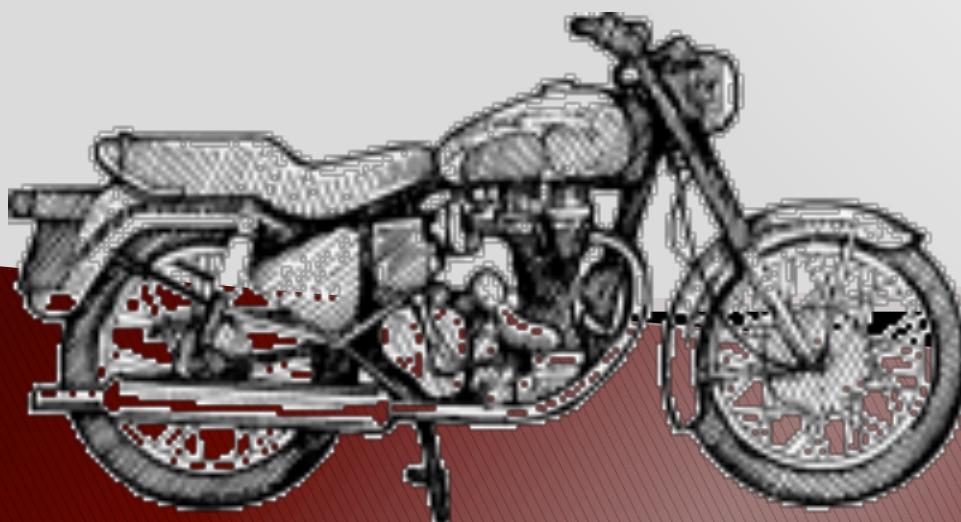


# Texas Motorcyclist Survey

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# Texas Motorcyclist Survey

- ▶ Part of TxDOT research project
- ▶ Purpose:
  - to provide background information on Texas motorcycle rider demographics, riding habits, and attitudes
  - develop communications and outreach plan for encouraging safe riding behaviors
