

Linking the Evaluation of Safety Data Management to Professional Certification

PI: Kevin Chang, University of Idaho

Original Project: Safety Data Management and Analysis: Addressing the Continuing Education Needs for the Pacific Northwest

Synopsis: Recent advancements in data collection capabilities have allowed transportation-related agencies to collect mountains of safety data. There was an immediate need to find out what types of safety data are being collected, what types of safety analysis can be done with the collected data, and what (other) types of safety data and analysis approaches are required to meet the safety objectives. This research effort supported regional transportation safety decision-making, a critical resource not currently available in the Pacific Northwest.

The objectives for the project responded to the current gaps in research and identified a methodology that benefitted all system users. These objectives included the following:

- Developing a comprehensive understanding of needs and priorities with regard to safety data management and analysis;
- Developing a set of core skills and knowledge required for safety data management and analysis; and
- Providing a comprehensive set of safety data workforce development resources that could easily be accessed for use and distribution.

Syllabi for over one hundred fifty institutions were collected and analyzed, and a practitioner survey was developed and administered to agencies in Idaho. Training modules for both academicians and practitioners were also developed.

Technology Transfer and Outreach Activities:

This research project focused on developing educational tools (in the form of powerpoint slide decks) that highlighted the importance and impact of transportation safety. These tools were created and designed for widespread dissemination within the practitioner community.

As part of the technology transfer and outreach activities, the powerpoint slide decks were refined to include a written script; this scripting could be adopted by any future presenter or refined, as needed, to suit individual presentation styles.

Project investigators also met with and shared this content with staff at the Institute of Transportation Engineers (ITE). ITE has established a new Road Safety Professional (RSP) certification program with the goal of the program to “ensure that individuals have a foundational knowledge of all of road safety’s multidisciplinary dimensions”. As part of ongoing discussions, ITE was invited to incorporate these materials into their existing or future curriculum.

Final presentation materials in electronic format are available upon request. A hard copy of the “Traffic Safety Management and Analysis: Building a Local Agency Safety Culture” presentation is attached to this project summary.

Traffic Safety Management and Analysis

Building a Local Agency Safety Culture



Source: <https://www.flickr.com/photos/149229261@N00/10000000000/>

Let's begin by discussing traffic safety management and analysis, and how we can build a safety culture within local agencies. This effort is part of a research project funded by PacTrans, a consortium of research universities in the Pacific Northwest, to identify: what types of safety data are being collected, what types of safety analysis can be done with the collected data, and what types of safety data and analysis approaches are required to meet the safety objectives of local agencies. A brief background of road safety will be provided and then continue with statistical facts of road safety, general concepts, resources available. Let's introduce this topic by discussing the history of road safety.

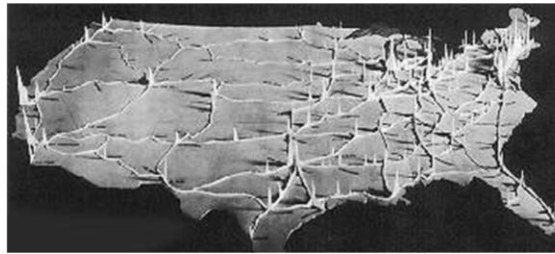
Road Safety (The Early Years)



2

Road safety has been an integral part of transportation project development, and its role and significance in transportation policy has evolved over time. Since the introduction of the motor vehicle, roads have been designed and enhanced to improve user mobility and safety. The government has implemented many different measures to improve safety; the end of World War II created the opportunity to introduce a new type of project to United States, namely the introduction of a better and more reliable road network.

Road Safety (The Early Years)



3

In 1956, the Federal-Aid Highway Act, popularly known as the National Interstate and Defense Highway Act, was enacted by President Eisenhower who signed the bill into law. The total investment in the project was \$128.9 billion with a federal share of \$114.3 billion. This covered the 42,795 miles built under the Interstate Construction Program and was the largest public works project in American history to date. In the same year, 49,000 Americans died in motor vehicle crashes and experts projected future increases. Despite efforts made by previous federal and state laws, most states lacked sufficient safety rules, driver education, and enforcement programs.

