

Belts in Back –

How to Raise Rear Seat Belt Use

(and how NTSB can help!)

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NTSB Rear Seat Safety in Passenger Vehicles

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Unbuckled in Back: An Overlooked Issue in Occupant Protection

Sponsored by the Governors Highway Safety Association

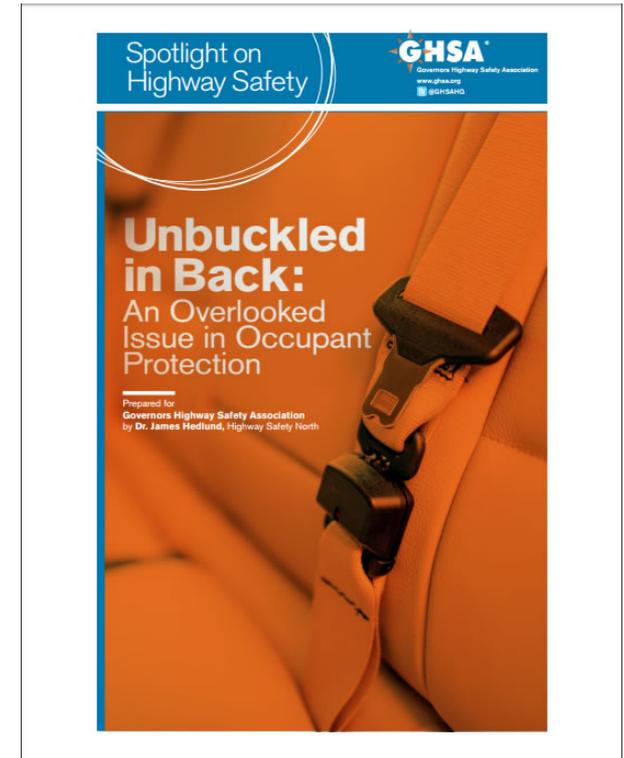
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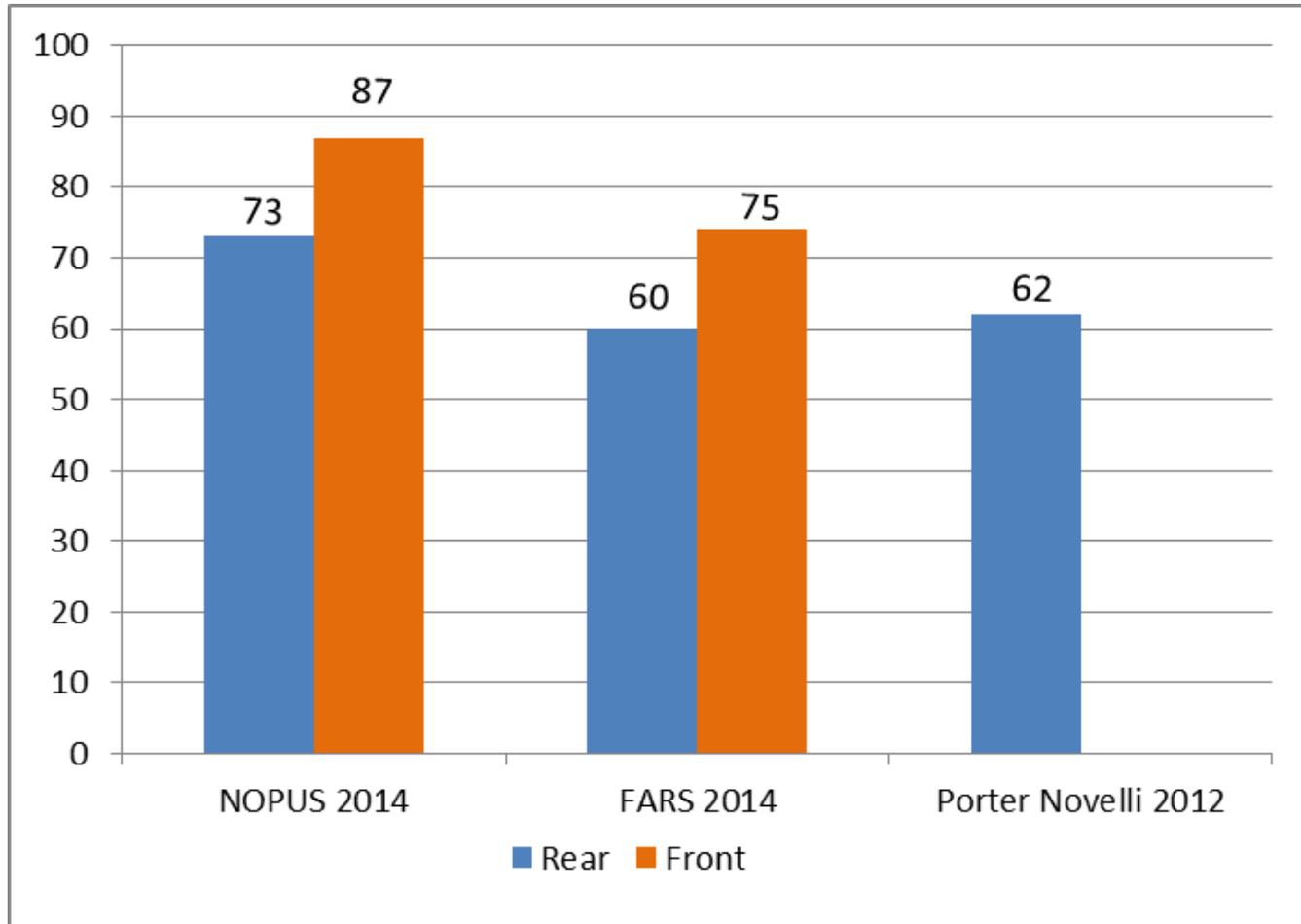
Provided to the docket



