

# First Ten Hours of Supervised Practice Driving

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Johnathon Ehsani, Bruce Simons-Morton, Charlie Klauer,  
Suzie Lee, Feng Guo, Tom Dingus.



*Eunice Kennedy Shriver* National Institute  
of Child Health and Human Development



# Study Design

## Participants

- 83 parent-teen dyads
- Blacksburg, Roanoke, VA
- Permit to licensure +12 months

## Method

- *Continuous in-vehicle recording*
  - 6 cameras → video was coded
  - Audio → coding in progress
  - GPS (location and speed)
  - Accelerometers (G-forces)
- *Video Sampling*
  - Trip files: driver, supervisor, conditions
  - First, Middle and Last 10 hours



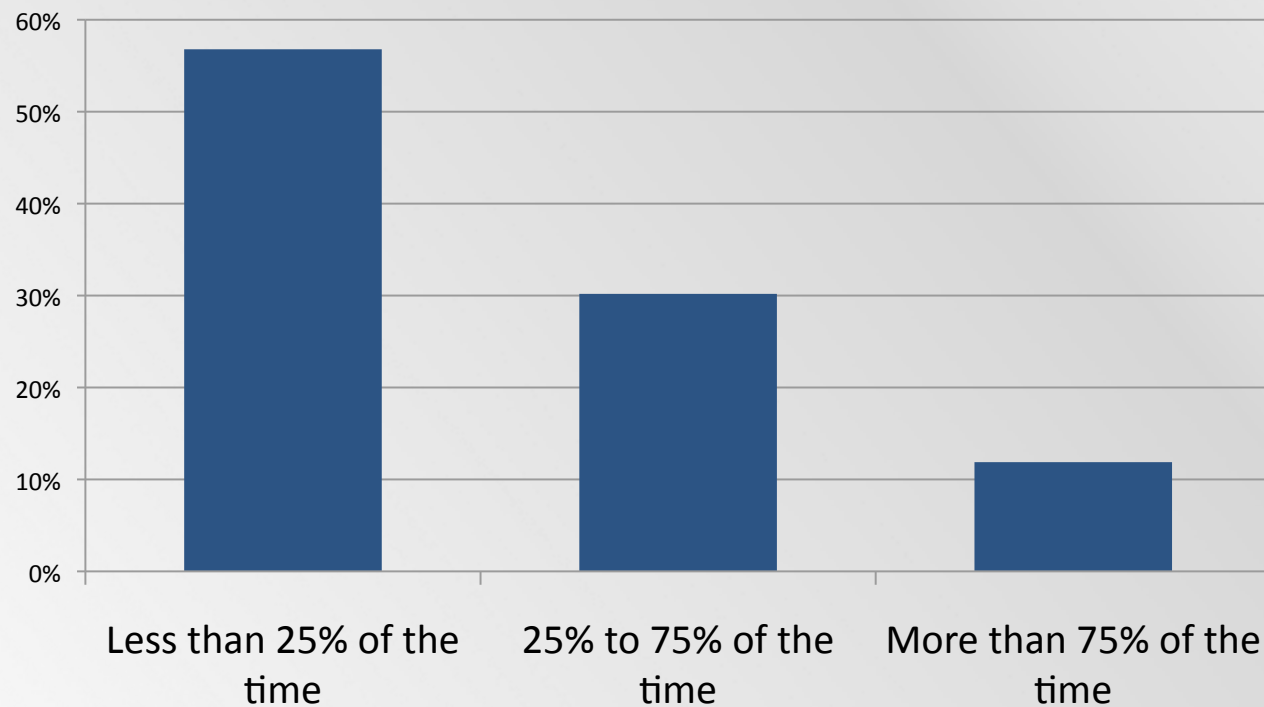
## Video Sampling

- Randomly sampled 30-sec segments from each 5-min period of driving
- **Coded for:**
  - Driving Conditions
  - Driving Instruction
  - Driving Errors
  - Secondary Task Engagement



## Conversations – First 10 hours

- In 87% of clips there was conversation present
- 69% of conversations parents dominated



**Driving-related conversation**



## Defining Driving Instruction

### Real time

- Related to the present time or immediate future related to events that are occurring during the drive

