

The Pikalert Vehicle Data Translator



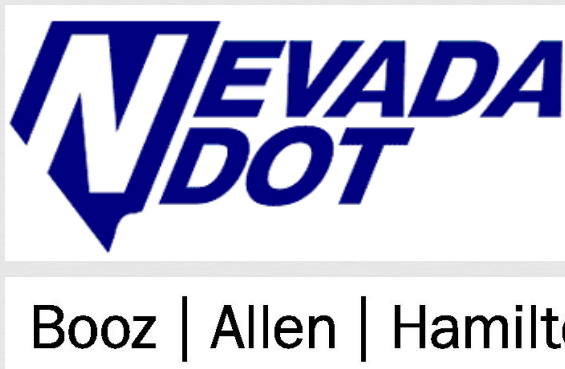
Overview and Applications

Feb 11, 2014

Annual Fatalities - USA



The Connected Vehicle Program



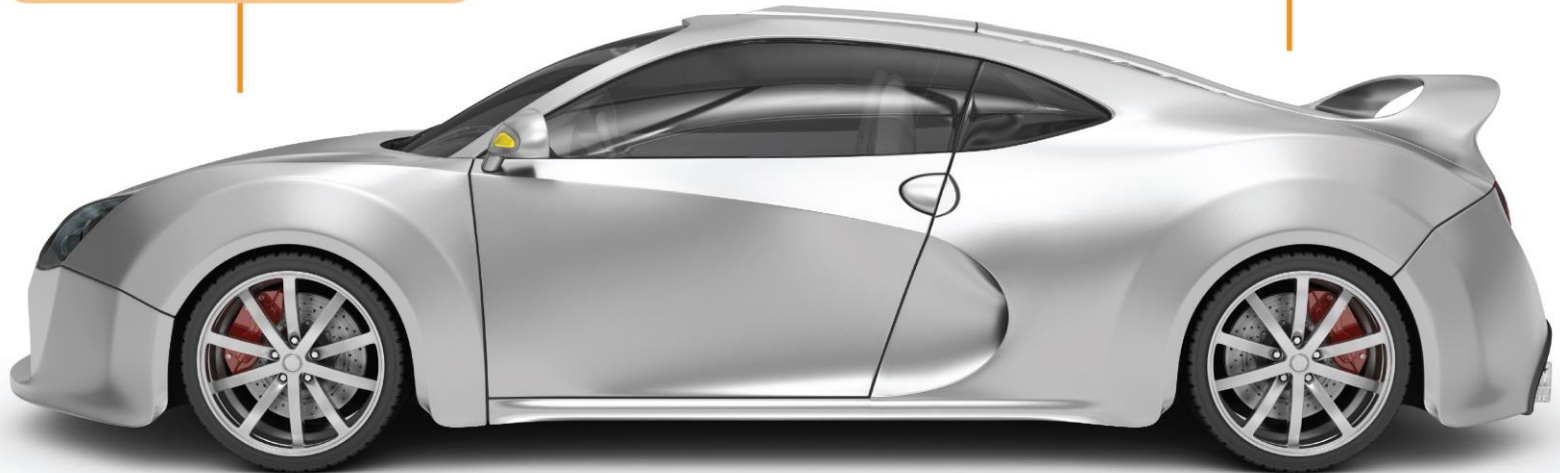
Booz | Allen | Hamilton



