



Unprotected Persons

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Unprotected Persons Fact Sheet

What are the Contributing Factors?

Unprotected Persons

Of the unprotected persons, 73% were motor vehicle occupants and 27% were unhelmeted motorcyclists.

19% of unprotected severe injured persons were between the ages of 15 and 20.

Age Group	Percent	Age Group	Percent	Age Group	Percent
≤14	4%	25 - 34	18%	55 - 64	9%
15 - 20	19%	35 - 44	15%	≥65	8%
21 - 24	11%	45 - 54	15%	Other	1%

Manner of Crash/Collision Impact

60% of severe injuries involved a non-collision.

Crash Type	Percent	Crash Type	Percent
Non-collision	60%	Head On	8%
Broadside	14%	Rear End	7%

Time

Almost half of unprotected severe injuries occurred between noon - 8:00 PM (45%) and over half on Fri - Sun (54%).

Time of Day	Percent								Total
	M	Tu	W	Th	F	Sa	Su		
Midnight to 3:59 AM	1%	1%	1%	1%	2%	4%	5%	15%	
4:00 AM to 7:59 AM	1%	1%	1%	1%	1%	2%	1%	8%	
8:00 AM to 11:59 AM	2%	1%	2%	2%	1%	2%	2%	12%	
Noon to 3:59 PM	3%	2%	3%	3%	4%	5%	3%	23%	
4:00 PM to 7:59 PM	3%	3%	2%	3%	3%	4%	4%	22%	
8:00 PM to Midnight	2%	2%	2%	3%	4%	4%	3%	20%	
Total	12%	10%	11%	13%	15%	21%	18%	100%	

County

The top five counties represent nearly one fourth (24%) of unprotected severe injuries in Iowa.

Top Counties	Percent
Polk	8%
Scott	5%
Pottawattamie	4%
Linn	4%
Black Hawk	3%

Road and Area Type

Unprotected persons severe injuries were primarily in rural areas (67%).

Combining rural and urban roadways, unprotected severe injuries are mostly on local roads (56%).

Jurisdiction	Rural	Urban	Total
State	30%	14%	44%
County	37%	1%	38%
City	-	18%	18%
Total	67%	33%	100%

Most unprotected severe injuries on the local road systems were on two-lane roads (County Road - 53% and City Streets - 79%).

Jurisdiction	Facility Type	Rural	Urban	Total
State	Freeway	15%	8%	23%
	Expressway	11%	6%	17%
	Multi-Lane	1%	12%	13%
	Two-Lane	41%	6%	47%
County	Paved	51%	2%	53%
	Unpaved	37%	<1%	37%
	Other	9%	1%	10%
City	Multi-Lane Undivided	-	10%	10%
	Two-Lane	-	79%	79%
	Other	-	11%	11%

How Significant is the Issue?

On Iowa roadways, there were 3,937 severe injuries between 2007 and 2011 in which the crash involved an unprotected person. This is an average of 788 severe injuries per year and involved nearly 37% of all severe injuries during the five year period.