In 1966, the Highway Safety Act or the National Traffic and Motor Vehicle Safety Act, was one of the first major efforts at the federal level to reduce the number and severity of highway-related crashes. This act required states to develop and maintain a highway safety program. The act established the first mandatory federal safety standards for motor vehicles. Many changes in both vehicle and highway design followed this mandate. Vehicles were built with new safety features and roads were improved by better delineation of curves, use of breakaway sign and utility poles, improved illumination, and the addition of barriers and guardrails to separate oncoming traffic lanes.

In 1973, a new Highway Safety Act was established. This act provided funding for existing interstate highways and new urban and rural primary and secondary roads in the United States. It also funded a highway safety improvement program, and permitted states for the first time in history to use Highway Trust Fund money for mass transit. The law also established the first national speed limit (of 55 miles per hour).

Road Safety (1990s)

A Summary

**Intermodal
Surface
Transportation
Efficiency
Act of 1991**



TEA-21
Moving Americans into the 21st Century



4

The evolution of highway safety continued with the passage of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. ISTEA presented an overall intermodal approach to highway and transit funding with collaborative planning requirements, giving significant additional powers to metropolitan planning organizations. Highway safety was further enhanced by a new program to encourage the use of safety belts and motorcycle helmets. ISTEA required states to develop and implement a series of management systems, including a safety management system (SMS). A comprehensive crash database was to serve as the basis for these decisions, and safety performance measures were to be defined and used to monitor safety progress over time. SMS resulted in the improvement and quality of crash databases in many states.

In 1998, the *Transportation Equity Act for the 21st Century* (TEA-21) provided more focus by including “safety and security” as a transportation planning priority. TEA-21 also provided guidance on a wide range of planning, policy and safety issues affecting bicycling and walking.

Road Safety (2000s to present)



5

In 2005, the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was established. With guaranteed funding for highways, highway safety, and public transportation, SAFETEA-LU addressed the many challenges facing our transportation system today – challenges such as improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, and protecting the environment. It established the Highway Safety Improvement Program (HSIP) as a core federal-aid program. The specific purpose of the HSIP was to achieve a significant reduction in traffic fatalities and serious injuries on public roads. This was accomplished through the development and implementation of Strategic Highway Safety Plans (SHSP).

Road Safety (2000s to present)



6

In 2012, Moving Ahead for Progress in the 21st Century (MAP 21) was signed into law by President Obama. MAP-21 created a streamlined, performance-based, and multimodal program to address the many challenges facing the U.S. transportation system. These challenges included improving safety, maintaining infrastructure condition, reducing traffic congestion, improving efficiency of the system and freight movement, protecting the environment, and reducing delays in project delivery.

In December 2015, President Obama signed the Fixing America's Surface Transportation Act (FAST Act). The FAST Act maintains our focus on safety, keeps intact the established structure of the various highway-related programs, continues efforts to streamline project delivery, and provides a dedicated source of federal dollars for freight projects.

Vision and Mission



7

Many agencies are in charge of road safety from the federal to the local level. All of these agencies have their own unique vision and mission but all pursue improvements in road safety. The main institution in charge of transportation is the Department of Transportation. The DOT's mission is to "serve the United States by ensuring a fast, safe, efficient, accessible and convenient transportation system that meets our vital national interests and enhances the quality of life of the American people, today and into the future." This department is divided into several organizations that focus on one of many aspects of transportation. The Federal Highway Administration focuses its attention to highways. Their mission is to "improve mobility on our nation's highways and highway system performance—particularly its safety, reliability, effectiveness, and sustainability." As the FHWA's Strategic Highway Safety Plan (SHSP) describes, "our nation's transportation community is entering an unprecedented era of change."

Agency Self-Assessment

Does your agency have a
safety mission?

If so, what is it?

Cooperation

- Cooperation equals success in road safety
- Road safety has to involve all transportation aspects



9

Unity and cooperation by those working in the road safety domain is essential. It is not unusual for there to be differences of interest between federal, state and local agencies and this type of issue ends up affecting the individual goals of each agency. Agencies have to understand that they will need the support of the partner agencies. For example, if a reduce speed limit is desired the cooperation of the police department to make this change effective is important. Road safety has to involve every aspect of transportation from planning to operations.

