

PSU Portal & ODOT TOC

5/15/2019



Transportation Operation Centers (TOCs)

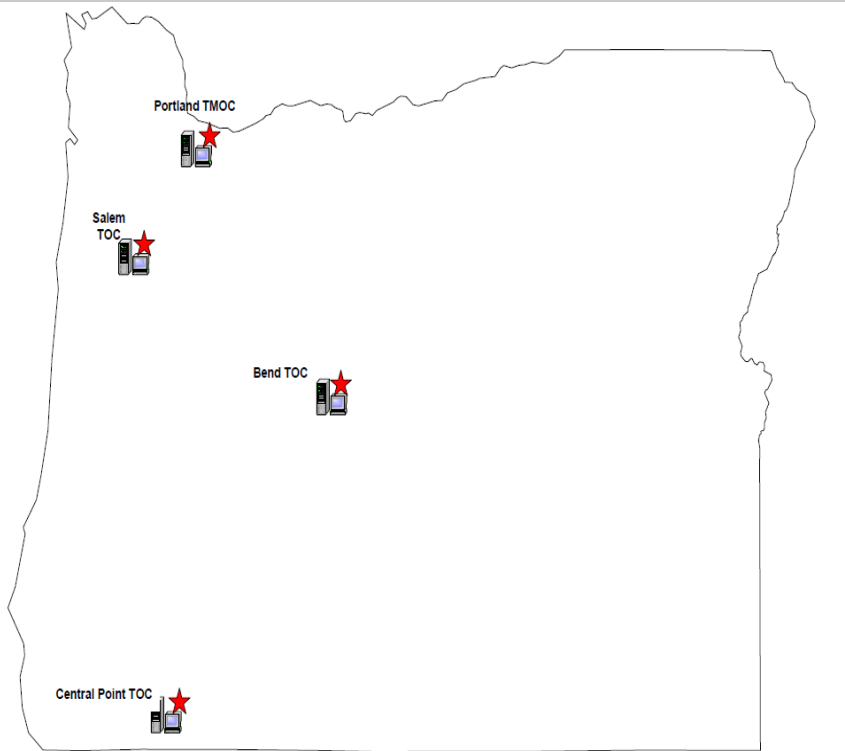
- Overview
- Data Warehouse/ Extraction
- Reports

TOCs in Oregon



Transportation Operation Centers (TOCs)

- Portland TOC (TMOC) -2B,2C
- Salem TOC (NWTOC)- 1,3,4,5
- Central Point TOC (STOC) – 7,8,11
- Bend TOC (CTOC)– 9,10,12,13,14

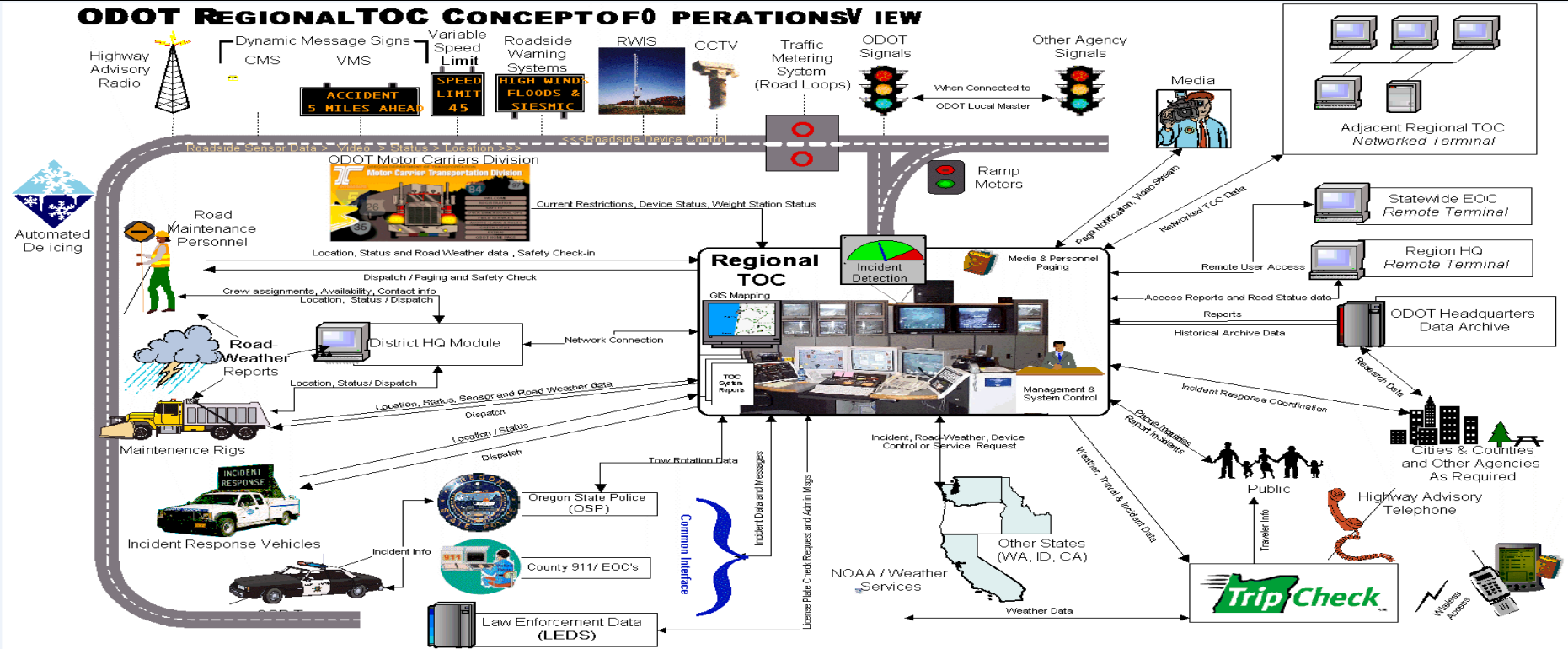


TOC Roles:

- Incident Management
- Emergency Management
 - Traveler Information
 - Winter Operations
- Maintenance Operations
 - Device Management
 - Traffic Management
- Construction Operations
- Highway Mobility Operations

