

Toward zero deaths: Who needs to do the heavy lifting? (Motorcycle Crash Trend in Florida)

Chanyoung Lee, Ph.D.

Center for Urban Transportation Research | University of South Florida

Unprecedented Degree of Mobility

 "Motor vehicle travel is the primary means of transportation in the United States, providing an unprecedented degree of mobility. Yet for all its advantages, motor vehicle crashes are the leading cause of death for age 4 and every age 11 through 27 (based on 2009 data)."

NHTSA Traffic Safety Facts

http://www-nrd.nhtsa.dot.gov/Pubs/811753.pdf



Pandemic?

 CDC estimated that between about 2,500 and 6,000 2009 H1N1-related deaths occurred between April and October 17, 2009. The midlevel in this range was about 3,900 2009 H1N1-related deaths.

http://www.cdc.gov/h1n1flu/estimates 2009 h1n1.htm

• In 2011, **32,367 people were killed** in the estimated 5,338,000 police-reported motor vehicle traffic crashes

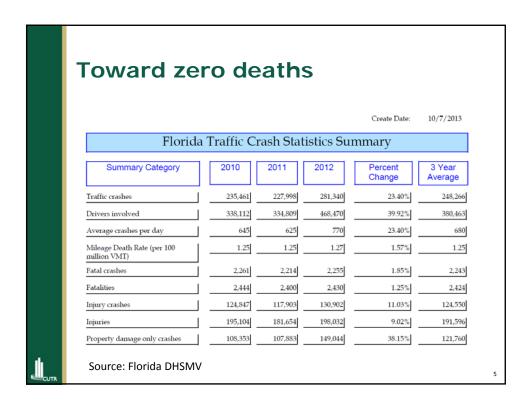


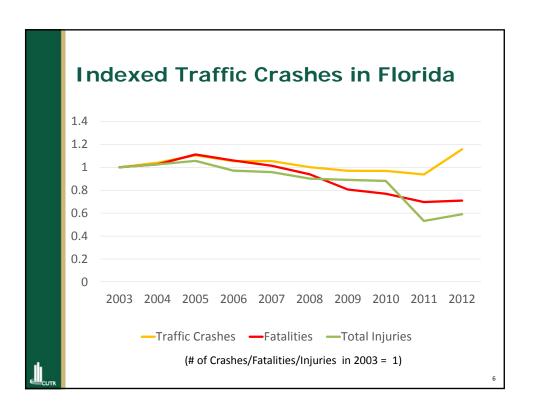
3

Toward Zero Deaths: A National Strategy on Highway Safety

- will be a data-driven effort focusing on identifying and creating opportunities for changing American culture as it relates to highway safety.
- will also focus on developing strong leadership and champions in the organizations that can directly impact highway safety through engineering, enforcement, education, emergency medical service (EMS), policy, public health, communications, and other efforts.