  - provide data for the development of a statewide motorcycle safety plan

# Survey Questions – Summary

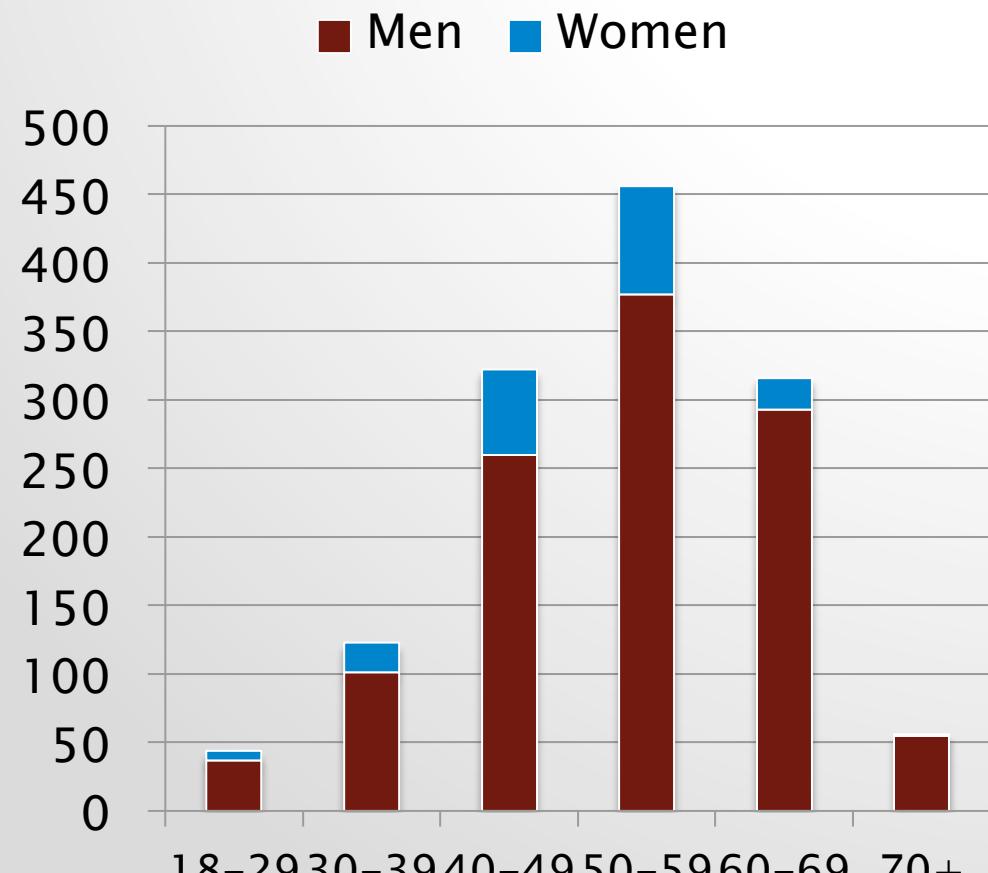
- ▶ Characteristics
  - Demographics
  - Riding habits
  - Training
  - Licensing status
  - Crash experiences
- ▶ Knowledge/Attitudes
  - Use of protective gear
  - Opinions on safety countermeasures
  - Opinions on advanced technologies