TOC

ODOT REGIONAL TOC CONCEPT OF OPERATIONS VIEW



Law Enforcement Data System (Oregon State Police)

• Overview

• Partnerships



TOC – Software GUI

Create New Event



Event Description

Type -- select -- Sub-Type -- select -- Reset
Priority 1 Sensitive ☐ Status Potential

Event Record Source

Name
Phone
Address

Location

Reset
Loc. Code All CAs ☐
Route -- select -- --
Highway -- select --
County -- select --
Milepost - Z (-) ☐

ForseCom

Customize/Override

Manual Alert

Impact No to Minimum Delay Est. Clear Cmd



Recovery Begin Time ☐ Create Lane Clearance Timer

Remarks Event Attributes Calendar

Responding Involving Service Property Damage Animal >90 Reasons

- ☐ Flat Tire ☐ Transported Person - Mileage
☐ Fuel Provided Begin End
☐ Help Enroute
☐ Let Use Phone
☐ Mechanical Assistance
☐ Pushed/Pulled Vehicle

Responses

Milestones Completed

Manage Event Response Activities

Units Notifications ATIS VMS Tows Timers Files

Unit	Prim.	Status	Inv.	Notified	En Route	Arrived	Cleared
------	-------	--------	------	----------	----------	---------	---------

Assign Additional Units

Unit Number(s) Assign

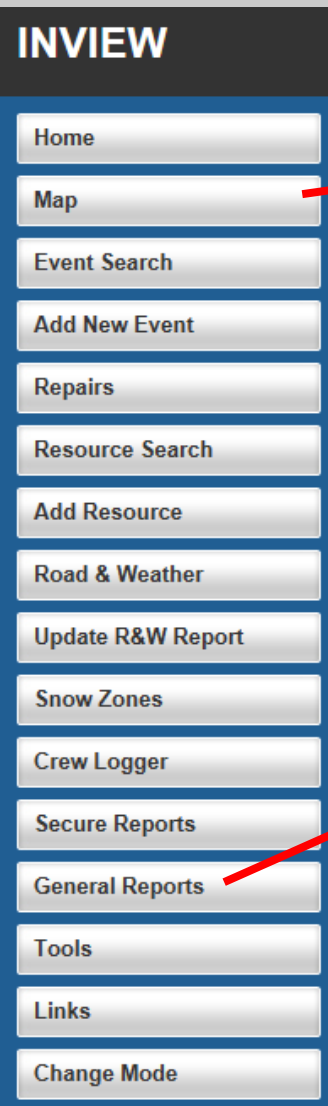
Manage Remarks

Create Record

Event Record Management

Save and Close

Inview



Welcome to INVIEW Reports

[Incidents](#) [ITS Inventory](#) [Miscellaneous](#) [Other Agencies](#) [Road & Weather](#) [TOC Operations](#) [Traveler Information](#)

Active Incidents

- [Current Incidents](#)

Incident Counts

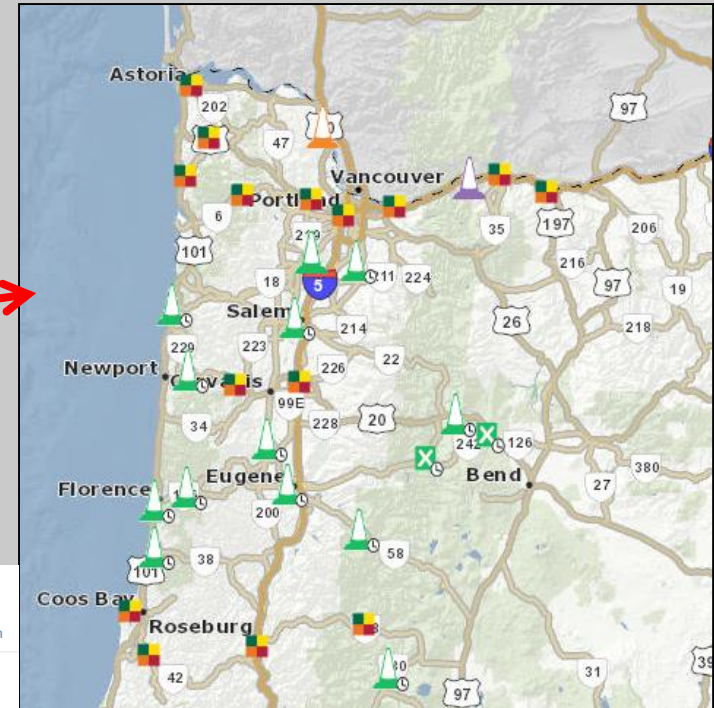
- [Count by Type and Command Area for a Month by Day](#)
- [Event Count By Maintenance Crew By Month](#)
- [Statewide Summary by Type of Event](#)

Incident Duration

- [Roadway Clearance Time for Crashes and Fatal Crashes - Map View](#)
- [Roadway Clearance Duration for Crashes and Fatal Crashes - Pie Chart](#)
- [Roadway Clearance - Percentage of incidents meeting 90 min goal - Trend Chart](#)
- [Highway Closure Duration for Crashes and Fatal Crashes](#)
- [Crew, Unit, and Event Response Times](#)
- [Over 90 Minute Roadway Clearance Causes](#)

Incident Summary

- [Closure Summary](#)
- [Daily Major Event](#)
- [Event Summary](#)
- [Event Summary - Long](#)
- [NEDC Reportable Incidents](#)
- [Property Damage Summary](#)
- [Emergency Vehicle Usage](#)
- [Roadway Clearance State KPM Gauge](#)
- [Motor Carrier Closure Report](#)

