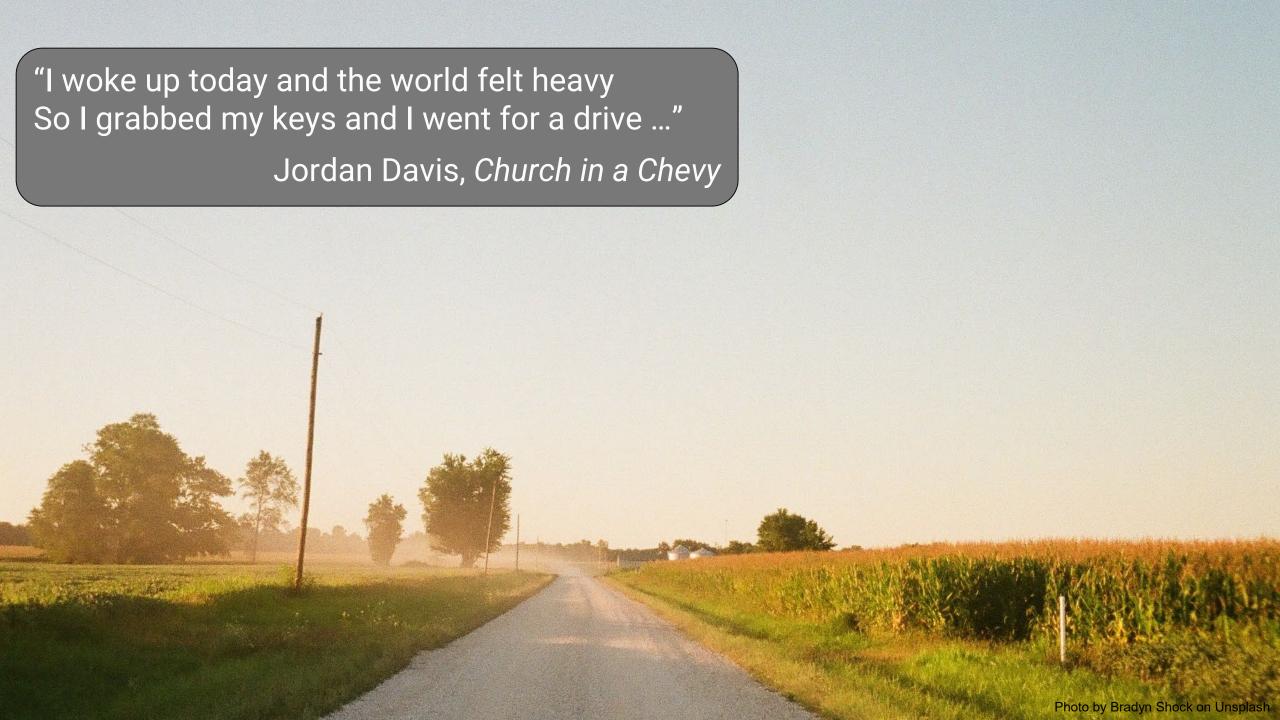
## DRIVING & AGING IN PLACE Emotions, mobility, and technology

Emmy Betz, MD, MPH

Professor of Emergency Medicine | Director of Firearm Injury Prevention Initiative | University of Colorado School of Medicine

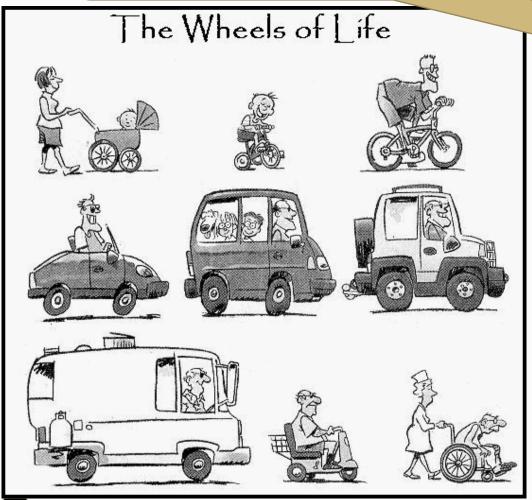
Research Physician | Eastern Colorado Geriatric Research, Education, and Clinical Center (GRECC) | Veterans Health Administration







"Gun safety, driving, living in your home, being able to turn your stove on and cook and not leave it on and burn the house. All those things are issues we have to face as we get older."



