IDAHO’S CRASH PROBLEM & PROGRAMS

Goals
- Mission - Zero traffic deaths on Idaho roads
- Fewer than 200 annual traffic deaths by 2012

Idaho’s Problem
- 232 people killed in 2008
- Fathers, mothers, children, brothers and sisters
- Leading cause of death in Idaho for 1 to 34

Fatality Location

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>State System</td>
<td>63%</td>
<td>64%</td>
<td>60%</td>
</tr>
<tr>
<td>Non State</td>
<td>37%</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>78%</td>
<td>22%</td>
</tr>
</tbody>
</table>
**Economic Costs of Crashes**

- $2.6 billion, $1700 per Idahoan in 2008
- Society pays 75% of total crash costs
- Society pays 85% of medical costs
- 87% of public know they are paying these costs

**Behavior**

- Aggressive Driving - 45%
- Inattentive Driving - 30%
- Safety Restraints - 29%
- Impaired Driving - 24%
- Youthful Driver - 18%
- Vulnerable Users - 17%
- Commercial Vehicles - 9%
- Motorcycle - 8%

**Current Programs**

- Idaho Highway Safety Coalition
- Statewide Mobilizations including paid media and enforcement
- Law Enforcement Liaison Program
- Alive at 25 Program

**Infrastructure**

- Lane departure – 45%
  - Single Vehicle Run-Off-Road – 35%
  - Head On/Side Swipe – 10%
- Intersections - 27%
Proven Roadway Countermeasures
- Rumble Strips and Stripes
- Safety Edge
- Roundabouts
- Turn Lanes at Stop Controlled Intersections
- Yellow Clearance Intervals
- Road Safety Audits and Follow-up

Idaho’s Safety Philosophy
- Continued focus on severe crashes
- Focus on system-wide improvements
- Continue to focus on point locations

Crash Response
- Quick and effective response
- Safety of emergency responders
- Appropriate training and equipment
- Re-opening of roadway
- Provide for accurate crash data

Summary
- Partnerships
- Data
- Culture
- Commitment
- Evaluation

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What is Road Safety?

The number of crashes, by kind and severity, expected to occur on the entity during a specific period.

Collaborative Plans & Programs

- Highway Safety Improvement Program (HSIP)
- Strategic Highway Safety Plans (SHSP)
- SHSP Update - Based on input from 49 Division Offices.
- The Essential Eight – A Strategic Highway Safety Plan Implementation Process Model (SHSP IPM)
- Highway Safety Improvement Program – 10% Flex Funds

Purpose of the HSIP

To achieve a significant reduction in fatalities and serious injuries on all public roads through the implementation of infrastructure-related highway safety improvements.

Highway Safety Improvement Program

The HSIP is a core Federal-aid funding program that emphasizes a data-driven, strategic approach to improving highway safety that focuses on results.
Legislative References

- SAFETEA-LU
  - 23 U.S.C. 130: Railway-Highway Crossing Program

- Federal Regulation
  - 23 CFR 924: Highway Safety Improvement Program

HSIP Programs

- Strategic Highway Safety Plans (SHSP)
  - State Highway Safety Improvement Program
    - Highway safety improvement projects
  - High Risk Rural Roads Program
  - Railway-Highway Crossing Program

What is SHSP?

An SHSP is a statewide-coordinated safety plan that provides a comprehensive framework, and specific goals and objectives, for reducing highway fatalities and serious injuries on all public roads.

Purpose of a SHSP

- To identify the State's key safety needs and guide investment decisions to achieve significant reductions in highway fatalities and serious injuries on all public roads.

  - The SHSP was established in SAFETEA-LU U.S.C. Section 148 as part of the Highway Safety Improvement Program (HSIP), which is a core Federal-aid program.

Strategic Highway Safety Plans (SHSP)

- Data-driven, statewide plan of strategies that provide a framework for reducing highway fatalities and serious injuries.

