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Enhancing Road Safety Through Education and Outreach

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Transportation Research Center, University of Nevada, Las Vegas

5th International Road Federation Regional Conference on
“Institutional Arrangements for Reduction of Road Fatalities”

New Delhi, India
November 25-26, 2010



InTrans @ Iowa State Univ



What and How

- Improve safety
 - Sustainable = Long-term
 - Behavioral changes
 - Decision makers
 - Road users
- Scientific basis
 - Translational research
 - Education and outreach
- Examples / Case studies
- Summary

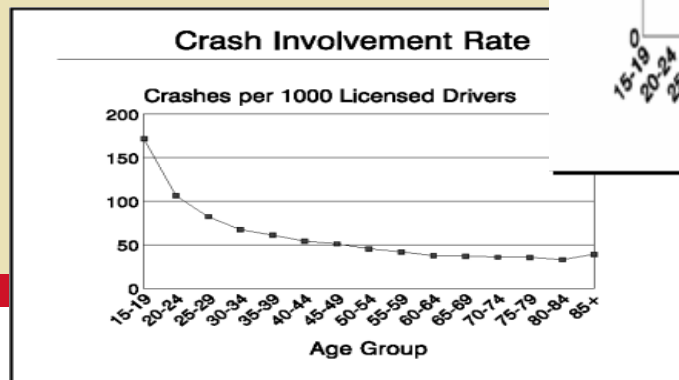
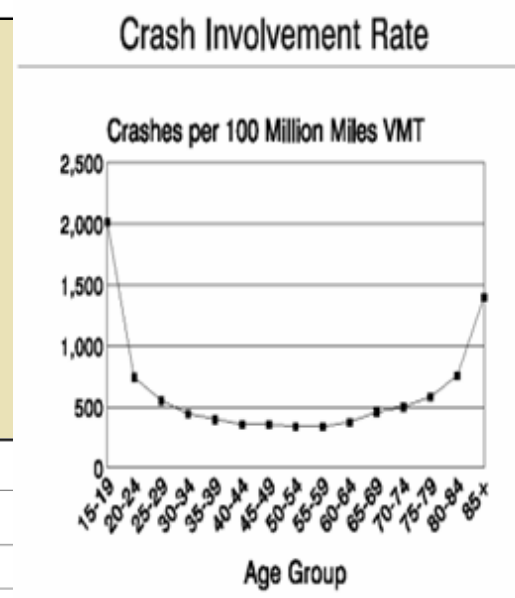
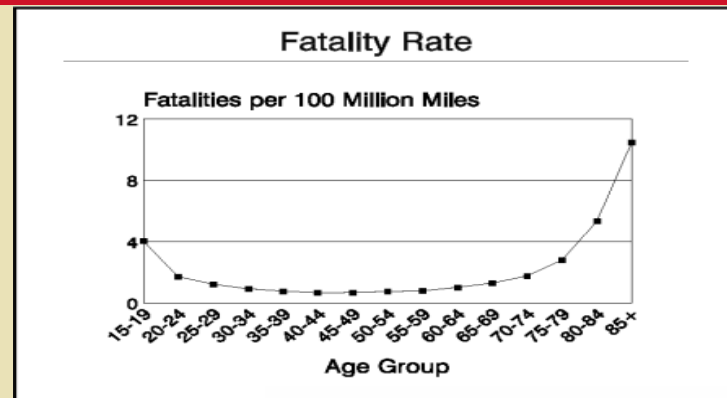


Obtaining Results

- Users + Decision makers / enablers
 - Family + friends
 - Teachers
 - Media
 - Administrative officers, staff (technical and non-technical)
 - Elected officials
- **Make it Personal**
 - Intuition
 - Information
 - Instinct
- Rational or emotional?

