



Older Driver Safety Summit

Planning a Safe and Mobile Future for Massachusetts

2015 ODSS REPORT

**Proceedings of the Massachusetts Older Driver Safety Summit,
June 16, 2015, at the University of Massachusetts Boston**

Gerontology Institute
John W. McCormack Graduate School of Policy and Global Studies
University of Massachusetts Boston
www.umb.edu/olderdriversafety

*“...but maybe today is the day we cross the tipping point...
moving Massachusetts towards age-friendly development!
Together, we can make Massachusetts age-friendly by improving
older driver safety. Massachusetts, in turn, can be a model for
the nation.”*

— Elizabeth Dugan,
UMass Boston Gerontology Institute

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“Everything we do to make the transportation system work better for seniors is also going to make it work better for everyone.”

— The Honorable Stephanie Pollack,
Massachusetts Secretary of Transportation

INTRODUCTION

“The Silver Tsunami.”

“A Demographic Transformation.”

“Age Wave.”

These and similar phrases were repeatedly used by speakers at the Older Driver Safety Summit held on June 16, 2015, at the University of Massachusetts Boston. The core message was the following: **Massachusetts — like the rest of the nation — is in the midst of an unprecedented demographic shift with major implications for the safe mobility of older adults.**

“We are on the threshold of the greatest later-life demographic surge in human history,” said Len Fishman, director of the Gerontology Institute, at the start of the summit. “The unprecedented growth of the 65-plus population in Massachusetts will influence every aspect of life in the Commonwealth, including transportation. The quality of life of older adults and the people who care for them depends on how well we prepare for this new reality.”

The summit, conceived as a one-day “think and do tank,” brought together 240 innovators from across the country to learn, connect, and brainstorm solutions to a complex problem: ensuring public and individual safety while trying to preserve the mobility and independence of older adults. Speaker after speaker talked movingly of confronting these issues in their own families, testifying to the omnipresence of the “driving dilemma” in today’s society.

This report distills information from more than 40 presentations covering four interrelated topics related to safer driving for older adults: infrastructure, medical issues, mobility, and policy. Videos of all presentations, as well as PowerPoint slide decks for many presentations are available from the website of the Gerontology Institute (www.umb.edu/gerontologyinstitute). The Summit and this report were supported by the Gerontology Institute in the McCormack Graduate School of Policy and Global Studies in partnership with the Older Driver Emphasis Area Team of the Massachusetts Strategic Highway Safety Plan. The Summit proceedings lay the foundation on which a five-year plan to improve safe mobility for older drivers in Massachusetts will be created in the latter part of 2015.

Summit participants included academics, engineers, carmakers, policymakers, occupational therapists and other medical professionals, police officers, insurance providers, elder service specialists, and directors of councils on aging.

EXECUTIVE SUMMARY

Nationally, two-thirds of seniors over the age of 80 are still driving, and they are spending more time behind the wheel today than in past generations. The number of licensed older drivers across the Commonwealth is expected to steadily rise.

Paradoxically, older drivers are generally safe drivers, but some are also more vulnerable.

“Driving is the glue that holds life together for people of all ages.”

— Joseph Coughlin,
director of the MIT Age Lab

Older drivers generally have safe driving habits:¹

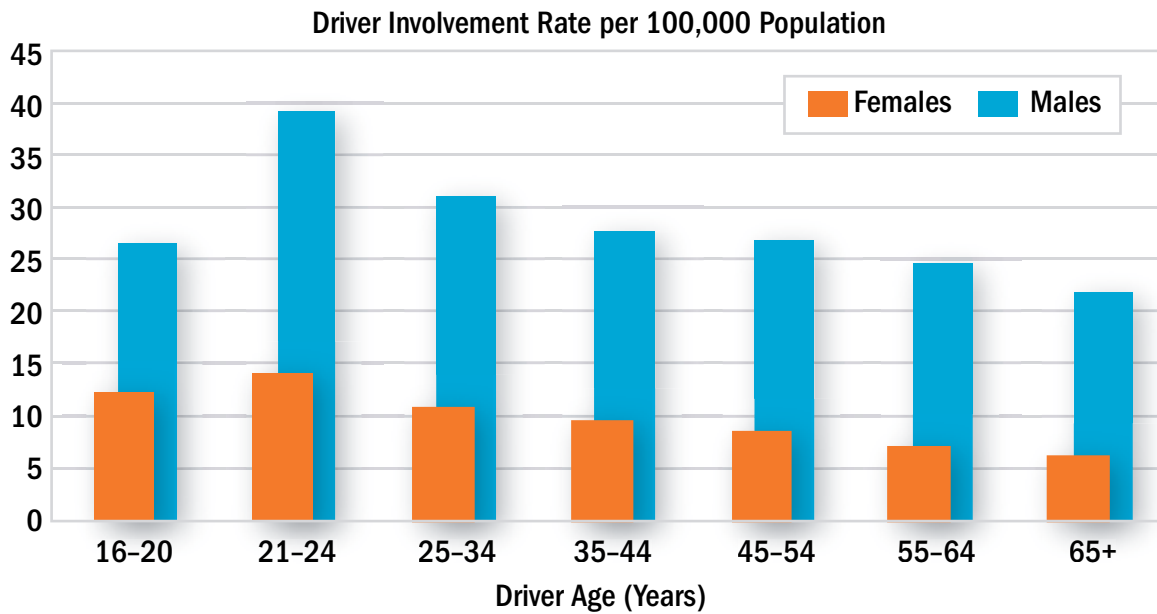
- They tend to drive when conditions are safest
- They have higher rates of seatbelt use
- They are less likely to drink and drive

But older drivers are more vulnerable to injury or death:

- Roughly 500 older adults are injured in an automobile crash every day
- About 15 older adults die in a car crash every day
- Fragility is estimated to account for 60–95% of excess death rates per vehicle miles travelled in older drivers²

In absolute terms, as illustrated in Figure 1, the rate of drivers in fatal crashes suggest a low risk for elderly drivers (although there is a pronounced gender disparity with males at higher risk).