  - Developed by State DOTs through a collaborative process with safety stakeholders
  - Integrates the 4Es – engineering, education, enforcement, and emergency medical services
  - Considers the safety needs of all public roads
  - Guides investment decisions

Strategic Highway Safety Plans (SHSP)

- Benefits of the SHSP
  - Common statewide safety goals and priorities
  - Strengthens existing partnerships
  - Builds new safety coalitions
  - Shared data, knowledge, and resources
  - Leverages resources
Integrating into Other Transportation Plans and Programs

**Factors Influencing Update Decision**

- Change
- States waiting to see reauthorization
- ARRA and other priorities
- Staff changes – State and Federal

**Opportunities**
- Increased effectiveness
- More comprehensive and inclusive
- Engage more stakeholders

**“The Essential Eight Fundamental Elements and Effective Steps for SHSP Implementation”**

- Communication
- Collaboration
- Action Plans
- Marketing
- Monitoring, Evaluation, and Feedback
- Data Collection & Analysis
- Emphasis Area
- Integration into other Transportation Plans

**Using the IPM**

- Chapters
- Key Strategies
- Narrative
- Checklists
- Case Studies
SHSP Implementation Process Model

- Ch. 1 – The SHSP IPM
- Ch. 2 – Leadership, Collaboration, and Communication
- Ch. 3 – Collecting, Analyzing, and Sharing Data
- Ch. 4 – Emphasis Area Action Plans
- Ch. 5 – Integration into Other Transportation Plans and Programs
  - 5.1 Long-Range Transportation Plans & Transportation Improvement Programs
  - 5.2 Highway Safety Improvement Programs
  - 5.3 Highway Safety Plans
  - 5.4 Commercial Vehicle Safety Plans
  - 5.5 Plan and Program Integration Checklist and Timeline
- Ch. 6 – Marketing
- Ch. 7 – Monitoring, Evaluation, and Feedback

(HSIP) – 10% Flex Funds

- Amount of Flex Funds Approved for Spending - 20 million
- Number of States using flex funds - 10
  - Alabama
  - Colorado
  - Hawaii
  - Idaho
  - Michigan
  - Minnesota
  - Nebraska
  - Nevada
  - Utah
  - Wisconsin

(HSIP) – 10% Flex Fund Activities

- Traffic records
- Occupant protection programs
- Impaired driving programs
- Young drivers programs
- Drowsy driving programs
- Attorney General’s Office to support the Traffic Safety Resource Prosecutor

Federal-Aid Funding Sources

- Safety Programs
  - Highway Safety Improvement Program
  - High Risk Rural Roads Program
  - Highway-Railway Crossing Program
  - Safe Routes to School
- Other Federal-Aid Programs
  - Interstate Maintenance
  - Surface Transportation Program
  - National Highway System
  - Equity Bonus
  - Congestion, Mitigation and Air Quality
  - Federal Lands

Other Federal Safety Resources

- National Highway Traffic Safety Administration
  - State and Community Highway Safety Grants (402)
  - Occupant Protection Incentive Grants (405)
  - Safety Belt Performance Grants (406)
  - State Traffic Safety Information System Improvement Grants (408)
  - Alcohol-Impaired Driving Countermeasures Incentives Grants (410)
  - Motorcyclist Safety Grants (SAFETEA-LU Section 2010)
- Federal Motor Carrier Safety Administration
  - Motor Carrier Safety Assistance Program (49 CFR 350)
Program Resources

- HSIP Program Fact Sheet
- SHSP Program Fact Sheet
- HSIP & SHSP Guidance
- State Safety Fact Sheets
- Safety Briefing Book – Making the Case for Transportation Safety – Ideas for Decision Makers
- Draft Strategic Highway Safety Plans Implementation Process Model (SHSP IPM)
- The Champion’s Guide for Developing Strategic Highway Safety Plans

Questions???

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202-366-1200
System-wide Safety Solutions

Missouri’s Approach to Saving Lives

Jon Nelson, P.E.
Missouri Department of Transportation

Traffic Safety in Missouri

The Mission

- Reducing fatalities and serious injuries on all Missouri roadways

Missouri Roadways

- State highway system
  - 32,000 + miles
  - 7th largest in the U.S.
- Local Roads
  - 100,000 + miles
- 166,000 crashes per year since 2005
- 68 billion vehicle miles traveled (VMT)

Missouri’s Safety Philosophy

- Previous efforts: Specific crash locations
  - Total crashes
  - High accident locations – “Black Spots”
    - Minimal overall effect
- High severity lists
  - Focus on severe crashes
  - Still location based