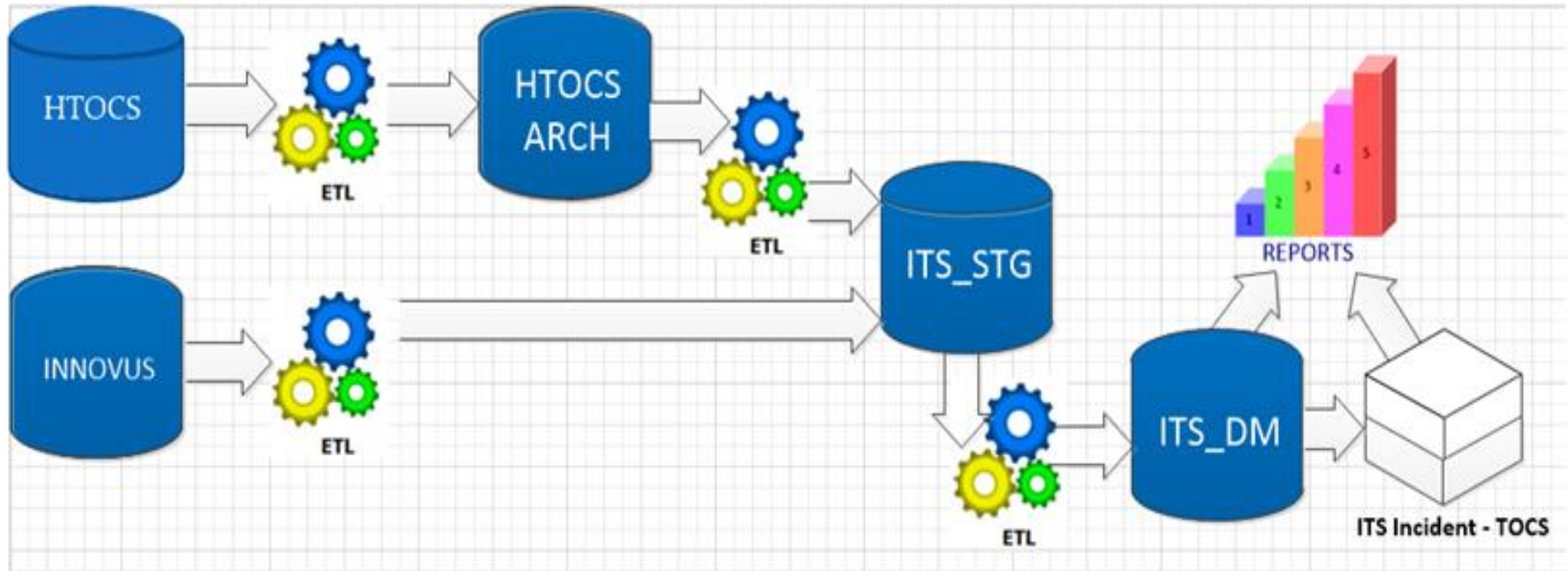


- INVIEW allows authorized users to search for and view events, crews and units, reports, etc.
- Access the Crew Logger tool and INVIEW reports

Incident History Report

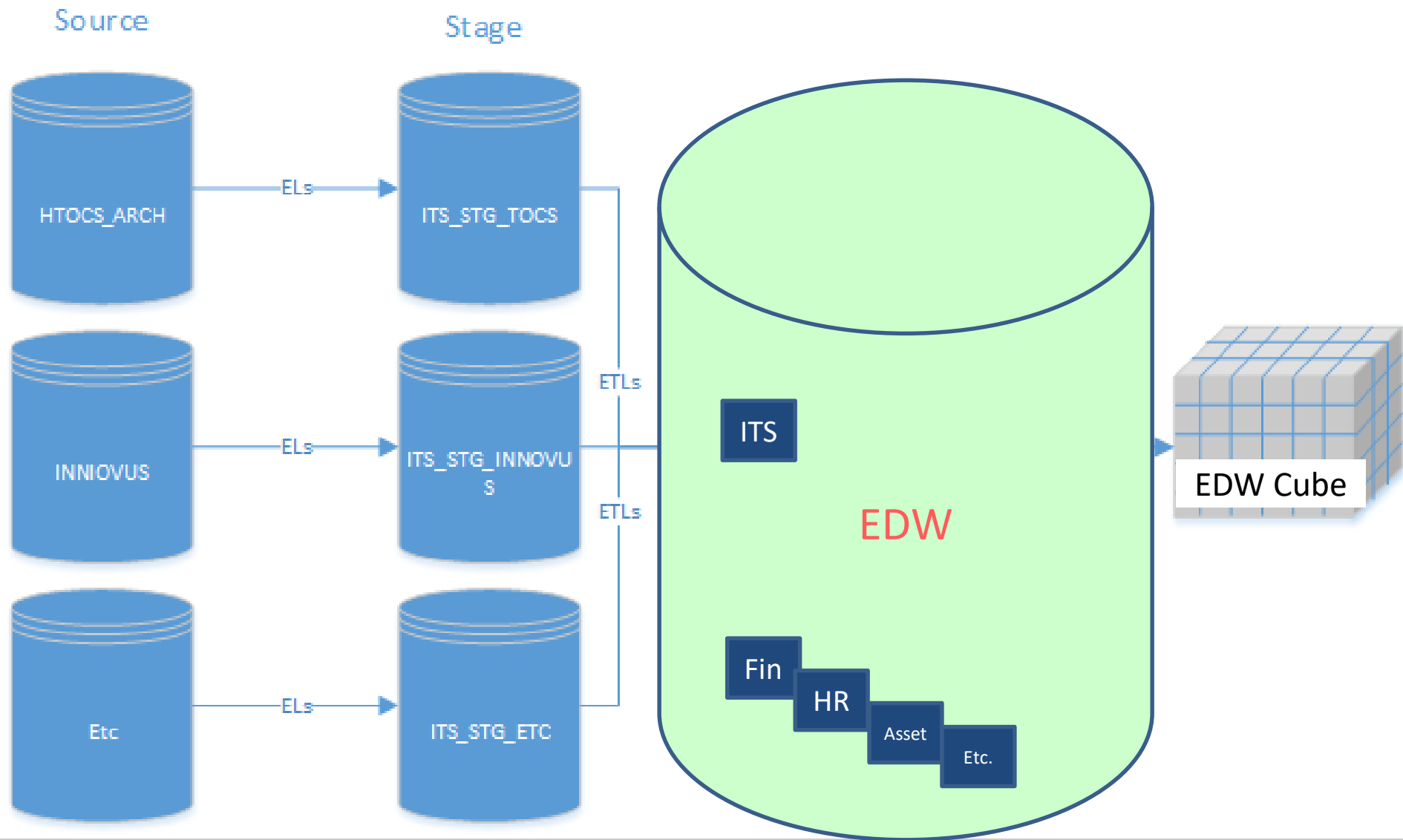
Oregon Department of Transportation				
Event History Report				
Event: 17T083794				
Created: 09/04/17 12:43:30 PM				
Originator: hwyr18j, Dispatcher: hwyr18j				
Sub-Type	Priority	Command Area	Location	Lanes Affected
Crash	1	2B	302.35 I-5 PACIFIC 001, Multnomah	
Source				
DISPATCHER				
Lanes Cleared	Event Cleared	Congestion Cleared	Devices Cleared	Repairs Complete
09/04/17 01:39:17 PM	09/04/17 01:40:42 PM			
Shared	Related	External Sync'd	External Related	
		DESCHUTES:17276872		
Disposition	Remarks		Schedule Start	Schedule End
21:Assistance Rendered				
Time	Elap Time	User	Unit	Action Taken / Remarks
09/04/17 12:43:30 PM	00:00	hwyr18j		New Event: Crash, Priority: 1; Geo-Located: /broadway; 302.35 I-5 PACIFIC - 001; Portland, OR, County: Multnomah, Command Area: 2B, Crew: 1204, Tow Zone: 1101; Status: Pending; Impact: No Impact; Vehicles Involved: Removed;Est Clear Date/Time: 9/4/2017 4:43:30 PM
09/04/17 12:43:35 PM	00:00	hwyr18j		crash sb 5 atbroadway
09/04/17 12:44:49 PM	00:01	hwyr18j		MULTI-VEH CRASH SB AT ROSE QTR EXIT
09/04/17 12:44:55 PM	00:01	hwyr18j		B/C LANES CLOSED
09/04/17	00:02	hwyr18j		Impact changed to: 20 min - 2 hours; Updated Source:

