

I-80 COALITION FALL WORKSHOP

RENO, NEVADA September 27 – 28, 2011

WORKSHOP SUMMARY

The following provides a brief workshop summary of action items. The detailed summary and presentations can be obtained from the "members only" area on the I-80 Coalition website.

www.I80coalition.com

Username: memberi80

Password: 1snowplowi80

ACTION ITEMS

General Coalition Action Items

- Update 2-page Coalition white paper provided on website
- Organization of the Coalition (develop a formal agreement to work together)
- Update the Coalition website to include more graphics and current news (especially during winter)
- Provide more frequent communications/updates via new I-80 Coalition e-mail address
- Topics to be discussed during the Spring Webinar include:
 - Results of the IMO/NCAR project
 - Update from UDOT on products that are coming out this year for traveler applications
 - Task Force updates
- Formation of two new task forces:
 - Data Sharing focus on what types of information would be beneficial to share between states as well as using additional data from trucking companies or others to benefit operations
 - Traveler Information particular focus on corridor-wide traveler information, and looking at feasibility of One-Stop-Shop type concept
- There may be the opportunity to compete for federal funding. There currently is no agreement, charter, or MOU in place. Start by looking at the I-15 agreement.
- Identify projects for federal funding and categorize them by project type.

Weather Task Force Action Items

- Finalize Road Weather Operations Plan
- Provide the Coalition with a template and best practices for an RWIS Strategic Plan
- Provide Coalition with a template and best practices RWIS Maintenance Plan

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 Prepare a webinar for the staff at the TMCs to listen to how each TMC in the Coalition is doing something different with weather and to discuss weather topics. Possible topic could be how to switch from a private system to open architecture.

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 Leverage the prepared list of questions on "What to ask your meteorologist" before and after a storm to enhance communications with NWS and other TMCs – provide additional

TMC Task Force Action Items

- Develop a process for coordination before events leverage what NW Passage has done.
- Continue to have coordination calls before and after major storm events
 - Add nighttime shift coordination calls
- Establish webinar for each state to go into detail about what their TMC can do and how they can support each other
- Establish consistent DMS and traveler information messaging (coordinate with new Traveler Information Task Force)
 - Document existing messages used along the I-80 Corridor in the process of collecting messages
 - Review the Federal Guidelines on standardization of messaging expected to be released in October
 - Develop standard messages regarding wind/speed, and other weather indicators

Freight Task Force Action Items

- Include others in the Freight Task Force, such as state trucking associations and/or private sector
- Preparation of article on trucking and work to get it published in state trucking association magazines
- Outreach to state trucking associations, including attend local trucking association meetings and present on the Coalition

Name	Agency	Name	Agency	Name	Agency
Bill Thompson	NDOT	Mike Fuess	NDOT District 2	Mark Wingate	WYDOT
Chris Joncas	NDOT	Thor Dyson	NDOT District 2	Vince Garcia	WYDOT
Coy Peacock	NDOT	Kevin Lee	NDOT District 3	Glen Taylor	CR England
Denise Inda	NDOT	Michael Murphy	NDOT District 3	Bob Cunha	FedEx
Eric Glick	NDOT	Steven Kirkpatrick	Caltrans	Marv Caton	FedEx
Heather Manzo	NDOT	Sean Campbell	Caltrans	Mike Chapman	NCAR
John Wells	NDOT	James McGee	NDOR	Rhett Milne	NWS
Lisa Schettler	NDOT	Daniel Kuhn	UDOT	Rod Schmalhaus	Wal-Mart
Mylinh Lidder	NDOT	Leigh Jones	UDOT	Lisa Burgess	Kimley-Horn
Tom Moore	NDOT	Richard Clarke	UDOT	Deanna Haase	Kimley-Horn
Sondra Rosenberg	NDOT	Jeff Frazier	WYDOT	Molly O'Brien	Kimley-Horn
Dave Titzel	NDOT District 2	Mark Eisenhart	WYDOT	Ralph Patterson	Narwhal Met

ATTENDEES



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DETAILED MEETING SUMMARY

All PowerPoint Presentations are available on the "member's only" area of the I-80 Coalition Website.