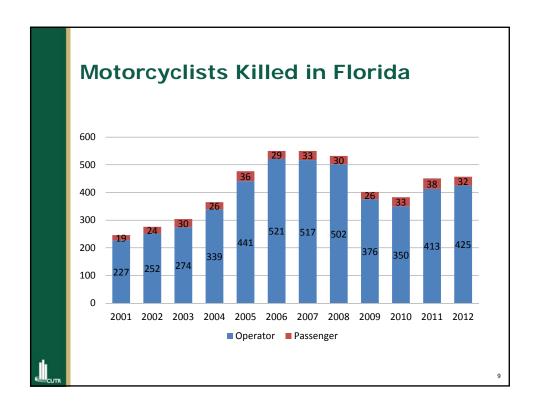


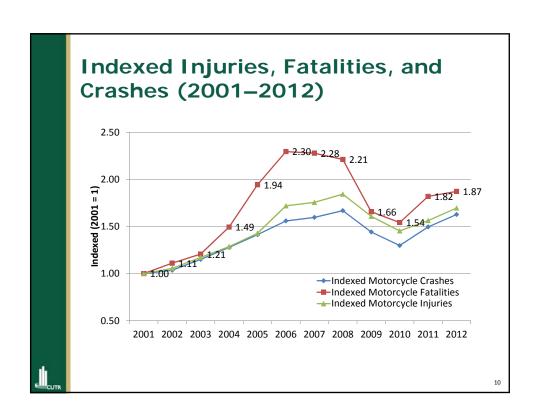


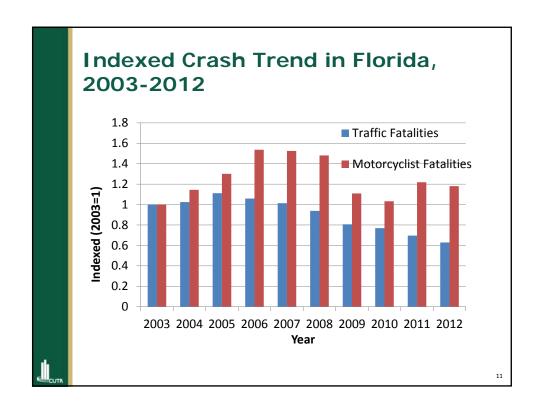
According to NHTSA,

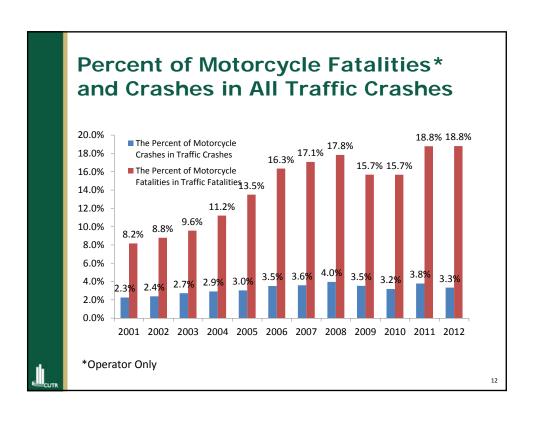
- In 2011, 4,612 motorcyclists were killed in motor vehicle traffic crashes.
- Motorcycles made up 3 percent of all registered vehicles in the United States in 2011 and accounted for only 0.6 percent of all vehicle miles traveled.

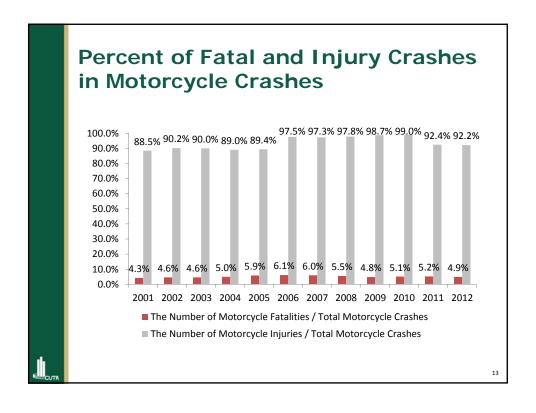
http://www-nrd.nhtsa.dot.gov/Pubs/811765.pdf