Local Roadways

- Experience the highest overall crash rates
- Local agencies must take the lead



10

The local roadway network varies from a few city blocks to thousands of miles of paved, dirt, or gravel roads. Unfortunately, the data indicate that the local roadway network experiences the highest overall crash rates. Local agencies are responsible for these roadways and often face challenges such as limited resources, staffing, and other restrictions. To achieve the stated U.S. goal of zero deaths, local agencies must take the lead; helping these local agencies to achieve success is the purpose of this presentation.

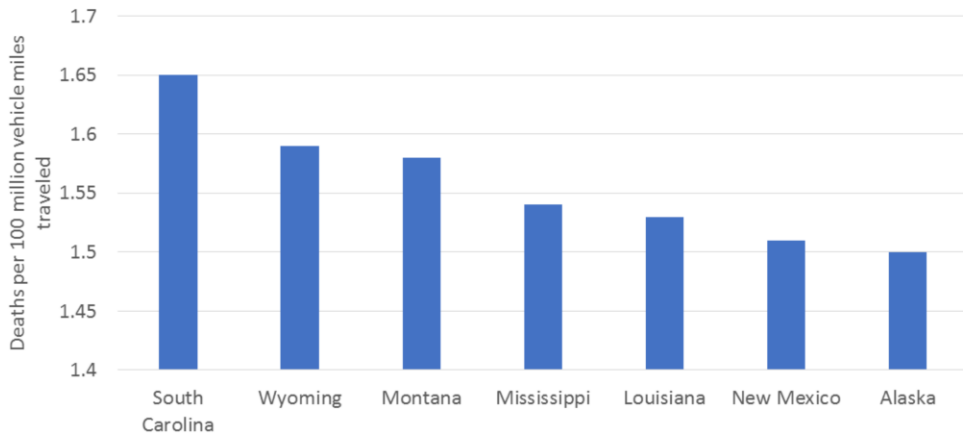
Roadway Statistics



11

Statistical facts can be used to provide perceptive. This discussion identifies the number of roadway fatalities, the individual states with the highest number of crashes, urban and rural road ownership, and the economic impact of crashes.

Fatal Crashes in the U.S. (Top 7 States)



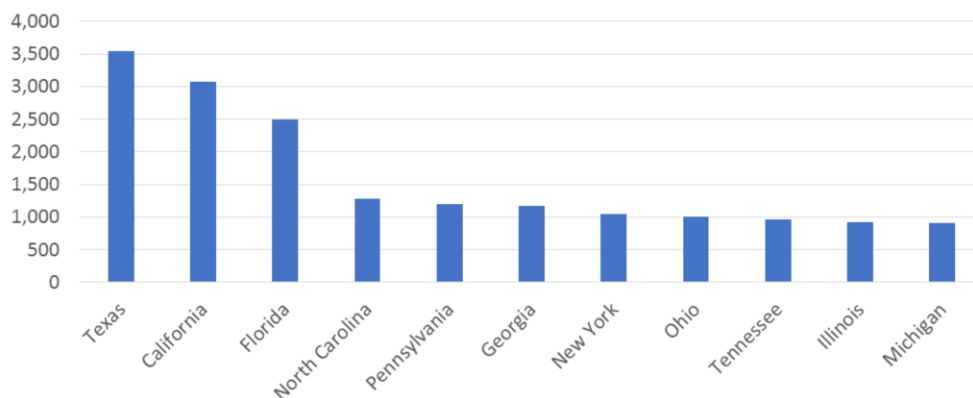
12

Over the past decade there has been a downward trend in traffic fatalities. In 2006, there were nearly 43,000 people killed in traffic crashes. Various safety programs were developed to increase seat belt use and reduce impaired driving. Vehicle improvements including technologies such as air bags and electronic stability control have also contributed to reduce traffic deaths.

The number and types of motor vehicle crash deaths differ widely among the fifty states. A state's population has an obvious effect on the number of fatal crashes. Fatality rates per capita and per vehicle miles traveled provide a way of examining vehicle deaths relative to the population and amount of driving. However, many factors affect these rates, including vehicle type, travel speeds, rates of licensure, state traffic laws, emergency care capabilities, weather, and topography. In 2014, there were around 30,000 fatal motor vehicle crashes in the United States in which nearly 33,000 deaths occurred. This translated into 10.2 deaths per 100,000 people and 1.1 deaths per 100 million vehicle miles traveled. The fatality rate per 100 million vehicle miles traveled ranged from 1.65 in South Carolina to 0.57 in Massachusetts.

