



# Northwest Safety Data Peer Exchange

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Boise, Idaho

Summary Report



U.S. Department of Transportation  
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<http://safety.fhwa.dot.gov>

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# 1 Background and Key Takeaways

The Federal Highway Administration (FHWA) Office of Safety sponsored the Northwest Safety Data Peer Exchange in cooperation with the Idaho Local Technical Assistance Program (LTAP) in Boise, Idaho, August 15-16, 2012. The Idaho LTAP Center requested the peer exchange through the Local and Rural Road Safety Peer Assistance of the FHWA Roadway Safety Peer-to-Peer (P2P) Program.<sup>1</sup> The Roadway Safety P2P provides technical assistance on policy, program, and technical issues across a broad range of roadway safety topics. The program is designed to help agencies develop and implement effective strategies and programs that reduce roadway fatalities and serious injuries on public roads.



An effective local road safety program needs to be data based/supported. While each State's safety data practices may be different, the processes and tools used by each have the potential to enrich the program of others. This peer exchange provided a forum for attendees to share information on safety data collection, analysis, warehousing, and access to improve existing data practices and safety on local roads.

Goals of the peer exchange included the following:

- Identify data and analysis tools that can be used to improve safety on local roads.
- Identify and discuss project selection methodologies for States.
- Identify effective partnerships for the collection, access to, and analysis of data for development of an efficient local road safety improvement program.

## 1.1 Methodology

There were 39 participants representing FHWA, the Bureau of Indian Affairs (BIA), State DOTs, Local Technical Assistance Program (LTAP) Centers/Tribal Technical Assistance Program (TTAP) Centers, and local and tribal representatives from California, Idaho, Nevada, Oregon, Utah, Washington, Illinois, Louisiana, and Minnesota were also in attendance to share their States' noteworthy safety data practices.

The peer exchange was in the form of a workshop. In order to assist attendees with garnering information to help their program and/or provide solutions to consider for improving their program, the agenda provided a mix of presentations, facilitated roundtable discussions, and breakout sessions. To provide a basis for the two days of discussion, FHWA provided presentations on (1) HSIP policies and requirements and (2) using and improving safety data highlighting optimum data needs for a safety program. Each State was encouraged to share their noteworthy practices and innovations as well as challenges and barriers experienced through the implementation of their local road safety program via

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<sup>1</sup> For additional information about the Roadway Safety Peer-to-Peer Program, visit <http://rspcb.safety.fhwa.dot.gov/technical.aspx>.

brief presentations. Three States outside the northwest region were identified as having noteworthy safety data practices involving LTAP/TTAP Centers and local agencies. These States were invited to the peer exchange and presented on their safety practices that have led to improvements in local road safety. Other presentations focused on data tools and included a presentation by Thurston County, WA, which is serving as a pilot test agency for the Systemic Safety Project Selection Tool.<sup>2</sup> The facilitated discussions allowed participants as groups to focus on specific topics – existing data analysis tools and their capabilities and benefits. For each of the breakout sessions, the attendees were divided into three (3) groups consisting of a mix of State DOT, LTAP/TTAP, local and tribal areas. The members of each group changed with each breakout session to allow attendees to hear from different individuals and/or exchange information in a small group setting. At the end of the peer exchange, attendees spent time developing State/Tribal Action Plans. These action plans were shared with the group and follow-up is expected in the future.

## 1.2 Peer Exchange Takeaways

An analysis of the discussion notes showed that attendee comments were routinely focused in four (4) areas. These themes emerged as attendees discussed their challenges and the strategies that can be implemented for a successful local road safety data program. The following key points were identified as major peer exchange takeaways.

1. It is much more useful to local and tribal agencies if the raw crash and roadway data is accompanied by an interpretation and recommendations for remedial action. In general, they do not typically have staff capacity/expertise to access and analyze the data.
2. Surrogate measures of risk on the local and tribal system can help alleviate the issue of a lack of inefficient data that may prevent appropriate data analysis that can lead to safety improvements on local and tribal roads.
3. Systemic approach to countermeasures implementation within a corridor or jurisdiction should be considered when specific crash location information is not available.
4. Smaller agencies can jointly pool funds to install similar, crash mitigation strategies across multiple jurisdictions using a systemic approach.

## 2 Peer Exchange Discussion Notes

This section provides the peer exchange proceedings following the agenda. This report is designed to provide information and stimulate discussion on the topics of safety data collection, analysis, warehousing, and access.

### 2.1 FHWA Presentation – HSIP Overview

The FHWA Office of Safety provided an overview of the Highway Safety Improvement Program (HSIP)<sup>3</sup> summarizing the overall policies and requirements of the HSIP and potential benefits to local road

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<sup>2</sup> The Systemic Safety Project Selection Tool is a 30-month research project begun in July 2010 to develop and test a step-by-step process for conducting systemic safety analysis and planning.

<sup>3</sup> For more information about the Highway Safety Improvement Program, contact Karen Scurry in the FHWA Office of Safety ([karen.scurry@dot.gov](mailto:karen.scurry@dot.gov)) or visit <http://safety.fhwa.dot.gov/hsip/>.

safety. The purpose of this program is to reduce fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements. The HSIP is a data-driven federally funded, but State administered program.

A Strategic Highway Safety Plan (SHSP) is a requirement of the HSIP. An SHSP is a safety plan that provides a comprehensive framework for reducing highway fatalities and serious injuries on all public roads within a state. The SHSP is developed by the State DOT in a collaborative process with a broad range of stakeholders. The SHSP is a data-driven, comprehensive plan that establishes statewide goals and objectives for key emphasis areas and integrates the four Es - engineering, education, enforcement and emergency medical services (EMS).

A comprehensive HSIP includes both a site analysis approach and systemic approach to safety. A site analysis approach [also known as a high crash location (HCL) approach] is a network screening process at the macro level. Systemic safety improvements are widely implemented based on high-risk roadway features that are correlated with particular severe crash types.

After the presentation, participants asked questions and discussion ensued. The following summarizes the main topics discussed during the question and answer session.

- Attendees were concerned that currently few local agencies received federal funding for projects and that the main focus was on solving problems rather than the education of local agencies in problem identification and countermeasure implementation.
- HSIP is a State administered program. Each State will take their own approach to getting funds to the local agencies. The FHWA Office of Safety has produced several documents showing noteworthy practices of getting funding to the local agencies. In several states, the LTAP/TTAP Centers are providing such training to local and tribal agencies.
- A noteworthy practice is the Illinois DOT has a Central Bureau of Local Roads and each District has a Bureau of Local Roads. The DOT field engineers assist local agencies with reviews and this is a huge resource for them.
- Minnesota DOT has developed a traffic safety handbook for the use of local practitioners.
- LTAP/TTAP Centers can provide a checklist for local/tribal practitioners to use in the safety project development and implementation process.
- It is often difficult for State DOTs to identify the right person at the local level to work with. The local practitioner often wears many hats.
- MAP-21 doubled HSIP funding for *some* States.

## 2.2 FHWA Presentation – Using and Improving Data

Bob Pollack from the FHWA Office of Safety provided a presentation on optimum data needs for a safety program. Typically, frequencies and rates are used to identify crash problem areas. Using either method alone can potentially give unrealistic results. If traffic volumes increase significantly, such as due to adding a casino on a road, crash frequencies can increase, but the crash rate can dramatically drop yielding an inconsistent perception of the situation. The segmentation distances a jurisdiction selects can radically alter the crash rate even though there are not changes to volume or crash numbers.