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1. STATE DOT PRESENTATIONS

Each state provided presentations to update the Coalition partners on activities that have happened in their state since the October 2010 meeting. Discussion and topics are provided below. It is important to note that all states provided feedback that inclusion in the Coalition has benefited their state over the last year.

California

- Provided a handout summarizing the winter operations from last winter (2010/2011). There were 818 inches of snow on Donner Pass last winter.
- Reported tremendous benefits from the Coalition through enhanced partnerships with the neighboring DOTs. The Coalition meeting allowed Caltrans to make personal contacts which helped with coordination throughout the winter.
- There were quite a few closures over the winter. In March there was a seven hour closure. During the filming of the American trucker program, there was a 45-vehicle pile-up and one fatality.
- Caltrans is continuing to partner with NDOT/NHP.
- Caltrans had CHP man the chain control areas which resulted in more successful enforcement of chain control and decreased downstream crashes.
- There were 250 temporary workers hired last winter. There are plans to hire another 250 temporary employees for this coming winter. They are currently training winter employees for this season.
- Over the summer there were new paving projects along I-80.
- There have been on-going projects to rehabilitate the sand houses along the corridor.
- Kingvale will be operational on November 1, 2011.
- Caltrans is continuing to enhance CMS along the corridor. Caltrans has 36 CMS, 3 of which are located in Nevada.
- There have been challenges with orders to reduce equipment statewide, which would impact the ability to keep I-80 clear over Donner Summit. The Department of Tourism and ski resorts were

concerned about keeping routes open. Caltrans was able to discuss their concerns about the reduction in equipment for maintenance along I-80. As a result, there has been a hold on reducing equipment.

- Caltrans is trying to leverage the I-80 coalition to their advantage, and trying to get the Legislature to look outside of California to see the benefits and enhance resources to maintain this critical stretch of I-80.
- The ski industry could be a future stakeholder/member of the coalition. CA provides 25% of the nation's food. Agricultural companies or ports could be added stakeholders.
- Pursuing new equipment, such as tow plows that other states are using.
- Need to focus on the mission to improve goods movement along I-80.

Nevada

Nevada District 2

- There are still truck parking issues along I-80 when there is a hold in Donner's Summit. NDOT is researching leasing parking areas at failed truck stops in key locations: Boomtown, Fernley, and Trinity. Caltrans has HAR 2 miles into Nevada. There is a 20 minute life expectancy of parking in the Reno area. In addition, the Reno zoning laws will not allow truck stops to have more than 200 spaces.
- NDOT now has their cameras available on the web could potentially be shared with other members of the Coalition if desired. The system is ICX.
- NDOT has separated the IT system from the ITS network, which has allowed the opportunity for advancements in ITS that previously could not be completed due to firewalls and access to webbased systems such as NWSChat.
- Nevada is looking into the purchase of two new tow plows. If Nevada buys them, they could save \$55 per hour over the equipment they use now. With increased usage of the new tow plows, the per hour savings increase.
- NDOT is conducting research for brine on corrosion inhibitors.
- Over the past year, NDOT has acquired new sweepers and brine tanks.
- Nevada has been coordinating with Caltrans at their pre-season meeting in Kingvale. In addition, there have been pre-event and post-event debrief meetings.
- There are new ITS devices on I-80 as part of the Design Build in Reno. Currently there are technical issues with video to web for the general public, but Nevada will look into giving access to other agencies.
- iPads were supplied for the I-80 Design Build project which access the ITS software managing their ITS devices along I-80 for remote access/viewing. iPads are believed to be the future for 511 reporting.
- During winter storms, Caltrans provides NDOT with their best guess on how bad the storm will be, and NDOT strategizes on what DMS information to provide to the public.

Nevada District 3

Nevada District 3 has conducted several wildlife safety projects. The wildlife safety projects are not located on the I-80 corridor.

WINTER OPERATIONS COALITION

NDOT partnered with the Nevada Department of Wildlife (NDOW) to design and construct these
wildlife safety improvements. Prior to the project, they were not tracking wildlife hits and/or
locations of the hits. NDOT and NDOW started tracking location, species, and gender.

