

# WYDOT

## Focus on Transportation Safety

August 11, 2015

Snowbird, Utah

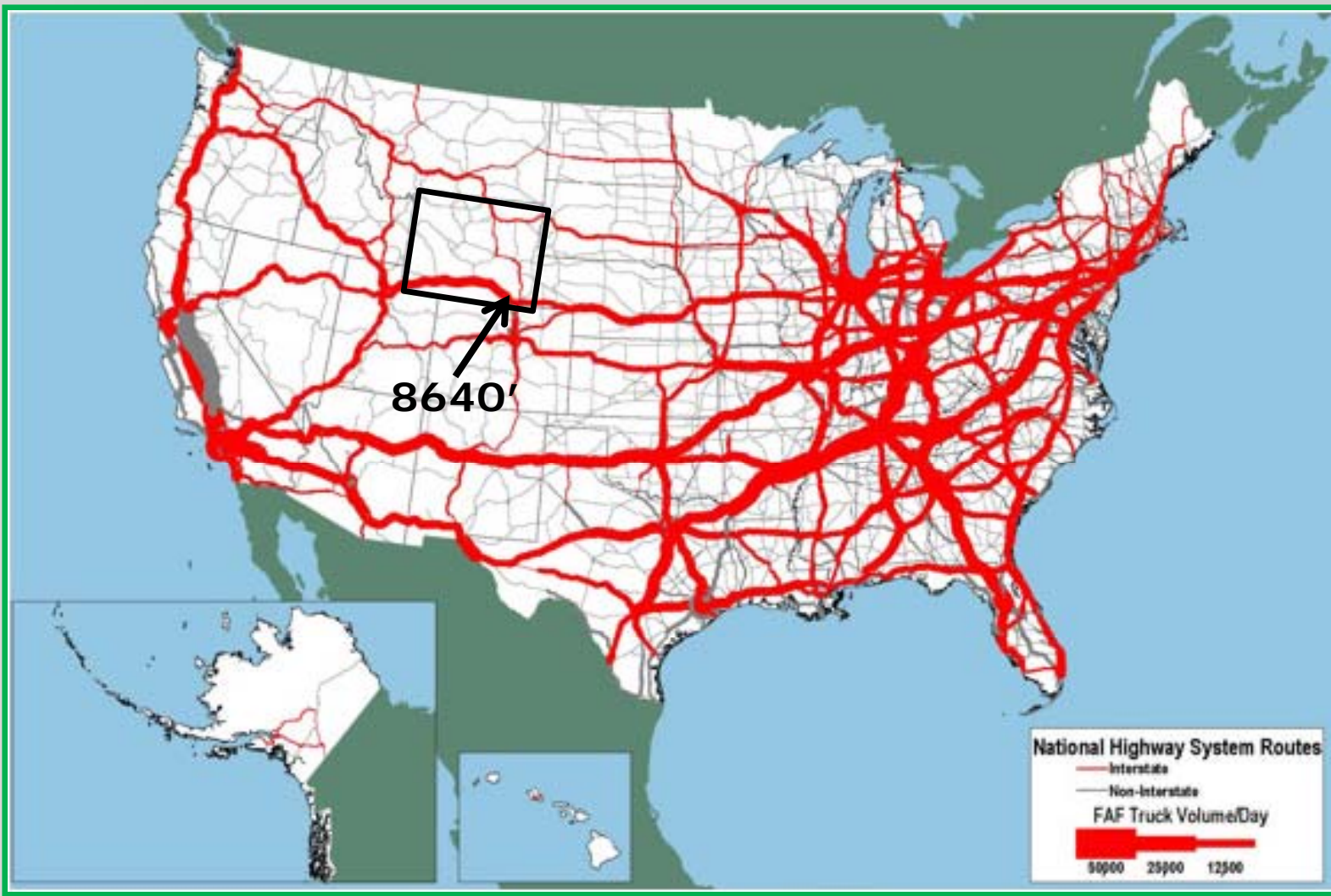
R. Vince Garcia, P.E.

