Iowa Traffic Safety Data Service
ITSDS Overview

- Quick-response service
- Provides easy-to-understand analyses and reports
- Aides other agencies in obtaining, mapping, and evaluating crash information.
- Facilitates decision-making, effective presentation of information, and education.
- Supports 4Es (Engineering, Education, Emergency Response and Enforcement)
FY2002 Requests

63 requests from 23 different organizations or agencies.

- GTSB: 15
- Iowa State Patrol: 5
- Local Law Enforcement: 6
- Other Local Agency: 6
- Private Sector: 5

- FHWA: 2
- Iowa DOT: 19
- State Government: 1
- Research and Education: 4
GTSB Requests

- Elderly driver crash statistics
- Fatal crashes, BAC between 0.08 and 0.1
- Alcohol-related fatalities and major injuries
- Belt-status in fatal and major injury crashes
- Fatalities of children under 16
  - by age, restraint device, seating position, county
- Corridor enforcement (9)
Some of the Agencies Using ITSDS

- Iowa Governor's Traffic Safety Bureau
- Iowa Department of Transportation
- Iowa Department of Public Health
- Iowa Safety Management System
- Iowa Statewide Traffic Records Advisory Comm.
- Federal Highway Administration
- Iowa State Patrol
- Scott County Sheriffs Office
- Ames Police Department
- Mason City Police Department
- Indianola Police Department
- Muscatine Police Department
- Cherokee Police Department
- Red Oak Police Department
- Black Hawk County Sheriff's Office
- Council Bluffs Police Department
- Safe Kids
- Safe Communities
- Jasper County Attorney’s Office
- Bi-State Regional Planning Affiliation
- City of Des Moines
- City of Bancroft
- Fayette County Highway Department
- Black Hawk County Health Department
- Pottawattamie County Engineer
- City of Sioux City
- City of Mason City
- Story County Engineer
- City of Iowa City
- State Representative Clyde Bradley
- Regional Aviation Partners
- General Growth
- Transtech Management
- Barr-Nunn Transportation Inc.
- Howard R. Green Co
- Snyder and Associates
- University of Iowa
- Iowa State University - CTRE
FY2003 Requests

~90 requests from over 20 different organizations or agencies, or individuals.

- GTSB: 23%
- Law Enforcement: 4%
- Local Public Agency (City/County): 5%
- Private Sector: 7%
- FHWA: 5%
- Iowa DOT: 49%
- Regional Public Agency: 3%
- Education: 2%
ITSDS Activities

- Policy and Practice Assessment
- High Crash Location Identification
- Project and Site Review
- Targeted Enforcement
ITSDS Activities

- Policy and Practice Assessment
  - High Crash Location Identification
  - Project and Site Review
  - Targeted Enforcement
1995-2000 Fatal Crashes in Iowa Involving Driver BAC of .08 or .09

Preliminary data obtained from FARS and the Iowa DOT.
### Belt Use

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**Subtotal | Total | Grand Total**
---|---|---
522 | 937 | 6408

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**Subtotal | Total | Grand Total**
---|---|---
2090 | 5471 | 5471

---

**Video:**

**Map:**

- **Fatal Belted:** Red
- **Fatal Unbelted:** Black
- **Major Injury Belted:** Blue
- **Major Injury Unbelted:** Orange

---

**Legend:**

- **OBRIEN:**
- **BUENA VISTA:**
- **POCAHONTAS:**
- **CLAY:**
- **PALO ALTO:**
- **CHEROKEE:**

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**Map Details:**

- The map shows the distribution of Belted and Unbelted individuals in different areas.
- The number of Belted and Unbelted individuals is indicated by the color-coded dots.
- The legend provides a key for interpreting the colors.

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**Table:**

- The table provides a detailed breakdown of Belt Use for both Fatal and Major Injury situations.
- The columns include Driver, Front Seat Middle, Front Seat Passenger Side, Rear Seat Driver Side, Rear Seat Passenger Side, Third Seat Driver Side, Third Seat Middle, and Third Seat Passenger Side.
- The subtotals, totals, and grand totals are calculated for each category.