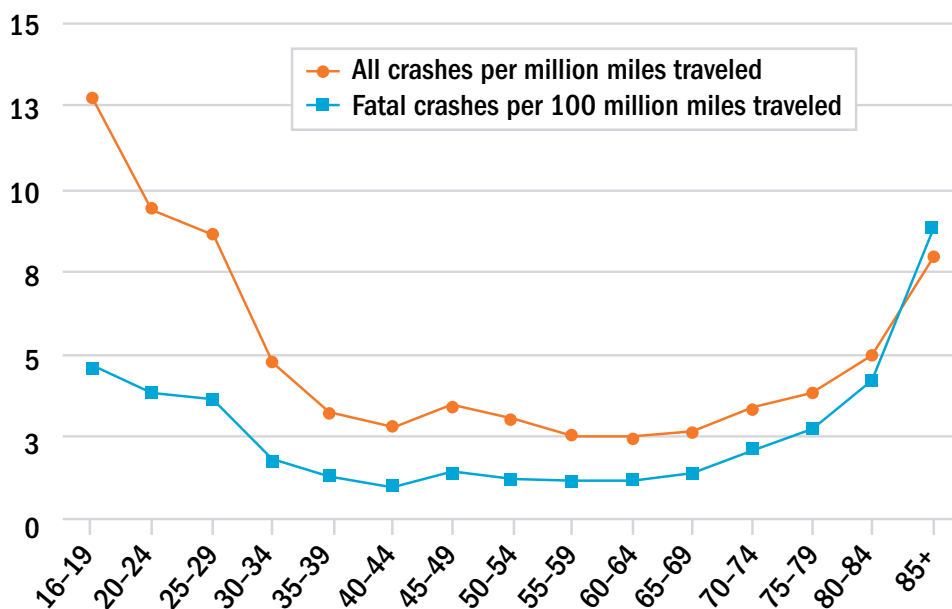
FIGURE 1. Driver involvement rates in fatal crashes by age and gender, 2012.



Source: National Highway Traffic Safety Administration. *Traffic Safety Facts. 2012 Data. Revised May 2014.*

But examining driver fatality rates per miles travelled shows a different picture. As shown in Figure 2, on a per mile basis, the frequency of crashes starts to rise in the 70s and beyond to a level equal to younger drivers, suggesting that age or age-associated impairments may be important risk factors.

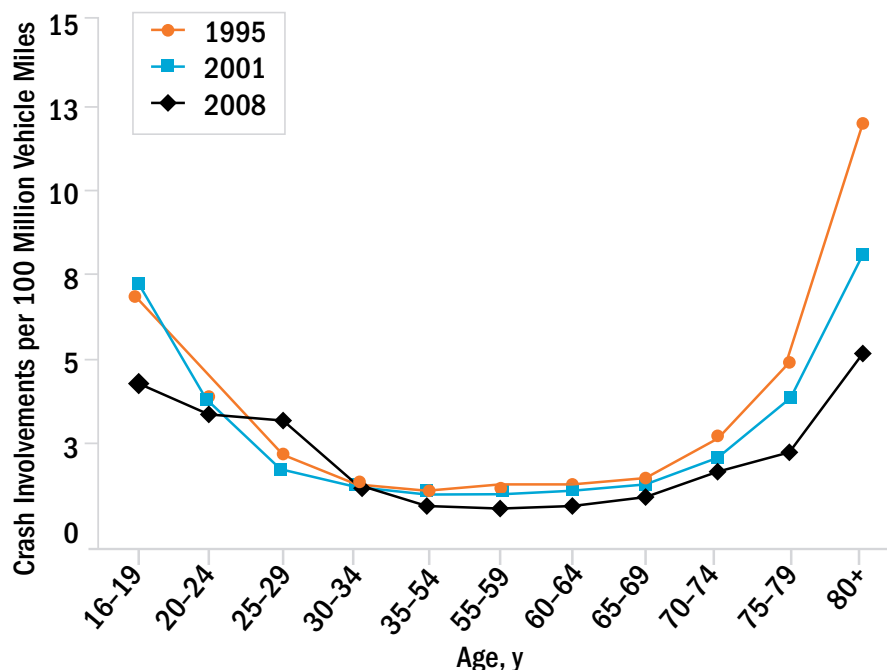
FIGURE 2. Rate of passenger vehicle crash involvements per mile traveled by driver age, 2008.



Source: Insurance Institute for Highway Safety, Highway Loss Data Institute.

The good news is while older drivers are at increased risk for being involved in fatal car crashes, the trends show a decline in this risk over the past 20 years. As seen in Figure 3, this increase in safety may be due to better safety standards or to improvements in roadways, vehicle design, and the physical health and resilience of older adults over this time span.

FIGURE 3. Trends in crash involvements per 100 million vehicle miles, 1995, 2001, and 2008.



© Insurance Institute for Highway Safety. 2014.

“The trend is going in the right direction, but there is certainly room for improvement and innovation,” said UMass Boston Professor Elizabeth Dugan, an expert on older drivers and state transportation policies.

Dugan noted research from the state Department of Public Health showing that Massachusetts seniors are involved in 20 percent of car crashes resulting in a median hospital stay of four days. In 2013, such crashes resulted in roughly \$28.5 million in health care expenses.

Many ideas and facts were presented at the conference that shed light on both the scope of current challenges and possible ways to make progress in the years to come. Detailed in the pages to come, the core “take-away” messages of the Summit were:

- Driving is the primary mode of transportation for older adults due to the design and layout of U.S. cities and towns. While promising alternatives exist, it will take some time for them to displace driving.
- Age isn’t the problem — age is a proxy for physical and cognitive impairments. What matters is the functioning of the driver, not his or her age *per se*.
- Improvements to vehicles and roadways can make driving safer for everyone — and most are financially feasible, both for individuals and municipalities (see safety.fhwa.dot.gov/older_users/handbook).
- The decision to “give up the keys” is almost always difficult, but many tips and techniques exist to make the transition to other mobility options easier.
- On average, one’s ability to drive safely is shorter than one’s life expectancy. In the United States, men, on average, outlive their ability to drive safely by 6 years; women outlive their ability to drive safely by 10 years.³
- Loss of mobility can lead to depression, low life satisfaction, health problems, isolation, and loneliness. Among older nondrivers, 54% do not leave their home on a given day, while only 17% of drivers stay home.⁴
- “Driving under the influence of dementia” is a largely unrecognized paradigm that may be the equivalent of operating a vehicle while intoxicated.
- Alternatives to driving exist in some areas, but they need to be more broadly available to maintain mobility for older adults. These options include ride-sharing programs, subsidized ride services, volunteer-based senior transportation options and assistance programs, and improved public transportation alternatives.