# Where did participants come from?

- ▶ Existing e-mail database of riders
- ▶ Texas Motorcycle Safety Coalition (TMSC)
- ▶ Riders groups (TMRA, TMRA2, COC&I)
- ▶ Motorcycle safety instructors → new riders
- ▶ Contacts collected at motorcycle rider events
- ▶ Social media
- ▶ 1,386 total respondents

# Demographics

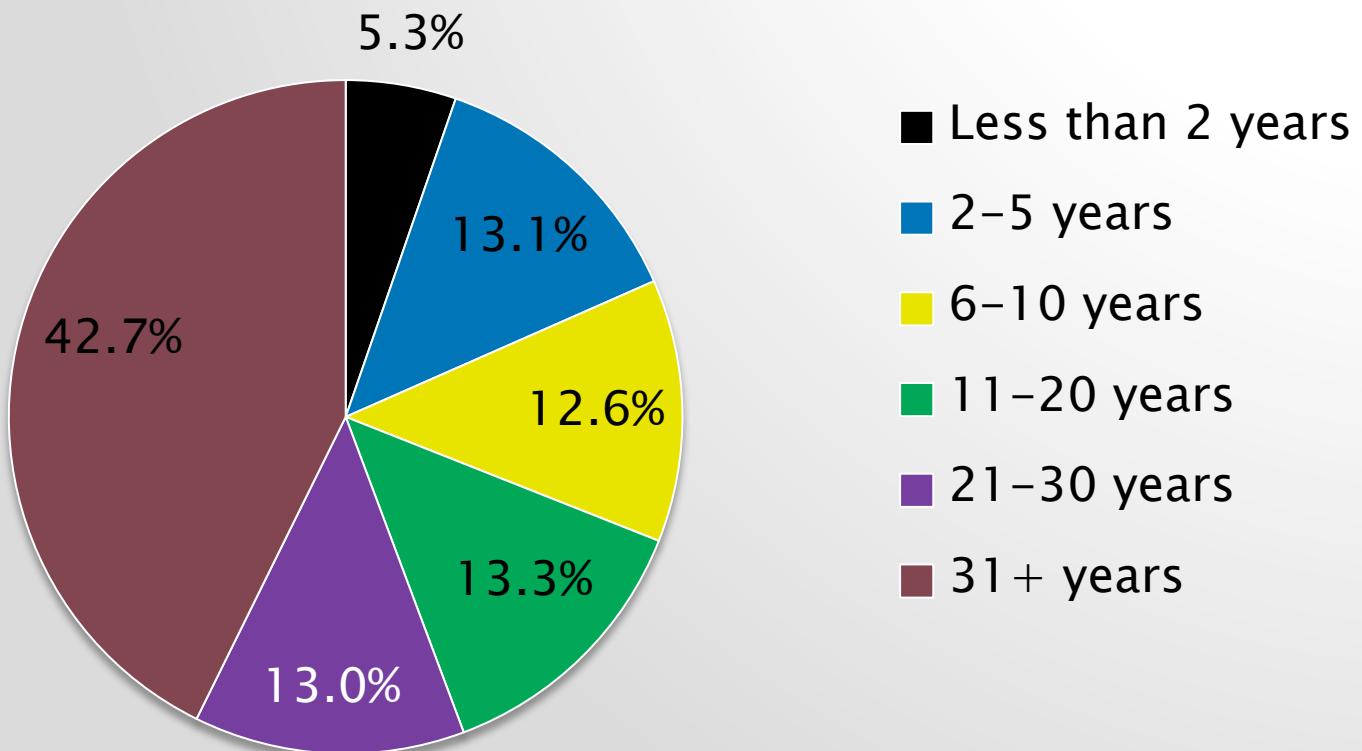
- 85% male
- 15% female
- Ages range:  
21 to 81 years
- Average age:  
52.5