Last year (August 2011), FHWA developed a list of 38 fundamental data elements (FDEs) as a recommended subset of Model Inventory of Roadway Elements (MIRE) that States should consider collecting. Sixteen of the FDEs duplicate Highway Performance Monitoring System (HPMS) data. The Model Inventory of Roadway Elements - Management Information System (MIRE MIS) project suggests ways to use existing road data information and develop it into a comprehensive management information system. The Crash Data Improvement Program started in 2008 to assist states to improve the quality of their crash data and FHWA is now developing a Roadway Data Improvement Program. As part of these programs, FHWA sends technical assistance teams to a State to evaluate the crash and roadway data production process. A report is generated and provides feedback to the State on their current processes and practices and provides recommendations on how to improve them.

The following summarizes the question and answer session after the presentation.

- There was concern that local and tribal practitioners will never have enough data to make a good decision.
- Having enough roadway, traffic, and crash data to use some newly developed analytic tools will assist State and local agencies in their safety decisions. Projects such as the MIRE MIS may help provide the data for use in these analytic tools.
- In explaining the difference between a data assessment project and Traffic Records Assessment (TRA) – TRA takes a broader approach to assessing all components of a State’s safety data system. The Data Improvement Programs (e.g. roadway and crash) are more focused on particular aspects of a single data system.
- In response to the comment: There is a lot of the system in Oregon where data cannot be collected (90% of local roads), Mr. Pollack stated that FHWA recognizes this issue. The MIRE MIS program is examining whether there are techniques that can provide data in other ways.

## 2.3 State/Tribal Presentations

Designated representatives from each State as well as a representative of the Northwest TTAP provided a presentation on their current safety data programs. Presentations described local involvement, the challenges encountered, and best practices in addressing the following:

- Data used in conducting safety analyses (roadway, traffic, crash).
- Source of data (self-collected, State, other sources).
- Problems encountered in obtaining the data.
- Problems with the data quality (timeliness, accuracy, completeness, consistency).
- Safety data collection, warehousing and analysis.
- Access to safety data.
- Data analysis tools.
- Type of analysis being performed (problem identification, prioritization, countermeasure(s) selection).
- Training.
- Highway Safety Improvement Program (including the High Risk Rural Roads Program).

### *2.3.1 California*

*Presenting – Steve Castleberry, Nevada County*

California is a State of diversity with 38 counties and 478 cities. Los Angeles County makes up 25% of the State's population. By State statute, counties cannot collect data; this is performed by the California Highway Patrol (CHP), not the county Sheriff. Local police collect data for cities (unless it is contracted to the Sheriff or CHP).

In Nevada County, CHP collects the data and they report it to the Statewide Integrated Traffic Records System (SWITRS). Police in Grass Valley (a smaller local agency) collect the data there; they also report it to SWITRS. This provides some uniformity in the crash database. In Nevada County, they look at all the data (including property damage crashes) to help identify issues. Caltrans uses fatal and injury data only. Grass Valley has to request data from their police department. Nevada County and Caltrans use GIS accident maps; a majority of counties and cities have access to this. Grass Valley, however, does not have access to these tools.

How do you prioritize projects given that there is such variety in data? Historically, projects were ranked through both data-driven and subjective (work type) application reviews. In 2012, Caltrans revised the project selection procedure to be completely data driven. Locals were concerned that they would never get funding for projects. The University of California-Berkeley began providing basic accident data from SWITRS to all jurisdictions. This removed dependency on data from law enforcement. Eighty percent (80%) of local agencies do not compete for funds. Caltrans does not have GIS data for all jurisdictions' roads, but Caltrans plans to use MAP-21 funds to improve this. Using this new project selection system, Caltrans found that low-cost systemic type improvements have the highest chance of receiving funding.

Some local agencies are still submitting projects with a benefit/cost ratio less than 1. Caltrans released a Safety Manual to their local agencies to provide guidance in identifying safety issues on their road system and working with Caltrans to find solutions.

Crash data from Caltrans and CHP lags by 1.5 years to all agencies; so Nevada County doesn't have any data after 2010. The California SHSP goal is to lower the data delay to 45 days by 2020.

- In discussions following the presentation it was noted that the application process for local road safety projects through Caltrans was not complicated and Nevada County has put together an application in one day.
- More State DOTs are developing manuals for their locals and the manual developed by Caltrans has helped Nevada County with Crash Reduction Factors, a requirement of the application.

### *2.3.2 Idaho*

*Presenting – Kelly Campbell, Idaho Transportation Department (ITD) and Laila Maqbool, Local Highway Technical Assistance Council (LHTAC)*

The trend for Idaho fatalities is going down. Injuries are also going down and have been at or below the national average. It was stated that in the past, the rate has been higher than the national average because Idaho is a rural state.

Idaho receives approximately \$10M a year for the HSIP program. In the past, all of the funding has been obligated for projects within ITD. Last year, it was decided that the money should be split between the State road system and the local road systems. Of the remainder, 10% of the HSIP (\$1M) is used for behavior solutions. ITD is now receiving 60% while LHTAC is receiving 40%. In Idaho, 40% of all the fatal crashes involve an impaired driver and that percentage has been pretty consistent for the past 15 years even as Idaho's fatal crashes continue to decline. ITD is using their remaining amount (\$5M) for infrastructure projects.

ITD uses a data driven approach for determining safety projects. Data typically used for analysis includes crash data, traffic volume data, roadway data, and census data. Idaho has a State statute that requires a crash to be reported if there is an injury or over \$1500 in property damage. Law enforcement agencies are required to provide a written report to ITD within 24 hours and use the standardized crash form provided by ITD. ITD trains law enforcement on how to complete the forms. ITD staff review all reports for accuracy and latitude/longitude are assigned for the locations. All crashes for a specific year are available by April or May of the following year.

Volume data is accessible for 5 years for all State system and federal aid roads. Roadway data is also available in ITD's new asset management system, TAMS (Transportation Asset Management System) and includes lane and shoulder width, horizontal and vertical curves. Crash data links to roadway data manually, but Idaho is moving toward a relational database.

LHTAC identifies the 5 most harmful crash types, and then identifies the 5 jurisdictions in each district with the highest amounts of those crash types. In 2014, this process will be expanded to 10 jurisdictions in each district. In the first year, there were 49 eligible local highway jurisdictions. Of 32 projects submitted, 26 were funded. Projects were ranked/funded according to a cost-benefit ratio.

LHTAC outreaches with phone calls and visits to help solicit project applications for local agencies. Systemic projects are encouraged by LHTAC and included signing, and striping projects. There were also some large projects funded including signal installation.

### *2.3.3 Nevada*

*Presenting – Chuck Reider, Nevada DOT (NDOT)*

NDOT has an electronic repository for crash data called the Nevada Citation and Accident Tracking System (NCATS). Traffic counts (AADT) are also available. There is a lack of uniform roadway data; as a result Nevada is unable to really utilize SafetyAnalyst. The Travel Demand Model is not specifically crash oriented, but they were able to extract many elements from the information. A vast variety of data sources requires reconciliation. NDOT has contracted with the University of Nevada-Las Vegas (UNLV) to implement SafetyAnalyst for them. UNLV is using a variety of sources for data. The data UNLV is collecting is being located to a GIS map.

Nevada uses the Critical Analysis Reporting Environment (CARE), which was developed by the University of Alabama and used by several other States. Nevada developed WebCARE for local agencies.



In Clark County (City of Las Vegas located in the county), crashes cost citizens more than congestion. When comparing crashes to crime, crashes have a larger impact on the community than crime. The CEO's office has data as a priority for NDOT.

The presenter stated that the public can request data and it will be provided. He also informed the attendees by Federal law, the State's data is protected and not "discoverable" in court in the follow up discussion.

#### 2.3.4 Oregon

*Presenting – Doug Bish, Oregon DOT (ODOT) and Jon Oshel, Association of Oregon Counties*

Oregon is primarily a citizen crash reporting state; 40% of crash data comes from police and the rest is citizen reported.