A California health insurance survey of adults 65 years and older found that of the top 10 fears, the **first** was “being diagnosed with a fatal disease.” **Second** was “losing the ability to drive and the driver’s license.”

INFRASTRUCTURE IMPROVEMENTS TO ENHANCE SAFETY

Improving infrastructure — primarily cars and roadways — helps everyone, even if the specific goal is to help older drivers. Automobile manufacturers are designing safer cars and the Massachusetts Department of Transportation is designing roadways to better accommodate older drivers. Efforts must be made to ensure dialogue between car manufacturers and roadway designers, and design improvements must be carried out on all roadways, not just those maintained by the state. Continuing these conversations through seminars, conferences, and other means is recommended.

Making cars safer

Cars today are safer than ever, but a great deal of research and development is being devoted to making further improvements. Some advanced-technology features, such as automated parking, are available today, but such features must be designed so that their use is simple, straightforward, and safe for use by older adults.

Some of the safety features likely to be available in the near future:

- Inflatable seat belts, to reduce chest fractures
- Door handles that can be accessed at all angles
- Fuel caps that are easier to remove and put back on
- Adjustable sound levels for alerts
- Collision warning systems (with, or without, automated braking support)
- Blind spot monitoring and warning
- Vehicle-to-vehicle communication systems
- Lane-sensing systems (with warnings or automated steering correction)

In the long term, automobile safety may be greatly improved for everyone by the advent of truly autonomous vehicles. Ron Medford, director of the Google Car project, described the progress that company has made (see www.google.com/selfdrivingcar). Prototype autonomous cars have driven more than 1.8 million miles on California roads, and the sensing and computer systems that control the car have been significantly improved — they are currently accurate to within 10 cm. A fleet of 25 low-speed research vehicles is being readied for use in California, although many legal, insurance, and regulatory issues must be solved before autonomous vehicles become an affordable reality for older adults, according to Medford and others. Still, he said, “People who never had access to mobility before can have it with this concept.”

Feel 30 Years Older — Instantly!

Demonstrated at the Summit was an “empathy tool” used by the Ford Motor Company to help them better understand the perspectives and needs of older adults, and to facilitate the testing of design changes to make cars easier to use.

Consisting of heavy padding and weights, along with collars and other devices that make movement more difficult, the suit simulates the motor and sensory limitations common in older adults. Ear coverings limit hearing, a special pair of glasses restricts peripheral vision, and gloves limit dexterity and sensitivity.

“When you actually try moving and doing things with the suit on, it really changes your view of aging,” said Michelle Chaka from Ford.



A Summit participant trying out one of the new Ford vehicles equipped with self-parking technology. The hands-off technology automatically steers the car into position. The car instructs the driver how to use the accelerator and brake pedal during the procedure. Courtesy of Emmett Schmarsow.

Making roads safer

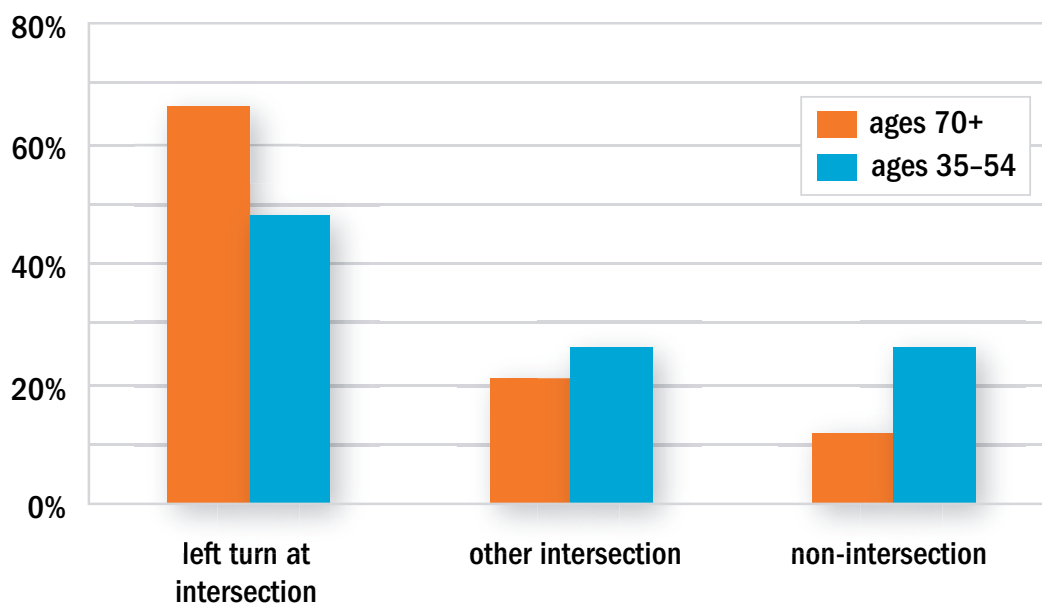
In his review of the recently-revised *Handbook for Designing Roadways for the Aging Population*, Gene Amparano, from the Federal Highway Administration, said, “It’s not rocket science — mostly it’s just common sense.”

The handbook, which is *available free* on the FHA website, covers 51 specific recommendations covering such topics as:

- Improving the angles of intersections (90 degrees is optimal)
- Adding offset left-turn lanes
- Improving visibility of edge lines and curbs
- Increasing the size of stop and yield signs
- Changing the phasing of left-turn traffic controls (lead-phasing is recommended over lag-phasing)

As outlined in Figure 4, research shows that left turns are difficult for older drivers; hence, efforts should be made to improve intersection and signaling design.

FIGURE 4. Where did drivers make inadequate surveillance errors?