Distribution of Ages for Men and Women

# Riding History and Experience

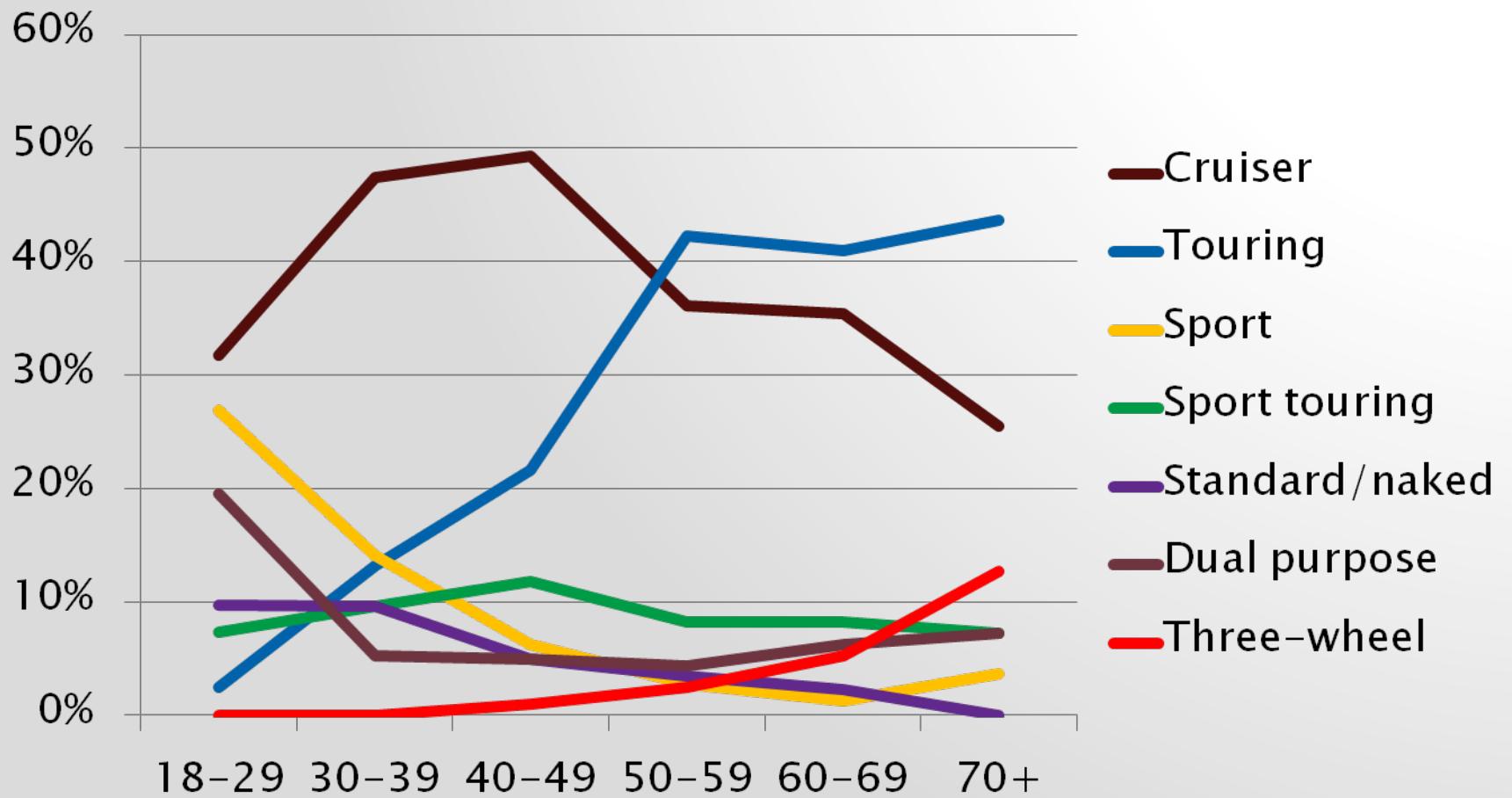
“How long have you been riding a motorcycle?”