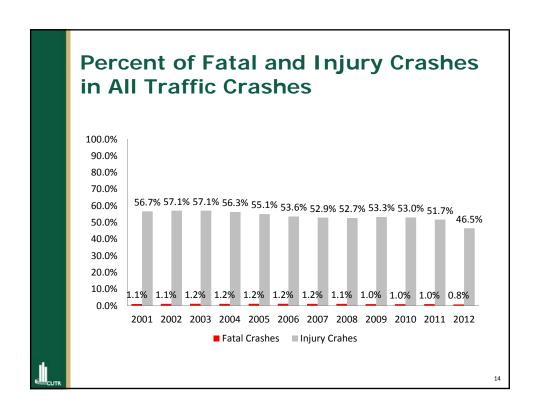












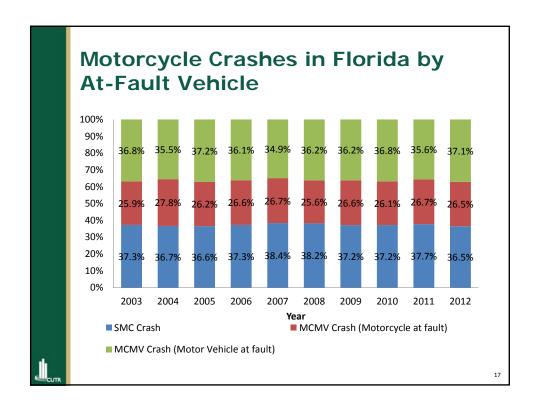
At-Fault

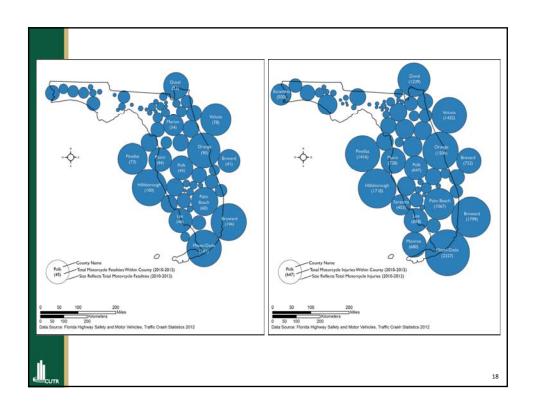
- Motorcycle riders are particularly vulnerable, and are seen by drivers as taking greater risks than other road users.
- Public perception is that motorcycle riders are reckless and more likely to ride at higher speeds.
- On the other hand, many motorcycle riders believe that drivers need more education and should have a greater awareness of motorcycles on the road. These opposing perceptions logically raise the question of fault, especially in motorcycle-motor vehicle crashes.

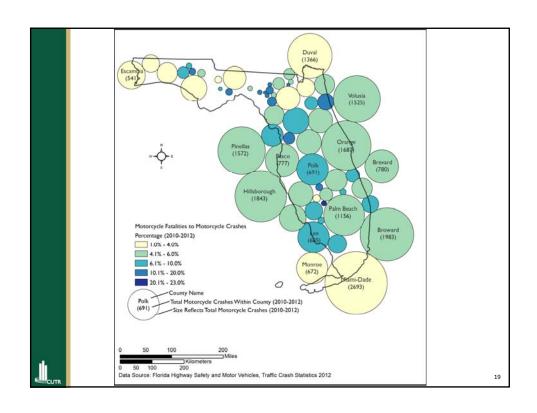


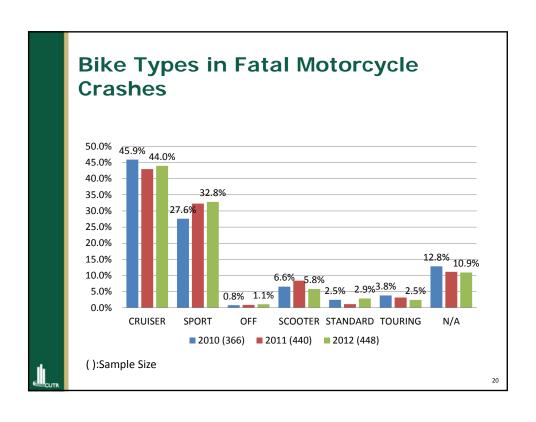
15

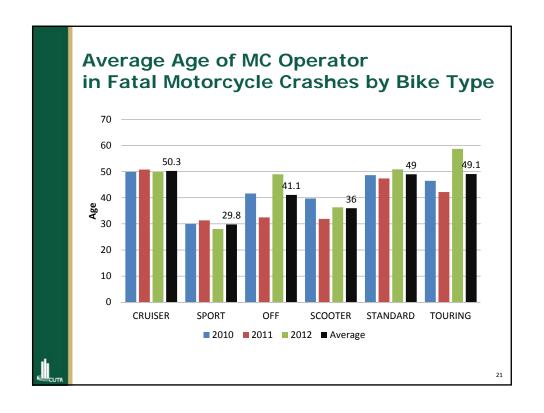
Motorcycle Crash Single Vehicle Motorcycle at fault Motorcycle at fault 34 % 26 % 15

