

# **Expansion of the Western States One Stop Shop for Rural Traveler Information**

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**NRITS 2015** 

Session B1: Using Partnerships to Improve Traveler Information Monday, August 10, 2015, 1:00 PM



#### Disclaimer

The opinions, findings and conclusions expressed in this presentation are those of the authors and not necessarily those of the Western States Rural Transportation Consortium, the California Department of Transportation, or Montana State University.

## **Abstract**

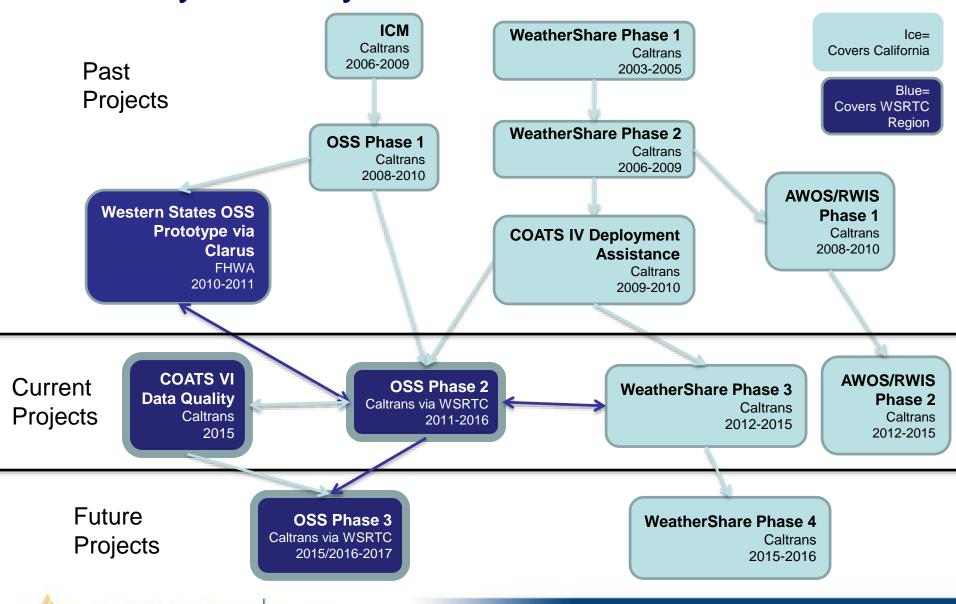
The One-Stop-Shop (OSS) web application provides travelers with comprehensive, real-time data that can be used in planning their trips. OSS presents routing functionality, camera images, weather information, elevation profiles, rest areas, points of interest and more, in a consistent, easily accessible and intuitive interface that allows travelers to plan both instate trips and trips that cross state borders. In November 2014, OSS expanded coverage to include Idaho, Montana, Wyoming, Utah, Colorado, New Mexico and Arizona as well as California, Oregon, Washington and Nevada, which have been covered since 2011.

OSS was developed using a "best effort" approach to bring in data from multiple states and organizations, providing over 25 separate layers. States were not required to change their feeds for use in OSS, although they were encouraged to make data accessible online that otherwise was not available. Managing the import and presentation of this data via an intuitive and responsive interface presented various technical challenges to the project team, and the expansion to additional western states and beyond was taken into account when expanding the system.

In this presentation we will discuss the details of the expansion of the One-Stop-Shop, including usage information.



#### History: Closely Related Web-Based Efforts



College of

STATE UNIVERSITY

ENGINEERING

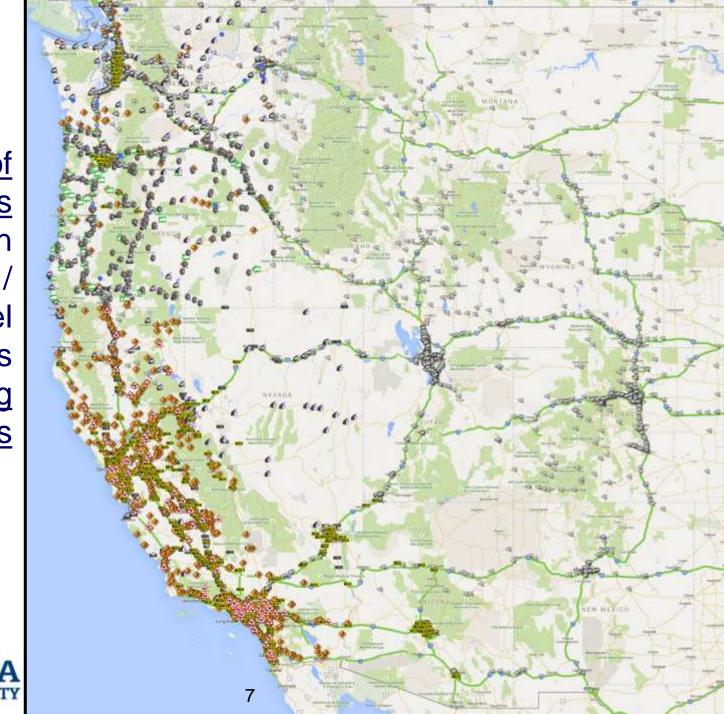
## What is OSS?

A Pictorial Overview ...

### http://oss.weathershare.org/

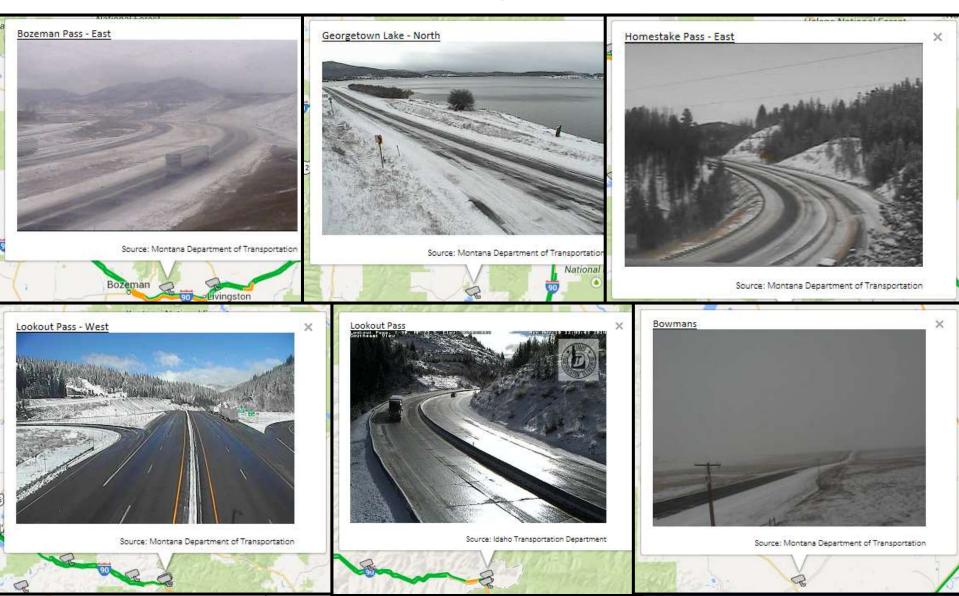


Thousands of
Field Elements
represented in
the Road /
Travel
Conditions
Layer Covering
11 States

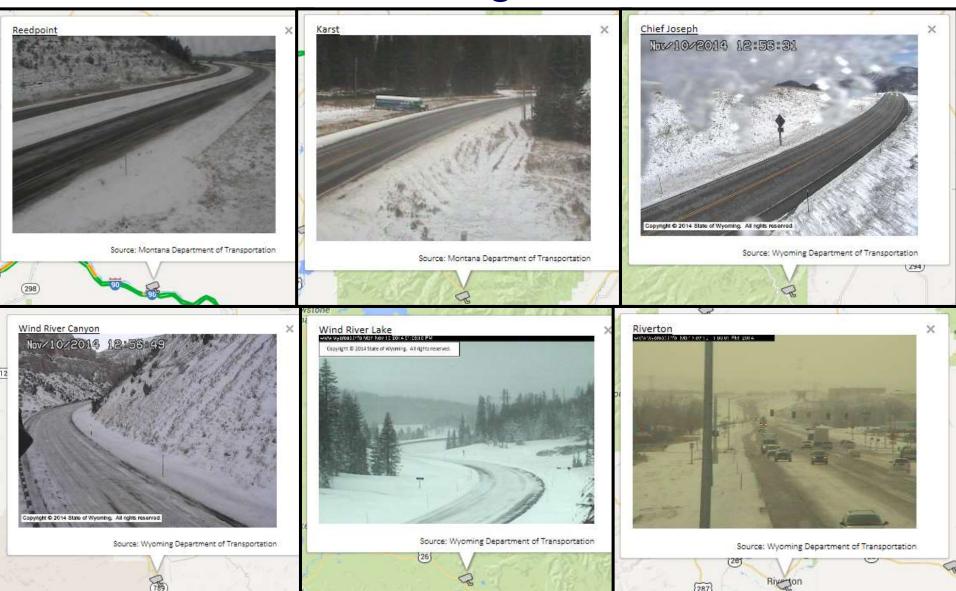




# Camera Images (2014-11-10)



# Camera Images (2014-11-10)



Camera Images (2014-11-10)