### Higher order

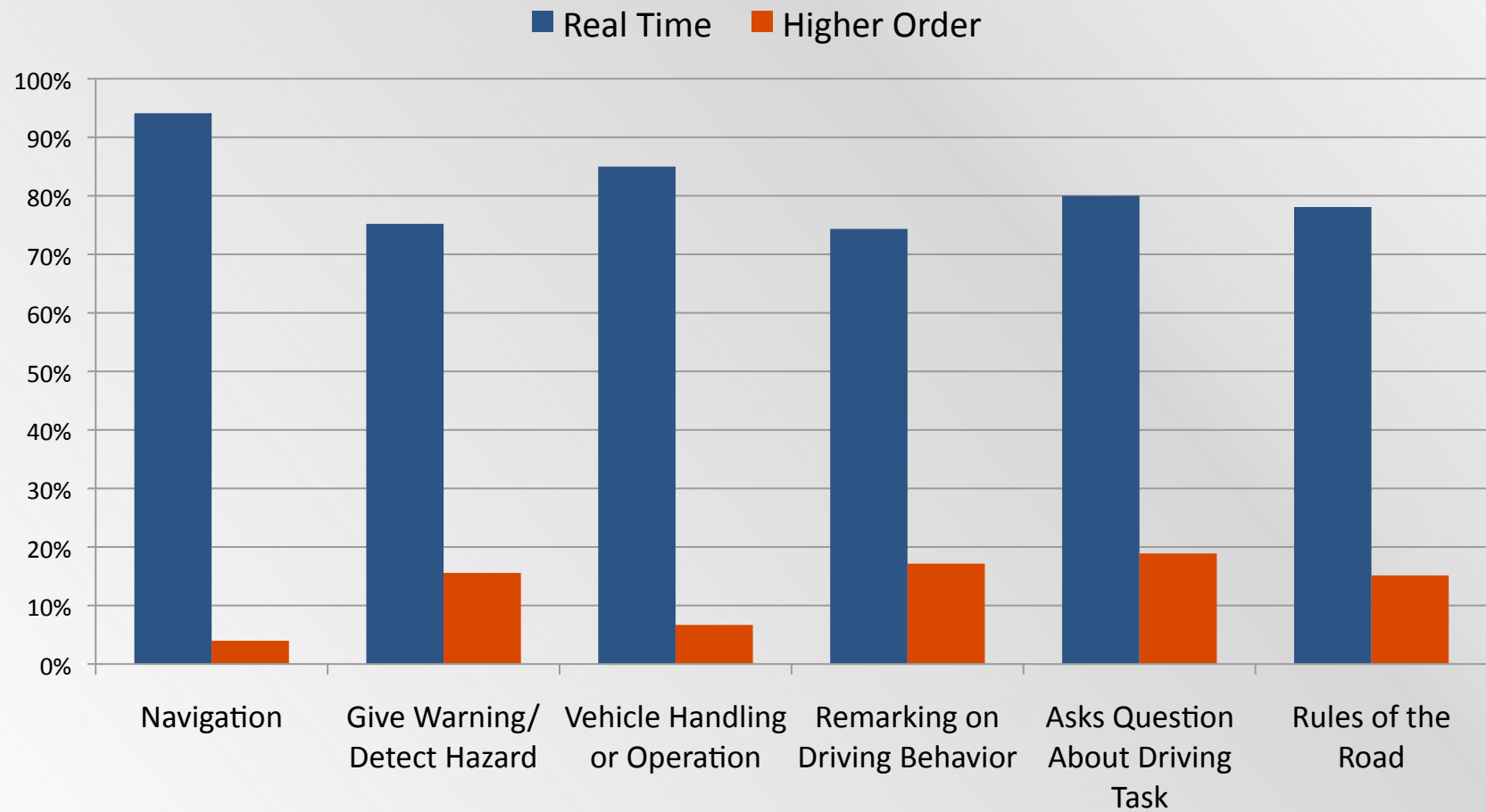
- Conveys general principles of driving
- May result from a specific event, but generalizes to other situations



# Driving Instruction

Topics	Real Time	Higher Order
<b>Navigation</b>	“You’re going to make a left turn at the next traffic light.”	“I like to think about the route I’m going to take before I leave home...”
<b>Hazard Detection</b>	“You’ve got a car pulling out of a drive way up ahead.”	“You’ve got to adjust to the road situation. If it rains, you’ve got to adjust to that.”
<b>Vehicle Handling</b>	“Slow down. Slow way down. He’s pulling out.”	“Try leaving a few car spaces between yourself and the other vehicle.”
<b>Comment on Driving</b>	“You took that corner too fast.”	“When turning, be sure you are over in the far lane so no car pulls around you”
<b>Asks Question About Driving</b>	“What are you going to do you when that bus stops ahead of you?”	“How often should you be checking your rear view mirror?”
<b>Rules of the Road</b>	“What does this sign mean?”	“Always follow the speed limit”.