University of Colorado Anschutz Medical Campus "When you're a young kid, you want a fast convertible, red, to race around, pick up chicks. As you get older and you get married, you go with a station wagon or you go with a van. And as you get older, you probably end up with a van that carries a wheelchair. It's a progression of life and it's the same thing with firearms. ... I don't want to carry around a big heavy gun and walk through the woods. I'm over that. Little bit of target practice now and then with the 22LR with my grandchildren."



The Gerontologist
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https://doi.org/10.1093/geront/gnac142
Advance Access publication November 16, 2022



Research Article

#### Cars, Guns, Aging, and "Giving Up the Keys"

Marian E. Betz, MD, MPH, 12,\*\*. Evan R. Polzer, MA, 1,3 Christopher E. Knoepke, PhD, MSW, 4,5 Laura C. Prater, PhD, MPH, MHA, 6,7 Joseph A. Simonetti, MD, MPH, 3,8 Teresa M. Lee, MD,9 Lauren E. Meador, MPH, 1,10 and Kathryn A. Nearing, PhD, MA<sup>2,11</sup>

https://pubmed.ncbi.nlm.nih.gov/36383376/

## Community

- Safety / stigma
- Resources
- Engagement

## Family

- Physical & mental health
- Finances/logistics

## Older adult

- Physical & mental health
- Engagement/isolation





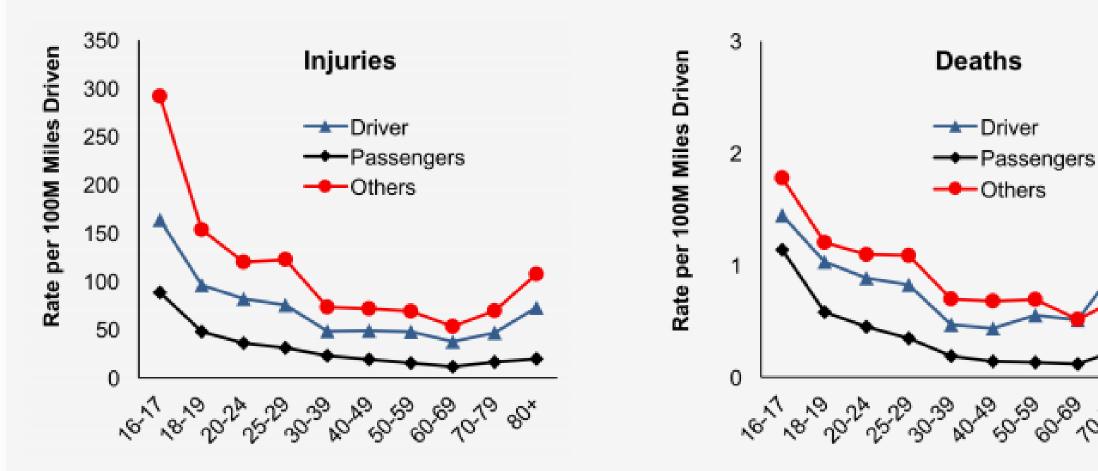


Figure 2. Injuries (left) and deaths (right) in crashes involving a driver of age shown per 100 million miles driven by drivers of that age, by role of person injured or killed, United States, 2014-2015.

https://aaafoundation.org/rates-motor-vehicle-crashes-injuries-deaths-relation-driver-age-united-states-2014-2015/





## and location matters for risks & resources

Photo by Dan Gold on Unsplash

Payyanadan RP et al. Challenges for Older Drivers in Urban, Suburban, and Rural Settings. Geriatrics (Basel). 2018 Mar 22;3(2):14. PMCID: PMC6319240.