Iowa's Strategic Highway Safety Plan

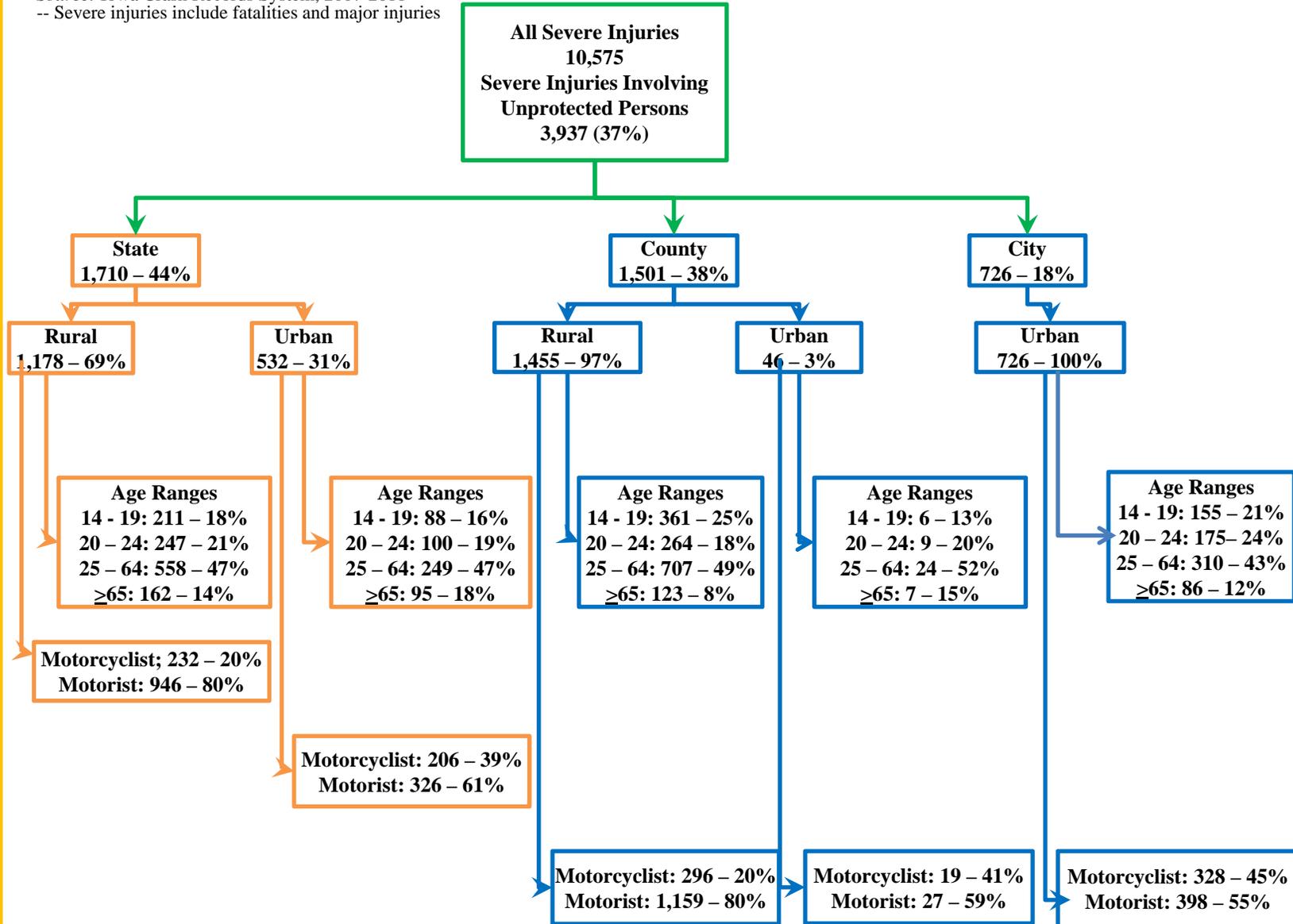
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Unprotected Person – By System

What the Crash Data Tells Us:

- Unprotected severe crashes on the state and county system involved over 80% of the severe injuries.
- 2/3 of unprotected severe crash injuries occur on rural roads.

Source: Iowa Crash Records System, 2007-2011
 -- Severe injuries include fatalities and major injuries