GIS/ITS Program Manager

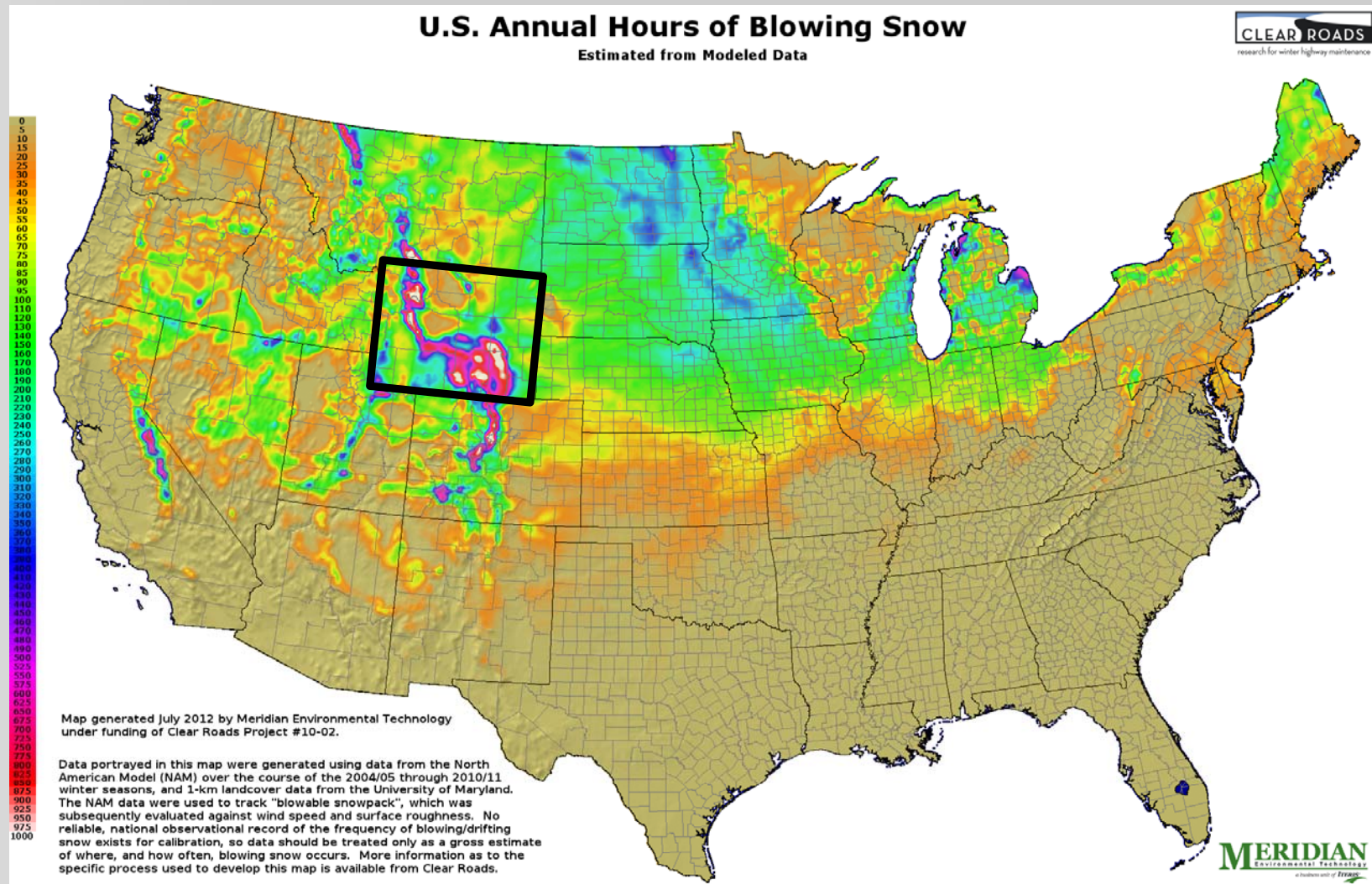
# Agenda

- Background information
- Methods to inform the public
  - Commercial Vehicle Operators
  - WAT
  - Pathfinder
  - Smart TVs
  - VOCE
  - Mobile App

