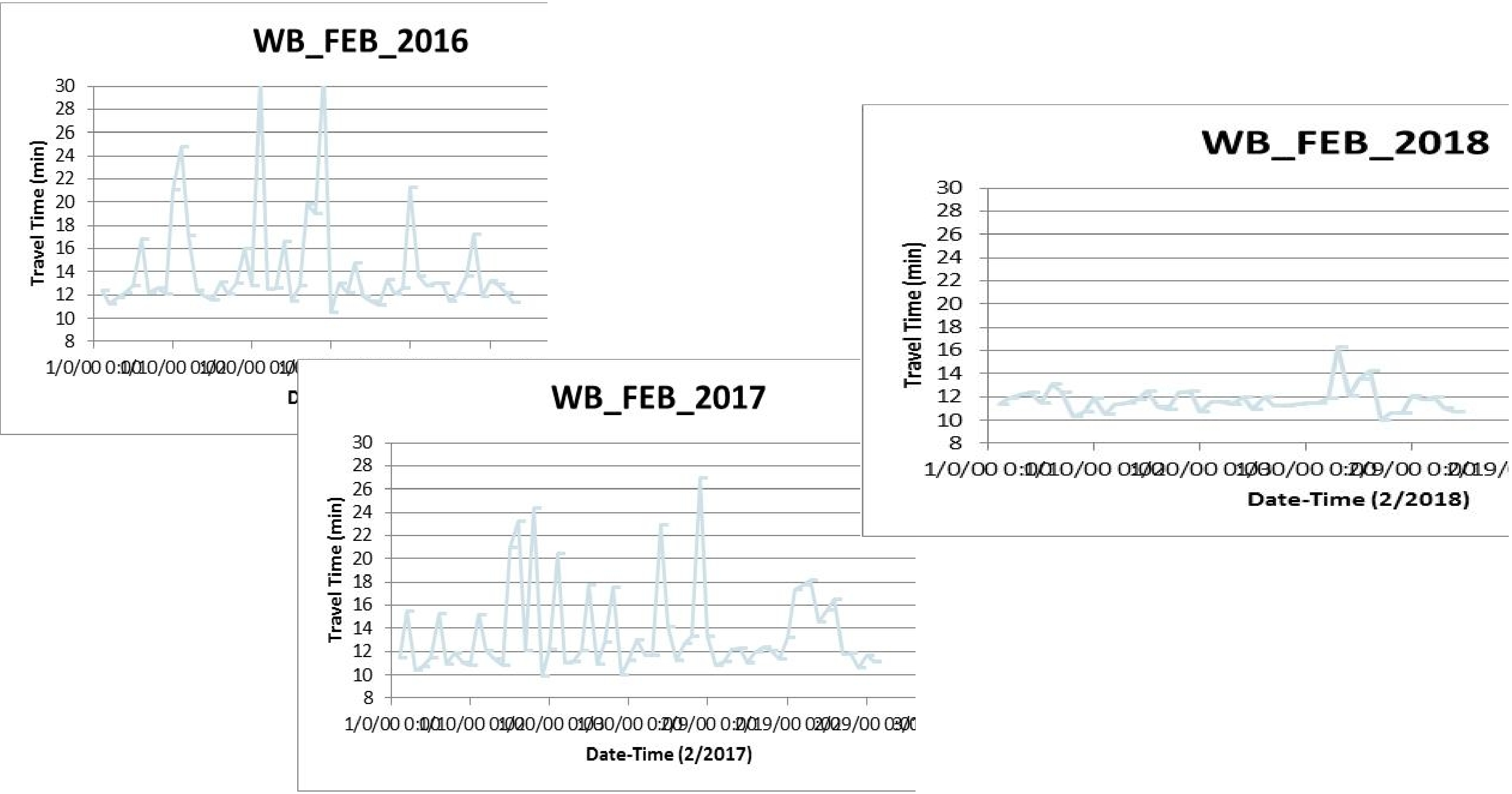
**Highly Unreliable**

**Opening**

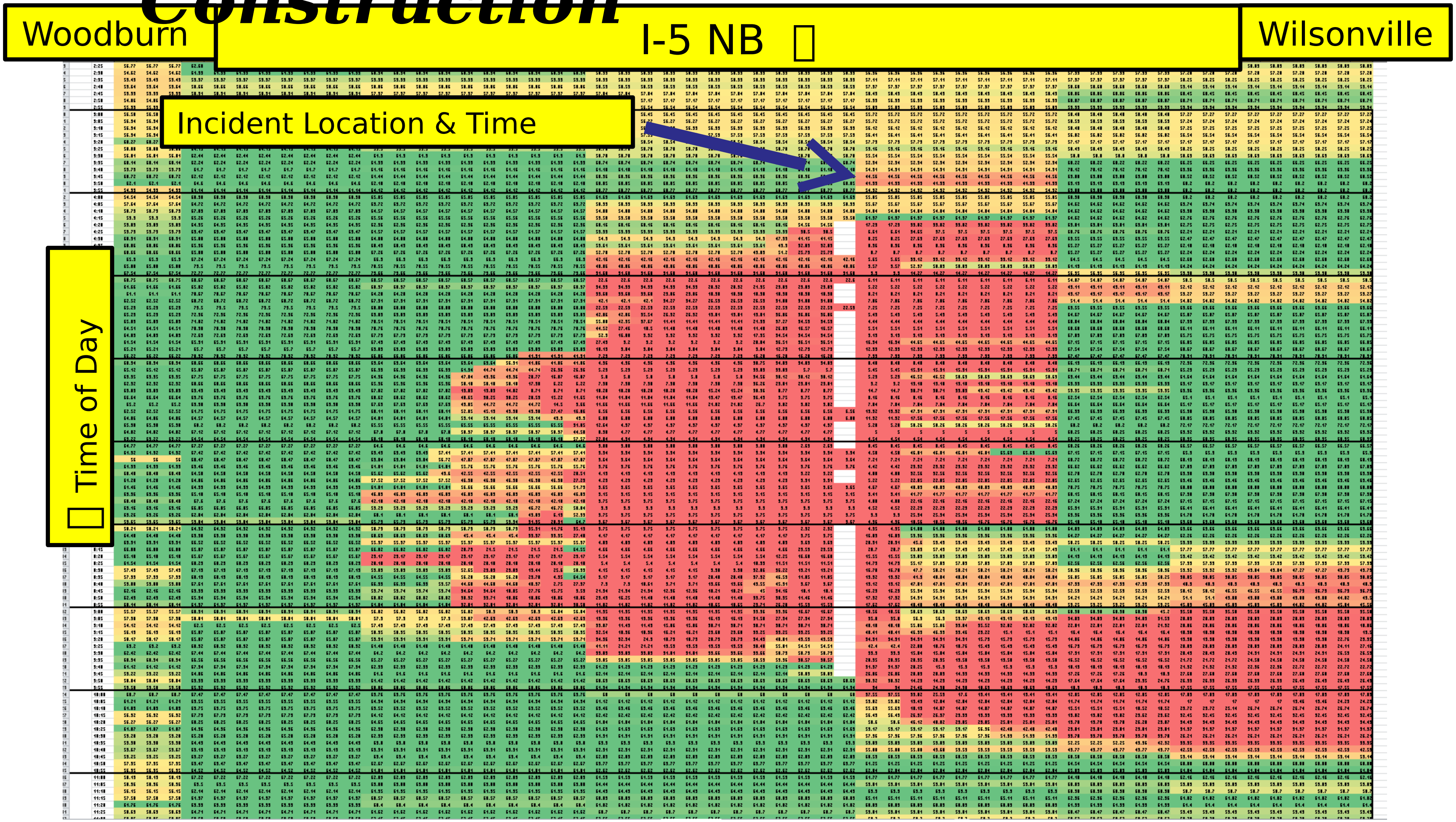
**Improved Reliable**

# Example: Newberg-Dundee Bypass

## Expanded Look (OR99W)



# Example: Work Zone Construction



Woodburn

I-5 NB

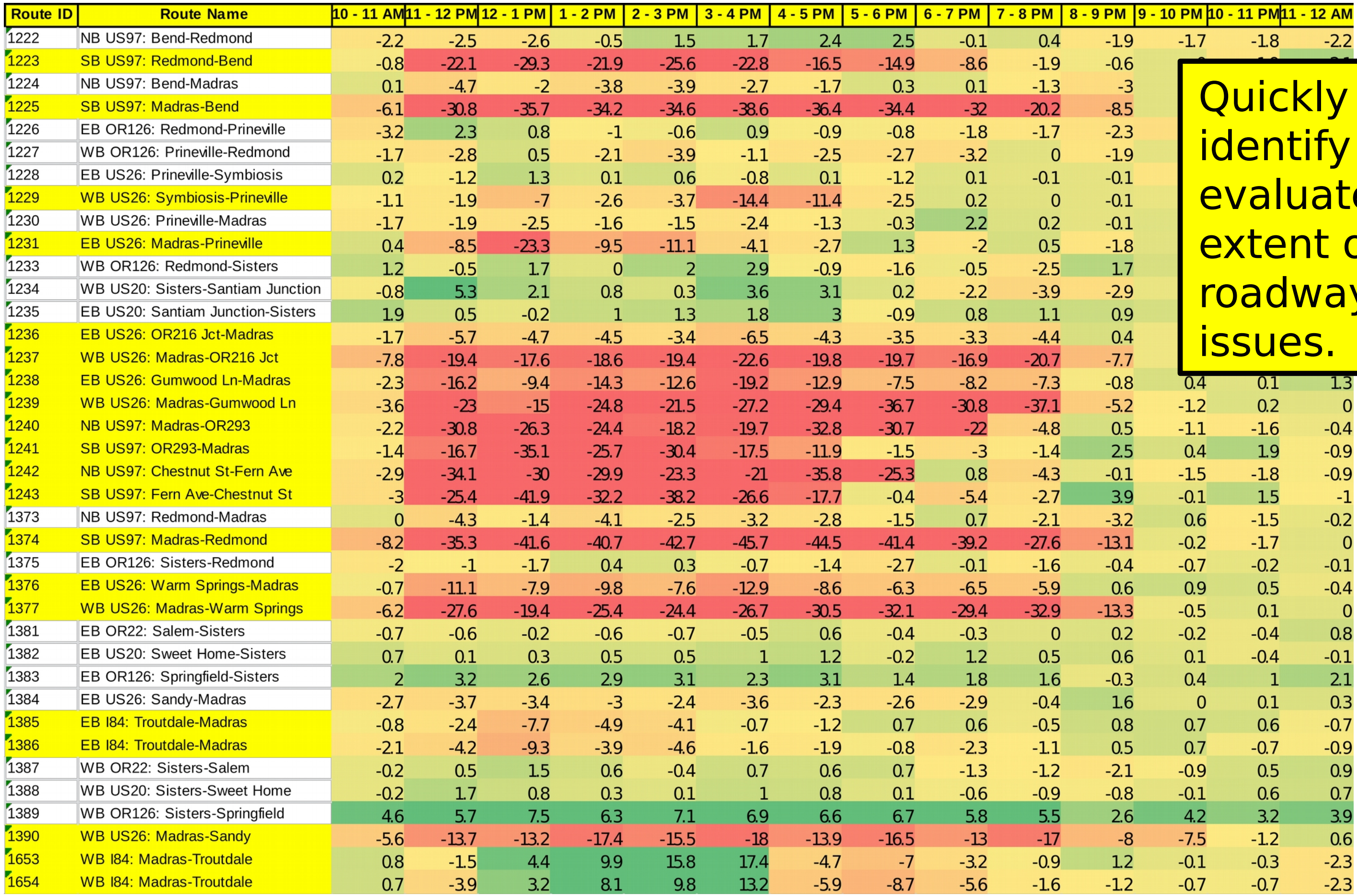
Wilsonville

Incident Location & Time

Time of Day

# *Example: Solar Eclipse*

- Developed routes to evaluate impacts.