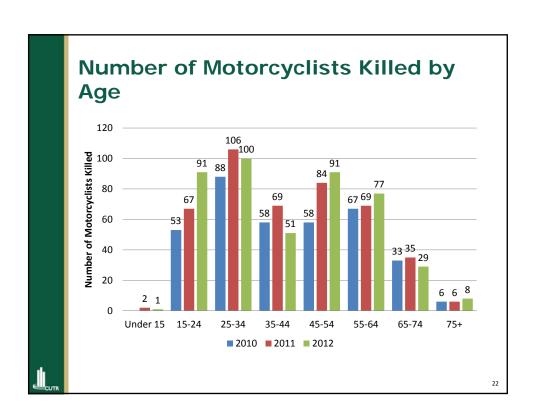




















23

DOT-Compliant Helmet

CDC Features > Features by Date

Recommend 364 Tweet 2 Share

Motorcycle Safety



Helmets save motorcycle riders' lives. And universal helmet laws, which require that every motorcycle rider and passenger wear a helmet whenever they ride, can increase helmet use and save money, according to a new CDC study.

The Reality

Preventing serious injuries and deaths from motorcycle crashes is a major and growing public health concern.

Consider that:

- Motorcycle crashes killed 4,502 people in 2010.
- Motorcycle-related deaths have increased by 55% since 2000.
- Motorcycle crash-related injuries and deaths totaled \$12 billion in one year, in medical care costs and productivity losses.

The good news is that riders'—and their passengers'—can protect themselves by wearing helmets. Helmets are estimated to prevent 37 percent of crash deaths among motorcycle riders and 41 percent of crash deaths for motorcycle passengers.

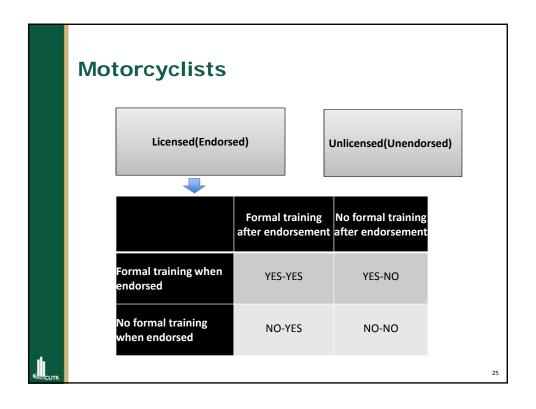
Motorcycle Safety: How To Save Lives and Save Money (Motorcycle Safety Guide)was developed by CDC to provide evidence-based motorcycle safety information in an easy-to-use format. The Guide provides key details on:

the public health significance of motorcycle crashes,

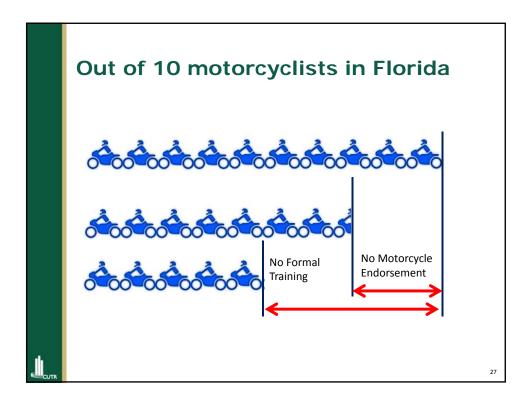
- . the best way to protect motorcycle riders,
- state-by-state data on motorcycle-related deaths and economic costs, and
 what you can do to increase motorcycle safety.

