

Michigan Leads the Way in Senior Mobility

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OUTLINE

- **Statistics**
- **Michigan's Comprehensive Approach**
- **Engineering Improvements**
- **Educational Opportunities**
- **Barriers**
- **Conclusion**

Statistics

21% of Americans over the age of 65 don't drive

- Of those non-drivers
 - 50% stay home any given day because they lack transportation options

Fatal Crash Statistics

- **Crash rates of older drivers had mirrored those of young drivers, however, latest study does not show this**
 - Fatalities fell 21%
 - Population increased 10%
 - Travel increased 29%

Michigan Department of State Medical Advisory Board

- **Established in February 2009 to provide recommendations on:**
 - Revisions to medical forms
 - Physical and Mental Standards for Drivers
 - Vision Standards
 - Training for staff
 - Assessment and screening tools
 - Educational materials for public

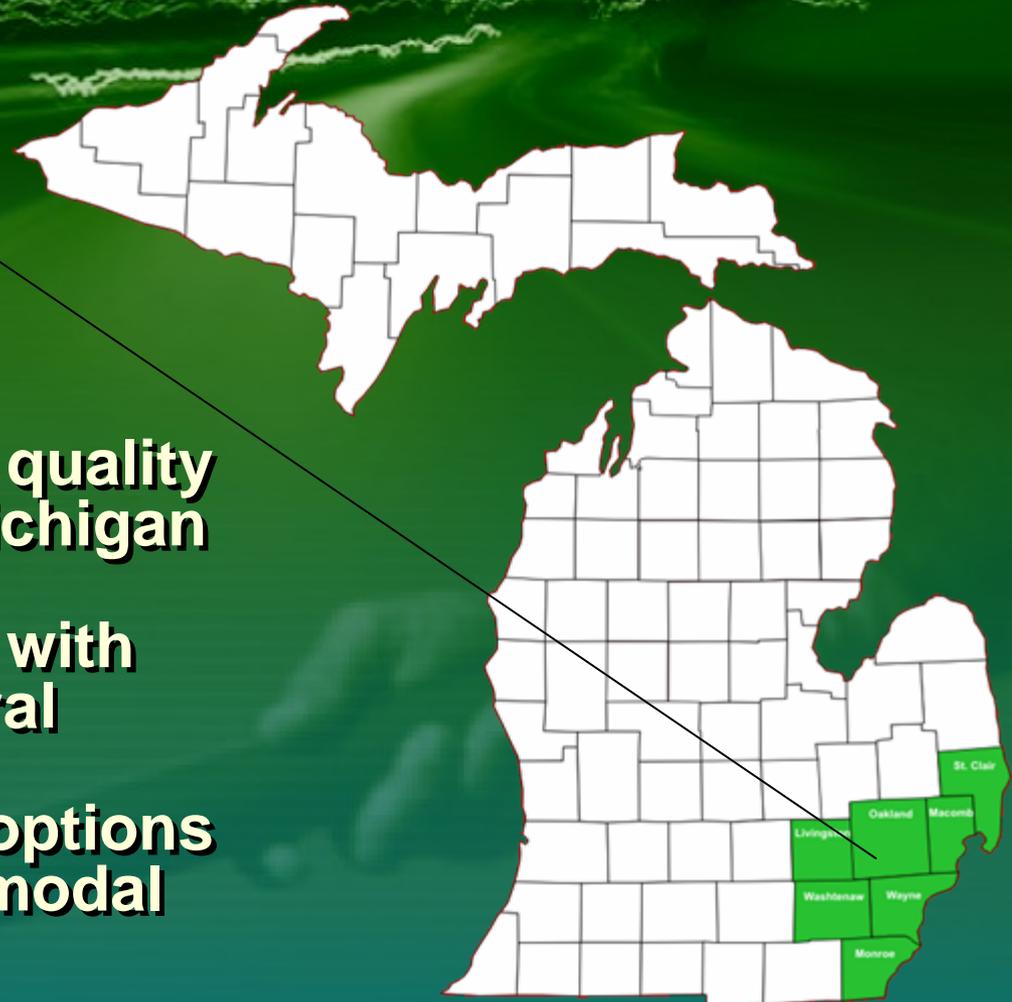
Senior Mobility Work Group Agency Members

