IOWA HIGHWAY
SAFETY
MANAGEMENT
SYSTEM

“SMS Staying Alive”

Fall 2000

Highway Safety Peer Exchange

4 E’s…+
Engineering, Enforcement, Education, Emergency Response
… And Everyone Else.

Iowa Typical Year Statistics

450 Highway Fatalities

- 377 Motorists
- 30 Pedestrians
- 35 Motorcyclists
- 8 Bicyclists

“Vision Zero”

(Sweden)

Unique Iowa Safety Programs

- State Funded Traffic Safety Programs
- Traffic Engineering Assistance Program
- SMS- Safety Management System

SMS Membership

State Agencies

- Department of Education
- Department of Elder Affairs
- Department of Public Health
- Iowa Department of Safety
  - Governor's Traffic Safety Bureau
  - Iowa State Patrol
- Iowa Department of Transportation

Education

- Iowa State University
  - Center for Transportation Research & Education
  - Fire Safety Institute

SMS Membership

Federal Agencies

FHWA- Federal Highway Administration

FMCSA- Federal Motor Carrier Administration

NHTSA- National Highway Traffic Safety Administration

Associations and Local Government

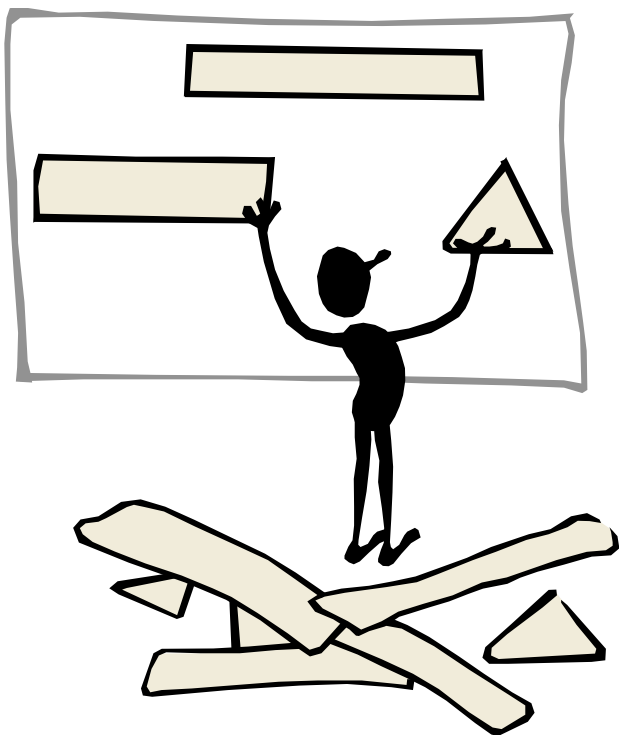
- American Public Works Association
- Iowa County Engineer's Association
- Iowa State Sheriff's and Deputy's
- Iowa Traffic Control and Safety

Private Sector

- AAA Iowa / Minnesota
- Iowa Interstate Railroad
- Iowa Motor Truck Association
- Insurance Industry

Working Together- Across Agencies and Disciplines

Defining Cooperative Process for Management Approval



- Management System Policy Committee
- Currently “informed consent”
- SMS committee members report to their respective management

Management Systems Policy Committee

Department of Transportation Division Directors:

- Planning and Programming
- Motor Vehicle Division
- Research Management
- Modal Division
- Operations and Finance
- Highway

Representatives

- County
- City
- Governor's Traffic Safety Bureau
- Municipal Planning Organizations
- Regional Planning Organizations
- Federal Highway Administration
- Federal Transit Administration

Iowa Strategic Highway Safety Plan

- Based on **AASHTO Model**
- 25 Iowa Emphasis Areas
- Each chapter drafted by a small multi-disciplinary group
- SMS members and recruited experts

Conducting Focus Groups

- Enforcement Officers
- Older Drivers
- Young Drivers
- Retired Traffic / Highway Engineers

Iowa Strategic Highway Safety Plan

25 Key Emphasis Subjects in 5 Areas

- Drivers
- Special Users
- Highways
- Emergency Response
- Management

“Volunteer Groups” Included the Experts

- Non-SMS members invited to join teams
- Top expert usually lead team whether or not serving on SMS (work zones, farm vehicles)
- Teams were impetus for having guest presenters on many topics
- Safety specialists wanted to be heard and wanted efforts documented
- Multiple authorship style variation

