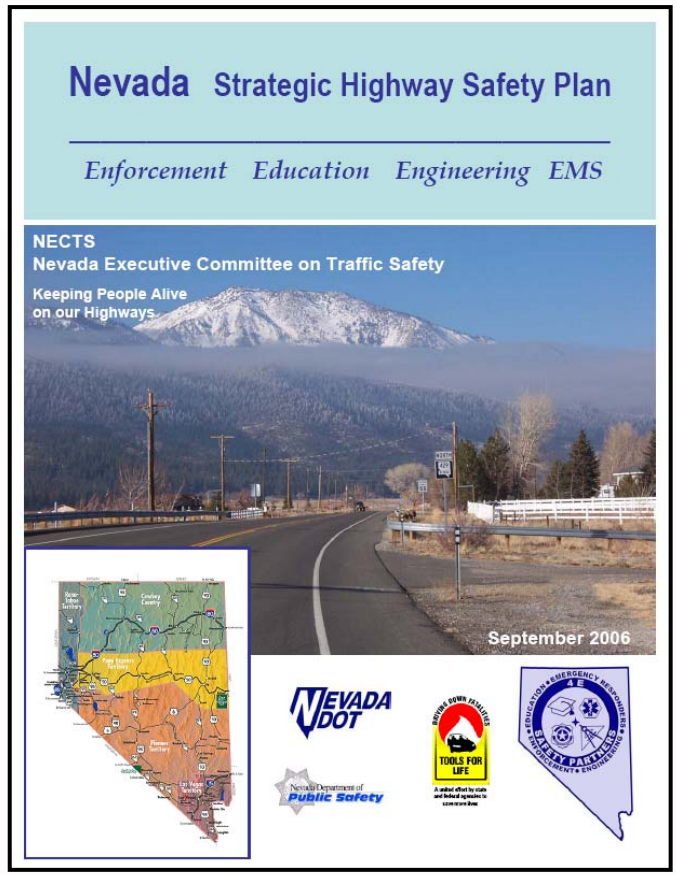
Implementing Nevada's Strategic Highway Safety Plan

Safety Summit 2008

- Purpose and Goals
- The Need
- Statistical update
- NDOT Safety Engineering activities
- Implementing the Plan



Background

Consider:

- **In 2005 the Texas Transportation Institute estimated the cost of congestion in Clark County alone: $543 million**
- **That same year, vehicle crashes in Clark County resulted in a *cost to society* of over $2.8 billion**

Background

Also consider:

Nevada crime/crash clock (2006)

- 1 murder every 39 hours
- 1 aggravated assault every 59 minutes
- 1 violent crime every 28 minutes
- 1 property crime every 5 minutes
- 1 traffic fatality every 20 hours
- 1 traffic injury every 16 minutes
- 1 property damage crash every 14 minutes
- 1 crash every 9 minutes

Background

Overview of injuries in Nevada 2000 – 2004 (Nevada State Health Division, 2008)

- Unintentional injuries are the fifth leading cause of death in Nevada and in the United States, as reported by the Center for Disease Control and Prevention
- The most common unintentional injury is motor vehicle accidents

Background: the problem today

- **Highway deaths in the U.S have remained relatively constant**
  - **43,510 (2005)**
  - **42,642 (2006)**
- **And…**

Traffic-related fatalities are the leading cause of death for people between the ages of 4 and 34