In my 10 minutes

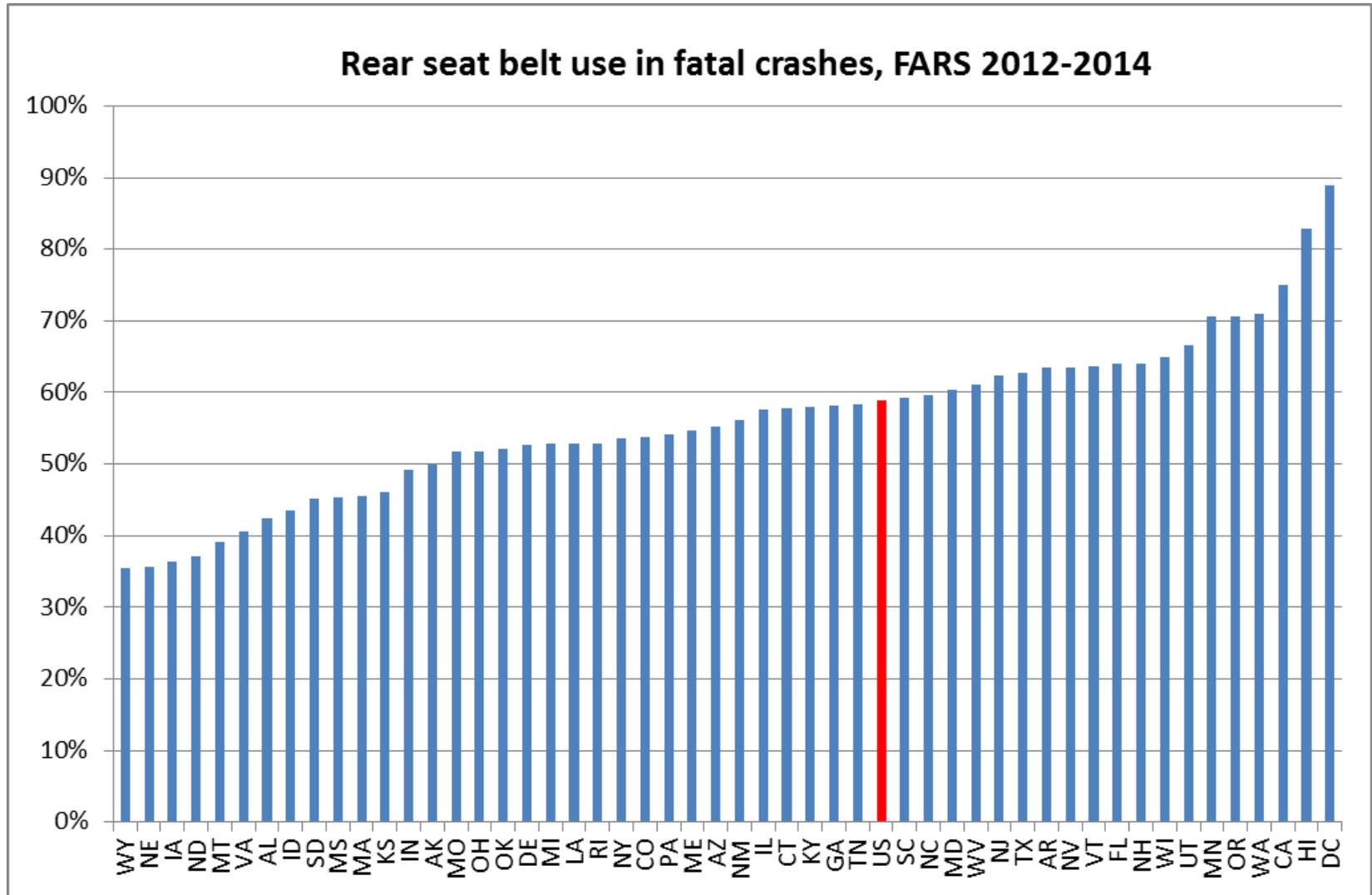
- Adult belt use is lower in rear seats than in the front seat
 - Data
 - Consequences
- Reasons
 - Laws and enforcement
 - Programs and messaging
 - Beliefs
 - Special case: taxis and limos
- Six easy, quick, and cheap ways to increase belt use
(well, most are easy, most are quick, most are cheap)

Adult rear seat belt use rates



Passenger vehicle occupants age 8 and older
Porter Novelli survey “always use”

Adult rear seat belt use rates



Consequences of lower belt use

- 838 unbelted rear seat adult fatalities in 2014 (FARS)
- Rear seat belt effectiveness: 44% cars, 78% LTVs (NHTSA)
- If all 838 had been belted:
 about 414 would have survived
- If use rate had been 75% (the FARS front seat rate):
 about 155 would have survived
- Increased risk to front seat occupants:
 "In a crash at 30 mph an unbelted adult rear-seat passenger is thrown forward with the force of a charging 3 1/2-ton elephant"

