

Increasing Seat Belt Use  
in St. Louis County, Missouri

Session: How States with Inadequate Laws  
have Attained High Seat Belt Use Rates  
Presenter: Sgt. David Stuckmeyer  
St. Louis County Police Department

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Increasing Seat Belt Use  
in St. Louis County

High Visibility Enforcement  
of a County Primary Ordinance

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Missouri was One of the Earliest  
States to Enact a Seat Belt Law

On September 28, 1985, it became  
the 7<sup>th</sup> State to enact a SBU Law,  
which required secondary enforcement

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### Following Substantial Gains, Little Change Since 2004

- Since that time, usage has increased from 10% in 1984 to 76% in 2008 (+66 points).
- But, there has been little or no gain since 2004
- This lack of gain comes in spite of continuing participation in Click It or Ticket (CIOT) mobilizations

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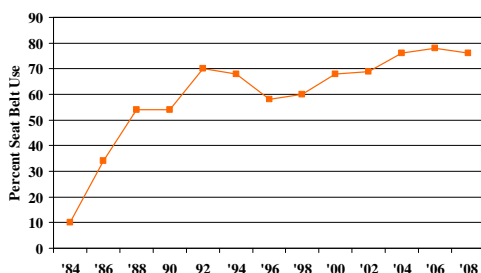
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### Historical Seat Belt Use in Missouri




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### Missouri vs. Law Upgrade States

- Since 1997, when national enforcement mobilizations began (*Operation ABC* and *Click It or Ticket*), there have been major gains in usage in nearly every State
- States that have upgraded to primary enforcement have had larger gains than Missouri
- That gap has widened in recent years
- Missouri continues to try to upgrade its law

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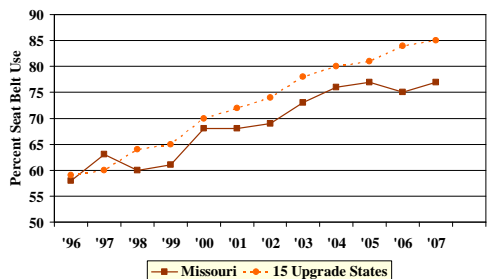
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### Historical Seat Belt Use in Missouri and in 15 Law-Upgrade States




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### Two Populous Counties in Missouri (have the highest numbers of serious crashes)

- St. Louis County (eastern Missouri)
  - Population ≈ 995,000
  - Excludes St. Louis City
  - Ranked 2<sup>nd</sup> in # Fatal Crashes (2005-2007)
  - Ranked 1<sup>st</sup> in # Disabling Injury Crashes
- Jackson County (western Missouri)
  - Population ≈ 667,000
  - Includes Kansas City
  - Ranked 1<sup>st</sup> in # Fatal Crashes (2005-2007)
  - Ranked 2<sup>nd</sup> in # Disabling Injury Crashes

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### Seat Belt Use in St. Louis County

- Usage has historically been higher in St. Louis County than across the State
- Usage has also been somewhat higher than in Jackson County
- Few gains have been made in recent years (in fact, there may have been some decline).

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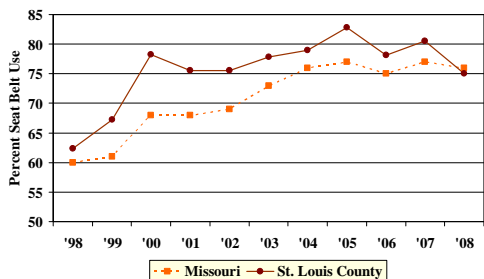
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### Historical Seat Belt Use in Missouri and at 20+ Sites in St. Louis County



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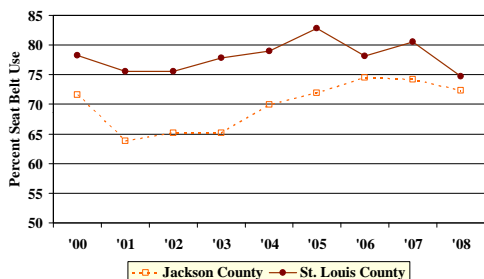
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### Historical Seat Belt Use in St. Louis and Jackson Counties (from sites in statewide survey)



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### A Primary Enforcement Ordinance in S.L. County

In 2007, a primary (standard) enforcement ordinance was enacted that covered unincorporated areas only

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Language remained the same as in the State Law, except for the following:

The following language was removed in the ordinance:  
"no person shall be stopped, inspected, or detained solely to determine compliance with this subsection" and  
"noncompliance with the subsection shall not constitute probable cause for violation of any other provision of law."