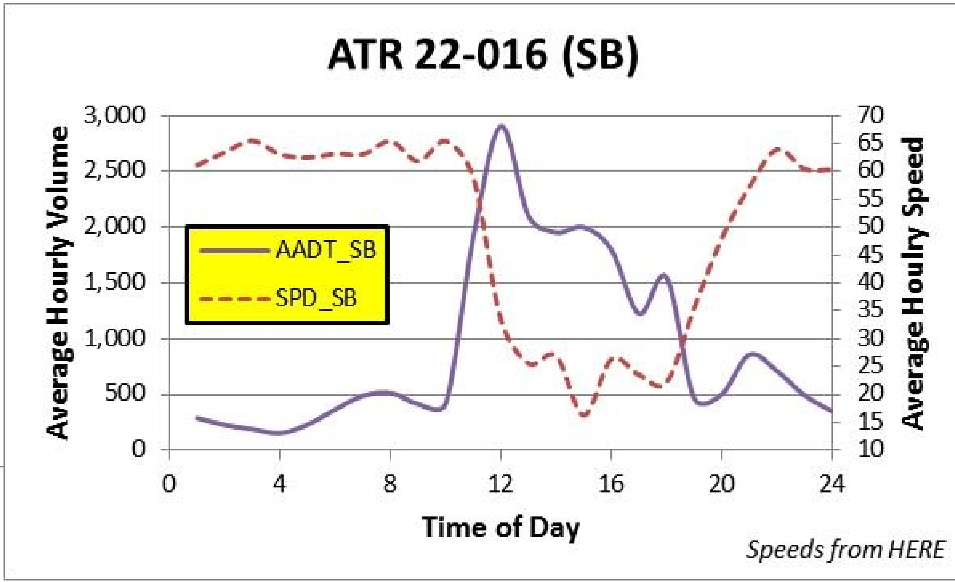


| Route ID | Route Name | 10 - 11 AM | 11 - 12 PM | 12 - 1 PM | 1 - 2 PM | 2 - 3 PM | 3 - 4 PM | 4 - 5 PM | 5 - 6 PM | 6 - 7 PM | 7 - 8 PM | 8 - 9 PM | 9 - 10 PM | 10 - 11 PM | 11 - 12 AM |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1222 | NB US97: Bend-Redmond | -2.2 | -2.5 | -2.6 | -0.5 | 1.5 | 1.7 | 2.4 | 2.5 | -0.1 | 0.4 | -1.9 | -1.7 | -1.8 | -2.2 |
| 1223 | SB US97: Redmond-Bend | -0.8 | -22.1 | -29.3 | -21.9 | -25.6 | -22.8 | -16.5 | -14.9 | -8.6 | -1.9 | -0.6 | | | |
| 1224 | NB US97: Bend-Madras | 0.1 | -4.7 | -2 | -3.8 | -3.9 | -2.7 | -1.7 | 0.3 | 0.1 | -1.3 | -3 | | | |
| 1225 | SB US97: Madras-Bend | -6.1 | -30.8 | -35.7 | -34.2 | -34.6 | -38.6 | -36.4 | -34.4 | -32 | -20.2 | -8.5 | | | |
| 1226 | EB OR126: Redmond-Prineville | -3.2 | 2.3 | 0.8 | -1 | -0.6 | 0.9 | -0.9 | -0.8 | -1.8 | -1.7 | -2.3 | | | |
| 1227 | WB OR126: Prineville-Redmond | -1.7 | -2.8 | 0.5 | -2.1 | -3.9 | -1.1 | -2.5 | -2.7 | -3.2 | 0 | -1.9 | | | |
| 1228 | EB US26: Prineville-Symbiosis | 0.2 | -1.2 | 1.3 | 0.1 | 0.6 | -0.8 | 0.1 | -1.2 | 0.1 | -0.1 | -0.1 | | | |
| 1229 | WB US26: Symbiosis-Prineville | -1.1 | -1.9 | -7 | -2.6 | -3.7 | -14.4 | -11.4 | -2.5 | 0.2 | 0 | -0.1 | | | |
| 1230 | WB US26: Prineville-Madras | -1.7 | -1.9 | -2.5 | -1.6 | -1.5 | -2.4 | -1.3 | -0.3 | 2.2 | 0.2 | -0.1 | | | |
| 1231 | EB US26: Madras-Prineville | 0.4 | -8.5 | -23.3 | -9.5 | -11.1 | -4.1 | -2.7 | 1.3 | -2 | 0.5 | -1.8 | | | |
| 1233 | WB OR126: Redmond-Sisters | 1.2 | -0.5 | 1.7 | 0 | 2 | 2.9 | -0.9 | -1.6 | -0.5 | -2.5 | 1.7 | | | |
| 1234 | WB US20: Sisters-Santiam Junction | -0.8 | 5.3 | 2.1 | 0.8 | 0.3 | 3.6 | 3.1 | 0.2 | -2.2 | -3.9 | -2.9 | | | |
| 1235 | EB US20: Santiam Junction-Sisters | 1.9 | 0.5 | -0.2 | 1 | 1.3 | 1.8 | 3 | -0.9 | 0.8 | 1.1 | 0.9 | | | |
| 1236 | EB US26: OR216 Jct-Madras | -1.7 | -5.7 | -4.7 | -4.5 | -3.4 | -6.5 | -4.3 | -3.5 | -3.3 | -4.4 | 0.4 | | | |
| 1237 | WB US26: Madras-OR216 Jct | -7.8 | -19.4 | -17.6 | -18.6 | -19.4 | -22.6 | -19.8 | -19.7 | -16.9 | -20.7 | -7.7 | | | |
| 1238 | EB US26: Gumwood Ln-Madras | -2.3 | -16.2 | -9.4 | -14.3 | -12.6 | -19.2 | -12.9 | -7.5 | -8.2 | -7.3 | -0.8 | 0.4 | 0.1 | 1.3 |
| 1239 | WB US26: Madras-Gumwood Ln | -3.6 | -23 | -15 | -24.8 | -21.5 | -27.2 | -29.4 | -36.7 | -30.8 | -37.1 | -5.2 | -1.2 | 0.2 | 0 |
| 1240 | NB US97: Madras-OR293 | -2.2 | -30.8 | -26.3 | -24.4 | -18.2 | -19.7 | -32.8 | -30.7 | -22 | -4.8 | 0.5 | -1.1 | -1.6 | -0.4 |
| 1241 | SB US97: OR293-Madras | -1.4 | -16.7 | -35.1 | -25.7 | -30.4 | -17.5 | -11.9 | -1.5 | -3 | -1.4 | 2.5 | 0.4 | 1.9 | -0.9 |
| 1242 | NB US97: Chestnut St-Fern Ave | -2.9 | -34.1 | -30 | -29.9 | -23.3 | -21 | -35.8 | -25.3 | 0.8 | -4.3 | -0.1 | -1.5 | -1.8 | -0.9 |
| 1243 | SB US97: Fern Ave-Chestnut St | -3 | -25.4 | -41.9 | -32.2 | -38.2 | -26.6 | -17.7 | -0.4 | -5.4 | -2.7 | 3.9 | -0.1 | 1.5 | -1 |
| 1373 | NB US97: Redmond-Madras | 0 | -4.3 | -1.4 | -4.1 | -2.5 | -3.2 | -2.8 | -1.5 | 0.7 | -2.1 | -3.2 | 0.6 | -1.5 | -0.2 |
| 1374 | SB US97: Madras-Redmond | -8.2 | -35.3 | -41.6 | -40.7 | -42.7 | -45.7 | -44.5 | -41.4 | -39.2 | -27.6 | -13.1 | -0.2 | -1.7 | 0 |
| 1375 | EB OR126: Sisters-Redmond | -2 | -1 | -1.7 | 0.4 | 0.3 | -0.7 | -1.4 | -2.7 | -0.1 | -1.6 | -0.4 | -0.7 | -0.2 | -0.1 |
| 1376 | EB US26: Warm Springs-Madras | -0.7 | -11.1 | -7.9 | -9.8 | -7.6 | -12.9 | -8.6 | -6.3 | -6.5 | -5.9 | 0.6 | 0.9 | 0.5 | -0.4 |
| 1377 | WB US26: Madras-Warm Springs | -6.2 | -27.6 | -19.4 | -25.4 | -24.4 | -26.7 | -30.5 | -32.1 | -29.4 | -32.9 | -13.3 | -0.5 | 0.1 | 0 |
| 1381 | EB OR22: Salem-Sisters | -0.7 | -0.6 | -0.2 | -0.6 | -0.7 | -0.5 | 0.6 | -0.4 | -0.3 | 0 | 0.2 | -0.2 | -0.4 | 0.8 |
| 1382 | EB US20: Sweet Home-Sisters | 0.7 | 0.1 | 0.3 | 0.5 | 0.5 | 1 | 1.2 | -0.2 | 1.2 | 0.5 | 0.6 | 0.1 | -0.4 | -0.1 |
| 1383 | EB OR126: Springfield-Sisters | 2 | 3.2 | 2.6 | 2.9 | 3.1 | 2.3 | 3.1 | 1.4 | 1.8 | 1.6 | -0.3 | 0.4 | 1 | 2.1 |
| 1384 | EB US26: Sandy-Madras | -2.7 | -3.7 | -3.4 | -3 | -2.4 | -3.6 | -2.3 | -2.6 | -2.9 | -0.4 | 1.6 | 0 | 0.1 | 0.3 |
| 1385 | EB I84: Troutdale-Madras | -0.8 | -2.4 | -7.7 | -4.9 | -4.1 | -0.7 | -1.2 | 0.7 | 0.6 | -0.5 | 0.8 | 0.7 | 0.6 | -0.7 |
| 1386 | EB I84: Troutdale-Madras | -2.1 | -4.2 | -9.3 | -3.9 | -4.6 | -1.6 | -1.9 | -0.8 | -2.3 | -1.1 | 0.5 | 0.7 | -0.7 | -0.9 |
| 1387 | WB OR22: Sisters-Salem | -0.2 | 0.5 | 1.5 | 0.6 | -0.4 | 0.7 | 0.6 | 0.7 | -1.3 | -1.2 | -2.1 | -0.9 | 0.5 | 0.9 |
| 1388 | WB US20: Sisters-Sweet Home | -0.2 | 1.7 | 0.8 | 0.3 | 0.1 | 1 | 0.8 | 0.1 | -0.6 | -0.9 | -0.8 | -0.1 | 0.6 | 0.7 |
| 1389 | WB OR126: Sisters-Springfield | 4.6 | 5.7 | 7.5 | 6.3 | 7.1 | 6.9 | 6.6 | 6.7 | 5.8 | 5.5 | 2.6 | 4.2 | 3.2 | 3.9 |
| 1390 | WB US26: Madras-Sandy | -5.6 | -13.7 | -13.2 | -17.4 | -15.5 | -18 | -13.9 | -16.5 | -13 | -17 | -8 | -7.5 | -1.2 | 0.6 |
| 1653 | WB I84: Madras-Troutdale | 0.8 | -1.5 | 4.4 | 9.9 | 15.8 | 17.4 | -4.7 | -7 | -3.2 | -0.9 | 1.2 | -0.1 | -0.3 | -2.3 |
| 1654 | WB I84: Madras-Troutdale | 0.7 | -3.9 | 3.2 | 8.1 | 9.8 | 13.2 | -5.9 | -8.7 | -5.6 | -1.6 | -1.2 | -0.7 | -0.7 | -2.3 |