Salt Lake City

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- NDOT and NDOW conducted a test project on a two lane road. The test project was on US93, 12 miles north of Wells. This crossing provided exclusionary fences.
- They ultimately built three under crossings using pre-cast boxes being completed this year.
- Future crossings are in design along I-80 on Pequop Summit and two more along US93.
- NDOW has satellite tracking of 20 deer. Cameras installed in the area took 70,000 photos in one migration period. The crossings appear to be successful thus far, although they need three years of data to show statistical significance and long-term success of the project.
- Still tweaking/modifying the design of future crossings based on lessons learned.

Utah

- Utah is adding to its tow plow fleet. They will have 6 this year, and hope to add 2 per year. Tow plow drivers attend a special tow plow school.
- They are continuing to add remote CCTV cameras on I-80. The newest installations are near Evanston.
- UDOT has continued to pre-wet the salt before it goes down. They find this is more effective at keeping the snow off the roads, and they use less salt overall using this method.
- They are taking a strong look at the current snow plan and looking for areas where they may be able to cut back. These items include closing mountain areas earlier in the season and opening later in the spring.
- Parley's Canyon has always been a bottleneck along the corridor.
- Last winter was a tough winter there were areas with 300% to 700% more snow.
- This coming winter they are trying a triple blade for the first time. Utah will provide an update on the use of this equipment at the next meeting.
- UDOT is very pleased with what happened last year as a result of the Coalition. There is a need to continue to communicate between the neighboring states on I-80.
- There is a \$3 billion dollar corridor expansion project on I-15 that should be completed in December 2012. The I-15 project has had great communication with freight community.
- Equipment is bigger than it used to be and the housing for the equipment has not changed. Even during these times, UDOT has been able to rebuild a new station each year down from rebuilding three stations per year.
- UDOT is conducting in-house winter severity index (red, yellow, green) to determine if there are opportunities on saving money during the winter.
- UDOT has a dedicated traveler information meteorologist to provide road weather forecasts. These forecasts are available within the DOT. Road conditions will be based on the "red/yellow/green" severity index.
- UDOT is developing an iPhone application to provide 511 weather information to travelers.
- UDOT is pushing AVL across the corridor right now AVL trucks are just located in Parley's Canyon (mobile observations) to cover the commuter route between Salt Lake City and Park City.

WINTER OPERATIONS COALITION

- UDOT continues to work more and more with NWS.
- UDOT manually transforms the information from RWIS to DMS. In high wind conditions, they just post wind speed and let drivers self-enforce. They could provide advisories based on wind speed and vehicle weight.
- CR England can send the wind speed information to truck drivers in the area. They are trained on
 wind speed and vehicle weight. Operators know the weight of their truck and can make an
 informed decision if the wind speed is conveyed to them. If DMS provide information on
 sustained winds and wind gusts drivers could receive really good accurate weather information.
- CR England has a weather desk intern that receives 50 to 100 calls a day, tracks truck locations, and provides detailed information on weather in the drivers' area.

Wyoming

- As with the other states, Wyoming had a big winter. They received 2 to 3 times more snow than average years. During the spring, flooding and landslides were a problem as well.
- 511 used to receive approximately 1.9 million phone calls per year. This was costing a significant amount of money. WYDOT now uses govdelivery to provide unlimited texts and messaging. As a result, 511 phone calls are down to 1 million per year which has lowered the phone bill and increased customer service.
- The trucking industry noted that they would benefit from 24 to 48 hour forecast along with information on when the road was previously plowed.
- Wyoming has a new website (by login only) that has information on wind, visibility, and snow at 12, 24, 36, and 48 hour increments. WYDOT has been in contact with Wal-Mart since the last Coalition meeting to establish that sharing weather forecasts with the freight industry and providing the automated vehicle location information for snowplows would be beneficial. This system is initially planned to be shared with Wal-Mart, although FedEx and CR England in attendance at this meeting could contact WYDOT to receive the information as well.
- As a result of the success that Wyoming received through its citizen assisted reporting, Idaho will be adding a citizen assisted reporting. Developing an online system is the next step.
- Wyoming still has its WYDOT Authorized Travel (WAT) program where citizens can apply for permission to travel during winter restrictions. This system is only available on lesser traveled roads (i.e. not I-80 or other major interstates).
- Four variable speed limit signs will be in effect along I-80 shortly. The two inner projects are already implemented. Ultimately, 35% of I-80 will have variable speed limit signs once the 4 projects are completed later in 2011. WYDOT uses speed sensors in the road to determine when to raise and lower the speed limits. Raising the speed limits back to normal is VERY important to the success of the system.
- AVL will be installed in all plows for the 2011-2012 winter season.
- WYDOT has an in-house road weather forecaster.