Emphasis Areas

Drivers

- Instituting Graduated Licensing for Young Drivers
- Ensuring Drivers are Fully Licensed and Competent
- Sustaining Proficiency in Older Drivers
- Curbing Aggressive Driving
- Reducing Impaired Driving
- Keeping Drivers Alert
- Increasing Driver Safety Awareness
- Increasing Safety Belt Usage and Improving Air Bag Effectiveness

Special (other) Users

- Making Walking and Street Crossing Safer
- Ensuring Safer Bicycle Travel
- Ensuring School Bus Safety
- Improving Motorcycle Safety and Increasing Motorcycle Awareness
- Making Truck Travel Safer
- Reducing Farm Vehicle Crashes*
- Reducing Train-Vehicle Crashes
- Reducing Deer-Vehicle Crashes*

Emphasis Areas

Highways

- Implementing Road Safety Audits
- Accommodating Older Drivers
- Keeping Vehicles on the Roadway and Minimizing the Consequences of Leaving the Road
- Improving the Design and Operation of Highway Intersections
- Reducing Head-On and Across-Median Crashes
- Designing Safer Work Zones

Emergency Response

- Enhancing Emergency Response Capabilities to Increase Survivability Accommodating Older Drivers

Management Systems

- Improving Information and Decision Support Systems
- Creating More Effective Processes and Safety Management Systems Designing Safer Work Zones

Sample Emphasis Area

Background

3. Sustaining Proficiency in Older Drivers

Primary Authors: Jim Hogan, Scott Falb, BobThompson, Steve Gent

As of 1995, there were 16.5 million older licensed drivers in the United States--47 percent more than a decade earlier. This number will only continue to increase as the huge "Baby Boomer" population begins to swell the ranks of older drivers. In Iowa, there were 335,245 licensed drivers over the age of 65. That is 16 percent of all the licensed drivers in the state. One national survey listed Iowa as having the third highest percentage in the nation of licensed drivers over the age of 65 and second highest percentage of licensed drivers over age 85.

Older Driver Design Considerations

- Larger Sign Lettering
- Sign Clutter at intersections
- Advance street name signs
- Improved pavement markings
  - Wider
  - Reflective marking
- Partially paved shoulders
- More and longer turn lanes
  - Offset turn lanes
- Rumble strips prior to stop sign
- Improved Pedestrian crossings
  - Refuge islands
  - Markings
  - Signal timing

1999 *Draft*
Iowa Strategic Highway Safety Plan

- Distributed for comment to >800 Cities, counties, agencies for review and comment
- Press Release and Web posting
- Public Opinion Survey
- Workshop Revisions
- Ongoing Additions
- “Living Document”

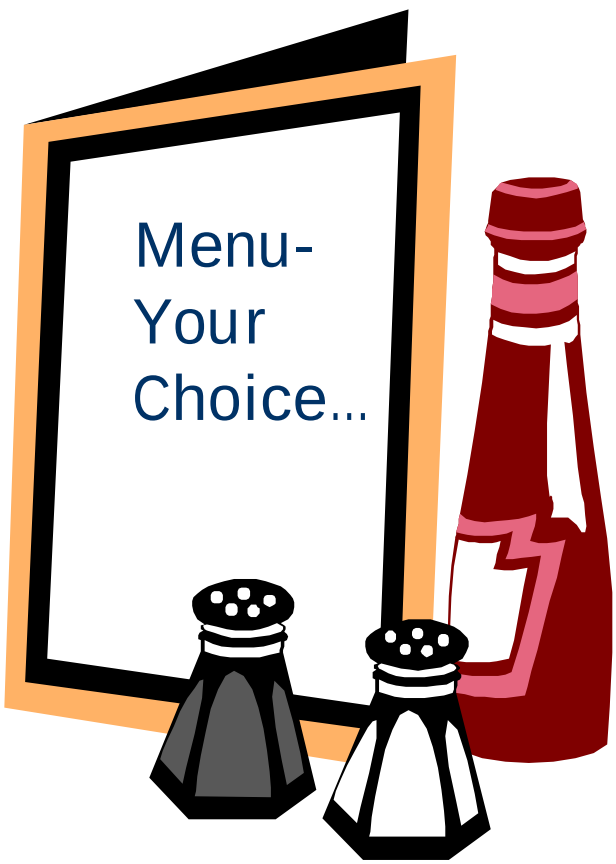
Important SMS Policy Decisions for SMS as a Group

- Avoid making recommendations on specific strategies
- Avoid promoting advocating or lobbying specific strategies- be a resource
- Individual agencies / members can and should do it- not “SMS”
- Avoid becoming a lightening rod of controversy to improve SMS survivability.