ODOT analysis uses a sampling of data to establish trends. There is a variable referencing system. Mileposts are used on the State system and in some counties. Distance from an intersection is used in cities. GIS SPIS (Safety Priority Index System) compiles data on a layer. In order to support all public roads, the GIS SPIS produces a common reference system in GIS. Crashes are coded by GIS placement on a map with an assigned milepost. SPIS is applicable to local roads because it only uses two (2) data elements; crash numbers and volumes.

County Road Departments generally do not have GIS staff. Many counties do not think they have a safety issue and the Association of Oregon Counties must develop the reports that show them they have a problem.

The group was informed during the follow up conversation that the Idaho Transportation Department has a great website with crash information. LHTAC can get some of the larger local agencies to access the site and work with ITD staff to figure it out. The smaller agencies, however, will not access it, so LHTAC has put together GIS maps to help sell the importance of the crash data.

#### 2.3.5 Utah

*Presenting – Scott Jones, Utah DOT (UDOT) and Nick Jones, Utah LTAP*

Utah's first SHSP was created in 2003. UDOT is going to start mapping each crash by hand until data from law enforcement gets better. UDOT maintains an Oracle database with crash data. Reports are provided by the Department of Public Safety. UDOT staff reviews each report.

UDOT developed several tools to get data to locals; UPLAN<sup>4</sup> and ArcGIS Online. They have also been exploring other ways to show crash mapping; using 3D Google Earth and trying different heights, weights, and lines colors.

Utah is also embarking on a roadway imaging/inventory project using Light Detection and Ranging (LiDAR). The data will be used for making safety, pavement, and roadway asset management decisions.

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<sup>4</sup> The UPLAN portal is located at [www.uplan.maps.arcgis.com](http://www.uplan.maps.arcgis.com).

The High Risk Rural Road Program (HRRRP) has really highlighted the lack of data on local rural roads.

The Utah LTAP Center has completed 16 Road Safety Audits (RSAs) over the last 3 years and will perform 3 more this year. They are also working with some Tribes this year. Local agencies contact the LTAP Center and the LTAP coordinates the RSA. Other services that the LTAP provides include:

- Assessing signs for retroreflectivity.
- Providing a safety software suite to any cities/counties that want it.
- Assisting locals with warrant studies.
- Providing crash tool reports to locals.
- Conducting asset management and safety studies for locals.
- Providing training/workshops for locals.

The LTAP has a GIS program that they use with the local governments. Many local governments do not have GIS capability.

### *2.3.6 Washington*

*Presenting – Matthew Enders, Washington LTAP [Washington State DOT (WSDOT)]*

The connection between crash experience and subsequent crash reduction investments is not broadly understood by the public. This disconnect may extend to agencies where data collection is requested. Without an understanding of the value of the data, there may be a reluctance to participate in data collection. WSDOT now houses the state crash data. WSDOT also has a great deal of roadway data that includes geometric features (number of lanes, lane widths) and roadside feature information. Enforcement data (citation data) is also used to identify locations where violations and driver errors are occurring that frequently contribute to crashes.

A new collision report form was developed a few years ago. Sixty percent (60%) of crash reports are submitted electronically, the balance comes in as paper copies. Tribal data is the least complete component in the crash data in the state repository.

Washington State has good crash data. Challenges include a lot of variation in data collection “density” (i.e., the amount of data available surrounding a certain incident); self-reported and not accessible on a statewide basis for use and timeliness. Two years ago the data was 2-3 months behind real time, but now it is 9-10 months behind. This makes investment decisions more difficult. It’s hard to know the effectiveness of investments with “after” crash data lagging so far behind.

Accuracy is another issue with crash data defining “serious” injury and the location details as “serious” are in the eye of the beholder. The decision is up to the officer at the scene and the benchmark is whether a person can carry himself away from the incident or if he has to be transported. WSDOT is trying to get hospitals involved and have medical professionals help grade the level of severity through a linking process, but with medical records there are a lot of privacy restrictions attached.

Local location details are challenging and so county collisions are often sent back to the counties for precise location identification. Counties have crash, roadway, and traffic data in a statewide program called Mobility. The cities warehouse their own roadway and traffic data. All agencies can have access

to their own crash data through WSDOT. Sometimes there are discrepancies between the local data and WSDOT data because the State might have the crash in an inaccurate location.

WSDOT analyzes data to identify problems, prioritize projects, and select countermeasures.

WSDOT asked FHWA to develop training highlighting the project development process “From the Data to the Project.” Often local agencies get the data and don’t know what to do next.

The presenter stated that multijurisdictional intersection projects are generally implemented using joint funding.

### *2.3.7 Tribal*

*Presenting – Richard Rolland, Northwest Tribal Technical Assistance Program – Eastern Washington University*

There are 45 federally recognized tribes in the Pacific Northwest (which include the States of Alaska, Idaho, Montana, Oregon, and Washington) served by the Northwest Region Bureau of Indian Affairs (BIA). The Indian Reservation Road Inventory for the northwest includes approximately 12,884 miles of public road on, or providing access to, a Reservation or other recognized Native Community. Over 75% of these miles are under the ownership of State, county, or city governments with the balance owned by the Bureau of Indian Affairs or Tribal Governments.

There is \$450M in funding in MAP-21 for Tribal roads; the safety set-aside is \$9M of the total. Tribes have the same issues as local and rural agencies. Tribes have limited funds, but do not have the ability to collect fees like local governments can.

In many states, Native Americans are over represented in fatal crashes. There is a lack of data due to low volumes. It is also difficult to differentiate between Native American and non-Native American victims on tribal roads. It is estimated that approximately 85% of crashes do not make it into the database. Tribes are using health information to get at some of the crash data. The Northwest Portland Area Indian Health Board collects data from Indian Health Service (IHS) and other sources and is a source for information supplementing State traffic data systems. Due to the lack of data available for many areas, analysis becomes more difficult. With timely and accurate tribal crash data, trends and other traffic safety concerns can be more easily and confidently identified.

One issue is that States include tribal interests to vastly different degrees. There are 29 Tribes in Washington and 18 participated in the State’s Target Zero Strategic Highway Safety Plan 2010. All Tribes in Montana were involved in the Montana SHSP and there is a chapter in the plan designated for Tribes. It is hoped that Idaho and Oregon will have improved tribal participation in SHSP updates under development.

A Strategic Highway Safety Plan for Indian Lands developed by a national Tribal Safety workgroup includes data-driven emphasis areas and strategies to reduce the number of fatal and serious injury crashes. Incorporated in each emphasis area is the need for education of elected officials, law enforcement, departments of transportation, and transportation safety advocacy representatives. Implementation of the SHSP for Indian Lands is promoted by the Tribal Transportation Program

administered by FHWA-FLH and the Bureau of Indian Affairs and includes statewide Tribal Safety Summits and work with individual tribes to develop Safety Plans. In Washington, the outcomes from the Tribal Safety Summit contributed substantially to the Target Zero Plan.

Assistance is needed with getting information out to the Tribes and training them on how to use crash data. There is a lot of information, but there is often no one to review and analyze the data within the tribal organizations. The NW TTAP works with FLH, BIA, and the tribes to assist in resource sharing and training.

- In response to the question on the number of road mileage on Tribal lands, the presenter responded that the definition of an Indian Reservation Road is a road that is on or provides access to a reservation or other recognized Native Community. Nationally, there are approximately 130,000 miles of Tribal roads; about 60,000 are owned by BIA or tribal governments.