- MDOT
- OHSP
- MDOS
- OSA
- MDCH
- SEMCOG
- FHWA
- AAA Michigan
- AARP
- AAA1-B
- CMU DEER
- M-CASTL
- UMTRI
- TIA

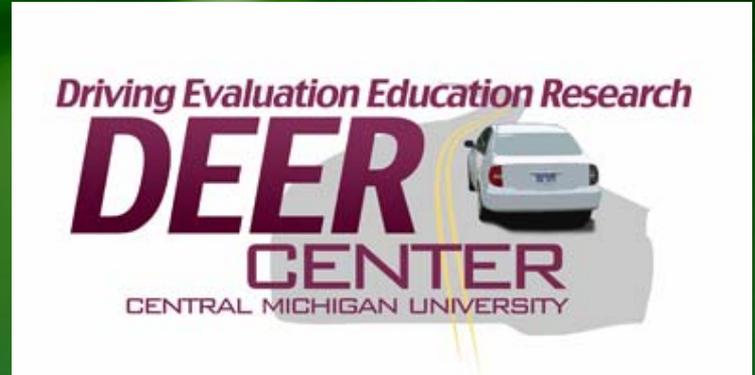
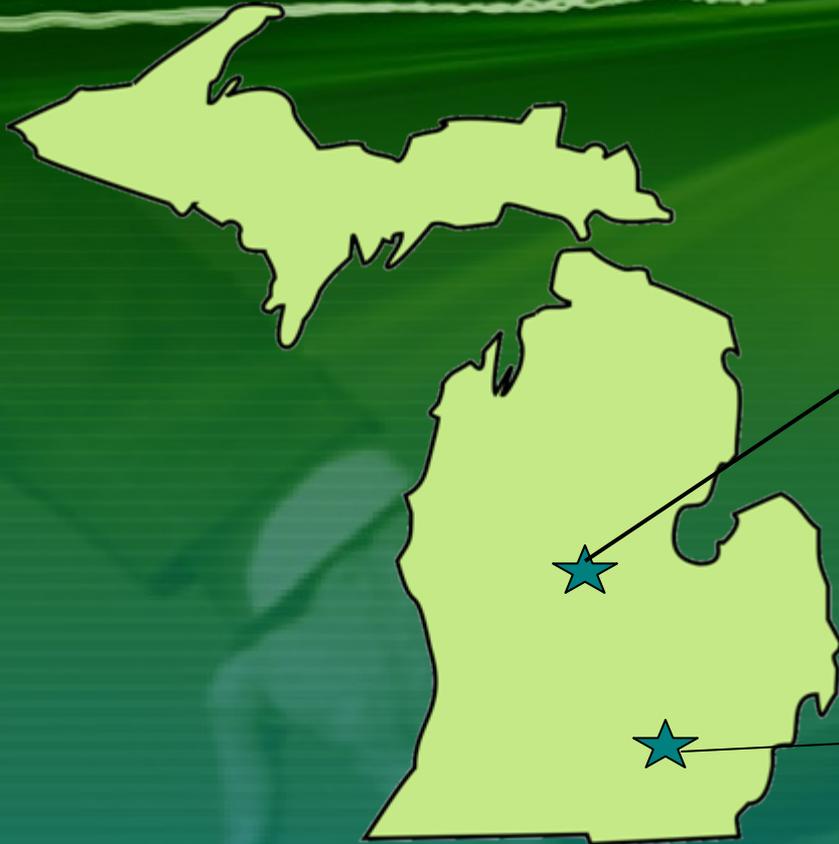
Other Non Traditional Groups Focusing on Senior Mobility

Regional Elder Mobility Alliance (REMA)

Significantly enhance the quality of life for southeastern Michigan elders, boomers, transit dependent adults, people with disabilities, and the general community through the maximization of mobility options and the delivery of multi-modal transportation services



Age Related Research



North American Conference



North American Conference



- **Alternative Transportation**
- **Education and Training**
- **Housing and Land Use**
- **Roadway Design**
- **Screening and Assessment**

ENGINEERING IMPROVEMENTS



Senior Driver Showcase Roadway

Detroit - 2004

- \$286 K
- 7.3 mile loop
- 35 new signs
- 17 signals modified
- 12 ped countdown signals
- Pavement markings



