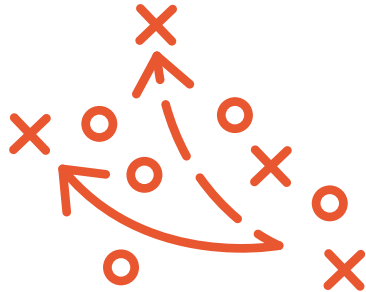




CENTRALINA
Area Agency on Aging

Identifying and Reporting Medically-at-Risk Drivers – Who is Responsible?



**Anne Dickerson, PhD, OTR/L,
SCDCM, FAOTA, FGSA**



PLAN FOR THE

ROAD AHEAD

Identifying and Reporting Medically-at-Risk Drivers – Who is Responsible?

Anne E. Dickerson, PhD, OTR/L, SCDCM, FAOTA, FGSA

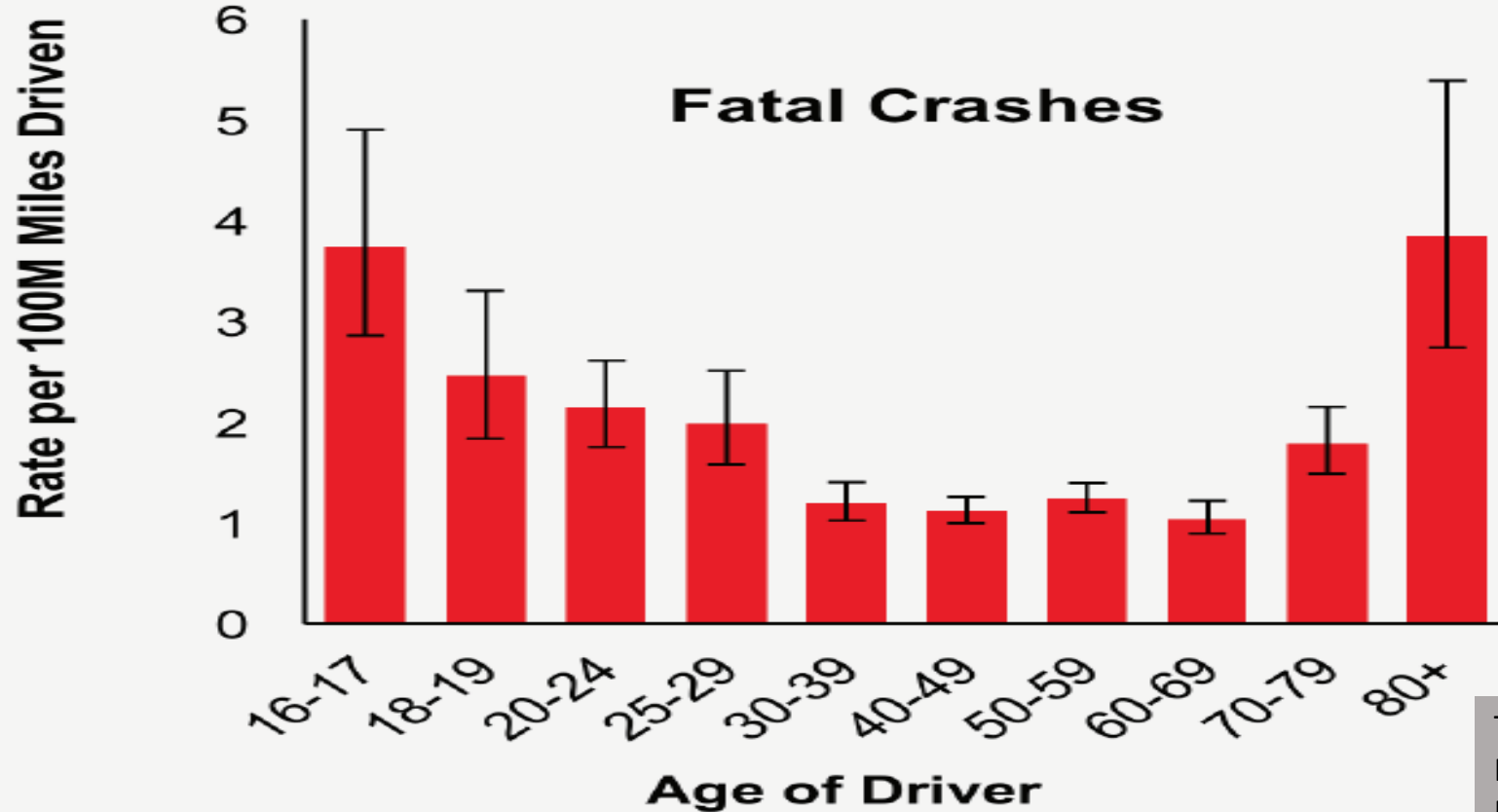
East Carolina University: Research for the Older Adult Driving Initiative

Why is Driving an Issue?



- ➡ Many older adults live in suburban & rural areas.¹
- ➡ Driving will remain the primary choice and personal mode of transportation.²⁻³
- ➡ Older adults want to age in their communities.⁴
- ➡ Want and need to continue driving to maintain health & quality of life.⁵
- ➡ Decision to stop driving has adverse consequences.⁵⁻⁶

80+ Drivers – Fatal Crash Rates



Tefft, B.C. (2017, Research Brief.) AAA Foundation for Traffic Safety.