Focusing on the problem

Nevada fatal crash summary by emphasis areas

TABLE 2.1
Summary of Nevada Fatal Crashes by Emphasis Areas

	Emphasis Areas	Nevada Fatal Crashes*	Percent
Part 1: Drivers	Instituting Graduated Licensing for Young Drivers	249 fatal crashes involved a driver under the age of 21	17%
	Ensuring Drivers are Licensed and Fully Competent	-- NA --	
	Sustaining Proficiency in Older Drivers	111 fatal crashes involved a driver between the age of 65 and 74	7%
		98 fatal crashes involved a driver over the age of 74	7%
	Curbing Aggressive Driving	180 fatal crashes listed speeding or reckless action as a contributing factor	12%
	[illegible]	[illegible]	35%
	Keeping Drivers Alert	219 fatal crashes listed inattentive as a contributing factor	15%
		45 fatal crashes listed asleep or fatigued as the driver's physical condition	3%
	Increasing Driver Safety Awareness	-- NA --	
	Increasing Seat Belt Usage and Improving Air Bag Effectiveness	822 vehicle occupant fatalities (out of [illegible] vehicle occupant fatalities) were not using a restraint device	[illegible]
Part 2: Special Users	Making Walking and Street Crossing Easier	265 pedestrian fatalities	15%
	[illegible]	[illegible] bicyclist fatalities	2%
Part 3: Vehicles	Improving Motorcycle Safety and Increasing Motorcycle Awareness	109 motorcyclists fatalities	6%
	Making Truck Travel Safer	164 fatal crashes involving heavy trucks	12%
	Increasing Safety Enhancements in Vehicles	-- NA --	
Part 4: Highways	Reducing Vehicle-Train Crashes	1 fatal crash involving a collision with a train	0%
	Keeping Vehicles on the Roadway	[illegible] fatal run-off the road crashes	40%
	Minimizing the Consequences of Leaving the Road	Top 5 fatal run -off the road collisions: - [illegible] (40%) - [illegible] (16%) - Struck fixed object (15%) - Overturned in median (14%) - Struck median fixed object (3%)	
	Improving Design and Operation of Highway Intersections	[illegible] fatal crashes [illegible] intersections	19%
	Reducing Head-On and Across-Median Crashes	115 fatal head-on and across-median crashes	8%
	Designing Safer Work Zones	58 work zone fatalities	3%
Part 5: EMS	Enhancing Emergency Medical Capabilities to Increase Survivability	-- NA --	
Part 6: Manage-ment	Improving Information and Decision Support Systems	-- NA --	
	Creating More Effective Processes and Safety Management Systems	-- NA --	