Nebraska

- NDOR has 8 Districts along I-80.
- Nebraska is home of the world's busiest railroad corridor, and second busiest state in freight traffic.
- On I-80, 0 to 2 hours of delay is a local/state incident. After 2 hours of delay it quickly expands to a multi-state road incident/closure.
- NDOR is trying to teach staff the benefits of NWS chat, and e-warn.

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- The stages of incident management are the same for weather and incidents. NDOR is trying to teach fire department general tapered traffic control information to better control traffic during incidents. There were 6 people killed outside of their cars on I-80 last year.
- NDOR provided additional information on their TIM coalition <u>www.tim.nebraska.gov</u>.

2. USDOT/FHWA ROAD WEATHER MANAGEMENT PROGRAM UPDATE

- Gabe Guevara provided an update by phone.
- FHWA is very interested in the I-80 Coalition and its partnerships. FHWA is focusing on stakeholder information, research and development, RITA, dynamic mobility applications, and weather responsive traffic management.
- There are many links on the FHWA website such as NCAR and MDSS guides.
- The Clarus program created a database to host RWIS information from the state and host the data from mobile probes and make this information available. They just finished five regional demonstrations, and the formal publications still need to be finalized.
 - 37 states are connected to Clarus with 50,000 total sensors.
- There are 81 Minnesota snow plow vehicles sending information to Clarus.
- NDOT is adding the vehicles to Clarus this year as part of NCAR.
- A rural traveler information project, the One Stop Shop project is being completed. The purpose of the project was to display multi-state Clarus data on one website as well as other information.
- Gabe provided a handout that will be distributed to the Coalition members.

3. IMO/NCAR UPDATE

- There are more fatalities from driving in bad weather than all other weather events that occur in communities (hurricanes, tornados, lightning, etc.), yet so little money is used for research on road weather versus the other types of weather research. Maybe we can change this. The NWS does not track road weather related deaths.
- In-vehicle communication has progressed rapidly in the past 10 years. Many items needed to obtain weather information are already included in the vehicle (windshield wipers, traction control, speed, temperature, etc.)
- If we can get observations, how do we manage the data? Build software that can start managing the data. One of the problems can be the accuracy and quality control of vehicle data.
- There is a need to create a multi-staged software based on the end user:
 - Stage 1 receive all of the raw data, unorganized