Vehicle Data

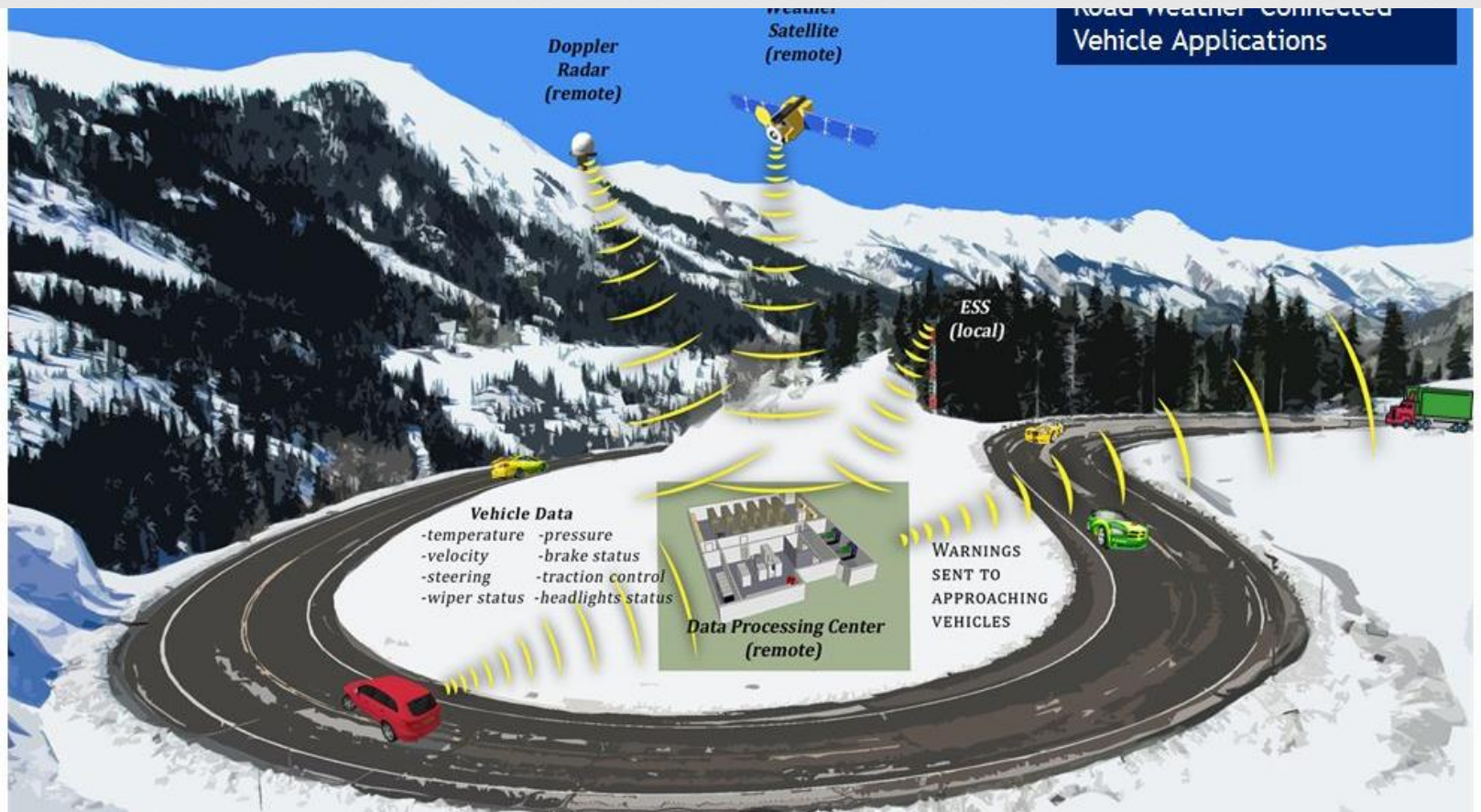
Sun/Rain Sensor
Windshield Wiper Setting
Head Lights Status
Ambient Air Temperature

Speed and Heading
Adaptive Cruise Control (ACC)
Location and Elevation
Hours of Operation