Photo by Bradyn Shock on Uns

# Be person-centered

Leverage technology



"I wish we could normalize driving health, just like ... in pediatrics we try to help folks think ahead about developmental stages."

- Driving discussions are emotionally charged
- Context matters
- Healthcare providers are trusted and influential
- Continued communication over time
- Desire for agency



© Annie Levy, 2008



Betz ME et al. "I wish we could normalize driving health:" a qualitative study of clinician discussions with older drivers. J Gen Intern Med. 2013 Dec;28(12):1573-80. PMC3832716.

#### **Pre-Contemplation**

"I'm driving and getting around just fine, so I don't really feel concerned."

**Usual Mobility** 

#### Contemplation

"I'm aware mobility is an issue for me, if not now, then certainly in the future."

#### **Preparation**

Altered Mobility (reduced driving)

"I'm looking into options to stay mobile and active, despite some losses and challenges."

#### **Action**

"I'm taking steps and trying new things to stay as mobile and active as I

#### **Maintenance**

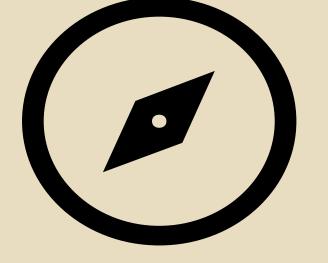
"I've been managing losses in my mobility and finding ways to get where I need and want to

Can a decision aid help?



=actors

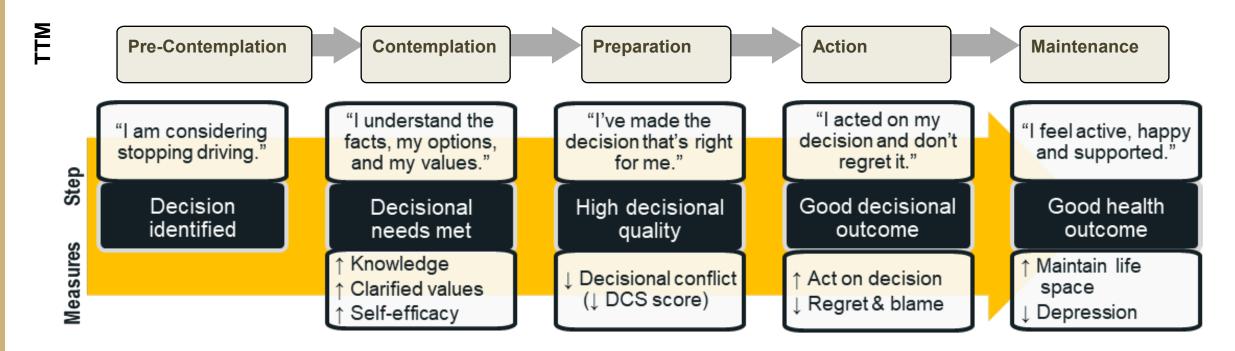
- Cognitive (e.g., cognitive ability, decision making competence)
- Attitudinal (e.g., readiness for mobility transition, personality)
- Social (e.g., demographics, health, life space, financial, geographical, transportation alter