Reason #1: Laws

Adult Law	Front Seat	Rear Seat
Primary	35	19
Secondary	15	10
No law	1	22

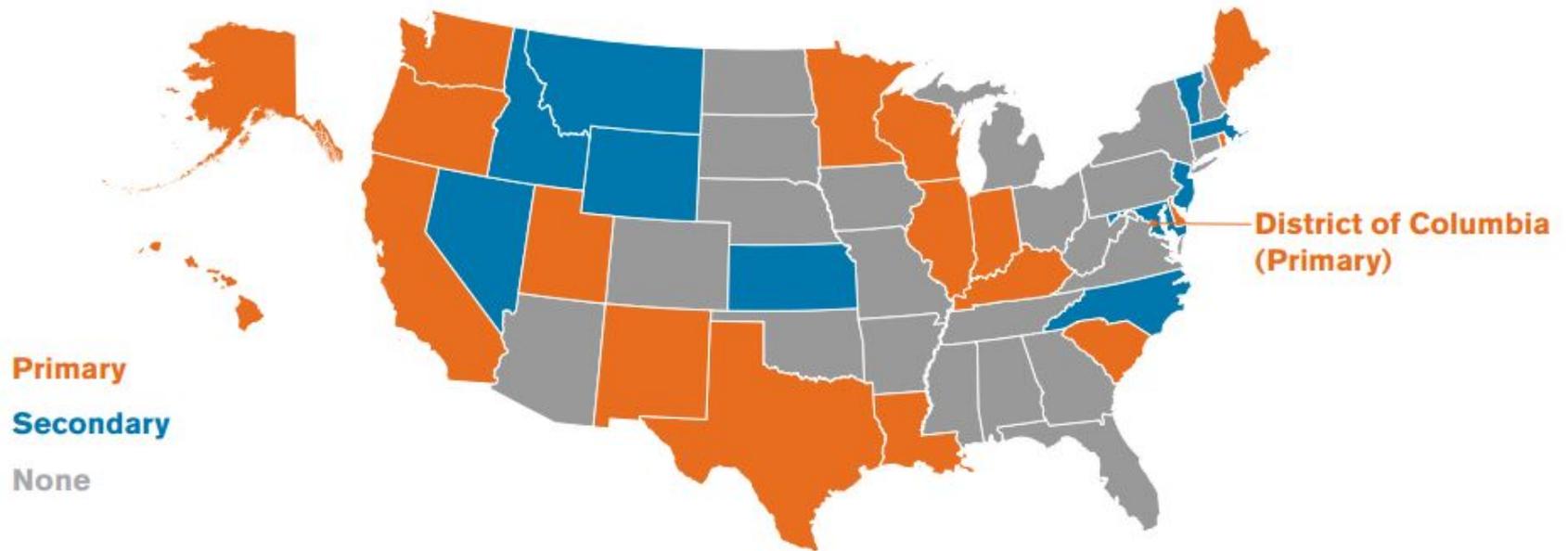
Primary: any unbelted occupant may be ticketed at any time

Secondary: unbelted occupants may be ticketed only if police stop the vehicle for another reason

