



**UMTRI**

# Improving the Safety of Older Heavy-Vehicle Drivers

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# Project Team and Co-Authors

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# Background

- **In 2014 (NHTSA, 2016):**
  - 438,000 large trucks involved in crashes
  - 3,903 deaths
  - 111,000 injuries
- **Heavy-vehicle drivers (drivers) age 60+ over-represented in crash statistics (Duke et al., 2010)**

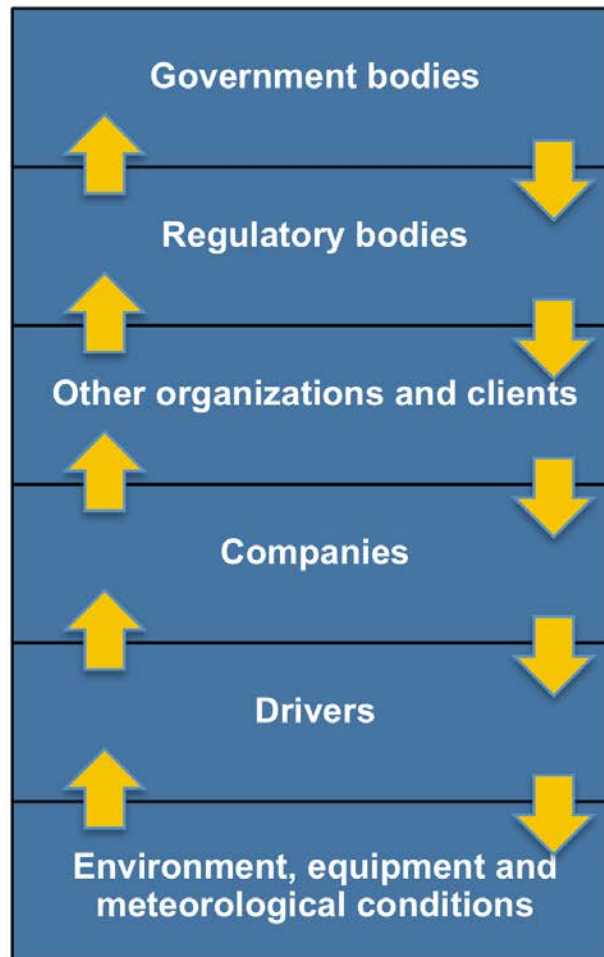
# Background

- **Transportation Safety Workforce Report (WIN, UMTRI-ATLAS, 2015):**
  - **21% of Michigan workers in Operations Occupations (including drivers) were age 55+ in 2014**
  - **56,100 drivers were employed in Michigan in 2014**

# Background

- **Not enough known about:**
  - **Age-related risk factors that may contribute to crashes in older drivers**
  - **Unique safety issues influencing older driver performance**
  - **Existing preventive strategies for older drivers**
  - **How to inform new evidence-based preventive strategies for older drivers**

# Heavy Vehicle Accident Analysis Method (Newnam and Goode, 2015)



# Study Tasks

1. **Crash Analysis**
2. **Synthesis of Literature**
3. **Group and Individual Structured Interviews with Managers and Drivers**
4. **Development of the Conceptual Framework for a Tool to Improve Driver Safety**