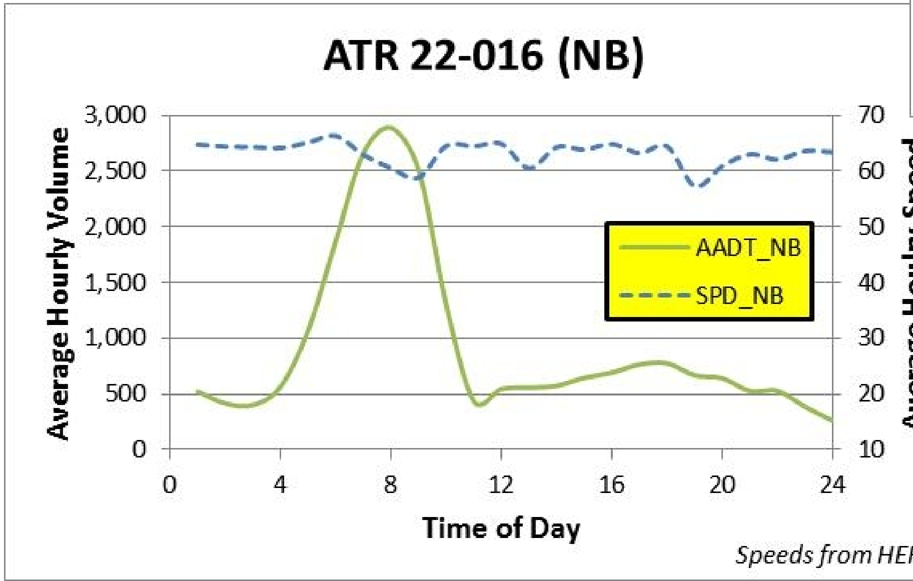
Quickly identify and evaluate extent of roadway issues.