# I-80 Major Commerce Corridor



# Winter Weather – Blowing Snow





# Winter Weather Crashes



April 20, 2015

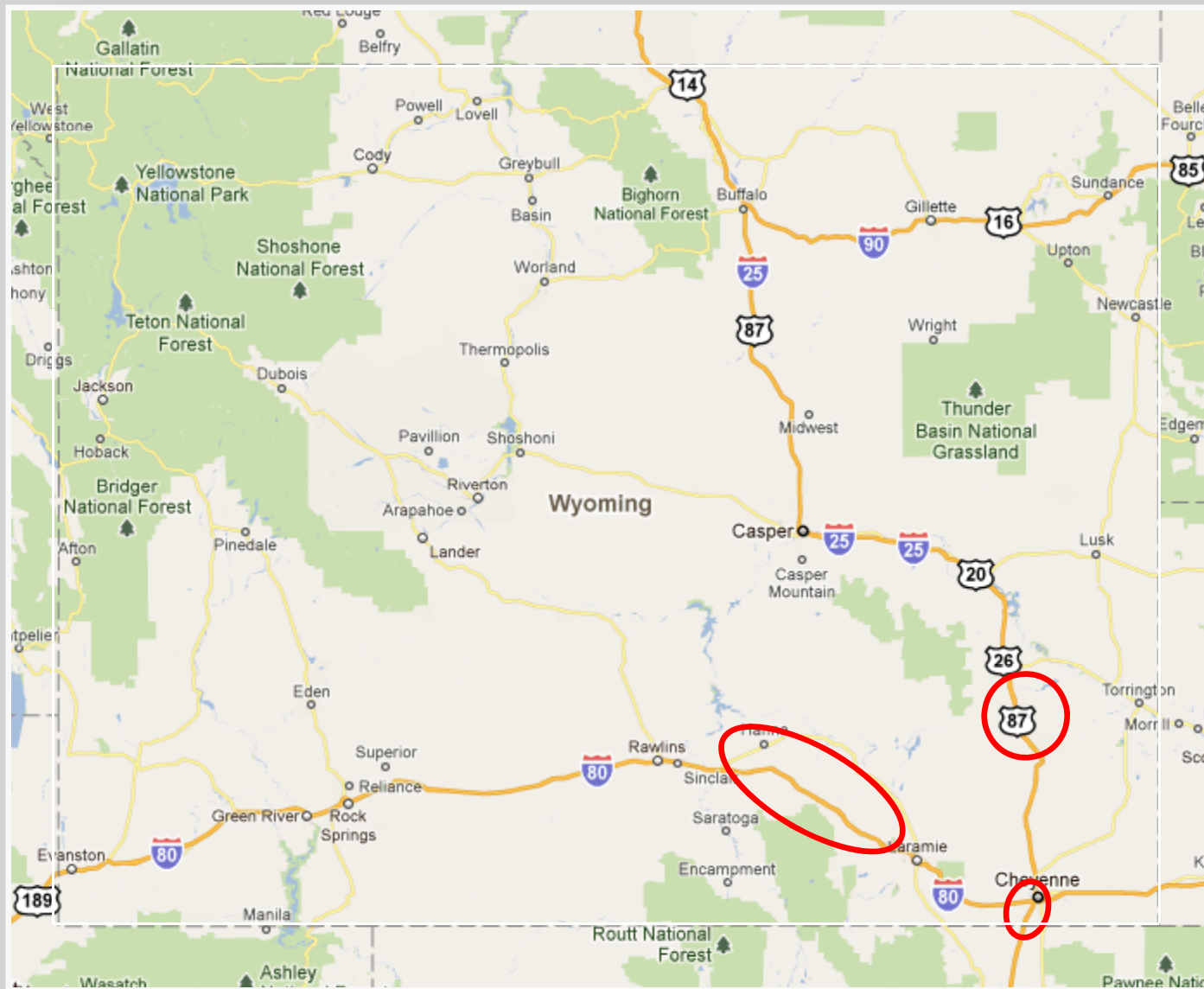




April 20, 2015



# Blowover Crashes





# Blowover Crashes

www.wyoroad.info Sun Feb 13 2011 01:00:54 PM



# Blowover Crashes



# Strategy

- Avoid problems with good design
  - Geometric design
  - Account for blowing snow – slope selections
  - Account for shadows on roadway – cut sections
- Mitigate
  - Snow fence
  - Slope flattening
- Deploy ITS and inform the public



# Stats

- During the 2014-15 Winter season (October to May) - 700+ million web hits (up from 600 million during previous year).
- 2014-2015 511 Notify Service – Sent 18.6 million text messages and 15.8 million emails
- 2014-2015 Phone system - Received 502,505 calls (down from a peak of 1.9 million)

# How TMC Achieves It's Goals?

## Affect driver behavior

- Advisories/Recommendations/Information
- Enforceable requirements
  - Variable Speed Limits
  - Closures
  - Chain laws