R01AG059613-Betz

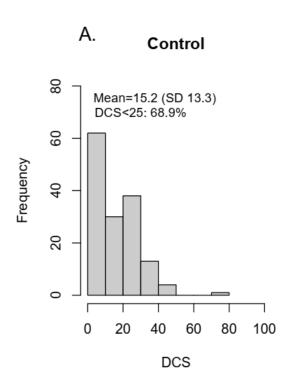


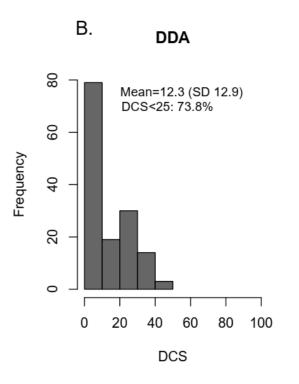


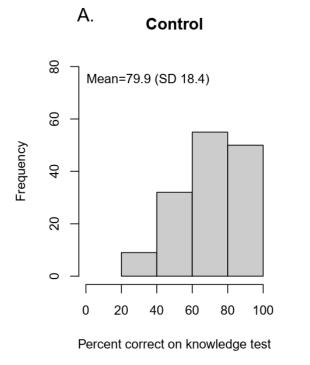


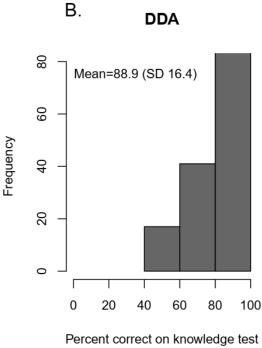
#### Main results n=301

- DDA group: Lower mean DCS score and higher knowledge scores
- No difference in self-efficacy
- 87% said they would recommend DDA to others





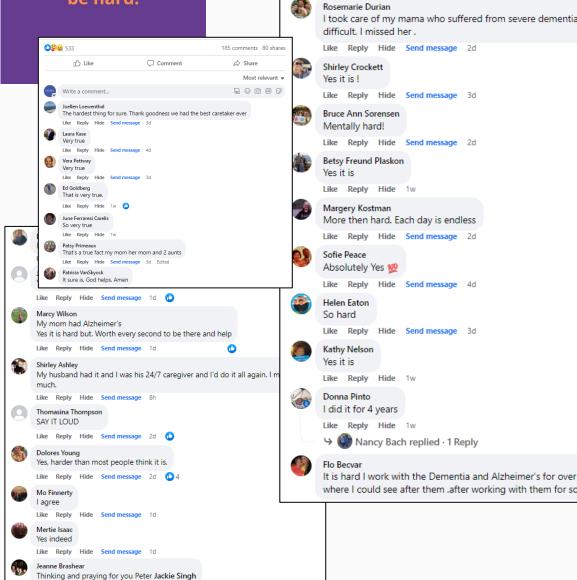






## Caring for someone with dementia can be hard.

Like Reply Hide Send message 2d





WELCOME

#### Safety Starts with You

#### Caring for someone with dementia can be hard.

There are physical, emotional, financial, and life-style changes to face. There are also new issues to think about. Thinking about these safety concerns can prevent injuries and deaths.

Now is the time to make choices and plans for the future. You may have already thought about some steps to improve safety at home. You may have had discussions about what to do about driving or firearms access. This site can support these discussions.

These can be hard topics to tackle, but you're not alone. Many others have faced issues like this.

The tools on this site can help you make decisions about safety and dementia.