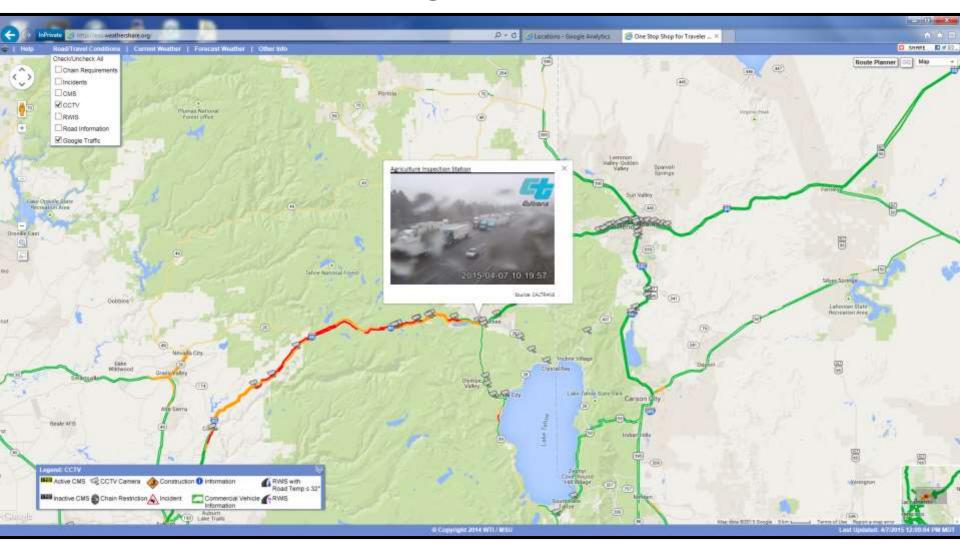




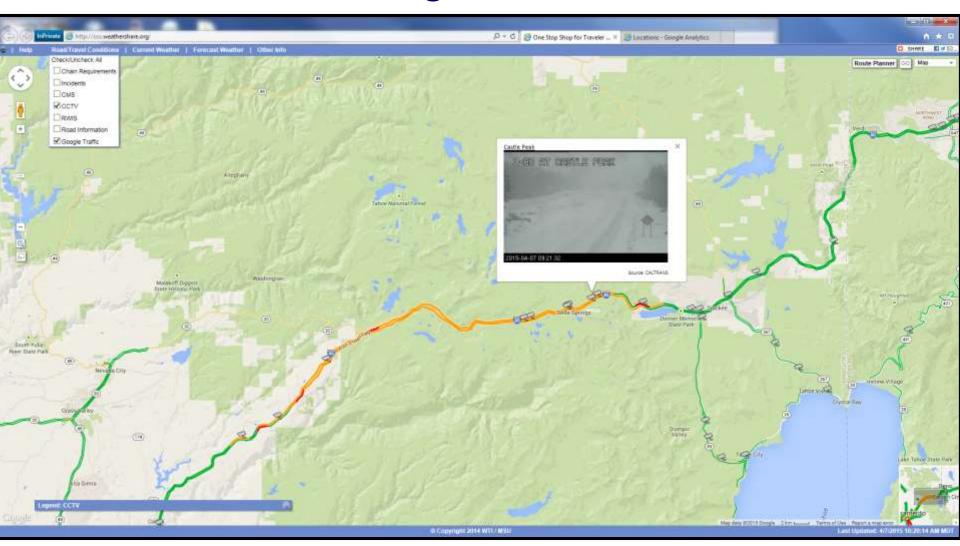


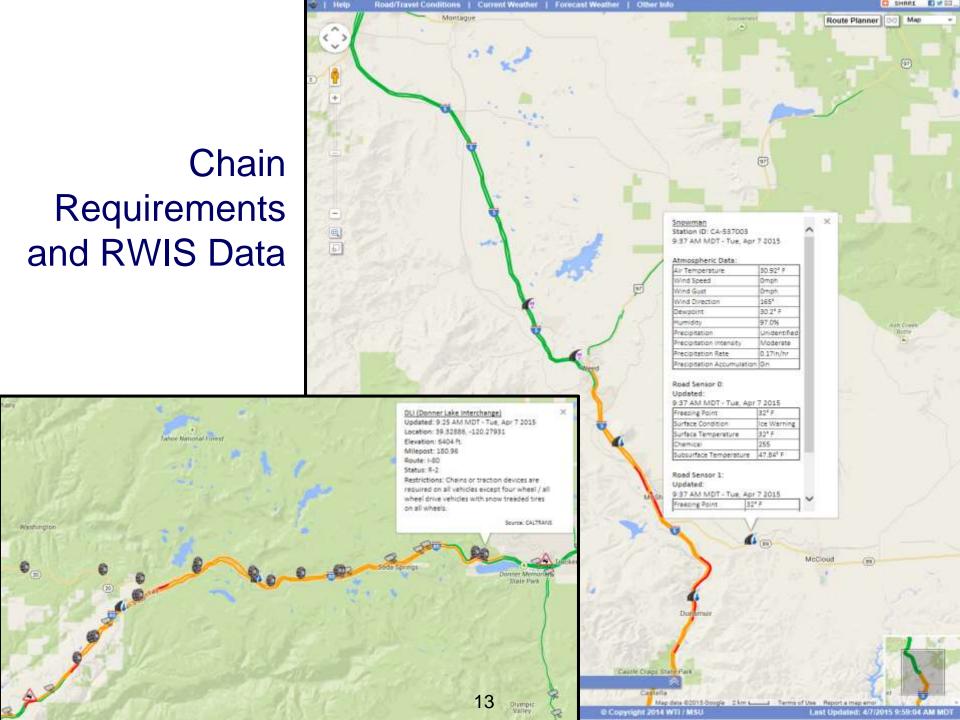


## Google Traffic

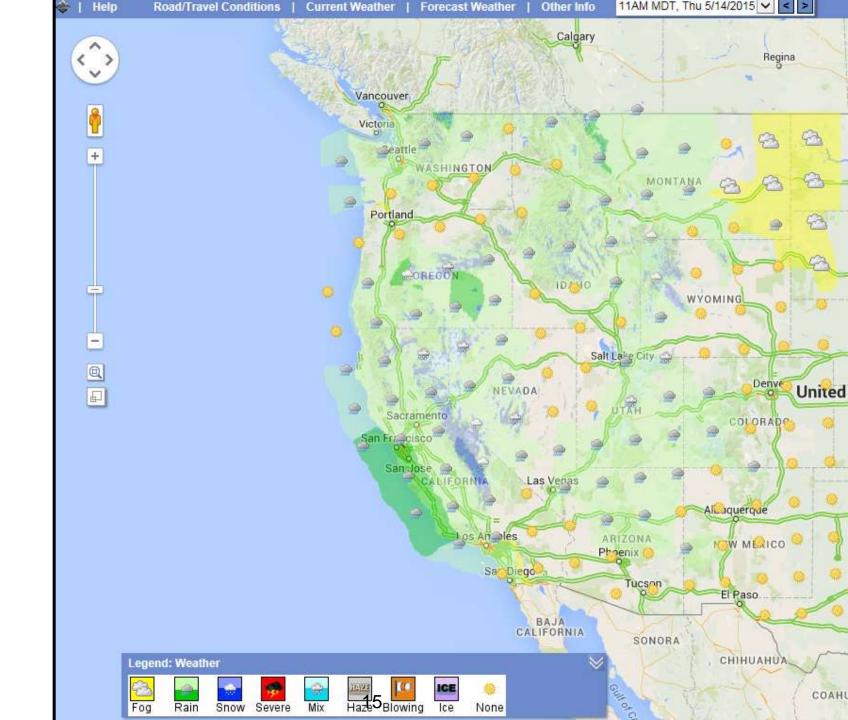


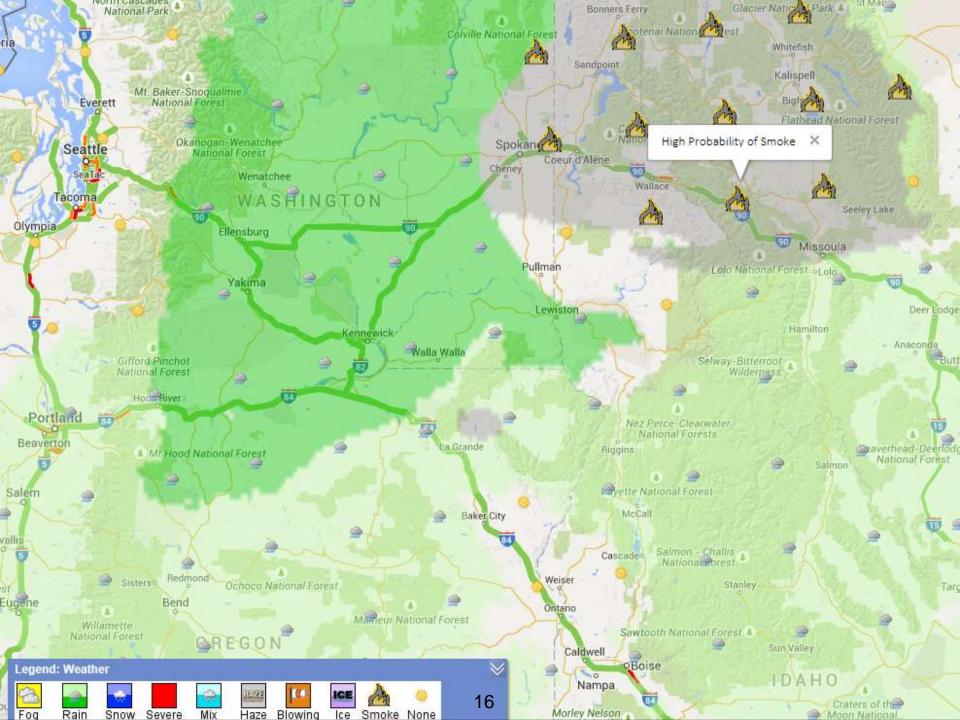
# Google Traffic

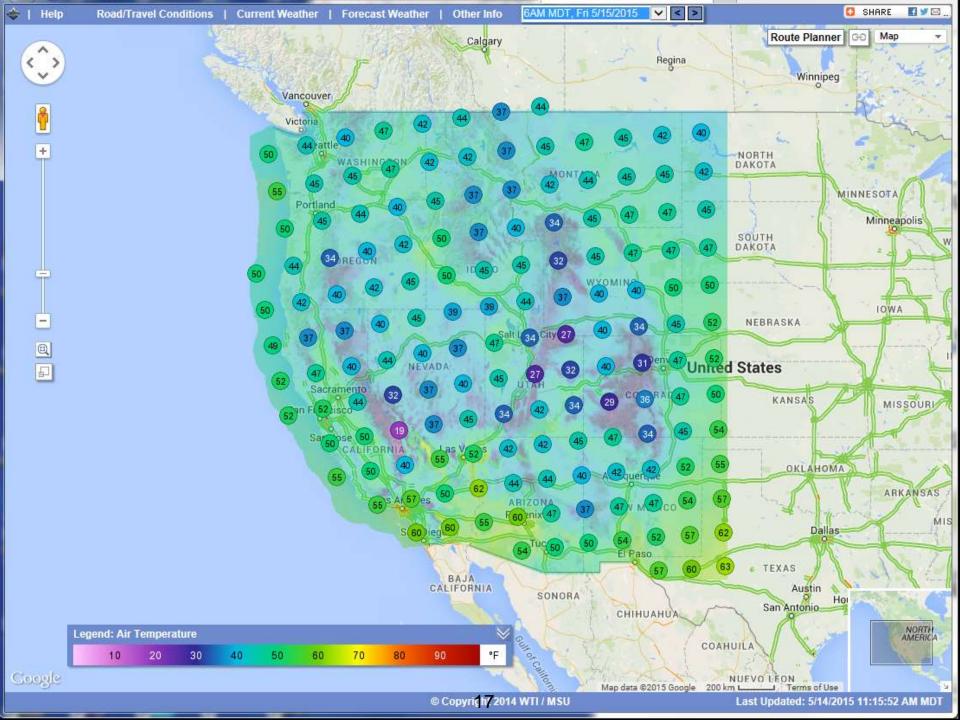


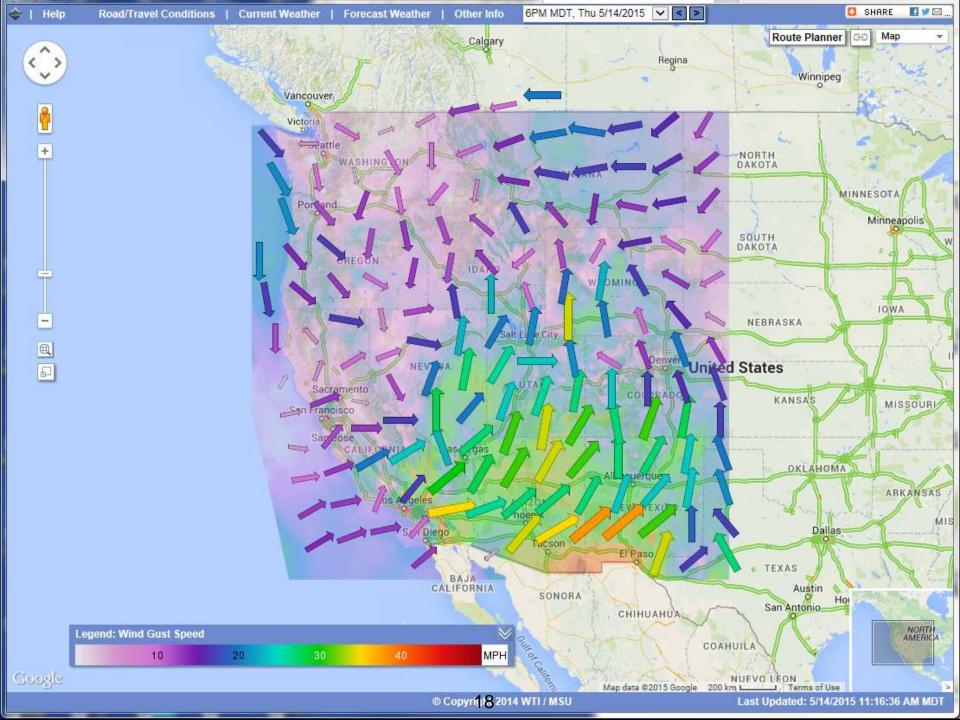


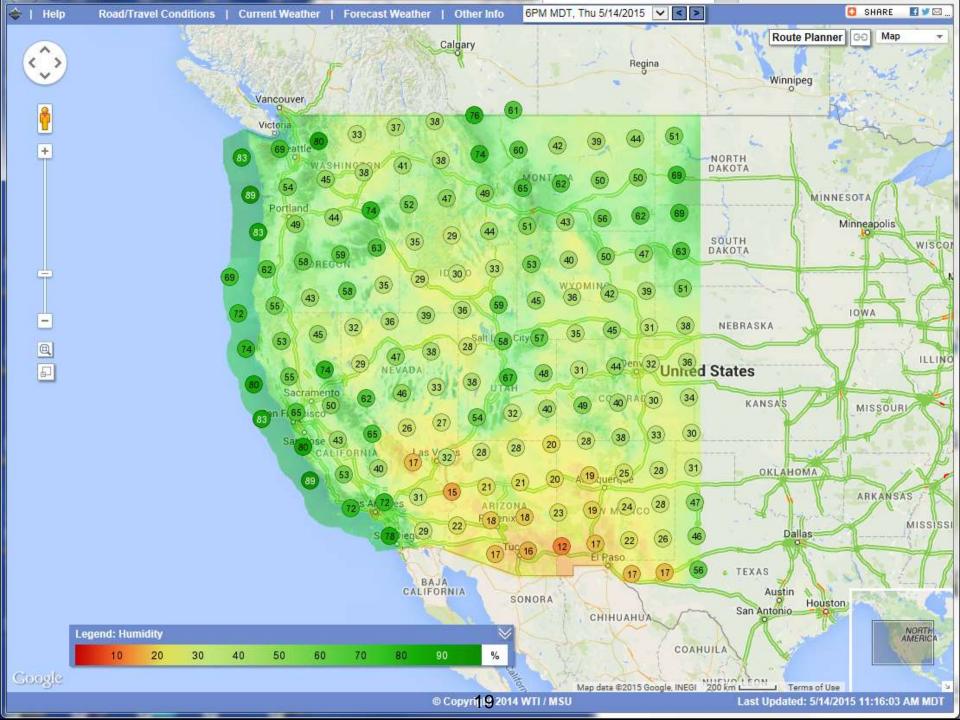
3600 Mm33 × CA-50 at 5 / 20 Jct/Williams Incidents and CMS Area: Ventura Updated: 12:00 PM MDT - Mon, Aug 3 2015 Updated: 2:22 PM MDT - Sun, Aug 2 2015 Location: 39.177867, -122.159205 Direction: South Type: FIRE-Report of Fire Detail: WILDFIRE 10:41 AM MDT - Mon, Aug 3 2015 : [47] CALTRANS SUP MEETING W/CAL FIRE TO DETERMINE FURTHER 10:40 AM MDT - Mon, Aug 3 2015 : [46] 1039 CALTRANS FOR UPDATE ON CREW CL DEFT 10:00 PM MDT - Sun, Aug 2 2015 : [45] 72-320 1010 / CREW WILL BE IN PLACE AT CLOSURE UNTIL 0830 6:48 PM MDT - Sun, Aug 2 2015 : [44] 1039 ENTAC Source: CALTRANS 6:39 PM MDT - Sun, Aug 2 2015 : [40] 33 NB AND SB WILL BE CLOSED UNTIL TOMORROW AFTERNOON FOR FIRE OPERATIONS // 100ACRES DOWN SO FAR ARSON SUSPECTED // RDWY NOT AFFECTED OTHER THAN FOR OPERATIONS Colusa 4:39 PM MDT - Sun, Aug 2 2015 : [37] 72320 // CLOSURE IN PLACE 4:16 PM MDT - Sun, Aug 2 2015 : [36] 72-320 ADVS ETA 10 TO WH CA-V45 at 45 - EB 49 (MOCCASIN) OR-25 VMS I84 WB @ Rufus MP109.5 4:12 PM MDT - Sun, Aug 2 2015 : [34] 1039 ENTAC Updated: 7:25 AM MDT - Thu, Jul 16 2015 Updated: 12:00 PM MDT - Mon, Aug 3 2015 3:49 PM MDT - Sun, Aug 2 2015 : [31] PER S7 ONCE HARD CLOSUR Location: 45.6956178. -120.7386249 Location: 37.815299. -120.315081 3:47 PM MDT - Sun Aug 2 2015 - [29] LP FIRE LL /COMM POST AT Direction: East SR14 CLOSED 3:45 PM EASTBOUND WATCH FOR OR-44 VMS I84 WB @ Durbin Creek Overpass MP347.85 3:41 PM IN WASHINGTON FIRE EQUIPMENT Updated: 7:25 AM MDT- Thu, Jul 16 2015 3:38 PM Location: 44.34615518.-117.2875867 THE 3:37 PM FIRE ACTIVITY 3:34 PM HWY 120 MHEAD WILDFIRE 3:34 PM DEEN USE CAUTION 3:24 PM Source: ODOT 3:23 PM Source: ODOT Source: CALTRANS TO BE A 3:18 PM Yosamile National Park \* CHIEF CA-V3 at 3 - Hum 101 PM 58.7 - N of Jct 36 - FSBT 2-20 DA Updated: 12:10 PM MDT - Mon, Aug 3 2015 Dos Rios CA-18 at 18 - Wilcox Road S/B - Red Bluff Location: 40.56276, -124,147953 Updated: 12:10 PM MDT - Mon, Aug 3 2015 Direction: South CA-V1 at 1 - Men 101 PM 31.6 - N of 101/20 Calpella - FSBT Location: 40.219252, -122.251679 Updated: 12:00 PM MDT - Mon, Aug 3 2015 HWY 36 CLOSED Direction: South Location: 39.249675. -123.210905 10 MT FAST OF Direction: South HWY 36 WEST HUY 20 CLOSED EAST OF JCT 58 BITHTHEF DUE TO FIRE Source: CALTRANS Source: CALTRANS Source: CALTRANS Rosewood Lake Red Bruff