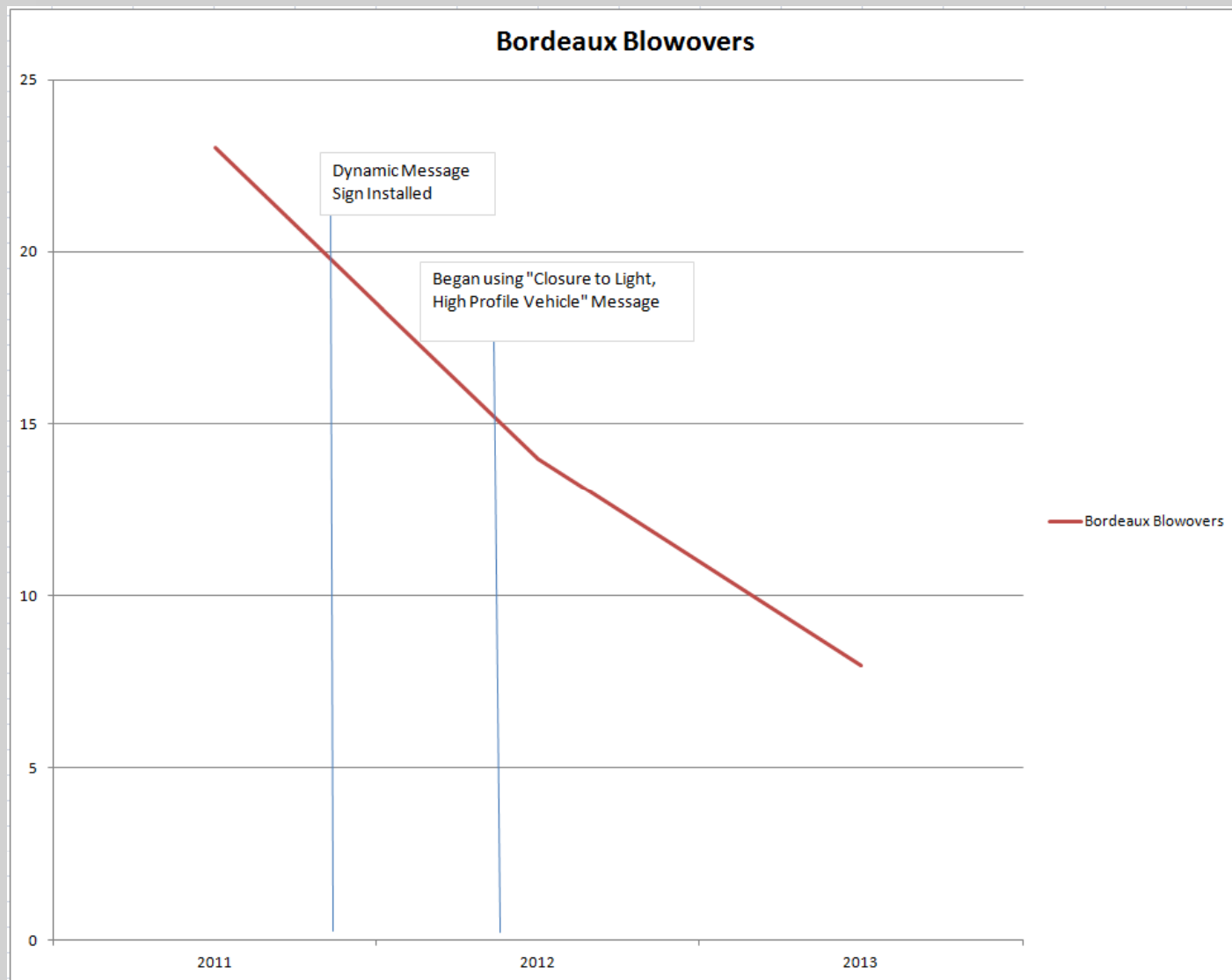
C2LHPV



# Minimize Blowovers

- Closure to light, high profile vehicles
- Authority granted in W.S. 24-1-108 and 109
- Wind gust 65 mph or a single blowover
- No cost associated with this option

# Results



WAT and WAT4B

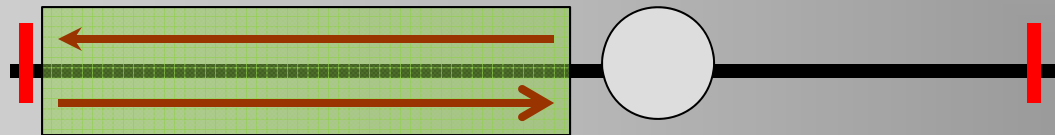


# WAT and WAT4B

- WYDOT Authorized Travel (for Business)
- Genesis: Legislator wanted to be able to get to his home and his ranching operations
- Process: If a road closed but a portion of the road is safe to travel (as assessed by Patrol and Maintenance), an authorization can be issued for pre-approved travelers.

# WAT and WAT4B

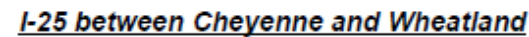
- WYDOT Authorized Travel
- Authority granted in W.S. 24-1-108 and 109
- Pre-approved citizens can travel on a closed road segment **if, and only if**, WHP and/or Maintenance deems the road safe
- Intended for citizens who live or work beyond a closure gate



<http://wyoroad.info/wat>

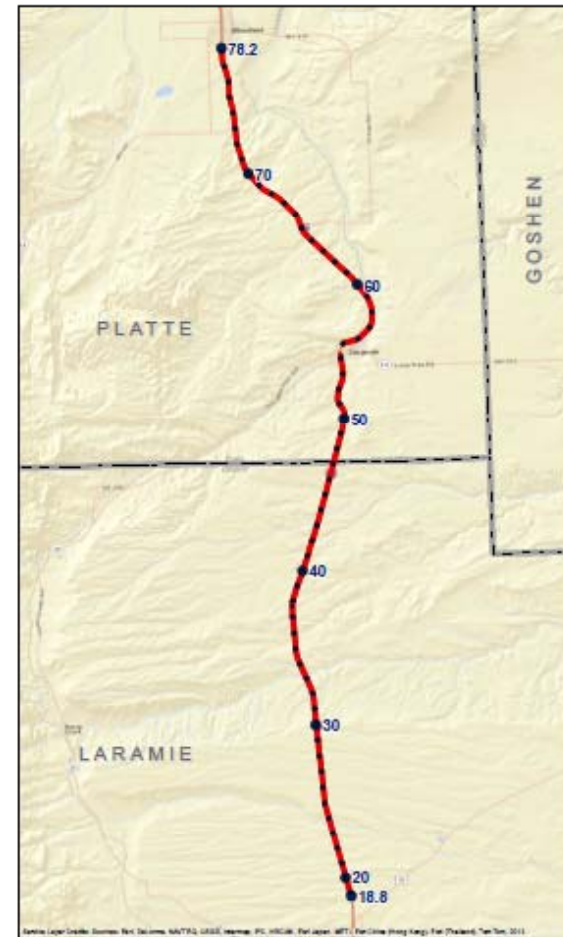
# WAT and WAT4B

- In the event of a closure, TMC coordinates WAT
- Patrol and Maintenance must approve
- Citizens automatically notified of authorized limits



WYDOT Authorized Travel (WAT) participants may not share notifications with others. Notifications for WAT events are valid for the current event only. Direct recipients of WYDOT Authorized Travel notifications may travel only within the limits defined in the notification. 1-855-WAT-DIAL (1-855-928-3425).

Updated on: 7/13/2019.

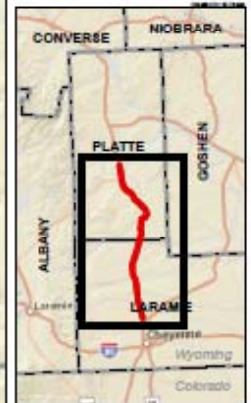


● • Mile Markers  
 ~ WAT Segment



1:397,498  
128.2

The State of Wyoming and its agencies make no express or implied warranties as to the way and the date it displays items of this information should review or consult the primary data and information sources to ascertain the reliability or quality of the information. The State of Wyoming and its agencies assume no liability associated with the use or misuse of this information and specifically retain ownership, in part and all interests available to them by law.