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★ **Student Poster:**

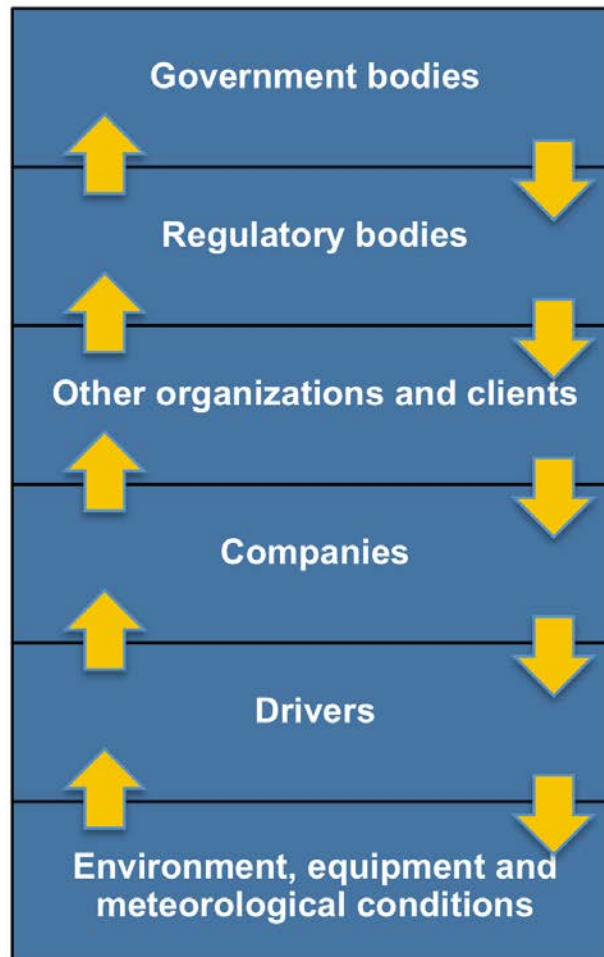
**Tian Tian: “Improving the Safety of Older Truck Drivers”**



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# Focus Groups: Managers

- **Two focus groups (East, West)**
- **Recruitment Assistance from Michigan Trucking Association**
- **15 participants**
  - **Safety managers/directors**
  - **Transportation director**
  - **Service center director**
  - **Vocational rehabilitation specialist**
  - **Transportation staffing company director**
  - **Driver certification support service representative**

# Focus Groups: Discussion Areas


- **Unique positives older drivers bring to the job**
- **Concerns about older drivers**
- **Current strategies to help older drivers**
- **Challenges with current strategies**
- **Strategies they want to try but have not yet**
- **Desired additional help from others**

# Unique Positives Older Drivers Bring to the Job

- **Work ethic**
- **Reliability**
- **Maturity**
- **Knowledge**
- **Experience**
- **Respect and care for equipment/vehicle**
- **Superior trip planning**
- **Pride in job, vehicle, and miles-accident-free**
- **Loyalty**

# Concerns about Older Drivers

- Physical demands of loading and unloading
- Memory and other cognitive declines
- Longer delivery time
- Resistance to technology
- Conflicts with younger co-workers
- Cumulative effect of decades living unhealthy
- Wide range of differences among older drivers



**“My main concern is that I need more of them!”**

# Current Strategies to Help Older Drivers

- **Build relationships and rapport with drivers; “Check in”**
- **Provide steps/stairs and straps**
- **Allow older drivers more time**
- **Tailor technology training**
- **Give older drivers easier and/or dedicated runs**
- **Provide wellness programs**



# Challenges with Current Strategies

- **Need to be careful about age discrimination – strategies must be applicable to all drivers**
- **Differences in what can be offered to company drivers compared to owner-operators**
- **Dispatcher interference**
- **Time pressure from customers**
- **Unique challenges for small and large carriers**



# Strategies They Want to Try But Have Not Yet

- Help drivers struggling with memory issues
- Not worry about the bottom-line so much
- Increase the “buy in” for healthy living
- Talk older drivers out of retiring

“You want them to stay longer....how do you make their time the easiest it can be?”

# Desired Additional Help from Others

- **Resources to help address memory problems**
- **More frequent medical assessment without penalty to encourage preventive care**
- **More comprehensive exams – include cognitive assessment**
- **Access to mobile simulators for assessments and/or training**
- **Change focus from incident-based approach to prevention**
- **Better PR for truck driving careers**

# Next Steps (In Progress)

- **Individual interviews with older drivers**
- **Individual interviews with representatives from regulatory and government agencies**
- **Conceptual framework development**

Thank you!  
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*Advancing  
Transportation  
Leadership and Safety*