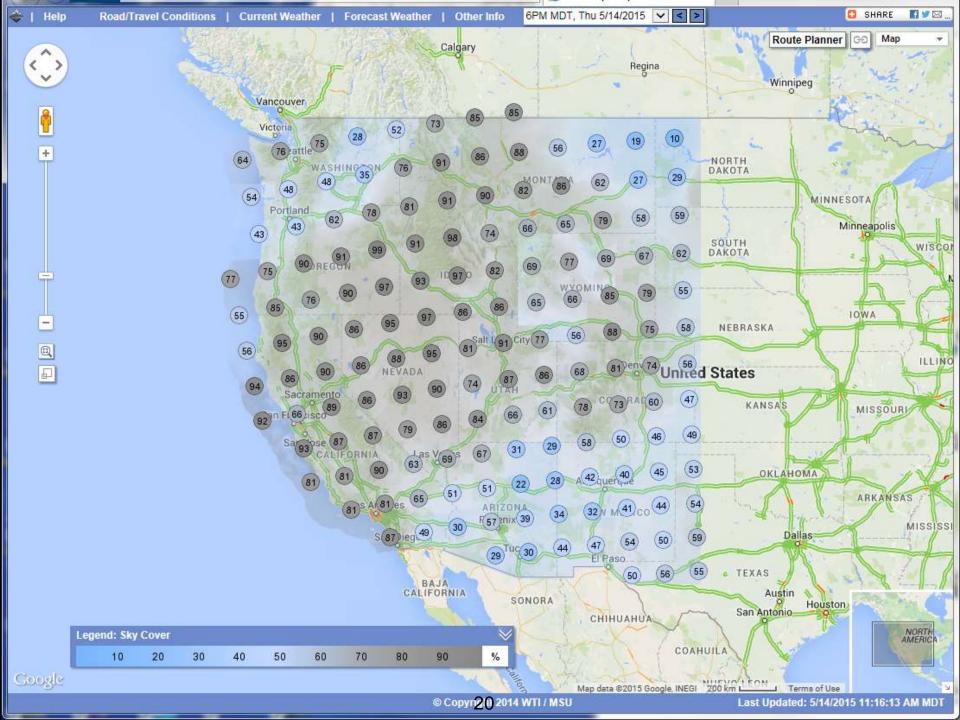


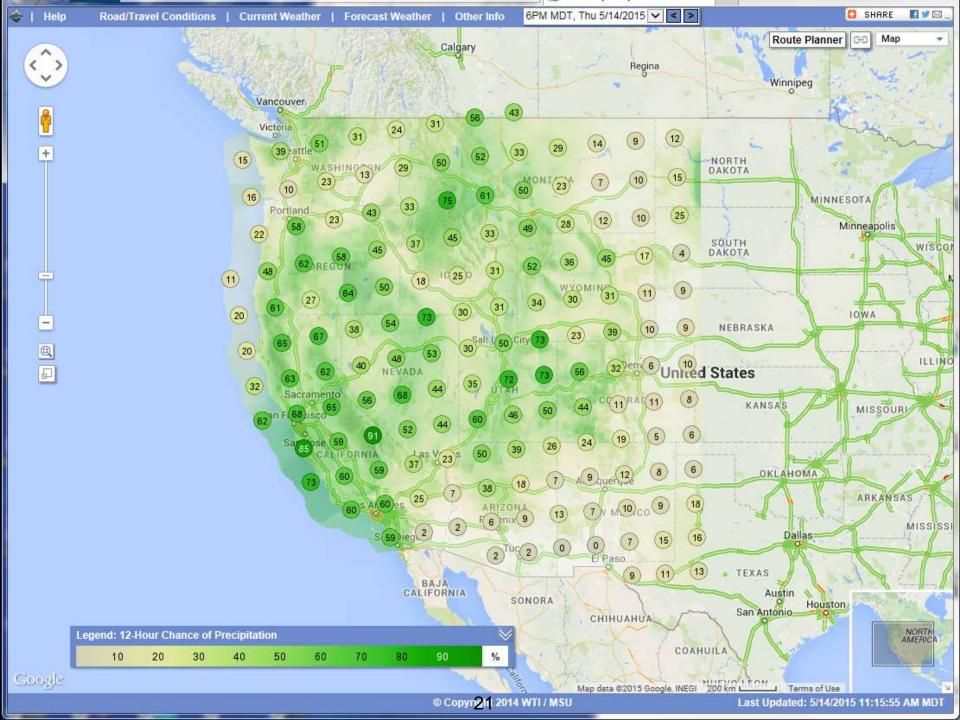


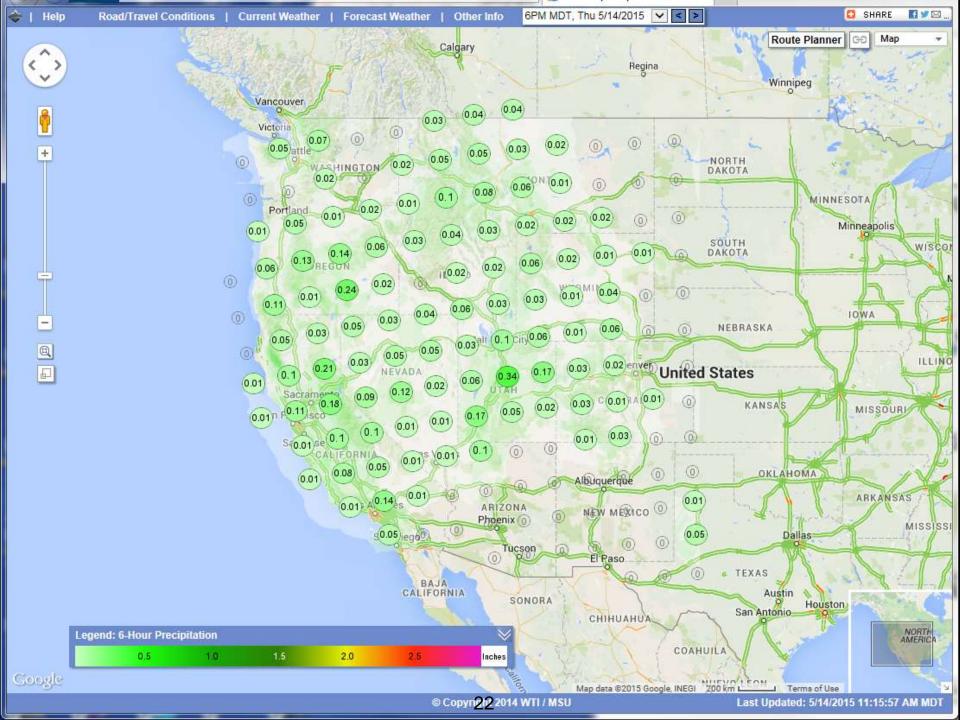


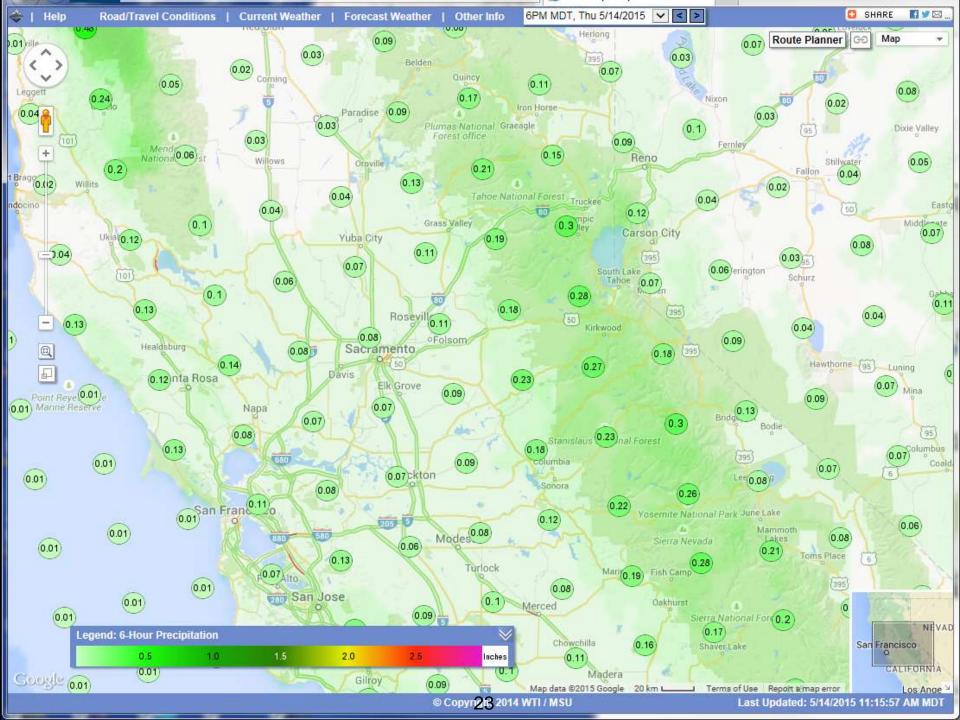


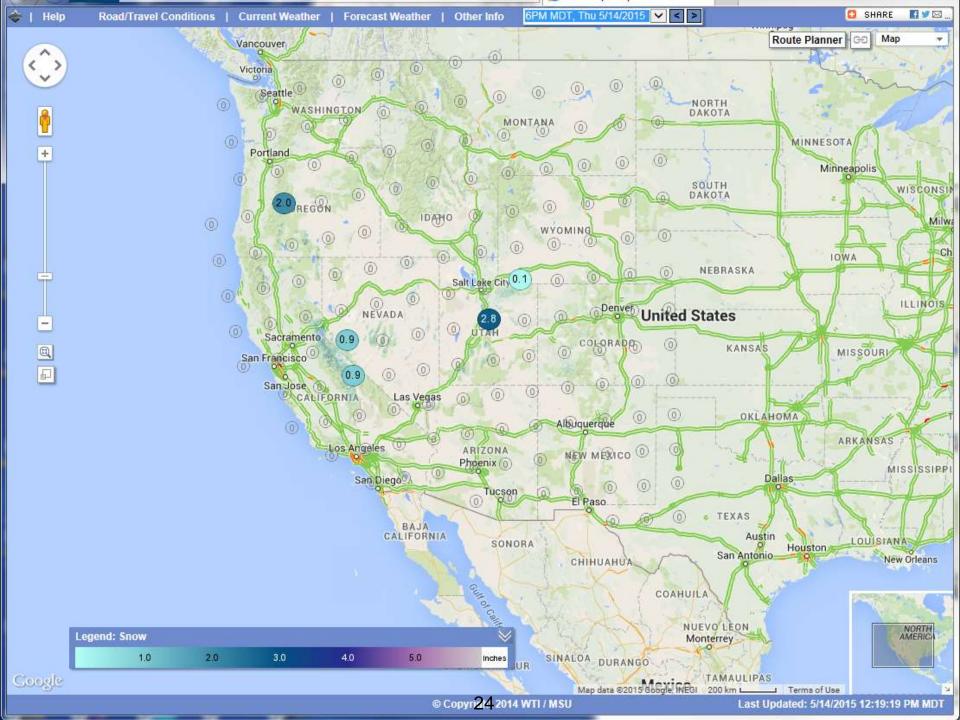


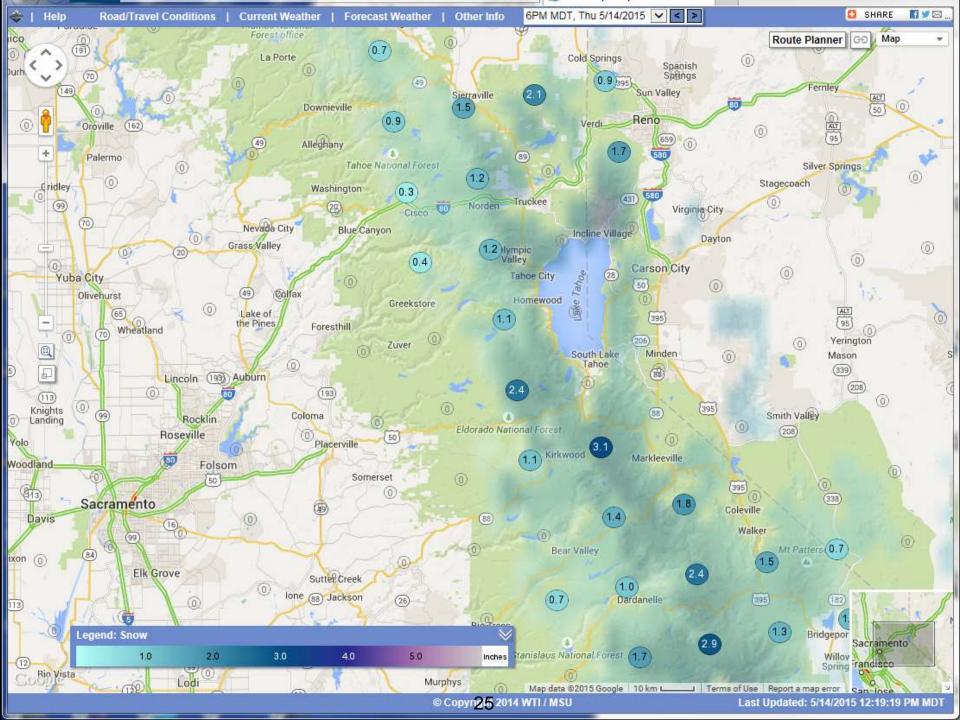


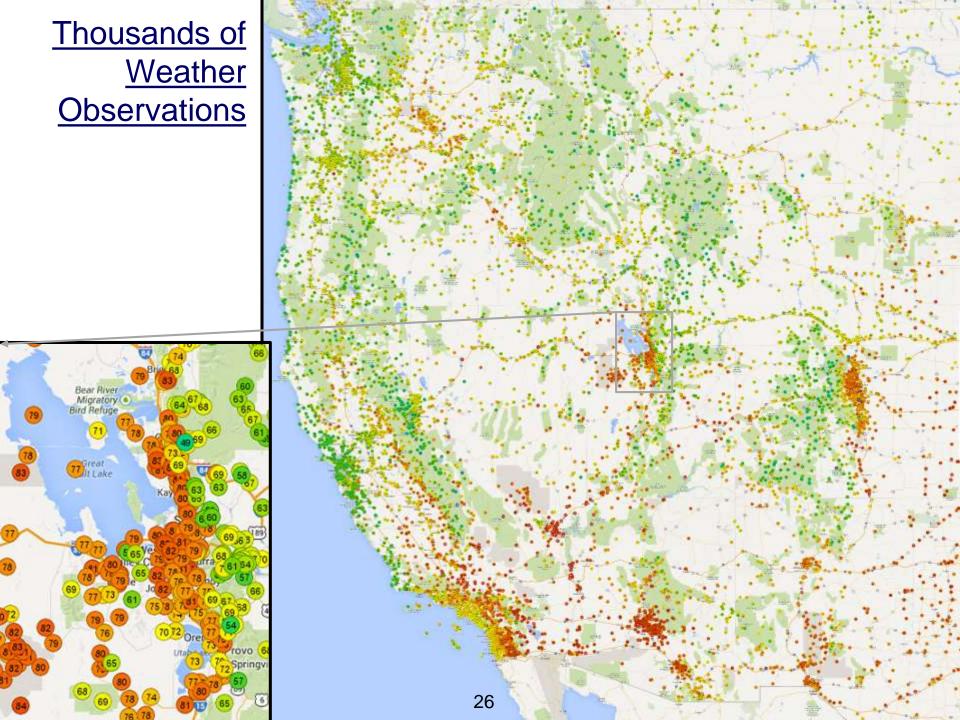












## The Layers

#### **Current Weather**

Air Temperature
Relative Humidity
1 Hour Precipitation
24 Hour Precipitation
AHPS 24 hr Precip.
Wind

#### Other Info

Rest Areas
Features of Interest
Truck Scales
Summit Locations

#### Road/Travel Conditions

Check/Uncheck All

- ✓ Chain Requirements
- ✓ Incidents
- ✓ CMS
- ✓ CCTV
- ✓ RWIS
- Road Information
- ✓ Google Traffic

#### **Forecast Weather**

Air Temperature

Wind Speed

Wind Gust Speed

Humidity

Sky Cover

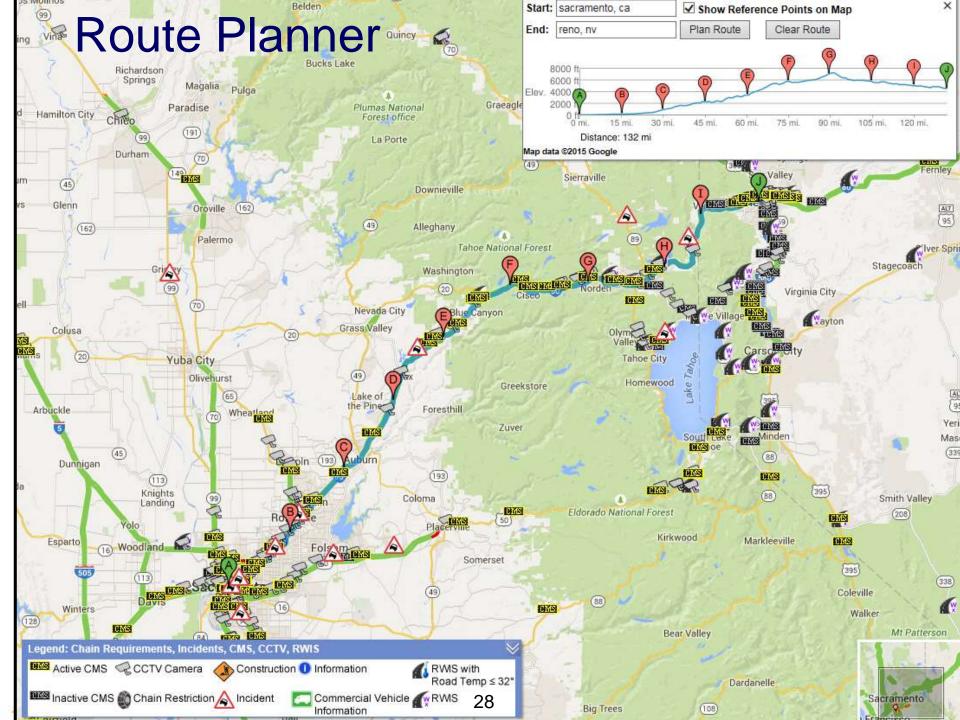