WYDOT Public Relations 307-777-4375.

CVOP

# Commercial Vehicle Operator Portal

- Working directly with Trucking Industry to tailor information
- Forecasting/meteorology
- Use of technologies/messaging

# CVOP Specifics

- System built specifically for CVOs with their direct involvement
- IMPACT forecasts in 12 hr increments for 72 hrs
  - Surface condition
  - Visibility
  - Wind speed



# CVOP Specifics

- Text/email alerts for high impact forecasts
- Map and text formats
- 150+ companies involved in the system

# Commercial Vehicle Operator Portal

[Jump to text forecasts](#)

Please take our [User Survey](#)

## WYDOT Commercial Vehicle Operator Portal

### Road Impact Forecasts

[Email/Text Subscriptions](#)

[Suggestions & Feedback](#)

[Log Out](#)

[Account & Password Management](#)

**Worst-Case forecasts for Tue Feb 18, 00:00 to 11:59 (Mountain Time)**

+

-

**(New)** Okay, Windy Wyoming. Here is your President's Day (Monday) forecast. Strong winds will create very dangerous travel conditions along I-80 and I-25 across southeast WY today through Tuesday morning. Gusts in the 50-60 mph range will be very likely, with some gusts 65 mph +. Gusts in the 55-65 mph range are common to cause tractor-trailer blow-overs. Another area with strong winds will be through South Pass (WY-28) and through Meeteetse-Cody-Clark area (esp. WY-120). Highest gusts are likely this afternoon and again very early Tuesday morning.

Snow (statewide) and much colder temperatures will cause travel concerns on Wednesday! This next winter storm sets up a snowy and cold pattern for Thursday through Saturday this week. These mild temperatures will not stick around for long.

Last updated: 2014-02-17 09:26:21

Legend	Forecast	Time Frame	Impact	L M H E
<input checked="" type="radio"/>	Worst-Case	<input checked="" type="radio"/> 0-12 Hours	Visibility Forecasts	<span style="color: green;">●</span> <span style="color: yellow;">●</span> <span style="color: red;">●</span> <span style="color: blue;">●</span>
<input type="radio"/>	Visibility	<input type="radio"/> 12-24 Hours	Wind Forecasts	<span style="color: green;">■</span> <span style="color: yellow;">■</span> <span style="color: red;">■</span> <span style="color: blue;">■</span>
<input type="radio"/>	Wind	<input type="radio"/> 24-36 Hours	Surface Forecasts	<span style="color: green;">▲</span> <span style="color: yellow;">▲</span> <span style="color: red;">▲</span>
<input type="radio"/>	Surface	<input type="radio"/> 36-48 Hours	NWS Alerts	<span style="color: red;">■</span> <span style="color: red;">■</span>
		<input type="radio"/> 48-60 Hours		
		<input type="radio"/> 60-72 Hours		


☐ Show green icons

Please see [map.wyoroad.info](#) for information about current width/height/weight restrictions and truck parking areas.

For current conditions, please see [map.wyoroad.info](#).

<https://apps.wyoroad.info/cvop/>

# CVOP Detailed Wind Grid



WD: Average wind direction  
WS: Average wind speed (mph)

**Strong:** Forecast winds near "**Strong Wind**" criteria (35 mph +)  
**Caution:** Forecast winds near "**No Light Trailer**" criteria (50 mph +)  
**CLOSED:** To Light and High Profile Vehicles only (65 mph +, or a blow-over)

The following are average forecasted wind speeds. Higher gusts may occur which are not always defined in the averages.

Last Updated: Today, 10:00 AM

Highway

Wind

Forecasts

Friday, February 14

NOON - 3PM

3PM - 6PM

6PM - 9PM

9PM - MIDNIGHT

MIDNIGHT - 3AM

3AM - 5AM

5AM

D1

I-80 (Wamsutter - Rawlins)

I-80 (Rawlins - Laramie)

I-80 (Elk Mtn/Arlington - Laramie)

I-80 (Laramie - Cheyenne)

I-25/I-80 Junction (Cheyenne)

I-25 (Wyo Hill area)

US-30

WY-34

US-287

D2

I-25 (Cheyenne - Wheatland)

I-25 (Chugwater - Bordeaux)

I-25 (Wheatland - Douglas)

I-25 (Douglas - Casper)

I-25 (Casper - Kaycee)

WY-220 (Muddy Gap - Casper)

US-85 (Torrington and Lusk)

D3

I-80 (Utah - Green River)

I-80 (Green River - Rock Springs)

I-80 (Rock Springs - Wamsutter)

D4

I-25 (Kaycee - Buffalo)

I-90 (Montana border - Buffalo)

I-90 (Buffalo - Gillette)

I-90 (Gillette - Sundance)

I-90 (Sundance - SD border)

D5

WY-28 (South Pass - Lander)

US-287 (Lander - Dubois)

US-287 (Dubois - Teton)

WY-789 (Lander - Shoshoni)

WY-789 (Shoshoni - Worland)

WY-120 (surrounding Clark)

WY-789 (Worland - Lovell)