Missouri - Fatalities

- 1996 - 2005

Missouri - Serious Injuries

- 1996 - 2005
### Crash Locations are Random

- **Description:** Fatal Crashes 2007

### Crash Types are Predictable

<table>
<thead>
<tr>
<th>Year</th>
<th>No Seat Belt</th>
<th>Run Off Road</th>
<th>Aggressive</th>
<th>Curves</th>
<th>Impaired</th>
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<tr>
<td>2006</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td>2007</td>
<td></td>
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<tr>
<td>2008</td>
<td></td>
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### Description 2005 2006 2007 Total

<table>
<thead>
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<th>2005</th>
<th>2006</th>
<th>2007</th>
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<tr>
<td>Unrestrained Occupants</td>
<td>621</td>
<td>576</td>
<td>478</td>
<td>1,675</td>
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<tr>
<td>Killed in Run-Off-Road Crashes</td>
<td>594</td>
<td>494</td>
<td>447</td>
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<tr>
<td>Aggressive Driving Involved</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Following too close</td>
<td>23</td>
<td>23</td>
<td>18</td>
<td>64</td>
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<tr>
<td>Too fast for conditions</td>
<td>316</td>
<td>290</td>
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<td>860</td>
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<tr>
<td>Speed exceeded limit</td>
<td>226</td>
<td>195</td>
<td>174</td>
<td>595</td>
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<td>565</td>
<td>508</td>
<td>446</td>
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<td>375</td>
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<td>288</td>
<td>257</td>
<td>834</td>
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<td>Inattentive Drivers Involved</td>
<td>313</td>
<td>262</td>
<td>247</td>
<td>822</td>
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<tr>
<td>Young Drivers - 15-20 Involved</td>
<td>255</td>
<td>245</td>
<td>180</td>
<td>687</td>
</tr>
<tr>
<td>Killed in Head-On Crashes</td>
<td>253</td>
<td>154</td>
<td>104</td>
<td>571</td>
</tr>
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</table>

### Missouri’s Safety Philosophy

- **Continue to focus on severe crashes**
  - Fatalities and serious injuries
- **Focus on system-wide improvements**
  - Identify crash types
  - Tier the system
- **Continue to use crash data**
- **Address “Black Spots” where appropriate**
  - Balance between system-wide and spot locations

### The Mission

- **Reducing fatalities and serious injuries on all Missouri roadways**

### The Goal

- Previous SHSP (2004): Missouri’s Blueprint for Safer Roadways
- 1,000 or fewer fatalities by 2008
Missouri - Fatalities
- 2005 - Present
  - Goal met!
    - Last time fatalities below 1,000: 1993

Missouri - Serious Injuries
- 2004 - Present

Current SHSP (2008)
- Blueprint to Arrive Alive
- 4 E’s
- New goal: 850 or fewer fatalities by 2012

Emphasis Areas
- Serious Crash Types
- High-Risk Drivers and Occupants
- Special Vehicles
- Vulnerable Roadway Users
- Special Roadway Environments

Key Strategies
- The Targeted 10
  1. Primary Seat Belt Law
  2. Public Education
  3. Targeted Enforcement
  4. Punish Drunk Drivers
  5. Improve Curve Recognition
  6. Install Rumble Stripes
  7. Improve Signs & Stripes
  8. Install Shoulders
  9. Improve Intersection Safety
  10. Remove/Shield Fixed Objects

System-wide Improvements
- With over 32,000 miles, where do we start?
- Nearly half of Missouri’s fatalities were occurring on just 5,500 miles of the system
  - Started by focusing on major roads

<table>
<thead>
<tr>
<th></th>
<th>Major</th>
<th>Minor</th>
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<tbody>
<tr>
<td>Roadway Miles</td>
<td>5,500</td>
<td>27,000</td>
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<tr>
<td>Miles Traveled</td>
<td>80%</td>
<td>20%</td>
</tr>
<tr>
<td>Fatalities</td>
<td>45%</td>
<td>55%</td>
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</table>
Smooth Roads Initiative (SRI)

- 2,200 miles of most heavily traveled roads
  - 2005-2006
  - 7% of the state system
  - 60% of the VMT
- $360 million