TOCs – Data Output Process – Previous



- ITS_STG is populated from source data
 - ETLs are preformed
 - ITS_STG feeds into ITS_DM
- TOCS_CUBE further compresses data from ITS_DM

TOCs – Data Output Process – As Is



TOCs Attributes and Measures

ITS Incident - TOCS
Measures
KPIs
City
Command Area
County
Crew
Event
Event ATIS
Event Attribute
Event Disposition
Event Duration Indicator
Event End Date
Event End Time
Event Milestone
Event Responsible Unit
Event Start Date
Event Start Time
Event Type
Highway
Lane
Radio
Route
Tow Company
Travel Impact
Travel Impact Date
User

Event
ATMS Event Indicator
Closure Indicator
Closure Involved
Dispatch Id
Event From MP No
Event Id
Event To MP No
GIS Latitude
GIS Longitude
IR Indicator
Is CODE 3
Is Event in Recovery
Is Primary Event
Is Reopened
Is Secondary Event
Message Sent To Atis
ODOT Effort
ODOT On Scene
OSP Covered
Primary Event IDs
Resp Crew No
Rural Location Indicator
Secondary Event IDs
Tow Involved Indicator

Measures
Event ATIS Message
ATIS Message Sent Duration
Event Attributes
Event Attribute Count
Event Disposition
Event Impact
Impact Durations
Event Milestones
Milestone Count and Durations
Event Response Unit
Arrive Duration
Clear Duration
Enroute Duration
Resp Unit Count
Responder Arrival Count
Event Tow
Tow Count and Durations
Event Tow Duration
Tow Counts and Durations
Tow Arrived Duration
Tow Called Duration
Tow Removed Duration
Event Update
Events
Event Counts and Durations
Event Action Count
Event Clear Duration
Event Count
Event Duration
Event Unit Duration
Fatal Count
Lanes Affected Count
Milestone Count and Durations
Congestion Clear Duration
Devices Cleared Duration
OSP to ODOT Transfer Duration
Repairs Duration
Roadway Clearance Duration
Average Event Duration
Average Event Duration for Attributes

TOCs –Reports

Connection Permitting

- [IR Dashboard](#)
- [Push, Pull, Drag \(PPD\)](#)
- [ITS Assets](#)
- [Response Plan System](#)