Nighttime Side-by-Side Comparison

Clearview

Jefferson Ave
WEST

Civic Center



14 FT. 2 IN.

Series E Modified

Jefferson Ave
EAST



EXIT ONLY

14 FT. 2 IN.



Fluorescent
Yellow

High Intensity
Yellow

FREEWAY ENDS
SIGNAL AHEAD

Jefferson Ave
EAST
EXIT ↓ ONLY

14 FT. 6 IN.

Monroe Ave

All signs newly erected

New Signing – Optional Exit Lane



ITE Clearance Interval: All-Red



Total Crash Reduction

All ages	15%
65+	30%

Black Signal Faces with Reflective Yellow Backplates



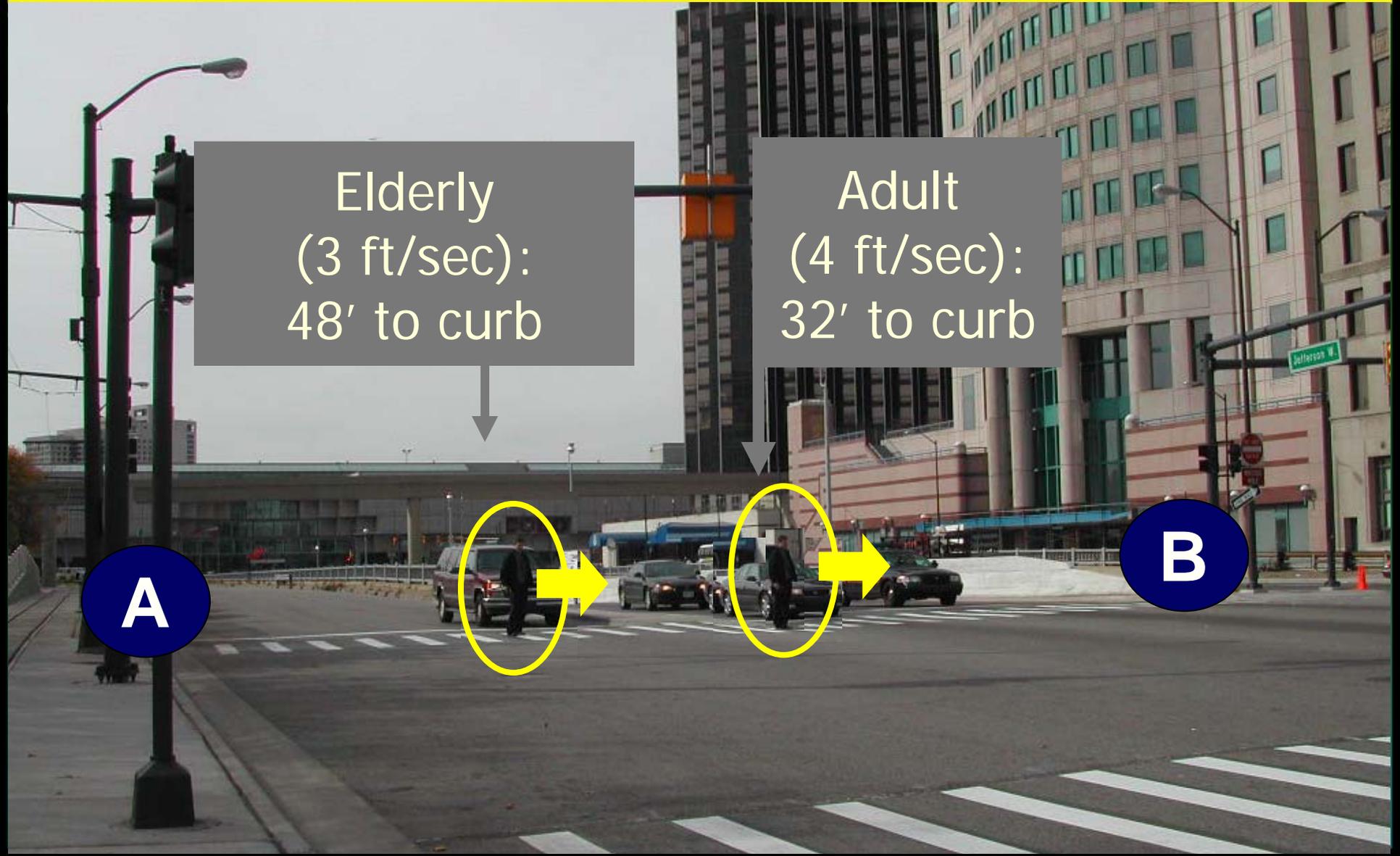
Where is Ped at end of WALK Signal?