- Stage 2 receive all of the data, but still needs to be organized
- Stage 3 end user would be private sector/apps (precipitation, visibility, pavement conditions)
- NCAR is trying to partner with driver behavior studies because they have a lot of the weather information.
- Only a few states expressed interest in IMO/NCAR project: Minnesota and Nevada (and Utah).
- Nevada (and Utah) were chosen. The major difference between the two is that Nevada does not have cell coverage and the fleet is different (different information will be available from different manufacturers):
 - 10 plows, 10 medium duty trucks were equipped (split between Reno and Elko area).
 - UNR is working on data transferring so it does not bog down the system.
 - The data that is currently being gathered is general data including: road surface temperature, pressure, temp, humidity, dew point, speed, brake status, engine intake air temperature and pressure, spreader and plow status.
 - There are future plans to partner with others regarding integration with MDSS, MMS, TIS, and possibilities for other add-in sensors
- Utah has been included in the NDOT IMO project NCAR would like to extend the project into other Coalition states.
- This information will be assimilated into a pavement model. They can run a point forecast at all RWIS locations. Initial results show that this pavement prediction is much better in the winter versus the summer. Right now they only know the default structural information of the road. The model could be better with better information. In the future there are plans to look into the difference in pavement prediction based on different pavement types.
- There are more applications: numerical weather modeling, traffic modeling and alerting, weather modeling over complex terrain, and other users (rail, airports).
- CR England mentioned that they may be able to share their on-board data with DOTs. This data would need to be made generic in a system. Potentially Wal-Mart vehicles as well. FedEx does not track their vehicles in real-time and therefore does not have data to offer for these purposes.
- It would be good to get ask for transit data as well need to initiate that conversation from the DOT perspective.
- The group may want to consider a subcommittee to talk a little more in-depth about the project. Denise Inda has already set up a call for the following week to initiate the conversation.
- What information can NCAR get that would be helpful, and would not compromise freight operations
 - Fed Ex does not have real time data.
 - CR England uses QualComm and gets real-time data.
 - Wal-Mart uses QualComm, and is willing to share information.

4. TASK FORCE UPDATES

Weather Task Force Update

- Ralph Patterson toured the corridor and met with stakeholders.
 - NWS Chat is set up in all states (except Caltrans and Elko still need to get set up).
 - During the site visits, a weather related TMC assessment was conducted.
- There are 3 main weather related focuses: maintenance, TOC operators, and commercial drivers.
- Completed tasks include:
 - Set up NWS Chat at DOTs.
 - Prepared draft Winter Operations Plan.
 - There is a designated weather manager at each I-80 Coalition TMC now point person for weather task force initiatives.
- Upcoming tasks include:
 - Identify performance measures for weather operations.
 - Planning trips during winter events to observe and evaluate operations.
 - Develop best practices for RWIS-ESS (maintenance, metadata, deployment, training).

Freight Task Force Update

- There was one conference call since last year's meeting.
- Currently developing article for the state trucking magazines. The article will focus on specific I-80 information for each state. Article will be a good avenue for the Coalition to reach out to the freight industry.
- Fed Ex worked with Colorado Trucking Association on I-70. Maybe there is the possibility of adding trucking associations to the list of I-80 Coalition stakeholders/partners.
- There could be the opportunity to prepare a stock presentation on the Coalition for each trucking association.
- Trucking Associations are generally more involved in policy versus day-to-day operations both perspectives are important.
- Want to continue private sector involvement in the Coalition involve UPS and Swift in future conversations as well.

TMC/Communications Task Force

- Created a running list of activities that have happened since the last coalition reviewed that list with group.
- There was a very successful pre-event and post-event conference call, and it is important to keep an updated call list.
- The contact information map provided by the Coalition was very useful.
- As a group, it is an important connection to establish to just get on the phone and call people at neighboring TMCs.

- The group started sharing materials such as TMC operations manuals, policies/procedures, DMS messages and meanings for each state, and a specific list of TMC contacts for peer-to-peer collaborations.
- Next steps:
 - Webinar for what TMCs can do and can support Spring 2012.
 - Process for coordination before events leverage NW Passage information.
 - Continue calls before and after storm events Coalition members to initiate.
- Need to start investigating the maintenance dispatch versus the traffic operations side.

