

# Miovision Equipment for SPaT Challenge

## **Intended and Actual Outcomes**

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Olympic Region, Signal Operations  
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## SPaT Challenge

Washington State Dept. of Transportation (WSDOT) is participating in the AASHTO SPaT Challenge to broadcast Signal Phase and Timing messages at 20 intersections in 50 states by 2020.

Ken Burt  
Signal Operations Engineer with  
WSDOT Olympic Region  
33 years state service  
Past 15 years in Signal  
Operations

Olympic Region, the Peninsula between  
Puget Sound, Strait of Juan de Fuca (Salish Sea)  
and the Pacific Ocean

7 counties Thurston, Pierce, Grays Harbor,  
Jefferson, Kitsap, Mason, and Clallam

360 signalized intersections

2/3 are Traconex TMP 390 w/ J-8

1/3 are Econolite 2070 ASC/3 w/ Aries

1 Remaining 170 w/ Bi-Tran



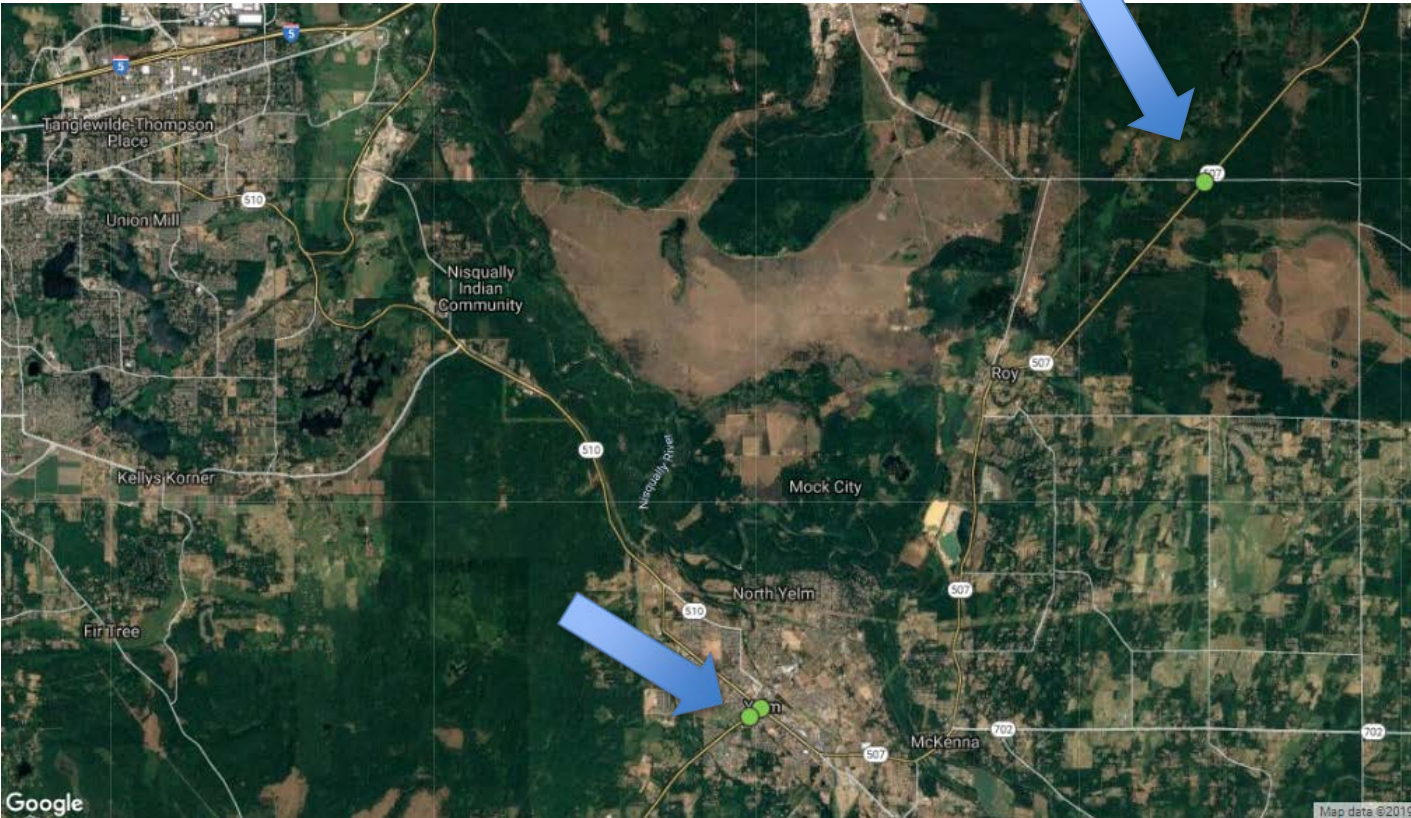
January 2016  
Met w/ NW Region  
First time seeing “Legacy”  
equipment talk to other  
equipment