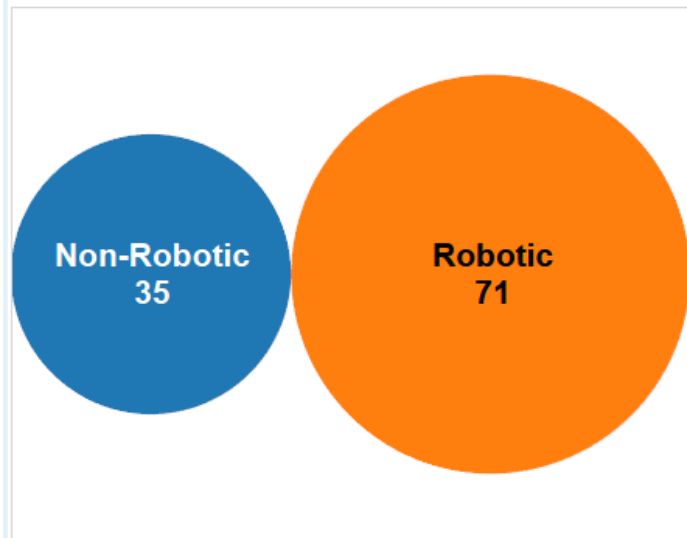
TOCs –Reports

Statewide Roadway Clearance %

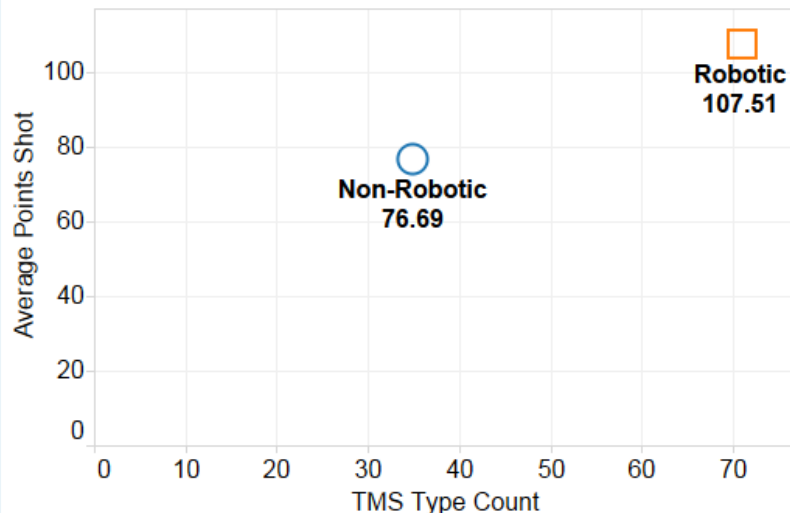
Year	Total Crashes Impacting Travel Lanes	Crashes under 90 minute Goal	Percentage of Events Under 90 Minutes	
2013	5179	4041	78%	
2014	5960	4735	79%	
2015	5507	4348	79%	
2016	6408	4941	77%	
2017	6699	5166	77%	
2018	6597	5309	80%	
2019	2415	1915	79%	

RTMS – OSP Partnership Report

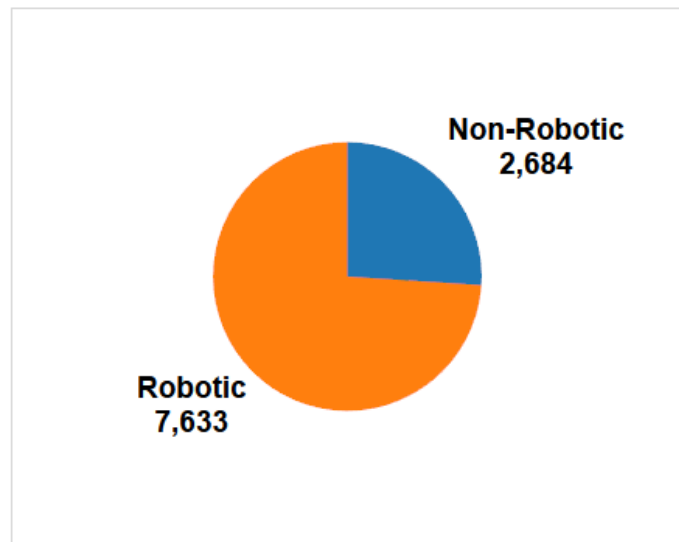
Frequency of TMS Type



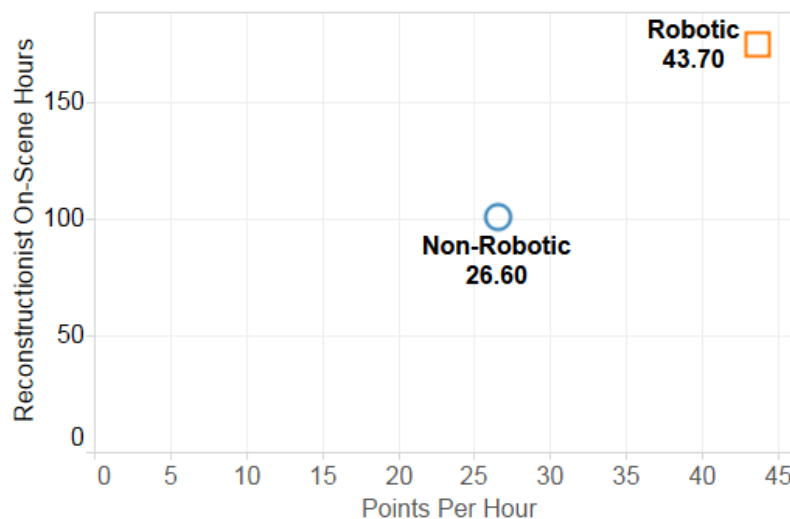
Average # of Points Shot Per Fatal Crash