Source: Insurance Institute for Highway Safety/Highway Loss Data Institute.

By far, the most significant factor contributing to older adult automobile crashes is “inadequate surveillance,” which was found to be a factor in 33% of crashes among adults 70 years and old.⁵ Interestingly, the following factors were *not* found to differ with the age of the driver: medical incapacitation, failure to obey traffic controls, illegal maneuvers, and daydreaming.⁵

Thus efforts to reduce older driver crash involvements should focus on countermeasures that remove left turns across traffic or simplify them, such as:

- Protected left-turn signals (green arrows for left turns)
- Roundabouts and rotaries
- Diverging diamond interchanges
- Creating vehicle-to-vehicle and vehicle-to-infrastructure communications, such as lane line sensors

Jim Danila, from the Massachusetts Department of Transportation, reviewed a range of projects currently underway to improve safety:

- Road safety audits (more than one a week conducted last year)
- Incorporating wet reflective pavement markings to improve visibility on all new state roadway projects
- Using mixed-case lettering on signs to improve legibility
- Installing countdown pedestrian signals
- Making improvements at 432 state locations to reduce the chances that drivers will mistakenly go down a one-way street or access ramp

MEDICAL ISSUES RELATED TO SAFER DRIVING

Presentations on this topic included those focused on health care professionals themselves (e.g., the ethical and legal requirements to report suspected unsafe drivers) as well as medical issues of older drivers that may predispose them to crashes.

Driver-related issues

Older drivers are safe and adjust their driving habits as they age. They drive less often, they drive fewer miles, and they avoid driving at night, during rush hour and (usually) in bad weather. Nonetheless, driver vulnerability to injury and their likelihood of being involved in a crash rise with age.

Aging brings changes that can affect driving:

- Visual perception (e.g., cataracts, glaucoma, macular degeneration, diabetic retinopathy)
- Physical functioning (e.g., reduced reaction time, arthritis, diabetic neuropathy, Parkinson-related bradykinesia)
- Cognition (e.g., poor planning, navigation errors, confusion)

Driving ability is also affected by sleep disturbances and medication effects (e.g., antidepressants, antipsychotics, antihistamines, barbiturates, sedative-hypnotics, benzodiazepines, muscle relaxants, antihypertensives, and analgesics). Both of these issues can be exacerbated and complicated by the use of alcohol or cannabis. Figure 5 summarizes medical conditions likely to be involved in the risk of a crash.

FIGURE 5. Crash risk associated with selected medical conditions: relative risk of crashing.

Dementia	2.1–5.0
Alcohol abuse and dependence	2.1–5.0
Schizophrenia	2.1–5.0
Sleep apnea	2.1–5.0
Epilepsy	1.1–5.0
Cardiovascular disease	1.1–5.0
Psychiatric disorder	1.1–5.0
Diabetes	1.1–2.0
Musculoskeletal/motor disability	1.1–2.0
Vision disorder	1.1–2.0

Source: Marshall SC. Traffic Injury Prev. 2008;9:291–298.

The following are some warning signs that a person may be unsafe driving:

- Accumulating dents, scrapes, and scratches on the vehicle
- Recent ticket, police warning, or crash
- Getting lost
- Can't distinguish gas/brake pedals
- Inability to make quick decisions
- Running onto curbs
- Can't recognize road signs
- Problems with left turns
- Problems merging

A variety of tools can be used to assess a person's suitability for driving, although none are perfect. The American Medical Association, in its Guide to Assessing and Counseling Older Drivers, recommends the Assessment of Driving-Related Skills (ADReS). Cognitive screening tests are available (e.g., the Mini-Mental Status Exam [MMSE] and the Montreal Cognitive Assessment), although research shows varying level of association between such tests and driving safety.

Interview-based screening tools of various kinds can also be used because they are relatively fast and simple to administer and can be integrated into a standard medical interview.

On-road evaluation of driving ability is currently the best measure and "gold standard," although it is time-consuming and potentially expensive, and must be conducted at designated sites using trained personnel.

Up to 25 percent of older adults continue driving after a physician's recommendation for driving cessation.

The "Drivewise" program at Beth Israel Deaconess Medical Center is an example of an effective driving assessment program (see www.bidmc.org/DrivingWithAutism). Patients are assessed based on a 45-minute on-road evaluation, using an interdisciplinary team approach that "bookends" the assessment with meetings with a social worker. A benefit of using such programs is that they help take the onus of a decision to "hang up the keys" off of family members and shift it to health care professionals.

Research presented by Dr. Thomas Meuser of the University of Missouri showed that, in general, a physician's in-office assessment of driving safety is only somewhat likely to predict a patient's performance on a road test. 73% of patients that physicians rated as "likely capable" of driving safely did actually pass their road test, but 27% of those rated as "likely capable" failed the road test. Conversely, two patients rated "not capable" by physicians *passed* their road test.

Studies of various programs to help older drivers cope with medical conditions or improve their driving have shown generally positive effects (e.g., Owsley 2002 to address cataracts; Marottoli 2007 to overcome physical limitations; and Roenker 2003 and Ball 2007 to address cognitive deficits.)

Clinician-related issues

Although they are often called upon to intervene in decisions about whether an older driver is safe to drive, many physicians are conflicted about this role. On one hand physicians are ethically bound to help protect the safety of their patients and society at large. On the other hand, many logistical or emotional barriers exist.

“Who decides if someone still has capacity?”

— Betsey Crimmins,
Greater Boston Legal Services

Massachusetts is a voluntary reporting state (see www.massrmv.com/rmv/forms/21788.pdf) and professionals who submit reports in good faith are granted legal immunity. Reports submitted by law enforcement or health care providers are processed in an expedited manner. A health care provider is defined as one of the following: registered nurse, licensed practical nurse, physician, physician’s assistant, psychologist, occupational therapist, optometrist, ophthalmologist, osteopath, physical therapist, or podiatrist who is a licensed health care provider under the provisions of MGL, Chapter 112.