Strategies

- Identify risks
 - Quantitative: data driven
 - Qualitative, anecdotal
- Minimize and mitigate risks
 - Countermeasures
 - **Implementation & Evaluation?**
- Stakeholders
- Education + outreach
 - Partnerships
 - Communications



Safety Education

- Audiences
 - Non-motorized road users
 - Motorized road users
 - Drivers
 - Passengers
 - Special (vulnerable?) groups
 - Children, Teens, Elderly
 - Disabled
 - Other decision makers
- Partnerships



Partnerships

- Four **E**s for road safety
- Road user stakeholders
- Media
- Judiciary
- Schools and colleges
- Driving schools
- Public transit agencies / providers
- Retailers, grocery stores
- Alcoholic beverage distributors
- Not-for profit organizations
- Advocacy groups
- Large employers



More on Partners

- Four Es for road safety
 - Engineering
 - Enforcement
 - Education
 - Emergency Medicine
- Media
 - Broadcast
 - Print
 - Online
 - Outdoor ad agencies



High Visibility Enforcement

- “Joining forces” program
 - Overtime pay for officers
 - Inter-jurisdictional cooperation
- Types of enforcement
 - Driving under the influence (DUI)
 - Red-light violators
 - Pedestrian safety
- Media coverage: TV, Radio, newspaper
 - Before & after
- Outcomes
 - Behavioral changes
 - “Residual effects”
 - Interactions between Engineering & Enforcement
- Do what you say



Other Programs

- Prevent Automobile Collisions Everyday
- You Drink, You Drive, You Lose
- Field Experiences
 - Teen driving: Drivers' Edge
 - Walk your child to school
 - Walking school bus
 - Child safety seat checks
- Click It, or Ticket



SAFE DRIVING RELAY RACE
Nov. 18 & 19, 2006

Prevent Automobile Collisions Everyday
PACE YOURSELF
Be Here For All Your Tomorrows!
Nevada Department of Public Safety

REWARD:
Dec. 2 & 3, 2006
Win a Trip to Disneyland

TEAM: 15 students

CREATE: Safety Message

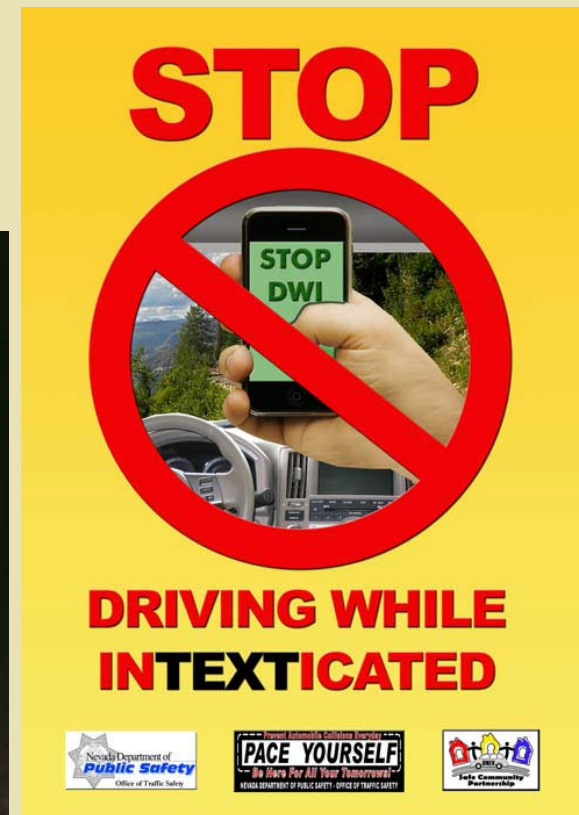
MEDIA: Your team chooses the media - print, video, or public service announcement

RELAY: Teams Compete at Las Vegas Motor Speedway, Nov 18 & 19, 2006
Best Driving Skilled Team Goes To Disneyland

CONTACT:

Tools and Toys

- Public service announcements
- Free ride home
- Competitions & prizes
- Posters at bus stops
- Goodies (gifts)
 - Bags
 - Bookmarks
 - Erasers
 - Reflectors



Safety Outreach Program

- State of Iowa
- Statewide multi-disciplinary safety support group
- Support for highway safety on local roads
- Excellent crash database
- Safety circuit rider ~ 20+ years old program
- Safety liaison program started in March 2008
 - Outreach to county (district) public works staff
 - Increase awareness of safety resources
 - Assist with pursuing resources

Safety “Tools”