Total Points Shot by TMS Type



Average # of Points Shot Per Hour of On-Scene Duration



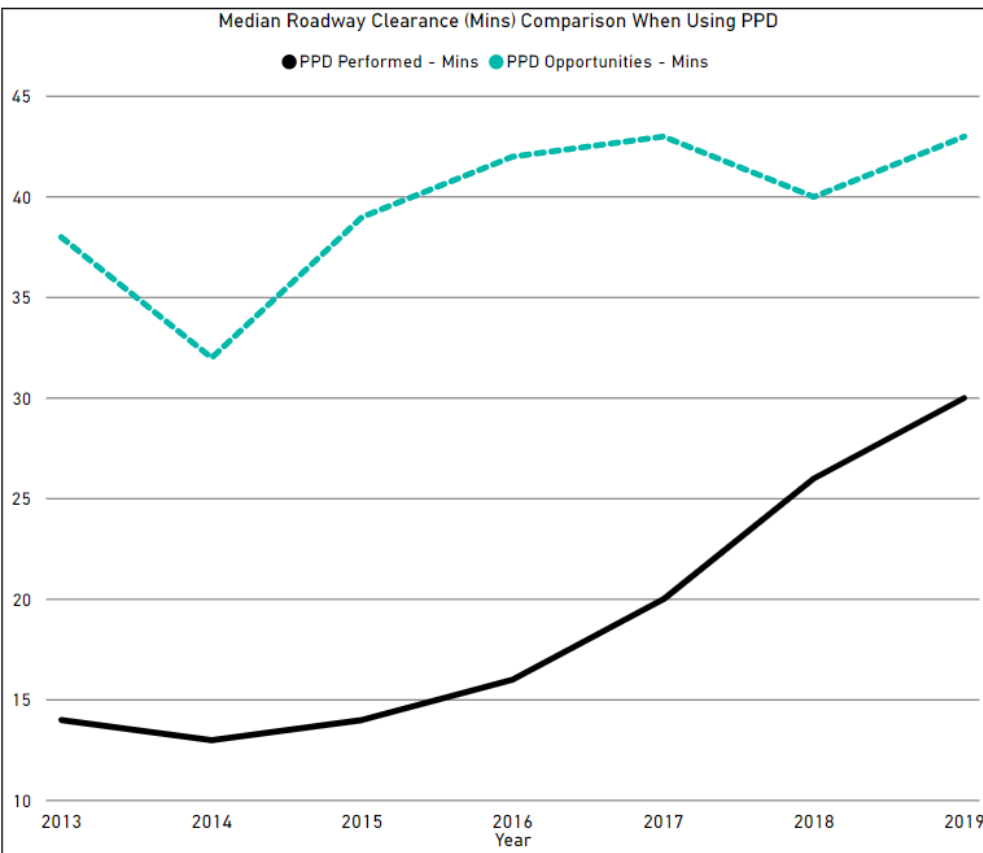
Push, Pull & Drag Report

Statewide Push/Pull/Dragged Event Count - Lane Blocking Events

Subtypes: Abandoned Vehicle - Hazard, Crash, Disabled Vehicle - Hazard, Fatal Crash, Hazard Tow, and Vehicle Fire

District

Month



District	2013	2014	2015	2016	2017	2018	2019	Total
1		-42.4 %	73.8 %	-82.3 %	-52.4 %	-42.9 %	-18.4 %	-45.8 %
10		-23.3 %	-59.7 %	11.7 %	-61.1 %	-3.4 %	-59.1 %	-37.3 %
11				-54.4 %	-15.6 %	-27.6 %	-50.0 %	-39.0 %
12						-38.5 %	-61.1 %	-34.8 %
13					-28.0 %	-11.4 %	40.4 %	-12.0 %
14				-96.5 %	-72.5 %	58.9 %	-48.9 %	-58.0 %
2B	-30.0 %	-23.5 %	-33.3 %	-33.3 %	-27.1 %	-32.0 %	-29.2 %	-31.8 %
2C			-64.1 %	-8.2 %	-26.1 %	6.8 %	-43.6 %	-15.0 %
3	-30.9 %	-42.1 %	-34.0 %	-10.7 %	-29.4 %	0.0 %	-8.8 %	-13.7 %
4	-15.3 %	-42.6 %	-53.5 %	-48.3 %	-39.3 %	-6.0 %	-29.6 %	-24.1 %
5	-31.1 %	-38.8 %	-42.3 %	-41.3 %	-43.3 %	-23.3 %	-23.1 %	-31.1 %
7			-67.2 %	-79.5 %	-39.7 %	-8.6 %	-34.5 %	-37.9 %
8	-44.6 %	-50.0 %		-22.9 %	-21.6 %	-24.7 %	-24.7 %	-28.9 %
9		-41.5 %			-27.1 %	-8.8 %	-70.9 %	-33.7 %
Total	-63.2 %	-59.4 %	-64.1 %	-61.9 %	-53.5 %	-35.0 %	-30.2 %	-55.0 %

3435
PPD
48985
PPD Opportunities

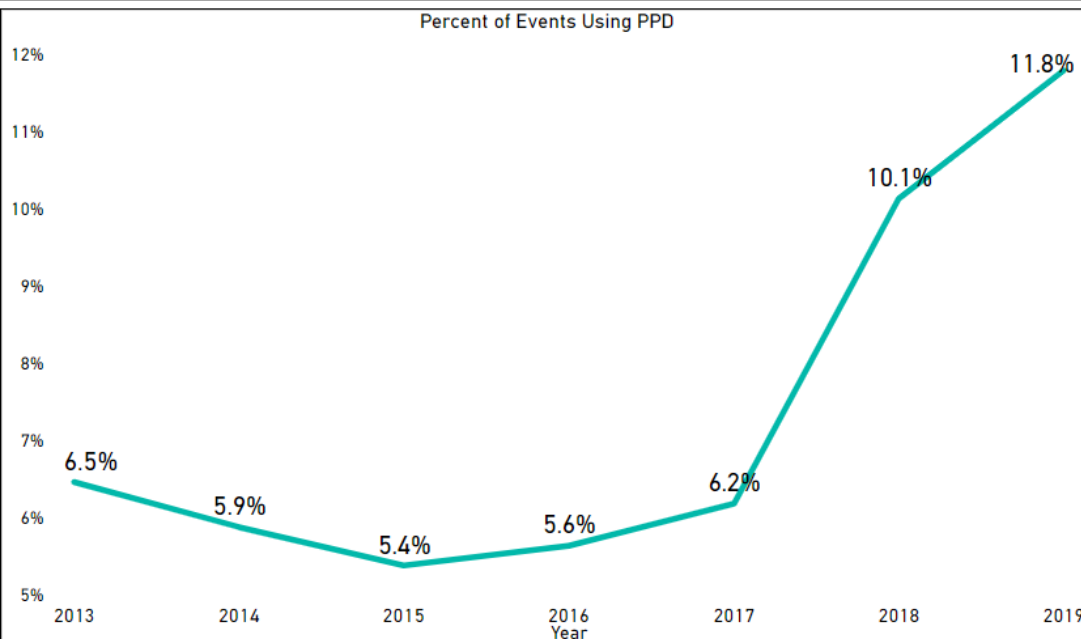
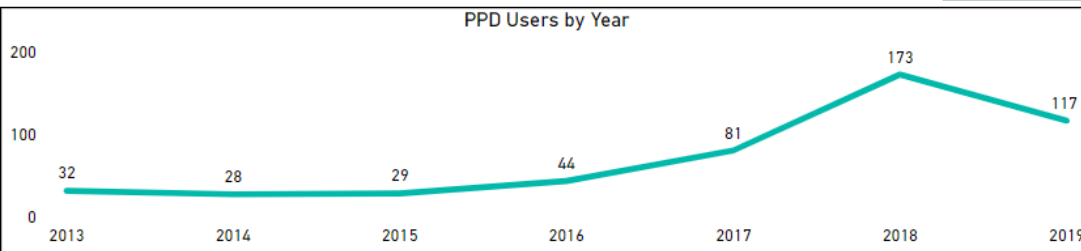
Push, Pull & Drag Report