## 2.4 Breakout Session 1

### *Challenges and Practices in Data Collection, Warehousing and Access*

For a local road safety program to be effective, it needs to be data based/supported. As agencies collect, store, and access data, they have identified practices that are highly successful, as well as challenges that need to be overcome. During this first breakout session, participants discussed their respective agency practices for local road data collection and warehousing. Participants were encouraged to share what has been successful for them and also to identify the challenges they face with data collection, warehousing, and access. Breakout groups also discussed the variables that can affect data collection, warehousing, and access. For example, the level of local agency involvement, differences in collecting and storing data on State roads as opposed to local roads, and the role of LTAP/TTAP Centers.

At the conclusion of the breakout session, each group reported back on their discussions including the challenges and strategies they identified, as well as the roles that various organizations take in a safety data program.

#### **Challenges**

- The lack of uniformity of data and resources to be able to collect and analyze safety data. The resources that are needed include staff, software, and time.
- Lack of leadership at the DOT level in developing policies to make sure the needed safety related data is collected.
- State and local agencies need to show a clear path from data gathering through analysis to implementation.
- If any agency is requested to provide safety data to the keepers and analyzers of the crash data (often the DOT), there needs to be some demonstration and/or assurance of the value of the data to the process as a whole, how it will be used, and how the agency providing the information can see the benefit or outcome.
- Data that is provided in different formats (e.g., hard copy or different software platforms) makes aggregation and analysis of the data much more difficult.
- Duplication of efforts at all levels of government

- In some cases, privacy laws make data less accessible.
- Crash data can only be used for a historical, reactive approach to safety improvement if data is substantially lagging real time.
- Crash data is of little use to an agency without the knowledge to analyze and understand the data.
- Local agencies often struggle with determining crash trends due to lack of specific crash location and accuracy information.
- The opinion of many smaller, local agencies is that federal and state agencies ask for more detail in crash data than is critical to problem analysis. A request for too much detail from the local agency may result in the local agency opting out of assisting in data collection and submittal.
- Crashes on the local system are random and sample sizes are small, so they do not lend themselves to succinct analysis.

### **Strategies**

- Participation in crash data gathering may lead to a standardized form being developed for all law enforcement officers in the state.
- Provide law enforcement with devices to electronically collect, report and provide GPS coordinates of crash locations. Use of mobile devices by police while on the scene of a crash will increase use and efficiency.
- If data collection is standardized statewide, uniformity and ease of analysis will increase.
- Local agency participation may increase if incentives or technical assistance are provided, such as sharing of staff expertise.
- MOBILITY is a program in Washington where the cities warehouse their own roadway and traffic data. All agencies can have access to their own crash data through WSDOT.
- UPLAN is a Utah DOT program that is a web-based interactive GIS mapping and data-sharing tool created to improve data management and collaboration across the agency.
- 402 funds may be used to purchase equipment or contract for consultant expertise in analyzing crash data at the local level. (Includes Indian Highway Safety Program administered by BIA.)
- Local agencies are often at a loss to interpret the crash data provided to them by the State DOT. It is more helpful if the State DOT (or other data-providing agency) also assists with interpretation and perhaps with countermeasure strategies.
- Multiple staff may be engaged in similar data gathering and analysis duties.

### **Roles**

- FHWA provides leadership, guidance, and best practices.
- States identify best practices and develop guidelines and standards. They also collaborate with all stakeholders (i.e. law enforcement).
- Tribes collaborate and share data with State agencies.
- Local agencies should be encouraged to collect and share safety data.
- Project selection by the State DOT for local projects will be aided by more crash data detail in the local agency's application for project funds.
- LTAPs/TTAPS provide information to the locals and Tribes.

## **2.5 Model State Practices**

Three (3) States from outside the northwest region were invited to attend the peer exchange and provide presentations on their States' noteworthy practices. Their presentations provided attendees with examples of other States' local road safety successes through notable data practices that involved LTAP/TTAP Centers and local agencies.

### 2.5.1 Illinois

*Presenting – Priscilla Tobias, Illinois DOT (IDOT)*

There are 102 counties in Illinois and the Illinois DOT assists county road authorities throughout the State with direct funding for data gathering, assistance in data analysis, and staffing and leading Road Safety Audits (RSAs) on the local system.

IDOT has a good working relationship with their local agencies. Fatalities are spread out all over the State, except for the Chicago area, where there is a dense concentration. In 2005, IDOT gave each county \$10K to locate 5 years of traffic fatalities and serious injuries.

One hurdle was a State law that made crash reports confidential. The law changed so state-generated crash data can be shared with locals.

All public roads have traffic volume counts. Interstate counts are collected every year and they video all State Routes.

The Pavement and Bridge offices need to better understand the data elements needed for safety. IDOT makes sure that their data systems are talking to each other; the roadway and crash data systems can communicate.

A lesson learned is that IDOT cannot assume what the locals need and have. They survey counties to see what data they have, what they need, and what analysis capabilities they have. They use workshops to educate locals on the use of data in problem identification and countermeasure selection. They hold workshops to walk agencies through what to do with the data and how to use the benefit/cost tool. They have also created data trees (crash type problem identification) and developed SHSPs for each county. They have also developed behavior-related problem ID maps.

There were 700 fatalities on the local system and IDOT has cut that in half since 2005 when they began investing targeted dollars on the county system throughout Illinois. They began targeting counties with higher fatality numbers. They use a crash data tree to help identify areas where to focus. They provide guidance and system-wide systemic analysis tools. An RSA in the medical area of Cook County (Chicago) led to several systemic improvements.

For RSAs, local agencies can call IDOT with a request and a RSA team is provided by the State DOT.

### 2.5.2 Louisiana

*Presenting – Marie Walsh, Louisiana LTAP; Jason Taylor, Louisiana LTAP; and Dan Magri, Louisiana DOTD*

Locals own 2/3 of the road system in Louisiana and 25% of fatalities are on the local roads. Louisiana does not have complete crash location information; they do not have location data on local roads (only 40%). 80% of crashes are reported electronically.

Louisiana does not have engineers in most of their parishes; they are mainly public works directors. There is no legislative authority to spend State dollars on local roads. There is also no local program office at the DOTD; however, there is now a recently assigned liaison in the DOTD. For years, no State money was being spent on local roads and the districts cannot provide technical assistance to the locals.

In 2005, the LTAP got involved. The Louisiana LTAP became the liaison between the State Department of Transportation and Development (DOTD) and the local agencies. The LTAP leveraged its established partnerships with DOTD offices and other State agencies. They built strategic relationships between the

DOTD, the LTAP, and the parishes. Including local agencies in the planning and treatment decision process increases their understanding and willingness to participate. Locals need to be there at the State level and the LTAP advocates for the inclusion of local issues. One way is to get locals on research agendas.

The LTAP shares data with locals *and* tells them what it means for them. During data presentations, LTAP staff gives locals who, what, when, and where.

The Louisiana DOTD budget is divided into 4 areas:

1. System Preservation
2. Capacity
3. Operations
4. Highway Safety

The Highway Safety Program averages \$40M and about \$3M-\$5M is allocated for the Local Road Safety Program. The funds are administered by the Highway Safety Section. The Local Road Safety Program provides technical and engineering support.

The LSU Highway Safety Research Group is responsible for collecting, maintaining, storing, and analyzing crash data. LSU scans all crash reports and stores as an image. There is a web based system to query crash data and it's available to any government entity. A GIS web portal was also created by LSU.

### 2.5.3 *Minnesota*

*Presenting – Brad Estochen, Minnesota DOT (MnDOT)*

There are 141,000 miles of roadway in Minnesota; 130,000 are local (92%). Last year, there were 368 fatalities. Minnesota is a Toward Zero Deaths State and the program started in 2003.