# *Example: Solar Eclipse*

- Tie Speed and ATR data



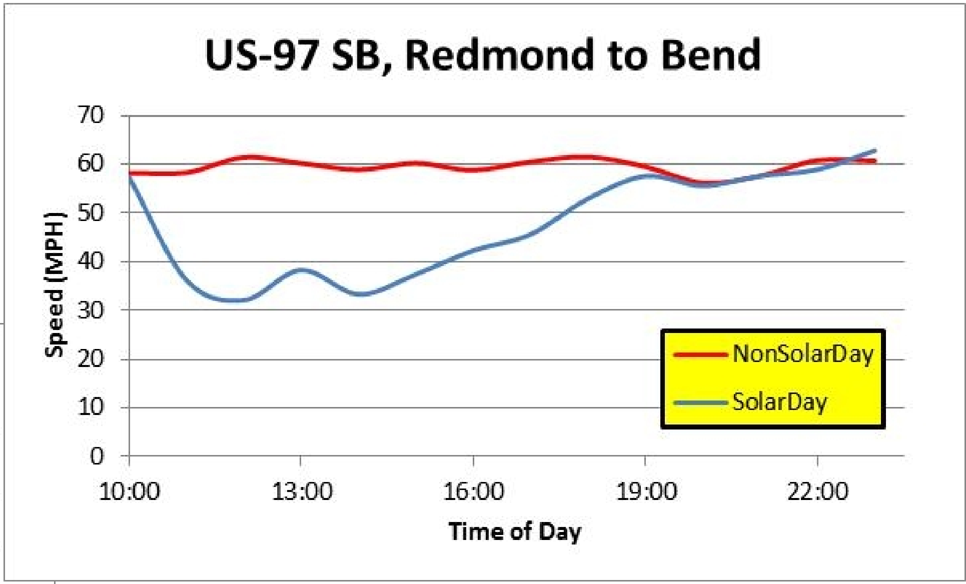
*Speeds from HERE*

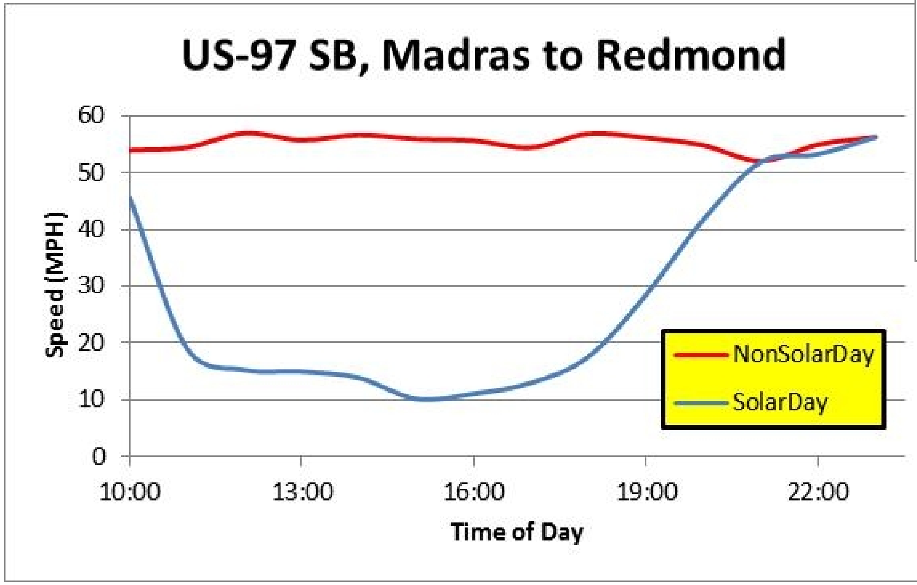


*Speeds from HERE*

# *Example: Solar Eclipse*

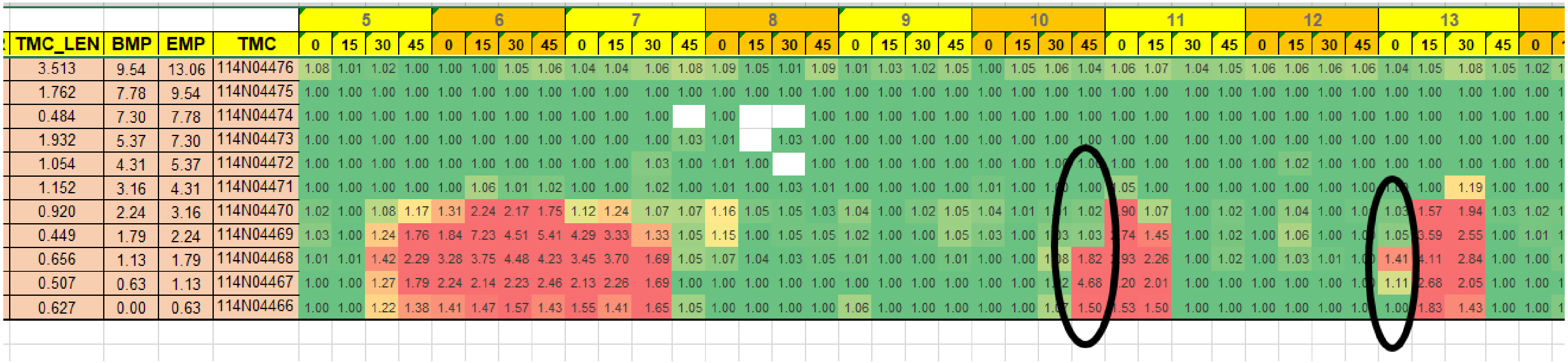
- Average Speed on the routes





# *Example: I-5 Interstate Bridge Lift*

## Feb 6, 2018 (I-5 SB)

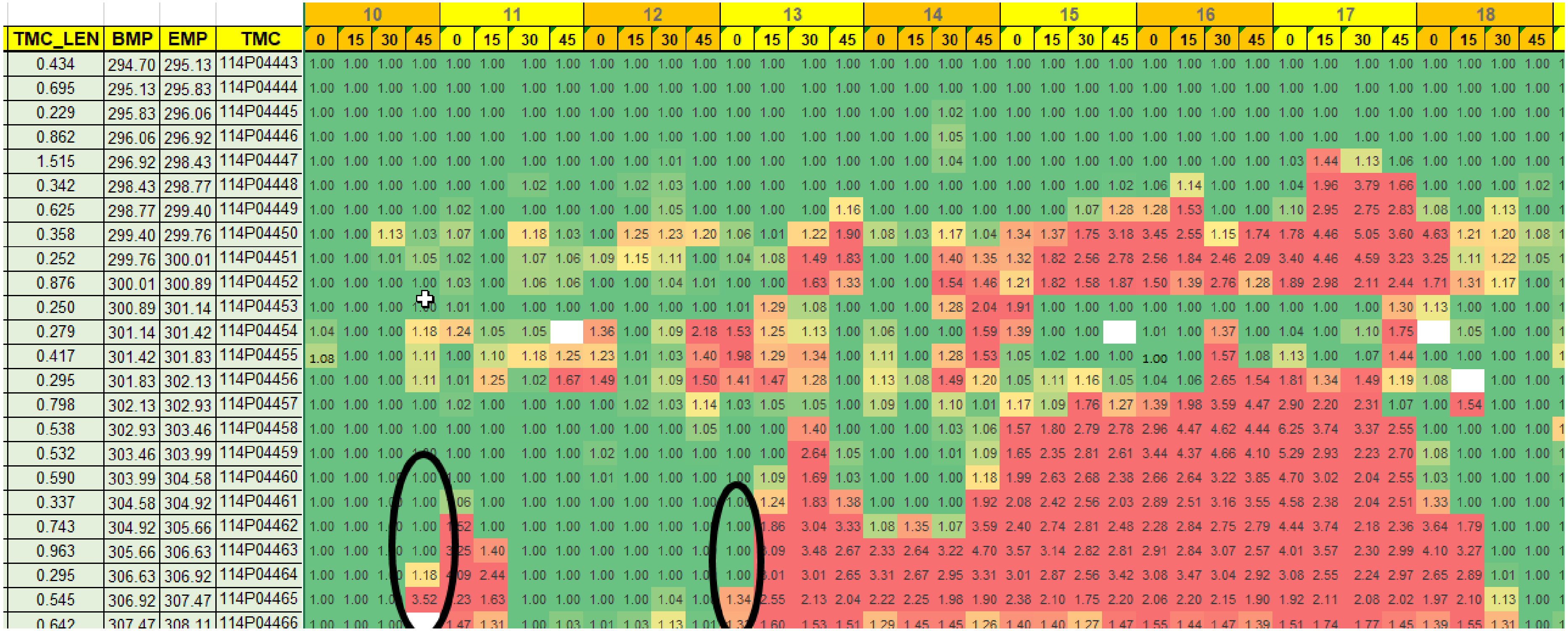


| | | | | 5 | | | | 6 | | | | 7 | | | | 8 | | | | 9 | | | | 10 | | | | 11 | | | | 12 | | | | 13 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TMC_LEN** | **BMP** | **EMP** | **TMC** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** |
| 3.513 | 9.54 | 13.06 | 114N04476 | 1.08 | 1.01 | 1.02 | 1.00 | 1.00 | 1.00 | 1.05 | 1.06 | 1.04 | 1.04 | 1.06 | 1.08 | 1.09 | 1.05 | 1.01 | 1.09 | 1.01 | 1.03 | 1.02 | 1.05 | 1.00 | 1.05 | 1.06 | 1.04 | 1.06 | 1.07 | 1.04 | 1.05 | 1.06 | 1.06 | 1.06 | 1.06 | 1.04 | 1.05 | 1.08 | 1.05 | 1.02 |
| 1.762 | 7.78 | 9.54 | 114N04475 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.484 | 7.30 | 7.78 | 114N04474 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | | 1.00 | | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 1.932 | 5.37 | 7.30 | 114N04473 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.03 | 1.01 | | 1.03 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 1.054 | 4.31 | 5.37 | 114N04472 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.03 | 1.00 | 1.01 | 1.00 | | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | [illegible] | [illegible] | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 1.152 | 3.16 | 4.31 | 114N04471 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.06 | 1.01 | 1.02 | 1.00 | 1.00 | 1.02 | 1.00 | 1.01 | 1.00 | 1.03 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.00 | [illegible] | 1.00 | 1.05 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | [illegible] | 1.00 | 1.19 | 1.00 | 1.00 |