Reducing Impaired Driving

Increasing Seat Belt Usage

Making Walking and Street Crossing Easier

Keeping Vehicles on the Roadway

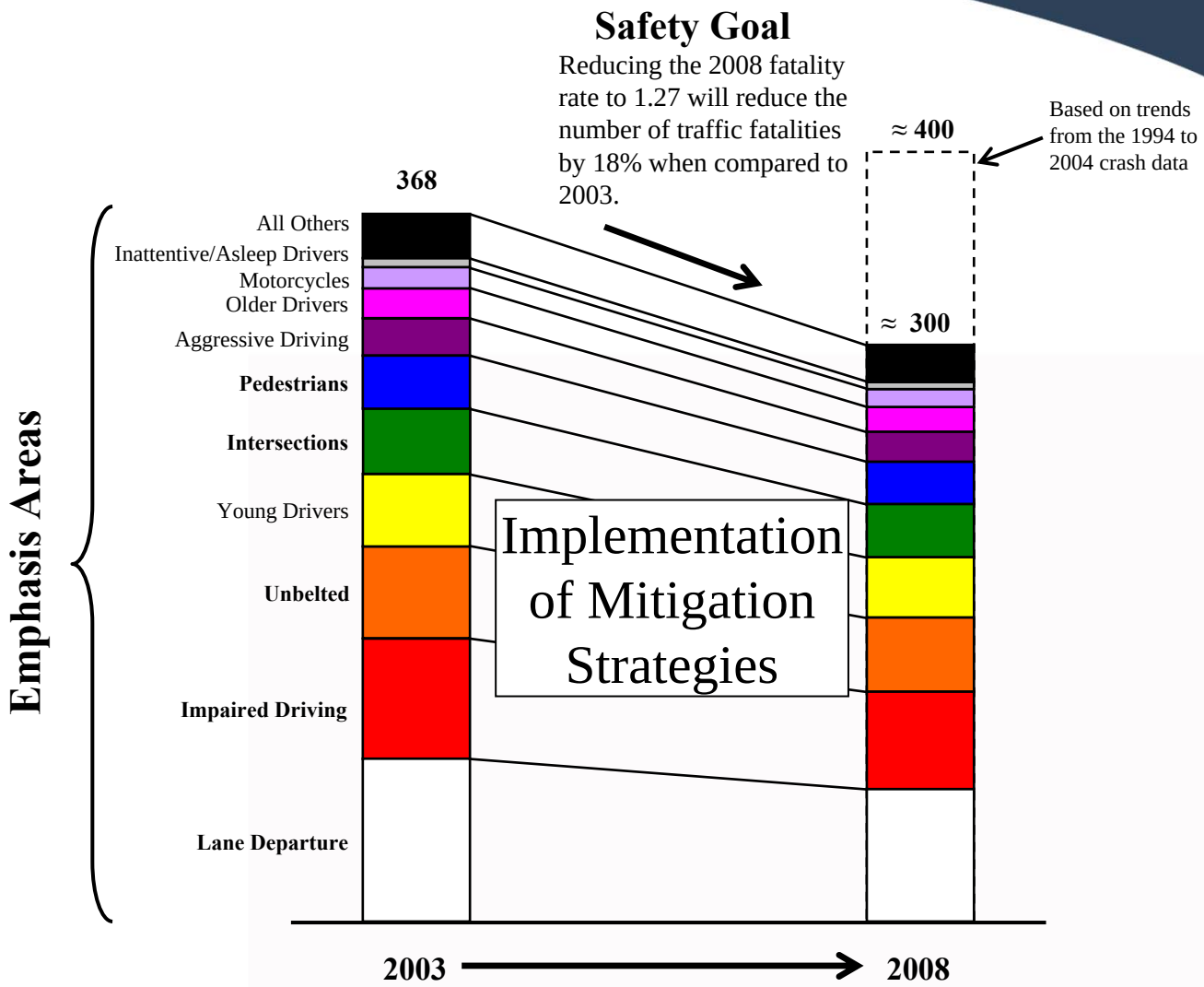
Improving the Design and Operation of Highway Intersections

Emphasis Areas

1998-2002 (1,750) 2002-2006 (2,000 fatalities)

- **Alcohol impairment**
  464 fatalities/27% of total traffic fatalities
  416 fatalities/21%
- **Unbelted occupants**
  780 fatalities/46% of total traffic fatalities
  886 fatalities/44%
- **Pedestrians**
  276 fatalities/16% of total traffic fatalities
  388 fatalities/19%
- **Lane/road departures**
  675 fatalities/39% of total traffic fatalities
  810 fatalities/41%
- **Intersections**
  443 fatalities/26% of total traffic fatalities
  536 fatalities/27%

Our Goal


Safety Goal
Reducing the 2008 fatality rate to 1.27 will reduce the number of traffic fatalities by 18% when compared to 2003.
Based on trends from the 1994 to 2004 crash data
≈ 400
368
≈ 300
Emphasis Areas
All Others
Inattentive/Asleep Drivers
Motorcycles
Older Drivers
Aggressive Driving
Pedestrians
Intersections
Young Drivers
Unbelted
Impaired Driving
Lane Departure
Implementation of Mitigation Strategies
2003
2008

Twenty Critical Strategies

Enforcement

- Highly publicized DUI checkpoints
- Seize Vehicle/License Plate for DUI offenses
- Highly publicized Seat Belt enforcement campaigns & primary seat belt law
- Enforce pedestrian laws at high crash areas (judicial follow-thru)
- Automated Enforcement

Education

- How to maintain vehicle on the roadway
- Public service campaigns to reduce impaired driving
- Subsidized transportation to/from bars, hotels, etc.
- Pedestrian safety education

EMS

- First responder training for state patrol, maintenance workers, etc.
- ITS Technology to reduce response times