MnDOT started allocating HSIP funds to local agencies in 2006. They look at the percentage of fatalities in each District by Area Transportation Partnership (ATP)<sup>5</sup> to help decide funding distribution (how much funding each District gets). There are 8 MnDOT Districts. They further divide funding by splitting between state/local roads in the District.

MnDOT had to get locals away from higher cost spot improvements. Local project emphasis was on broader value projects where investments brought higher returns on investment, but not necessarily expensive projects. MnDOT realized the locals were going to need technical assistance to identify safety opportunities. MnDOT is working with local agencies to create safety plans for each county.<sup>6</sup>

Are there predictors (surrogate measures) of serious injury crashes? Crash analysis is not just K&A; MnDOT is looking at risk factors to help prioritize. The presenter used the analogy, your doctor doesn't wait until you have a heart attack before trying to lower your cholesterol. He looks at indicators for heart disease (including your family history, weight, cholesterol level). Using a similar system on the roads leads to improvements at locations where there has not been a crash, but the possibility exists for one based on roadway characteristics. For example, intersection predictors can include: skewed; on horizontal curve; volume ratio major/minor roadway.

MnDOT use 5 years of crash data to identify long-term trends.

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<sup>5</sup> MnDOT created Area Transportation Partnerships (ATPs) to emphasize greater public involvement in the preparation of transportation plans and programs.

<sup>6</sup> The County Road Safety Plans Program was initiated by MnDOT to more effectively involve local highway agencies in the safety planning process and to provide these agencies with the technical assistance needed to apply for State and Federal funding successfully.

## 2.6 Breakout Session 2

### *Data Analysis, Issue Identification and Safety Project Selection*

Collecting data is just the first step in creating a data-driven safety program. Once an agency has data, it needs to be analyzed so that it can be used to identify crash problems and make decisions on what countermeasures to implement and where. This breakout session offered participants an opportunity to discuss data analysis needs of local practitioners and to learn from each other about the various data analysis tools and project selection methodologies that are available. Groups also discussed how safety is affected by limited (or lack of) data and how the LTAP/TTAP Centers can assist with providing data resources to local agencies.

At the conclusion of the breakout session, each group reported back on their discussions including the challenges and best practices they identified with respect to data analysis, issue identification, and project selection methodologies.

#### **Challenges**

- Local and tribal road crashes are random.
- Rates are not always the best way as volume information is often missing for the local system.
- Limited expertise and resources result in lack of local/tribal safety projects.
- Competing state projects against local projects.
- Not having the training for problem identification.
- Perception that there is no data, or it's not good data.
- Safety data might not be used and a project is selected for some other reason (public or political pressure).
- Projects are being selected to widen shoulders for safety, but when analyzed it was really to increase capacity.
- Institutional bias.
- Misunderstanding about what a safety improvement is.
- Crash data supplied by EMS, police and city/county agencies may be lacking sufficient detail to be useful.
- Sample size / determining the best interval (5 years or something else).
- If there is access to the data, how do you use it?

#### **Strategies**

- Developing data trees and providing information about safety issues can spur locals to action.
- There may be a greater willingness on the part of EMS, police and city/county road authorities to participate in data gathering if the method of capturing the data is more uniform and is simplified.
- Utilizing a plan similar to Minnesota's to identify surrogates.
- Performing RSAs.
- Providing safety training and appropriate workshops for local practitioners.
- Making safety a part of our jobs at all levels.
- Identify a champion/advocate and regional/statewide experts.
- Coalitions to select standards.



## 2.7 Day 1 Recap – Challenges/Solutions Identified by Attendees

### Summary of Data Collection, Warehousing, and Access

<b>Challenge</b>	<b>Solution</b>
Duplication of efforts across agencies.	Create safety coalitions to review data collected/used.
Inconsistency in reported data/quality.	Devices for law enforcement so they can report electronically and provide GPS coordinates of crash locations.
Access to data/timeliness/ability to analyze.	Get university support; not just providing data but also information.
Crash location accuracy.	GPS coding; Smart Phone apps; smart maps.
Crash severity definition.	Enlisting the medical community/linking crashes with medical records.
Too many data elements are required.	Technical Working Groups to help identify truly essential data elements.
Small, rural agencies will not participate in providing data with or without incentives.	Locals must see the benefits of providing data and how money will flow to them by providing that data. Provide locals with information on how they can make the roads safer.
Local crashes are too random – difficult to address hot spots.	Go to a systemic program which requires less location-specific crash data.
Lack of resources for data collection and analysis.	Collaborate with stakeholders to identify essential data; maximize technology.
Locals have difficulty analyzing the data and making decisions on countermeasures.	Outsource the data analysis and interpretation; provide training to the locals to perform data analysis and interpretation.
Lack of leadership and having policies in place to make sure the data is collected.	Cultivate safety champions/advocates.
Small sample size.	Use systemic countermeasures rather than spot treatments.
Tribes need help with crash data; they get funding for roadway inventory, but not very much for crash data collection and analysis.	Training on hazard identification, data uses, overview of analysis methods, and use of results. Use alternate sources such as health system information to get at some of the crash data.
Variable referencing systems.	Geo-coding and placed on a GIS map.
Projects done in a reactive manner due to public/political pressure.	Use a systemic approach to evaluate risk factors; educate the public.

### General Discussion about the Challenges/Solutions Above

- WSDOT used to perform data audits, but does not have the resources to do so anymore.
- At the end of the year, when Idaho Transportation Department is finishing up their data, they have some business rules that they follow to run through the data.
- Oregon DOT developed an application similar to a smart map to locate points; this has improved the data quality. This application is public domain and can be transferable to other States.
- NCHRP has an on-going project that will help define what a serious injury is.

- How do we get around HIPAA rules to get medical record information? States are subject to their own legalities.
- Police aren't medical experts. There are cases where people walk away from crashes and then die 2 days later.
- The Utah Department of Health has educated the State DOT on HIPAA. If someone is using HIPAA as an obstacle, learn about HIPAA. It does not restrict sharing data between governmental agencies. State DOTs still have to overcome internal legalities, but HIPAA is not an obstacle.
- State and local political officials need to be aware of problems on both road systems, and work with State and Federal agencies to find solutions. At the policy level, the need for data collection needs to be a priority and that doesn't always come out of the leadership.
- The take-away for Nevada County is making sure the California Highway Patrol is aware of how the collection of data benefits them too. Do not wait for the State DOT to talk to the local Highway Patrol; the local agency should do it.
- The Idaho Transportation Department incorporates elements into their highway patrol training on the value of the data.
- MnDOT created a YouTube video called "Crash Reports are Not Just for Insurance Purposes."
- The New Jersey LTAP has a course on traffic engineering for law enforcement.
- With small sample sizes, it may be beneficial to work things on a multi-jurisdictional basis.

**Summary of Data Analysis, Issue Identification, and Safety Project Prioritization**

<b>Challenge</b>	<b>Solution</b>
Misconceptions of what a safety countermeasure is.	Crash Modification Factors can provide alternative solutions to identified problems.
Local agencies may not be able to take the appropriate amount of time, or know how to conduct proper problem identification or figure out contributing factors.	Perform RSAs; training.
Perception of not being able to "fix stupid" (e.g. drunk drivers) or institutional bias/barriers to improvements.	Use a multi-disciplinary approach to safety (create Traffic Safety Commissions/Coalitions).
Resistance to change.	Develop and cultivate a culture of safety; develop safety professionals.
Rates are not always the best way to identify problems.	Use surrogate measures or other indicators to identify potential problems.
Competing State projects against local and/or tribal projects leading to lack of local/tribal safety project investments.	Establish a policy or formula for providing funding or assistance to the locals and tribes commensurate with the severity and extent of their safety problems.