Statewide Push/Pull/Dragged Event Count - Lane Blocking Events

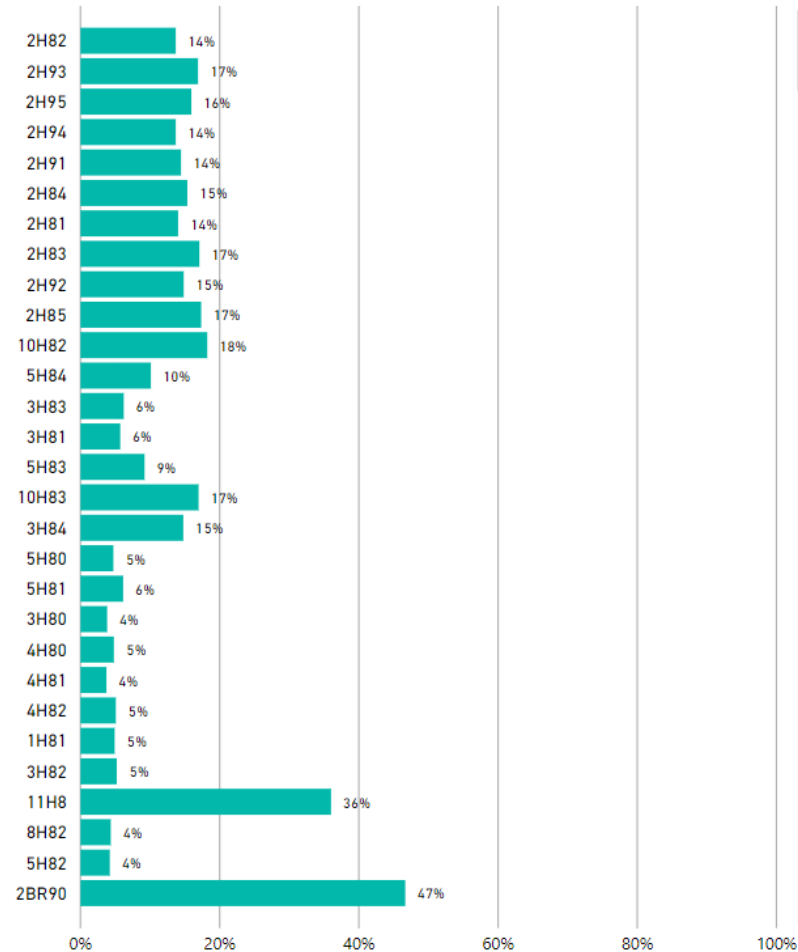
Year District Month

300

PPD Users



Percent of Events Using PPD by Radio



2018 TRAFFIC PERFORMANCE REPORT

Incidents

Incidents (Non-Crash)