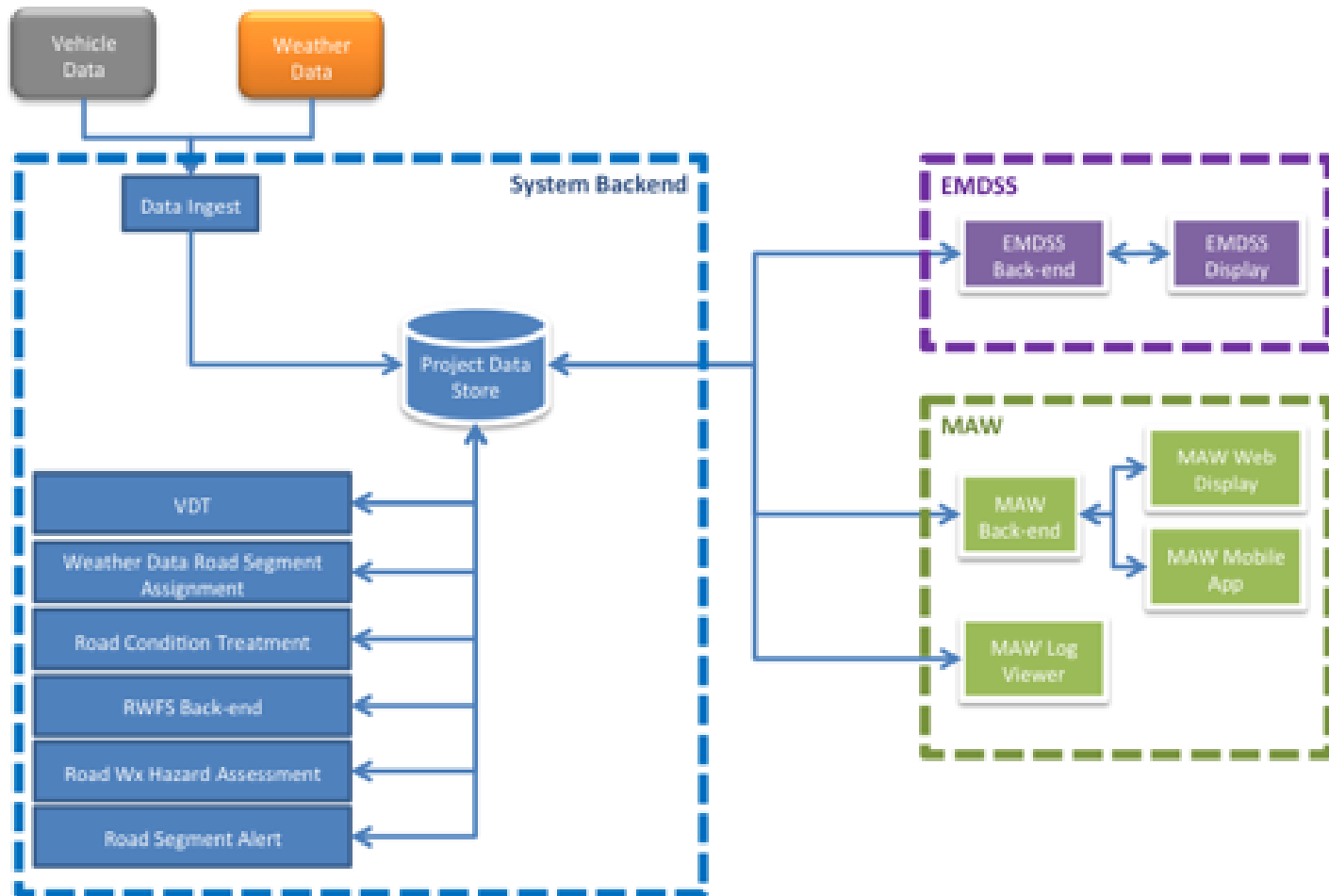


Anti-lock Braking System (ABS)
Brake Status
Stability Control
Traction Control

The Pika™ Vehicle Data Translator



Data Flow

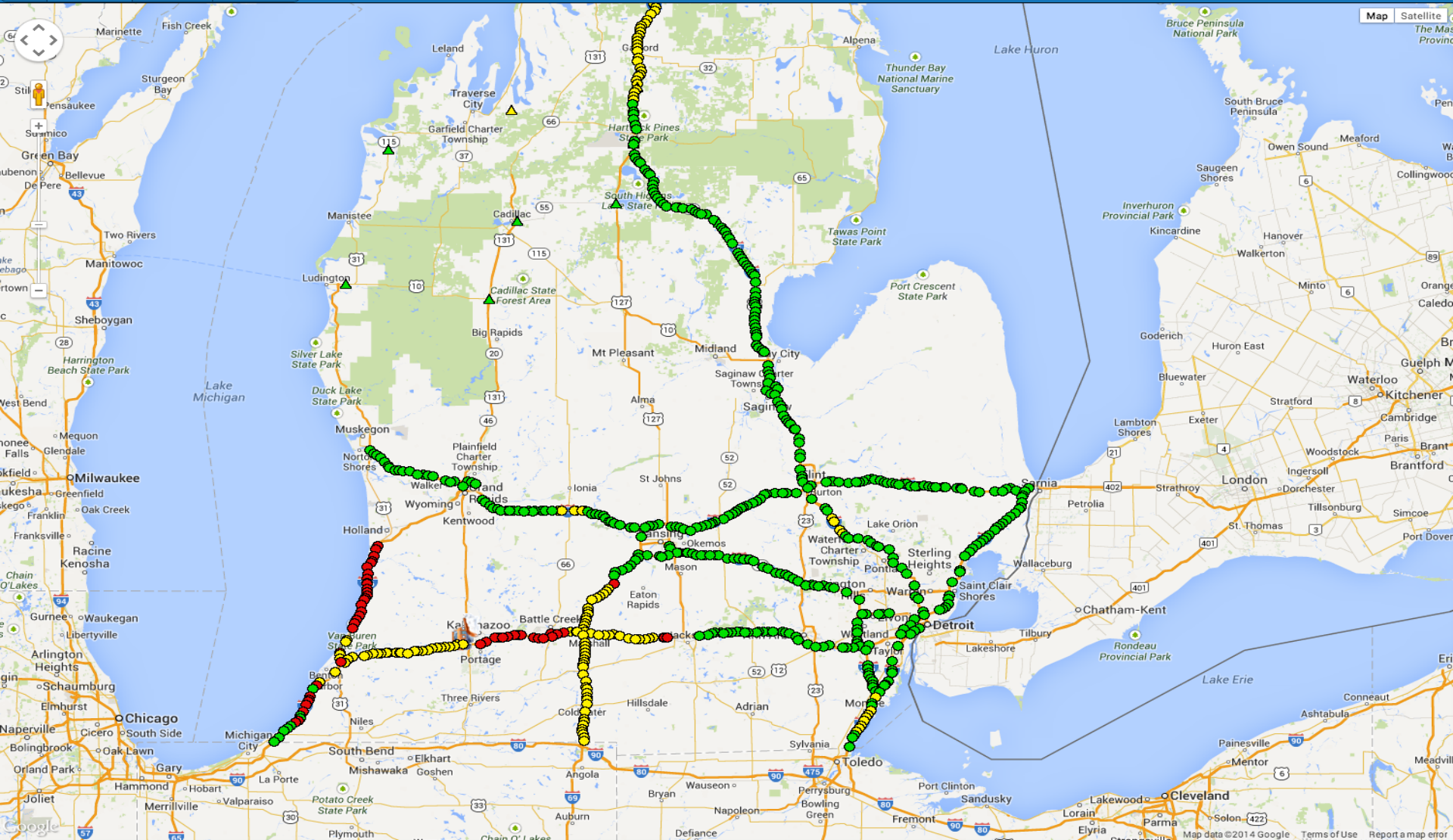


EMDSS