# Topics of Driving Instruction



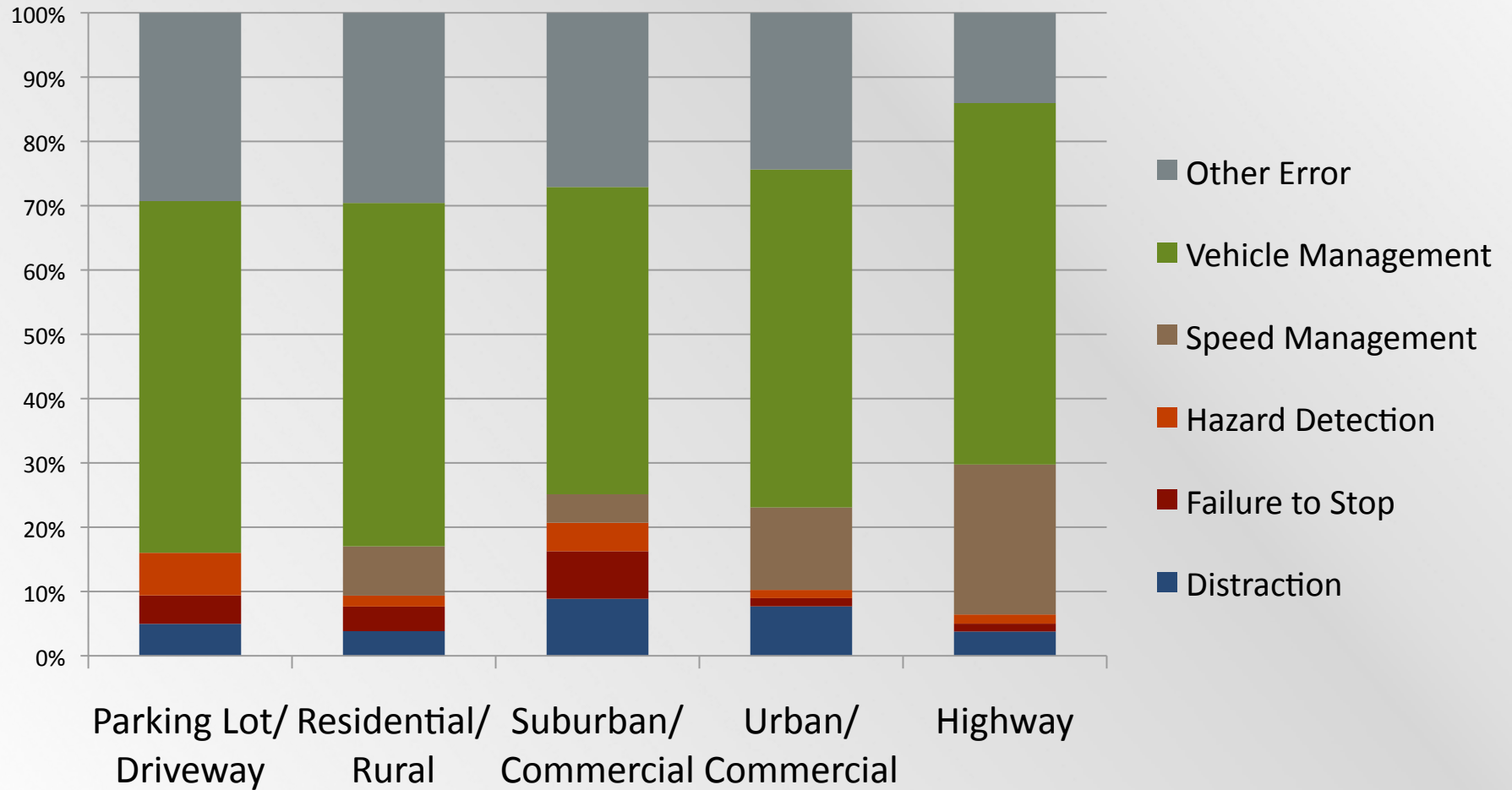


# Driving Errors

Definitions	Example
<b>Distraction</b>	Inattention, distraction or eyes removed from roadway
<b>Failure to Stop</b>	Failure to yield or stop
<b>Hazard Detection</b>	Failure to detect a hazard
<b>Speed Management</b>	Driving too slow or too fast for current conditions, hard breaking
<b>Vehicle Management</b>	Crossing lines, driving the wrong way, overcorrecting, following too closely or improper vehicle operation
<b>Other</b>	Other error types