May 2016

Demo on SR 507 (2 in Yelm 1 at Eastgate)

Communications, Travel Time, Alerts, ATSPM's  
(Automated Traffic Signal Performance Measures)

Difficulties getting all of the ATSPM's (Detection)

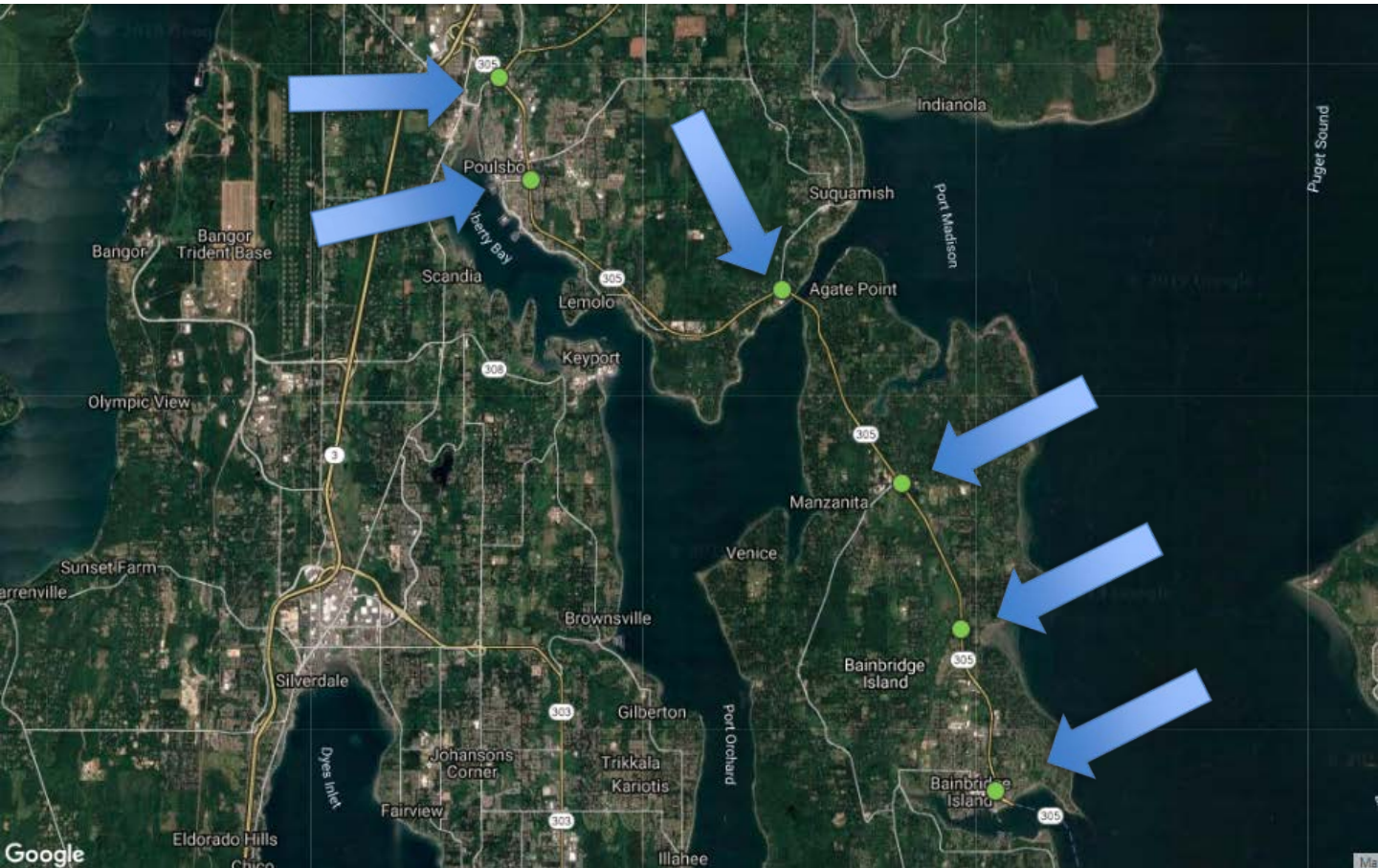




New challenge. SPaT 2020  
20 intersections in the state  
by 2020 broadcasting SPaT

## Nov 2017 Install equipment on SR 305

- Winslow Way
- Sportsmans Club Rd.
- Day Rd.
- Suquamish Way
- Hostmark St.
- SR 307 Bond Rd.