But even though physicians — and family members — may want to avoid the “tough conversation” about driving cessation because nobody wants to be the “bad guy,” such conversations are essential and can be conducted in ways that minimize the risks of confrontations or hostility. Here are some tips shared by Summit presenters that can be used by either clinicians or family members:

- Remember what driving represents: freedom, independence, youth
- Have conversations early, before the crisis
- Pick one family member to take the lead in the conversation
- Involve health professionals
- Enlist family support
- Take time and allow for silences in the conversation
- Focus on actual driving errors
- Discuss safety for self and others
- Medicalize the problem
- Learn about and use motivational interviewing techniques⁶
 - Assess readiness for change
 - Avoid confrontation
 - Weigh the pros and cons of driving
 - Know what alternatives to driving exist
 - Express empathy
 - Support self-efficacy
 - Roll with the resistance
 - Develop discrepancy
 - Listen reflectively

“It’s not about age; it’s about the medical conditions that impact critical driving skills.”

— Nina Silverstein,
UMass Boston
Gerontology Institute

- Be prepared for resistance
- Repeat discussions (especially with cognitively impaired person)
- Evaluate whether “phasing out” is safe vs. complete cessation
- Enlist clinicians in process as needed

IMPROVING MOBILITY FOR OLDER ADULTS

Older adults overwhelmingly get around by driving. One study⁷ of people 65 and over found that:

- 90% were either driving or being driven
- 8.8% walked
- 2.2% used public transit
- 0.4% rode a bicycle
- 0.2% used a taxi

The speakers in the mobility track explored the challenges faced by older adults as they transition from driving to other transportation options. Strategies such as travel training and mobility management for senior transportation were discussed, as well as programs using volunteer drivers. Risk management concerns in the provision of senior transportation were also addressed.

The consumer experience was captured through the firsthand voice of an individual with Parkinson’s disease who described his own transition to “giving up the keys” and his struggle to maintain control and find solutions to help him preserve independence and identity. Finally, examples of replicable, successful programs were described that help to address the transportation needs of seniors in Massachusetts, including Council on Aging programs, a partnership with a regional transit authority, and a medical escort program.

“Most of the challenges we face are baked into the way we’ve built our cities,” noted Len Fishman, director of the UMass Gerontology Institute. “More than 90% of seniors, when asked, say their goal is to age in place. And that means they want to stay in the suburbs where they want cars.”

Older adults who can’t, or shouldn’t, drive will need to rely on options such as:

- Rides from family and friends
- Expanded use of volunteer driver and escort programs
- Public funding of traditional transportation systems (e.g., The Ride)
- Encouraging public/private partnerships of alternative transportation systems (e.g., Uber, ElderBus)
- Ensuring that options are accessible to older adults and user-friendly
- Travel training programs to encourage use of existing public transportation
- Encouraging lifelong mobility fitness by supporting exercise programs for older adults

“Most people don’t plan ahead for driving cessation. Instead they wait until a crisis happens.... This is an issue that can bring families to their knees.”

— Lissa Kapust,
Beth Israel Deaconess
Medical Center

POLICY CHANGES TO PROMOTE SAFER DRIVING

Formation, implementation, and enforcement of policies related to older driver safety need to be evidence-based and socially just. The work of the Insurance Institute for Highway Safety also informs the Commonwealth's efforts to promote safety for older drivers. Finally, consideration must be given to policies related to medical and psychological fitness to drive and reporting mechanisms.

A wide range of policy, legal, and regulatory issues were reviewed and discussed by Summit presenters. Policy ideas arising from these discussions include:

- MA policymakers ought to be ready to implement evidence-based best practices. Better communication between researchers and lawmakers is needed to keep the focus on evidence-based practices and off against proposals generated on talk radio.
- The issue of driver safety should be framed in terms of “impaired drivers” because that is the real issue, not age. The goal is to restrict driving for anybody who is impaired for any reason, including (but not limited to) use of alcohol or other recreational drugs, use of prescription medications, physical or sensory limitations, and neurological or cognitive limitations.
- Given the discomfort and uncertainty about reporting medically impaired patients to the Registry of Motor Vehicles (RMV), policies related to medical reporting by health care providers should focus exclusively on their role in assessing driving status (e.g., score on cognitive test or speed of processing time) and shifting all evaluative/adjudication responsibilities to the RMV.
- Increase staffing in the Medical Affairs Division and Community Education MassDOT RMV units, perhaps along the lines of the system now used in Maryland. Responding to the increasing number of reported medically impaired drivers is labor intensive. More dissemination and educational outreach is needed. Currently one half-time position is responsible for education/outreach/training for the entire state.
- Implement education and referral resources for medically at-risk drivers and for their physicians and family members.
- Take the steps needed to allow Massachusetts to be an innovator in autonomous vehicle testing and use.
- Pursue tort reform and define liability limits as well as other transportation alternatives (e.g., Uber as a senior transportation service).
- Change liability laws so that volunteer driving programs are less encumbered by insurance/liability issues.
- Promote livable and age-friendly communities, such as encouraging the construction of affordable housing near transportation and services. Active, healthy aging should be a state priority! Physical activity extends driver fitness and overall health. Healthier older drivers are more likely to avoid and survive crashes, if they occur.
- One provocative recommendation was to institute a single, national set of laws and regulations to address the current wide between-state disparities in licensure and driving education requirements.

The Ice Cream Success Test

What will success look like? It looks like this to me: It's a hot July night. You want an ice cream cone, and you want it now. It's 7:30 at night. You don't want to bother your spouse or child, and certainly not a neighbor. If you, as an older adult, have a safe way to get that ice cream cone, then that's the goal. Because the ice cream cone represents quality of life — living longer, better.

— Joseph Coughlin,
director of the MIT Age Lab

CONCLUSIONS AND FUTURE DIRECTIONS

This report has summarized the key findings from a unique gathering of people interested in tackling the challenge of ensuring driver and public safety as the U.S. population becomes ever more “gray.” Despite many promising alternatives, such as driverless cars, ride-sharing, and increasing public transportation options, driving will continue to be the primary mode of transportation for older adults for decades to come. As such, efforts across the domains of infrastructure, policy, and automobile design will drive continued improvements in safety.