# Type of Motorcycle Participants Ride Most Often

Type	Response Percent
Cruiser	39.8%
Touring	33.2%
Sport	5.0%
Sport touring	9.1%
Standard/naked	4.1%
Dual purpose (on and off-road)	5.7%
Three-wheeler	2.8%

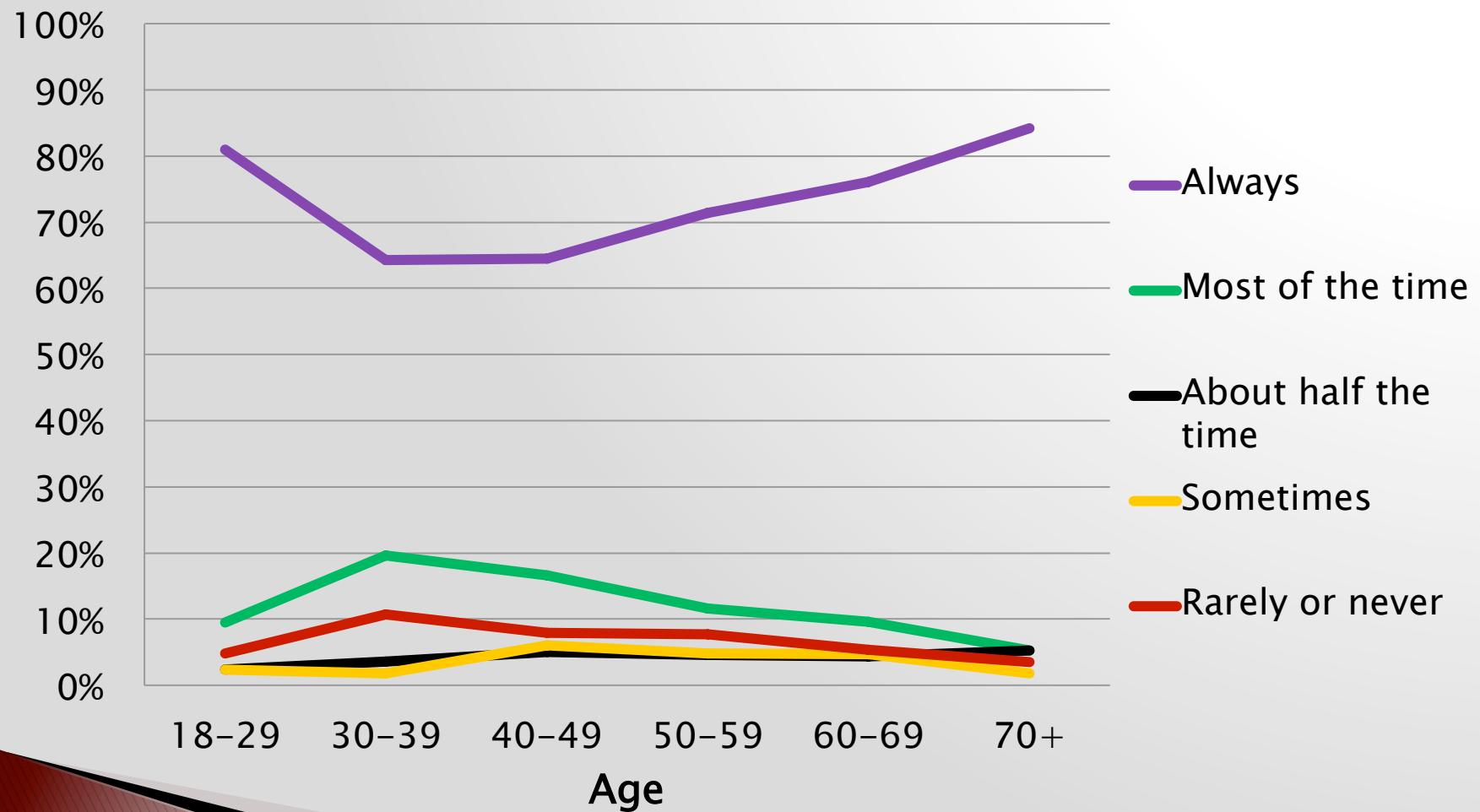
# Bike Type by Age Group



# **Motorcycle Safety Training**

- ▶ 72% of participants have taken at least one training course
- ▶ 82% of these say that training significantly improved their skills
- ▶ Training needs identified:
  - Improve/update curriculum
  - Better/more motorcycles available for training
  - Courses for 3-wheel motorcycles
  - Courses for high-performance riding

# “How often do you choose to wear a DOT-approved helmet when you ride?”



# Reasons for Wearing or Not Wearing a DOT-Approved Helmet

## Reasons for wearing a helmet

Protective benefits	81.2%
Weather (cold/rain/wind)	49.6%
Keeps bugs/debris out of my face	40.2%
Habit	38.3%
Know someone who was injured riding without a helmet	25.9%