5. ROAD WEATHER OPERATIONS PLAN

- The road weather operations plan was e-mailed out prior to the meeting. This plan provides summaries of what each of the TMCs are doing in relation to weather management and operations.
- DOTs were recommended to have an RWIS deployment plan, maintenance/calibration schedules, administer datasets, and develop an open architecture. Should look at RWIS similar to ITS when it comes to planning and maintenance, rather than deploying RWIS whenever it is convenient to add one to an existing project.
- DOTS were recommended to manage their system and put the road information out for the public. When sending information to the public, use icons that the NWS provides for consistency.
- During events, a consistent message needs to be conveyed throughout all information outlets using consistent weather descriptors.
- It is beneficial to have a storm event management plan. The number of crashes from weather conditions can be planned for knowing where problem spots are and archiving storm information in a database can help with this planning.
- There are 12 weather forecasting offices and 2 NWS regions along the I-80 Coalition states, in addition to multiple private sector weather companies.
- Knowing who the forecaster is for each state by name is important for communications.
- Involve PIO in weather information.
- If the group is looking for training recommendations, COMET offers free training.
- All universities along the corridor are doing road weather research look for opportunities to find research for the Coalition benefit.
- Next steps:
 - RWIS-ESS deployment plans, maintenance guidelines, metadata storage
 - TMC Operations optimize weather operations, identify weather manager, develop performance measures
 - Traveler Information common language across the states, no discrete jumps across state borders
 - Field Personnel (Maintenance and Construction) develop support methodologies for personnel

6. UNIQUE WEATHER AFFECTING THE CORRIDOR

Nevada Wind Warning System

- When there is a wind event in the Washoe Valley, trucks are detoured to SR-429.
- With the construction of the Galena Creek Bridge, Nevada is reinvestigating its existing wind warning system. The new I-580 and Galena Creek Bridge will be windier than the existing route along 395.

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- When the existing system was installed in the 1990s, it was a state of the art system, and many DOTs base their systems on studies performed by NDOT.
- The existing wind thresholds are quite conservative leading to a lack of compliance. There is also a 20-30 minute lag in the weather data, and they leave the message up for 20 minutes past the event. In addition, there are complaints from locals when trucks are rerouted on SR-429 and Eastlake Boulevard.
- It is in NDOTs best interest to let as many trucks through as possible while keeping the road safe for all users.
- As part of the study, a survey was conducted regarding the existing wind warning system. The public wants better information (wind speeds) well before the Washoe Valley.
- The new system will have new algorithms for wind speed along with more RWIS sites to forecast wind. In addition, there is a proposal to change the philosophy regarding factor of safety, and will increase the range of notification.

Wyoming Wind System/Automated Gates/Variable Speed Limits

- In 2008, the legislature allowed variable speed limits. Signs are now located on shoulder and in median.
- There are two different sign technologies:
 - Scrolling tough to maintain, lots of parts that can break in the wind.
 - LED simple and reliable, but requires power all of the time.
- The purpose of VSLs is to tighten the speed distribution, and have a speed that is conducive to the actual conditions.
- WYDOT uses the stopping sight distance to determine the posted speed. The return to normal speed limits is very important.
- Changing the speeds is a manual process, but is completed remotely at the TMC.
- Since installation, there has been a 50% reduction in truck crashes. This is based on only 2 years of data, and in the future, it would be good to couple this information with the winter severity index.
- There are two corridors in Wyoming that are prone to blow overs. The terrain in these areas contributes to gap winds, especially in the spring and fall.
- WYDOT can close the road to light high profile vehicles (C2LHPV). There is a closure to light high profile vehicles when wind gusts 65 mph or there is a single blow over. Anytime wind gusts above 70 mph, there will be blow overs. Raised the threshold for light trailers "Advise No Light Trailers 50 MPH".

- Uses windmill information for better automated forecasting, not wind speeds on the road level.
- There are automated road closure gates on I-80. They are operated by remote control, push buttons, TMC, or crank down. There are flashing beacons with warnings in advance of gates.

7. WEATHER TRAINING AND NATIONAL WEATHER SERVICE DEMO

At the beginning of the presentation, a summary of "Questions to Ask Your Meteorologist" was distributed to the group.

- During a weather event it is important to have lots of communication with the operations and winter maintenance personnel.
- Need to know how to use tools and forecasts. Never just ask "What's the forecast?"
- Keep communicating with meteorologist during the storm. In some places the storm has more impacts after the storm is finished (i.e. Wyoming blowing snow).
- There are instant messages from Caltrans to public during events, including real time information on chain controls.
- Caltrans is conservative at times It's hard to say how conservative they are estimates.
- Need someone who is looking at all of the weather information not an operator that has other duties to focus on as well. Operators can provide valuable information on what is going on with road conditions.
- The media is your voice tell them what to say or they will say what they want.
- NDOR mentioned that Webinars have helped their maintenance staff.
- Could train foremen for the crew areas as a refresher course.
- UDOT mentioned that in-house forecasters put out a maintenance specific forecast to their DOT personnel. They put out a "red, yellow, green" severity index that will be offered to the public in the future.