Engineering

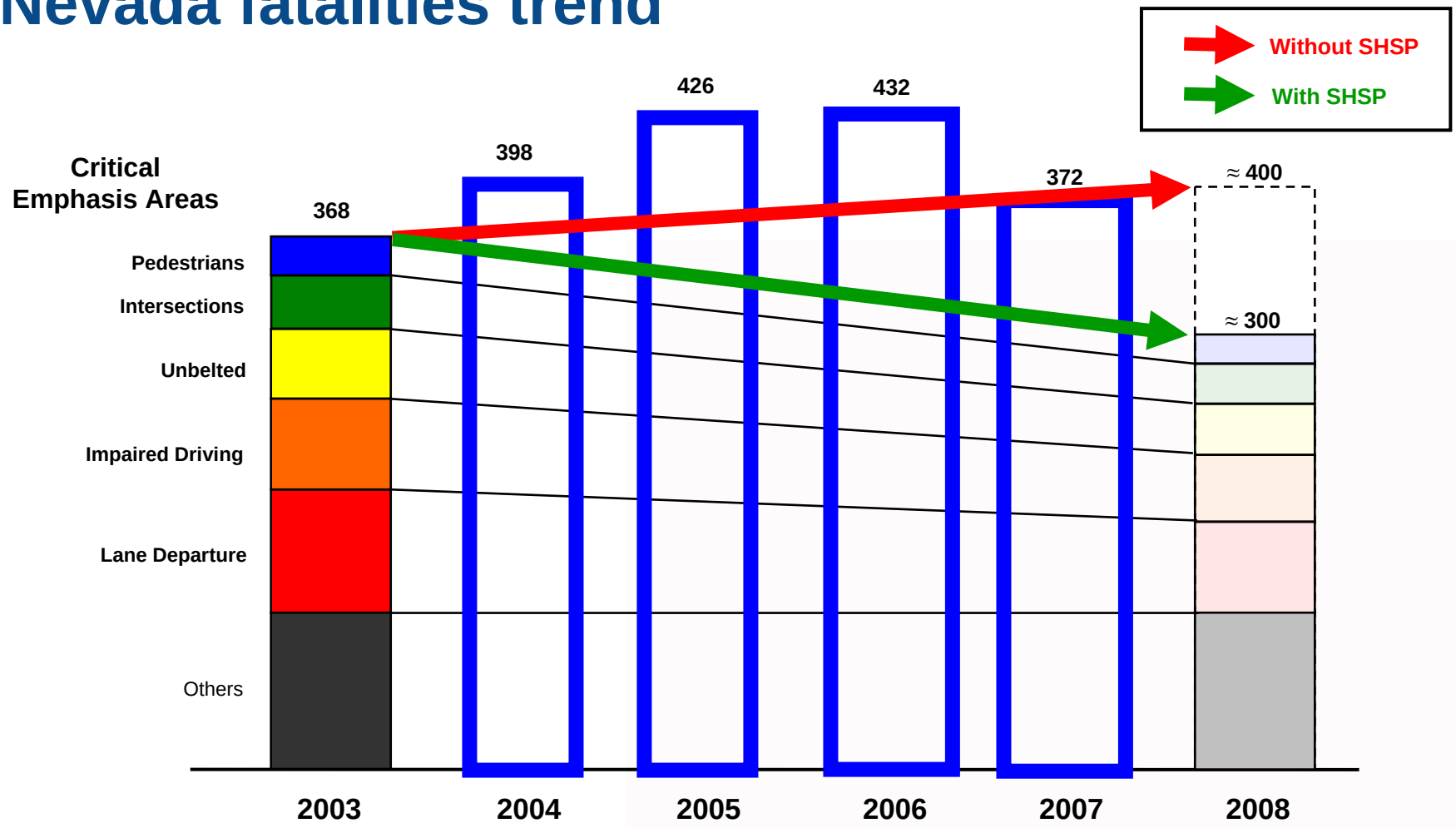
- Keep vehicles in their lane
- Flatten slopes and remove roadside objects
- Increase ped safety by constructing sidewalks, refuge islands, and upgrading signals
- Access management
- Intersection geometric improvements
- Increase intersection awareness with traffic control devices
- Traffic signal upgrades and improvements

Data Systems

- Improve ability to perform data analysis across agencies
- Develop criteria to identify high pedestrian crash locations and crosswalk placement guidelines