Smooth Roads Initiative (SRI)

- Improved roadway surface
  - Asphalt overlays
  - Concrete diamond grinding
- 6” edgelines: Rumble stripes
  - Epoxy
- 6” lane lines
  - 3M waffle tape
  - Wet reflective

Smooth Roads Initiative (SRI)

- Sign upgrades
- Delineation
  - Guardrail
  - Guard cable
  - Jersey barrier
- Emergency reference markers
**Better Roads, Brighter Future**

- Next 3,300 miles of major roads
  - 2007-2011
  - Mostly 2-lane roadways
- 85% of major roads in “good” condition by the end of 2011
- $124 Million
  - HSIP funds for safety components

**Better Roads, Brighter Future**

- Minimum expectations (all major roads):
  - Smooth driving surface
  - Minimum 4” paved shoulder
  - Improved signing
- Over 1,000 miles will receive edgeline + centerline rumble stripes

**Median Guard Cable**

- 1999: Spot locations in St. Louis
- 2004: System-wide installation
- Criteria
  - Interstates
  - Severe crash history
- $100,000 per mile
- Current installations
  - 600 miles to date
  - Low and high tension
  - Expressways added

**Median Guard Cable**

- Studied all reported cross-median crashes
  - 1999-2005
  - 1,400 crashes
- 95% success rate
  - Vehicle did not enter opposing lanes
**Median Guard Cable**

- Recently completed more updated study
  - I-70 and I-44
  - 2005-2008
  - 4,622 crashes
  - 103 “failures”
- 98% success rate
  - 97.3% on I-70
  - 98.3% on I-44

**Making Safety Policy**

- Rumble stripes
  - All major roads
  - All minor roads with crash history
- 6-inch stripes
  - All edgelines, multi-lane skips
- Curve speed plaques
  - All curve/turn signs

**Additional System-Wide Improvements**

- Edgeline striping
  - AADT greater than 400
  - Road width 20’ or greater
  - 7,600 miles between 400 and 1,000 AADT
  - 6,800 of these miles (90%) are on HRRR Routes
- Improved curve visibility
  - Chevrons on all curves with advisory speeds 15 mph or more below the posted speed limit
Edgeline Stripes are Low Cost Solutions

- 18 lives per year?

Chevrons

- Intersection safety plan
  - Signing packages
  - Uniform signal clearance interval timing
  - Reflecterized back plates
  - Lighting

- Fluorescent yellow sheeting
- Remove/shield fixed objects
- Eliminate edge drop-off

Intersection Visibility

Fluorescent Yellow Sheeting
System-wide Improvements

- Are they working?
  - Since 2005, fatalities on major roads down 48%
    - VMT steady during that same period
  - Lane departure fatalities down 25%
  - Over a 90 percent reduction in fatalities on routes we have installed median guard cable
    - In-house MoDOT study

- 24% decrease in fatalities from 2005 to 2008.
  - 1,257 fatalities in 2005.
  - **850 fatalities or less in 2012???**
  - On pace to be below 900 in 2009.
    - Last time fatalities below 900: 1950

Remember...

- Fatal crash locations are random.
- Fatal crash types are predictable.
  - No seat belt
  - Curves
  - Run off road
  - Impaired Driving
  - Aggressive Driving

Contact Information

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  - Senior Traffic Studies Specialist
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  - Jonathan.Nelson@modot.mo.gov
**Washington State’s Strategic Highway Safety Plan**

**Featuring:** The Traffic Safety Corridor Program - Our Integrated Systems Approach in Action

**Presented by:**
- Angie Ward
  - Washington Traffic Safety Commission
- Matthew Enders
  - Washington State Department of Transportation

**Date:** November 2009  
**Location:** Boise, Idaho

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**Purpose**

- To present Washington’s process for developing our Strategic Highway Safety Plan – Target Zero
- To share details of just one Washington program guided by the integrated systems approach.

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**The Crash Problem**

- The CDC reports the number one cause of death for people between the ages of 4 and 34 in the U.S. is motor vehicle crashes!
- The bottom line is that crashes impact every aspect of our lives to include mobility, congestion, and the preservation of our infrastructure.