## Reasons for NOT wearing a helmet

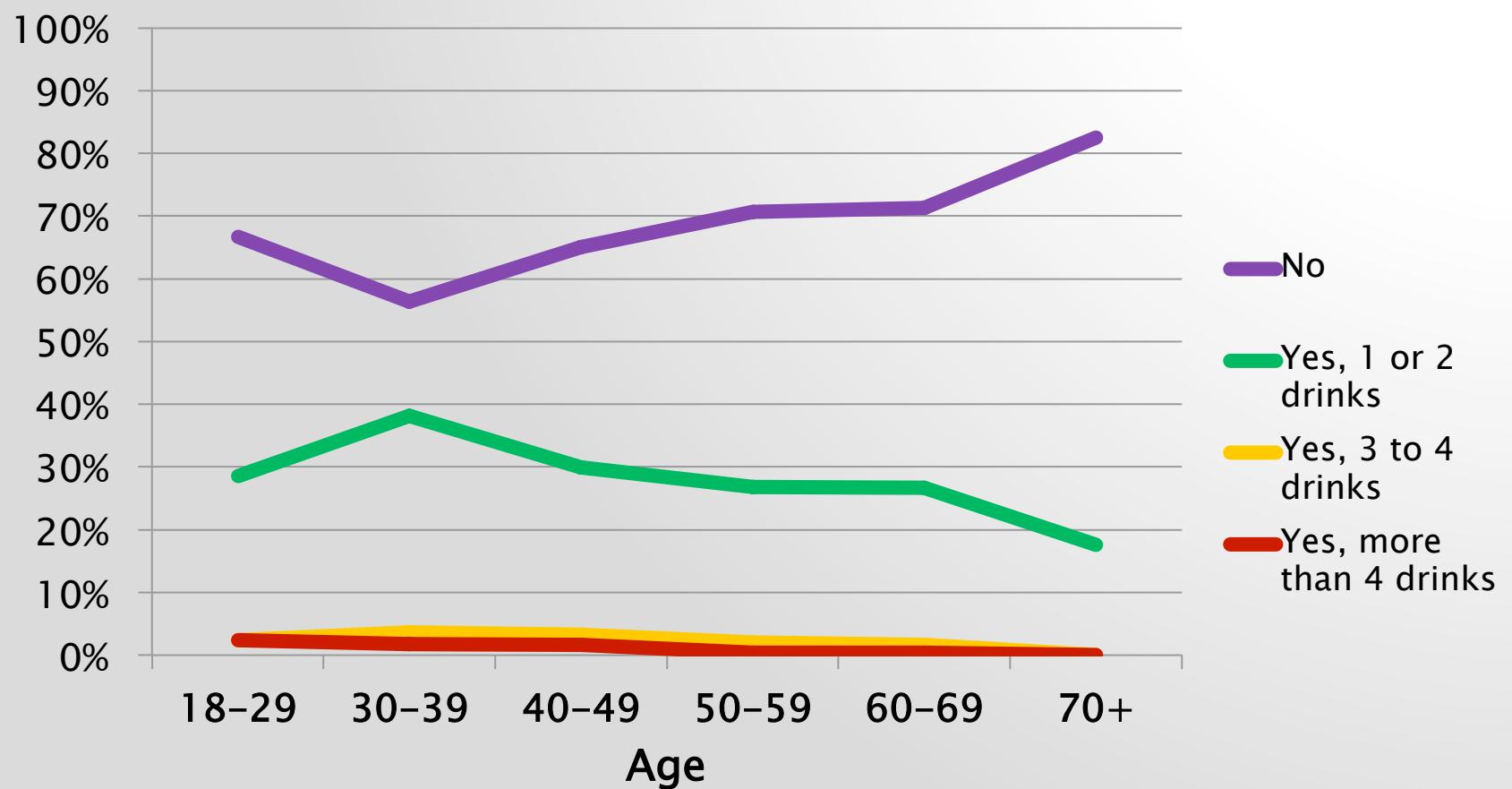
Personal freedom/choice	58.3%
Weather (hot/humid)	36.5%
Uncomfortable	25.8%
More fun to ride without helmet	25.2%
See better	18.2%
Hear better	16.0%
Give passenger the only helmet	8.0%