12-Hour Chance of Precipitation

6-Hour Precipitation

Snow

Weather



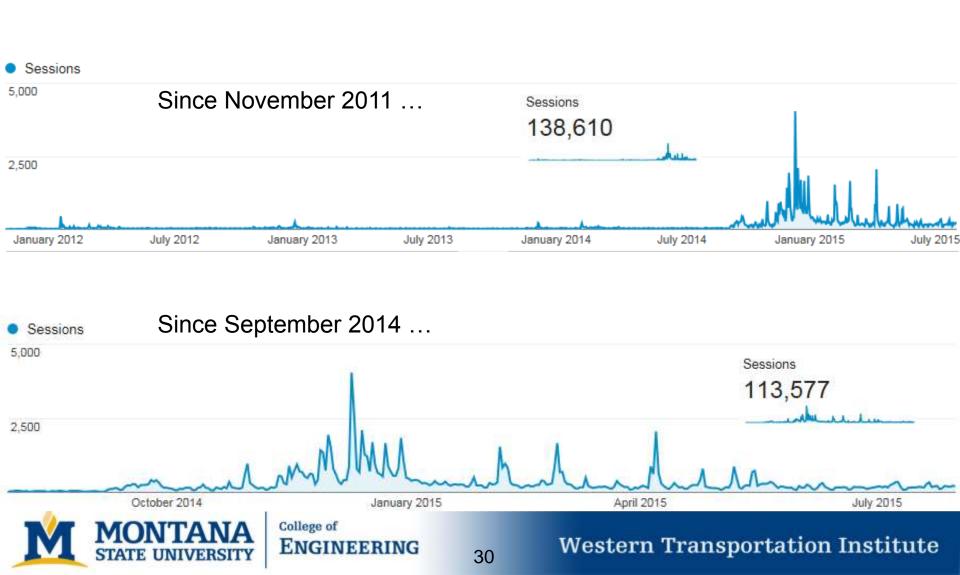


# Expansion and Related Efforts

- Summer 2014: The OSS team began experimenting with expanded coverage for weather conditions and forecasts.
- Summer 2014: Sean Campbell began work on feeds for CCTV and CMS from additional states.
- September 2014: The OSS team implemented mouse-over viewing of cameras and other data.
- September 2014: Caltrans (Sean Campbell) added links to OSS from the Caltrans camera/video page.
- November 2014: The OSS team expanded coverage from four states to eleven states.
- November 2014: An MSU press release is picked up by local (Montana) news and other regional sources.

#### **User Sessions**

A session is a user visit to the site.