Frailty and Fragility

Older adults “sustain injuries more easily and are more frail which reduces their odds at recovering from injuries”.

“At crash speeds of 31 mph, the risk of sustaining a serious injury increases dramatically.

- 50-year-old female has about a 10% risk of serious injury in a frontal crash,
- 80-year-old female has about a 40% risk.”





What do we know about older adults?

Babies come into the world as
homogenous persons

Older adults
heterogeneous



What we do know!

- ➡ We all age *differently*.
- ➡ Older drivers are generally safe drivers.¹
- ➡ As one ages, drivers tend to self restrict.²
- ➡ **Clear evidence:** with aging: slowed processing speed.³⁻⁵
- ➡ We will outlive our ability to drive!⁶
 - ➡ **Men – 6 years**
 - ➡ **Women - 10 years**



**NC Governor's Highway Safety Program
and
East Carolina University**

As one ages:

- Processing speed decreases
- Increased number of Medical conditions

Medically-at-risk



**Aging: Changes
in motor, vision
& cognition**

**Common
Living Older
Adults**

Drivers at **any age**
can be medically-at-risk!

The *Medically-at-Risk* Driver

Challenge:

How do we identify or test the medically-at-risk driver without over-restricting our healthy older adults?



Making sure the driving privilege is based on **Function** – **not Age** – through an **evaluation of Driving Fitness**¹

1- Dickerson et al., 2019



Why is it hard to determine when to stop driving?

Historical Event – NHTSA initiative

- ▶ July 16, 2003:
George Weller, age 86
- ▶ The crash fueled a national debate in the US on safety risks posed by "elderly" drivers.
- ▶ NHTSA – Initiated funding



"I have been driving
for 60 years – and I
never crashed or
got a ticket!"





Why do we Behave



Rules of the Road
Roadway Design

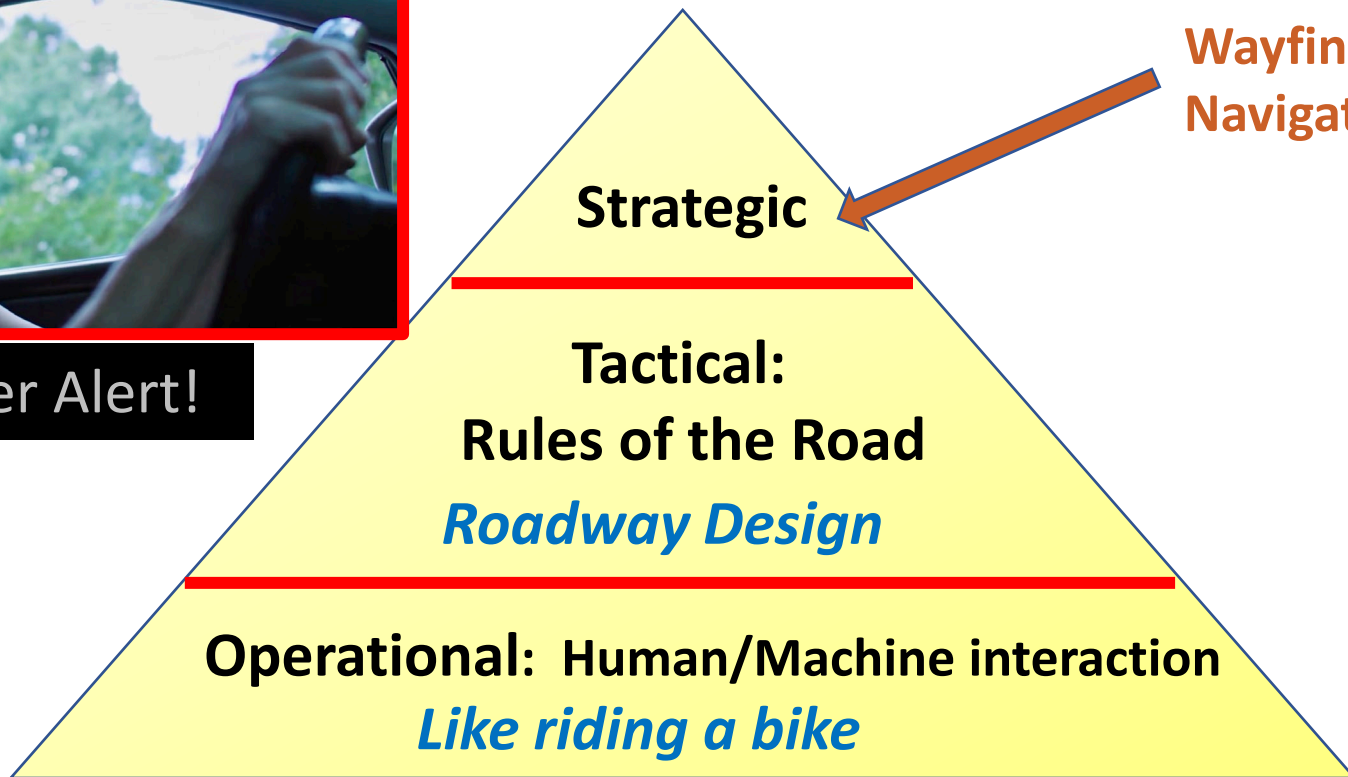
Functional: Human/Machine
Like riding a bike



Michon's Hierarchy of Driving Behaviors



Silver Alert!