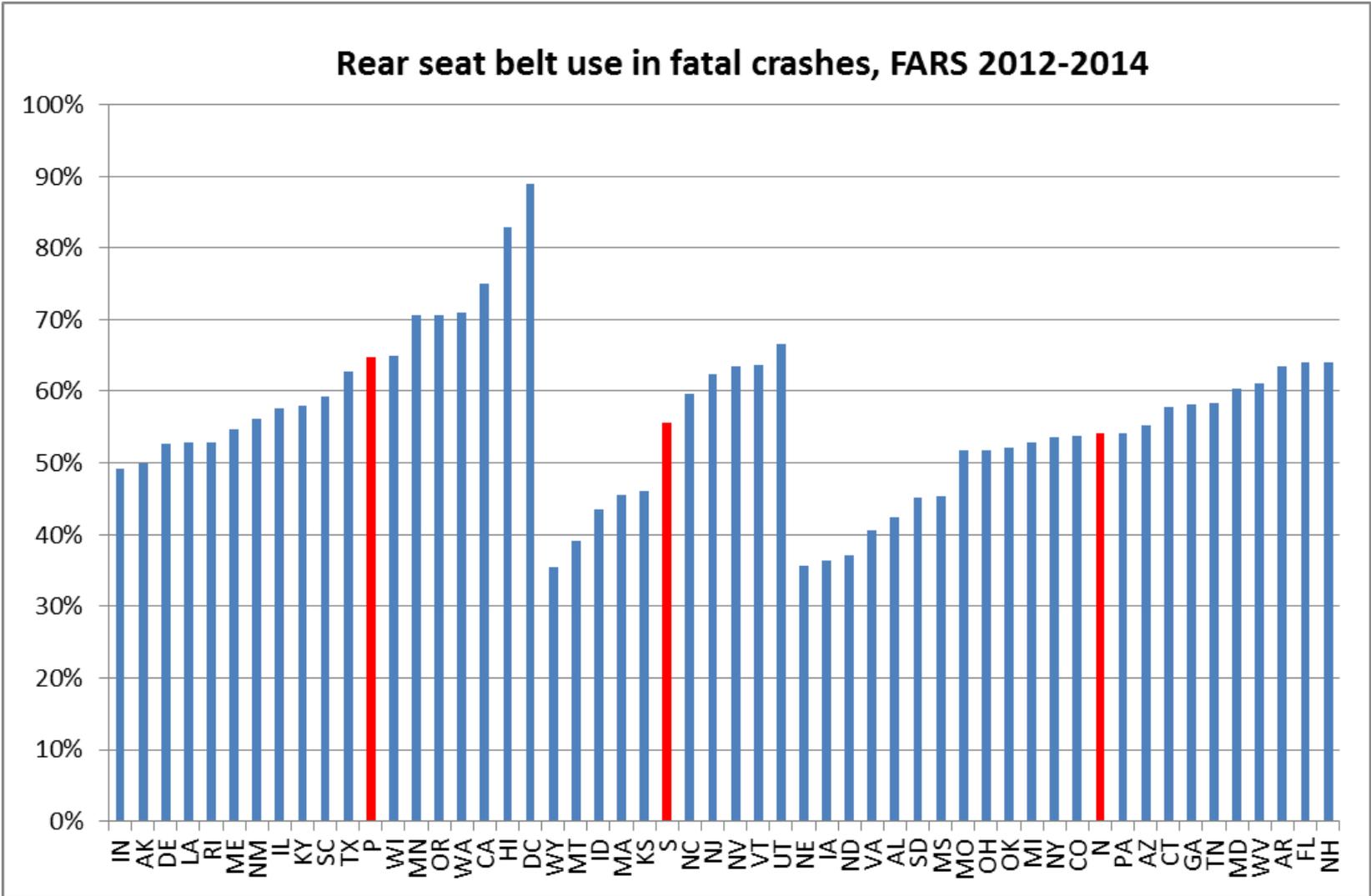
Last states to enact or upgrade a rear seat law: MD secondary law 2013, UT upgraded to primary law 2015

Laws

Figure 1. Rear seat belt use laws for adults, November 2015.



Belt use by law type: primary, secondary, none



Reason #2: Messaging and programs

- Most law states have “belt use required in all seats” messages

But ...

- Almost no state or national campaign explicitly target rear seat belt use by adults

Reason #3: Beliefs – “I’m safe in the back seat”

- True for older vehicles, but little difference in newer ones
- Perhaps due to “kids safer in back” campaigns
- The real message point: rear seat adults are 3 times more likely to die in a crash if they are unbelted (FARS)

“I’m safe in the back seat”

Injury	Belted	Unbelted
O - None	36.3 %	6.0 %
C - Possible	14.4 %	7.7 %
B – Minor	21.8 %	19.4 %
A - Serious	14.1 %	27.1 %
K - Fatal	13.3 %	39.8 %
	100 %	100 %