| 0.920 | 2.24 | 3.16 | 114N04470 | 1.02 | 1.00 | 1.08 | 1.17 | 1.31 | 2.24 | 2.17 | 1.75 | 1.12 | 1.24 | 1.07 | 1.07 | 1.16 | 1.05 | 1.05 | 1.03 | 1.04 | 1.00 | 1.02 | 1.05 | 1.04 | 1.01 | [illegible] | 1.02 | [illegible] | 1.07 | 1.00 | 1.02 | 1.00 | 1.04 | 1.00 | [illegible] | 1.03 | 1.57 | 1.94 | 1.03 | 1.02 |
| 0.449 | 1.79 | 2.24 | 114N04469 | 1.03 | 1.00 | 1.24 | 1.76 | 1.84 | 7.23 | 4.51 | 5.41 | 4.29 | 3.33 | 1.33 | 1.05 | 1.15 | 1.00 | 1.05 | 1.05 | 1.02 | 1.00 | 1.00 | 1.05 | 1.03 | 1.00 | [illegible] | 1.03 | [illegible] | 1.45 | 1.00 | 1.02 | 1.00 | 1.06 | 1.00 | [illegible] | 1.05 | 3.59 | 2.55 | 1.00 | 1.01 |
| 0.656 | 1.13 | 1.79 | 114N04468 | 1.01 | 1.01 | 1.42 | 2.29 | 3.28 | 3.75 | 4.48 | 4.23 | 3.45 | 3.70 | 1.69 | 1.05 | 1.07 | 1.04 | 1.03 | 1.05 | 1.01 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | [illegible] | 1.82 | [illegible] | 2.26 | 1.00 | 1.02 | 1.00 | 1.03 | 1.01 | [illegible] | 1.41 | 4.11 | 2.84 | 1.00 | 1.00 |
| 0.507 | 0.63 | 1.13 | 114N04467 | 1.00 | 1.00 | 1.27 | 1.79 | 2.24 | 2.14 | 2.23 | 2.46 | 2.13 | 2.26 | 1.69 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | [illegible] | 4.68 | [illegible] | 2.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | [illegible] | 1.11 | 2.68 | 2.05 | 1.00 | 1.00 |
| 0.627 | 0.00 | 0.63 | 114N04466 | 1.00 | 1.00 | 1.22 | 1.38 | 1.41 | 1.47 | 1.57 | 1.43 | 1.55 | 1.41 | 1.65 | 1.05 | 1.00 | 1.00 | 1.00 | 1.00 | 1.06 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | [illegible] | 1.50 | 1.53 | 1.50 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | [illegible] | 1.00 | 1.83 | 1.43 | 1.00 | 1.00 |