Saturday, February 15

WYDOT TMC Wind Forecast

I-80 (Arlington) Graph

I-25 (Wyo Hill) Graph

I-25 (Bordeaux) Graph

US-120 (Clark) Graph

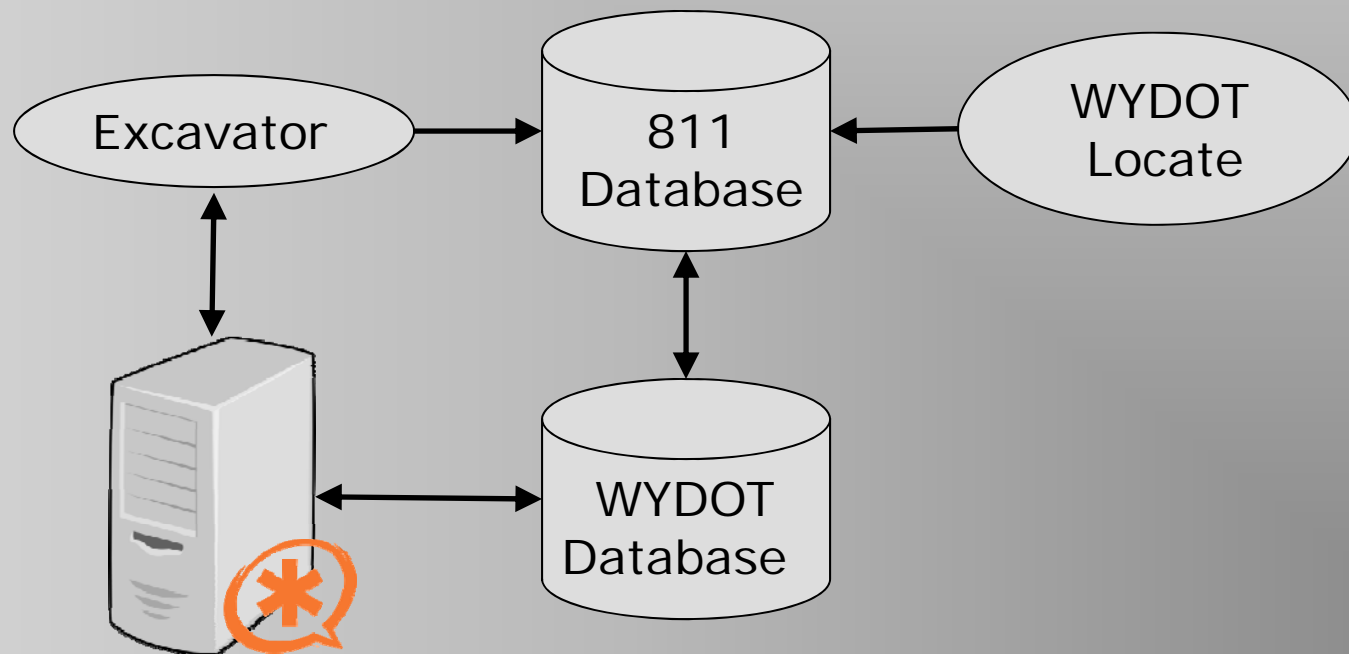
<https://apps.wyoroad.info/cvop/>

VOCE

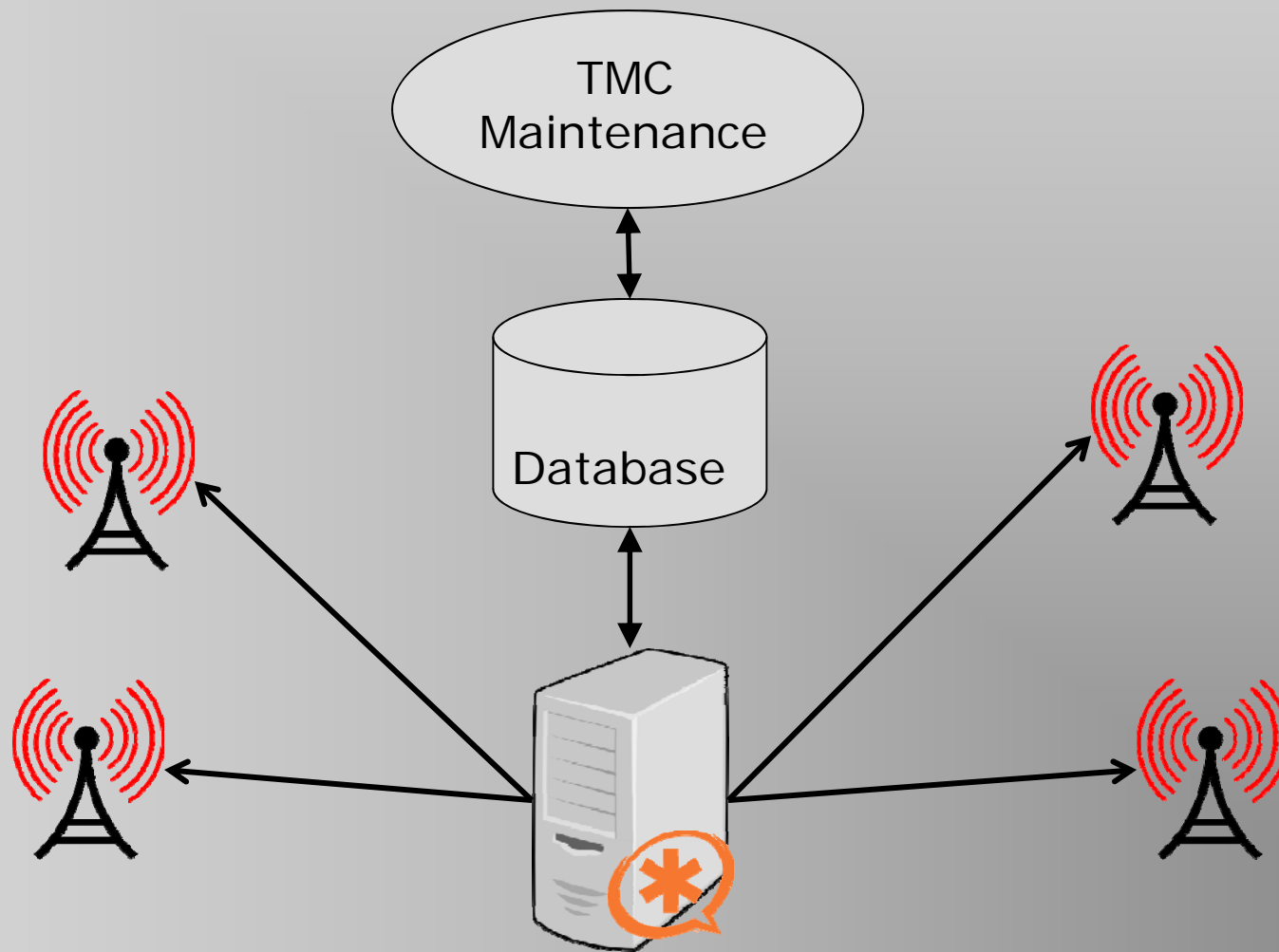


# Call Before You Dig

- WYDOT responds to 20,000 “Call before you dig” requests
- TMC is responsible for making routine calls