1	California	80,608 (59.26%)	11. Utah	867 (0.64%)	Z1. Nebraska	325 (0.24%)
		00,000 (00.2070)			22. Alaska	321 (0.24%)
2.	Nevada	18,664 (13.72%)	12. Iowa	<b>586</b> (0.43%)	23. New York	317 (0.23%)
3	Montana	8,671 (6.37%)	13. Florida	554 (0.41%)	24. Michigan	299 (0.22%)
٥.	montana	0,011 (0.0170)			25. Connecticut	294 (0.27%)
4.	Oregon	<b>6,191</b> (4.55%)	14. Wyoming	487 (0.36%)	26. Pennsylvania	276 (0.20%)
5	Washington	<b>4,874</b> (3.58%)	15. Illinois	468 (0.34%)	27. Georgia	273 (0.20%)
٥.	Washington	4,014 (3.3070)			28. (nat set)	253 (0.19%)
6.	Arizona	<b>1,773</b> (1.30%)	16. Minnesota	<b>429</b> (0.32%)	29. Virginia	248 (0.10%)
7		4.500	17. Hawaii	<b>421</b> (0.31%)	30. New Mexico	246 (0.18%)
1.	Idaho	<b>1,580</b> (1.16%)	II. Hawaii	421 (0.31%)	31. Maryland	223 (0.16%)
8.	Colorado	<b>1,409</b> (1.04%)	18. Oklahoma	371 (0.27%)	32. North Carolina	219 (0.10%)
			10.0.11.01.1	007	33. Tennessee	212 (0.16%)
9.	Texas	1,344 (0.99%)	19. South Dakota	337 (0.25%)	34. New Jersey	157 (0.12%)
10.	Ohio	924 (0.68%)	20. Missouri	327 (0.24%)	35. Massachusetts	149 (0.11%)
					36. Wisconsin	145 (0.11%)
			Time 1		37. Kentucky	144 (0.11%)
				38 Kansas	140 (0.10%)	
		39. District of Columbia		123 (0.09%)		
					40. Arkansas	120 (0.00%)
			- Parties and the same of the	41. Mississippi	116 (0.00%)	
					42 Indiana	113 (0.08%)
			27.		43. Louisiana	107 (0.08%)
					44_ (not set)	83 (0.06%)
			7 7		45. South Carolina	48 (0.04%)
					46. Alabama	47 (0.00%)
			2 2		47. Delaware	33 (0.02%)
					48. North Dakota	31 (0.02%)
		Dage of the Control o			49. West Virginia	27 (0.02%)
	I la		50. Maine	21 (0.02%)		
	7	>			51. New Hampshire	15 (0.01%)
•	To the same of the		24		52. Vermont	12 (0.01%)
6 80,608			31		53. Rhode Island	6 (0.00%)

1.	Sacramento-Stockton-Modesto CA	30,036 (22.08%)	11.	. Fresno-Visalia CA	2,036 (1.	50%)	21.	Billings Mount	88	82 (0.65%)
2.	San Francisco-Oakland-San Jose CA	19,963 (14.68%)	12.	2. Las Vegas NV	1,572 (1.	16%)	22.	Missoula Mount	85	54 (0.63%)
3.	Reno NV	19,115 (14.05%)	13.	3. Phoenix AZ	1,557 (1.	14%)	23.	(not set)	70	00 (0.51%)
4.	Chico-Redding CA	11,551 (8.49%)	14.	Santa Barbara-Santa Maria-San Luis Obispo	1,473 (1.	.08%)	24.	Bakersfield CA	66	68 (0.49%)
5.	Los Angeles CA	7,571 (5.57%)	15	5. Monterey-Salinas CA	1,306 (0.	06%1	25.	Great Falls Mount	65	51 (0.48%)
	Butte-Bozeman Mount	5,855 (4.30%)		5. Eugene OR	1,140 (0.		26.	Dallas-Ft. Worth TX	51	15 (0.38%)
	Seattle-Tacoma WA	3,516 (2.58%)		7. Denver CO			27.	Helena Mount	49	90 (0.36%)
	Portland OR	3,275 (2.41%)			1,135 (0.		28.	Des Moines-Ames IA	48	89 (0.36%)
				3. Spokane WA	1,118 (0.		29.	Houston TX	45	50 (0.33%)
	Medford-Klamath Falls OR	2,507 (1.84%)	19.	). Salt Lake City UT	980 (0.		30.	Cincinnati OH	44	40 (0.32%)
10.	San Diego CA	2,358 (1.73%)	20.	). Boise ID	890 (0.	65%)	31.	Cleveland-Akron (Canton) OH	42	27 (0.31%)
							32.	Honolulu HI	41	18 (0.31%)
				A.			33.	Eureka CA	36	63 (0.27%)
	The the state of t							Rapid City SD	35	53 (0.26%)
			35.	Washington DC (Hagerstown MD)	35	52 (0.26%)				
		3	36.	Chicago IL	35	51 (0.26%)				
		200	37.	Minneapolis-St. Paul MN	31	17 (0.23%)				
			38.	New York NY	31	14 (0.23%)				
			39.	Omaha NE	28	86 (0.21%)				
			40.	Anchorage AK	28	86 (0.21%)				
								Yakima-Pasco-Richland-Kennewick WA	28	84 (0.21%)
	Part of						42.	Hartford & New Haven CT	27	74 (0.20%)
								Palm Springs CA	25	50 (0.18%)
							44.	Albuquerque-Santa Fe NM	24	48 (0.18%)
	45. Colorado Springs-Pueblo CO							24	47 (0.18%)	
46						46.	Bend OR	24	41 (0.18%)	
	47.					Twin Falls ID	19	97 (0.14%)		
		100		W-			48.	Tulsa OK	19	91 (0.14%)
	The second secon			00			49.	Idaho Falls-Pocatello ID	18	89 (0.14%)
1	3	0,036		32			50.	Detroit MI	18	80 (0.13%)

Accessed from 602 Communities in California 15,389 15,389 (19.09%) Sacramento 11. Roseville 1,000 (1.24%) 2. Chico 4,915 (6.10%) 12. South Lake Tahoe 963 (1.19%) San Francisco 4,752 (5.90%) 13. Susanville 950 (1.18%)

16. Rocklin

17. Modesto

19.

20.

Fresno

Oroville

Stockton

33

4,126 (5.12%)

1,829 (2.27%)

1,800 (2.23%)

1,736 (2.15%)

1,269 (1.57%)

1,144 (1.42%)

1,142 (1.42%)

Redding

San Jose

Oakland

7. Los Angeles

San Diego

Santa Rosa

8. Folsom

14. Truckee 689 (0.85%) 15. Auburn 669 (0.83%)

25. Elk Grove Weaverville 27. Corona Red Bluff 29. El Cajon Fremont 31. Santa Cruz Pleasanton 33. Rancho Cordova

21. Yuba City

22. Bakersfield

Grover Beach

24. El Dorado Hills

Placerville

35. Santa Clara

Davis

37 Carmichael

Petaluma

McClellan Park

San Ramon

41. Sunnyvale

42. Grass Valley

43. Monterey

44. Milpitas

45. San Rafael

46. Mount Shasta

47. Walnut Creek

Chester

50. Visalia

Citrus Heights

652 (0.81%)

622 (0.77%)

614 (0.76%)

614 (0.76%)

614 (0.76%)

592 (0.73%)

588 (0.73%)

564 (0.70%)

550 (0.68%)

527 (0.65%)

526 (0.65%)

513 (0.64%)

497 (0.62%)

486 (0.60%)

469 (0.58%)

458 (0.57%)

428 (0.53%)

420 (0.52%)

404 (0.50%)

395 (0.49%) 390 (0.48%)

379 (0.47%)

363 (0.45%)

341 (0.42%)

339 (0.42%)

336 (0.42%)

331 (0.41%)

329 (0.41%)

319 (0.40%)

318 (0.39%)

313 (0.39%)

306 (0.38%)

303 (0.38%)

293 (0.36%)

293 (0.36%)



	1. (direct) / (none)	78,796 (56.85%)	21. actionnewsnow.com / referral	65 (0.05%)
		22. excite.com / referral		63 (0.05%)
	dot.ca.gov / referral	20. printer rotatia		55 (0.04%)
	3. google / organic	4,522 (3.26%)	24. tripadvisor.com / referral	<b>54</b> (0.04%)
			25. wtiwebdev.coe.montana.edu:50004 / referral	54 (0.04%)
	westernstates.org / referral	1,390 (1.00%)	26. westerntransportationinstitute.org / referral	<b>52</b> (0.04%)
	5. montana.edu / referral 1,285 (0.93%) 27. 69.51.77.202:81 /		27. 69.51.77.202:81 / referral	50 (0.04%)
			28. lassenuhsd.lhs.schoolfusion.us / referral	50 (0.04%)
	visitmtshasta.com / referral	853 (0.62%)	29. Im.facebook.com / referral	48 (0.03%)
<b>—</b> (()	7. bing / organic	702 (0.51%)	30. us.mg203.mail.yahoo.com / referral	<b>45</b> (0.03%)
Traffic			31. redbluffdailynews.com / referral	40 (0.03%)
Hamo	8. co.shasta.ca.us / referral	579 (0.42%)	32. spokesman.com / referral	35 (0.03%)
Sources /	9. yahoo / organic	495 (0.36%)	33. thetruckersreport.com / referral	35 (0.03%)
Sources /		(22277)	34. t.co / referral	33 (0.02%)
<b>D</b> (	10. kbzk.com / referral	337 (0.24%)	35. bozemanmagazine.com / referral	31 (0.02%)
Referrals	11	224 (0.04%)	36. californiaagricultural.com / referral	29 (0.02%)
rtororraio	11. cawscportal.wr.usgs.gov / referral	331 (0.24%)	37. transportationradio.wordpress.com / referral	29 (0.02%)
	12. facebook.com / referral	321 (0.23%)	38. onramp.dot.ca.gov / referral	27 (0.02%)
	13. m.facebook.com / referral	304 (0.22%)	39. greatfallstribune.mt.newsmemory.com / referral	26 (0.02%)
			40. transnet.odot.state.or.us / referral	26 (0.02%)
	14. intranet / referral	268 (0.19%)	41. 36ohk6dgmcd1n-c.c.yom.mail.yahoo.net / referral	<b>25</b> (0.02%)
	15. lassenhigh.org / referral	197 (0.14%)	42. crawler.semalt.com / referral	23 (0.02%)
			43. charter.net / referral	22 (0.02%)
	16. csntoday.org / referral	187 (0.13%)	44. babylon / organic	20 (0.01%)
	17. carsonnow.org / referral	131 (0.09%)	45. caltrans.ca.gov / referral	20 (0.01%)
			46. staging.csntoday.org / referral	20 (0.01%)
	18. I.facebook.com / referral	I.facebook.com / referral 96 (0.07%) 47. 10.160.32.18 / refer		<b>19</b> (0.01%)
MONTANA	19. semalt.com / referral	87 (0.06%)	48. semalt.semalt.com / referral	19 (0.01%)
STATE UNIVERSITY	25		49. duckduckgo.com / referral	16 (0.01%)
STATE ONIVERSITI	20. kxlf.com / referral 35	86 (0.06%)	50. webhelper.centurylink.com / referral	16 (0.01%)

1.	/research/its/cctv/hq/nevada.htm	P	34,752	(75.46%)	
2.	/dist2/cctv/allcams.shtml	æ	3,005	(6.53%)	Caltrans Links
3.	/research/its/cctv/hq/oregon.htm	P	2,942	(6.39%)	
4.	/dist2/	æ	2,398	(5.21%)	
5.	/dist2/chainup/allcntys.htm	æ	1,132	(2.46%)	
6.	/research/its/cctv/hq/arizona.htm	æ	759	(1.65%)	
7.	/dist2/index.shtml	æ	335	(0.73%)	ONE STOP SHOP
8.	/dist2/maps.htm	æ	219	(0.48%)	
9.	/dist10/	æ	185	(0.40%)	http://dot.oo.gov/dict?/
10.	/ctnews/sep14/tc03.shtml	æ	141	(0.31%)	http://dot.ca.gov/dist2/
11.	/research/OSS.htm	æ	58	(0.13%)	D - G Schwichest Hotels.
12.	/hq/paffairs/news/pressrel/14pr09 7.htm	P	39	(0.08%)	CAUTHERIS DEPARTMENT OF TRANSPORTATION TO TRANSP
13.	/research/its/cctv/iframemap.htm	æ	28	(0.06%)	With Horse in Gai You Town - Culture Horse - Culture
14.	/dist3/departments/traffic/camera s/	æ	24	(0.05%)	GUICK LINKS  - Transpe - Lock Ageneral - Lock Ageneral - Transpe
15.	/dist6/cctv/	æ	17	(0.04%)	- Last third Roleman & CALL IN ANN DISTRICE 2  Public Interpolar  - Public Content from  - Turbic Content from  -
16.	/ctnews/sep14/sum.shtml	æ	10	(0.02%)	COSURES CASSINES CASS
17.	1	P	3	(0.01%)	Hes 28 Figure Road Conditions 830 225-3482
18.	/ctjournal/2012CTJournal_Annual _Report/CTJournal2012.html	æ	1	(0.00%)	Distant 2 Office  Distant 2 Of
19.	/ctjournal/2012CTJournal_Annual _Report/Journal_samp.html	æ	1	(0.00%)	SENSORS CARRY WEXCAS CARRY WITH DATE of an extragger. Materials used operations make a to 30 results.  If I is in it is in it is in it is sensing an extragger is defined an extragger in the sensing an extragger is defined an extragger in the sensing an extragger in the sensing and but the sensing and extragger in the sensing and extr
20.	/dist2/pdf/oss091214.pdf	æ	1	(0.00%)	259 WOLD SHASTA. Shala ACA will service dominations and barriers for padeathiers. One-way traffic coomed Monday-Friday, from 7:00 a m - 5:00 pm used of Macking Aley to Red DMF Road or the seatoured direction. Expected above 12-30 news. Months experied to confuse through Moneyation.
21.	/dist2/planning/pdf/sr139tcr.pdf	æ	1	(0.00%)	200 DEAds Tubble Trailed Project Chronic will be junforming up printing operators from information field to 2.5 miles west of logor insignment Tubustay. Way 5. 2010. Trailed careful will be in justice between the focus of 7 a.m. 400 p.m. Delays are expected to 0.0 common for the common field of the careful will be in justice between the focus of 7 a.m. 400 p.m. Delays are expected to 200 p.m. and the project of the careful will be in common for the project of the common field of th