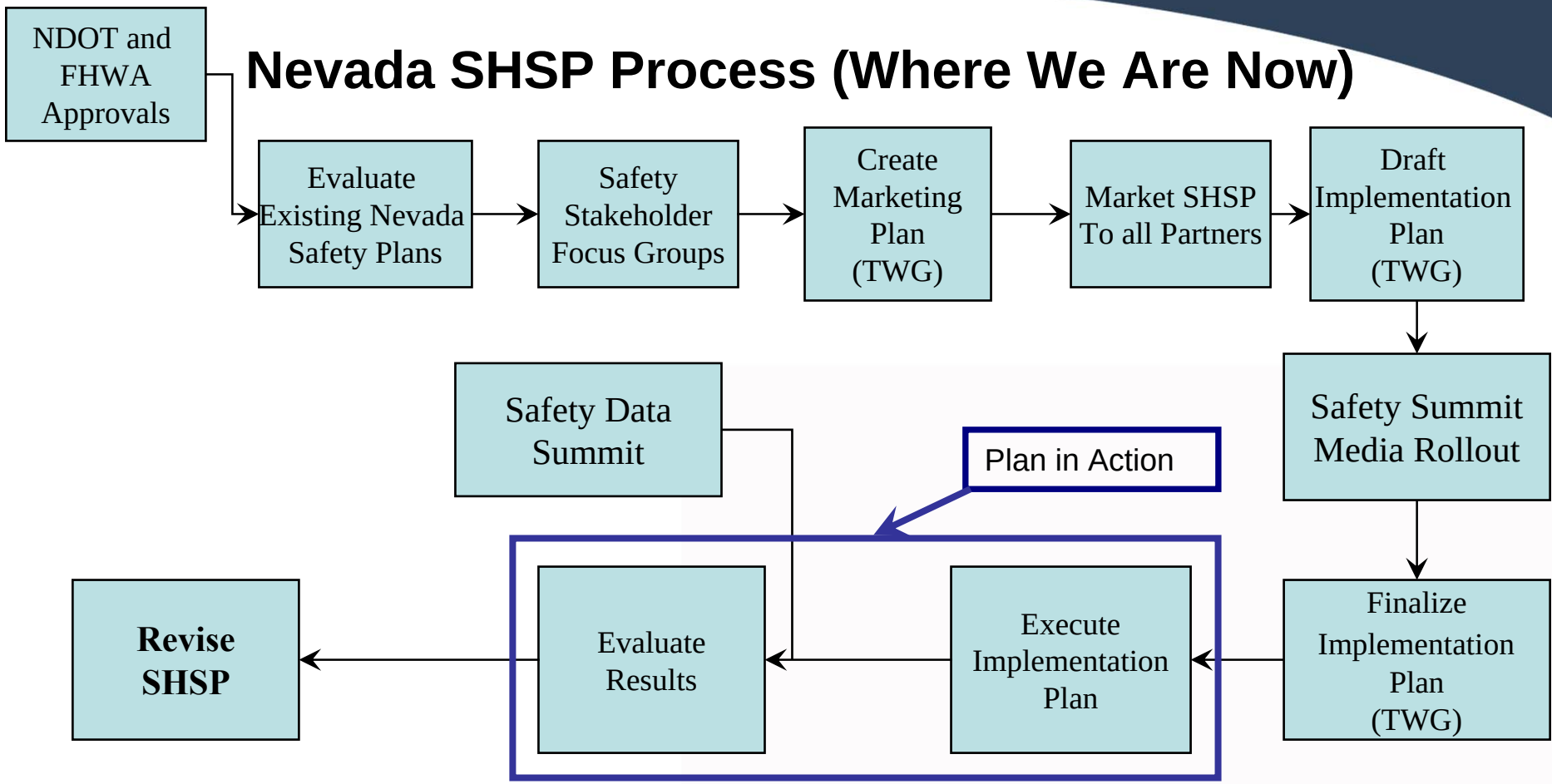
Statistical update

Nevada fatalities trend