# HAR

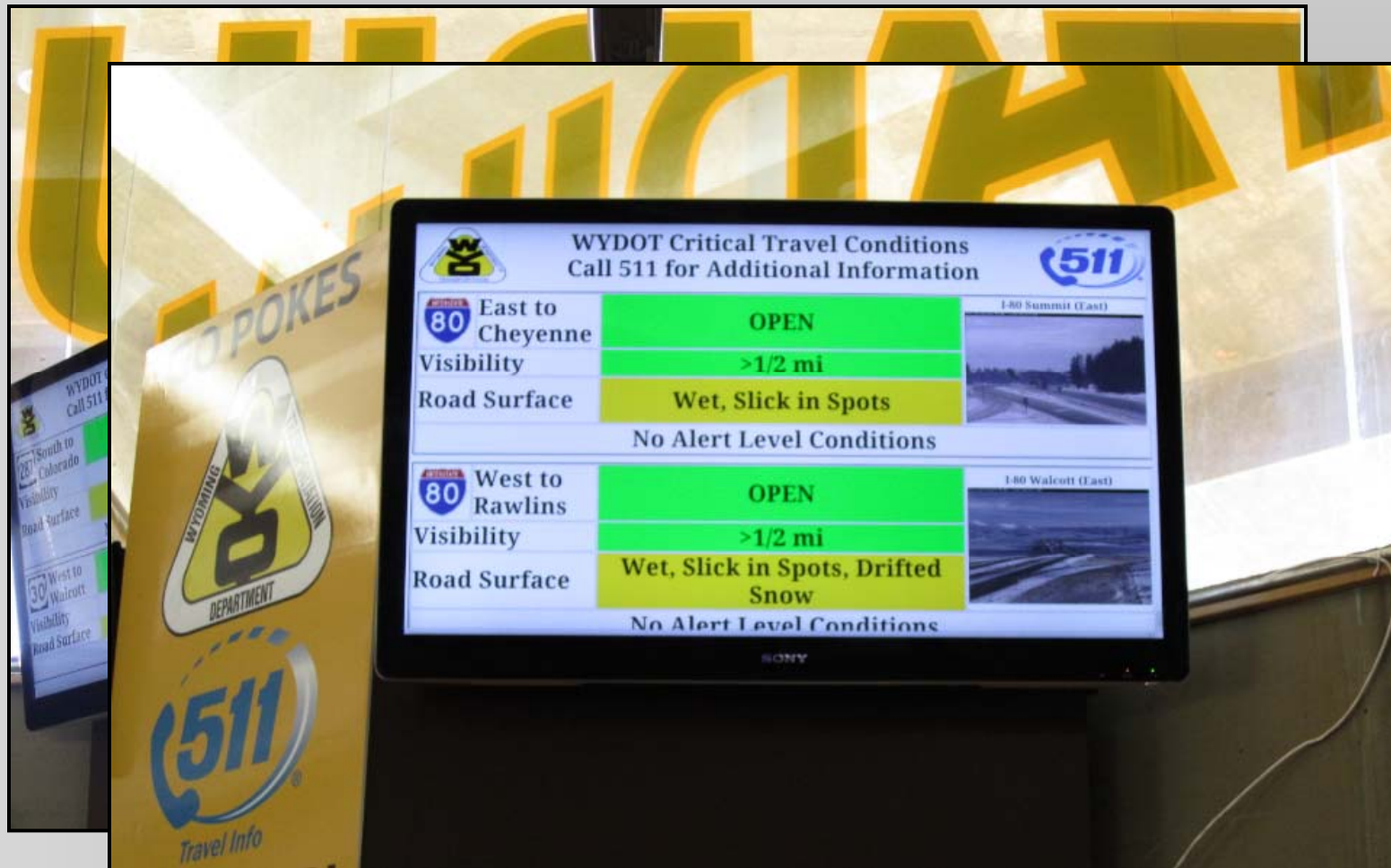




SMART TVS

# Smart TVs

- Custom displays for business or event locations



# Smart TVs

- Hotel lobbies
- Ports of Entry
- Sporting events
- Truck stops
- Other businesses
- Funding for the project may be available through the Department of Workforce Service Safety Improvement Fund. For more information, visit: <http://tinyurl.com/q48tfbd>