---

**Washington Crash Profile**

- Since 1995, an average of over 600 people have died each year in traffic crashes;
- Each year more than 3,500 serious injury crashes occur in Washington;
- Each year more than 140,000 collisions occur on Washington’s roadways; and
- In 2007 the total economic cost of motor vehicle collisions in Washington was more than $5.8 billion.

---

**The Crash Problem**

- The FHWA recently updated its crash cost estimates (2007):
  - Fatality - $5,800,000
  - Serious Injury - $288,845
  - Visible injury - $80,904
  - Possible Injury - $53,626
  - Property Damage - $6,209

---

**Most Frequent Causes of Fatal Crashes in Washington?**

- Over 80% of traffic deaths result from behavioral errors.
- In Washington, 4 out of every 5 traffic deaths involve impairment, speed, or non-belt use or some combination of these three factors.
Acceptable Progress?

- No!
- Over 500 people dying each year on WA roadways is not success.
- In order to change this trend the state needed a radical new approach to traffic safety planning.

Solution - an Integrated Systems Approach to traffic safety planning.

Target Zero Vision

- To eliminate fatal and serious injury crashes by 2030
- Question: Is this a viable traffic safety planning strategy, or is it just wishful thinking?

Implementing a Data Driven Collaborative Approach to Transportation Safety

- The state must develop and implement a Strategic Highway Safety Plan.
- Which outlines specific elements including:
  - Statewide goals
  - Emphasis areas
  - Specific strategies
  - Performance Measures
Benefits of an Integrated Systems Approach to Traffic Safety

- Collaboration among organizations to address transportation safety issues
- Assists policy makers when prioritizing investments.
- Outlines specific elements of the state's approach to transportation safety including:
  - Goals
  - Emphasis Areas
  - Performance Measures
  - Broad range of proven strategies

The Result: Fewer Fatal & Disabling Injuries

Key Elements of Target Zero

- Many partners
- Data driven
- Establishes priorities and goals
- Implemented via proven strategies and best practices
- Aggressively evaluates results
- Makes course corrections as warranted

Determining Target Zero Priorities

- Analyze all available data;
- Identify the target areas where investment of resources will generate the greatest safety benefits; and
- Group priority areas into four levels, with Priority 1 being the most critical.

Desired Outcomes

- Has the development, implementation, and refinement of Target Zero begun to generate desired outcomes?
- Let's review some of the performance data.
**Analysis Shows**

- WA has exceeded Target Zero annual goals since 2006;
- Researchers believe the transition to an integrated systems approach is a significant factor;
- However, 518 lives lost in 2008 is not the level of success desired; and
- There is much work yet to be done.

**Causal Factor Analysis**

- The aggregate data shows improvement, but clearly not enough.
- Crash analysis needs to specifically determine where the most reductions in fatal crashes can be realized, and
- What did Washington’s analysis show?

**The Role of Impairment, Speed, and Non-Seat Belt Use in Traffic Fatalities**

Of the 3,429 traffic fatalities that occurred from 2000-2004, 17 percent involved impairment, speed, and/or non-belt use. This accounted for 1880 deaths.
Priority One

- Impaired Driving
- Speeding

Priority Two

- Seat Belts
- Intersection Crashes
- Run off the Road Crashes
- Improved Traffic Records Data

States Traffic Safety Structure

- Was WA structured and organized properly to effectively implement Target Zero?
- Answer - NO!
- The diverse traffic safety infrastructure and organizations operated independently in their respective silos.
- If Target Zero were to be implemented effectively, this had to radically change!

Washington Traffic Fatalities, 1980-2008

- Projected to 2030 (preliminary data for 2008)
- Prepared by WTSC - May 2009 (Source: FARS)

Current trend is a decrease of 9.6 traffic fatalities per year...

...But to reach the goal of zero traffic fatalities by 2030 will require a decrease of 25 fatalities per year!

Governor Gregoire’s Priorities for Washington

- Economic Development
- Education
- Health Care
- Environment
- Government Accountability
- Public Safety
- Social Services

Traffic Safety Commission’s Funding Plan

Washington’s Strategic Highway Safety Plan

Implementation Recommended

Local Agencies

Private Industry & Non-profit Groups

Indian Nations
Putting “Target Zero” to Work!