R01AG076364

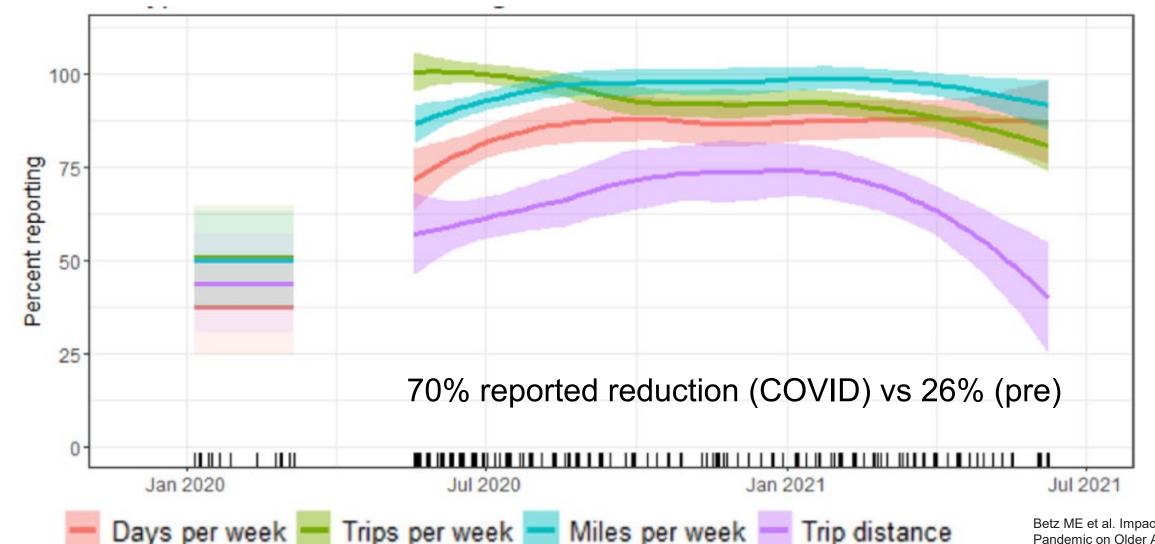
# Be person-centered

Leverage technology



## Types of reductions in driving (among those reporting reductions)

(n=16 pre-COVID; n=167 during COVID-19) Lines represent % reporting ± standard error PMID: 35583182 R01AG059613

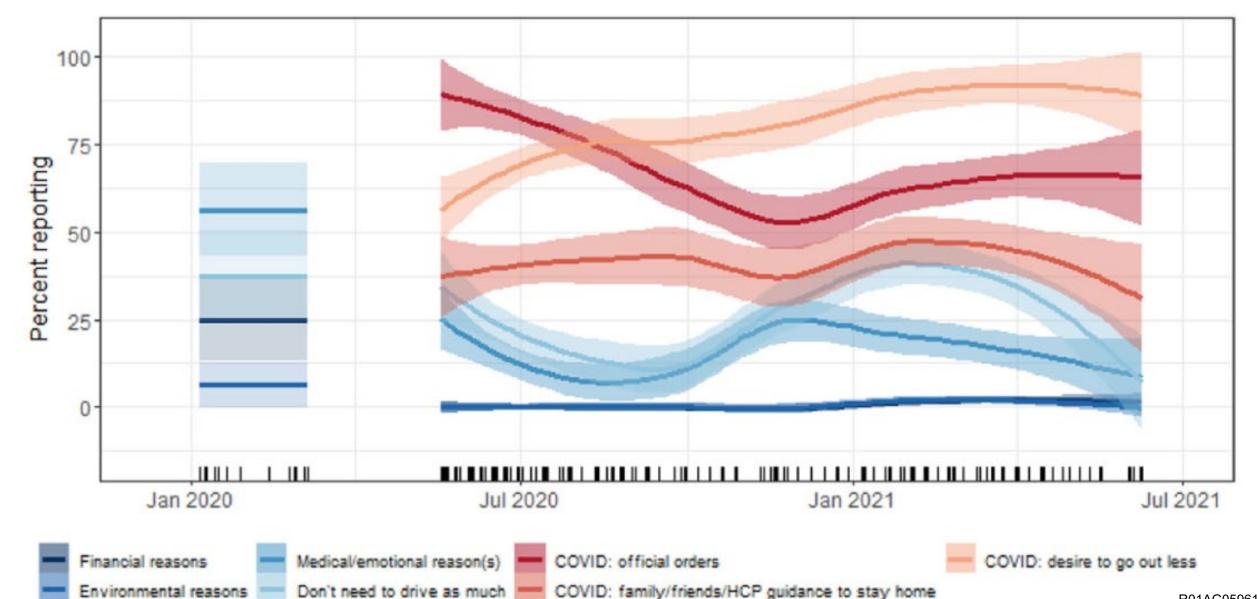


R01AG059613
Betz ME et al. Impact of the COVID-19
Pandemic on Older Adult Driving in the
United States. J Appl Gerontol. 2022

Aug;41(8):1821-1830. PMC9378355.