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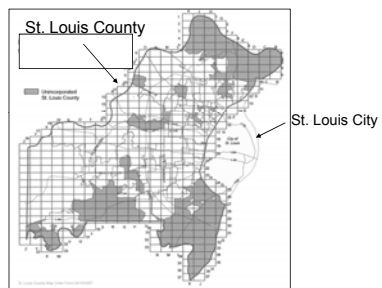
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### Areas Covered by Primary Ordinance (only Unincorporated Areas Highlighted in Blue are Covered)



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### Dispersion of Areas Covered by the Ordinance May have Limited Impact

- The new ordinance received some initial publicity and it has been enforced.
- However, because of the dispersion of areas covered by the ordinance, it likely did not have its intended impact.
- Comments by motorists suggested that most did not know about the ordinance.

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### A "Corridor" Enforcement Program in an Unincorporated Area

- State and County officials decided to develop, implement, and evaluate a "corridor" enforcement program in an unincorporated area of the County
- The objective was to use a high visibility enforcement (HVE) effort to increase SB usage on this corridor, ...and to compare any changes observed with changes on a similar roadway in Jackson County

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### Selection of Target and Control Corridors

- Highway 21 in southern part of St. Louis County was selected as the targeted corridor.
- Highway 24 in the western part of Jackson County was selected as the control corridor.
- Both were commuter roadways that connected suburban areas with the center city.
- Both were low-to-moderate speed roadways.

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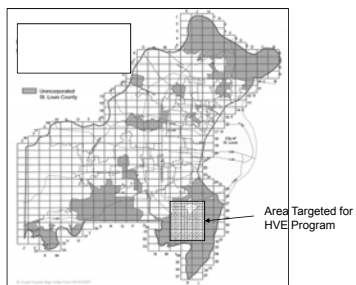
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### Highway 21 in South S.L. County was Targeted for HVE Program



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### Development of the HVE Program

- Informal planning group made up of County, State, and Federal safety officials (and PRG).
- Program was developed via a series of conference calls with planning group
- Presentation made at County Traffic Safety Enforcement meeting to solidify support and finalize plans
- S.L. County PD (SLCPD) Highway Safety Unit planned the enforcement effort.
- Missouri DOT and *Missouri Coalition for Roadway Safety* provided support for enforcement and publicity.

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### Characteristics of the HVE Program

- Two weeks of enforcement and publicity planned for November 17–30, 2008.
- Saturation patrols and enforcement zones conducted along an 8-mile stretch of Highway 21.
- Press release three days prior to start of enforcement
- Kickoff event at local hospital (1<sup>st</sup> day of enforcement)

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### Characteristics of the HVE Program (continued)

- Permanent signs (6) and variable message signs (9) on Highway 21 and on some feeder roads.
- Efforts to generate "earned media" (news stories) regarding the enforcement.
- No paid or public service media
- No enforcement activity or publicity on Highway 24 in Jackson County (control corridor).

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## Evaluation Components

- Documented enforcement and publicity activity.
- Pre- and post-program awareness surveys at 1-2 convenience stores on target and control corridors
- Pre- and post-program observational surveys at 15 sites on targeted and control corridors.
- Pre-program interviews and post-program surveys with participating officers.

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## Evaluation Design

Pre-Program	Program	Post-Program
Awareness Surveys	Document Enforcement & Publicity Activity & Earned Media (news stories)	Awareness Surveys
Seat Belt Observations		Seat Belt Observations
Officer Interviews		Officer Surveys

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## Results: Enforcement Activity

- About 500 officer hours expended over 11 of 13 days
- 64% regular patrol hours; 36% overtime hours
- Most enforcement during daytime hours (7am - 7pm) but, on 4 days, enforced at night (up to 10 pm or 12 am)
- Saturation patrols + one enforcement zone each day.

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**Results: Enforcement Activity**  
(continued)

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- 991 citations and 140 warnings issued for seat belt violations (plus 12 citations for child seat violations)
  
- Average rate of two citations per hour worked
  
- 6 DWI and 3 felony arrests; 3 fugitives apprehended; 30 uninsured motorist and 25 speeding violations.

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**Results: Publicity and Earned Media**

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- 1 Press release issued on November 14
  
- 1 Kickoff event held on November 17 at hospital.
  