The Guide and state-based fact sheets are available online.





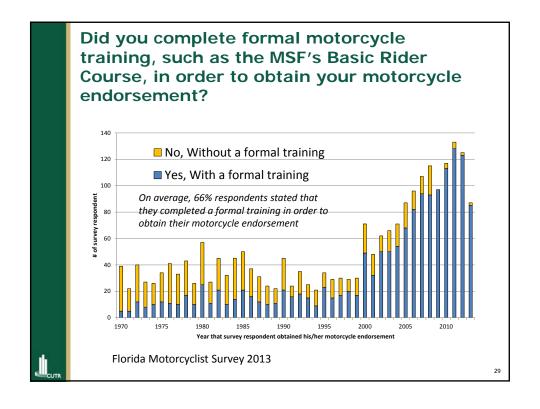
Formal Training vs. Endorsement Formal training No formal training Total after endorsement after endorsement 14% 52% Formal training 66% YES-NO YES-YES when endorsed 27% No formal training when endorsed 7% 34% NO-YES NO-NO 21% 79% 100% Total Florida Motorcyclist Survey 2013

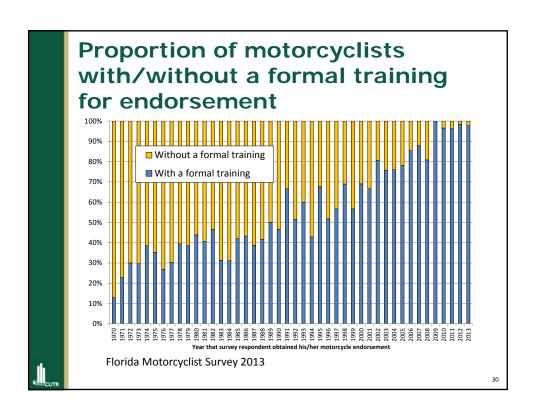


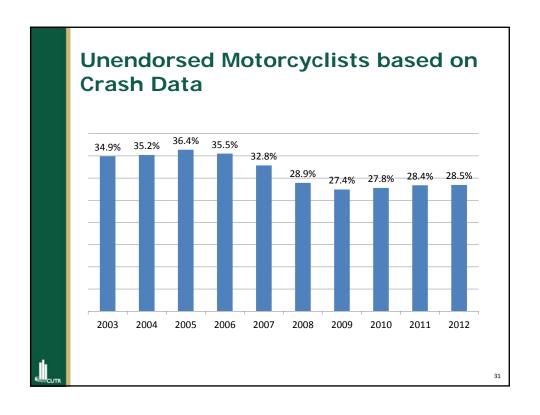
Florida was the one of first state to adopt a mandatory training law(July 2008)

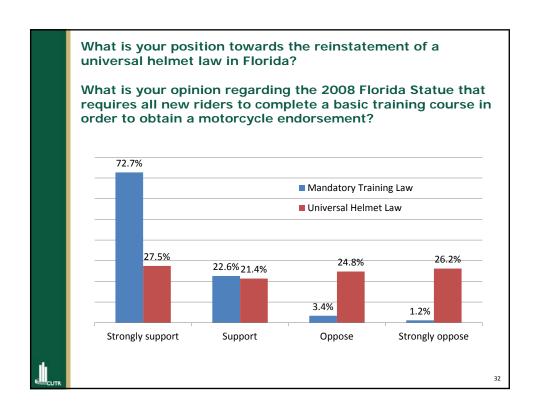
- Florida was the first state to adopt a mandatory training law requiring all motorcyclists, regardless of age, to attend a motorcycle training course in order to obtain a motorcycle endorsement on their license.
- In addition, the mandatory training course is standardized across the state and follows the Motorcycle Safety Foundation's (MSF) curricula for the Basic Rider Course (BRC).
- Furthermore, the Florida Rider Training Program (FRTP) monitors all course providers in the state to ensure they are upholding all MSF standards, including training sites, course structure, and instructor training.