Have not Avoided Controversy in the Strategies

- Motorcycle Helmet law
- .08 Impaired driving
- Anonymous requests for retesting drivers (Especially older drivers)

SMS Plan Is a Menu of Potential Strategies



- Special of the Day
- Technology of the month
- Engineer's choice
- Enforcement special

Iowa SMS Plan

Congratulations Iowa SMS!

Partnership in Excellence Award, November 1999

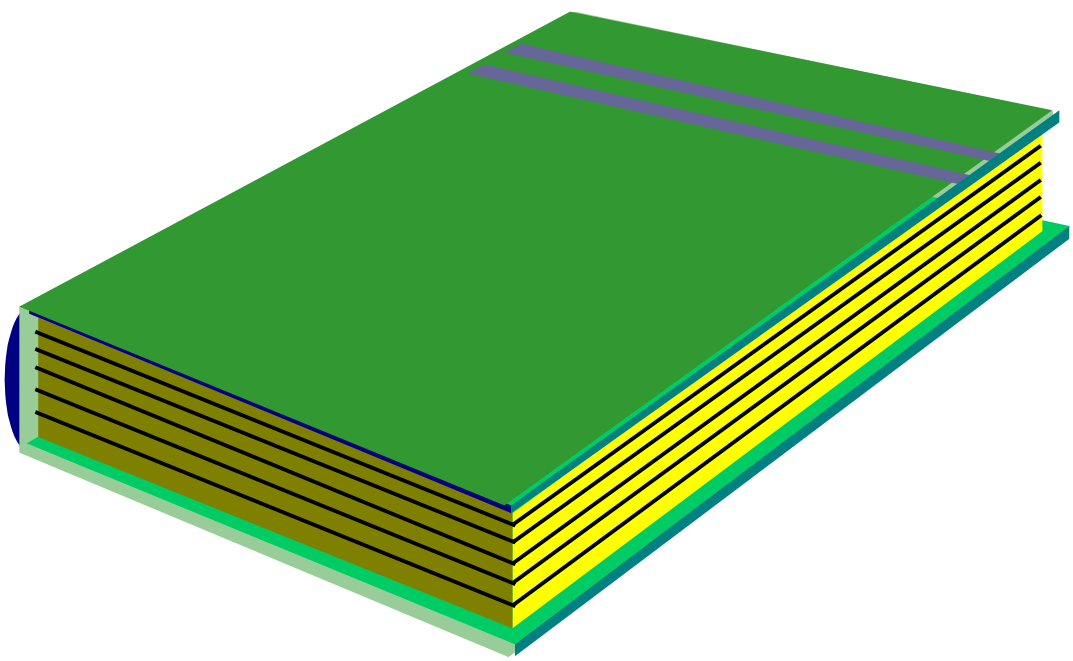
"It is my pleasure to honor you as one of the first recipients of the Federal Highway Administration's (FWHA) Partnership in Excellence Award. This award honors the partnership efforts of State and Local Governments, private industry, other federal agencies and FHWA working together to help insure the best possible transportation system for the traveling public."