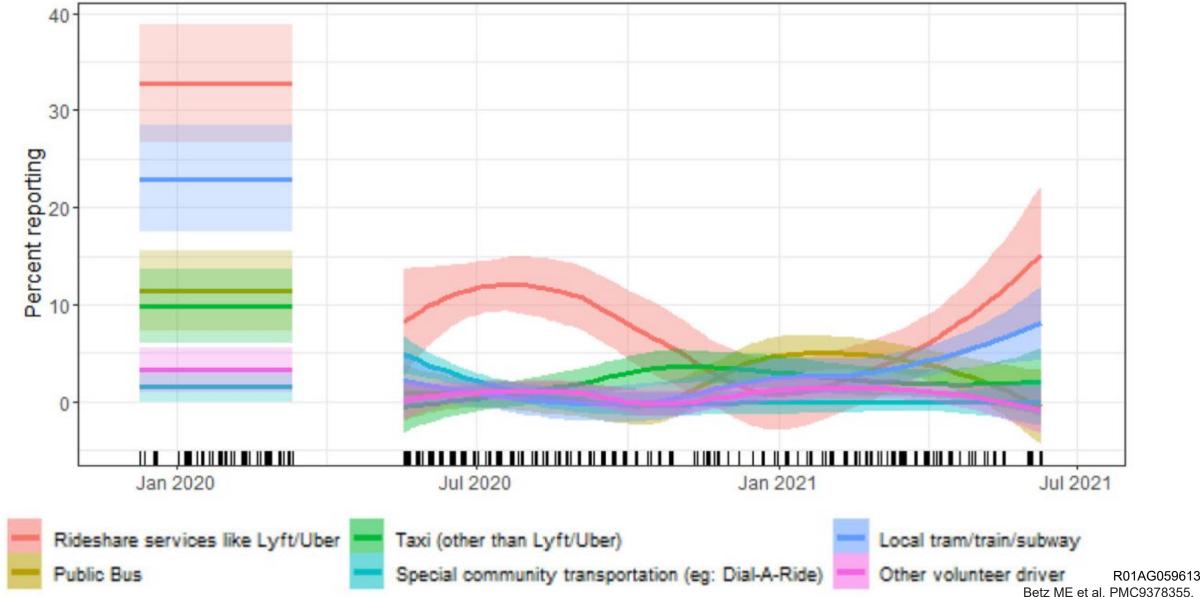
## Reasons for reductions in driving (among those reporting reductions)

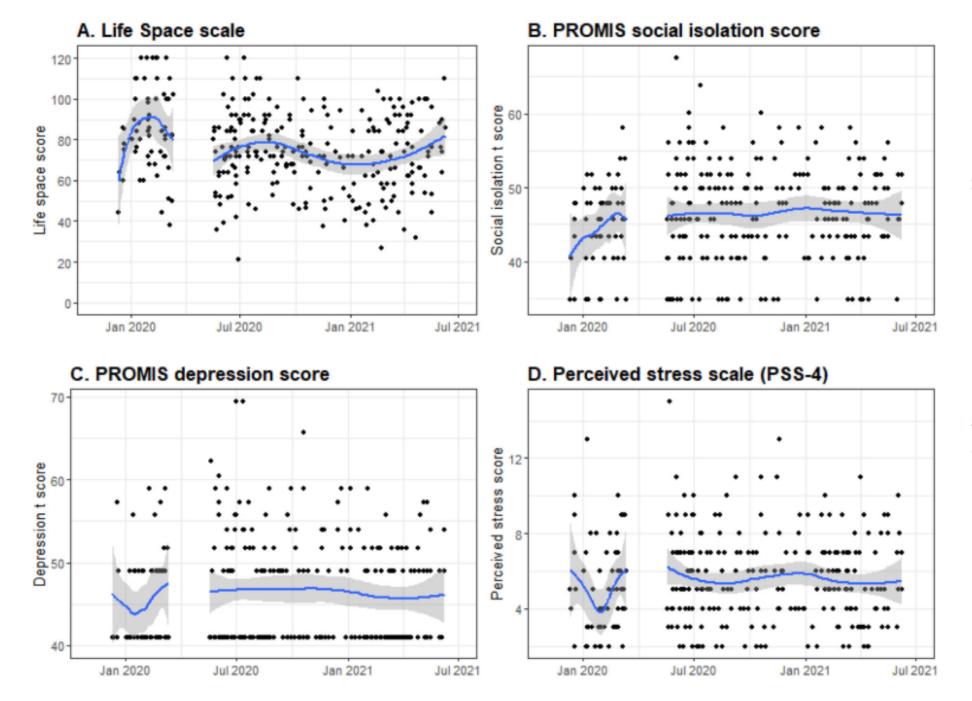
(n=16 pre-COVID; n=167 during COVID-19) Lines represent % reporting ± standard error PMID: 35583182 R01AG059613