# Participant Strategies for Improving Conspicuity

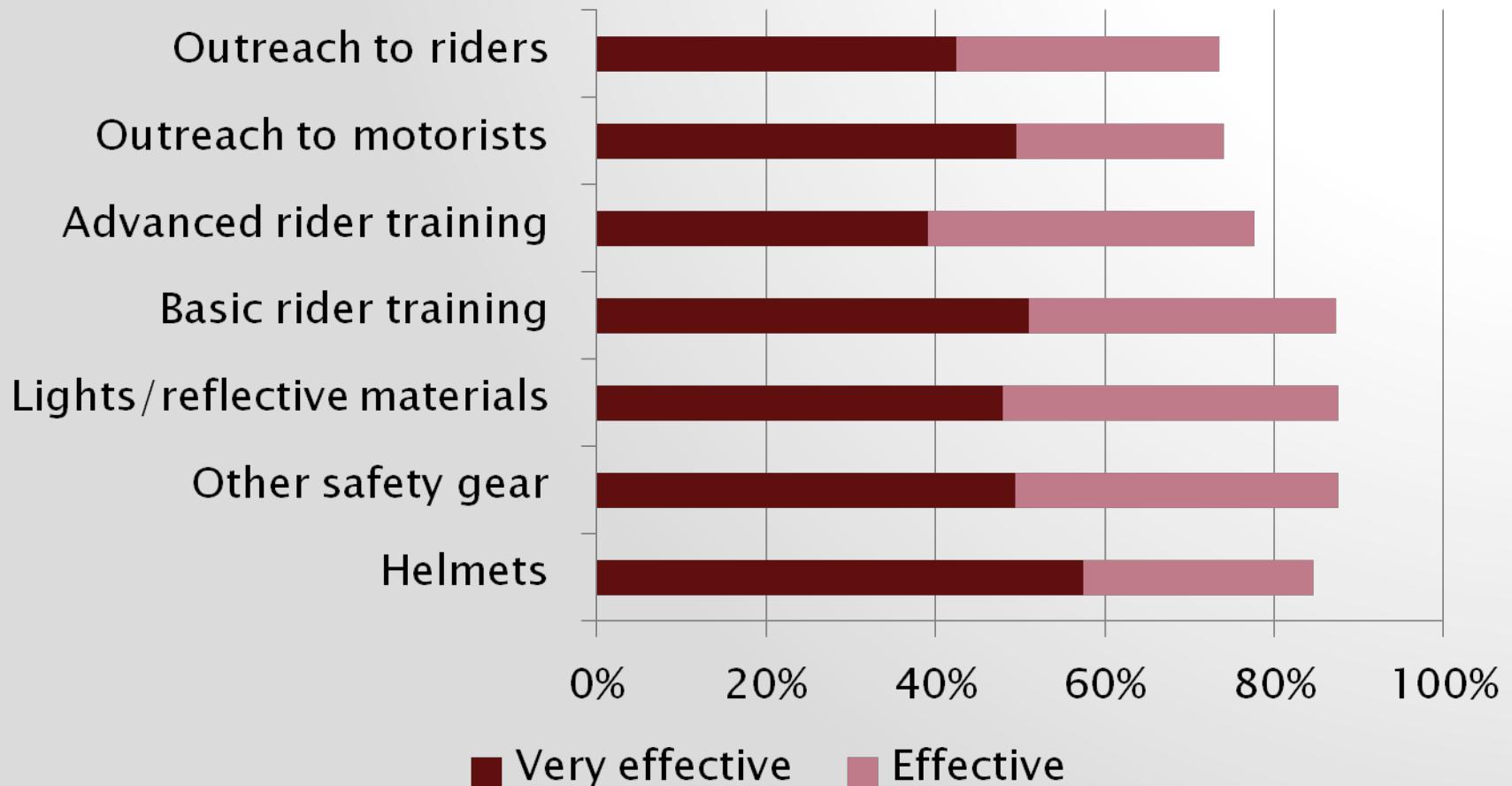
- ▶ Strategic lane positioning (74%)
- ▶ Auxiliary lights (51%)
- ▶ Reflective materials (32%)
- ▶ Brightly colored helmet (24%)
- ▶ Brightly colored clothing (22%)

# Alcohol Use

“Within the last year, have you consumed alcohol within an hour prior to riding a motorcycle?”



# Effectiveness of countermeasures



# ITS and Advanced Technologies

## Technologies for Motorcycles/ Riders

Adaptive headlights  
Airbag on motorcycle  
Airbag vest  
Alcohol breathalyzer on motorcycle ignition

Anti-lock brakes  
Blind-spot detector in motorcycle helmet  
Electronic stability system (for trikes)  
Helmet-mounted rear-view display/camera