# PATHFINDER



Photo Credit: Jeff Garmon

# Pathfinder

- FHWA and NWS Project
- Improved relationships
- Improved communications
  - More consistency, more action-oriented
- Coordinated statements
- Highlighted impacts



# Pathfinder

## NWS

Text products  
Graphical products  
Social Media

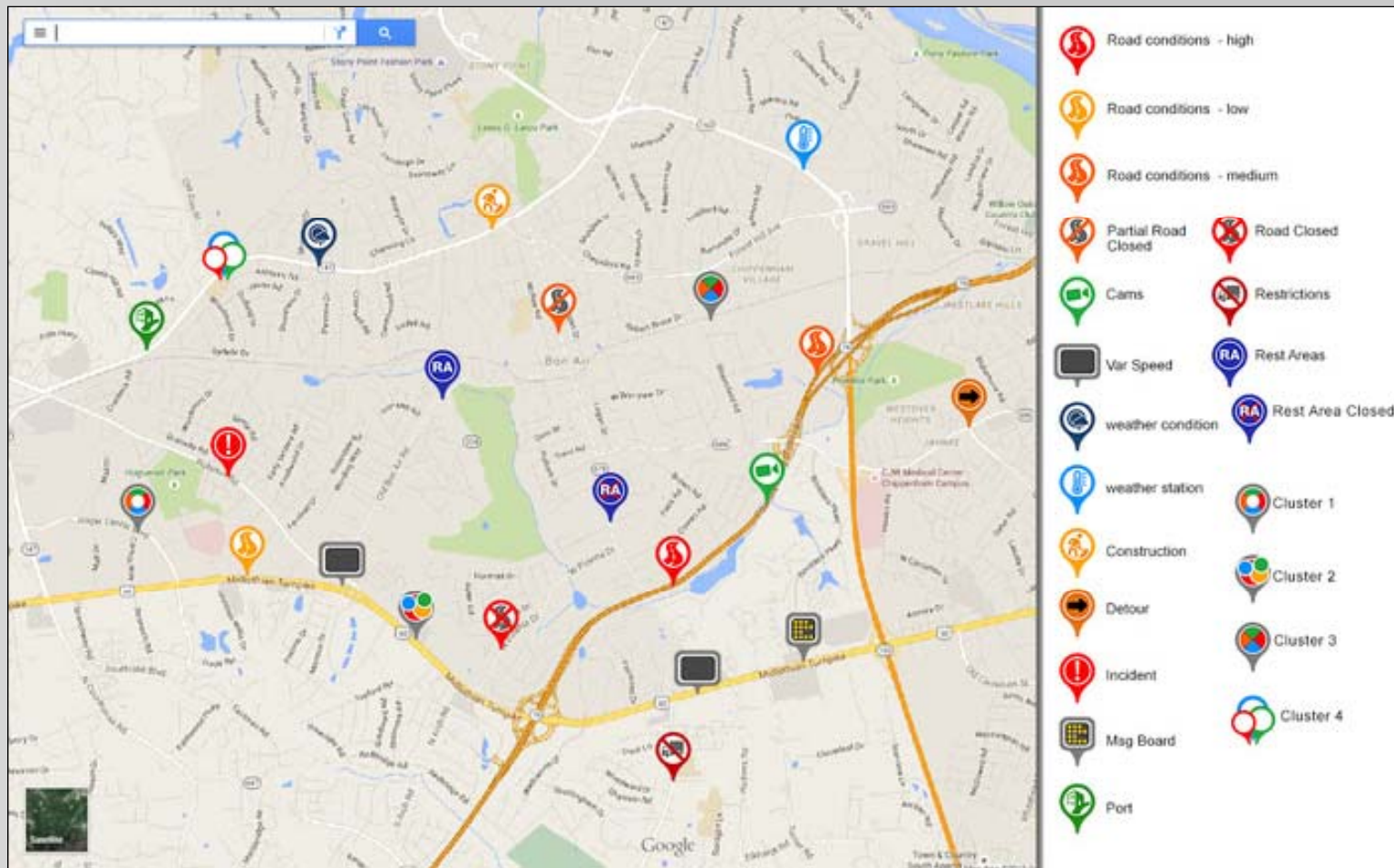
## WYDOT

Dynamic Message Signs  
Highway Advisory Radios  
Email Subscription Alerts

- Big storm events coordinated through NWS Chat and Telephone calls
- The public benefits by improved information and consistent messaging.



# MOBILE APP



# Mobile App

- WYDOT is very late to the game
- Four major functions
  - Pre-trip information in map format
  - En route information – hands free
  - Emergency
  - Submit a snapshot

# Thank You

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