### http://dot.ca.gov/dist3/departments/traffic/cameras/

/research/its/cctv/hq/nevada.htm	P	31,146 (85.57%)
2. /research/its/cctv/hq/oregon.htm	æ	<b>2,672</b> (7.34%)
3. /dist2/	æ	817 (2.24%)
4. /research/its/cctv/hq/arizona.htm	æ	612 (1.68%)

#### U.GOV TRANSPORTATION

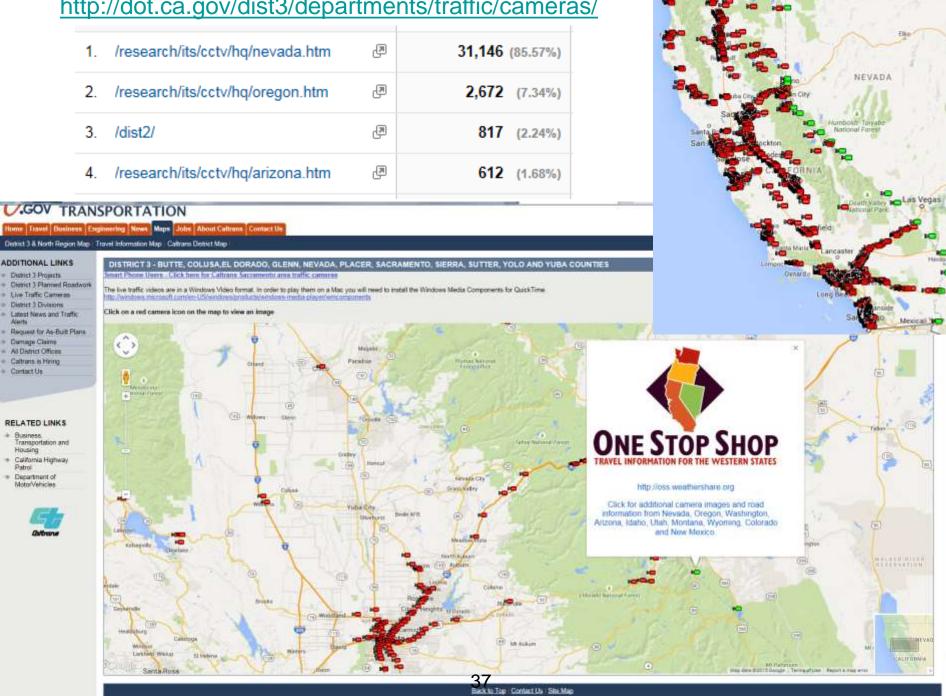
#### ADDITIONAL LINKS

- District 3 Projects District 3 Planned Roadwork
- Live Traffic Cameran
- District 3 Divisions
- Latest News and Traffic
- Request for As-Built Plans
- Damage Claims
- All District Offices

#### RELATED LINKS

- Transportation and Housing
- California Highway
- Department of Motor/Vehicles





## **MSU Links**

http://www.montana.edu/news/15240/ msu-39-s-wti-launches-new-travelerwebsite-for-montana-rockies-region

http://www.montana.edu/weather/



Montana State University > Weather and Road Conditions

### **Weather and Road Conditions**

- · One-Stop Shop for Traveler Information (OSS)
- Montana State University ECE/ORSL Weather Station
- Gallatin National Forest Avalanche Center Advisories

#### Montana Department of Transportation

- · Montana Hourly Weather Roundup
- · Montana Zone Forecasts -- Western
- Montana Zone Forecasts -- Southwest and North Central
- Montana Zone Forecasts -- South Central and Southeast
- · Montana Zone Forecasts -- Northeast
- · State Forecast for Montana
- · Extended Outlook for Montana
- · Montana Weather Summary
- · Montana Detailed Road Report
- · Montana Road Report Maps and Traveler Information

/news/15240/msu-39-s-wti-launches-new-traveler-website-for-monta 1.063 (84.23%) na-rockies-region /news/15120/wti-project-wins-award-for-intelligent-transportation-tec 185 (14.66%) hnology /weather/ 14 (1.11%) MONTANA STATE UNIVERSITY A-Z Index Directories Search MSU MSU's WTI launches new traveler website for Montana, Rockies region BOZEMAN - As Montanans prepare for the winter holiday travel season, a website developed at Montana State University is set to provide motorists in the Rocky Mountain region with up-to-the-minute information on weather and road conditions.

road conditions.

The One-Stop Shop for Traveler Information (OSS), which was developed at MSU's Western Transportation Institute and sponsored by Caltrans, offers travelers a website that integrates weather and road information from multiple Western states. Unlike websites for state transportation departments, the OSS provides travelers with current road information that does not stop at

Western states. Unlike websites for state transportation departments, the OSS provides travelers with current road information that does not stop at jurisdictional boundaries. Combined with real-time weather information, the OSS provides motorists with a seamless decision-making tool for maintaining and enhancing traveler safety and mobility.

While the award-winning website has been in operation since 2011 for routes in California, Oregon, Washington and Nevada, the WTI team working on the project have now added Montana, Idaho, Wyoming, Utah, Colorado, New Mexico and Arizona.

Doug Galarus, senior research scientist and manager of WTI's Systems Engineering, Integration and Development Program, said the pioneering effort at integrating information from various agencies will be a major asset to motorists in the Rockies, where winter driving can be particularly hazardous.

"During a storm that hit California over the Halloween weekend, we had nearly 2,000 user sessions and showed over 87,000 roadside camera images to users mostly in California and Nevada," Galarus said. 'With the expansion to other states, including Montana, and with winter having just started, we really think the site will take off."

With its mission to make rural transportation systems safer for everyone, Galarus said that OSS is the kind work that WTI was meant to do.

WTI is a collaborative research partnership involving MSU's College of Engineering, the Montana Department of Transportation and California's Caltrans, which serves the nation's most populous state. Now celebrating its 20th year, the Western Transportation Institute at MSU was established to provide innovative solutions to transportation problems at all levels, from local to international. More information about the WTI is available at <a href="https://www.westerntransportationinstitute.org">www.westerntransportationinstitute.org</a>.

Contact: Doug Galarus, (406) 994,5268 or dgalarus@coe.montana.edu.

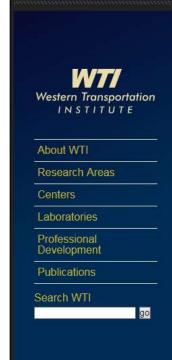


The One-Stop Shop for Traveler Information (OSS), which was developed at MSUS Western Transportation Institute and sponsored by Cattans, offers travelers a website that integrates weather and road information from multiple Western states that does not stop at jurisdictional boundaries. Combined with real-time weather information, the CISS provides motorists with a seamless decision-making fool for maintaining and enhancing traveler safety and mobility high fine Assistance.

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E-mait:	Subsorbe
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Recent News	
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The NWS weather and road information is provided by a network feed from the Montana Department of Transportation. Weather items are updated starting at 20 minutes after the hour. Road reports are updated around 7:00 a.m. every day, and again around 3:00 p.m. except for weekends and holidays. Road reports may be updated during the day as conditions warrant.

## WTI Link





The Western Transportation Institute is the country's largest National University Transportation Center focused on rural transportation issues.

Because we live and work in rural communities, we understand the critical roles rural transportation plays in the lives of people, in the environment and in the economy.

We draw from our eight integrated research groups to create solutions that work for our clients, sponsors and rural transportation research partners. WTI focuses on rural issues, but some of our program areas also address the concerns of the urban environment. Whatever the objective, we bring innovation and expertise to each WTI transportation research project.

### **WTI Project News**

The One Stop Shop for Traveler Information now includes Montana – and Idaho, Utah, Arizona, New Mexico, Colorado, and Wyoming! OSS has been providing travelers in California, Oregon, Washington, and Nevada access to route-oriented, real-time and near real time weather and road information through a single website, and now the Rocky Mountain States have access to this valuable traveler tool. Developed in partnership by WTI and Caltrans, OSS won an International award from the Intelligent Transportation Society of America for Best New Innovative Practice earlier this fall. Visit the OSS site at <a href="http://oss.weathershare.org/">http://oss.weathershare.org/</a>.

Great job goes out to Doug Galarus, Leann Koon, Dan Richter, and Caltrans Project Manager, Sean Campbell and Caltrans Project Champion, Ian Turnbull.

See the MSU news article here: <a href="http://www.montana.edu/news/15240/msu-39-s-wti-launches-new-traveler-website-for-montana-rockies-region">http://www.montana.edu/news/15240/msu-39-s-wti-launches-new-traveler-website-for-montana-rockies-region</a>

nt to the Montana State University campus in Bozeman, Montana. We Vashington, and a <u>large testing facility in rural Montana near</u> ural transportation research needs.

es Montana – and Idaho, Utah, Arizona, New Mexico, Colorado, and a, Oregon, Washington, and Nevada access to route-oriented, realrough a single website, and now the Rocky Mountain States have ership by WTI and Caltrans, OSS won an International award from the tw Innovative Practice earlier this fall. Visit the OSS site at

Richter, and Caltrans Project Manager, Sean Campbell and Caltrans

u/news/15240/msu-39-s-wti-launches-new-traveler-website-for-

106) 994-1697 Siten

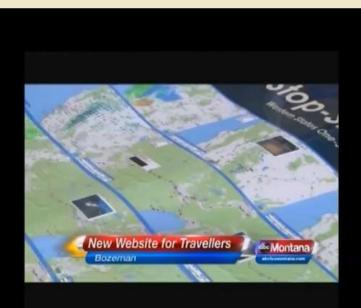
## On the News ...



http://www.westernstates.org/Projects/OSS/Updates/2014-02-21.html

### http://www.westernstates.org/Projects/OSS/Updates/2015-04-06.html

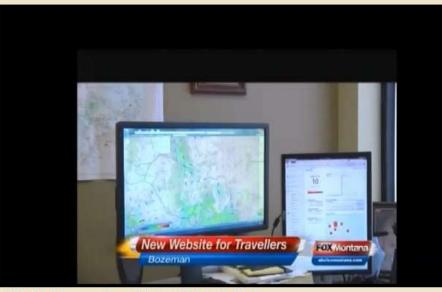
ABC Montana (November 16th, 2014)



KTVM (November 17th, 2014, 10 PM)



FOX Montana (November 16th, 2014)

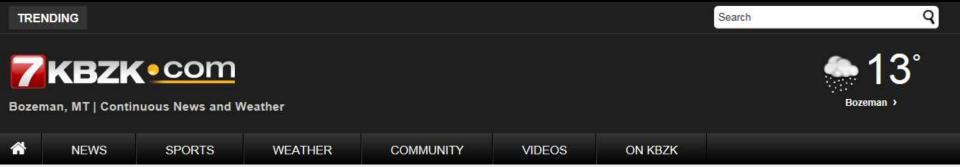


KTVM (November 17th, 2014, 6 PM)



### http://www.kbzk.com/weather/

### http://www.kxlf.com/news/msu-launches-new-rockymountain-weather-and-road-condition-reports/



#### NEWS - WEATHER

More News - Weather



© 32 minutes 26 seconds ago

#### MSU launches new Rocky Mountain weather and road condition reports

BOZEMAN - Just in time for the winter travel season, a Montana State University website is ready to provide continuing information on weather and road conditions across the Rocky Mountain region. In a news release, MSU said, "The One-Stop Shop for Traveler Information (OSS), which was developed at MSU's Western Transportation Institute and sponsored by Caltrans, offers travelers a website that integrates weather and road information from multiple Western states. Unlike websites for state transportation departments, the OSS provides travelers with current road information that does not stop at jurisdictional boundaries. Combined with real-time weather information, the OSS... Read Story >













#### **WEATHER NEWS**

 MSU launches new Rocky Mountain weather and road condition reports





Carson City Weather Mostly Cloudy Conditions at 12:26pm on 5/12/15







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## Twelfth Annual Sheriff's Open House

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Games!

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Home

### Chains, snow tires required over Sierra mountain passes

Submitted by Jeff Munson on Wed, 12/24/2014 - 4:34pm





National Weather Service.