Planning
Wayfinding
Navigation

Understanding Driving Behaviors*





What is a fitness to drive evaluation?

Medical Fitness to Drive Evaluation



- ➡ Evaluation of motor, vision, & cognition
- ➡ Includes Clinical & On Road
- ➡ No one test can be used to determine fitness to drive¹⁻⁷
- ➡ Fitness to drive evaluations – best done by **driving rehabilitation specialists who are occupational therapists.**

1- Dickerson et al., 2019; 2-Dickerson et al., 2014; 3-Aksan et al, 2015; 4-Anderson et al., 2012; 5-Piersma et al., 2016, 6-Sun et al, 2018; 7-Vaucher et al., 2014.

Why Occupational Therapy?

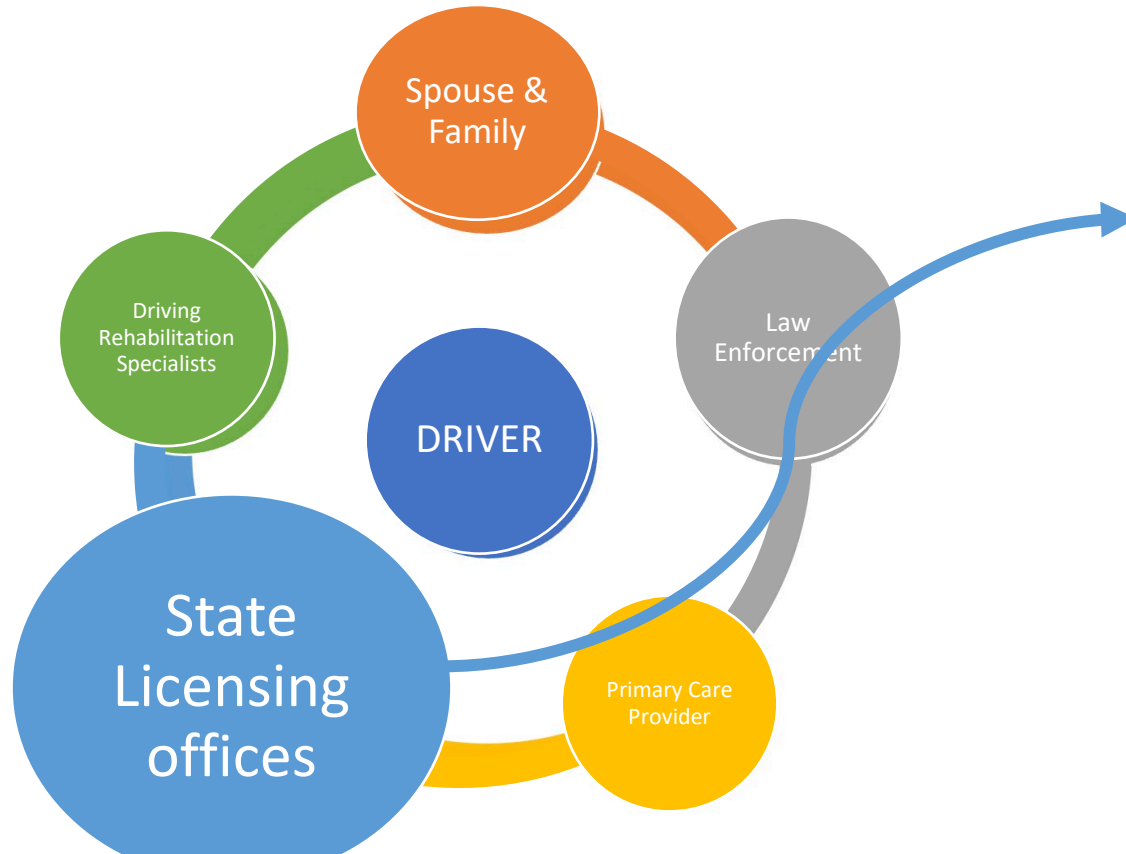
- ➡ Assists individuals with medical conditions with everyday activities.
 - ➡ Driving is an important everyday activity.
 - ➡ Evaluate / plan interventions for individuals with cognition, physical, visual/perceptual impairments.
- ➡ Also assists individuals to drive after a medical condition interferes - stroke