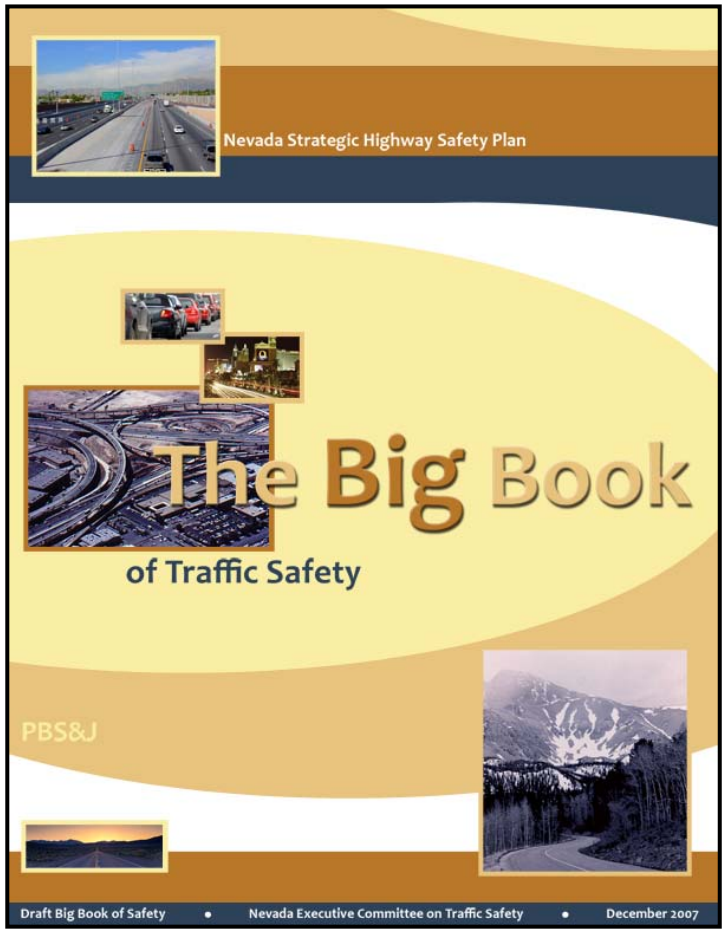
NEVADA STRATEGIC HIGHWAY SAFETY PLAN

Nevada SHSP Process (Where We Are Now)