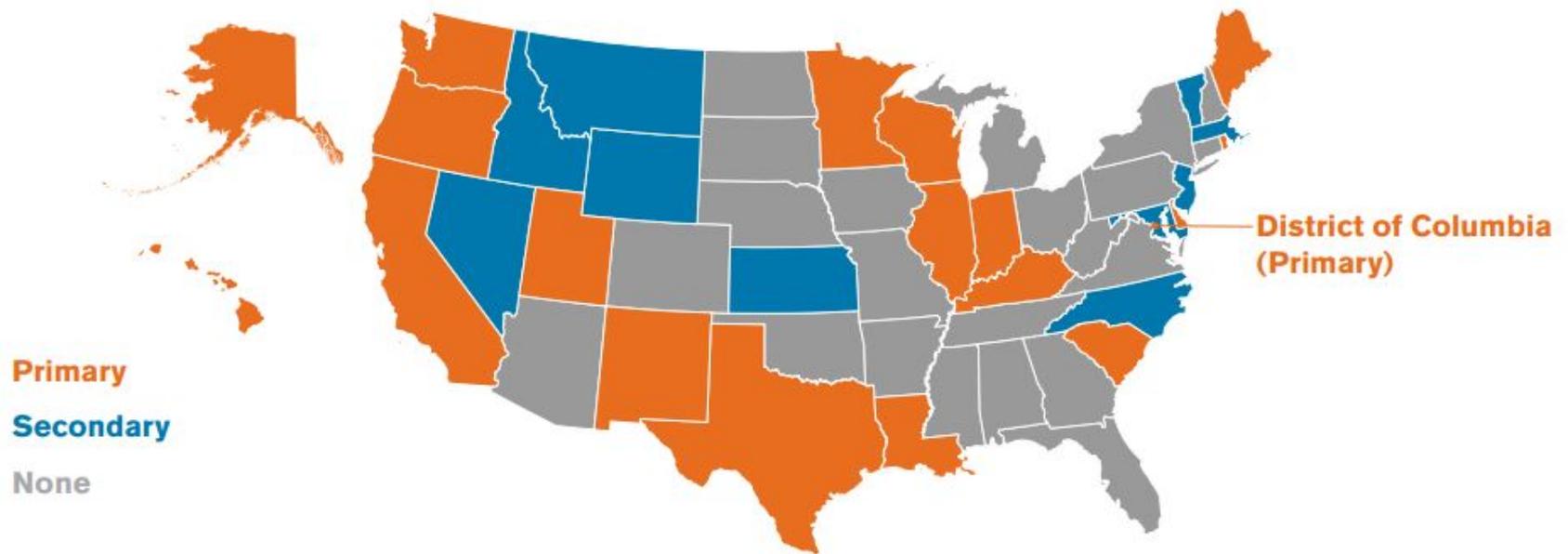
Rear seat passenger vehicle occupants age 8 and older in fatal crashes, 2014

Taxis and limousines

- Some states exempt taxis and limos from rear belt laws
- Self-reported belt use in New York City taxis, 2012-13:
38%
- John Nash and Bob Simon fatalities— unbelted in rear seat
- Some NYC emergency rooms now have a term for the frequent injuries they see when unbelted rear seat passengers strike a taxi's partition:
“partition face” (NY Times)

Solution #1: Laws

Figure 1. Rear seat belt use laws for adults, November 2015.



NTSB could: recommend again that states enact primary rear seat belt use laws (H-15-42, H-97-2)

Solution #2: Enforcement

- Enforce rear seat belt laws with the same vigor as front seat laws

NTSB could: recommend again that states with rear seat belt laws enforce them vigorously (H-97-5, 7, 8, 9)

Solution #3: Education

- Include rear seat positions in belt use education
- Consider campaigns directed to rear seat occupants

NTSB could: recommend that states publicize rear seat belt use (H-97-23, 24,25)



Seat Belts Must Be Worn

Fine: \$112

Hawaii's Police Enforce the Law Statewide

Hawaii's **NEW** seat belt law requires that **ALL FRONT & BACK SEAT** occupants buckle up. Adults and children **MUST** use their seat belts and child restraints at all times. **IT'S THE LAW!**

CLICK IT OR TICKET

Fine may vary by county. The Click It or Ticket campaign combines the efforts of the State Departments of Transportation, Health and Education; the four county police departments; the National Highway Traffic Safety Administration; the Federal Highway Administration; the Federal Motor Carrier Safety Administration; and Safe Community coalitions.