Elderly
(3 ft/sec):
48' to curb

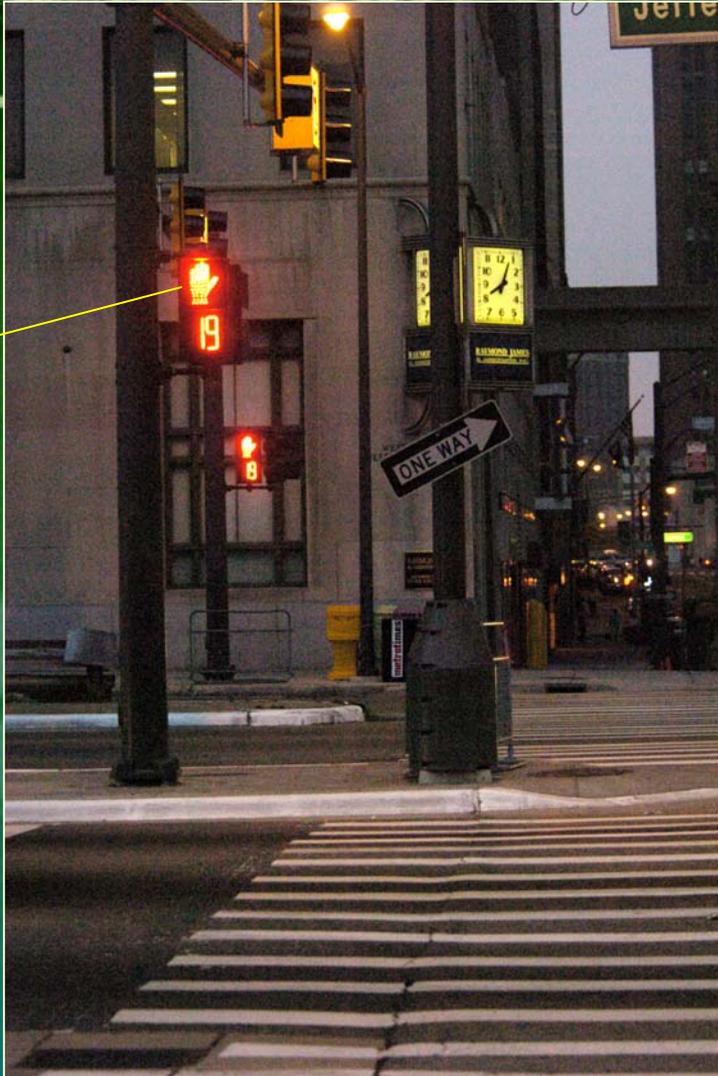
Adult
(4 ft/sec):
32' to curb

A

B



Pedestrian Countdown Signals



Benefits

Provides Additional
Information to Ped

Peds Adjust Speed

Peace of Mind

OTHER ENGINEERING COUNTER MEASURES



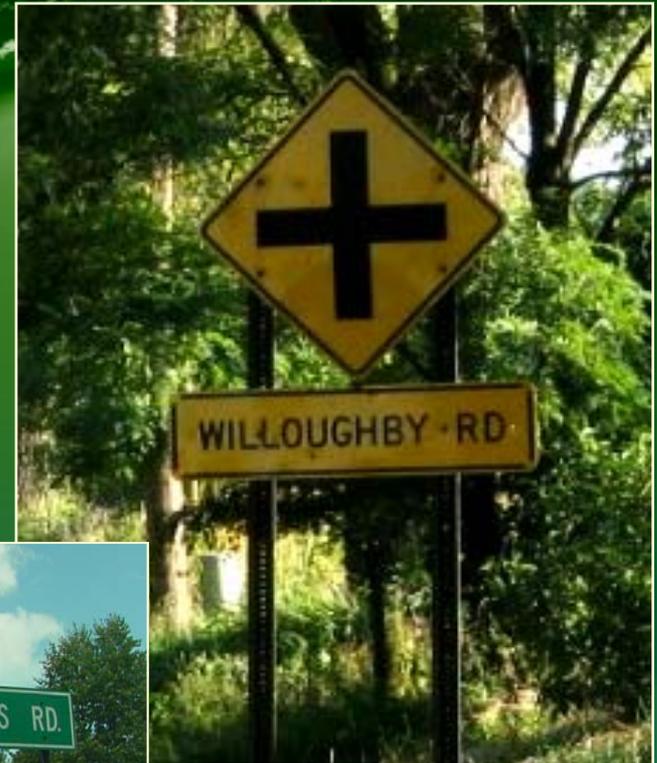
Painting the rumbles: freeway



Michigan: 100+ freeway miles



Advance Street Name – supplemental plaques



Intersections:

Compared to drivers age 40-49:

- Drivers age 65-69 are 2.3 times more at risk for crashes at intersections
- Drivers age 85+ are 10.62 times more at risk

Intersections:

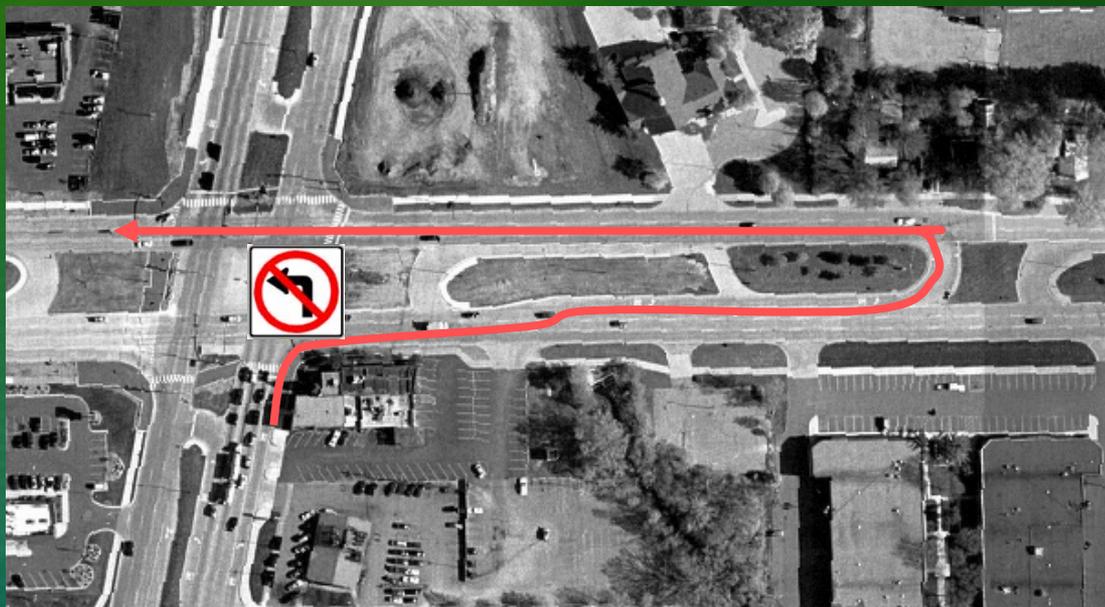
Anything you do to simplify
the operation of an
intersection,
*particularly the demands
on left turn traffic,*
is an elderly mobility
countermeasure.

Michigan Indirect Left Turn

Michigan DOT - common practice on boulevards

Injury crash reduction:

All ages	45%
60+	52%



Kach 1992, revised 2004

4-lane to 3-lane conversions

E. Lansing M-43



All LTs cross one lane only

8 Michigan
corridors



Injury crash
reduction

All ages	26%
65+	37%

ROUNDABOUTS Eliminate left turn, head-on crashes



Add LT Phasing Detroit & Grand Rapids



**13 intersections where
left-turn phasing and LT lane was added:**



**Total Crash Reduction
Head-On Left Turn
by Age**

25-64	66%
65+	73%

What is the AAA Road Improvement Demonstration Program?