Nevada SHSP Process

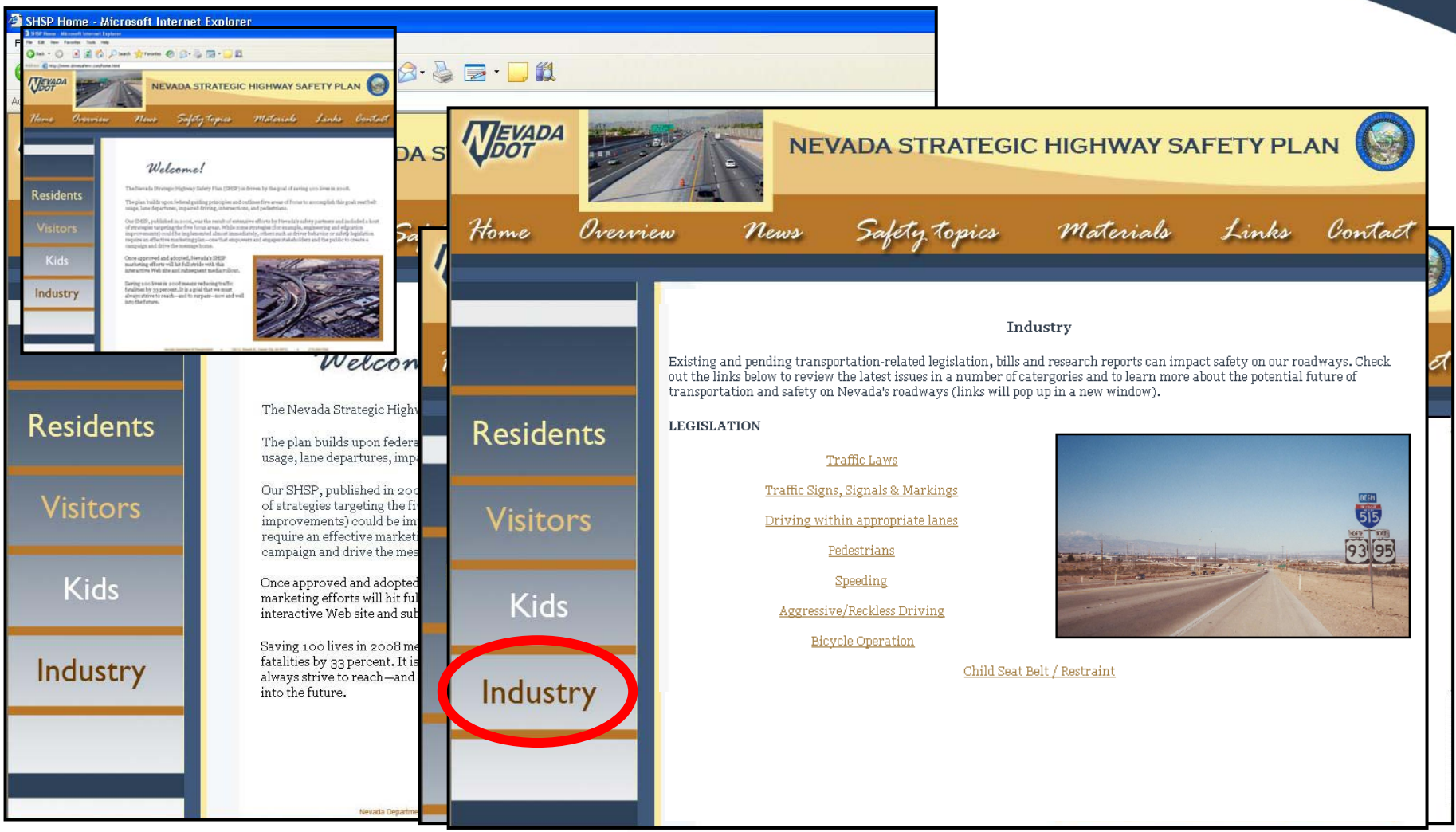
The Big Book of Safety



Title:	**Attorney General Advisory**
Title:	**Bicycle Safety Education** 28-PS-5/26-163PS-3
Institution:	Washoe County Kiwanis Club
Status:	New
Description:	This 502(c)3 organization will conduct bicycle rodeos and distribute helmets to Northern Nevada communities while conducting education on bicycle safety. This is the third year of a highly successful education program.
Resources:	$11,500
Partners:	**Contact:** Telephone
Strategies:	**Address:**

NEVADA STRATEGIC HIGHWAY SAFETY PLAN

Nevada SHSP process: www.drivesafenv.com



CEA Implementation Teams

Impaired Driving

Team Leader: Michael Geeser, AAA Nevada, in association with the Attorney General's Advisory Coalition on Impaired Driving

Strategies

- **Conduct highly publicized DUI checkpoints**
- **Conduct public service campaign to reduce impaired driving**
- **Institute a mandatory ignition interlock program for DUI offenders**
- **Seize the vehicle/license plate of convicted impaired driving offenders**
- **Provide subsidized transportation to/from drinking establishments**

Safety Belts

Team Leader: Traci Pearl, Office of Traffic Safety, in association with the Nevada Seatbelt Coalition

Strategies

- **Improve core driving skills/car control and accident avoidance**
- **Conduct highly publicized seat belt enforcement campaign**
- **Improve ability to perform crash data analysis across agencies**
- **Create primary seat belt law**

CEA Implementation Teams

Lane Departures

Team Leader: Kelly Anrig, NDOT

Strategies

- **Keep vehicles in their lanes through improvements/engineering**
- **Flatten side slopes and reduce roadside objects**
- **Create education/awareness programs for maintaining vehicles on roadway lanes**
- **Provide first responder training for state patrol, maintenance workers, and related personnel**