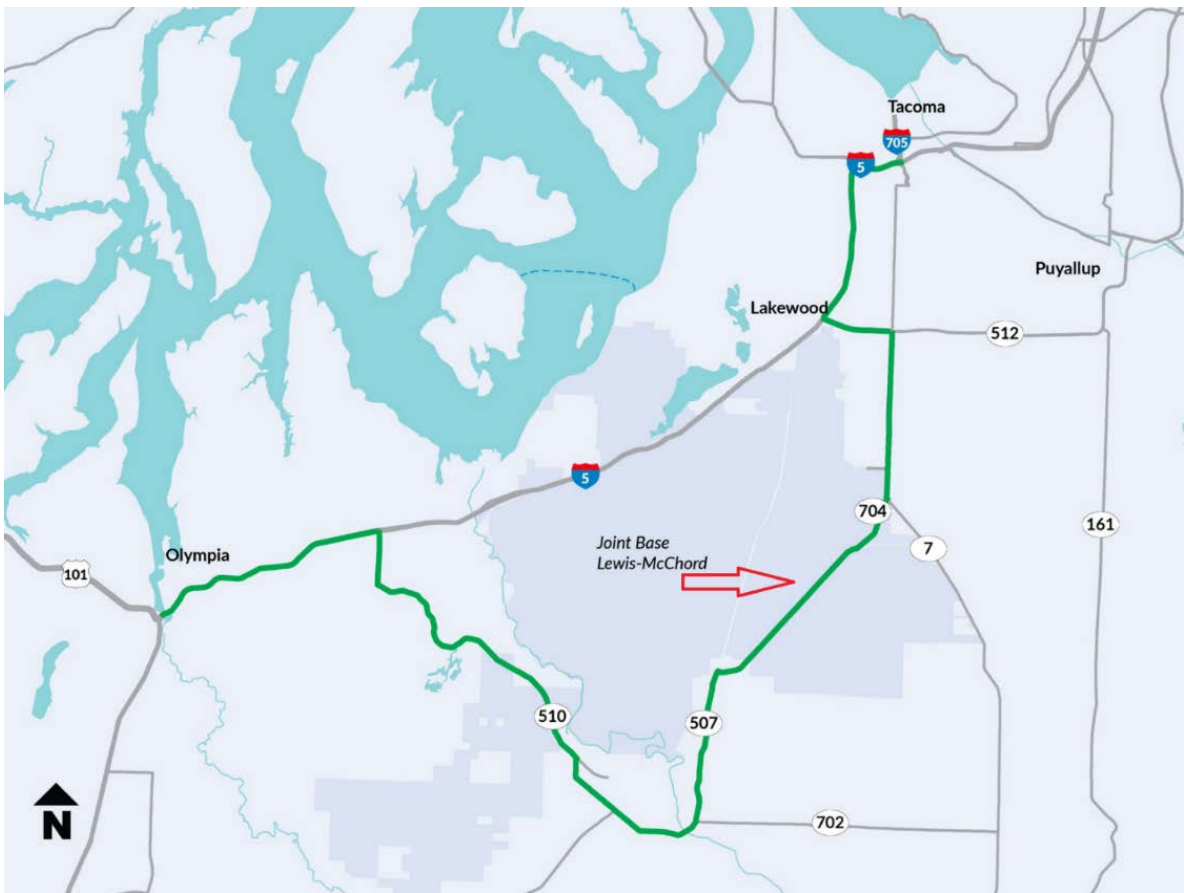
## Why this Route?