- 9 variable message signs and 6 “permanent” signs alerted motorists to ordinance and enforcement.

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**Results: Publicity and Earned Media**  
(continued)

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- Messages on roadway signs included:
  - “Buckle Up: It’s the Law, County Ordinance #”
  - “Buckle Up - Seat belt Law Enforced”
  - “Click It or Ticket” and
  - “Buckle Up- It’s the Law – Ordinance Enforced Ahead”
  
- 10 news documented stories: 4 on TV; 3 on radio; 3 in newspapers.

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### Results: Motorist Awareness and Perceptions

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- Awareness of police enforcement of seat belt law increased from 17% to 77% (+61 percentage points); [9-point increase in control area].
- Perception that a ticket is likely for driving unbuckled increased from 22% to 32% (+11 points); [3-point decline in control area].

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### Results: Motorist Awareness and Perceptions (continued)

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- Support for primary enforcement increased from 63% to 70% (+7 points); [6-point decline in control area].
- Perception that county police can enforce the SB law as a primary offense increased from 61% to 69% (+8 points); [no change in control area].

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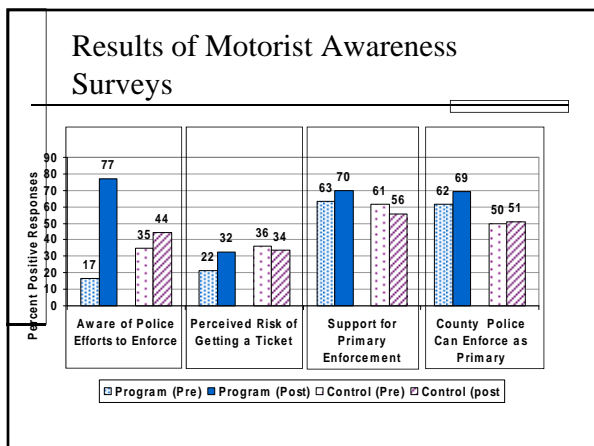
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### Results: Observed Seat Belt Use

- Observed seat belt use among drivers increased from 83% to 88% (+5 points); [-2 points in control area].
- Usage among passengers increased from 84% to 89% (+6 points); [-3 points in control area].
- Overall, usage increased from 83% to 88% (+5 points); [-2 points in control area].
- Usage among occupants of pickup trucks increased from 66% to 71% (+5 points); [-3 points in control area].

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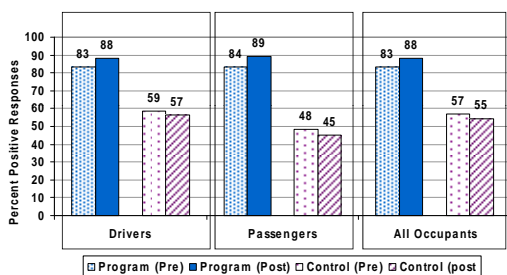
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### Results of Observational Surveys Seat Belt Use among Occupants of Passenger Vehicles




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### Officer Interviews (pre-program)

- All officers (in Highway Safety Unit) supported the primary enforcement ordinance
- Slightly less support among other officers (possibly due to discontinuity of coverage)
- Notified when it went into effect; some publicity and some increase in enforcement
- Most thought that low fine limited impact
- All favored a statewide primary law

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### Officer Interviews (post-program)

- Officers stated that most motorists understood and approved of their efforts
- All felt that the program went well
- All supported the ordinance whole-heartedly
- Nearly all supported statewide upgrade
- Most thought fine should be \$25, minimum
- Most suggested additional enforcement and publicity efforts in other unincorporated areas

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### Other Observations (post-program)

- Responses from businesses along corridor were positive (reduction in gas drive-offs)
- Most common excuses: I forgot; I'm close to where I am going; seat belt is uncomfortable
- Other excuses: my dog is in my lap; I'm too fat; my (shirt pocket) pens are in the way; I have a hernia.
- Passengers often did not know law applied to them
- Teens unaware that non-use was a violation of restricted license
- One driver indicated that he would send \$100 and that (the officer) could write nine citations later.

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### In Summary

- Intense Enforcement Effort with little or no broadcast media
- Significant increases in public awareness and support for (primary) enforcement and law
- Significant 5-point gain in usage (after several years with no gain)
- Implications for other areas wishing to increase seat belt usage and for statewide use in Missouri

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