NWS Demo

- Ask "If this forecast doesn't pan out, what's the next most possible outcome?"
- NWS is coming out with a new doppler radar. It is a dual-polarization doppler radar that sends out two bands. Now we can get size and shape, which can tell the difference between snow, rain, and hail. Following is the roll out on I-80:
 - Riverton November 20, 2011
 - Salt Lake City October 15, 2011
 - Cheyenne November 20, 2011
 - Sacramento next June
 - Elko/Reno next fall
- NWS is working on weather service travel route forecasts.
- Trucking companies can potentially ask to get involved with NWSChat (which is currently a public-agency-only tool) if there is a dedicated emergency management person rather than a dispatcher that can be the point person for NWS at that company.
- NWS gets lots of calls regarding road conditions, and they refer people to DOTs.

• NWS is looking for DOT feedback to confirm what is happening on the ground to be able to compare that to what the NWS forecast said would happen.

Salt Lake City

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- NWS will be visiting with DOTs to determine the road segments to be put into the system. NWS will roll out the system by office.
- NWS could communicate with someone physically in the operations office. Field to TMC-to NWS and on-staff meteorologist.
- NWS in Wyoming can hear all of the interaction between the TMC and operators via a dispatch radio, and they are trying to get more information from the field back to the NWS office.
- CR England wants drivers to update them on weather. The information goes to safety department, and goes to other drivers in the area.

8. TRAVELER INFORMATION

- The new NDOT 511 system will be in place in April 2013.
- WYDOT is focusing on commercial vehicle updates.
- UDOT is working on making its internal traveler information application public. The commuter link application is more streamlined for the public, new updates working on roll out before winter. The 511 system will be updated to include more areas and special events (football games, etc.).

One Stop Shop

- In 2009, formed the WSRTC Western States Rural Transportation Consortium (a pooled fund program): WA, CA, OR, NV.
- The ICM project integrated corridor management for major highways, usually in large cities, looked at I-5 in CA and OR, and tried to integrate the two and get both agencies talking together. They looked at combining field elements, lane closures, weather, and travel advisories into one location.
- The One Stop Shop project has a one year contract with Clarus to integrate the data. Phase 1 was completed in September 2011, and they are now moving on to Phase 2.
- The site receives data from DOTs and published data as well as Clarus. The data is not standardized across the region. They are still working to integrate the Nevada traveler information data.
- This is very useful because freight needs to pull up information on each state individually. They are looking to prepare the system for wider use.
- In Kansas City, a person in the TMC gathers information, inputs data into the system, the application is turned on, and is pushed out audible alerts based on normal travel routes. Pennsylvania has a similar system.
- Maybe they could roll out the One Stop Shop in its own pooled fund for other states to join.
- The website is open to the public, and there is a survey question on the top of the page.
- Are there other needs of corridor?
 - Add a profile of the elevation if possible, with red, yellow, green overlays.
 - The freight industry could have a link to this to help drivers.

 Thus far the general public feedback has been positive – providing boundary-less traveler information has been helpful and beneficial. Some negative comments are that there is too much data. As a result they are looking into a new feature to zoom into current location, then the user can choose to expand to a larger region.

Salt Lake City

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- WSRTC is in conversations to push to Google but not sure if it is the right market yet more reliable in urban than in rural areas.
- There is a steering committee meeting in February they would like some feedback from others in the group Coalition members to provide feedback if possible.