- **C**rash **M**apping and **A**nalysis **T**ool (CMAT)
 - Excellent and user friendly
 - Free training on its use
- **I**owa **T**raffic **S**afety **D**ata **S**ervice (ITSDS)
- 9 years of crash data available for each jurisdiction
- Crash analysis provided for highest crash locations
- Free services
 - DOT staff / consultant review of major site specific problems
 - Customized crash maps (intersections, routes, or county wide)
 - Copies of safety related research projects for highway safety
- Safety seminars for engineers and technicians

Safety and Information Systems

- Toward **Zero** Deaths
- Safety and Risk Analyses
 - Vehicle Characteristics
 - Roadway Design / Ops
 - Human Factors
- usRAP and iRAP
- Information Systems and Tools: TraCS, ALAS, CMAT

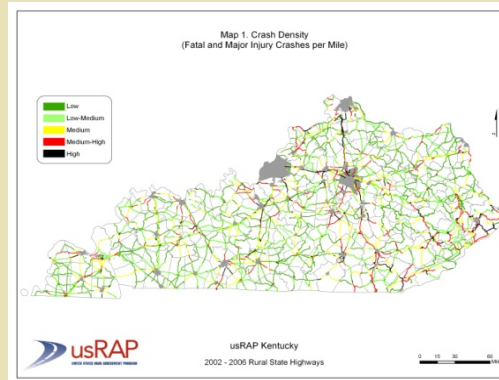
US Road
Assessment Program
usRAP

Star Ratings



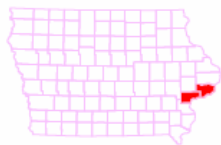
Car Occupants – Bicyclists – Pedestrians –
Motorcyclists

Intl Road Assessment Program (iRAP)