Older drivers understandably fear losing their independence and freedom from losing their ability to drive. To the extent that feasible, comfortable, and affordable alternatives to driving exist, older adults won’t associate losing their driver’s licenses with losing their independence.

The Older Driving Safety Summit synthesized much current knowledge on this topic and helped crystallize for attendees both the goals for the future and many potential means of achieving those goals. The Summit, and this summary report, lay the foundation on which a five-year plan to improve safe mobility for older drivers in Massachusetts will be created in the latter part of 2015 and, more broadly, for the efforts being made nationwide to improve driving safety for everyone.

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RESOURCES RELATED TO SAFE DRIVING FOR OLDER ADULTS

Family and Driver Resources

ALZHEIMER'S ASSOCIATION

The national association's website on driving and dementia provides links to educational information.

Local chapter websites will often list available driving clinics in the area.

www.alz.org/safetycenter/we_can_help_safety_driving.asp

AMERICAN ASSOCIATION OF RETIRED PERSONS

Information about online and classroom driving courses for seniors.

www.aarp.org/home-garden/transportation/driver_safety

AMERICAN AUTOMOBILE ASSOCIATION

Information on self-assessment, classes, and other resources for the older driver.

seniordriving.aaa.com

AAA Roadwise Review: A Tool to Help Seniors Drive Safely Longer

dev.seniordriving.aaa.com/evaluate-your-driving-ability/interactive-driving-evaluation

AMERICAN OCCUPATIONAL THERAPY ASSOCIATION

Information on occupational therapists, their role in driving assessment and rehabilitation, and locator.

www.aota.org/Practice/Productive-Aging/Driving.aspx

ASSOCIATION FOR DRIVER REHABILITATION SPECIALISTS

Provides information for professionals working in the field of driver education/driver training and transportation equipment modifications.

www.driver-ed.org

CENTERS FOR DISEASE CONTROL

Older drivers: get the facts.

www.n4a.org/content.asp?contentid=261

FAMILY CAREGIVER ALLIANCE

A review of the myriad of caregiver issues related to this topic.

www.caregiver.org/caregiver/jsp/content_node.jsp?nodeid=432

FEDERAL HIGHWAY ADMINISTRATION

Information about older road users.

safety.fhwa.dot.gov/older_users/#facts

MAYOCLINIC.COM

Caregiver site on when to stop driving for people with Alzheimer's disease.

www.mayoclinic.com/health/alzheimers/HO00046

NATIONAL ASSOCIATION OF SOCIAL WORKERS

Locate a social worker near you.

www.helpstartshere.org/find-a-social-worker

NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Active aging programs.

www.nhtsa.dot.gov/people/injury/olddrive

Information and resources for family and professionals.

www.nhtsa.gov/Driving+Safety/Older+Drivers

THE HARTFORD

Insurance company web site with links to brochures on aging and dementia issues and driving.

www.thehartford.com/mature-market-excellence/experts-on-aging

www.thehartford.com/mature-market-excellence/publications-on-aging

TRANSPORTATION AND ESCORT SERVICES GUIDE

www.fw4elders.org/wp-content/uploads/2012/08/Transportation-Guide-2012.pdf

UNIVERSITY OF MICHIGAN, TRANSPORTATION RESEARCH INSTITUTE

Driving decisions workbook by David Eby.

deepblue.lib.umich.edu/bitstream/handle/2027.42/1321/94135.0001.001.pdf?sequence=2&isAllowed=y

WebMD

Older driver safety tips.

www.webmd.com/healthy-aging/guide/tips-caregivers-elderly-driving-transportation-needs

Physician Resources

AMERICAN FAMILY PHYSICIAN

Dementia and Driving handout for the office.

www.aafp.org/afp/20060315/1035ph.html

AMERICAN MEDICAL ASSOCIATION AND NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Physician's Guide to Assessing and Counseling Older Drivers.

www.nhtsa.gov/people/injury/olddrive/OlderDriversBook/pages/Contents.html

State Licensing and Reporting Laws (last updated 2004).

www.nhtsa.gov/people/injury/olddrive/OlderDriversBook/pages/Chapter8.html

AMERICAN SOCIETY ON AGING AND NATIONAL HIGHWAY TRAFFIC SAFETY ADMINISTRATION

Drive Well Tool Kit: Promoting Older Driver Safety and Mobility in Your Community.

www.nhtsa.gov/Driving+Safety/Older+Drivers/Drive+Well+Toolkit:+Promoting+Older+Driver+Safety+and+Mobility+in+Your+Community

CALIFORNIA DEPARTMENT OF MOTOR VEHICLES

Discussion of the California law and dementia severity.

www.dmv.ca.gov/dl/driversafety/dementia.htm

CANDRIVE RESEARCH PROGRAM IN CANADA

Selected links on dementia and driving.

www.candrive.ca/en/resources/physician-resources/43-driving-and-dementia.html

INSURANCE INSTITUTE FOR HIGHWAY SAFETY

Older driver laws for licensing as well as driving statistics, updated every six months.
www.iihs.org/iihs/topics/t/older-drivers/topicoverview

MEDSCAPE

“Safety First for Older Drivers”: Self-assessment program for physicians and health care professionals by Dr. David Carr.

www.medscape.org/viewarticle/837937

“Assessing and Modifying Risks for Older Drivers”: Education program for physicians and health care professionals by Dr. Brian Ott.

www.medscape.org/viewarticle/833915

Neurology: “When should patients with Alzheimer’s stop driving” by Deniz Erten-Lyons

Handout for patients and families.

www.neurology.org/cgi/reprint/70/14/e45?maxtoshow=&HITS=10&hits=10&RESULTFORMAT=&fulltext=driving+and+dementia&searchid=1&FIRSTINDEX=10&sortspec=relevance&resourcetype=HWCIT

PSYCHIATRY WEEKLY

Advanced Age, Dementia and Driving: A discussion of the physician role, ethics, and communication issues.

www.psychweekly.com/asp/Article/articledetail.aspx?articleid=984

HELPFUL REVIEW ARTICLES

“The Older Adult Driver With Cognitive Impairment” by David Carr and Brian Ott

www.ncbi.nlm.nih.gov/pmc/articles/PMC2915446

“Impaired Driving From Medical Conditions” by Matthew Rizzo

www.ncbi.nlm.nih.gov/pmc/articles/PMC3289256

“Practice Parameter Update: Evaluation and Management of Driving Risk in Dementia” by Donald Iverson, et al.