UPDATE: Snow is falling down to the valley floor on this Christmas Eve night, Go here for the latest road conditions before you head out traveling. Go here of for the latest forecast from the

Snow and lower elevation rain this afternoon is expected to change to snow at all elevations this evening behind a cold front. A period of moderate to heavy snow is expected in the Sierra through early evening, with whiteout conditions possible over the passes, according to the weather service. Lake Tahoe and much of Northern Nevada is under a Winter Weather Advisory.

Snow will end tonight as the front moves into eastern and southern Nevada. Snowfall totals through this evening are forecast to be 6-12 inches over Sierra passes, 3-6 inches around Lake Tahoe (at lake level), and 1 to 3 inches for the valley floors of northeast California and western 43 Nevada, according to the weather service.



### Visit Carson City

Something for everyone at #Brew #Brats and #Ballet this Saturday, an annual event at the Brewery Arts Centerfor more info and tickets link here ...

Get closer to the divine at Brew. **Brats and Ballet** rai.com Brew, Brats and Ballet choreographers talk about their

inspiration and

process.





12 min 59 sec ago



#### Road Trips Forum



D0bby N. Idaho



posts: 11,915

reviews: 86

### 3. Re: safe places to stay on a roadtrip from Toronto to San Franci

iii Save this Post

Nov 17, 2014, 8:19 AM

I posted this elsewhere, but I found this neat link to road conditions in the Western US. Once your trip gets to the edge of this map, you can use the route planner to give you up-to-the-minute road conditions for your route. I would bookmark this on your mobile device.

#### http://oss.weathershare.org/

(I had trouble getting to this website this morning, so had to google \* One-Stop Shop for Traveler Information \*)

When you are parking at your overnight stops, I would also try to back up to a light pole in the parking lot which will block the doors shut.

# 1

D0bby N. Idaho



posts: 11,915 reviews: 86

### 2. Re: Ohio to Berkeley/SF area end of December

iii Save this Post

Nov 22, 2014, 8:58 PM

I'll just add a couple of things to Randy's thorough post.

Carry paper maps, either from AAA or buy a good Road Atlas at a brick and mortar bookstore. If you have to divert during your trip due to weather this will be more useful (and safer) than trying to depend on GPS routing.

editing to add: Here is a good Road Condition site which covers multi-states. I did find in looking at the Idaho DOT site for comparison the DOT site had more information, but this one is a good start for a general look-see.

#### http://oss.weathershare.org/

As a woman traveling solo, I would plan to stop by dark each night. www.sunrisesunset.com will give you your daylight hours.

I also recommend audio books to listen to as you make your way across the country.

Keep your gas tank topped up especially in the West. At 1/2 start planning where you are going to fill and fill by 1/4. I would not let it get to 1/4 in winter.

Have fun, be safe and give us a trip report when you get there!

Edited: 9:00 pm. November 22, 2014



#### D0bby N. Idaho



### 4. Re: 4 day road trip through Oregon and Washington

Nov 17, 2014, 8:49 AM

Here is a link to road conditions across the Western States. If you zoom it will give you current chain/traction tire recommendations/requirements.

#### http://oss.weathershare.org/

You can use the route planner feature (only has begin and end, can't do midpoints) which also pops up an elevation profile.



#### D0bby N. Idaho



posts: 11,915 reviews: 86

### Winter Road Conditions link for Western US

Nov 17, 2014, 8:15 AM

#### http://oss.weathershare.org

(I did have trouble getting to this web address the first time I tried it this morning and had to google One-Stop Shop for Traveler Information and link from there.)

I saw an item on this website in the local paper this morning which provides motorists with current info on weather and road conditions in multiple western states. It's pretty neat because it goes across jurisdictional boundaries. It was developed by folks at Montana State University in Bozeman.

If you look at the upper right, there is a trip planner where you can put in start and end points and it will even pop up an elevation profile. If you zoom in a bit you can see road conditions, chain/traction tire requirements, closures, warnings, all sorts of stuff! FWIW 184 in Oregon still looks to be a mess and is still requiring/recommending carrying chains or having traction tires from the bad storm that moved thru a few days ago. In the instructions I also saw where it will show you all the rest stops!

I've only played with it a bit this morning (hey, it's 5AM and I don't have much coffee on board!) and the only downside I can see is that it may give you more information than you want, lol.

Reply

Report inappropriate content



D0bby N. Idaho Destination Expert

for Yellowstone National Park

posts: 11,915 reviews: 86

Uden The.

#### 1. Re: Driving from Spokane to San Francisco in the winter

Dec 04, 2014, 11:44 AM

Well Heather, it will probably just depend on what is going on at the time. For instance today on the Idaho Palouse (Moscow ID area) down to Lewiston we've had freezing rain with snow on top of it. Yuck. Supposed to have rain for tomorrow. I would much rather drive thru snow than on ice caused by freezing rain.

What routes are you considering?

From Spokane or CdA south to Pullman or Moscow, then down US95 in Idaho to Boise, south from there to Oregon and in to Nevada?

Or thru Eastern Washington, SW from Spokane on 395 to the Tri Cities, pick up 182 there to 184 then along the east side of the mountains to Bend?

Since you are going multi state, you might also want to post on the Road Trip forum.

#### tripadvisor.com/ShowForum-g1-i12567-Road\_Tri...

Here also is an interesting website that shows you road conditions all over the West. It's great for an overview, but go to the individual state sites for more specific information.

#### http://oss.weathershare.org/

Good luck. Just heading to the local airport this morning and hope it is less treacherous in 45 minutes!

Pam

#### 22. Re: 11-day trips from Seattle to Grand Canyon in Christmas 2014 Dec 11, 2014, 10:34 AM

Maybe try this site:



5. Re: winter roadsn from texas to washington Dec 18, 2014, 11:55 AM

Watch 10 days weatherforcast on www.weather.com or use a site like this one:

Destination Expert for Road Trips

http://oss.weathershare.org/



Save this Post

D0bby N. Idaho



posts: 11,915 reviews: 86

5. Re: Winter Trip: Quad Cities (IA/IL) to San Francisco 12/20/14

Dec 18, 2014, 10:14 AM

covers the Western states. In just looking at it and comparing data for my local area it does give a good overview, but you will want to focus in on individual states for more comprehensive data, especially if the weather is bad as Photoguy indicates it is predicted to be.

Here is a road condition link that might be helpful to you as you travel. It

#### http://oss.weathershare.org/

I also always feel compelled to say this, but make sure you have paper maps in case you need to divert from your chosen route due to weather. Do not depend on GPS. Keep your eye on your gas tank especially in the west. Don't let it get below 1/4. You should start planning when you are going to fill when you get to about 1/2 a tank.

Edited: 10:18 am, December 18, 2014



D0bby N. Idaho

Destination \_\_\_\_ Destination Expert National Park

posts: 11,915 reviews: 86

4. Re: Denver to Las Vegas - Elevation Migraines - Southern Route

Jan 08, 2015, 11:10 AM

You can also go to this website for road conditions which will also give you an elevation profile.

Save this Post

#### http://oss.weathershare.org/

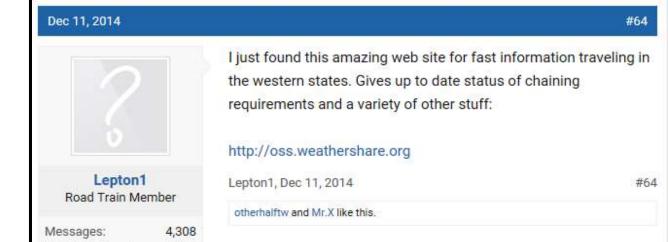
Pam

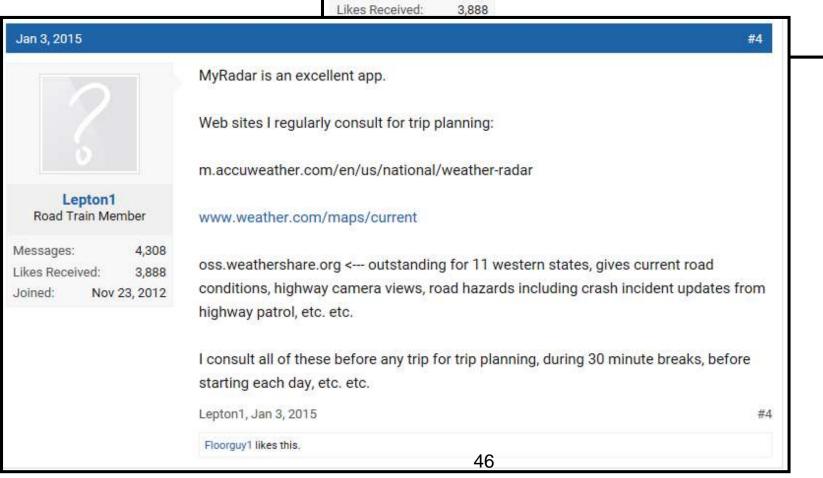
Click on the Route Planner in the upper right. Plug in your route. You will have to do it in segments since I have not found that you can plug in intermediate waypoints to make it follow the route you want. Anyway, an elevation chart will pop up after you click on the Plan Route button.

http://oss.weathershare.org/

5







https://transportationradio .wordpress.com/2014/11/ 19/rural-travelerinformation-site-grows/

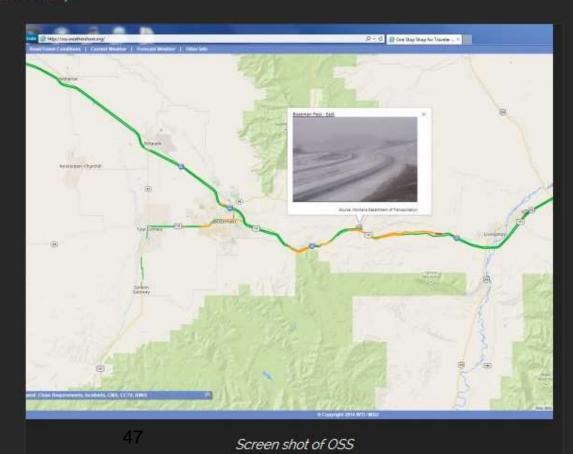
## Transportation Radio

#### Rural Traveler Information Site Grows

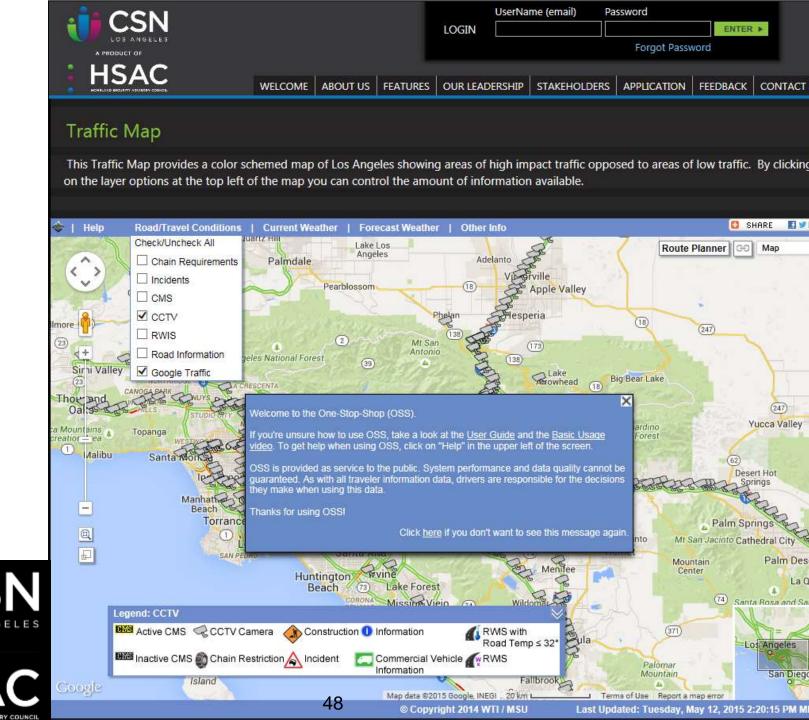
Posted on November 19, 2014 by brwagenblast

Just in time for winter weather, the One-Stop Shop for Rural Traveler Information now includes many of the states in the western lower 48. The site was developed by the Western Transportation Institute at Montana State University. We learn more in this report from Bernie Wagenblast.

#### Listen to story







A PRODUCT OF



#### One Stop Shop for Traveler Information

for situational awareness. Thanks for sharing! ↑ 1 · December 20, 2014 at 10:13am

If you're unsure how to use OSS, take a look at the User Guide and the Basic Usage video . To get help when using OSS, click on "Help" in the upper left of the screen.

OSS WEATHERSHARE ORG





KTVN Channel 2 News 2 shared US National Weather Service Reno Nevada's photo.

March 11 - @

There are no chain requirements on Donner Summit right now. For the latest road conditions, call 511 or go to www.ktvn.com.

You can stay up to date on weather in our area with our KTVN Storm Watch weather app.