10:44 AM, for 15 min
13:03 PM, for 16 min

# Example: I-5 Interstate Bridge Lift

## Feb 6, 2018 (I-5 NB)

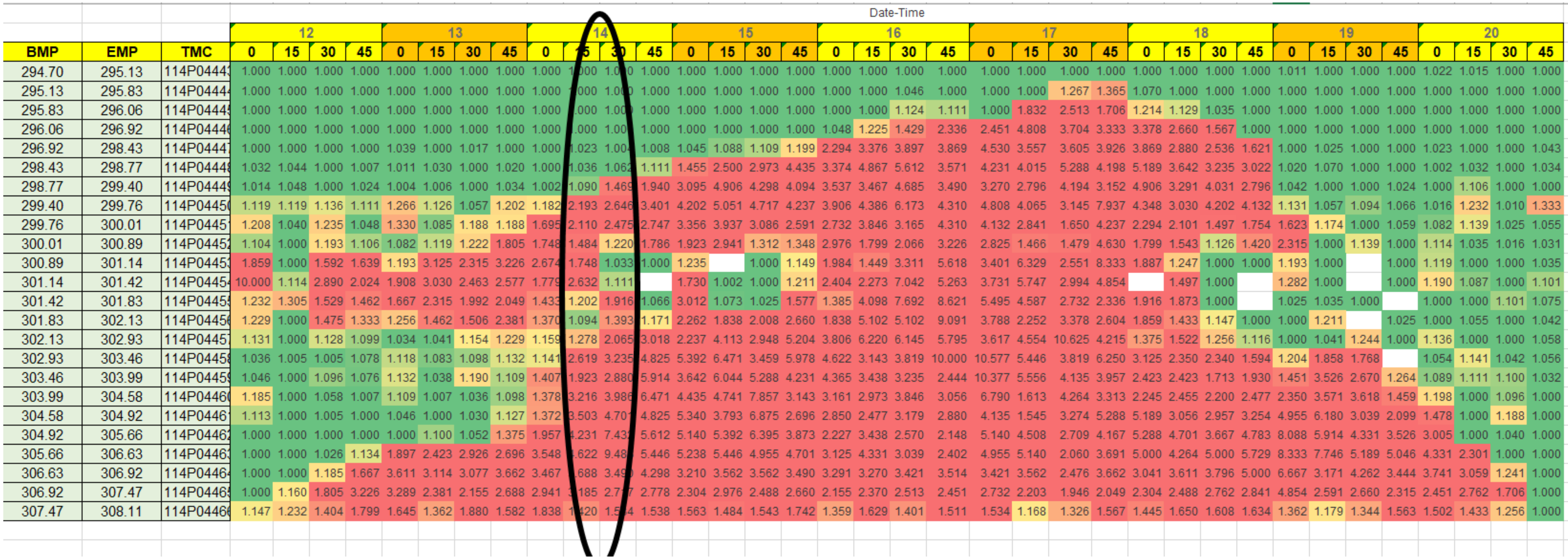


| | | | | 10 | | | | 11 | | | | 12 | | | | 13 | | | | 14 | | | | 15 | | | | 16 | | | | 17 | | | | 18 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **TMC_LEN** | **BMP** | **EMP** | **TMC** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** |
| 0.434 | 294.70 | 295.13 | 114P04443 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.695 | 295.13 | 295.83 | 114P04444 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.229 | 295.83 | 296.06 | 114P04445 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.862 | 296.06 | 296.92 | 114P04446 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.05 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| 1.515 | 296.92 | 298.43 | 114P04447 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.03 | 1.44 | 1.13 | 1.06 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.342 | 298.43 | 298.77 | 114P04448 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.02 | 1.03 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.06 | 1.14 | 1.00 | 1.00 | 1.04 | 1.96 | 3.79 | 1.66 | 1.00 | 1.00 | 1.00 | 1.02 |
| 0.625 | 298.77 | 299.40 | 114P04449 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.05 | 1.00 | 1.00 | 1.00 | 1.00 | 1.16 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.07 | 1.28 | 1.28 | 1.53 | 1.00 | 1.00 | 1.10 | 2.95 | 2.75 | 2.83 | 1.08 | 1.00 | 1.13 | 1.00 |
| 0.358 | 299.40 | 299.76 | 114P04450 | 1.00 | 1.00 | 1.13 | 1.03 | 1.07 | 1.00 | 1.18 | 1.03 | 1.00 | 1.25 | 1.23 | 1.20 | 1.06 | 1.01 | 1.22 | 1.90 | 1.08 | 1.03 | 1.17 | 1.04 | 1.34 | 1.37 | 1.75 | 3.18 | 3.45 | 2.55 | 1.15 | 1.74 | 1.78 | 4.46 | 5.05 | 3.60 | 4.63 | 1.21 | 1.20 | 1.08 |
| 0.252 | 299.76 | 300.01 | 114P04451 | 1.00 | 1.00 | 1.01 | 1.05 | 1.02 | 1.00 | 1.07 | 1.06 | 1.09 | 1.15 | 1.11 | 1.00 | 1.04 | 1.08 | 1.49 | 1.83 | 1.00 | 1.00 | 1.40 | 1.35 | 1.32 | 1.82 | 2.56 | 2.78 | 2.56 | 1.84 | 2.46 | 2.09 | 3.40 | 4.46 | 4.59 | 3.23 | 3.25 | 1.11 | 1.22 | 1.05 |
| 0.876 | 300.01 | 300.89 | 114P04452 | 1.00 | 1.00 | 1.00 | 1.00 | 1.03 | 1.00 | 1.06 | 1.06 | 1.00 | 1.00 | 1.04 | 1.01 | 1.00 | 1.00 | 1.63 | 1.33 | 1.00 | 1.00 | 1.54 | 1.46 | 1.21 | 1.82 | 1.58 | 1.87 | 1.50 | 1.39 | 2.76 | 1.28 | 1.89 | 2.98 | 2.11 | 2.44 | 1.71 | 1.31 | 1.17 | 1.00 |
| 0.250 | 300.89 | 301.14 | 114P04453 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.29 | 1.08 | 1.00 | 1.00 | 1.00 | 1.28 | 2.04 | 1.91 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.30 | 1.13 | 1.00 | 1.00 | 1.00 |
| 0.279 | 301.14 | 301.42 | 114P04454 | 1.04 | 1.00 | 1.00 | 1.18 | 1.24 | 1.05 | 1.05 | | 1.36 | 1.00 | 1.09 | 2.18 | 1.53 | 1.25 | 1.13 | 1.00 | 1.06 | 1.00 | 1.00 | 1.59 | 1.39 | 1.00 | 1.00 | | 1.01 | 1.00 | 1.37 | 1.00 | 1.04 | 1.00 | 1.10 | 1.75 | | 1.05 | 1.00 | 1.00 |
| 0.417 | 301.42 | 301.83 | 114P04455 | 1.08 | 1.00 | 1.00 | 1.11 | 1.00 | 1.10 | 1.18 | 1.25 | 1.23 | 1.01 | 1.03 | 1.40 | 1.98 | 1.29 | 1.34 | 1.00 | 1.11 | 1.00 | 1.28 | 1.53 | 1.05 | 1.02 | 1.00 | 1.00 | 1.00 | 1.00 | 1.57 | 1.08 | 1.13 | 1.00 | 1.07 | 1.44 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.295 | 301.83 | 302.13 | 114P04456 | 1.00 | 1.00 | 1.00 | 1.11 | 1.01 | 1.25 | 1.02 | 1.67 | 1.49 | 1.01 | 1.09 | 1.50 | 1.41 | 1.47 | 1.28 | 1.00 | 1.13 | 1.08 | 1.49 | 1.20 | 1.05 | 1.11 | 1.16 | 1.05 | 1.04 | 1.06 | 2.65 | 1.54 | 1.81 | 1.34 | 1.49 | 1.19 | 1.08 | | 1.00 | 1.00 |
| 0.798 | 302.13 | 302.93 | 114P04457 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.03 | 1.14 | 1.03 | 1.05 | 1.05 | 1.00 | 1.09 | 1.00 | 1.10 | 1.01 | 1.17 | 1.09 | 1.76 | 1.27 | 1.39 | 1.98 | 3.59 | 4.47 | 2.90 | 2.20 | 2.31 | 1.07 | 1.00 | 1.54 | 1.00 | 1.00 |
| 0.538 | 302.93 | 303.46 | 114P04458 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.05 | 1.00 | 1.00 | 1.40 | 1.00 | 1.00 | 1.00 | 1.03 | 1.06 | 1.57 | 1.80 | 2.79 | 2.78 | 2.96 | 4.47 | 4.62 | 4.44 | 6.25 | 3.74 | 3.37 | 2.55 | 1.00 | 1.00 | 1.00 | 1.00 |
| 0.532 | 303.46 | 303.99 | 114P04459 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.02 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 2.64 | 1.05 | 1.00 | 1.00 | 1.01 | 1.09 | 1.65 | 2.35 | 2.81 | 2.61 | 3.44 | 4.37 | 4.66 | 4.10 | 5.29 | 2.93 | 2.23 | 2.70 | 1.08 | 1.00 | 1.00 | 1.00 |
| 0.590 | 303.99 | 304.58 | 114P04460 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.01 | 1.00 | 1.00 | 1.00 | 1.00 | 1.09 | 1.69 | 1.03 | 1.00 | 1.00 | 1.00 | 1.18 | 1.99 | 2.63 | 2.68 | 2.38 | 2.66 | 2.64 | 3.22 | 3.85 | 4.70 | 3.02 | 2.04 | 2.55 | 1.03 | 1.00 | 1.00 | 1.00 |
| 0.337 | 304.58 | 304.92 | 114P04461 | 1.00 | 1.00 | 1.00 | 1.00 | 1.06 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.24 | 1.83 | 1.38 | 1.00 | 1.00 | 1.00 | 1.92 | 2.08 | 2.42 | 2.56 | 2.03 | 2.89 | 2.51 | 3.16 | 3.55 | 4.58 | 2.38 | 2.04 | 2.51 | 1.33 | 1.00 | 1.00 | 1.00 |
| 0.743 | 304.92 | 305.66 | 114P04462 | 1.00 | 1.00 | 1.00 | 1.00 | 1.52 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.86 | 3.04 | 3.33 | 1.08 | 1.35 | 1.07 | 3.59 | 2.40 | 2.74 | 2.81 | 2.48 | 2.28 | 2.84 | 2.75 | 2.79 | 4.44 | 3.74 | 2.18 | 2.36 | 3.64 | 1.79 | 1.00 | 1.00 |
| 0.963 | 305.66 | 306.63 | 114P04463 | 1.00 | 1.00 | 1.00 | 1.00 | 3.25 | 1.40 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 3.09 | 3.48 | 2.67 | 2.33 | 2.64 | 3.22 | 4.70 | 3.57 | 3.14 | 2.82 | 2.81 | 2.91 | 2.84 | 3.07 | 2.57 | 4.01 | 3.57 | 2.30 | 2.99 | 4.10 | 3.27 | 1.00 | 1.00 |
| 0.295 | 306.63 | 306.92 | 114P04464 | 1.00 | 1.00 | 1.00 | 1.18 | 4.09 | 2.44 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 3.01 | 3.01 | 2.65 | 3.31 | 2.67 | 2.95 | 3.31 | 3.01 | 2.87 | 2.56 | 3.42 | 3.08 | 3.47 | 3.04 | 2.92 | 3.08 | 2.55 | 2.24 | 2.97 | 2.65 | 2.89 | 1.01 | 1.00 |
| 0.545 | 306.92 | 307.47 | 114P04465 | 1.00 | 1.00 | 1.00 | 3.52 | [illegible] | 1.63 | 1.00 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.34 | 2.55 | 2.13 | 2.04 | 2.22 | 2.25 | 1.98 | 1.90 | 2.38 | 2.10 | 1.75 | 2.20 | 2.06 | 2.20 | 2.15 | 1.90 | 1.92 | 2.11 | 2.08 | 2.02 | 1.97 | 2.10 | 1.13 | 1.00 |
| 0.642 | 307.47 | 308.11 | 114P04466 | 1.00 | 1.00 | 1.00 | | 1.47 | 1.31 | 1.00 | 1.03 | 1.01 | 1.03 | 1.13 | 1.01 | [illegible] | 1.60 | 1.53 | 1.51 | 1.29 | 1.45 | 1.45 | 1.26 | 1.40 | 1.40 | 1.27 | 1.47 | 1.55 | 1.44 | 1.47 | 1.39 | 1.51 | 1.74 | 1.77 | 1.45 | 1.39 | 1.55 | 1.31 | 1.00 |