**Group Discussion about the Challenges/Solutions Above**

- Need to build partnerships to break down silos.
- There needs to be a strong connection between the FHWA Office of Safety and NHTSA. Contributing factors for crashes come from the engineering and behavior side.
- The solution to the "resistance to change" is also a challenge. Developing and cultivating a safety culture is also a challenge.

## 2.8 Data Tool Presentations

### 2.8.1 Idaho

*Presenting – Kelly Campbell, ITD and Bruce Drewes, LHTAC*

ITD analysis tools include:

- Webcars, which is an online analytical tool.
- High Crash Locations.
- RSAs.

Idaho uses Webcars to extract crash data by using various reports and queries. Canned reports, such as the intersection analysis report, can be used or separate queries can be created. Permissions are required for queries and ITD provides training first. This is not as valuable for smaller agencies because they might only have 2-3 crashes at a location. Within Webcars, there are high crash location (HAL) reports. There are four (4) HAL report types: Interstate cluster, non-Interstate cluster, intersection, and interchange.

ITD also started a Road Safety Audit (RSA) Program and created an RSA Manual<sup>7</sup> two (2) years ago. The manual formalizes ITD's procedures for RSAs and contains the steps for conducting an RSA on an existing road or project. A Road Safety Audit is a formal safety performance examination of an existing or future road or intersection by an independent audit team. RSAs are an effective countermeasure for improving safety on an agency's roadways.

Fatals and serious injuries are used in determining problem areas. Locals are provided with various representations of their crashes. The Local Highway Technical Assistance Council (LHTAC) has the ability to sort data by different parameters. LHTAC staff provides specific technical assistance to locals to help them with understanding the meaning of the data and possible countermeasures. There is a pool of HSIP funds available for RSA-identified solutions. The LHTAC provides hands-on assistance. They perform a number of RSAs and these have really strengthened the relationships with the local highway jurisdictions. The following are comments during the discussion after the presentation:

- New Jersey has formed RSA Coalitions so there are always people available to help with RSAs.
- Illinois trained their police crash reconstruction teams to look at roadside features when they are out reconstructing a crash.

### 2.8.2 Utah

*Presenting – Scott Jones, UDOT*

After much trial and error, Utah now has statewide GIS mapping of crashes. The State is sharing data through UPLAN and ArcGIS Online. UPLAN is a GIS data warehouse of all roadway information for use by project designers. Users can drag Excel files onto ArcGIS, to be mapped. The ease of use has made sharing the data easier. The UDOT Planning Division created UPLAN to provide all the information a designer would need to start a design project (everything from utilities to ROW). ArcGIS Online is an online mapping service created by ESRI.

### 2.8.3 Thurston County, Washington

*Presenting – Scott Davis, Thurston County, Washington*

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<sup>7</sup> The ITD RSA Manual is available online at <http://itd.idaho.gov/manuals/ManualsOnline.htm>.

Thurston County is participating in a pilot project for FHWA's Systemic Project Selection Tool. It is a data driven planning process that is system wide but focused safety planning technique. It is not a replacement for an existing spot analysis safety program. It lends itself to proactive safety data planning. The advantage of the tool is that it is not dependent on location-specific crashes. It generally is intended to focus on lower cost solutions and the planning tool is flexible.

The county data comes from a variety of sources. They have crash data from the Mobility program, but they also get it from WSDOT. They also use video data of the roads.

Data analysis of the county shows:

- 77% are non-intersection crashes (statewide is 60%).
- 40% are fixed objects.

The data analysis helps determine the focus areas. Non-intersection crashes are examined and analyzed in depth. An over representation of crashes on curves was discovered.

Thurston County recently completed the field inventory and has identified some of the possible risk factors. They have some roadway data (including number of lanes, lane width) and curve data (speed differential, edge clearance) and use all of this data to perform risk factor analysis.

The pilot project has facilitated the building of partnerships that had not happened before. It also helped them recognize that local agencies (especially the small ones) may need safety information, not the raw crash data.

In responding to the question: how can federal money for low-cost improvements be implemented sooner; the presenter suggested, a streamlining effort is needed at the FHWA level for smaller projects. If the State can flex federal funding with State funding, then locals can use State funds and the State uses federal funds.

## 2.9 Roundtable Discussion

Many States have developed automated data analysis tools to ease a process that can be cumbersome. During this roundtable discussion, attendees identified data analysis tools that can be helpful, their capabilities, and pros/cons.

### *General Discussion/Comments*

- The HSM and HSM spreadsheets will help evaluate risk factors on the roadway.
- Data should be used to make safety decisions; systemic vs. spot.
- The Idaho LTAP conducts a pre-analysis of crashes. There are a number of highway districts in Idaho that have only one person on staff as a result LHTAC staff is one of their strongest tools. They meet with jurisdictions in person to provide assistance.
- FHWA should conduct a series of RSA train-the-trainer workshops for the LTAPs. Make it meaningful so that attendees are experts in their area on RSAs. In Nevada County, California, formal RSAs are not used in the identification of locations with safety issues. The county engineer continually assesses these locations and knows what the crash reduction factors are. The county engineer believes if he has been looking at a site for 5 years, someone with fresh eyes is not going to recommend a solution that he has not already thought of.
- Locals in Illinois like the "heat" maps produced by IDOT that shows safety issues.

- States/LTAPs need to get staff on the ground to get information (not just data) and coaching to the local agencies. Some LTAPs have Safety Circuit Riders that provide these duties. In Louisiana, the LTAP has three (3) engineers, DOTD funds their salaries.
- Some agencies (OR) have used NHTSA 402 funds to help local agencies decipher data.
- Resources are the issue for Sacramento. Analysis and data gathering are up to the locals.
- The States that are moving ahead and effectively addressing local road safety have a strong, consistent approach.
- The CMF Clearinghouse is a tool that agencies should be utilizing.

## 2.10 Breakout Session 3

### *Partnerships/Collaboration*

Agencies within a state can have different roles when it comes to data collection and analysis. Some agencies collect and store the data, while other agencies use the data to make safety decisions. Some agencies have data, but need assistance from others to analyze and interpret the meaning of the data. This makes partnering essential in order for a data-driven safety program to be successful. This breakout session allowed participants to discuss how partnerships can facilitate improved safety data and how to make the partnerships work. Participants had an opportunity to learn from each other how various agencies collaborate to collect and analyze data and what the respective agency roles are in the process.

At the conclusion of the breakout session, each group reported back on their discussions including the challenges and best practices for forming effective partnerships for successful access and use of safety related data.

#### **Challenges/Barriers**

- Funding mechanisms; funding is sometimes in silos for specific issues.
- Bringing the stakeholders into the picture.
- Locals are burdened by paperwork, reporting, etc.
- Different entities have different goals and priorities and report to different people. Often they conflict.
- Disproportionate; there are few people at the Tribal level, but overseen by several agencies. Tribes need help, however there is limited staff to provide it.
- Understanding the flexibility of funds and how to use those funds.
- Too much collaboration can actually slow down the process sometimes.
- Data sharing; not knowing who has the data or someone has data and does not know the agency needs it.
- People are set in their ways.
- Lack of effective leadership.
- Turf issues.
- Limits of personnel and job duties - being involved in partnerships usually means being outside of your job duties.

#### **Noteworthy Practices**

- Provide incentives for attending meetings.
- Spreading the workload so one agency is not doing all the work.
- Address more than 1 of the 4 Es when analyzing a jurisdiction safety issues.

- Hold an annual safety summit to get all the safety partners and stakeholders in the same meeting.
- Have the State assume responsibility for paperwork on federal projects.
- Get to know your partners by engaging them in the process.
- Request assistance from FHWA Division Office.
- Develop Regional Coalitions; Minnesota has District TZD Coordinators.
- Institute safety across the board in an agency.
- Get involved with existing groups, seek assistance with safety issues.
- Making one-on-one connections; personal relationships making lasting partnerships.
- Identify projects
  - Mobile phone apps
  - Newsletter
  - Annual Summits
  - TRCC robustness
  - Webinars

### **Roles**

Everyone is responsible to work at developing partnerships to improve safety.