www.ncbi.nlm.nih.gov/pmc/articles/PMC2860481

TALKING TO SENIORS AND THEIR FAMILY ABOUT DEMENTIA AND DRIVING

Educational pamphlet.

giic.rgps.on.ca/files/5%20Talking%20to%20seniors%20about%20driving.pdf

VETERANS ADMINISTRATION

Government pamphlet: Dementia and driving.

www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1162

Transportation Alternatives

AMERICAN PUBLIC TRANSPORTATION ASSOCIATION

Locate a local transportation provider in your community.

www.publictransportation.org/systems

COMMUNITY TRANSPORTATION ASSOCIATION

Information on transportation in the United States.

www.ctaa.org/ntrc

INDEPENDENT TRANSPORTATION NETWORK — AMERICA

Novel older adult transportation system that provides 24-7 rides for seniors.

www.itnamerica.org

MASSACHUSETTS HUMAN SERVICE TRANSPORTATION OFFICE

The HST office works to support and increase transportation options for consumers to access health care, jobs, social services, and a full range of opportunities within the community.

www.mass.gov/hst

An interactive state map with information about town-specific transportation services is available at maps.

massgis.state.ma.us/eohhs_hst/hst.html

NATIONAL CENTER ON SENIOR TRANSPORTATION

A website that provides links to many transportation agencies.

seniortransportation.easterseals.com

NATIONAL VOLUNTEER TRANSPORTATION CENTER

The purpose of the Center is to promote and support the concept and practice of volunteer transportation, which includes volunteer driver programs, shared vehicle utilization, and ride sharing initiatives.

www.ctaa.org

SENIORS ON THE MOVE

Assists older adults with relocation to another community.

www.seniorsonthemoveinc.com

U.S. ADMINISTRATION ON AGING

Brochures on transportation options for seniors.

www.n4a.org/content.asp?contentid=261

Eldercare transportation assistance resource locator by community.

www.eldercare.gov/eldercare.net/public/resources/topic/Transportation.aspx

UBER

newsroom.uber.com/2015/07/creating-more-options-for-senior-mobility

Research on older driver traffic accidents and mitigation strategies

INSURANCE INSTITUTE FOR HIGHWAY SAFETY/HIGHWAY LOSS DATA INSTITUTE

www.iihs.org

CONFERENCE PROGRAM

7:30–8:15 AM	REGISTRATION AND CONTINENTAL BREAKFAST, <i>sponsored by AAA Northeast</i>
8:00–8:30 AM	POSTER PRESENTATIONS, <i>sponsored by Tufts Health Plan Foundation</i> Ballroom A
8:30–9:15 AM	OPENING SESSION Ballrooms A/B/C Ira Jackson, <i>MGS Dean, University of Massachusetts Boston</i> Jessica Cicchino, <i>Insurance Institute for Highway Safety</i> Jeanne Hathaway, <i>Massachusetts Department of Public Health – Injury Prevention</i> Beth Dugan, <i>University of Massachusetts Boston</i>
9:15 AM–4:00 PM	EXHIBITORS' HALL Ballroom A
9:30–10:45 AM	TRACKS SESSION I

INFRASTRUCTURE TRACK (ROOM 3540)

NHTSA's 5-Year Strategic Plan

This session will discuss the NHTSA 5-Year Strategic Plan and the Older Driver Highway Safety Program Guidelines, which are based on best practices around the country, including countermeasures that can be implemented to ensure the safety of older drivers. Information will also be provided on the relationship with the car manufacturers to improve safety for all users including older drivers.

Art Kinsman, (Moderator) Highway Safety Division, Office of EOPSS
Mark Scarboro, National Highway Traffic Safety Administration

MEDICAL TRACK (BALLROOM C — SPONSORED BY HARVARD PILGRIM HEALTH CARE)

Identifying Medically At-Risk Drivers

This session will focus on assessing and identifying medical conditions that may impact one's ability to safely operate a motor vehicle. The session will include information on Alzheimer's disease, dementia, changes in vision, reaction time, cognition, and other challenges and solutions.

Janet Jankowiak, MD, (Moderator)
Brian Ott, MD, Brown University and Rhode Island Hospital
Ann Hollis, Beth Israel Deaconess Medical Center
Elin Schold Davis, American Occupational Therapy Association
Eugene Scanzera, (Discussant) Harvard Pilgrim Health Care

MOBILITY TRACK (ROOM 3545)

The Transition from Driver to Passenger and the Role of Senior-Friendly Transportation Options

This session will explore the challenges faced by older adults as they transition from driving to transportation options, introduce the strategies of travel training and mobility management for senior transportation, present the concept of supportive senior-friendly transportation and the role of volunteers and volunteer driver programs in supporting that vision, and address risk management concerns in the provision of senior transportation.

Nina Silverstein, (Moderator) University of Massachusetts Boston

Jana Hunkler, Berkshire Community Action Council/Berkshire Rides

Helen Kerschner, Community Transportation Association of America

William Henry, Volunteers Insurance Service Association, Inc.

Noah Berger, (Discussant) Federal Transit Administration

POLICY TRACK (BALLROOM B)

Policies That Work

This session will discuss policy formation, implementation, and enforcement issues related to older driver safety. Policymakers will discuss the process of getting evidence-based laws enacted, while a local district attorney will describe enforcement issues and concerns. Advocating for socially just and evidence-based policies impacting older adults will also be presented.

David Stevens, (Moderator) Massachusetts Councils on Aging

Marian Ryan, Middlesex District Attorney

The Honorable Kay Khan, Representative, Massachusetts House of Representatives

Victoria Halal, Joint Committee on Elder Affairs Director and aide to The Honorable Patricia Jehlen, Senator, Massachusetts State Senate

10:45–11:00 AM

COFFEE BREAK, sponsored by MA Councils on Aging

11:00 AM–NOON

TRACKS SESSION II

INFRASTRUCTURE TRACK (ROOM 3540)

Designing for Older Road Users

This session will focus on how streets and highways can be designed to better meet the needs of older road users. Information will include programs and projects underway at FHWA, an in-depth look at the updated Handbook for Designing Roadways for the Aging Population, and a brief discussion on how MassDOT is incorporating the design elements identified in the handbook.