(By comparison, Idaho had 1.15 fatalities per 100 million vehicle miles traveled.)

Crashes by State (Top 11)



13

The National Institute of Statistics and Economic Studies defines a road crash as any crash involving at least one road vehicle, occurring on a roadway facility open to public circulation, and in which at least one person was injured or killed. In 2015, the United States lost 35,092 people in crashes. The estimated number of people injured on the nation's roads increased in 2015, rising from 2.34 to 2.44 million injured people. The estimated number of police-reported crashes increased from 6.0 to 6.3 million.

The graph in this slide presents the total number of crashes by state, 56 percent of motor vehicle crash deaths occurred in single-vehicle crashes.

Texas led the ranking with 3,538 crashes followed by California with 3,074 crashes. (By comparison, the state of Idaho registered a total of 186 total crashes.)

Urban Road Ownership (2014)

URBAN						
STATE	STATE HIGHWAY AGENCY	COUNTY	TOWN, TOWNSHIP, MUNICIPAL (1)	OTHER JURIS- DICTIONS (2)	FEDERAL AGENCY (3)	TOTAL
Alaska	696	1,538	327	7	72	2,640
Idaho	362	134	4,463	698	2	5,658
Montana	512	-	3,651	-	-	4,164
Oregon	1,229	3,927	9,719	101	22	14,998
Washington	1,544	6,423	16,455	90	433	24,944
U.S. Total	168,060	243,477	775,851	6,651	7,641	1,201,680

14

The overwhelming majority of urban roads in the United States are owned and maintained by state and local governments. The Interstate Highway System is partly funded by the federal government but owned and maintained by state governments. Local private roads generally serve remote or insular residences. Three million miles of local roads are maintained and operated by state highway agencies, counties, township managers and other jurisdictions. In total, there are more than 38,000 counties, cities, villages, towns, and tribal governments across the United States. One common issue to all local agencies is traffic safety. The number of miles owned for the states of Alaska, Idaho, Montana, Oregon, and Washington is presented here.

Rural Road Ownership (2014)

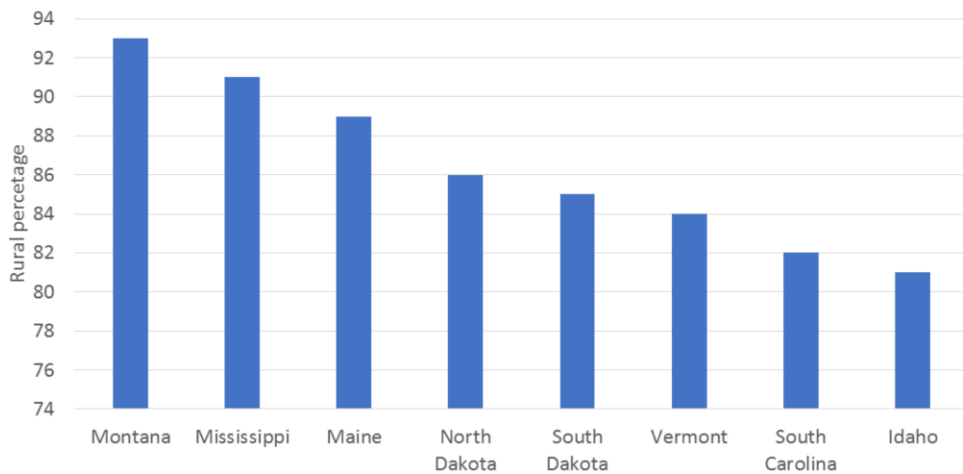
RURAL						
STATE	STATE HIGHWAY AGENCY	COUNTY	TOWN, TOWNSHIP, MUNICIPAL (1)	OTHER JURIS- DICTIONS (2)	FEDERAL AGENCY (3)	TOTAL
Alaska	4,897	2,114	1,456	2,303	2,319	13,089
Idaho	4,623	15,526	1,830	13,061	8,202	43,243
Montana	10,492	42,594	1,175	4,235	12,322	70,819
Oregon	6,430	29,173	1,247	1,379	20,252	58,481
Washington	5,511	32,745	1,629	8,370	8,217	56,473
U.S. Total	614,743	1,597,119	559,289	50,705	153,490	2,975,347