Bobby W. Blackmon, Division Director, FHWA

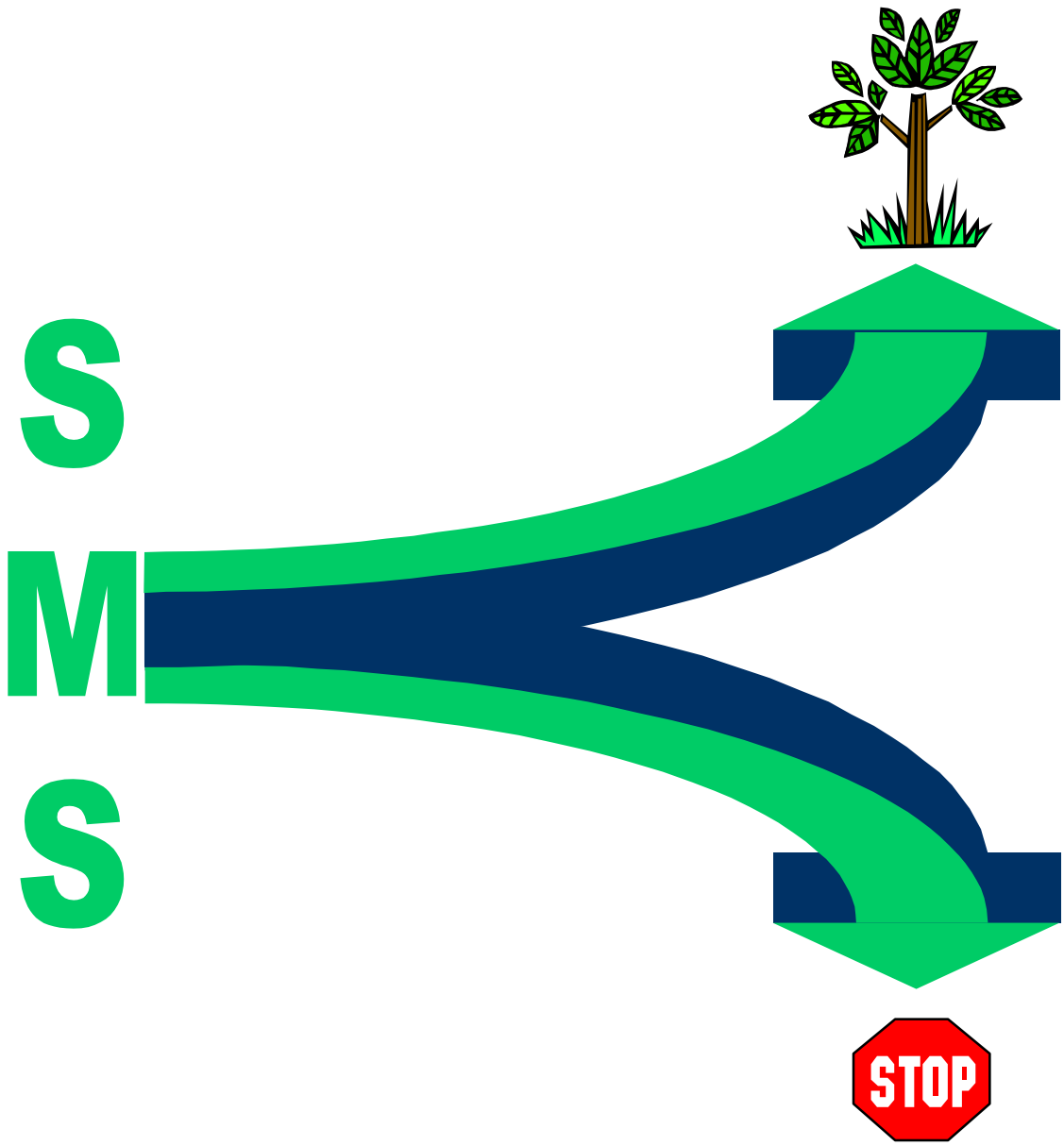
Iowa Safety Management System

Iowa Strategic Highway Safety Plan

Implementation



Here We Are …. Iowa SMS "Staying Alive"



Public Opinion Survey of Highway Safety Improvement Goals and Strategies Found in The Iowa Safety Management System Iowa Highway Strategic Highway Safety Plan October 2000

University of Northern Iowa

Public Opinion Survey

20 minute interviews of 1000 Iowans

Top Ranking Driver-Related Goals and Strategies

Goal:

Reduce Drunk Or Substance Impaired Driving:

- **80%** of respondents identified Reduce Drunk Or Substance Impaired Driving for high emphasis over the next five years.

Strategies:

Lower the BAC from .10 to .08

- **54.4%** of respondents would support the strategy of Iowa lowering the BAC from .10 to .08.
- **First** among 8 suggested driver-related strategies:

Driver-Related Goals and Strategies

Goal: Reduce Aggressive Driving:

- **75%** of respondents identified Reduce Aggressive Driving as first or second among 8 driver-related goals.

Strategies:

- **92%** support more vigorous enforcement to stop aggressive driving.
- **90%** support making aggressive driving illegal.

Reduce Red Light Running

Strategies:

- **78%** support using videotape cameras at intersections to reduce the practice of running red lights.

- **79%** support legislation to permit giving traffic tickets based on videotape evidence for running red lights.

- Red light violations based on videotape evidence should be…:

  56.1% *civil* violations

  37.8% *criminal* violations.