2013-2017

Source: ODOT

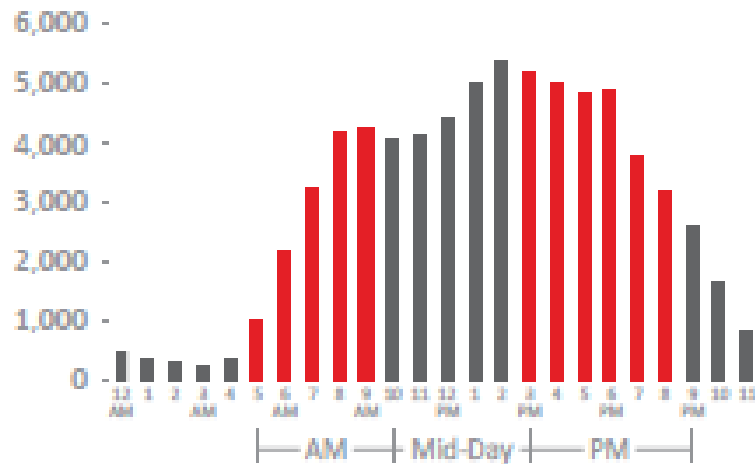


2018 TRAFFIC PERFORMANCE REPORT

Incidents by time of day

2013-2017, total incidents by time of day

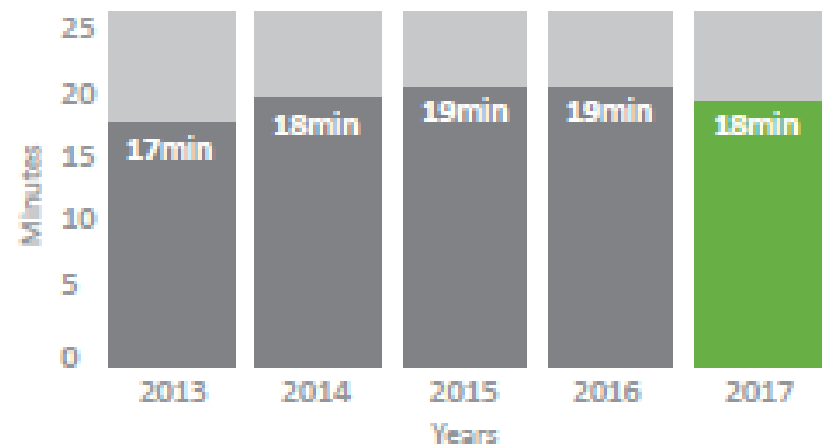
Source: ODOT



Incidents (non-crash) clearance times

2013-2017

Source: ODOT

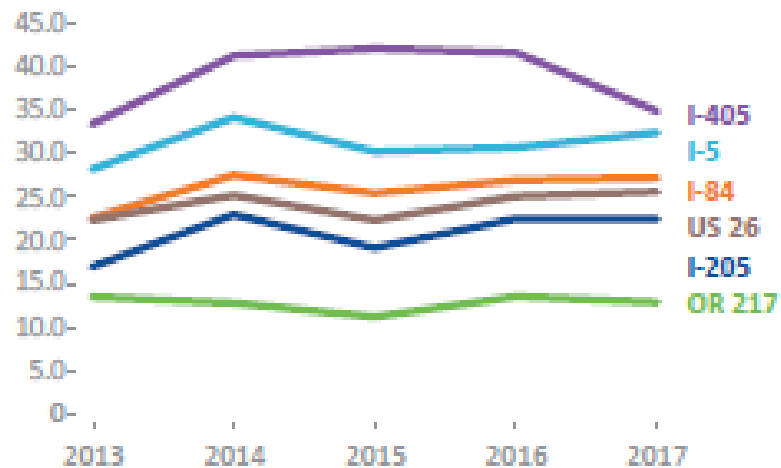


2018 TRAFFIC PERFORMANCE REPORT

Freeway incident rates by corridor

2013-2017, incidents per lane mile

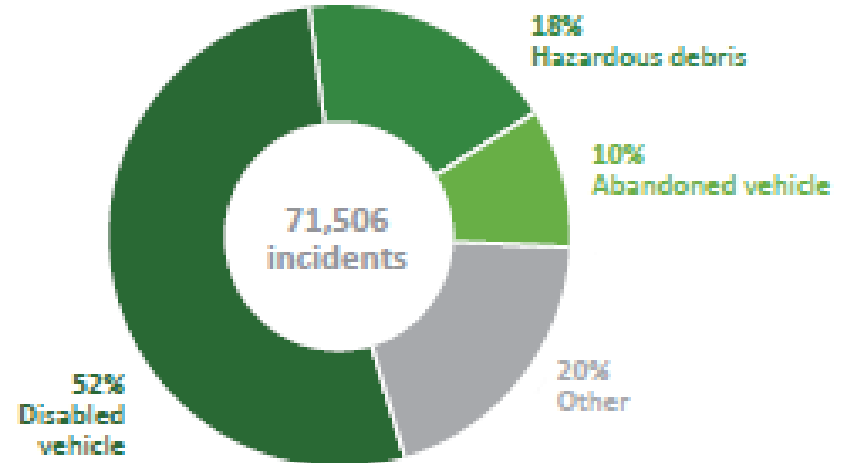
Source: ODOT



Incidents by type

2013-2017

Source: ODOT



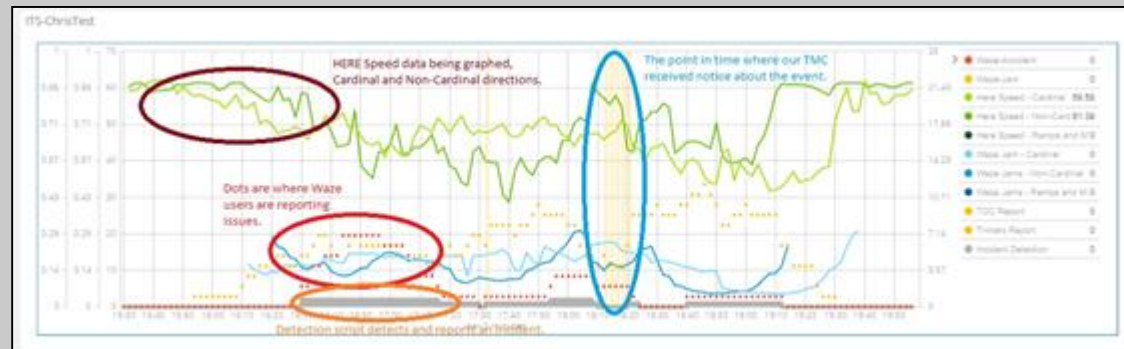
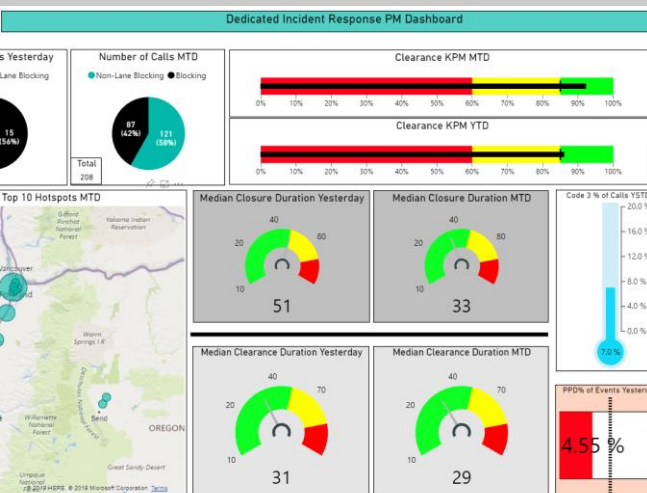
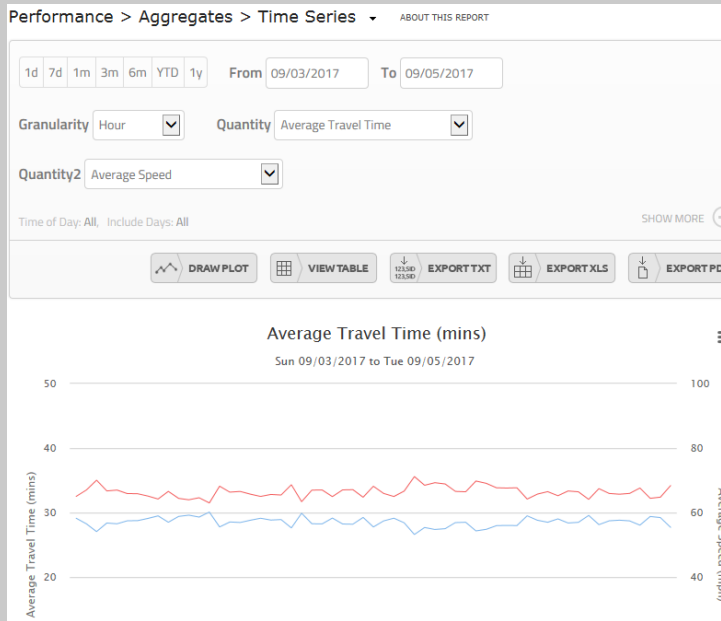
Future Reports/Reporting Tools

Where we want to go:

- Power BI
- iPeMS
- WAZE
- Live Reports
- Partnership Reports

Current

- E-Mail Blasts
- SSRS Reports
- INVIEW Reports
- Trip Check



THANK YOU.