- **A public/private partnership designed to enhance traffic safety by reducing the frequency and severity of crashes at high risk urban intersections.**



How the Program Works

Identify Target Intersections

Conduct Safety Audit

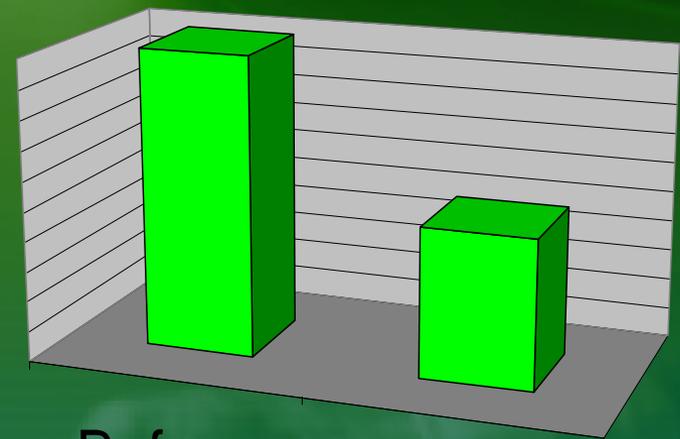
Conduct a Benefit Cost Analysis
Is AAA Investment beneficial?

Develop Project Funding Strategy

Design and Construct Improvements

Conduct Post Improvement
Evaluation Study

Collision History



Before

After

Evaluate safety and
economic benefits
of the improvements



Improve Signal Visibility

Woodward Ave. corridor- Detroit



- reposition signal heads
- 12" signal heads
- add supplemental signals
- add all-red interval



33
locations

Total Crash Reduction by age

25-64	17%
65+	31%

RIDP Toolkit

- **Designed for municipal leaders and planners**
- **Used to identify intersection safety problems**
- **Provides countermeasures that will positively impact these safety problems**
- **A template for action to implement needed changes in local jurisdictions**
- **Enact tested real-world solutions**