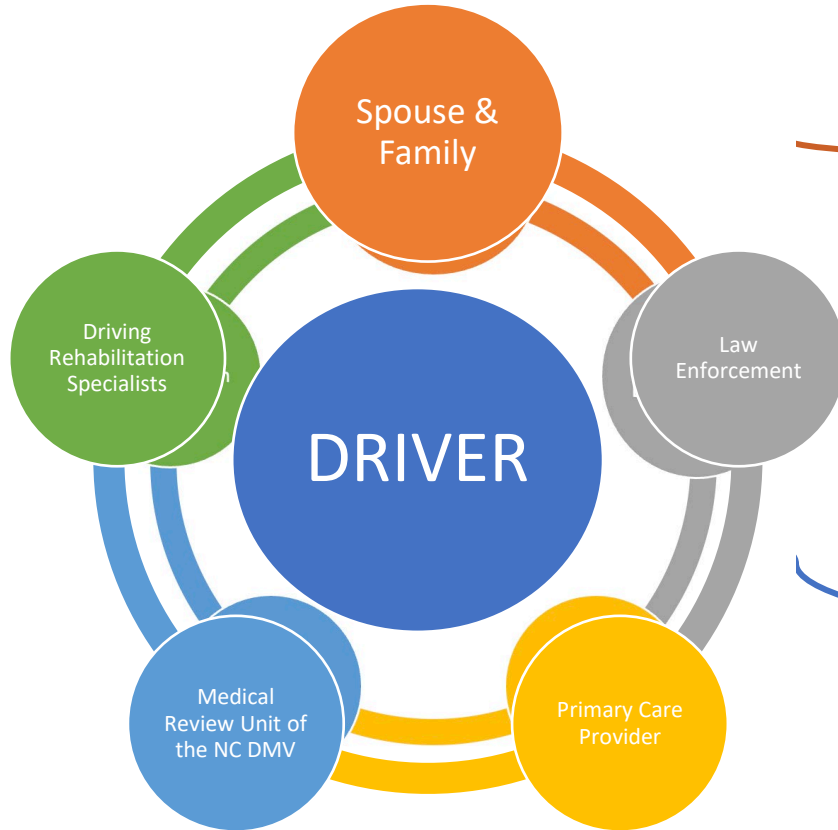
Who is responsible for identifying and reporting medically-at-risk drivers?

Who is Responsible?



- State licensing offices
 - Makes the licensing decision for drivers who have medical conditions that affect driving
- Problems
- Depend on reports from others
 - Process can be slow, especially for those that need immediate cessation
 - Process not well understood

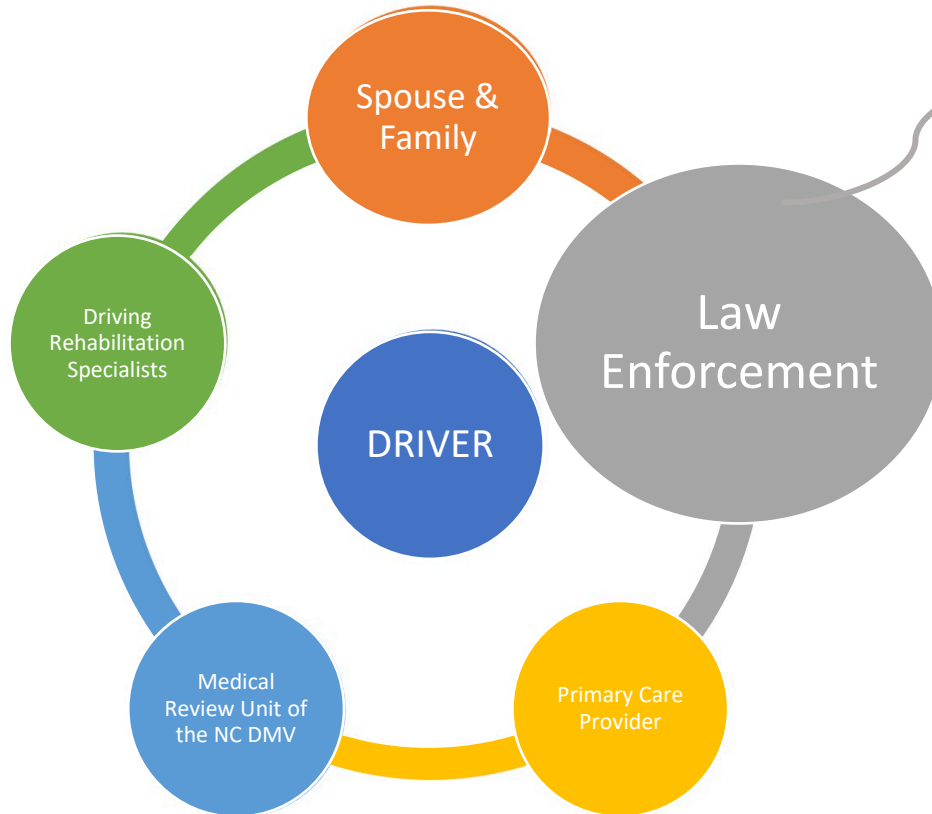
Who is Responsible?



- Aging changes – too slow to recognize deficits
- Difficult for most spouses / family members
- Conflicting interests (who will provide transportation)