## 2.11 State/Tribal Action Plans

At the end of the peer exchange, attendees broke into their State/Tribal teams to develop action plans based on the information they had gathered during the peer exchange. A summary of their next steps is included in this section.

### **Tribal Actions**

*The Tribal actions are a result of discussions between the BIA Northwest Region Office, Northwest TTAP, and Lummi Nation representative.*

- SHSP for Tribal Lands/Tribal Safety Plans – recommend this be continued with additional focus on resources for that group.
- States should include Tribal governments in HSIP project selection based on crash rates/severity.
- Include Tribes in the project planning and project selection process.
- Bring in LTAPs/TTAPs/BIA – build coalitions and get more people involved.
- Increase public involvement.
- Include a Tribal section in the SHSP.
- Develop a Tribal Safety Advocacy Board.
- There is a Tribal Transportation Planning Organization in Washington. Tribes started it and the State DOT provided funding to hold the meeting. Other States can use this as a model.
- Start a national campaign to promote RSAs on Tribal lands.

### **Utah Actions**

- The State DOT needs more staff support; technical support for data and to facilitate communication between all stakeholders.
- UDOT needs to create an implementation plan to make data more accessible and usable.
- Work with the LTAP to develop a decision tree for low-cost safety systemic improvements.

### **Washington Actions**

- Provide summary data with individualized (your) data to local agencies.
- Simplify and explain the data.

- Provide training for local agencies for using data; perform data analysis.
- Collect missing safety data; get tribal crash data; traffic and roadway data for local agencies.
- More outreach to our partners; Association of Washington Cities are only passively involved; would like MPOs to prioritize safety; outreach to TZD managers.
- Hold a State Safety Summit; organized one in 2005.

#### **Louisiana Actions**

- Review what the LTAP has been doing with the data; getting through all of the parishes and doing analyses similar to what Illinois and Minnesota presented.
- Looking at also making heat maps (similar to Illinois).
- Get with GIS and inventory sections at the LA DOTD to see if there is other data out there that can be used.
- Review the pilot project from Thurston County to conduct a similar initiative.
- Identify missing data and collect it.
- Look into the State collection initiative and adopt to the locals.
- Using a scope of work from Minnesota as an example, the Louisiana LTAP will create an RFP for the development of County Level Safety Plans.

#### **Idaho Actions**

- Review the Illinois Decision Tree Process and determine if/how it can be adapted to Idaho.
- Adopt Minnesota's systemic tool to use surrogate data.
- Provide more assistance to Tribes with data and data analysis.
- Include Tribes in the SHSP rewrite.
- Include Tribes in upcoming Safety Summits.
- Develop county level safety plans.
- Work on the misconception that the data is not available.

#### **Oregon Actions**

- Meet with upper management at Oregon DOT to discuss the requirements of MAP-21 related to providing HSIP funding on all public roads, based on crash data. The outcome goal being a substantial increase of HSIP funding for city and county jurisdiction roads.
- Create a new statewide position of a Local Agency Safety Liaison. This person would provide safety training, technical services, and advocacy for local governments.

#### **California Actions**

- Increase training; traffic engineering/traffic safety training.
- Better collaboration throughout the State.
- Continue to allow locals in HSIP project selection.

#### **Nevada Actions**

- Break out data for counties; provide data per county for each county.
- Will discuss data acquisition at the HSIP Executive Committee meeting in February.
- Ask MPOs if they want to participate in data collection.
- Meet with the new LTAP Director and build a relationship.
- Work with universities on safety capacity building.

### 3 Conclusion

A peer exchange is a practical, widely-used, and effective tool for exchanging information among peer groups about common challenges, best practices, and lessons learned. The Northwest Safety Data Peer Exchange was a focused collaboration of stakeholders concerned with safety data. The peer exchange agenda and format was structured to allow facilitated dialogue among participants and enable each attendee to find the means to develop, update, improve, fine tune, manage, implement, and evaluate their safety data program.

At the end of the peer exchange, attendees were invited to share what they had learned and identify key takeaways. Responses included the following.

- We are all in this together.
- Everyone has a role in data collection.
- Need to think about Tribes. Tribes need to be an integral part of the safety process.
- Provide local agencies with appropriate safety information instead of the data – many do not have the expertise or time to do the necessary analysis and do not know what to do with the findings.
- Need technical help/support for local agencies – a dedicated person.
- Collaboration between States to share best practices.
- Still learning ways to improve, despite how long someone has been involved with data.
- Cultivating personal connections can aid in development of future safety activities.
- The issue may not be sharing the data; it is generally the facilitation of it and getting analysis done to help locals.
- HSIP is a data driven program.



## Appendix A – Agenda

WEDNESDAY AUGUST 15, 2012

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- 7:30 – 8:00    **Registration**
- 8:00 – 8:30    **Welcome**  
Brent Inghram, Team Leader, FHWA – Idaho Division  
Brent Jennings, Highway Safety Manager, Idaho Transportation Department  
Jeff Miles, Deputy Administrator, Idaho Local Highway Technical Assistance Council
- 8:30 – 9:15    **Introductions and Expectations** – Rosemarie Anderson
- 9:15 – 10:15   **FHWA Presentations**
- HSIP Overview – *Rosemarie Anderson, FHWA Office of Safety*
  - Using and Improving Data – *Robert Pollack, FHWA Office of Safety*
- Outcome** – Provide attendees with HSIP policies, requirements and optimum data needs for safety program.
- 10:15 – 10:30   **BREAK**
- 10:30 – 12:15   **Presentations** – California, Idaho, Nevada, Oregon, Utah, Washington and Tribal Perspective: An Overview of State Data Practices with an emphasis on local and tribal roads.  
**Outcome** – Attendees will garner information to help their program and/or provide solutions to be considered to improve their program.
- 12:15 – 1:00    **LUNCH**
- 1:00 – 2:00    **BREAKOUT SESSION** – Challenges and Practices that work in Data Collection, Warehousing and Access  
**Outcome** – Identify best practices in data collection and the role of tribes, local agencies and LTAP/TTAP Centers; Recognize and articulate the roadway issues as a result of limited or no data access to local and tribal practitioners.
- 2:00 – 2:15    **REPORT BACK**
- 2:15 – 2:30    **BREAK**
- 2:30 – 3:30    **Model State Practices (Invited)**  
Illinois, Louisiana and Minnesota will present their noteworthy practices in local road data that have led to safety improvements on local roads.  
**Presenters** – *Priscilla Tobias (ILDOT), Marie Walsh (LA LTAP), Dan Magri (LA DOT) and Bradley Estochen (MnDOT)*  
**Outcome** – Provide attendees with examples of other states’ local road safety successes through notable data practices by involving the LTAP/TTAP Centers and local agencies.
- 3:30 – 4:30    **BREAKOUT SESSION** – Data Analysis, Issue Identification and Safety Project Selection  
**Outcome** – Identify best practices in data analysis and project selection methodologies; solutions to identify issues.
- 4:30 – 4:45    **REPORT BACK**
- 4:45 – 5:00    **Day 1 Wrap-up**
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## THURSDAY AUGUST 16, 2012