Linking WTSC Goals to the Governor’s Priorities

Outcome of this Change

- Would then drive:
  - The application of targeted countermeasures - proven strategies and best practices;
  - The allocation of all traffic safety resources - people, time and money; and
  - And the ongoing and aggressive evaluation of these initiatives.

- Question - How was this accomplished?
SUMMARY

10 fatal crashes with a total of 11 motorcyclist fatalities

- 5 (50%) of operators did not have valid MC endorsement
- 5 (50%) of the MC operators were impaired
- 5 (40%) fatal crashes occurred on county roads
- 6 (60%) of the operators were speeding
- 4 (40%) of the crashes were single vehicle
- 1 (9%) of the drivers/riders were not wearing a helmet
- 10 (90.9%) of fatalities were MC operators
An Example of a Target Zero Delivery System: The Corridor Safety Program

- The goal: Reduce fatal and serious injury collisions on a defined section of roadway:
  - using
- Low cost, near term solutions;
- and building
- Partnerships with community groups, business, engineering, enforcement, education and emergency services.

The Process

- WA State DOT works with Highway Safety Office to identify high collision roadways—then approach local leadership;
  - OR
- Community comes to us with concern about a particular stretch of roadway.

The Process - Part 2

- Determine presence of local leadership for a two year project;
- During the first six months, meet monthly with local steering committee to build an action plan for education, enforcement, and engineering;
- Once Action Plan is built:
  - Public kick off
  - Quarterly meetings to coordinate work
  - Track results

SUITABLE CORRIDORS

- Arterial or related set of roadways
- Clearly definable (State Route, City Street)
- Workable size
- Within governmental jurisdictions that can and will work together
- Collision problems that can be countered by low-cost, near-term actions

Steering Committee

- WTSC
- WSDOT
- WSP
- Local Regional Traffic Engineer
- County Sheriff
- Local Community Traffic Safety Task Force
- Liquor Control Board
- Local EMS
- City/County Public Works
- School District
- Media
- Transit
- Local elected officials
- MADD
- Anyone who has an interest in traffic safety

HOW THE PROJECT WORKS

1. Identify Project
2. Recruit Steering Committee
3. Analyze Problems
4. Draft Action Plan, Problems and Solutions
5. Publicize
6. Plan into Action
   (Projects last 18 months to two years from kick-off)
Analyze Problem
Subjectively

Objectively
- Data

Within the resources available through members of the steering committee
- Measurable Impact
- Supported by a majority of the committee

Logo Creation

SR 27 Spokane Billboard

189 crashes on this road last year. 2 were fatal.
Corridor Safety Program: Strategies and Activities

**Strategies and Activities**
- **SR 14/ Cape Horn Corridor Safety Project**
  - WSDOT and local partners use small low cost engineering fixes, including:
    - Installation or improvement of traffic signals or other road control improvements;
    - Roadway striping or other road marking;
    - Traffic control signing improvements;
    - Improvements to pedestrian walking environments;
    - Counseling or encouragement of traffic signals or other electronic devices;
    - Products tested through demonstration or new construction.

**SR 14 Education: Inform Public of the Project and Don’t Surprise with Extra Enforcement**

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<thead>
<tr>
<th>Education</th>
<th>Case Study</th>
<th>Project: Aurora Avenue Project in Seattle</th>
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**Program Results**

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<th>Corridor Safety Program: Strategies and Activities</th>
<th>Before</th>
<th>After</th>
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<tbody>
<tr>
<td>Total Collisions</td>
<td>199</td>
<td>183</td>
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<tr>
<td>Fatality/Serious Injuries</td>
<td>30</td>
<td>17</td>
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<tr>
<td>Fatality/Serious Injuries</td>
<td>2</td>
<td>1</td>
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</table>

**Top Collision Types**
- Hit fixed object (75)
- Overturn (20)
- Runoff road (15)
- Animal strike (14)
- Side impact (9)
- Over-dimensional load (5)

**Top Contributing Causes**
- Exceeding safe speed (88)
- Over speed (41)
- Intoxicated (33)
- Distracted driving (31)
- Failing to yield (21)
- Runoff road (21)
- Failure to maintain control (14)

**Benefit/Cost**
- Benefit/cost ratio is estimated at $35/$1.
- Benefits $20 Million per year to $11.8 Million per year, a savings of over $4 Million community relationships.