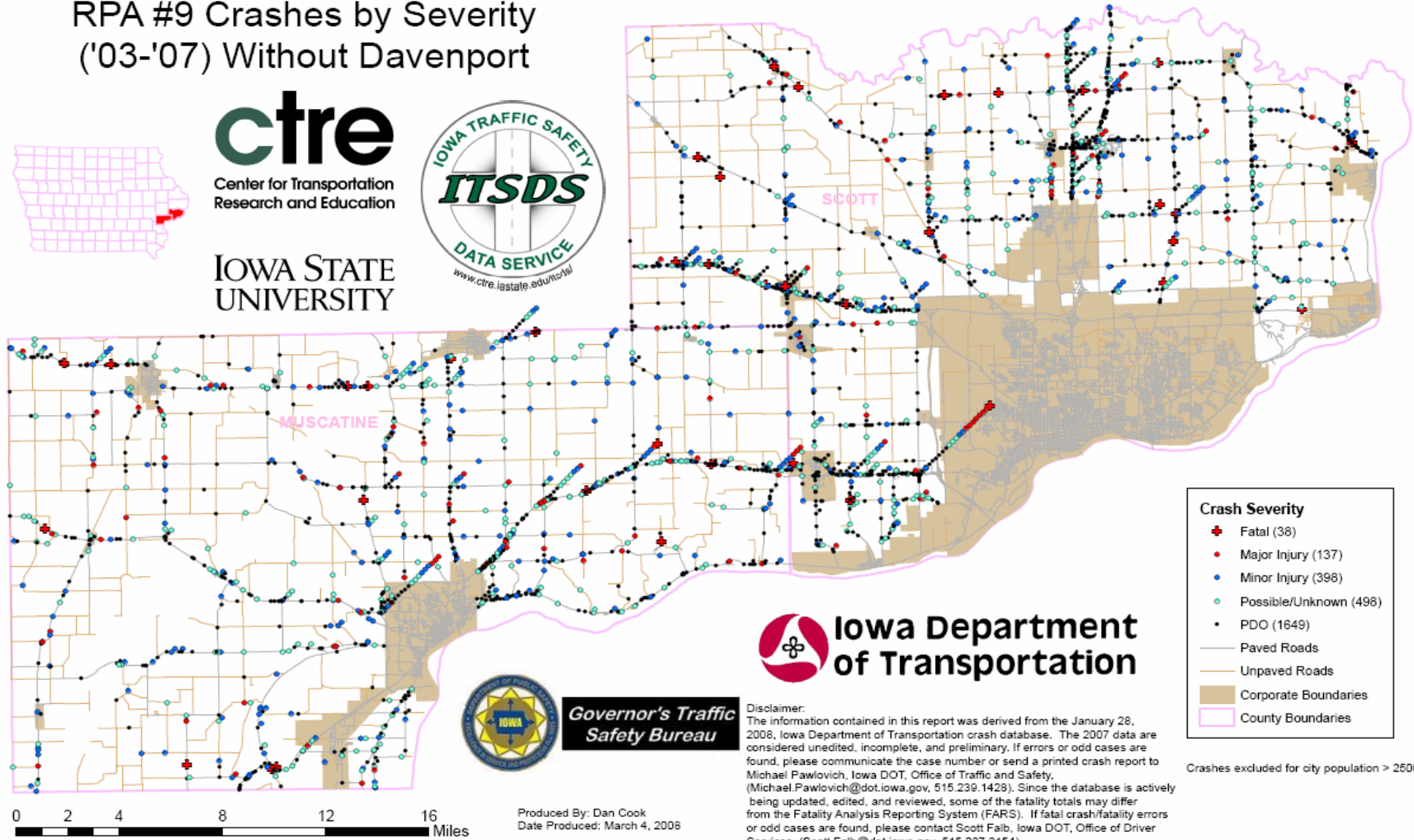


Crash Data Analysis

RPA #9 Crashes by Severity ('03-'07) Without Davenport



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Crash Severity	
+	Fatal (38)
•	Major Injury (137)
•	Minor Injury (398)
•	Possible/Unknown (498)
•	PDO (1649)
—	Paved Roads
—	Unpaved Roads
■	Corporate Boundaries
□	County Boundaries



Governor's Traffic Safety Bureau

Disclaimer:
The information contained in this report was derived from the January 28, 2008, Iowa Department of Transportation crash database. The 2007 data are considered unedited, incomplete, and preliminary. If errors or odd cases are found, please communicate the case number or send a printed crash report to Michael Pawlovich, Iowa DOT, Office of Traffic and Safety, (Michael.Pawlovich@dot.iowa.gov, 515.239.1428). Since the database is actively being updated, edited, and reviewed, some of the fatality totals may differ from the Fatality Analysis Reporting System (FARS). If fatal crash/fatality errors or odd cases are found, please contact Scott Falb, Iowa DOT, Office of Driver Services, (Scott.Falb@dot.iowa.gov, 515.237.3154).

Crashes excluded for city population > 2500

Produced By: Dan Cook
Date Produced: March 4, 2008

Iowa Local Agency Safety Workshops

A Multi-Disciplinary Approach to Safety



Dates and locations:

2010 sessions

- October 20, 2010 - Ames, IA**
InTrans, ISU Research Park
- October 21, 2010 - Sioux City, IA**
Western Iowa Tech
- October 27, 2010 - Council Bluffs, IA**
Iowa Western Community College
- November 2, 2010 - Ottumwa, IA**
Indian Hills Community College
- November 3, 2010 - Waverly, IA**
Red Fox Inn

Cost: **Free!**

Registration:

Mail or fax your information no later than seven days before the workshop you plan to attend to:

Bob Sperry
Institute for Transportation
2711 South Loop Drive, Suite 4700
Ames, IA 50010
Fax: 515-294-0467
E-mail: rsperry@iastate.edu
Phone: 515-294-7311

Contact information:

Name: _____
Agency: _____
Address: _____
Phone: _____
Fax: _____
E-mail: _____

Questions:

Contact Tom McDonald, tmodonal@iastate.edu, (515) 294-8384.



Center for Transportation Research and Education

Sponsored by the Iowa Department of Transportation Office of Traffic and Safety

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Institute for Transportation

Multi-Disciplinary Crash Analysis and Safety Improvements Workshop

A half-day workshop for local agencies addressing crash data and safety needs

What:

This workshop is part of an effort to encourage development of a multi-disciplinary team in north central Iowa.

At the workshop you will:

- Hear the latest information about crash reports and data interpretation
- See the value of an interdisciplinary team approach to problem identification and countermeasure selection and evaluation
- Learn about selecting mitigation, and applying for funding
- Receive valuable information about assets and procedures that can be used to identify needed safety improvements

When and where:

November 4, 2010 - Fort Dodge, IA
Best Western Starlite Village Inn & Suites

Cost: **Free!** Lunch provided.