9. FREIGHT CHALLENGES

Utah I-15 Truck Parking Survey

- There was a FHWA 1999 study that was released in 2002, which is what the fed government is basing truck parking information on.
- UDOT conducted the I-15 survey in August 2010.
- As a result of the study, UDOT created a visor card with truck parking locations.
- They would like to build more parking spaces (truck stop, rest area).
- Longer combination vehicles need parking too.
- As part of the study, UDOT estimated the truck supply, divided the I-15 corridor into 3 segments, and needed to determine how to account for parking supply.
- Trucks do not like to park at ports of entry.
- The study created contour maps to get optimal driving distance for 11 hours to determine where to stop and provide parking. They also investigated supply/demand ratios for existing and future (2040) conditions. This information could be shared with truck stop companies in strategic segments along the corridor to spur development interest.
- Nevada challenges with truck parking are development law and use permit locations.
- *Truck Stop Finder* best information available through standard publication. Many drivers plan their trip based on available parking and information contained in publications like this.

Private Sector Freight Input

- Almost all drivers have cell phones it would be helpful to have some sort of application that they could put their route into to get information on their route and plan their trips.
- Fed Ex mentioned that knowing the wind speeds helps for planning and putting together their different combinations of vehicles (double versus triple loads).
- Wal-Mart mentioned that there were lots of open ended conversations last year. There have been lots of advancements since last year, but there are still many more to come. Wal-Mart is dialed into what happens at a store because of weather and maybe this can be adapted to the road and drivers.
- Freight wants to know who to call or how to find out the information about weather impacts and impact questions.
- An emergency support functional role is the best option for NWS information to be open to freight.

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 - With the proper information freight companies can keep trucks off the road, resulting in a better/safer road.
 - Would it help for a trucking agency have the support of a DOT? Yes.
 - If the trucking industry knows there is a problem and they are able to avoid the situation.
 - DOTs could convey the information from the NWS to the trucking industry.
 - The biggest problem with winter storms is playing a guessing game with launching drivers at the right time to get them over when it's open.
 - Most larger carriers know that during weekends the ski resorts own I-80 and on the weekdays trucking owns I-80.
 - When a decision comes about a road closure, it is challenging for a hub and spoke freight distribution situation.
 - Communication is the key for long haul trucking.
 - CR England has some customers that do not route over I-80 during the winter. This is the choice of safety or freight along the road.
 - CSA 2010 is a measure of safety based on the hours of drivers the better their score, the easier they can move along the highway.
 - There can never be too much information or communication. Every CR England truck has a Qualcomm information pad in the truck, information can be given to trucks well ahead of the game. Having information on the road keeps them moving, drivers are paid by the mile, not the hour. Customers and drivers in the industry are aware of construction issues.
 - When the NWS issues a severe weather warning CR England sends this information to the trucks in the area.
 - It is important to note that truck drivers are good communicators with other truck drivers. They are sharing information with each other on the road.
 - The major benefit for freight and the I-80 Coalition would be for the companies to let us know what information they use and find the most useful way to transmit the information, and follow up with feedback.
 - Safety of freight impacts the safety of everyone.

10. COLLABORATION

- It would be helpful to conduct webinars at the end of major projects to share information from DOT to DOT. Also, conduct webinars to share specific information that is relevant to the Coalition (freight, projects, and weather).
- Create a general e-mail address to distribute information through the corridor.
- Provide a monthly e-mail blast/newsletter.
- Update the 2-page summary on the coalition to quantify the benefits of the Coalition.
- Providing a summary of how the TMCs are now working together would be a good addition to the white paper.
- Solicit additional feedback from trucking associations and companies and find out if there are local trucking association meetings to attend.
- Adding in some additional webinars would be a good avenue to share information effectively. The audio and video for webinars would be taped and archived on the website.



- Continue with one face-to-face meeting, one end of the season webinar in the spring to follow up on the season, then updates on each task force throughout the year through a monthly emailed newsletter.
- Leverage UDOT-U (UDOT University) for developing classes that could be shared with the Coalition.

11. ORGANIZING FOR SUCCESS

- Involve state communications groups and additional I-80 stakeholder identified previously in notes (trucking associations, tourism, PIOs, agricultural companies, ports).
- There may be the opportunity to compete for federal funding. There is currently no agreement, charter, or MOU in place for this I-80 Coalition. Start by looking at the I-15 agreement.
- Identify projects for federal funding and categorize them by project type.