Intersections

Team Leader: Chris Louis, RTC of Washoe County

Strategies

- **Implement automated enforcement including red-light-running cameras**
- **Increase intersection awareness with traffic control devices**
- **Implement geometric intersection improvements**
- **Implement traffic signal upgrades and improvements**
- **Follow the principles of access management at intersections**

CEA Implementation Teams

Pedestrians

Team Leader: Jerry Duke, RTC of Southern Nevada

Strategies

- **Enforce pedestrian laws at high crash locations (with judicial follow-thru)**
- **Provide pedestrian safety education for pedestrians and motorists**
- **Develop criteria to identify high pedestrian crash locations and placement, design, and implementation guidelines for pedestrian amenities**

Agencies with CEA Team Action Assignments

- Department of Public Safety
- NDOT
- RTC Washoe County
- RTC Southern Nevada
- Cities and Counties Statewide
- STOP DUI
- AAA
- MADD
- Nye County Community Prevention Partnership
- UNLV
- UNR
- DMV
- Las Vegas Metropolitan Police Department
- Reno Police Department
- Henderson Police Department
- Washoe County Sheriff
- FHWA
- Federal Motor Vehicle Carriers Association
- Emergency Medical Services
- American Traffic Academy
- Safe Communities
- Safe Kids

Public Information Officer (PIO) Working Group

Advisory committee to the SHSP Technical Working Group

- Integrates and engages statewide agency PIO personnel (e.g., NDOT, DPS, AAA, DMV, Dept. of Health, RTC North and South)
- Refines and guides marketing/media strategies from focus groups/workshops and Safety Summit
- Creates coordinated message for media outlets and the public

Purpose and Goals

Safety Summit
March 18-19, Henderson, Nevada

- **Foster networks**
  - **Prioritize and track participant feedback**
  - **Share successful implementation strategies**
  - **Coordinate SHSP support**
  - **Conduct media rollout**
- **Develop implementation task teams with roles, responsibilities, and timing**
- **Commit to a safety culture**

Office of Traffic Safety (OTS) SHSP participation

- Provides incentives to state, local, and non-profit agencies that apply for federal grants addressing key SHSP strategies
- Provides professional development grants enabling partners to participate in SHSP meetings and special events
- Provides paid media to inform the public of high-visibility enforcement and other key behavioral traffic safety issues
- Funds law enforcement, education, and emergency medical services to perform traffic safety programs

NDOT Safety Engineering

- **Hazard Elimination Program**
  - High Crash Location review and project development (intersections)
  - centerline rumble strips (lane departure)
- **Road Safety Audit Program**
  - Reviewing roadways from a safety perspective (intersection/lane departure/pedestrian)
- **Data Driven Solutions**
  - Partnership with DPS on NCATS management
  - New analytic tools
    - Statewide GIS
    - Statewide C.A.R.E. implementation
    - SafetyAnalyst FHWA Pool Funded Study
  - Safety Data Warehouse

Legislative involvement

- Strategy: Primary Seat Belt Law
  - Unbelted Occupants
    - 44% of total traffic fatalities
  - Benefit:
    - A NHTSA study found seat belts reduce the risk of a fatality by 45% and a critical injury by 50% for front seat passengers over the age of five).
  - Cost:
    - Publicity costs to inform the public of the law change.
    - Increased enforcement and publicity to magnify the effect of the law change.

Legislative involvement

- Strategy: Automated Enforcement (Red Light Running Cameras)
  - Intersections
    - 27% of total traffic fatalities
  - Benefit:
    - 15% reduction in related crashes
  - Cost:
    - Varies depending on equipment selected
      - $50,000 per intersection
      - Sensor costs $5,000 to $10,000 per intersection
  - National Conference of State Legislatures
    - Example legislation http://www.ncsl.org/programs/transportation/trafsafdb.cfm
  - More information
    - http://www.stopredlightrunning.com/

The problem tomorrow

Nationwide, of every 100 children born this year:

- One will die violently in a highway crash during their lifetime.
- 70 will be injured in a crash during their lifetimes – some more than once.