Obs Next 6 Hrs 6 - 24 Hrs 24 - 72 Hrs Hide Vehicles

Pikalert Map

Current time: 1/15 12:28:07 pm
Data valid: 1/15 12:15:00 pm



EMDSS Forecast

Back

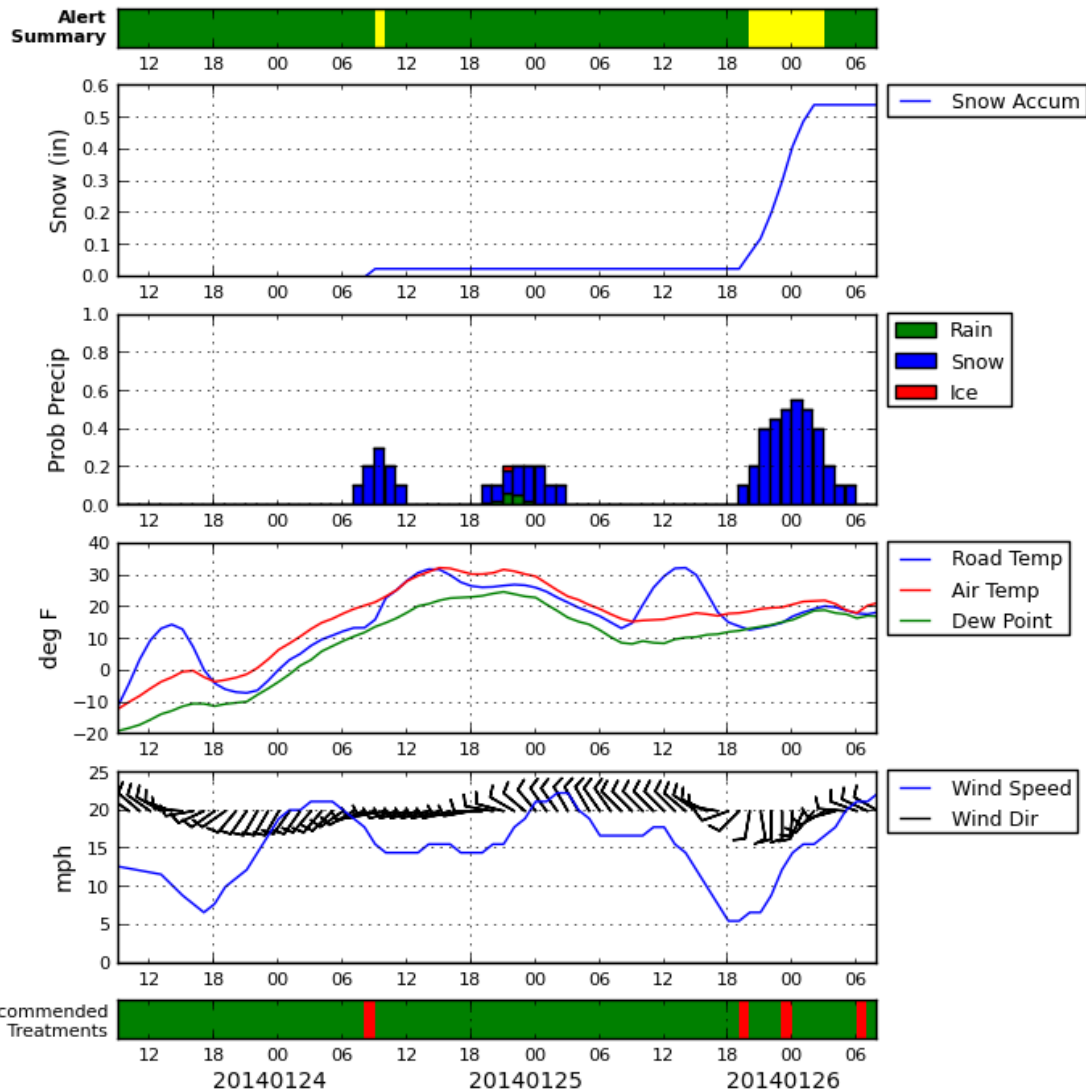
Forecast

Treatments

Alerts

Road Segment Observations

MN ROAD SEGMENT Interstate 90 95



Hazard Algorithms

- ☞ Precipitation intensity and type
 - ☞ Snow
 - ☞ Rain
 - ☞ Road splash
- ☞ Pavement condition
 - ☞ Icy
 - ☞ Hyrdoplane
- ☞ Visibility
 - ☞ Clear
 - ☞ Blowing snow
 - ☞ Smoke