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**Analysis:**

- The data suggests a higher number of Belted individuals in the 1997 to 1999 period compared to the total.
- The major injury belt usage is slightly lower than the fatal belt usage.
- The grand total indicates a significant number of individuals involved in these incidents.
Accommodating Older Drivers

- Assessing Older Driver Mobility Issues

![Bar Chart: FTYROW from Stop Sign](chart1)

![Bar Chart: FTYROW Making Left Turn](chart2)
Older Drivers Conference


Frequency

Year

Age

Crash Fatalities (1998-2001)

Frequency

Year

Age
ITSDS Activities

- Policy and Practice Assessment
- **High Crash Location Identification**
- Project and Site Review
- Targeted Enforcement
High Crash Curves

Top 30 Average
- 11.5/mvm
- f=9.5
- $490,000 Loss
- 5% of crashes (1% of curves)
- 11% of all fatalities

Statewide Average
- 1.4/mvm
- f=1.9
- $55,000 Loss

Worst
- 27.4/mvm
- f=14
- $960,000 Loss

Curve length and degree of curvature are significant causal variables.
High Crash Curves: Low Cost Mitigation

Improved Signage
Iowa DOT District 1
Rural Two-Lane Primary Road Fatalities and Major Injuries (1998-2000)

20 unlocated injury severities not represented.
(0 Fatal, 20 Major Injuries)

Disclaimer: The Center for Transportation Research and Education presents these data as preliminary.
Statewide Rural Four-Lane Primary Road* Fatal and Major Injury Crash Severities (1996-2000)

* Non-Interstate
Unlocated crash severities not represented.

*As recorded in the crash record.
**Surface Conditions: Ice, Snow, Wet
ITSDS Activities

- Policy and Practice Assessment
- High Crash Location Identification
- Project and Site Review
- Targeted Enforcement
### Before 1993 - 1995

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<th>REAR END/LEFT TURN</th>
<th>SIDESWIP/SAME DIRECTION</th>
<th>SIDESWIP/RIGHT TURN</th>
<th>BREDSWIP/RIGHT TURN</th>
<th>BREDSWIP/LEFT TURN</th>
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*Note: Only crashes occurring within an intersection were assigned to an intersection.*

### After Widening 1998 - 2000

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*Note: Only crashes occurring within an intersection were assigned to an intersection.*

Crash Rate/100 Million VMT:
For the Study area (1996-2000) = 74.41
Statewide Rural Primary (1995-1999) = 122

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Fatal & Major Injuries by Year

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Disclaimer: The Center for Transportation Research and Education presents these data as preliminary.
School-Age Pedestrian Crashes

City of Des Moines
1995 to 1999
Ages 5 to 19
August 15 to June 15
Monday to Friday
7:00 a.m. to 5:00 p.m.

Middle Schools

Pedestrian Injuries
- Age 5-11 (Major)
- Age 5-11 (Minor)
- Age 5-11 (Possible, Unknown)
- Age 12-14 (Possible, Unknown)
- Age 12-14 (Major)
- Age 12-14 (Minor)
- Age 12-14 (Possible, Unknown)
- Age 15-19 (Major)
- Age 15-19 (Minor)
- Age 15-19 (Possible, Unknown)
ITSDS Activities

- Policy and Practice Assessment
- High Crash Location Identification
- Project and Site Review
- Targeted Enforcement
(From Audubon County Line to Iowa-141)

Note: 38 unlocated crashes not represented.
(9 Non-Fatal, 29 Fat C)

LEGEND

- Crash Severity:
  - Fatal (F)
  - Non-Fatal (GFT)
  - Property Damage Only (PDO)
  - Iowa 44

Primary Roads

County Boundaries

Public Roads

Copyright Boundaries

Disclaimer: Center for Transportation Research and Education presents these data as preliminary.

11/04/2002
Rural Alcohol-Related Fatal and Major Injury Crashes

Rural Alcohol-Related Crashes: Corridors Ranked by Frequency
Questions?

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Reg@iastate.edu  z hans@iastate.edu
515.294.5453  515.294.2329

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