Use of alternative transportation in the past 3 months

(n=16 pre-COVID; n=167 during COVID-19) Lines represent % reporting ± standard error PMID: 35583182 R01AG059613





(n=16 pre-COVID; n=167 during COVID-19)

Lines represent % ± standard error

PMID: 35583182 R01AG059613

Higher mean social isolation during COVID (vs pre) but no significant change in depression, global health, stress

#### R01AG059613

Betz ME et al. Impact of the COVID-19 Pandemic on Older Adult Driving in the United States. J Appl Gerontol. 2022 Aug;41(8):1821-1830. PMC9378355.

### How the pandemic changed views on driving

More concerned about driving "If i get into an accident this would increase my exposure [to COVID-19]. So I drive less now to avoid exposure."

"I don't make unnecessary trips; I plan out my driving and make sure I don't go to places where I don't need to be (in order to be safe)"

Before COVID-19, both she and her husband would use UBER, but now they are very hesitant to do that.

Doesn't make unnecessary trips where she could expose self. Worries about car breaking down leading to exposure. Feels especially vulnerable due to underlying conditions.

"Have lost confidence in my driving since driving less now"

"Made me realize that I can get along driving less"

Realizes she can do without driving so much. Less traffic. Found that she drove more than she needed to [pre-COVID-19]. Other ways to get what she needs

"My son has come weekly to [help with] my grocery shopping. "This made me less fearful about losing my ability to drive later on. I have less need to go places. I am really comfortable just being on my property"

"We (my wife and I) take more trips to get away from the house"

Less
concerned
about not
driving, or
driving
more



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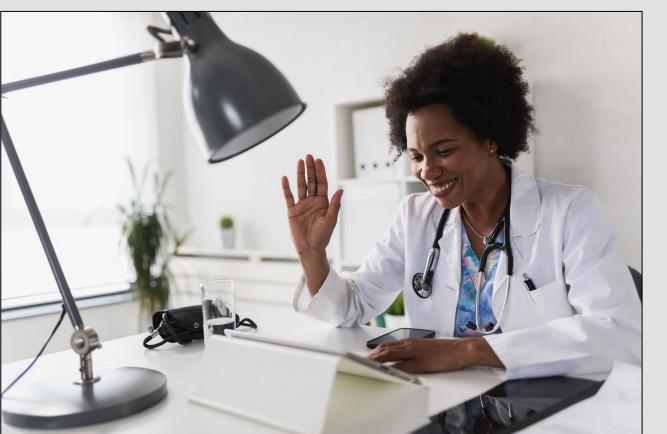








## **Alternatives TO transportation**





## Transportation and Aging: An Updated Research Agenda to Advance Safe Mobility among Older Adults Transitioning From Driving to Non-driving

Topic	Research issues for older adult transportation
Transitioning to non-driving mobility	Develop comprehensive models to better understand the interaction of the multiple factors that affect transitioning to non-driving.
	Identify and evaluate programs to facilitate the transition, especially in terms of their ability to reduce adverse consequences associated with driving cessation.
Beyond driving	Expand strategies to use existing and new transportation options in communities in the United States and elsewhere.
	Develop strategies to build coalitions that include a broad range of stakeholders beyond the aging network to enhance mobility.
	Expand the evaluation of elements of livable communities, age-friendly communities, and smart growth to provide evidence of demonstrable outcomes related to healthy aging.



## Thank you!

Emmy Betz, MD, MPH
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### THE ELEPHANT IN THE ROOM

Because it won't fit in the car

notifake.com