Iowa's Strategic Highway Safety Plan

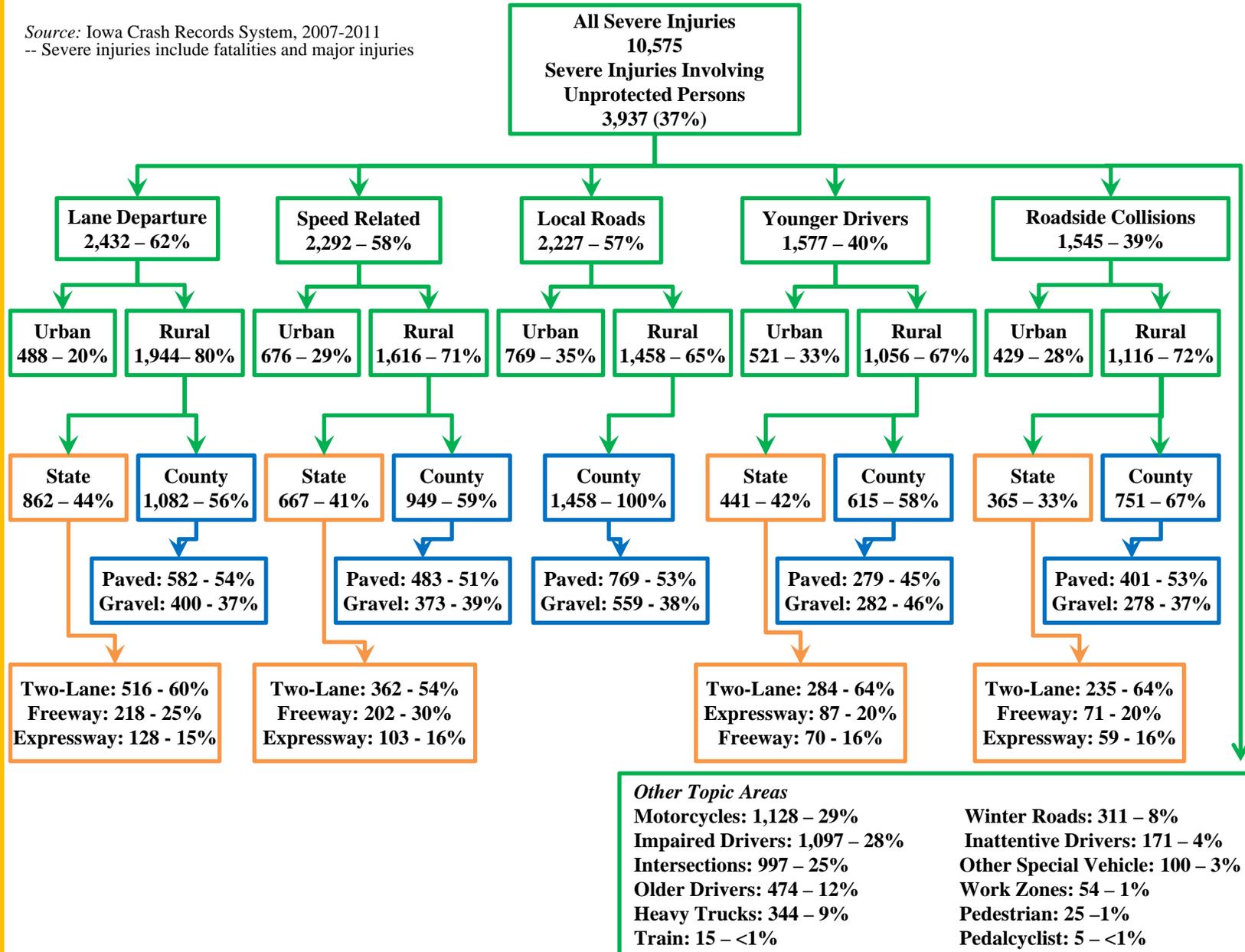
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Unprotected Persons – By Topic

What the Crash Data Tells Us:

- The following areas are related to unprotected severe injuries:
 - 40%-60% involved lane departure, speed, younger drivers, and/or roadside collisions.
 - 56% occur on county and city roads.
- Of the areas noted above, at least 65% of the severe injuries were on rural roads and of those the county roads are most at risk.
- Of the areas noted above, with the exception of younger drivers, paved county roads are more at risk than gravel roads.
- Of the areas noted above 2-lane rural roads are most at risk on the state system.

Source: Iowa Crash Records System, 2007-2011
 -- Severe injuries include fatalities and major injuries



Iowa's Strategic Highway Safety Plan

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Unprotected Persons – Possible Strategies

Objectives	Strategies	Relative Cost to Implement and Operate	Effectiveness	Typical Timeframe for Implementation
A - Maximize use of occupant restraints by all vehicle occupants	A1 - Conduct high visibility and highly publicized enforcement campaigns to maximize belt and child restraint use , including nighttime enforcement	Moderate-High	Proven	Medium
	A3 - Provide enhanced enforcement and focused communication outreach to population groups with low belt use	Low	Proven	Short
	A5 - Enact enhanced Primary Seat Belt law requiring seat belts for all passengers, in all seating positions.	Low	Tried	Short
	A6 - Increase belt use law penalties	Low	Tried	Short
	A8 - Conduct targeted and highly publicized enforcement for drivers under 18 at school locations.	Moderate	Proven	Short
B - Ensure that restraints, especially child and infant restraints, are properly used	B1 - Strengthen child restraint/booster laws for children up to age 8 or 4'9"	Low	Tried	Short
	B2 - Provide community locations for instruction in proper child restraint use , including both public safety agencies and health care providers	Low	Tried	Short
	B3 - Conduct high-profile "Child Passenger Safety" inspection clinics events at multiple community locations to educate on the proper use of restraint devices	Low	Proven	Short
	B5 - Train law enforcement personnel to check for proper child restraint use in all motorist encounters	Moderate	Tried	Short
C - Provide access to appropriate information, materials, and guidelines for those implementing programs to increase occupant restraint use	C1 - Create state-level clearing houses for materials that offer guidance in implementing programs to increase restraint use	Moderate	Experimental	Medium
	C2 - Provide tools/information on the benefits and ways to achieve the highest usage percentage possible	Moderate	Tried	Medium
D - Provide use requirements through alternative sources	D1 - Use employer sanction programs for non-compliance of belt use policies.	Moderate	Tried	Medium

Source: NCHRP 500 Series & NHTSA's Countermeasures that Work

Notes: Short (<1 year); Medium (1-2 years); Long (>2 years); helmet strategy not included