10:44 AM, for 15 min
13:03 PM, for 16 min

# *Example: I-5 Interstate Bridge Lift*

## Sept 26, 2018 (I-5 NB)



Date-Time

| | | | 12 | | | | 13 | | | | 14 | | | | 15 | | | | 16 | | | | 17 | | | | 18 | | | | 19 | | | | 20 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **BMP** | **EMP** | **TMC** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** | **0** | **15** | **30** | **45** |
| 294.70 | 295.13 | 114P04443 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.011 | 1.000 | 1.000 | 1.000 | 1.022 | 1.015 | 1.000 | 1.000 |
| 295.13 | 295.83 | 114P04444 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.046 | 1.000 | 1.000 | 1.000 | 1.267 | 1.365 | 1.070 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 295.83 | 296.06 | 114P04445 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.124 | 1.111 | 1.000 | 1.832 | 2.513 | 1.706 | 1.214 | 1.129 | 1.035 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 296.06 | 296.92 | 114P04446 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.048 | 1.225 | 1.429 | 2.336 | 2.451 | 4.808 | 3.704 | 3.333 | 3.378 | 2.660 | 1.567 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 296.92 | 298.43 | 114P04447 | 1.000 | 1.000 | 1.000 | 1.000 | 1.039 | 1.000 | 1.017 | 1.000 | 1.000 | 1.023 | 1.004 | 1.008 | 1.045 | 1.088 | 1.109 | 1.199 | 2.294 | 3.376 | 3.897 | 3.869 | 4.530 | 3.557 | 3.605 | 3.926 | 3.869 | 2.880 | 2.536 | 1.621 | 1.000 | 1.025 | 1.000 | 1.000 | 1.023 | 1.000 | 1.000 | 1.043 |
| 298.43 | 298.77 | 114P04448 | 1.032 | 1.044 | 1.000 | 1.007 | 1.011 | 1.030 | 1.000 | 1.020 | 1.000 | 1.036 | 1.062 | 1.111 | 1.455 | 2.500 | 2.973 | 4.435 | 3.374 | 4.867 | 5.612 | 3.571 | 4.231 | 4.015 | 5.288 | 4.198 | 5.189 | 3.642 | 3.235 | 3.022 | 1.020 | 1.070 | 1.000 | 1.000 | 1.002 | 1.032 | 1.000 | 1.034 |
| 298.77 | 299.40 | 114P04449 | 1.014 | 1.048 | 1.000 | 1.024 | 1.004 | 1.006 | 1.000 | 1.034 | 1.002 | 1.090 | 1.469 | 1.940 | 3.095 | 4.906 | 4.298 | 4.094 | 3.537 | 3.467 | 4.685 | 3.490 | 3.270 | 2.796 | 4.194 | 3.152 | 4.906 | 3.291 | 4.031 | 2.796 | 1.042 | 1.000 | 1.000 | 1.024 | 1.000 | 1.106 | 1.000 | 1.000 |
| 299.40 | 299.76 | 114P04450 | 1.119 | 1.119 | 1.136 | 1.111 | 1.266 | 1.126 | 1.057 | 1.202 | 1.182 | 2.193 | 2.646 | 3.401 | 4.202 | 5.051 | 4.717 | 4.237 | 3.906 | 4.386 | 6.173 | 4.310 | 4.808 | 4.065 | 3.145 | 7.937 | 4.348 | 3.030 | 4.202 | 4.132 | 1.131 | 1.057 | 1.094 | 1.066 | 1.016 | 1.232 | 1.010 | 1.333 |
| 299.76 | 300.01 | 114P04451 | 1.208 | 1.040 | 1.235 | 1.048 | 1.330 | 1.085 | 1.188 | 1.188 | 1.695 | 2.110 | 2.475 | 2.747 | 3.356 | 3.937 | 3.086 | 2.591 | 2.732 | 3.846 | 3.165 | 4.310 | 4.132 | 2.841 | 1.650 | 4.237 | 2.294 | 2.101 | 1.497 | 1.754 | 1.623 | 1.174 | 1.000 | 1.059 | 1.082 | 1.139 | 1.025 | 1.055 |
| 300.01 | 300.89 | 114P04452 | 1.104 | 1.000 | 1.193 | 1.106 | 1.082 | 1.119 | 1.222 | 1.805 | 1.748 | 1.484 | 1.220 | 1.786 | 1.923 | 2.941 | 1.312 | 1.348 | 2.976 | 1.799 | 2.066 | 3.226 | 2.825 | 1.466 | 1.479 | 4.630 | 1.799 | 1.543 | 1.126 | 1.420 | 2.315 | 1.000 | 1.139 | 1.000 | 1.114 | 1.035 | 1.016 | 1.031 |
| 300.89 | 301.14 | 114P04453 | 1.859 | 1.000 | 1.592 | 1.639 | 1.193 | 3.125 | 2.315 | 3.226 | 2.674 | 1.748 | 1.033 | 1.000 | 1.235 | | 1.000 | 1.149 | 1.984 | 1.449 | 3.311 | 5.618 | 3.401 | 6.329 | 2.551 | 8.333 | 1.887 | 1.247 | 1.000 | 1.000 | 1.193 | 1.000 | | 1.000 | 1.119 | 1.000 | 1.000 | 1.035 |
| 301.14 | 301.42 | 114P04454 | 10.000 | 1.114 | 2.890 | 2.024 | 1.908 | 3.030 | 2.463 | 2.577 | 1.779 | 2.632 | 1.111 | | 1.730 | 1.002 | 1.000 | 1.211 | 2.404 | 2.273 | 7.042 | 5.263 | 3.731 | 5.747 | 2.994 | 4.854 | | 1.497 | 1.000 | | 1.282 | 1.000 | | 1.000 | 1.190 | 1.087 | 1.000 | 1.101 |