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- 8:00 – 8:45 **Recap of DAY 1** – *Robert Pollack*
- 8:45 – 9:45 **Presentations** – Data Tools
- Idaho Data Tool and Practice – *Bruce Drewes (Idaho LHTAC), Kelly Campbell (ITD Highway Safety Office)*
  - Utah Data Tool – *Scott Jones, Utah DOT*
  - Systemic Approach to Safety – *Scott Davis, Thurston County, WA*
- 9:45 - 10:15 **Facilitated Roundtable Discussion** – Data Analysis Tools  
Facilitator – *Hillary Isebrands – FHWA Safety & Design, Resource Center*  
Many states have developed automated data analysis tools to ease a process that can be cumbersome. This discussion will examine data analysis tools development, capability, available training, and technical assistance provided.  
**Outcome** – Information on diverse data analysis tools and their features.
- 10:15 – 10:30 **BREAK**
- 10:30 – 11:30 **BREAKOUT SESSION** – Partnerships/Collaboration  
**Outcome** – Identifying and developing essential elements of partnerships for successful access and use of safety related data and tools.
- 11:30 – 11:45 **REPORT BACK**
- 11:45 – 12:45 **LUNCH**
- 12:45 – 2:00 **BREAK OUT SESSION** – Action Plans  
Grouped by State to Develop Data Action Plans – Plans will include action on improving data collection, data warehousing, data access, data analysis and tools to make local and tribal roads safer.
- 2:00 – 3:00 **Facilitated Roundtable Discussion**  
Facilitator – *Rosemarie Anderson*  
Discussion will focus on peer exchange outcomes and action plans and participant opportunities.
- 3:00 -3:30 **Wrap Up and Adjourn**

## Appendix B – Peer Exchange Roster

Last Name	First Name	Agency	Job Title	City	State	Phone	Email Address
<b>FHWA Delegation</b>							
Anderson	Rosemarie	FHWA	Transportation Specialist	Washington	DC	202-366-5007	rosemarie.anderson@dot.gov
Inghram	Brent	FHWA-Idaho Division	Program Specialists Team Leader	Boise	ID	208-334-9180 X114	Brent.Inghram@dot.gov
Isebrands	Hillary	FHWA Resource Center	Safety Engineer	Lakewood	CO	720-963-3222	hillary.isebrands@dot.gov
Johnson	Lance	FHWA-Idaho Division	Safety and Traffic Program Manager	Boise	ID	208-334-9180 X124	lance.johnson@dot.gov
Perry	John	FHWA-Idaho Division	Field Operations Engineer / Team Leader	Boise	ID	208-334-9180 X116	JohnA.Perry@dot.gov
Pollack	Robert	FHWA	Transportation Specialist	Washington	DC	202-366-5019	Robert.Pollack@dot.gov
<b>Tribal Delegation</b>							
Bonga	Joseph	Bureau of Indian Affairs - NW Regional Office	Supervisory Highway Engineer	Portland	OR	503-231-6728	joseph.bonga@bia.gov
Rolland	Richard	NW Tribal Technical Assistance Program	Director	Cheney	WA	509-358-6829	rrolland@ewu.edu
Vinish	Kirk	Lummi Nation	Assistant Planning Director	Marysville	WA	360-303-4139	kirkv@lummi-nsn.gov
<b>California Delegation</b>							
Barron	Hector	City of Sacramento	City Traffic Engineer	Sacramento	CA	916-808-2669	HBarron@cityofsacramento.org
Castleberry	Steve	Nevada County	Public Works Director	Nevada City	CA	530-265-1718	steven.castleberry@co.nevada.ca.us
<b>Idaho Delegation</b>							
Campbell	Kelly	Idaho Transportation Department	Research Analyst, Principal	Boise	ID	208-334-8105	kelly.campbell@itd.idaho.gov
Cover	Laurie	Idaho T2 Center/LTAP	Training Coordinator	Boise	ID	208-344-0565	lcover@lhtac.org
Drewes	Bruce	Idaho T2 Center/LTAP	Manager	Boise	ID	208-344-0565	bdrewes@lhtac.org
Jennings	Brent	Idaho Transportation Department	Highway Safety Manager	Boise	ID	208-334-8557	brent.jennings@itd.idaho.gov
Maqbool	Laila	Local Highway Technical Assistance Council	Traffic Safety Engineer	Boise	ID	208-344-0565	lmaqbool@lhtac.org

Last Name	First Name	Agency	Job Title	City	State	Phone	Email Address
Miles	Jeff	Local Highway Technical Assistance Council (LHTAC)	Deputy Administrator	Boise	ID	208-344-0565	jmiles@lhtac.org
Shields	Denise	Idaho T2 Center/LTAP	Event Coordinator	Boise	ID	208-344-0565	dshields@lhtac.org
Syphus	Matthew	Local Highway Technical Assistance Council (LHTAC)	GIS Specialist	Boise	ID	208-344-0565	MSyphus@lhtac.org
<b>Nevada Delegation</b>							
Greco	Tom	Regional Transportation Commission of Washoe County	Senior Transportation Planner	Reno	NV	775-335-1907	tgreco@rtcwashoe.com
Reider	Charles	Nevada DOT	Chief Safety Engineer	Carson City	NV	775-888-7335	creider@dot.state.nv.us
<b>Oregon Delegation</b>							
Bish	Douglas	Oregon DOT	Traffic Engineering Services Unit Manager	Salem	OR	503-986-3594	douglas.w.bish@odot.state.or.us
Oshel	Jon	Association of Oregon Counties	County Road Program Manager	Salem	OR	503-585-8351	joshel@aocweb.org
<b>Utah Delegation</b>							
Gilbert	Jeff	Cache MPO	Transportation Planner	Logan	UT	435-755-1634	jeff.gilbert@cachecounty.org
Jones	Nick	Utah LTAP	Director	Logan	UT	435-797-2933	nick.jones@usu.edu
Jones	W. Scott	Utah DOT	Safety Programs Engineer	West Jordan	UT	801-633-6409	wsjones@utah.gov
<b>Washington Delegation</b>							
Davis	Dan	Washington State DOT	Collision Data Analysis Supervisor	Tumwater	WA	360-570-2451	Davidd@wsdot.wa.gov
Davis	Scott	Thurston County Public Works	Traffic Engineer	Olympia	WA	360-867-2345	davissa@co.thurston.wa.us
Enders	Matthew	Washington State DOT	Technical Services Manager	Olympia	WA	360-705-6907	matthew.enders@wsdot.wa.gov
<b>Peer Attendees</b>							
Kolody	Kim	CH2MHILL	Transportation Engineer	Chicago	IL	773-693-3809	kkolody@ch2m.com

Last Name	First Name	Agency	Job Title	City	State	Phone	Email Address
Tobias	Priscilla	Illinois DOT	State Safety Engineer	Springfield	IL	217-782-3568	priscilla.tobias@illinois.gov
Magri	Dan	Louisiana DOT	Highway Safety Administrator	Baton Rouge	LA	225-379-1871	dan.magri@la.gov
Taylor	Jason	Louisiana LTAP	Safety Manager	Baton Rouge	LA	225-767-9717	jason.taylor@la.gov
Walsh	Marie	Louisiana LTAP	Director	Baton Rouge	LA	225-767-9184	marie.walsh@la.gov
Estochen	Bradley	Minnesota DOT	State Traffic Safety Engineer	Roseville	MN	651-234-7011	bradley.estochen@state.mn.us
<b>Other Attendees</b>							
Christianson	Larry	SAIC	Senior Transportation Analyst	Merlin	OR	971-241-0771	larry.p.christianson@saic.com
Horan	Thomas	Center for Excellence in Rural Safety	Research Director	Claremont	CA	909-607-9302	tom.horan@cgu.edu
Ishaq	Cameron	Fasterhorse LLC	Strategy and Management Consultant	Arlington	VA	703-235-0525	cameron.ishaq.ctr@dot.gov
Rigdon	Heather	SAIC	Coordinator	Stafford	VA	703-676-8123	heather.m.rigdon@saic.com