Bonnie Polin, (Moderator) Massachusetts Department of Transportation, Highway Division

Gene Amparano, Federal Highway Administration

Jim Danila, Massachusetts Department of Transportation

MEDICAL TRACK (BALLROOM C — SPONSORED BY HARVARD PILGRIM HEALTH CARE)

Substance and Medication Use

This session will provide information on drivers' use of prescription medications, poly-pharmacy, alcohol, "medical" marijuana, and illegal drugs and the impact these substances may have on driving. Discussion will identify tools available roadside for law enforcement when dealing with drugged drivers, and will highlight best practices for prosecutors and the criminal justice system.

Mary Maguire, (Moderator) AAA Northeast

Michele Matthews, Massachusetts College of Pharmacy and Health Science

Stephen J. Walsh, Lieutenant, Massachusetts State Police

Joanne Thomka, National District Attorneys Association

MOBILITY TRACK (ROOM 3545)

When the Wheels Fall Off

This session captures the consumer experience throughout the transition process, their struggle to maintain control, and solutions to help them preserve independence and identity.

Jean Patel Bushnell, (Moderator) ITNGreaterBoston™

Lissa Kapust, Beth Israel Deaconess Medical Center

John Paul, AAA Northeast

Dan Blackburn, consumer

POLICY TRACK (BALLROOM B)

Policies That Work

This session will describe policies related to medical fitness to drive and medical reporting. There will be an overview of the research related to medical fitness to drive, best practices, and clinical geriatric issues.

Kathrin Boerner, (Moderator) University of Massachusetts Boston

Richard Marottoli, Yale University

Tom Meuser, University of Missouri-St Louis

NOON-12:30 PM	Luncheon, presented by Ford Ballroom A
12:15-1:00 PM	POSTER PRESENTATIONS, sponsored by Tufts Health Plan Foundation Ballroom A
12:30-1:00 PM	Ira Jackson, MGS Dean, University of Massachusetts Boston Ballrooms B/C
	LOOKING TO THE FUTURE – GOOGLE Ron Medford, GoogleX Driverless Car Director
1:00-2:00 PM	KEYNOTE ADDRESS Ira Jackson, MGS Dean, University of Massachusetts Boston Ballrooms B/C
	NAVIGATING TOMORROW: KEEPING AN AGING AMERICA SAFE, SEAMLESS AND ON THE MOVE Joseph F. Coughlin, Director, MIT Age Lab and Director, New England University Discussants: Len Fishman, University of Massachusetts Boston, Gerontology Institute Director Rich Marotolli, Yale University
2:15-3:15 PM	TRACKS SESSION III

INFRASTRUCTURE TRACK (ROOM 3540)

Designing Vehicles to Accommodate Older Driver Needs

This session will focus on what car manufacturers consider during design phases to accommodate older drivers and other specific needs. Included will be Ford's work in addressing the needs of older drivers and research in vehicle improvements to assist older drivers.

Bonnie Polin, (Moderator) Massachusetts Department of Transportation, Highway Division

Michelle Chaka, Ford Motor Company

Scott A. Schmidt, Alliance of Automobile Manufacturers

MEDICAL TRACK (BALLROOM C — SPONSORED BY HARVARD PILGRIM HEALTH CARE)

Reporting At-Risk Drivers to MassDOT Medical Affairs Branch

This session will address counseling the at-risk driver, health care provider responsibility and liability, clinician resources to provide older drivers, and procedures for reporting. This session will also include information on recognizing the sense of loss and grief experienced by someone who must relinquish a driver's license.

Michele Ellicks, (Moderator) Massachusetts Department of Transportation

Marjorie Weinberger, Massachusetts Department of Transportation

James Ellison, MD, Harvard Medical School

Debra Kerrigan, Newton-Wellesley Hospital

Jatin Dave, MD, (Discussant) Tufts Health Plan

MOBILITY TRACK (ROOM 3545)

Successful Models for Senior Transportation in Massachusetts

This session will discuss examples of replicable, successful programs that address the transportation needs of seniors in Massachusetts, including Council on Aging programs, a partnership with a regional transit authority, and a medical escort program.

Theadora Fisher, (Moderator) Executive Office of Health and Human Services

Jayne Colino, Newton Senior Services

Tim O'Day, SCM Elderbus

Erica Girgenti, Adams Council on Aging

Janet Seckel-Cerrotti, Friendship Works

POLICY TRACK (BALLROOM B)

Focus on Innovation

This session will include information on how the work of IIHI can inform state efforts to promote older driver road safety. The session will also address innovations in research, implications for policy, how corporate and philanthropic partners can support policy developments, and the legal and elder justice advances needed to keep older Massachusetts adults safe and mobile.

Emily Shea, (Moderator) Boston Commission on Elderly Affairs

Jessica Cicchino, Insurance Institute for Highway Safety

Bryan Reimer, MIT

Meghan Verona Joyce, (or designee) Uber

Nora Moreno Cargie, Tufts Health Plan

Betsey Crimmins, Greater Boston Legal Services

3:30–4:00 PM

WRAP UP AND CALL TO ACTION

Ballrooms A/B/C

Ira Jackson, MGS Dean, University of Massachusetts Boston

The Honorable Stephanie Pollack, MassDOT Secretary

Lillian Glickman, Moderator, University of Massachusetts Boston

4:00–5:00 PM

NETWORKING RECEPTION, *sponsored by Tufts Health Plan Foundation*

Beacons Parking Lot

OLDER DRIVER SAFETY SUMMIT SPONSORS

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Massachusetts Councils on Aging

The Gerontology Institute at the University of Massachusetts Boston

***Proceedings written by Stephen Braun
(www.braunmedicalmedia.com)***

**Hosted by:
Gerontology Institute
John W. McCormack Graduate School of Policy and Global Studies
University of Massachusetts Boston**