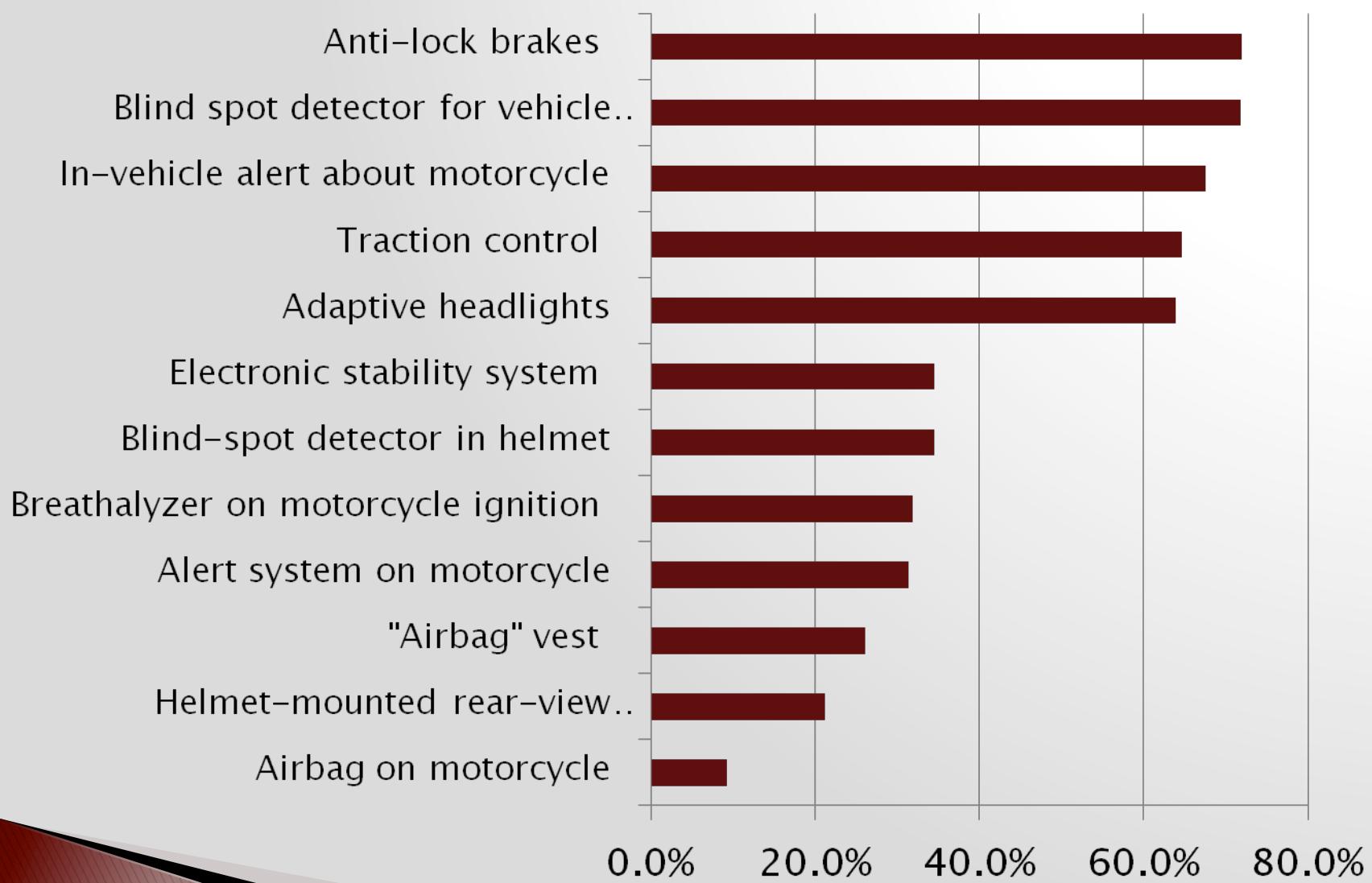
System to alert riders if they're getting too close to other vehicles, pedestrians, or objects

Traction control

## Technologies for Vehicles/ Drivers

Blind spot detector (vehicles)  
System to warn drivers if they're getting close to motorcycles

## Percent Rated as Effective/Very Effective



# Texas Strategic Action Plan for Motorcycles

- ▶ Living document intended to guide motorcycle safety initiatives for Texas, 2013–2018
- ▶ Survey results contributed to plan measures
  - Improve motorcycle training
  - Increase helmet/safety gear use
  - Increase motorcycle/rider conspicuity
  - Increase driver awareness of motorcycles
  - Reduce impaired riding
  - Promote adoption of advanced technologies