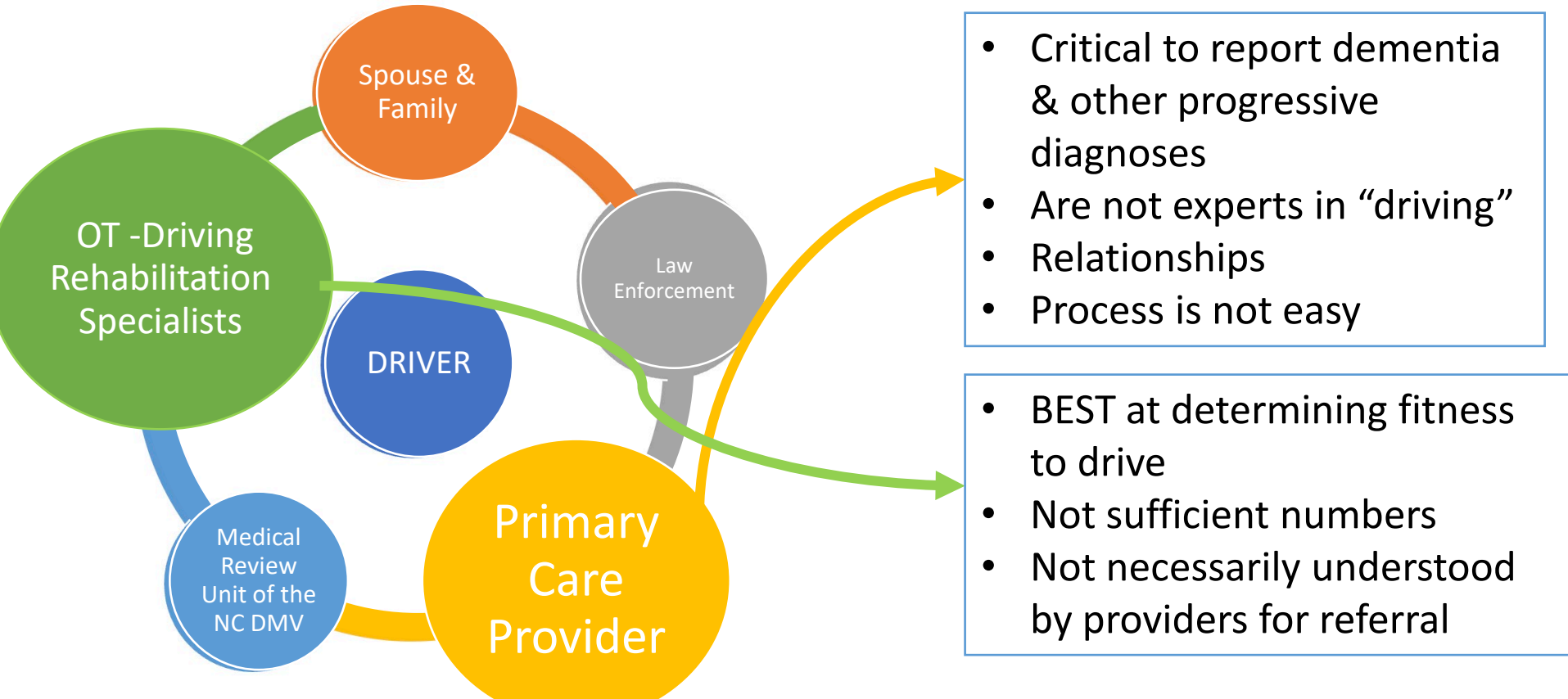
- Aging changes occur slowly; difficult to recognize deficits
- If cognitive impairment, unable to recognize impairment.

Who is Responsible?

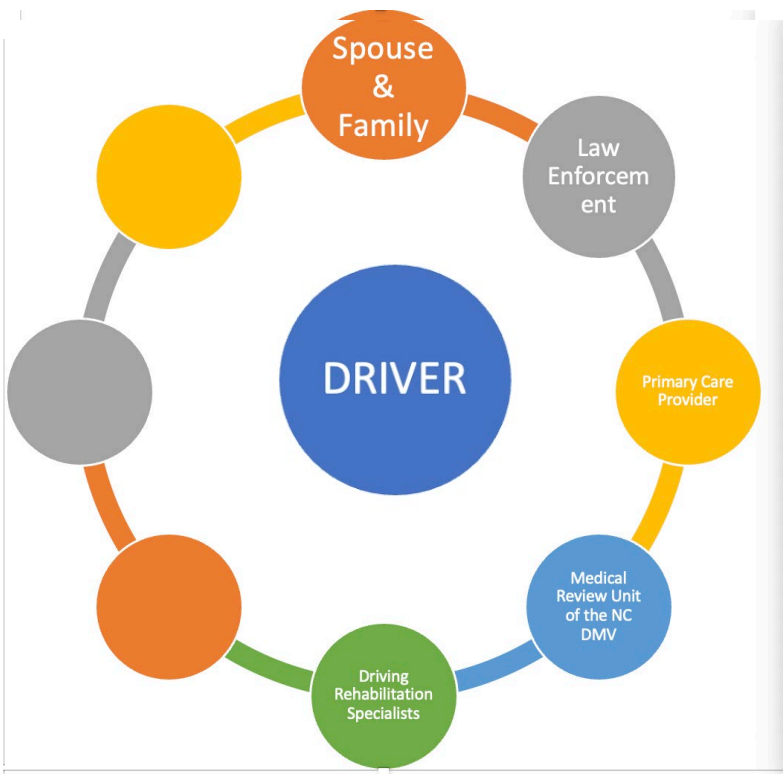


- OBSERVE driving issues
- Don't want to take "license"

Who is Responsible?



Who **could be** responsible?