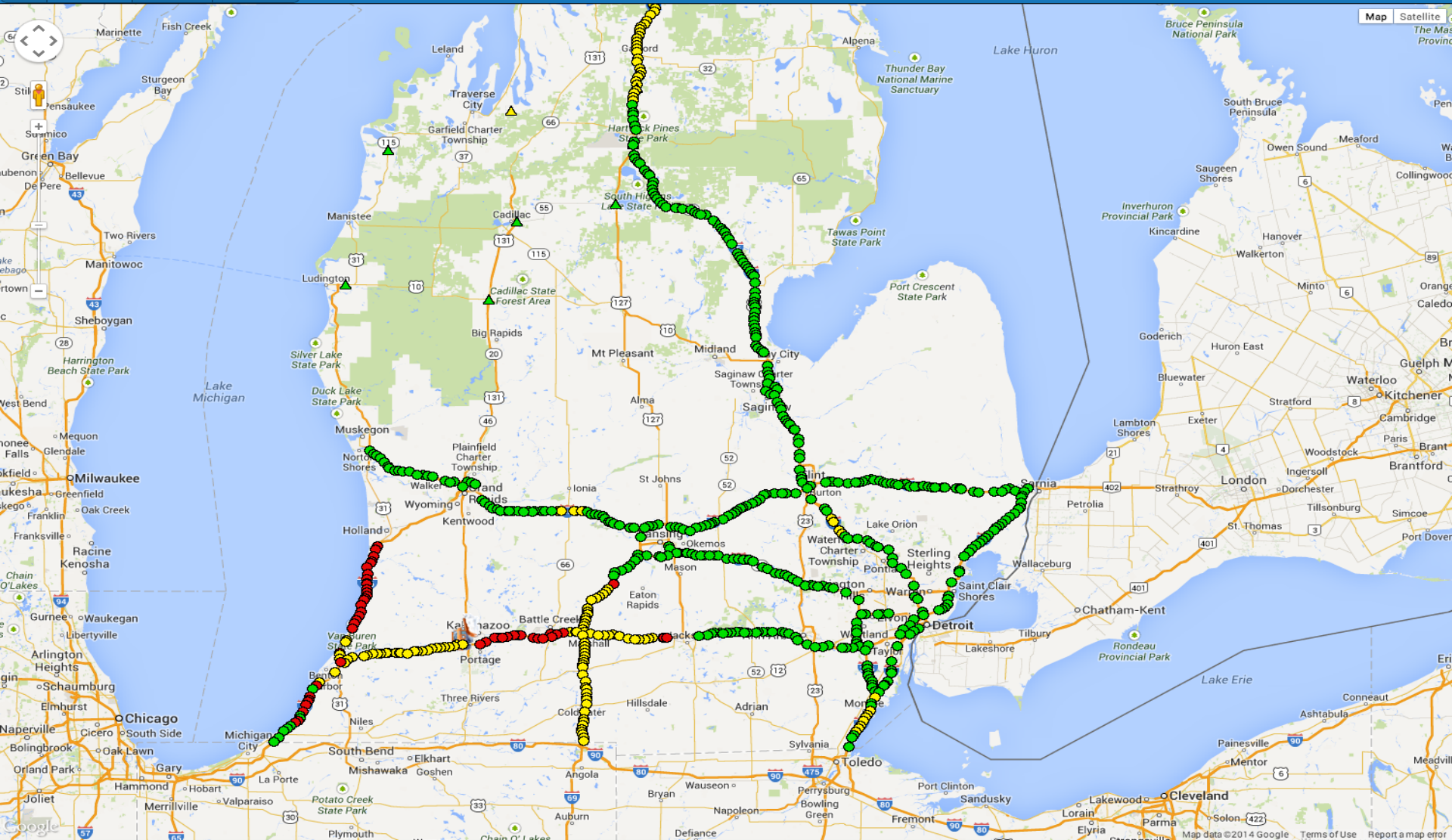


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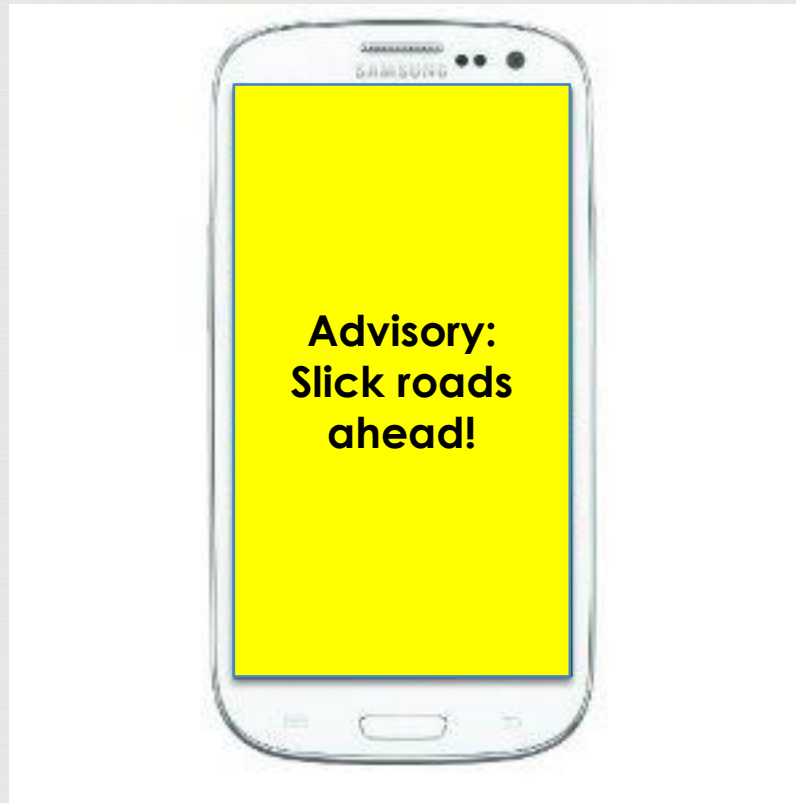
Hazard Algorithms

Back MI ROAD SEGMENT Interstate 196 24		
Thurs 1/23 8:30 am	●	Warning: Precip: none, Pavement: dry, Visibility: fog
Thurs 1/23 9:00 am	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal
Thurs 1/23 10:00 am	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal
Thurs 1/23 11:00 am	●	Clear
Thurs 1/23 12:00 pm	●	Clear
Thurs 1/23 1:00 pm	●	Clear
Thurs 1/23 2:00 pm	●	Clear
Thurs 1/23 3:00 pm	●	Clear
Thurs 1/23 4:00 pm	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal
Thurs 1/23 5:00 pm	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal
Thurs 1/23 6:00 pm	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal
Thurs 1/23 7:00 pm	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal
Thurs 1/23 8:00 pm	●	Advisory: Precip: moderate snow, Pavement: slick, snowy, Visibility: normal



MAW Phone Application

- ☞ Provides situational awareness reports while on the road



More information

☞ TEDxBoulder

☞ [http://www.youtube.com/watch?v=IM16YUrhzRY
&list=PLyWrz5bdXbVMZewo4hcMxwO2vVmO_nUd
I&index=7](http://www.youtube.com/watch?v=IM16YUrhzRY&list=PLyWrz5bdXbVMZewo4hcMxwO2vVmO_nUdI&index=7)

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