EVERY MOVE YOU MAKE
TOWARD ZERO DEATHS
The one thing that unites all human beings, regardless of age, gender, religion, economic status, or ethnic background, is that, deep down inside, we all believe we are above-average drivers.

— Dave Barry
What does it take to make it safe? It starts with you!
Fatalities & Serious Injuries
2008-2017

*This number will rise as 2017 crash data is finalized by law enforcement.*
The Economy is a Factor

Travel increase in Ohio: 5%

Stable Gas Prices
Fatalities per Emphasis Area
2008-2017

- Roadway Departure: 5633
- Restraints Not Used: 3911
- Driver/Occupants: 
- Alcohol-related Involvement: 3695
- Young Driver Involvement: 3428
- (15-25): 
- Speed-related Involvement: 3433
- Intersection: 2659
- Older Driver Involvement: 2214
- (Over 64): 
- Motorcycle Passenger/Driver: 1662
- Commercial Motor Vehicle (CMV) Involvement: 1559
- Pedestrian Involvement: 1093
- Rear End: 558
- *Distracted Drivers: 300
- Work Zone Related: 189
- Bicycle Involvement: 178
- Railroad Crossing: 69

*The number of distracted drivers is underreported. Few people will admit to it, and it's more difficult to prove.*
Overview of Older Driver Crashes
2008-2017

SERIOUS INJURIES

FATALITIES
Overview of Pedestrian Crashes
2008-2017

SERIOUS INJURIES
FATALITIES
Overview of Distracted Driving Crashes 2008-2017

*Ohio has changed its crash report form in 2012 to encourage officers to report specific distractions.

** Distracted driving total crashes will likely increase as more law enforcement agencies finalize crash data from 2017.
Drug Related Traffic Fatalities
2008-2017

*This number will rise as 2017 crash data is finalized by law enforcement.*
National Trends
Total Fatalities
2007-2016

Source: FARS
## Leading Cause of Death

<table>
<thead>
<tr>
<th>RANK</th>
<th>INFANTS UNDER 1</th>
<th>TODDLERS 1-3</th>
<th>YOUNG CHILDREN 4-7</th>
<th>CHILDREN 8-15</th>
<th>YOUTH 16-20</th>
<th>YOUNG ADULTS 21-24</th>
<th>OTHER ADULTS 25-34</th>
<th>OTHER ADULTS 35-44</th>
<th>OTHER ADULTS 45-64</th>
<th>ELDERLY 65+</th>
<th>ALL AGES</th>
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<tbody>
<tr>
<td>1</td>
<td>Suffocation 1,125</td>
<td>Poisoning 316</td>
<td><strong>MV Traffic Crashes 279</strong></td>
<td><strong>MV Traffic Crashes 744</strong></td>
<td><strong>MV Traffic Crashes 3114</strong></td>
<td><strong>MV Traffic Crashes 3415</strong></td>
<td>Poisoning 11,231</td>
<td>Poisoning 10,580</td>
<td>Poisoning 19,452</td>
<td>Falls 28,486</td>
<td>Poisoning 47,478</td>
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<tr>
<td>2</td>
<td><strong>MV Traffic Crashes 57</strong></td>
<td><strong>MV Traffic Crashes 249</strong></td>
<td>Drowning 163</td>
<td>Drowning 160</td>
<td>Poisoning 1075</td>
<td>Poisoning 2820</td>
<td><strong>MV Traffic Crashes 6281</strong></td>
<td><strong>MV Traffic Crashes 4652</strong></td>
<td><strong>MV Traffic Crashes 10,043</strong></td>
<td><strong>MV Traffic Crashes 6165</strong></td>
<td><strong>MV Traffic Crashes 35,092</strong></td>
</tr>
<tr>
<td>3</td>
<td>Drowning 30</td>
<td>Suffocation 120</td>
<td>Fire/Burn 71</td>
<td>Other Land Transport 80</td>
<td>Drowning 261</td>
<td>Drowning 210</td>
<td>Drowning 445</td>
<td>Falls 492</td>
<td>Falls 3802</td>
<td>Unspecified 5204</td>
<td>Unspecified 33,381</td>
</tr>
</tbody>
</table>
Proportion of Fatalities by Road User

1975-2015

INSIDE VEHICLE: Occupants of cars, light trucks, buses and other vehicles

OUTSIDE VEHICLES: Motorcycles, pedestrians, bicyclist and non-occupants

Source: FARS
Unbelted Passenger Vehicle Occupant Fatalities
2007-2016

Source: FARS
Alcohol-Impaired Driving Fatalities
2007-2016

Source: FARS
Speeding-Related Fatalities
2007-2016

Source: FARS
Pedestrian Fatalities
2007-2016

Source: FARS
Change in Fatalities and % Change
2015 to 2016 by NHTSA Region

- Vehicle Research and Test Center
- Regional Headquarters

Source: USDOT, NHTSA
Today’s Trends
Driverless Vehicles
How Does It Work?

Driverless car features

**Lidar**
Accurate within 2 cm, the Lidar is a rooftop ranging system that takes a 360-degree picture of the car's surroundings.

**Radar**
Prevent accidents by detecting obstructions in the car's blind spots.

**Lane guidance**
Recognizes lane markings and knows the difference between the road surface and boundary lines.

**Stereo vision**
Creates a real-time 3D image of the road ahead using two windshield-mounted cameras.

**Infrared camera**
Extends vision at night with these infrared headlamps.
Initiatives

- US 33 Smart Mobility Corridor
- Interstate 90 Lake Effect Corridor
- Interstate 670 Smart Lane
- Interstate 80 - Ohio Turnpike
- Connected Marysville
- Smart Columbus
The evolution of driverless cars

The motorist dream of having fully automated vehicles on the road inches toward reality.