- Need additional medical providers to screen and refer appropriately
 - Occupational therapists
 - All primary care providers (PA, NP)
- EMS – first responders to assist in the process.
- Community-based paramedics
- Pharmacists
- Optometrist/Ophthalmologists
- Dentists
- Aging Service providers

It Takes A Village to Eliminate the “Cracks”

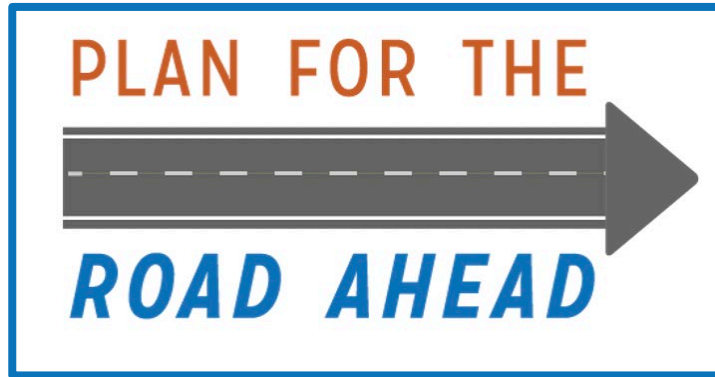




Change the Message!

Need to Change Perception of Driving

➔ View *Transportation Planning* as a Transition





Transportation planning

PLAN FOR THE
ROAD AHEAD

[About Us](#) | [Contact Us](#) | [Q](#)

PLAN FOR THE
ROAD AHEAD

[AGING & DRIVING](#) ▾

[TAKE CONTROL](#) ▾

[MOVING ON, GETTING OUT](#) ▾

[ADDITIONAL RESOURCES](#) ▾

[BLOG](#)

[P](#) BOOMERS

[Watch later](#) [Share](#)



Website:

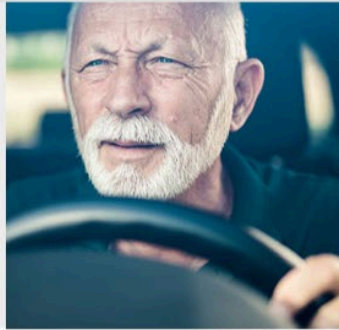
Dedicated to
Older Adults to
for Planning
Transportation

YOUR DRIVING
RETIREMENT PLAN

GOING THE EXTRA MILE: HOW AGING AFFECTS DRIVING

Research shows that crash rates start to increase for drivers at age 70 and older. But age alone won't make you an unsafe driver; as the country song says, it ain't the years, it's the miles. One person may be able to drive safely into their 80s, while another will need to stop in their 60s. Medical conditions, side effects from medications, cognitive changes, vision and hearing issues—there are many factors to consider when assessing your driving skills. And they're different for everyone.

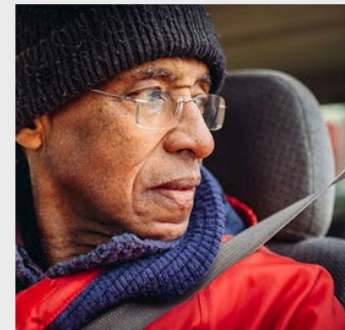
Still, there are some common issues affecting older drivers that you should watch for, for your own safety and the safety of others. Learn more about changes that come with age that could affect your driving abilities.



**Sensory and Physical
Changes**



Cognitive Changes



Dementia & Alzheimer's

HOW'S MY DRIVING?

Perhaps you've been worried that your driving skills are declining. Or you feel you're doing fine, but a friend or family member has expressed concern. Don't just worry and wonder. First, learn about the three levels of driving ability. Then, use our tools to assess your skills in each area.



The 3 levels of driving ability +

Driving skills vs. Driving fitness +

Warning signs +

Assess your readiness for mobility transition +

TOOLS TO ASSESS YOUR DRIVING SKILLS & FITNESS

Self Assessment

► Three research
based assessment
tools.

Tools to assess your driving skills & fitness

Assessment #1: Older Driver Safety Questionnaire. This questionnaire, created in cooperation with a physician who specializes in geriatrics, will offer helpful suggestions based on your concerns about driving.

OLDER DRIVER SAFETY QUESTIONNAIRE

Assessment #2: SAFER Driving: The Enhanced Driving Decisions Workbook

This workbook has three sections: Seeing, Thinking and Getting Around. Each section begins with questions for you to answer, and then gives you feedback and suggestions based on your answers.

SAFER DRIVING WORKBOOK

Assessment #3: Fitness to Drive Screening Measure

An online screening tool developed by the University of Florida, this questionnaire is to be used by a family member and/or caregiver who is familiar with your driving. The results will provide the family member with information they can discuss with you.

FITNESS TO DRIVE SCREENING

GET ADVICE FROM THE PROS

Your primary care physician +

Vision and hearing specialists +

A professional driving instructor +

An Occupational Therapist Driving Rehabilitation Specialist (OT-DRS) –

An OT-DRS is a medically trained therapist who understand how physical, sensory and cognitive impairments can affect driving. If you have a medical condition that could affect your driving (such as dementia, arthritis or diabetes), an OT-DRS can perform a **comprehensive driving evaluation** that will more accurately evaluate your driving fitness. More importantly, if you are just slowing down, recovering from a medical condition or wonder when you can return to driving, an OT-DRS would be the **best** person to assist you with that decision. Additionally, they may have strategies or solutions to help you drive if you have impairments. For example, a steering adaptation could assist if your hand function has not returned fully after a stroke. Or, if you are short in stature, there are easy solutions to adjust your vehicle perfectly for you.