1









What made you decide to take the Basic Rider Course?

2011	2012	2013
3.7%	3.2%	1.8%
64.3%	64.0%	65.4%
27.4%	26.0%	26.4%
2.6%	4.6%	3.2%
2.0%	2.2%	3.2%
100.0% (543)	100.0% (497)	100.0% (500)
	64.3% 27.4% 2.6% 2.0% 100.0%	64.3% 64.0% 27.4% 26.0% 2.6% 4.6% 2.0% 2.2% 100.0% 100.0%

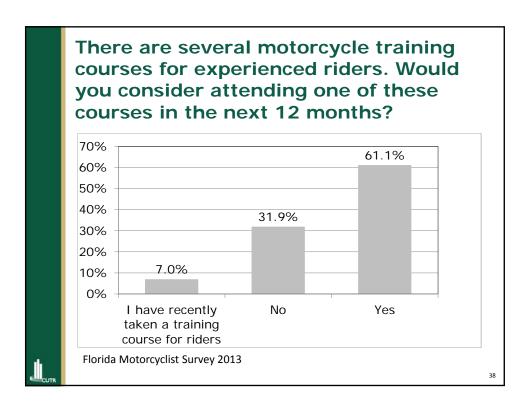
Riding Experience Prior to Course

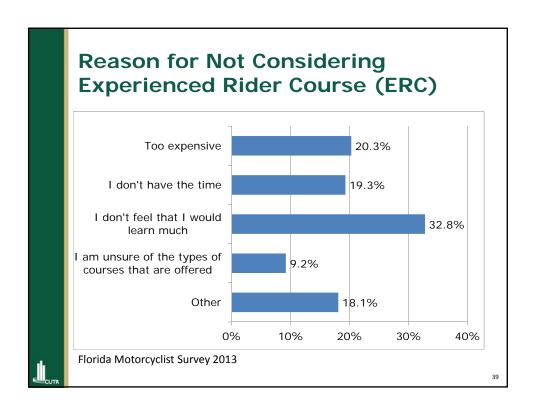
	2011	2012	2013
Very experienced	13.7%	16.1%	11.7%
Somewhat experienced	40.6%	34.3%	32.4%
Somewhat inexperienced	19.3%	18.1%	22.1%
Very inexperienced (I have never ridden a motorcycle prior to the course)	26.4%	31.5%	33.8%
Total	100% (539)	100% (496)	100% (497)

		ommend the MSF Basic BRC) to an experienced	
	All		
		Response (488)	
	Yes	86.7%	
	No	13.3%	
	Very experienced		
		Response (57)	
	Yes	77.2%	
	No	22.9%	
CUTR			

Would you consider taking the Experienced Rider Course (ERC)? Motorcycle riding experience prior to taking the Basic Rider Course(BRC) Very experienced Somewhat experienced Somewhat inexperienced Very inexperienced (I had never operated a motorcycle prior to the course) Florida Rider Training Survey 2013







		No formal training after endorsement	
Formal training when endorsed	14% YES-YES	52% YES-NO	66%
No formal training when endorsed	7% NO-YES	27 % NO-NO	34%
Total	21%	79%	100%

Taking a training course after endorsement

- Required
 - Military
- Improving Skills
 - Sport Bike
- Built-in Culture in Motorcycle Club
 - GWRRA
- New Motorcycle
 - Trike



41

Conclusion

- No Sliver Bullet
- PPE Use, Defensive Riding/Driving
 - Required
 - Motivation
 - Culture
 - Habit
 - Benefit
 - Price







Question?

Chanyoung Lee, Ph.D.

Center for Urban Transportation Research (CUTR)

cylee@cutr.usf.edu

813.974.5307



44