Units: miles

15

By comparison, the number of rural roadway miles owned by agencies are presented here. Fifty-four percent of the miles are owned by counties. The state highway agency and towns own 20 percent and 19 percent, respectively. When comparing the total of urban and rural miles, it is noted that many of the fatal and injury crashes occur in rural areas. Road safety cannot focus only on urban travel; we must consider that a great percentage of drivers are injured or fatally hurt on rural roads. Many local roads are maintained by local agencies with limited resources and staff, making it particularly challenging to address safety issues. Many local agencies rely on state DOTs to provide funding, training, and technical assistance to advance local road safety initiatives and these road safety programs are organized and administered differently from state to state.

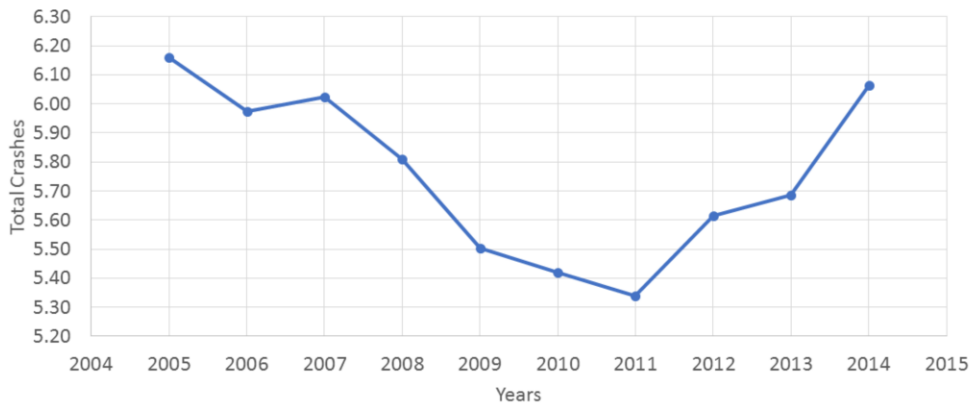
Rural Roadway Percentage by State (Top 8)



16

This table presents the percentage of rural roadway for selected states. The percentage of rural roads was 93 percent in Montana, 91 percent in Mississippi, and 89 percent in Maine compared with 14 percent in New Jersey, 12 percent in Rhode Island, and 10 percent in Massachusetts. For the state of Idaho 81 percent of the roads are part of the rural roadway. Nationwide, 51 percent of motor vehicle deaths in 2014 occurred in rural areas.

Economic Impact of Crashes



17

There is an inherent cost associated with these crashes, and the economic cost of crashes, defined by the USDOT as the sum of fatal, injury and property damage crashes, is significant. In 2010 the total economic cost of motor vehicle crashes in the United States was \$242 billion. When quality-of-life valuations are considered, the total value of societal harm from motor vehicle crashes increases to \$836 billion. In every state the value of a crash varies but as a nation the economic costs alone are nearly \$800 for each person. The economic cost of motor vehicle crashes in the U.S. is equivalent to 1.6 percent of the Gross Domestic Product (GDP) (2010 data). The economic and societal costs of crashes are increasing, and no amount of money can replace the life of a loved one, or stem the suffering caused by motor vehicle crashes.

Agency Self-Assessment

What are your agency's key statistics?

Which statistics would you highlight?

Roadway Users

- Motor-Vehicle Drivers
 - Cars
 - Trucks
 - Motorcycles
 - Buses
- Bicyclists
- Pedestrians



19

Let's now define some general road safety concepts. Wikipedia describes road traffic safety as the methods and measures used to prevent road users from being killed or seriously injured. Typical road users include: motorists, vehicle passengers, passengers of on-road public transport, cyclists, and pedestrians. The Highway Safety Improvement Program Manual defines road safety in terms of the injuries and fatalities that occur on the roadway system. The science of safety has evolved over the years and is focusing more on data and analysis, rather than solely adhering to standards.

Road Safety Performance Measures

- Fatalities
- Fatalities and Serious Injuries
- Fatalities and All Injuries
- Crashes



20

What is a road safety performance measure? As described by Kane Tony who authored Performance Measures to Improve Transportation Systems, the ultimate purpose of measuring performance is to improve transportation service for customers. The use of performance measurement is considered useful not only for reporting to the public but also for communicating with the public. The Federal Highway Administration views performance measures as a tool that can help educate the public as well as decision makers and legislators regarding the importance of transportation and the merits of making appropriate system investments.