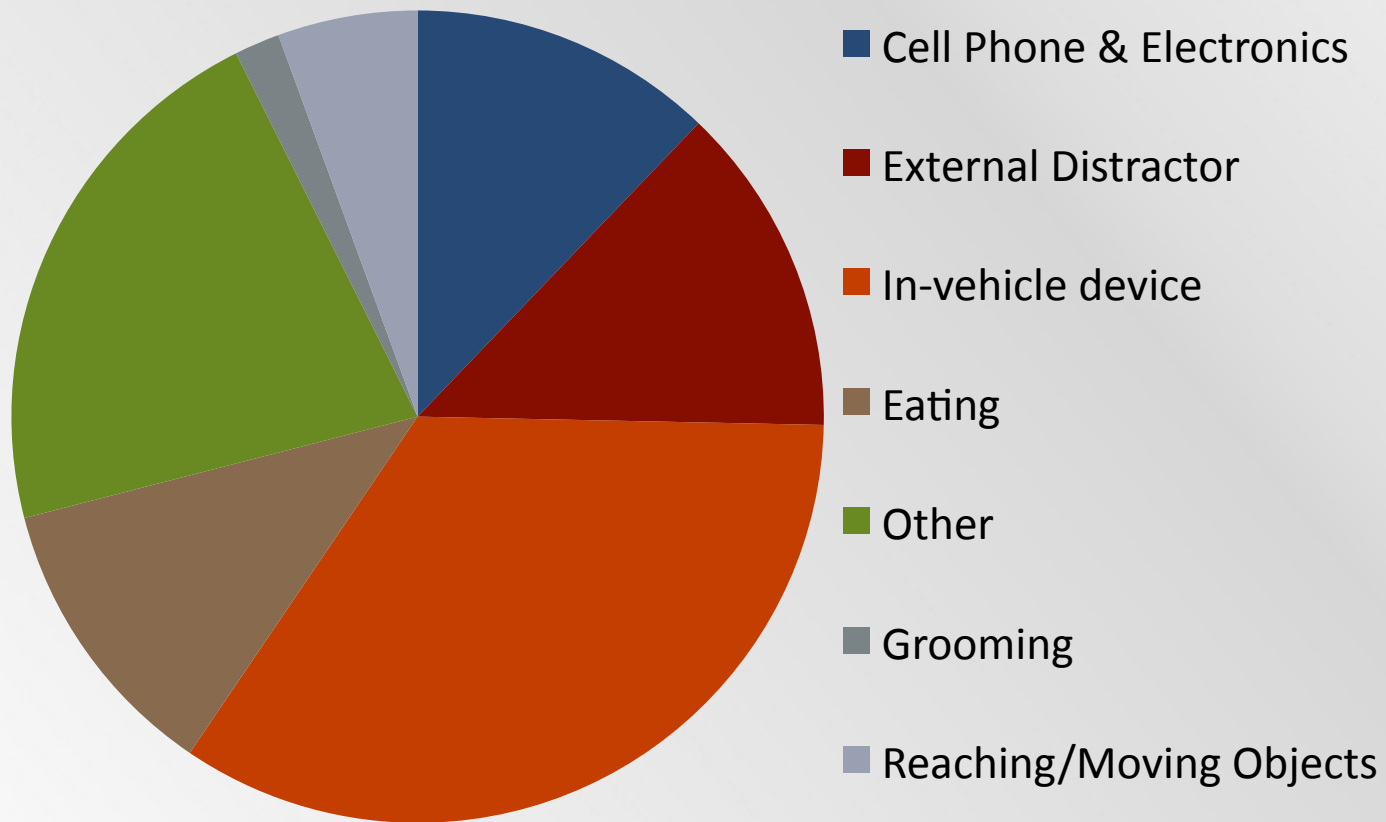


# Driving Errors



## Secondary Tasks During the First 10 Hours

- 14% of clips included a secondary task





**Thank you!**

**[Johnathon.Ehsani@nih.gov](mailto:Johnathon.Ehsani@nih.gov)**