

**Alan M. Voorhees Transportation Center**  
**Edward J. Bloustein School of Planning and Public Policy**



## **Safe Mobility at Any Age**

### **Policy Forum Series**

## **Forum #3**

# **The Future of Vehicle and Roadway Safety and Design**

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Robert Wood Johnson Foundation  
College Road East & Route 1  
Princeton, New Jersey

# **Safe Mobility at Any Age**

## **Policy Forum Series**

- Cosponsored by the Alan M. Voorhees Transportation Center and New Jersey Foundation for Aging
- Policy Forum Topics:
  - Facts and myths related to NJ's mature driver
  - Maryland Safe Mobility Research Consortium
  - Functional fitness to drive assessment and screening
  - Safety perspectives addressing roadway design, vehicle design and adaptive technologies to improve safety
  - Regulatory practices and compliance issues related to driving licensure
  - Community mobility options for those who cannot or wish not to drive

# New Jersey's Mature Driver

- Crash incidence declined with the age of the driver although fatalities increased
- Crash characteristics:
  - More crashes during daylight hours and good weather
  - More crashes on local and private roads
  - High incidence of left turn crashes
  - Crashes most often due to:
    - Driver inattention
    - Failure to yield right of way
    - Failure to obey traffic signals
    - Older drivers more likely to be at fault

Source: The Mature Driver in New Jersey, Dr. Naomi Rotter and Dr. Claire McKnight



# Products and Policy Outcomes Identified by the Maryland Consortium

- Functional areas identified as significant predictors of “at-fault” crashes:
  - Visualization of missing information
  - Direct visual search
  - Information processing speed under divided attention conditions
  - Working memory
  - Leg strength and general mobility
  - Head and neck flexibility



# **Products and Policy Outcomes Identified by the Maryland Consortium**

- Functional capacity screening adds value to traditional medical evaluation procedures
- Identifying functional loss can promote safe mobility by allowing earlier intervention (and remedial help)

Source: Maryland Consortium, Dr. Loren Staplin



# **NJ Motor Vehicle Commission**

## **Medical Advisory Board**

- Most medical review referrals are made by concerned physicians and/or family members
- Referrals cannot be made anonymously
- Medical reviews may result in reinstatement of an individuals license or a recommendation for additional testing
- MVC is in the process of upgrading its capacity to proactively pursue medical reviews when license holders with long-standing medical conditions or those with time limited suspensions come up for license renewal



# Best Practices for Functional Assessment and Health Screening

- Functional fitness to drive assessments should include:
  - Vision
  - Cognition
  - Motor performance
  - Reaction time
  - Roadway knowledge
- Functional assessments will NOT answer whether a person can drive safely, but they can help to identify diminished capacity
- Only clinical testing can provide a full picture of how an individual is likely to perform while driving



# Resources for Improving Skills and Rehabilitation

- American Occupational Therapy Association (AOTA) – Older Driver Initiative
  - Educate occupational therapists and promote awareness that driving is an instrumental activity of daily living
  - Increase awareness of the needs of older drivers
  - Promote working with older drivers as a viable practice area
  - Develop a “good practice” guide and continuing education materials for occupational therapists through a cooperative agreement between the NHTSA and the CDC



# Resources for Improving Skills and Rehabilitation

- Certified Driving Rehabilitation Specialists (CDRS)
  - Six CDRSs practicing in New Jersey
  - CDRSs are trained to perform fitness to drive evaluations using medical history, physical examination, vision, cognitive and perceptual skills testing and behind-the-wheel road testing
  - Based on evaluation, CDRSs provide occupational therapy as well as vision and driver skills training, as needed
  - If prohibition on driving is recommended, CDRSs assist client and their family to explore community resources for alternative transportation
- AARP Driver Safety Program



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