Registration:

Mail or fax your information no later than seven days before the workshop to:

Bob Sperry, Local Roads Safety Liaison
Institute for Transportation
2711 South Loop Drive, Suite 4700
Ames, IA 50010

Fax: 515-294-0467
E-mail: rsperry@iastate.edu
Phone: 515-294-7311

Registration will be limited to a maximum of two participants per agency. If more participation is desired, please contact Tom McDonald.

Contact information:

Name: _____
Agency: _____
Address: _____
Phone: _____
Fax: _____
E-mail: _____

Agenda:

8:30 am	Registration
9:00	Welcome
	Introduction
9:15	Crash History demonstration
	Webster Cnty & Fort Dodge
	Hamilton County/Webster City
	Wright County
	Break
	Calhoun County
	Humboldt County
	Pocahontas County
	Unpaved Low Vol. Road Examples
11:45 pm	Lunch
12:30	MDST business meeting
1:00	Closing comments and certificates

Participating Speakers:

Speakers will include staff from the Governor's Traffic Safety Bureau, Federal Highway Administration, state and local law enforcement, emergency responders, Iowa Department of Transportation, planning agencies, and Iowa State University.

Questions:

Contact Tom McDonald, tmodonal@iastate.edu, (515) 294-6384.



Iowa Department of Transportation

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Agenda:

8:00 am	Registration	
8:30 am	Introduction	Bob Sperry InTrans
	Road Safety Law Changes	Mary Stahlhut Iowa DOT
	Comprehensive Highway Safety Plan	
	Multi-Disciplinary Safety Teams	Roger Larson Iowa DOT
	Safety Desk Reference for Planning	
	Funding and Program Status	Nicole Fox Iowa DOT
	BREAK	
	Law Enforcement Efforts	Randy Hunefeld & ISP GTSB
	Seat Belt and Automated Enforcement	
	Statewide Emergency Operations	John Haas/ Designee Iowa DOT
	Emergency Relief Program	
	Federal Funding for Local Safety	Jerry Roche FHWA
	Crash Reduction Factors	
	Highway Safety Manual	
	LUNCH	
	MN Local Agency Safety Program	Keith Knapp LTAP Director
	Safety Edge Technology	Jerry Roche Nationally and in Iowa
	BREAK	
	Safety Myths & Counter Measures	Jack Latterell for Enforcement & Engineering FHWA (Retired)
	2009 MUTCD Revisions	Tom McDonald InTrans
3:00 pm	Certificates and Adjourn	

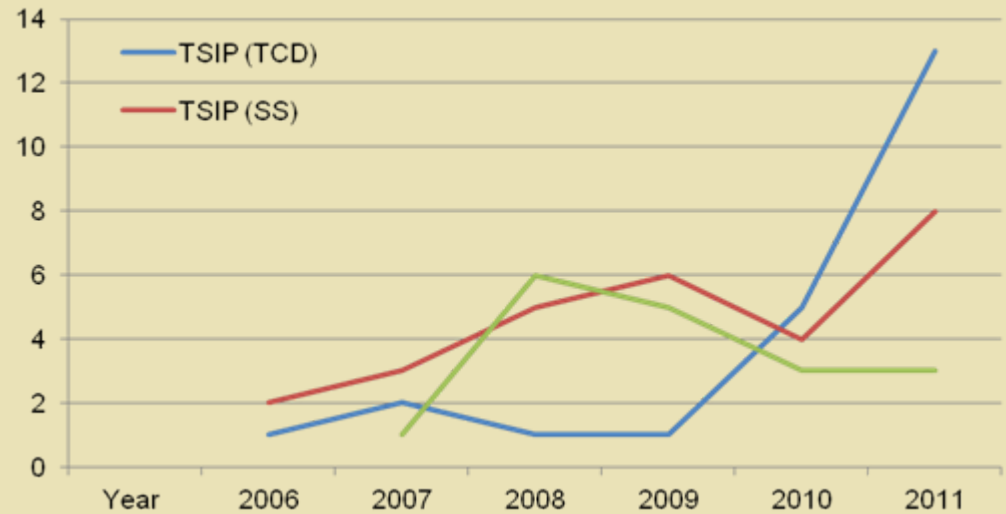
Local Consultation Priorities

- A moving target
 - Counties that do not participate in safety events
 - Counties with highest rating (top 5%) crash locations
 - Counties with **new engineering leadership**
- Two-way communications
- Information from locals
 - Information on use of traffic control devices
 - Knowledge and past participation in safety seminars
 - Knowledge and past use of DOT provided assistance
 - Current safety materials available for staff use
 - Existing signing practices and computerized inventory

