Minnesota Comprehensive Highway Safety Plan - (CHSP)

North Dakota Rural Transportation Safety and Security Summit
August 23, 2006
It’s All About Safety!
91,274 traffic crashes occurred
- 567 people died
- 40,073 people were injured
- $1.8 billion estimated economic cost to Minnesota

4,841 traffic crashes involved alcohol
- 177 people died
- 3,622 people were injured
- $288 million estimated economic cost to Minnesota

Traffic fatalities decreased 14.8% from 2003 (655 in 2003 to 551 in 2005)

Estimated 2005 fatalities at 551

*Minnesota Motor Vehicle Crash Facts 2004, compiled and prepared by the Minnesota Department of Public Safety*
“...history is calling us to another important task...the battle to stop the death and injury on our roads and highways...I want everyone to know in this Department – that our priority for the next 18 months is to use every tool available to reduce death and injury on our highways.”

US DOT Secretary Norman Mineta speaking to an “All Hands Meeting” with staff from NHTSA, FHWA and FMCSA, July 2003
AASHTO and FHWA have set a national goal to reduce the traffic fatality rate to 1.0/100MVM by 2008. A 1.0 fatality rate isn’t enough for Minnesota. “Zero Deaths” becomes the proposed benchmark.
Vision
To reduce fatalities and serious injuries on Minnesota’s roads to zero

Mission
To move the state of Minnesota toward zero traffic deaths on our roads through the application of engineering, enforcement, education, emergency services, research activities and community involvement.
Minnesota Comprehensive Highway Safety Plan (CHSP)
Comprehensive Highway Safety Plan (CHSP)

- Minnesota Plan:
  - Data and Information Driven
  - Performance Measures

- Vision: *To reduce fatal and life changing crashes on Minnesota roadways by aggressively implementing systematic and proactive safety strategies with an ultimate goal of moving Towards Zero Deaths*
The previous approach to addressing traffic safety issues isn’t working - the fatality rate has flattened and the actual number of fatalities is increasing.

Solution:

- All Roads
- All Four E’s
- Proactive and Systematic
Minnesota’s Critical Emphasis Areas

1. Increasing Seat Belt Use & Reducing Impaired Driving
2. Improving the Design and Operation of Highway Intersections
3. Lane Departure
   - Reducing Head-On and Across Median Crashes
   - Keeping Vehicles on the Roadway
   - Minimizing the Consequence of Leaving the Roadway
4. Young Drivers & Curbing Aggressive Driving
5. Increasing Driver Safety Awareness & Improving Information and Decision Support Systems
Minnesota’s 15 Critical Strategies

**Enforcement**
- Provide adequate law enforcement resources
- Primary seat belt law
- Implement automated enforcement
- Stronger graduated driver licensing system
- Support the enforcement of traffic safety laws
- Targeted enforcement

**Engineering**
- Cost effective lane departure improvements
- Cost effective intersection improvements
- Roadway maintenance
- Road Safety Audits

**Education**
- Communication and marketing task force
- High-level traffic safety panel and legislature action committee
- Enhance driver education

**EMS**
- Statewide Trauma System

**Data Systems**
- Improve Data System
Driver Safety Awareness
Ran-Off the Road
Head-On & Across Median
Aggressive Drivers
Young Drivers
Signalized Intersections
Unsignalized Intersections

Alcohol Related

Unbelted

Critical Emphasis Areas

Safety Goal
Nearly a 25% Reduction in the Number of Traffic Fatalities

Implementation of Mitigation Strategies

Based on trends from the 1993 to 2002 crash data

2003 2008
CHSP Complete
December 31, 2004

Implementation Requires Commitment:

• Champions
• Funding Model
• Projects
Funding for ‘Safety Projects’

Central Safety Fund and District/ATP Funds

Central Safety Fund

Dist/ATP Funds
CHSP

Safety Project Definition:

- **Reactive**: A project/activity whose purpose is to correct an existing safety issue, identified by crash history (Top 350).

  and/or

- **Proactive**: A project/activity that is intended to reduce fatal and life changing crashes by implementing safety strategies identified in the MN CHSP.
CHSP

District/ATP Funds

- Utilize funds currently directed to ATPs
- Follow SAFETEA-LU HSIP Guidance
- Set Spending Goals based on where Fatal and Serious Injury Crashes are occurring
- District/ATP report on process and scheduled projects
Central Safety Fund
(Federal Funds)

- Administered by OTSO (supported by OTS and State Patrol)
- Statewide Engineering, Enforcement, Education and EMS Safety Projects
  - Central Selection Committee
  - Competitive Process
Comprehensive Highway Safety Plan Implementation

Central Safety Fund
$6.5 Million

- District “C”
  $1.5 M
- Metro Cable Median Barrier
  $1.5 M
- Statewide Speed Management Project
  $3.0 M
- County CHSP Solicitation
  $2.0 M
- Section 164 Transfer Money
  $5.0 M
CHSP Implementation

Projects:

- *Posted Speed Limit Increase??...YES!*
  - 55MPH to 60MPH – To better fit the roadway characteristics (Engineering)
  - Increased Enforcement on these and rural 4 lane divided Expressways and Freeways
  - Public Information Campaign (Education)
  - Comprehensive Evaluation (U of M)
5 yr Crash Comparisons

% Change on Trunk Highways
Before / After Speed Limit Change (in 1997)

-3% -3%
16%
31%
59%
93%
36%
23%
26%
25%
29%

-20%
0%
20%
40%
60%
80%
100%

55 to 55
55 to 60
55 to 65
65 to 65
65 to 70

Mostly 2-lane 2-way trunk hwy = 8600 miles
Rural expressways = 815 miles
Rural Interstate = 726 miles

Change in Speed Limit

Fatals
Crash Cost per mile
Veh-Miles
Speed Mgmt Project Results:

- **Speed Mgmt Project:**
  - 14773 Speed Citations Issued
  - Metro Vehicles traveling over 70 mph - Down 28%
  - Greater MN Vehicles traveling over 70 mph - Down 42%
  - Citations for DWI, Warrants, Firearms, etc.

*(First 6 Months of Project)*
Projects (cont.):

- **Cable Median Barrier:**
  - Next four locations based on six years of cross-median crash data
  - Estimated Construction Cost $1.65M letting in March, 2006
  - Placement of cable barrier will be adjacent to shoulder
    - I-94 in Brooklyn Center (.6 miles)
    - I-35W in Burnsville (2.3 miles)
    - TH 169 in Plymouth (3.5 miles)
    - I-494 in Plymouth (4.4 miles)
Projects (cont.):

- **Solicitation to Road Authorities:**
  - Incorporate 4 “E” Approach
  - Received 40 applications from 27 Counties
  - Funded 27 projects with max $75,000 per County
    - Intersection improvements and Lane Departure Strategies
    - Safety Audits
    - Lighting, signing, guardrail, shoulder/turn lane improvements, clearing sight triangles
  - 2nd solicitation Fall 2006
Mn/DOT Measure: Total fatalities on all state and local roads (3-year average)

Last two years promising (2005 - est 561 and 2004 – 567)
The CHSP is a dynamic and useful tool driving MINNESOTA Toward Zero Deaths!