Road safety is usually measured in terms of fatalities and injuries involving motor vehicles and roadway users such as pedestrians and bicycles. Fatalities and injuries are comprehensive measures but is difficult to track, since minor injuries are not always recorded by law enforcement. Crashes on the other hand, can be tracked so long as they are reported, including those where no injury or fatality occurred such as property damage-only crashes. However, crashes where no injury or fatality occurred may not be reported.

Current Legislation

- Fixing America's Surface Transportation (FAST) Act
- Improves nation's surface transportation infrastructure



21

Why is keeping up to date with legislation important? Local agencies need to be aware of changes that take place with new legislation. The current legislation is the Fixing America's Surface Transportation (FAST) Act, a five-year program to improve the nation's surface transportation infrastructure including roads, bridges, transit systems, and passenger rail network. In relation to road safety, some of FHWA's priorities for FAST Act implementation include:

- Developing summary materials (including fact sheets and presentations) to ensure the public and highway stakeholders have key information on the FAST Act's highway provisions;
- Getting funding in the hands of states, locals, Metropolitan Planning Organizations (MPOs), tribes, and others who can put it to use throughout the country;
- Issuing guidance to fill in the details of the new law and answer stakeholder questions; and
- Making progress on regulations related to the FAST Act.

FAST Act

- Funding:

<http://www.fhwa.dot.gov/fastact/funding.cfm>

- Guidance and Regulation:

<http://www.fhwa.dot.gov/fastact/guidance.cfm>

22

Several links are provided here that relate to important information on the FAST Act and road safety. Funding is a important issue for every local agency and having knowledge regarding the priorities of the FAST Act many provide an important edge when competing for funding.

Highway Safety Improvement Program (HSIP)

- Core federal-aid program
- HSIP projects must be consistent with SHSP
- Funds used to maximize opportunities to advance projects that can reduce fatalities and serious injuries

23

The FAST Act is closely linked with the Highway Safety Improvement Program, or HSIP. The HSIP is a core federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads, including non-state-owned public roads and roads on tribal land. An important consideration is that highway safety improvement projects must be consistent with each SHSP and identified on the basis of crash experience, crash potential, crash rate, or other data-supported means. HSIP funds should be used to maximize opportunities to advance projects that have the greatest potential to reduce the state's roadway fatalities and serious injuries and support the safety performance targets of the State. In addition, the cost effectiveness of highway safety improvement projects should be considered during the project selection and prioritization process.

Traffic Safety Management

- Combined efforts at improving safety would collectively exceed the efforts of agency working independently?



24

Let's pause to consider a case study. Imagine several people moving a large heavy sofa from one room to another. If one person lifts, one person pushes, and another person holds a door open, is this a reasonable approach? However, what if those who are pushing and lifting are going in different directions, and the third person opening the door does so arbitrarily?

Now imagine several different agencies from the same jurisdiction, each with the responsibility of improving highway safety. How can there be some sort of management system so that the agencies' combined efforts at improving safety are greater than each agency working independently?

Partner Agencies

Federal Departments and Programs

- Department of Transportation (DOT)
- Federal Highway Administration (FHWA)
- National Highway Traffic Safety Administration (NHTSA)

State and Local Agencies

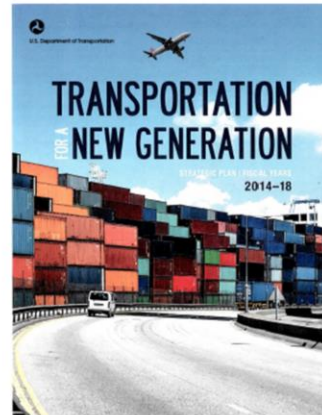
- Governors Highway Safety Association (GHSA)
- State Department of Transportation
- Counties and Cities

25

Who can we turn to? Staff members tasked with roadway safety work at the federal, state, and local levels. At a federal level, we have the Department of Transportation, Federal Highway Administration, and National Highway Traffic Safety Administration. At a local level, we have the State Department of Transportation, Governors Highway Safety Association, State Police and numerous county and city agencies. A brief description of these different agencies is provided next.