Assessment for the Readiness for Mobility Transition

- ➡ How people react to change is different.
- ➡ Questionnaire is designed to measure your emotional and attitudinal readiness to cope with present and future changes in mobility.

Mobility loss can be sudden or progressive, but it is always devastating.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Asking others for help with mobility means that I am losing my independence.

Strongly disagree	Disagree	Neutral	Agree	Strongly agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Results

Your score: 53

- **High readiness score:** 1 – 54
 - To get more information about your score, see this handout: [1. High readiness.](#)
- **Mixed readiness score:** 55 – 85
 - To get more information about your score, see this handout: [2. Mixed readiness.](#)
- **Low readiness score:** 86 – 120
 - To get more information about your score, see this handout: [3. Low Readiness.](#)

What do the scores mean?

The Assessment of Readiness for Mobility Transition (ARMT) examines age related changes in mobility from the perspective of personal feelings and attitudes. The scores only reflect where you are thinking about transitioning from driving to non-driving mobility. Remember, we hope to help you make the transition over time and with support! Use the handouts to talk with your family members, physician, clergy, counselor, or close friends.

The ARMT was developed by a team of educators and researchers with funding support from the National Center on Senior Transportation to Dr. Thomas Meuser with co-investigators Marla Berg-Weger, John Chibnall, and Annie Harmon.

Reference: Meuser, T. M., Berg-Weger, M. Chibnall, J.T., Harmon, A.C. & Stowe, J.D. (). Assessment of Readiness for Mobility Transition (ARMT): A Tool for Mobility Transition Counseling with Older Adults. *Journal of Applied Gerontology* 2013;32(4):484-507. doi:10.1177/0733464811425914

Note: Dr. Thomas Meuser and Dr. Marla Berg-Weger have given permission for the use of the ARMT on this website, November 2019.

Low Readiness

Total Mean Score of 3.58+ (>28 Short Form) / LOW READINESS

Why was I asked to complete this questionnaire?

The ARMT examines age-related changes in mobility from the perspective of personal feelings and attitudes. You responded to a series of statements, indicating your level of agreement for each. Your total score tells the professional or peer counselor about your beliefs. *Your score is in the "at risk" range, and your responses suggest that you might struggle to adapt should you experience a sudden change in mobility.*

What does my total score on the ARMT say about me?

Your score indicates that you are a proud, independent, self-reliant person. You appreciate doing things for yourself and being in a position to help others. You cope with age-related declines in your health or function by maintain a positive attitude and focusing on what you still do well. While you are open to receiving help from others at times, you prefer solutions that allow you to remain in control and focused on your personal priorities,

When faced with a mobility transition, such as a need to cut back on driving, you prefer a go-slow, wait-and-see approach. You worry about what your life will be like if you are less mobile than today, and you want to do all that you can avoid negative outcomes for yourself and your family. Having to rely more on others and burden them with your needs is not an appealing prospect. The thought of declining health and function is anxiety-provoking and you would rather not think about it.

Questions for Consideration & Discussion

- What concerns What concerns you most about growing older? What would you avoid if you could?
- What would happen if your present independence changed and you had to rely more on others? How would you feel about yourself?
- Is it possible to remain largely independent and in control, yet also rely on others to live a full, meaningful life? How might this look?
- Does retirement from driving mean an end to quality living? Might it be possible to stop driving and still go to the places and activities you value?