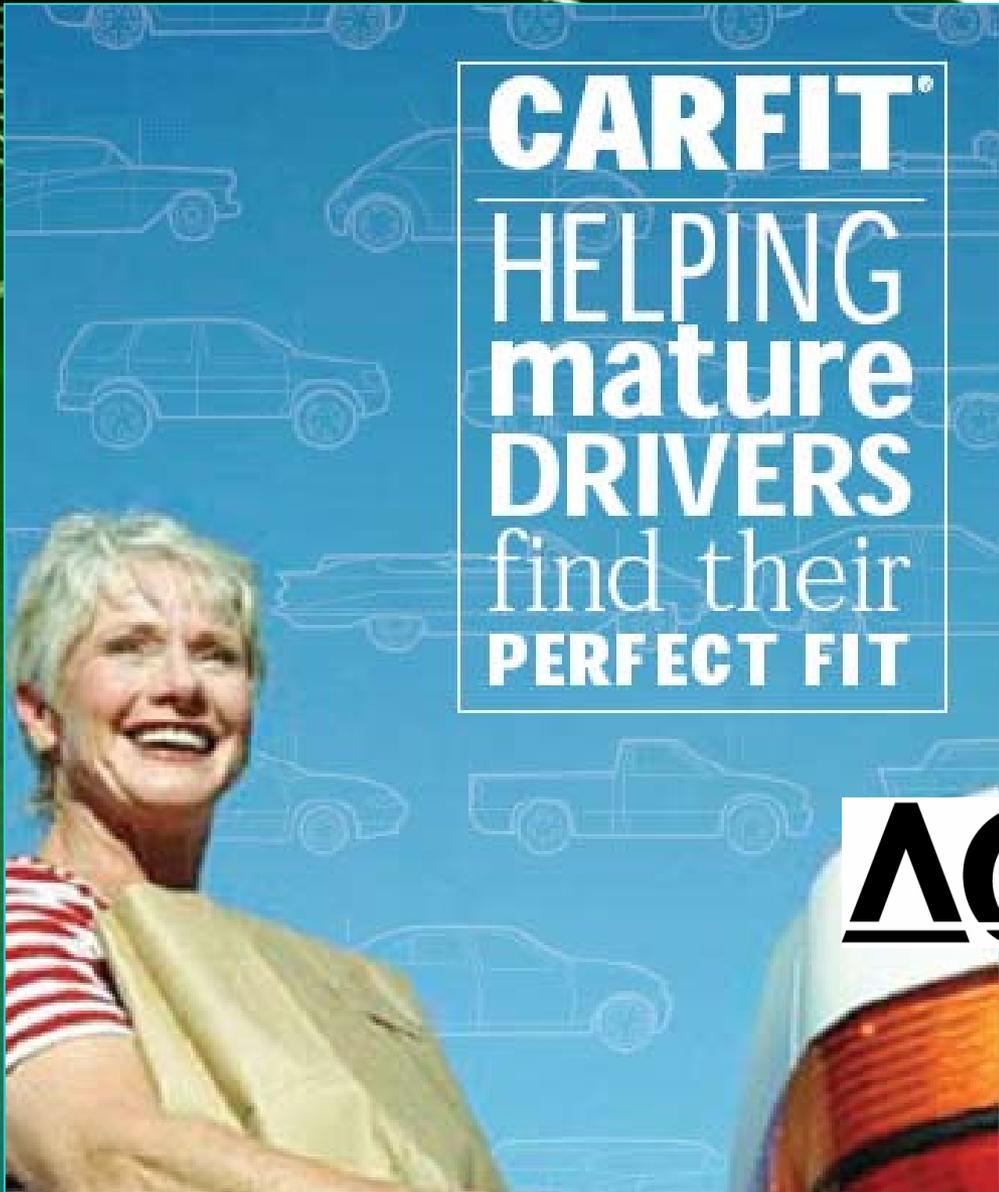


EDUCATIONAL OPPORTUNITIES

- **CarFit**
- **Roadwise Review**
- **AARP Driver Safety Course**
- **TIA Mature Driver Workshops**
- **Resource Counselors**
- **Senior Education and Awareness Toolkit**
- **Driving for Life Brochure**

AAA's GOAL FOR SENIOR MOBILITY:

- As the leading motorist advocate agency, AAA is dedicated to keeping drivers on the road as long as safely possible. When it is no longer possible to drive, AAA is committed to promoting viable alternative transportation programs.



CARFIT[®]
HELPING
mature
DRIVERS
find their
PERFECT FIT



AOA[®] The American
Occupational Therapy
Association, Inc.



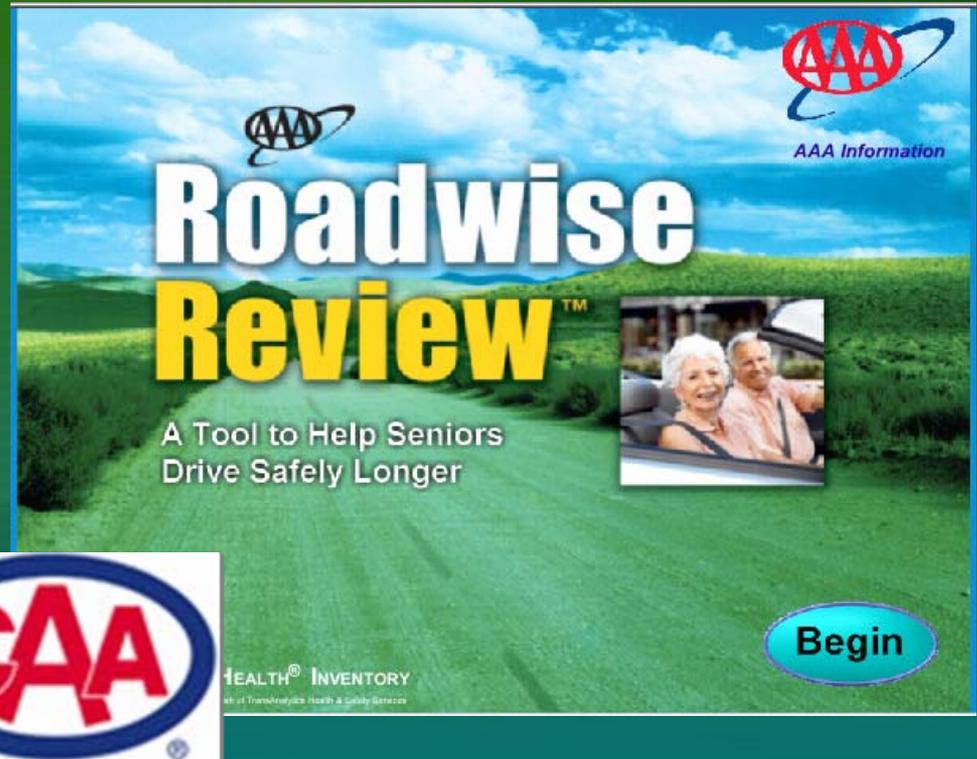
How is a CarFit[®] Check-Up Done?