SR 305 Commuter Route  
Oversaturated & Highly Politicized  
AADT 22,000

New Miovision Equipment Supplies

- ATSPM's
- Travel Time

# Dec. 18, 2017 DuPont, WA Amtrak 501 Derails



Drivers  
Preferred detour

# Communication through Miovision Demo front panel connection

# Actual Outcomes

## Alerts

- Detection
- Flash
- Telemetry
- Pre-empt
- Power Loss

All techs get notified, even for alerts in other techs area





### Alerts

227

Total this Month

### Time to Resolution

4.91

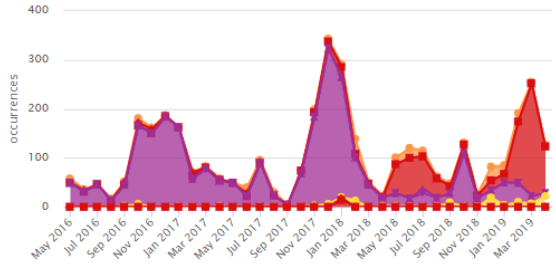
Average Resolution Time (hrs)

### Connectivity

9

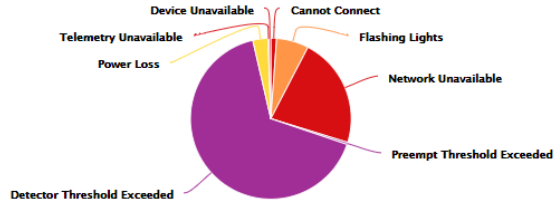
Intersections Connected

#### Alert History



- Flashing Lights
- Preempt Threshold Exceeded
- Telemetry Unavailable
- Cannot Connect
- Detector Threshold Exceeded
- Device Unavailable
- Network Unavailable
- Power Loss

#### Alert Failure Modes



Another Actual Outcome

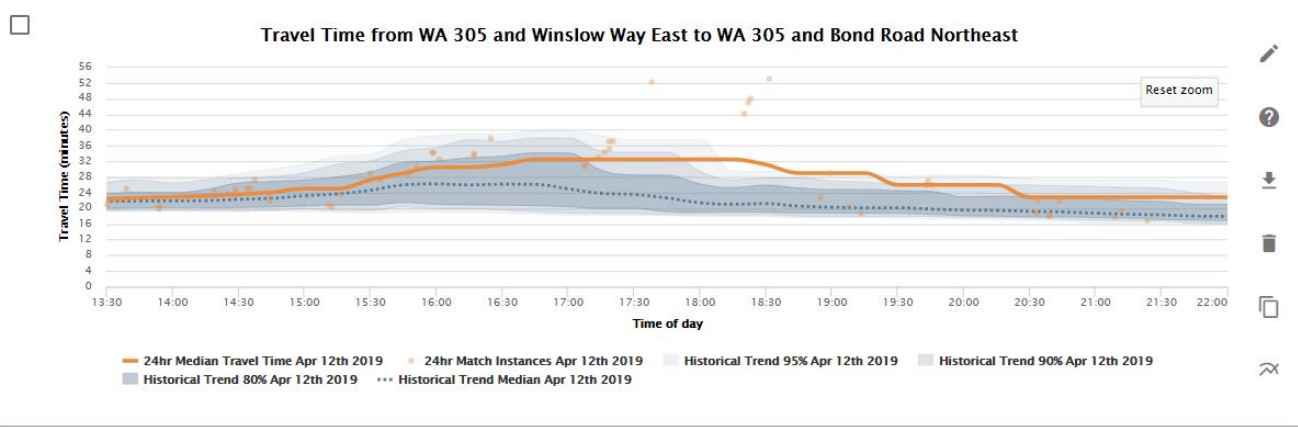
Access to Travel Times  
across Bainbridge Island

Support of refute reports of  
extra-long commute times

EDIT SELECTIONS

SELECT ALL CHARTS

+ ADD NEW CHART



## Intended Outcomes...

Feb. 22, 2019

Official notice Miovision would not be delivering DSRC (Dedicated Short Range Communications) “radio broadcast”

Our Participation in SPAT Challenge  
Is over

## We have not Determined Next Steps for the challenge or equipment in Olympic Region

Other Regions within WSDOT have

- NCR - Nothing
- SCR - Nothing
- SWR – Partnering with Clark County, Vancouver  
SPAT via Centralized Traffic Ware called Tidal Wave  
July deploy DSRC radios SR 500 from  
Fourth Plain to Padden Parkway

## Intelight installations w/ Connected Vehicle Module Feature of MAXTIME signal software

- ER – SR 27, Spokane Valley  
3 intersections deployed Feb. 2019
- NWR – SR 522, north of Lk. Washington, Seattle  
10 intersections deployed April 2019

# Demonstration

ATSPM's

Network Insights

Intersection Insights

Current Operation

Questions or

Comments?

Thank You

Ken Burt

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