| 301.42 | 301.83 | 114P04455 | 1.232 | 1.305 | 1.529 | 1.462 | 1.667 | 2.315 | 1.992 | 2.049 | 1.433 | 1.202 | 1.916 | 1.066 | 3.012 | 1.073 | 1.025 | 1.577 | 1.385 | 4.098 | 7.692 | 8.621 | 5.495 | 4.587 | 2.732 | 2.336 | 1.916 | 1.873 | 1.000 | | 1.025 | 1.035 | 1.000 | | 1.000 | 1.000 | 1.101 | 1.075 |
| 301.83 | 302.13 | 114P04456 | 1.229 | 1.000 | 1.475 | 1.333 | 1.256 | 1.462 | 1.506 | 2.381 | 1.370 | 1.094 | 1.393 | 1.171 | 2.262 | 1.838 | 2.008 | 2.660 | 1.838 | 5.102 | 5.102 | 9.091 | 3.788 | 2.252 | 3.378 | 2.604 | 1.859 | 1.433 | 1.147 | 1.000 | 1.000 | 1.211 | | 1.025 | 1.000 | 1.055 | 1.000 | 1.042 |
| 302.13 | 302.93 | 114P04457 | 1.131 | 1.000 | 1.128 | 1.099 | 1.034 | 1.041 | 1.154 | 1.229 | 1.159 | 1.278 | 2.065 | 3.018 | 2.237 | 4.113 | 2.948 | 5.204 | 3.806 | 6.220 | 6.145 | 5.795 | 3.617 | 4.554 | 10.625 | 4.215 | 1.375 | 1.522 | 1.256 | 1.116 | 1.000 | 1.041 | 1.244 | 1.000 | 1.136 | 1.000 | 1.000 | 1.058 |
| 302.93 | 303.46 | 114P04458 | 1.036 | 1.005 | 1.005 | 1.078 | 1.118 | 1.083 | 1.098 | 1.132 | 1.141 | 2.619 | 3.235 | 4.825 | 5.392 | 6.471 | 3.459 | 5.978 | 4.622 | 3.143 | 3.819 | 10.000 | 10.577 | 5.446 | 3.819 | 6.250 | 3.125 | 2.350 | 2.340 | 1.594 | 1.204 | 1.858 | 1.768 | | 1.054 | 1.141 | 1.042 | 1.056 |
| 303.46 | 303.99 | 114P04459 | 1.046 | 1.000 | 1.096 | 1.076 | 1.132 | 1.038 | 1.190 | 1.109 | 1.407 | 1.923 | 2.880 | 5.914 | 3.642 | 6.044 | 5.288 | 4.231 | 4.365 | 3.438 | 3.235 | 2.444 | 10.377 | 5.556 | 4.135 | 3.957 | 2.423 | 2.423 | 1.713 | 1.930 | 1.451 | 3.526 | 2.670 | 1.264 | 1.089 | 1.111 | 1.100 | 1.032 |
| 303.99 | 304.58 | 114P04460 | 1.185 | 1.000 | 1.058 | 1.007 | 1.109 | 1.007 | 1.036 | 1.098 | 1.378 | 3.216 | 3.986 | 6.471 | 4.435 | 4.741 | 7.857 | 3.143 | 3.161 | 2.973 | 3.846 | 3.056 | 6.790 | 1.613 | 4.264 | 3.313 | 2.245 | 2.455 | 2.200 | 2.477 | 2.350 | 3.571 | 3.618 | 1.459 | 1.198 | 1.000 | 1.096 | 1.000 |
| 304.58 | 304.92 | 114P04461 | 1.113 | 1.000 | 1.005 | 1.000 | 1.046 | 1.000 | 1.030 | 1.127 | 1.372 | 3.503 | 4.701 | 4.825 | 5.340 | 3.793 | 6.875 | 2.696 | 2.850 | 2.477 | 3.179 | 2.880 | 4.135 | 1.545 | 3.274 | 5.288 | 5.189 | 3.056 | 2.957 | 3.254 | 4.955 | 6.180 | 3.039 | 2.099 | 1.478 | 1.000 | 1.188 | 1.000 |
| 304.92 | 305.66 | 114P04462 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 | 1.100 | 1.052 | 1.375 | 1.957 | 4.231 | 7.432 | 5.612 | 5.140 | 5.392 | 6.395 | 3.873 | 2.227 | 3.438 | 2.570 | 2.148 | 5.140 | 4.508 | 2.709 | 4.167 | 5.288 | 4.701 | 3.667 | 4.783 | 8.088 | 5.914 | 4.331 | 3.526 | 3.005 | 1.000 | 1.040 | 1.000 |
| 305.66 | 306.63 | 114P04463 | 1.000 | 1.000 | 1.026 | 1.134 | 1.897 | 2.423 | 2.926 | 2.696 | 3.548 | 4.622 | [illegible] | 5.446 | 5.238 | 5.446 | 4.955 | 4.701 | 3.125 | 4.331 | 3.039 | 2.402 | 4.955 | 5.140 | 2.060 | 3.691 | 5.000 | 4.264 | 5.000 | 5.729 | 8.333 | 7.746 | 5.189 | 5.046 | 4.331 | 2.301 | 1.000 | 1.000 |
| 306.63 | 306.92 | 114P04464 | 1.000 | 1.000 | 1.185 | 1.667 | 3.611 | 3.114 | 3.077 | 3.662 | 3.467 | [illegible] | 3.490 | 4.298 | 3.210 | 3.562 | 3.562 | 3.490 | 3.291 | 3.270 | 3.421 | 3.514 | 3.421 | 3.562 | 2.476 | 3.662 | 3.041 | 3.611 | 3.796 | 5.000 | 6.667 | 3.171 | 4.262 | 3.444 | 3.741 | 3.059 | 1.241 | 1.000 |
| 306.92 | 307.47 | 114P04465 | 1.000 | 1.160 | 1.805 | 3.226 | 3.289 | 2.381 | 2.155 | 2.688 | 2.941 | 3.185 | [illegible] | 2.778 | 2.304 | 2.976 | 2.488 | 2.660 | 2.155 | 2.370 | 2.513 | 2.451 | 2.732 | 2.203 | 1.946 | 2.049 | 2.304 | 2.488 | 2.762 | 2.841 | 4.854 | 2.591 | 2.660 | 2.315 | 2.451 | 2.762 | 1.706 | 1.000 |
| 307.47 | 308.11 | 114P04466 | 1.147 | 1.232 | 1.404 | 1.799 | 1.645 | 1.362 | 1.880 | 1.582 | 1.838 | 1.420 | [illegible] | 1.538 | 1.563 | 1.484 | 1.543 | 1.742 | 1.359 | 1.629 | 1.401 | 1.511 | 1.534 | 1.168 | 1.326 | 1.567 | 1.445 | 1.650 | 1.608 | 1.634 | 1.362 | 1.179 | 1.344 | 1.563 | 1.502 | 1.433 | 1.256 | 1.000 |

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# QUESTIONS???

Richard.Arnold@odot.state.or.us (503.986.4219)