PLAN FOR THE ROAD AHEAD

AGING & DRIVING

TAKE CONTROL

MOVING ON, GETTING OUT

ADDITIONAL RESOURCES

BLOG

P BOOMERS

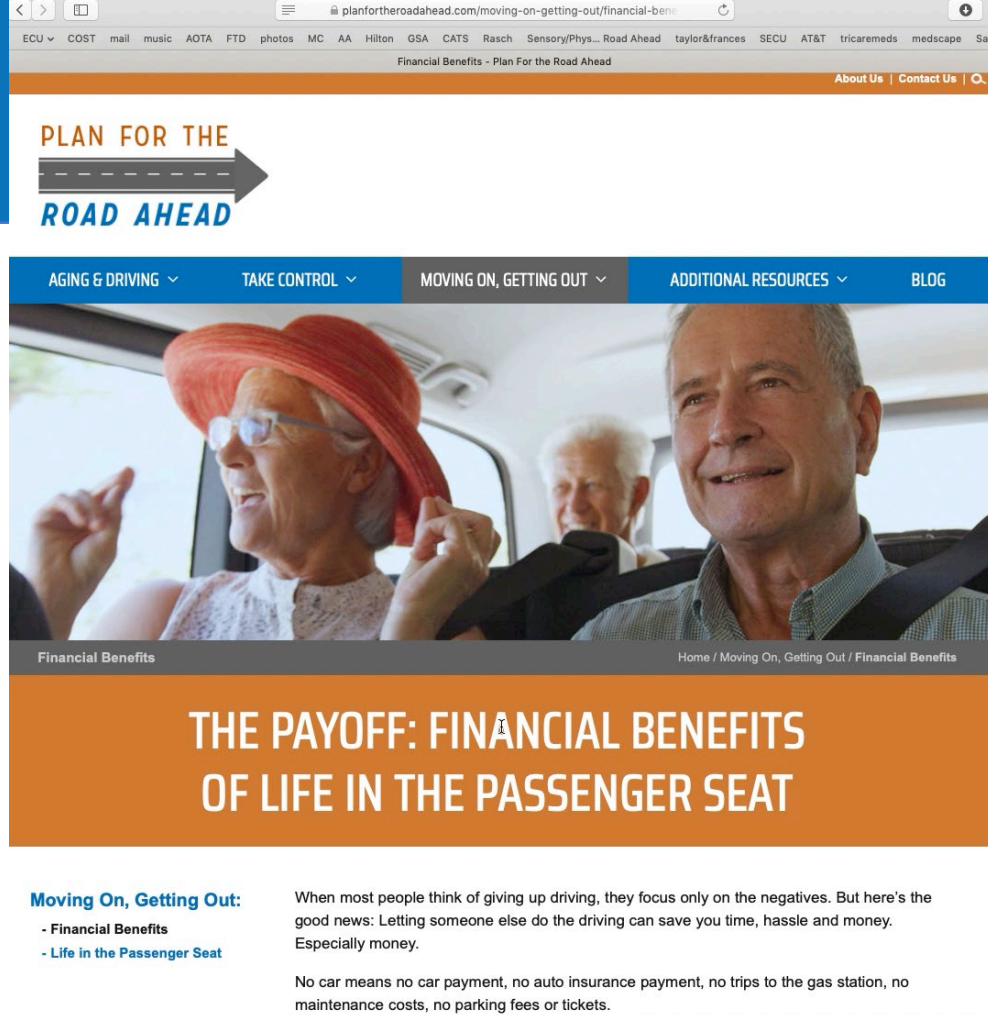
Watch later
Share



YOUR DRIVING

PLAN FOR THE ROAD AHEAD

Savings Calculator



The screenshot shows the Plan for the Road Ahead website. The top navigation bar includes links for ECU, COST, mail, music, AOTA, FTD, photos, MC, AA, Hilton, GSA, CATS, Rasch, Sensory/Phys..., Road Ahead, taylor&frances, SECU, AT&T, tricaremeds, medscape, and Safe. The main header features the "PLAN FOR THE ROAD AHEAD" logo. Below the header is a navigation menu with "AGING & DRIVING", "TAKE CONTROL", "MOVING ON, GETTING OUT" (selected), "ADDITIONAL RESOURCES", and "BLOG". The main content area displays a photo of three elderly people in a car. Below the photo is the title "THE PAYOFF: FINANCIAL BENEFITS OF LIFE IN THE PASSENGER SEAT". The "Moving On, Getting Out" section is highlighted, showing a list of topics: "Financial Benefits" and "Life in the Passenger Seat". The text explains that letting someone else drive can save time, hassle, and money, especially money. It also lists benefits: no car means no car payment, no auto insurance payment, no trips to the gas station, no maintenance costs, no parking fees or tickets.

PLAN FOR THE
ROAD AHEAD

AGING & DRIVING ▾ TAKE CONTROL ▾ MOVING ON, GETTING OUT ▾ ADDITIONAL RESOURCES ▾ BLOG

Financial Benefits Home / Moving On, Getting Out / Financial Benefits

THE PAYOFF: FINANCIAL BENEFITS OF LIFE IN THE PASSENGER SEAT

Moving On, Getting Out:

- Financial Benefits
- Life in the Passenger Seat

When most people think of giving up driving, they focus only on the negatives. But here's the good news: Letting someone else do the driving can save you time, hassle and money. Especially money.

No car means no car payment, no auto insurance payment, no trips to the gas station, no maintenance costs, no parking fees or tickets.

RESOURCES TO HELP RETIRING DRIVERS

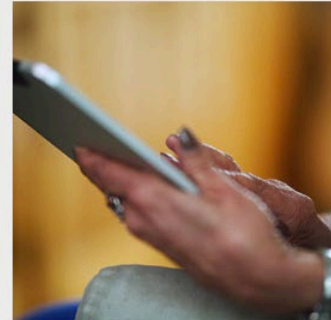
Making the transition from driver's seat to passenger seat isn't easy, but help is available for you and your loved ones. Take advantage of these additional resources to help you adjust to your new way of life.

[Resources for healthcare professionals +](#)

View Transportation Planning as a Transition



Conversation Starters



Hartford Booklets



FAQs

Questions?



PLAN FOR THE
ROAD AHEAD

Need help with transportation
planning?
PlanfortheRoadAhead.com

Older adults who plan early for life in the passenger seat make the transition easily. Start with rides to avoid night driving.
Ease into the passenger seat!

Stay Independent. Find your Mobility Plan
bit.ly/CDC-MyMobilityPlan

Clearinghouse for Older Road User Safety.
roadsafeseniors.org

How can an occupational therapist help?
AOTA.org/olderdriver

Affordable Rides Without a Smart Phone.
gogograndparent.com

Looking for transportation? RidesInSight.org

experienced driver **WEBSITES**



THANK YOU!

Dickersona@ecu.edu

References upon request