- **Trained team of volunteers & health professionals work with senior driver participants.**
- **Pre-arranged 15 minute appointments assess the “fit” between the vehicle and the driver.**
- ***Red Flag* issues are brought to the attention of the OT for review.**

AAA Roadwise Review:

A Tool to Help Seniors Drive Safely Longer

- **State-of-the-Art Screening Tool developed by AAA**
- **Interactive CD-ROM**
- **Screens 8 factors important for driving**
- **Home-Based**
- **Developed with TransAnalytics**

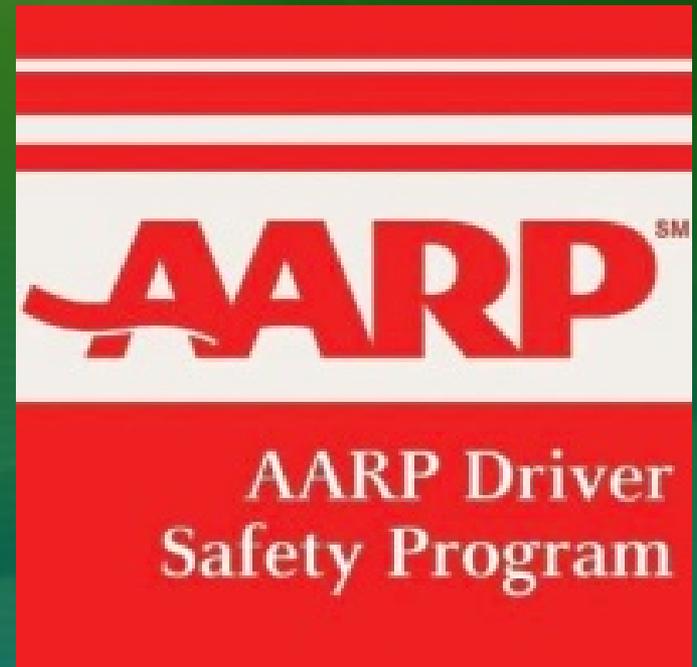


WHY HAS AAA CREATED *ROADWISE REVIEW*?

- In response to the changing demographics, AAA created *Roadwise Review* to help senior drivers stay safe.
- Also, there are cognitive and physiological changes that affect us all as we age. *Roadwise Review* can help identify these changes before they become evident on the road.

AARP Driver Safety Course

- In Michigan 3500-4000 “graduates” per year in classroom setting.
- On line 3-4 times more complete the class



TIA MATURE DRIVER WORKSHOP

PHILOSOPHY

 **STAY ON ROAD AS LONG AS SAFELY POSSIBLE**

PURPOSE

 **SELF-EVALUATION -
VOLUNTARY & CONFIDENTIAL**

OBJECTIVES

-  **DRIVER IMPROVEMENT PROGRAM**
-  **PYSCO-PHYSICAL EVALUATIONS**
-  **ON-ROAD EVALUATION**

RESOURCE COUNSELORS

- **Personal planning instead of forced planning.**
- **Plan for continued mobility, no matter what option is chosen.**
- **Training other professionals.**
- **Counselors will be certified through the Aging Information Resource Specialist.**

TOOLKIT PROJECT

- **Effects of Aging on Driving**
- **Safe Driving Practices**
- **Roadway Navigational Enhancements**
- **Transportation Options**
- **Driver Retraining Programs**
- **Self-Assessment Resources**

DEPARTMENT OF STATE GUIDE

Driving for Life

A Guide
for Older Drivers
and their
Families

- Assist in understanding the Department's role in licensing
- Provide suggestions to help maintain driving skills
- Provide tips on alternative transportation
- Available in Secretary of State branch offices and at www.Michigan.gov/sos



CHALLENGES

- **Dollars**
- **Non Regional Transit Availability**
- **Awareness/Education**
- **Lack of Program Integration**
- **Silo Thinking**

Remember this

- **What we are doing for the older driver actually improves the transportation system for everyone**

IN ESSENCE

- **These are some of the things Michigan has done.**
- **What can you do next**
 - Literature review
 - Navigation: Street and guide signs—clear view font
 - Inventory: transportation service providers
 - Assessment: how senior friendly is your community
 - Relocate or remove left turn to simplify the turning movement
 - Install 12” signal lenses
 - One signal head centered over each lane of traffic