Department of Transportation

- Safe and secure public travel
- Increase personal mobility
- Contribute to nation's economic growth



26

The Department of Transportation was established by an act of Congress on October 15, 1966. The Department's first official day of operation was April 1, 1967. The top priorities at DOT are to keep the traveling public safe and secure, increase their mobility, and have our transportation system contribute to the nation's economic growth. The United States Department of Transportation's (DOT's) Strategic Plan for fiscal years 2014–2018 re-imagines America's transportation system as the means by which we connect with one another, grow our economy, and protect the environment. President Lyndon Johnson once said: "A day will come in America when people and freight will move through this land of ours speedily, efficiently, safety, dependably, and cheaply, and that will be a good day and a great day in America". Since the DOT is a institution that does not only focus on safety but every aspect of transportation, the strategic plan describes many different elements with regard to safety, including the goal of improving public health and safety by reducing transportation-related fatalities, injuries, crashes and injuries.

Federal Highway Administration (FHWA)

- Supports state and local agencies in the design, construction, and maintenance
- Improve mobility and highway system performance



27

The Federal Highway Administration (FHWA) is an agency within the U.S. Department of Transportation that supports state and local governments in the design, construction, and maintenance of the nation's highway system (Federal Aid Highway Program) and federal and tribal owned lands (Federal Lands Highway Program). Through financial and technical assistance to state and local governments, the Federal Highway Administration is responsible for ensuring that America's roads and highways continue to be among the safest and most technologically sound in the world. The Federal Highway Administration (FHWA) was created on October 15, 1966. The core of FHWA's mission is to improve mobility on our nation's highways, and a primary focus of the strategic plan framework is improving highway system performance—particularly its safety, reliability, effectiveness, and sustainability. The FHWA also has a Strategic Highway Safety Plan Champion's Guidebook which is intended to provide an overview of the fundamental elements of the SHSP process. It serves as a resource for states that are updating their Strategic Highway Safety Plans (SHSP) or assessing their SHSP development process, and is a reference for professionals new to safety and planning.

Federal Highway Administration (FHWA)



<http://safety.fhwa.dot.gov/hsip/>

General (HSIP) Information
Strategic Highway Safety Plan (SHSP)
Data and Analysis Tools
High Risk Rural Roads (HRRR)
Railway-Highways Crossing (Section 130) Program
Transportation Performance Management (TPM)
HSIP Rulemaking
HSIP Resources
Highway Safety Improvement Program Reports

28

The FHWA manages many different programs and provides different tools for highway improvement. For safety, existing programs or tools include the Strategic Highway Safety Plan, data and analysis tools, high risk rural roads, and the HSIP manual and resources.

National Highway Traffic Safety Administration (NHTSA)

- Responsible for reducing deaths, injuries and economic losses
- Investigates safety defects in vehicles
- Promotes the use of safety belts, child safety seats, and air bags



29

The National Highway Traffic Safety Administration (NHTSA), under the U.S. Department of Transportation, was established by the Highway Safety Act of 1970 as the successor to the National Highway Safety Bureau to carry out safety programs under the National Traffic and Motor Vehicle Safety Act of 1966 and the Highway Safety Act of 1966. NHTSA is responsible for reducing deaths, injuries and economic losses resulting from motor vehicle crashes. This is accomplished by setting and enforcing safety performance standards for motor vehicles and motor vehicle equipment, and through grants to state and local governments to enable them to conduct effective local highway safety programs. NHTSA investigates safety defects in vehicles, sets and enforces fuel economy standards, helps states and local communities reduce the threat of drunk drivers, promotes the use of safety belts, child safety seats and air bags, investigates odometer fraud, establishes and enforces vehicle anti-theft regulations and provides consumer information on motor vehicle safety topics. NHTSA also conducts research on driver behavior and traffic safety to develop the most efficient and effective means of bringing about safety improvements.

Governors Highway Safety Association (GHSA)

- Represents state and territorial highway safety offices
- Provides leadership
- Supports states and local agencies to improve traffic safety



30

The Governors Highway Safety Association (GHSA) represents the state and territorial highway safety offices that implement programs to address behavioral highway safety issues including: occupant protection, impaired driving, and speeding. GHSA provides leadership and advocacy for the states and territories to improve traffic safety, influence national policy, enhance program management, and promote best practices. GHSA's goals are to promote traffic safety as a national priority, expand and deliver member support services, develop new and strengthen existing partnerships, and ensure sufficient resources to support association services and priorities.

