Focused Question
What is the evidence for the effect for policy and community mobility programs (e.g., alternative transportation, walkable communities, education, driving cessation programs, and pedestrian programs) on the performance and participation of older adults?

Wendy Stav, PhD, OTR/L, SCDCM, FAOTA
Julie Nastasi, OTD, OTR/L, SCLV
Towson University

Academic Partnership
- Occupational science doctoral program
- Independent study with a student experienced in
  - Evidence-based practice
  - Evidence-based literature reviews

Significance of the review question
- Regulation of driver licensing/renewal for older adults can influence
  - Driving status
  - Access to the community
  - Participation in the community
- Access and availability of community mobility programs affects access to the community
- Need to identify how policy and community mobility resources influence engagement of older adults

Search Results
- 16 articles included
  - Four Level I studies
  - Seven Level II studies
  - Five Level III studies
- Four themes present in the literature
  - Community mobility
  - Driving cessation
  - Walkable communities
  - Licensing policy

Community Mobility
- Education to facilitate informed community mobility choices increases knowledge (Di Stefano, Lovell, Stone, Oh, & Cockfield, 2009)
- Group transit training increases frequency of bus use (Stepaniuk, Tuokko, McGee, Garrett, & Benner, 2008)

Driving Cessation
- After driving cessation community participation (spending on tickets, dining out, and trips) declines significantly (Kim & Richardson, 2006) as does social participation (Mezuk & Rebok, 2008)
- Driving cessation results in continued pre-cessation health trajectories with a steeper decline after cessation (Edwards, Lunsman, Perkins, Rebok, & Roth, 2009)
### Walkable Communities

- Seniors in communities designed to be more walkable drive less and vice versa (Frank, Saelens, Powell, & Chapman, 2007)
- Connectivity index and built environment (volume of intersections/crosswalks) influences how much seniors walk
  - High connectivity index were less likely to walk for at least 60 minutes per week
  - Middle connectivity index were more likely to walk at least 60 minutes per week
  - Increased slope reduced the amount of walking to less than 60 minutes per week (Gomez, Parra, Buchner, Brownson, Sarmiento, Pinzón, et al, 2010)

### Licensing Policy

- Restricted licenses reduces mileage driven, night driving, driving radius from home, and travel on high speed roads (Braitman, Chaudhary & McCartt, 2010)
- Current policies related to licensing, renewal, and restrictions are inconsistent in improving safety
  - Some studies say there is no difference (Dobbs, 2008; Langford & Koppel, 2011; Langford, Bohensky, Koppel, & Newstead, 2008; Morrissey & Grabowski, 2005)
  - Other studies say safety is improved (McGwin, Sarrels, Griffin, Owsey & Rue, 2008; Nasvadi & Wister, 2009)

### Limitations of the Reviewed Studies

- Measuring crash data is not sufficient in capturing all of the motor vehicle events
- Cross-sectional surveys do not account for timing in terms of the relationship of variables
- Lack of cost-benefit analyses

### Summary of Key Findings

- Programs to support transportation options and assist with the transition from driving can be helpful
- Context needs to be considered in the support of pedestrian travel for seniors
- Policy specific to licensure laws may or may not improve safety, the literature is inconsistent

### Implications for Practice

- Increasing role for practitioners to work with transit agencies is needed for:
  - Staff training and orientation
  - Training of schedulers and drivers
  - Travel training
  - Paratransit eligibility assessments
- Key role in developing programs to support engagement in meaningful community-based occupations through facilitation of comprehensive pedestrian safety, bicycle safety, roadway design programs, cessation programs, and walkable communities.
- Caution should be used when advocating for licensure law changes

### Implications for Education

- Educational and training programs need to recognize driving and community mobility as an instrumental activity of daily living
- Policy implications on occupational and community engagement should be incorporated into the training of occupational therapy practitioners
Implications for Research

• Further studies need to explore:
  – Occupational engagement when using transportation alternatives
  – Quality of life when using transportation alternatives
  – Changes in engagement under strict license renewal policies
  – Occupational engagement and transit use implications of premature license surrender
  – Differences in occupational engagement between drivers with restricted licensure versus license revocation
  – Impact of walkable communities on the health and community mobility of older adults
  – Cost-benefit analysis of cessation and community mobility programs