The app gives you forecast information, like radar, storm tracking and more for any location in the country, all in the palm of your hand.

You can download it for free for your iPhone, iPad, or Android smartphone. Just search KTVN in the iTunes or Google Play Store.





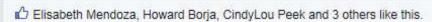




#### US National Weather Service Reno Nevada

Just wet over Donner Summit. No chain requirements at this time. Here is a great site for monitoring current road conditions and chain and snow tire requirements... http://oss.weathershare.org/#

Like - Comment - Share





Isolated snow showers have resulted in light accumulations on Highway 36 at Fredonyer Summit and Highway 44 at Bogard Rest area. Road temperatures in the low 40s have kept snow from accumulating on roads so far, but as seen in the webcam screenshots they are shiny and likely slick early this morning. Keep up-to-date on road conditions before you venture out for Easter festivities today! ( http://oss.weathershare.org/# )





Like - Comment

Linda Boegle, Jennifer Hiler, Colleen Gayle Price-Garcia and 48 others like this.



















### Turkey Day Sa

Hard to believe, but Thank filled with tasty food, festive safety concerns to keep in

According to the National caused by cooking accide than on an average day!

- Never leave your hom food is baking in the o Additionally, set an ov you don't burn your fo
- Keep young children away from the stove
- · Clear the floor in your from any tripping haza
- · Stay in the kitchen wh cooking on the stovet
- Avoid wearing loose of dangling jewelry while
- · Check the batteries in smoke alarms

#### Food Safe

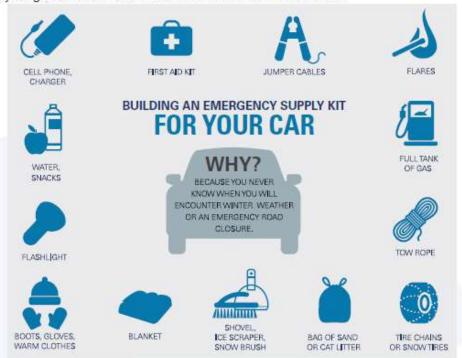
It's an American tradition t ourselves on Thanksgiving

- Cook your turkey until
- Avoid leaving food ou more hours
- · If you are traveling wi higher by wrapping in filled with ice.
- The 5-second rule is:

### **Holiday Travel**

If you are heading out to eat someone else's Thanksgiving feast, keep these travel safety tips in mind before you go:

- · Check road conditions frequently. Montana weather can vary drastically from one end of the state to the other. http://oss.weathershare.org/#
- Keep an emergency supply kit in your car for all members of your family:
  - · Heavy coat, gloves, hat
  - · Sturdy boots
  - · Blanket or sleeping bag
  - Extra water and food
  - Small shovel or scoop (you can also pop off a hubcap or the windshield visor and use it to scoop snow)
  - · Bright flagging or a flashlight to identify your location
  - First aid kit
- . Don't rush. Expect heavy traffic. Leave early so you don't have to hurry.
- Keep your gas tank full- no one wants to be stranded in a cold car.



#### One Stop Shop for Traveler Information

Another great traveler's link is oss.weathershare.org the One Stop Shop for Traveler Information (OSS), This website, developed by the Western Transportation Institute in cooperation with Caltrans District 2, contains road and weather information for California, Oregon, Washington, and Nevada, OSS utilizes a multi-state road conditions map including a planning feature that allows the user to indicate the start and end points of their trip and uses Google routing to find an efficient route.

For more information call the Public Information Office at 530-229-0511 or 530-225-3260.







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#### **New Feature**

Click on Columnists to access travelogues. field reports, advice. humorous tales and answers to your Q's!

Weather



Products-Services

Website of the Week







## **Medford Fuel**

HOME HEAT FUEL DELIVERY COMMERCIAL FUELING

Bill Terpening Click here for info! Now featuring Ethanol Free Clear Super

#### Caltrans warns drivers to be vigilant

10/22/12 -- Caltrans' Redding office is reminding motorists traveling in northern California to be vigilant regarding winter driving and be prepared on the roadways for possible changes in the weather or road conditions. With the current rain and snowfall prediction, now is the time to become familiar with the informational tools and tips available on the internet and to prepare for travel in the north state. The website links listed below have the traveling public in mind and are readily available on the Caltrans District 2 webpage.

#### District 2 Chain Control Map/QuickMap

At this website, motorists can keep track of changing conditions and plan a route of travel specifically within northern California. The Caltrans District 2 Northstate Chain Control Map includes the counties of Siskiyou, Modoc, Lassen, Shasta, Trinity, Tehama, Butte, and Plumas and has information on road conditions, chain control restrictions, and definitions of what the restrictions mean. Also available is the Caltrans Quickmap, which features the same traveler's information but includes statewide road information.

#### One Stop Shop for Traveler Information

Another great traveler's link is oss.weathershare.org the One Stop Shop for Traveler Information (OSS). This website, developed by the Western Transportation Institute in cooperation with Caltrans District 2, contains road and weather information for California, Oregon, Washington, and Nevada. OSS utilizes a multi-state road conditions map including a planning feature that allows the user to indicate the start and end points of their trip and uses Google routing to find an efficient route.

For more information call the Public Information Office at \$30-229-0511 or 530-225-3260.

Go Search

Click on ads for more info



## **ITS America Award**

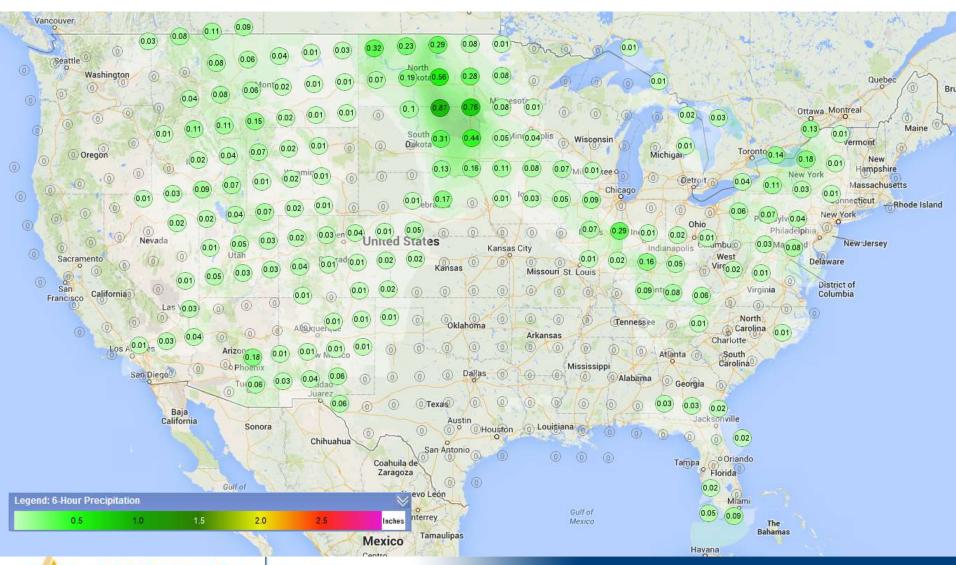
At the 2014 ITS World Congress in Detroit, Michigan, the One-Stop
Shop was announced as the winner of ITS America's Best of ITS Award for Best New Innovative Practice – Research Design and Innovation.

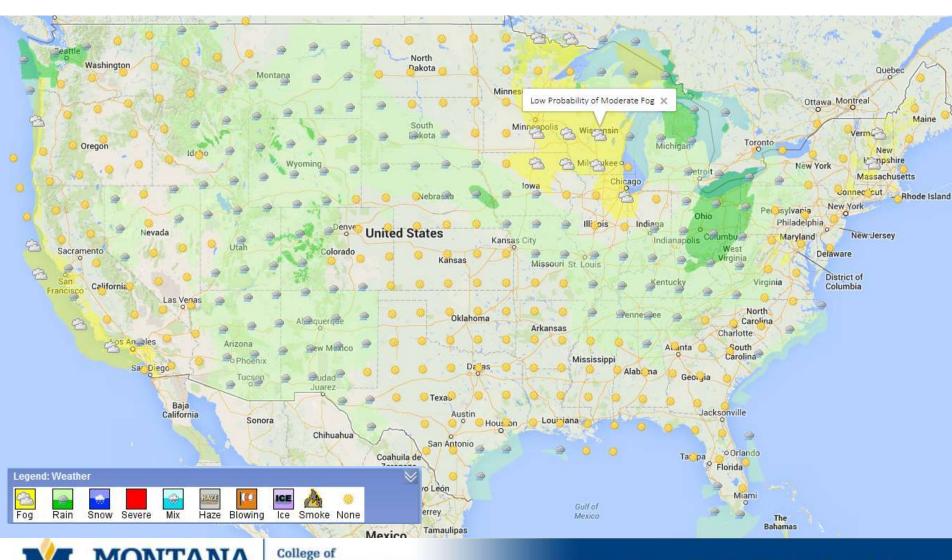


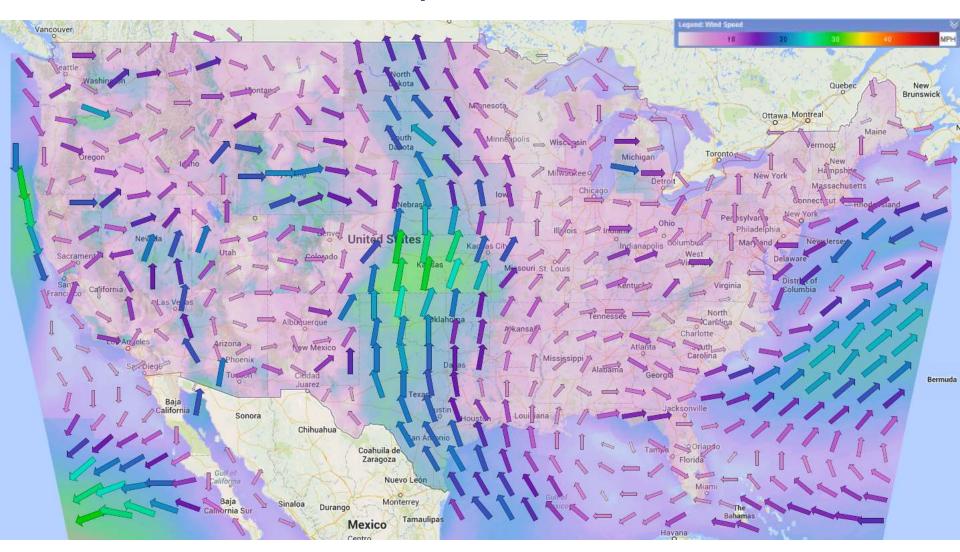


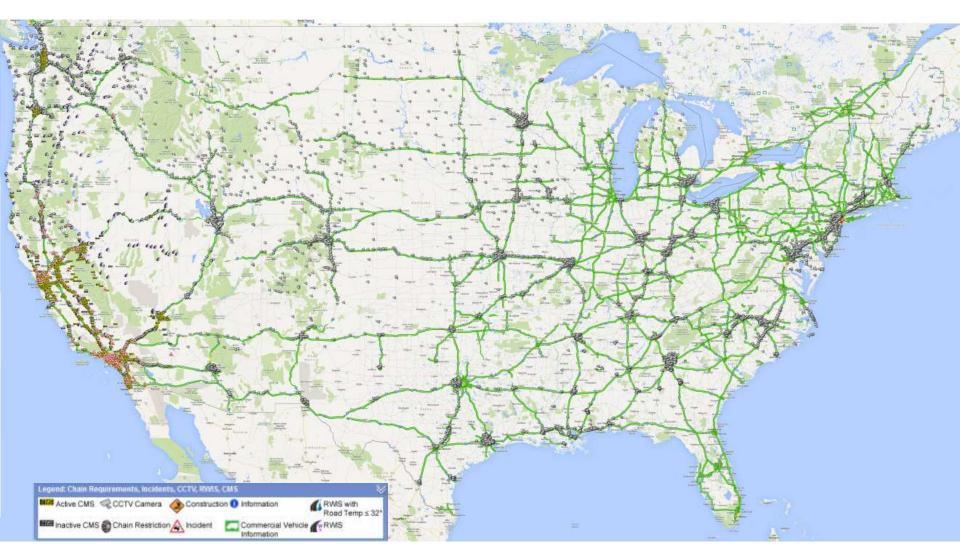
## Next Steps: Phase 3

- Add Missing Field Elements for Current States
- Add Layers : Fire?
- Address Mobile Use
- Expand Further?









## Acknowledgements

- Caltrans D2
- Caltrans DRI
- WSRTC
- FHWA Clarus
- WTI UTC
- David Veneziano



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Ian Turnbull
Caltrans District 2
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Ian.Turnbull@dot.ca.gov

## For Further Information see:

http://oss.weathershare.org

http://www.westernstates.org

http://www.westernstates.org/Projects/OSS/