Ensure Driver Capacity

Goals:

- **66%** Ensure Physical And Mental Competency For *All Drivers* for high emphasis
- **55%** Ensure *Older Drivers* Are Able To Drive Safely for high emphasis

Strategies:

- **84%** support improving how physical and mental health is measured when renewing all driver licenses.
- **72%** support required insurance discounts for older drivers who complete a driver refresher course.
- **92%** support greater efforts to stop suspended or revoked drivers from driving.

More Driver-Related Strategies

Strategies:

- **74%**
  support prohibiting cell phone use while driving.

- **70%**
  support adding more paved shoulders with rumble strips

SMS Success Stories

- Speed Task Force Reports
- Access Management- Research, Conference, and Educational material
- Deer / Vehicle Collision Study
- Improve Emergency Response to Motor Vehicle Crashes
- Expanded Drug Recognition Expert Training

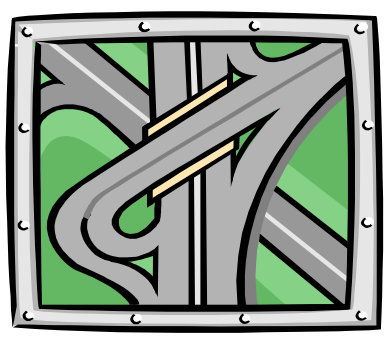
What Strategies Have Been Implemented?

- Older Driver Task Force
- Bicycle Safety Education Pilot
- Focus on Building Local Groups
- Emergency Response Data Base Development

- Traffic Calming Urban Design
- Bike/ Pedestrian Accommodation Policy
- Others…

Older Drivers Task Force

- **Emphasis on Iowa's Aging Population**
- **Two Strategic Plan Sections:**
  - Sustaining Proficiency in Older Drivers
  - Accommodating Older Drivers



"People and Pavement "

- **Members:**

  DOT, GTSB,Department of Elder Affairs, Alzheimer's Association, Area Agencies on Aging, Regional Transit, AARP, State Farm Insurance, AAA

Bicycle Safety Education Pilot

- Matching funds $5,000 SMS and $5,000 IAHPERD (Iowa Association for Health, Physical Education, Recreation, and Dance)
- March- 38 Iowa schools classroom pilot curriculum, helmet video, etc.
- April- bicycle rodeo
- Evaluation by teachers and IAHPERD report completed with positive results
- Future funding anticipated from other sources. This partner has applied for DOT HIP funding

Focus on Building Local Groups

- 6 identified and functioning with GTSB assistance
- Other identified SAFE Communities
- Briefings for MPO's on the opportunities and benefits of multi-disciplinary groups
- Focus group with law enforcement
- Potential for enhanced *local problem-solving* through multi-disciplinary groups
- FHWA directive for planners Incorporating safety in local planning process

What Strategies Are Under Development?

- Rural expressway intersection design
- Enhanced pavement markings and signing
- 3R safety audit program
- System-wide highway safety analysis approach
- Aggressive and distracted driving analysis
- Enhance AARP's 55ALIVE and other older driver resources

Identify Strategies by category

- Law change
- Department policy or standards change
- Pilot studies
- Other

Identify priorities-

- What can be done now?
- What is long-term to *start* now?
- Who will lead?
- Who will fund?
- Who will complete or sustain?

Iowa SMS Funding Sources

- Management System Funds (DOT)
- Traffic Safety Improvement Program
- Highway Safety Section 402
- Traffic Records Section 411
- Seat Belt Incentive Section 157
- HES Program
- Statewide Transportation Enhancement Funds
- Agency Budgets
- Private matches

Can We Set Goals With Target Numbers ?

- Too many unknown variables in highway safety dynamics
- Can set up failure if only one element is addressed and studied
- Alternative is to identify appropriate indicators

Major public release in early spring?

- Tool Box- Updtaed Plan
- Survey Results
- 2001 / 2002 Legislative Session Targeted

Long Term & Ongoing

- Accept proposals for action quarterly
- Measure and track success as appropriate
- Update potential strategies annually
- Prepare annual reports for each emphasis area
- Prepare an annual SMS program report

Position SMS for Success

- Maintain position with lower profile for DOT involvement
- Consider committee co-chairs with another agency
- Facilitate interaction between key department directors

Iowa SMS
"Staying Alive"

IOWA HIGHWAY
SAFETY
MANAGEMENT
SYSTEM

Fall 2000
Highway Safety
Peer Exchange

4 E's…+
Engineering, Enforcement, Education, Emergency Response
… And Everyone Else.