0. No automation
A human driver performs all driving tasks.

1. Drive assistance
Driver-assistance system either steers or controls speed using information about the driving environment. A driver is expected to perform all other aspects of driving.

2. Partial automation TODAY
One or more driver-assistance systems both steer and control speeds using information about the driving environment. A driver is still expected to perform all other aspects of driving.

3. Conditional automation 5-10 YEARS
An automated driving system can perform most tasks, but there's an expectation that a passenger will respond to a request to intervene.

4. High automation 5-10 YEARS
An automated driving system can perform all tasks, even if a passenger does not respond to a request to intervene.

5. Full automation 10+ YEARS
The automated driving system performs all driving tasks, full time, under all road and environment conditions that can be managed by a human driver.

Source: MarketWatch research, SAE International
The most unpredictable part of the car is the driver.
Eliminate 9 in 10 Crashes
Other Benefits
Advantages for Ohioans

- 247K Blind Ohioans
- 1.2M Under Age 65 Cognitive or Physical Disabilities
- 1.2M Aging Driver Over Age 65
- 1.7M Economically Disadvantaged
Driverless Cars

Driverless cars promise far greater mobility for the elderly and people with disabilities

https://www.youtube.com/watch?v=OXRQ7SMn0wl
According to this, in only a few years' time, we'll be able to buy driverless cars.

But who would want a driverless car?

Driving

Woof?
The Nation is Getting Older
Silver Tsunami

Scripps Gerontology Center 2015
Overview of Older Driver Crashes
2008-2017

[Graph showing the number of older driver crashes from 2008 to 2017, with data points for serious injuries and fatalities for each year.]

SERIOUS INJURIES  FATALITIES
Battle of the Ages: Who is a better driver?
Driving is a Lifeline
“Normal” Aging

- Vision
- Strength, flexibility and reflexes
- Health conditions like arthritis
- Memory
Self-Regulating

- Limit or cease night driving
- Compensate for decreased reaction time
- Travel off-peak
- Avoid in-car distractions
- Plan ahead
Medical Conditions

- Diabetes
- Stroke
- Dementia

These conditions and fitness to drive should be evaluated by a medical professional.
Medications

- Older adults take more medications.
- May be more susceptible to adverse or strong reactions.
Driving Spectrum

ACT TO MAXIMIZE ABILITY

SAFE DRIVERS
- FULLY ABLE TO DRIVE
- SPECIFIC FUNCTIONAL IMPAIRMENTS

ACT TO PROMOTE DRIVING RETIREMENT

UNSAFE DRIVERS
- SERIOUS IMPAIRMENT OF MOBILITY, VISION OR COGNITION
- UNABLE TO CONTINUE DRIVING
WE’RE AGING, BUT WE HAVE ANSWERS, TO STAY —

FIT TO DRIVE
Distracted Driving
Overview of Distracted Driving Crashes
2008-2017

- Ohio has changed its crash report form in 2012 to encourage officers to report specific distractions.
- Distracted driving total crashes will likely increase as more law enforcement agencies finalize crash data from 2017.
Research
2016

Crashes with phone records show increased in risk

Conversation restricts visual processing - attention

Drivers on cell phones drive worse than drunk drivers
Conversation Restricts Vision

No cell

Cell
Conversation Restricts Vision
Conversation Restricts Vision
We fool ourselves ...

Our View: A Complex Computer

Reality …
Conversation Restricts Vision

![Brain scans comparing driving alone vs. driving with sentence listening.](image)
Phones are Addictive
How Addictive?

Users tapped, swiped and clicked a whopping 2,617 times each day, on average.

At 7AM, touches explode, ramping up almost continuously until dinner time.
Proximity Matters
“Do Not Disturb”

<table>
<thead>
<tr>
<th>Feature</th>
<th>LifeSaver</th>
<th>AT&amp;T DriveMode</th>
<th>TrueMotion Family</th>
<th>Mojo</th>
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<tbody>
<tr>
<td>Sends Parent Notifications</td>
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<tr>
<td>Tracks Safe Miles Driven</td>
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<tr>
<td>Rewards Safe Driving</td>
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<tr>
<td>Location Sharing</td>
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<td></td>
<td></td>
<td>✔️</td>
</tr>
</tbody>
</table>

Download Links
- **LifeSaver**: [Download on the App Store](#)
- **AT&T DriveMode**: [Download on the App Store](#)
- **TrueMotion Family**: [Download on the App Store](#)
- **Mojo**: [Download on the App Store](#)
Leadership

You have our backs, we have yours. Never drive distracted. I lead by example.

No matter what wheel I'm behind, I never drive distracted. I lead by example.

I never drive distracted. I lead by example.
Leadership

We never drive distracted. **We lead by example.**

I only take calls when I’m NOT driving. **I lead by example.**
Strategies
Distracted Driving Task Force
WE’RE AGING, BUT WE HAVE ANSWERS, TO STAY —

FIT TO DRIVE
Drivers Education

Which lane should you be in if you want to head west on Cherry Street from South Spring Street?

- Left Lane
- Right Lane

Submit

Good job!
Your answer was correct!

Continue
Freeway Message Signs

GOT SOMETHING TO SAY?
Show your support for safety. Submit an idea.

Have something to say to Ohio drivers that could save a life? Submit a safety message. Watch for the winning submission on Ohio’s freeway message boards.

YOUR MESSAGE HERE

SUBMISSION FORM

Your Message* (3 lines, 17 characters per line)

THINGS TO KNOW BEFORE SUBMITTING:

- Due to the size of the signs, your submission is has a character limit. A highway message can’t be longer than 51 characters (17 characters for each of the three lines).
Traffic Safety to People Safety
Michelle May
Ohio Department of Transportation
614.644.8309
Michelle.May@dot.ohio.gov