Solution #4: Taxis and limos

- Include taxis and limos in belt use laws, enforcement, and education

NTSB could: recommend that taxi and other for-hire passenger vehicle services encourage belt use by all passengers

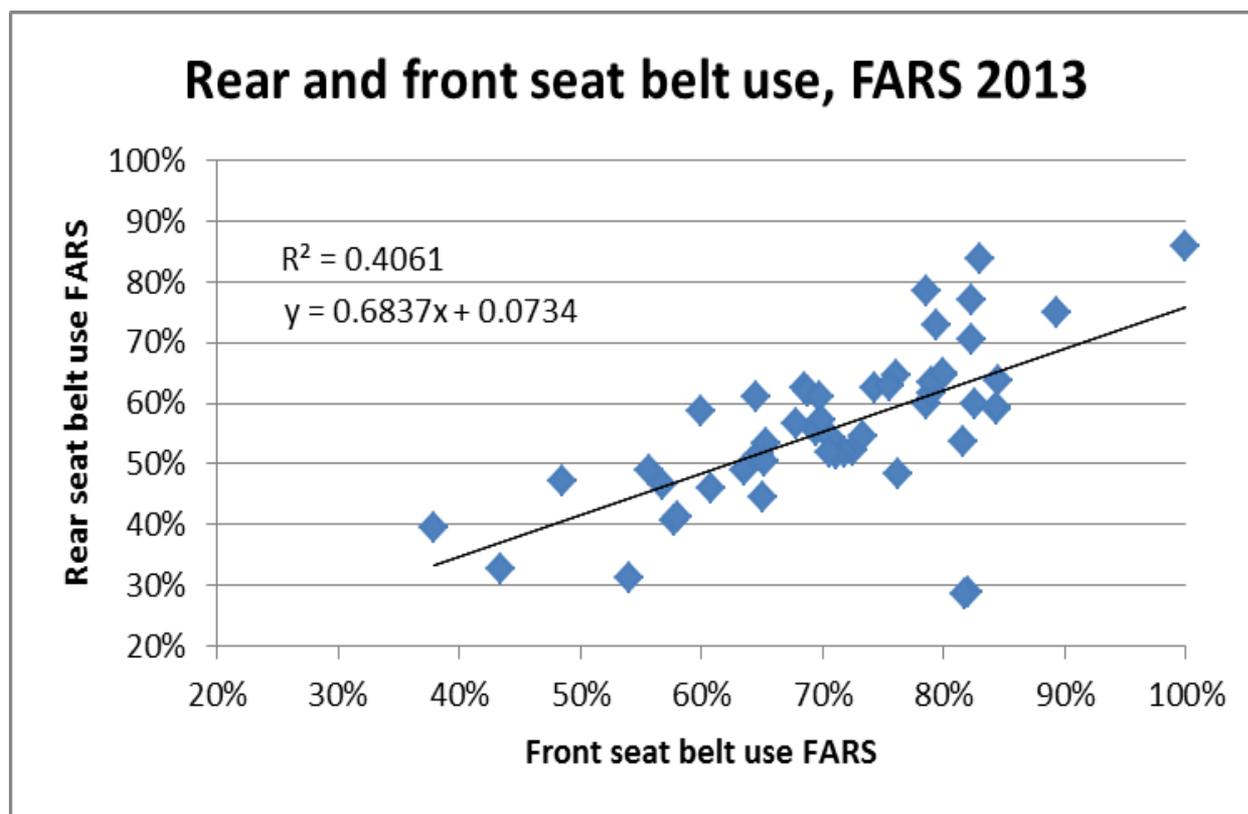
Solution #5: Rear seat belt reminders

- Belt use reminders are standard in front seats – why not in rear seats as well?

NTSB could: recommend that auto manufacturers install rear seat belt use reminders in all passenger vehicles (H-15-42)

Solution #6: Front seat belt use

Higher front seat use produces higher rear seat use



NTSB could: recommend again that states enact and enforce primary front seat belt use laws (H-15-42, H-97-2)

Questions and comments

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