The Highway Safety Act of 1966 established the State and Community Highway Safety Grant Program, commonly known as the "402" program, creating a unique partnership among federal, state and local governments. This legislation also set the foundation for the creation of State Highway Safety Offices, which were funded primarily through 402 funds. In each state and territory, governors select a Highway Safety Representative (Governor's Representative) to administer the program. In 1967, several Governor's Representatives, realizing the need to share information and collectively work for national safety goals, decided to organize. The organization was incorporated in 1974 and in 2002, the name was changed to the Governors Highway Safety Association.

Department of Transportation – State Level

- Own mission and vision
- Backbone of economy



31

Every state department of transportation has a mission and vision while operating the roads in their state. For example, the Idaho Department of Transportation's mission is "Your Safety. Your Mobility. Your Economic Opportunity." Why is transportation important? The state's transportation system is inextricably woven into the fabric of daily life. The state's citizens use its transportation system to get to work and school, visit friends, and seek recreation opportunities. The roads, bridges, airports, railroads and ports are the backbone of a state's economy. The cost of doing business is affected by how well goods and people can be moved across town, across the country and around the world. Thus, economic performance is tied to the quality of a state's transportation system.

Counties and Cities

- Manage a safe, high-quality local public street system
- Operations and maintenance practices vary by jurisdiction



32

The local counties and cities are responsible for a specific part of the road system in each state. County and city roads and highways operated and maintained by the local highway department vary greatly in design standards, funding and regularity of maintenance. Some cities manage their own roads while others are managed by the county or a local district.

Toward Zero Deaths (www.towardzerodeaths.org)

- Brings stakeholders together
- Defines a common vision
- One person dies every 16 minutes in a traffic crash



33

There are currently many diverse initiatives and programs to increase safety on the nation's roadways. Many stakeholders have their own strategic plans that guide their individual activities, and many of these organizations involve their highway safety partners as they develop coordinated safety plans to put them into action. Federal transportation laws require each state to develop a SHSP and requires all safety partners to focus on the highest priority traffic safety needs. What is missing, however, is a specific single vision that brings together all of the various stakeholders nationwide with a role in highway safety. The Toward Zero Deaths (TZD) National Strategy on Highway Safety, brings these stakeholders together and defines the common vision that will drive their individual and collaborative efforts. Sadly, one person dies every 16 minutes in a traffic crash in the United States.

Road users need to make safety-driven decisions, as do transportation professionals, and a crucial tenet of the TZD National Strategy is to encourage change in the nation's highway safety culture. This involves exploring how and why road users often make unsafe decisions, and why and how these influences have such an impact. Positively changing the safety culture among road users where decisions are to be made with safety in mind would lead them to understand the potential results of their actions or inactions. Many challenges remain the size of the nation's roadway network, the number of road users, the variety of road user types, and the complexity of the driving task combine to present significant challenges for eliminating traffic fatalities and serious injuries.

Summary

- Highlighted a brief background of road safety in United States
- Described the importance of road safety
- Introduced the main concepts of road safety
- Identified the agencies involved with road safety improvements

34

Road safety can be defined in multiple ways, often depending on the performance measure used. At present, the common performance measures used are crash fatalities and injuries on the roadway system. The concept of road safety has evolved over the years and is now focusing more on data and analysis, rather than solely on standards. In the past decade there has been a general downward trend in traffic fatalities and injuries. Countermeasures have been developed to substantially lower the number of traffic fatalities over the years but there is a need to continue improving the roadway safety system due to the high number of fatalities and injuries. For agencies that seek road safety improvements, it is necessary to partner with agencies responsible of the roadway system and learn more about current legislation such as the Fixing America's Surface Transportation (FAST) Act, which seeks to improve the nation's surface transportation infrastructure. The FAST Act is closely linked with the Highway Safety Improvement Program, or HSIP. The HSIP is a core federal-aid program with the purpose of achieving a significant reduction in fatalities and serious injuries on all public roads. Agencies divide their safety priorities depending on roadway classification, and the focus of this presentation targets agencies like yours who are responsible for the local roadway system.