Safety Grants for Locals

- Traffic Safety Improvement Funds: 0.5 % from state Road Use Tax revenue set aside for safety improvements
 - Traffic Control Devices: Signs, posts, and hardware only
 - Site Specific Projects: Intersections or road segments
- High Risk Rural Road Funds: Federal Funds
 - Projects must be on road segments that are above the average crash rate for the state

Applications for funding



Obtaining Results

- Decision makers / Enablers: Users +
 - Family + friends
 - Teachers
 - Media
 - Administrative officers, staff (technical and non-technical)
 - Elected officials
- **Make it Personal**
 - Intuition
 - Information
 - Instinct
- Rational or emotional?

Obtaining Results

- Act with a “personal touch and a local flavour”
 - Pique interest
 - Increase awareness
 - Engage (Hook ‘em)
 - Act / commit (Reel ‘em in)
- **Process**
 - Data
 - Information
 - Knowledge
 - Decision (Instinct)
- steps to tidal waves
- Local, regional, national, global

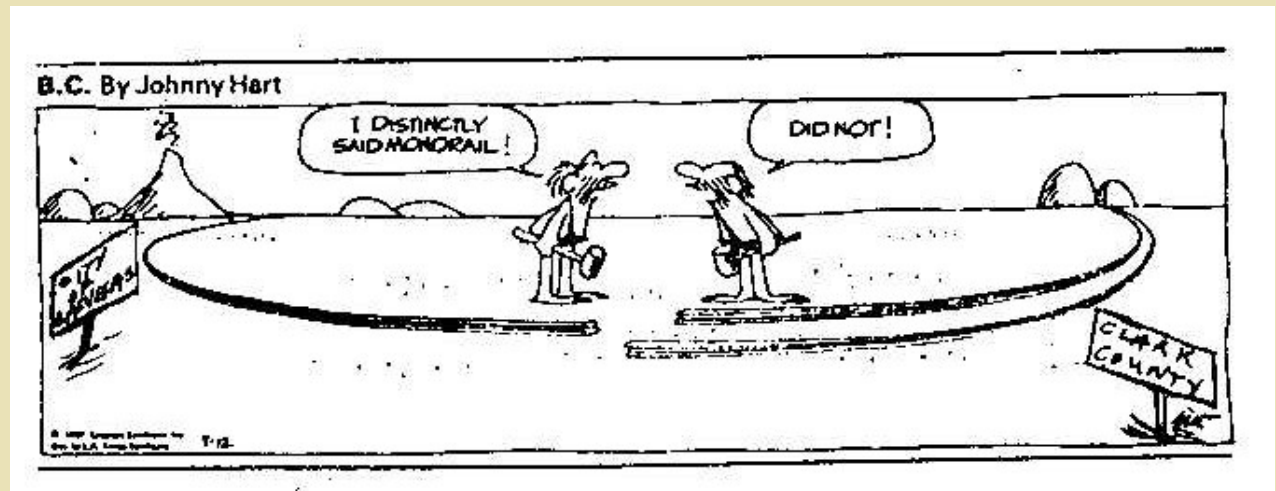
Summary

- Behavioral changes
 - Hook them early, Hook them young
- Team work / partnerships
 - Supporters
 - Stakeholders
 - Champions and proponents
- Support system
 - Confidence
 - Trust
 - Mutual Help
- Communicate
- Stay focused, don't give up
- **Enjoy, have fun!**



Key Factors

- Institutional commitment
 - Administrative / management
 - Elected officials
- Stakeholder support / confidence
- Open communications
- Demonstrable outcomes
 - Benefits
 - Risks



Contact Information

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