**Aurora Avenue Project in Seattle**

- WSDOT and local partners use small low cost engineering fixes, including:
  - Installation or improvement of traffic signals or other road control improvements;
  - Roadway striping or other road marking;
  - Traffic control signing improvements;
  - Improvements to pedestrian walking environments;
  - Counseling or encouragement of traffic signals or other electronic devices;
  - Products tested through demonstration or new construction.

**Before and After Results for Coralridor Safety Project to Date (Per Year)**

<table>
<thead>
<tr>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Collisions</td>
<td>199</td>
</tr>
<tr>
<td>Fatality/Serious Injuries</td>
<td>30</td>
</tr>
<tr>
<td>Fatality/Serious Injuries</td>
<td>2</td>
</tr>
</tbody>
</table>

**Top Contributing Causes**
- Exceeding safe speed (88)
- Over speed (41)
- Intoxicated (33)
- Distracted driving (31)
- Failing to yield (21)
- Runoff road (21)
- Failure to maintain control (14)

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**Summary**

WSDOT and local partners use small low cost engineering fixes, including:
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SR 14 Enforcement:
Utilizing Problem Oriented Policing

Partnered Solutions:
- WSP and Skamania County Sheriff's Office partnered on enforcement
- EMAR
- WSP motorcycle, Commercial Motor Vehicle Enforcement, and Agreements
- Emphasis patrols on drinking and driving on peak evenings
- Encourage drivers to use "slow moving vehicle turnouts"
- Utilize lasers and in-car video cameras

After two years and upon the completion of the corridor, the task force reported the following results:
- 83% of citations resulted in a ticket
- Total number of tickets increased 110% (from 851 to 1,785 tickets)
- 30% of contacts resulted in a ticket
- Total contacts increased 158%
- Total number of tickets increased 110% (from 851 to 1,785 tickets)
- 30% of contacts resulted in a ticket

SR-14 Project Results:
Fatal/Serious Injuries down 65%

Results
- The Columbia Corridor Traffic Safety Project established community relationships and interagency collaboration.
- Partnerships made SR-14 safer for motorists and passengers:
  - 34% Reduction in Fatal & Serious Injury Collisions;
  - 15% Reduction in Alcohol-Related Injury Collisions;
  - 11% Reduction in Total Injuries;
  - 5% Reduction in Total Collisions;
  - 5% Reduction in Fatal/Serious Injuries;
  - 30% Reduction in Speed Contacts;
  - 25% Reduction in Hit Fixed Object Collisions;
  - 15% Reduction in Speed Contacts and Hit Fixed Object Collisions;

Results from 29 Completed Corridor Projects

- Carryover of working relationships within the community, which can be used on other traffic safety issues in the future;
- Roadways identified for long term future development;

Results from 29 Completed Corridors

- $25:$1 Benefit/Cost Ratio - benefit realized by the local community; and
- Has become an integral element of WA data driven, evidence based, integrated systems approach to traffic safety – "Target Zero"
Have We Answered The Original Question?

- Question:
  - Is Target Zero a viable traffic safety strategy, or just wishful thinking?
  - Let's follow one of the core elements of an integrated systems approach to traffic safety planning – aggressively evaluating the data!

Conclusion

- Traffic fatalities are a leading cause of death globally;
- There are distinct similarities for the behaviors causing these deaths;
- A growing body of research identifies the proven strategies and best practices that can most effectively reduce these deaths;

Conclusion

- To significantly reduce traffic fatalities globally, law enforcement, road safety professionals, engineers, medical, health, education professionals, public policy setters must work together to:
  - Create an integrated systems approach to transportation and strategic highway safety planning (SHSP);
- Aggressively apply proven strategies and best practices based on valid and precise problem identification;
- Accurately measure and evaluate program performance and make course corrections as warranted;
- Continually evolve, refine and improve this integrated systems approach to transportation and traffic safety planning; and
Conclusion

- The total value of the individual parts of an integrated systems approach to traffic safety are more than the sum of their individual parts!

Remember - What you do in traffic safety each and every day makes a difference in the communities and lives of those we serve!

Traffic safety is personal, one life at a time!

Questions

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