U.S. Motor Vehicle Deaths and Rates
1993-2016

Per 100 million vehicle miles

Deaths

Road to Zero

Mileage Death Rate
Motor-Vehicle Fatalities
## Motor Vehicle Crashes: Leading cause of death throughout our lives

<table>
<thead>
<tr>
<th></th>
<th>1-4</th>
<th>5-14</th>
<th>15-24</th>
<th>25-34</th>
<th>35-44</th>
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<tbody>
<tr>
<td>1</td>
<td>Congenital anomalies</td>
<td>MV Overall</td>
<td>MV Overall</td>
<td>Suicide</td>
<td>Cancer</td>
<td>Cancer</td>
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<tr>
<td>2</td>
<td>MV Overall</td>
<td>Cancer</td>
<td>Suicide</td>
<td>MV Overall</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
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<td>Cancer</td>
<td>Suicide</td>
<td>Homicide</td>
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<td>4</td>
<td>Homicide</td>
<td>Congenital anomalies</td>
<td>Cancer</td>
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<td>MV Overall</td>
<td>Liver Disease</td>
</tr>
<tr>
<td>5</td>
<td>Heart Disease</td>
<td>Homicide</td>
<td>Heart Disease</td>
<td>Heart Disease</td>
<td>Homicide</td>
<td>Diabetes</td>
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<tr>
<td>6</td>
<td>Flu/Pneumonia</td>
<td>Heart Disease</td>
<td>Congenital anomalies</td>
<td>Liver Disease</td>
<td>Liver Disease</td>
<td>MV Overall</td>
</tr>
<tr>
<td>7</td>
<td>Septicemia</td>
<td>CLRD</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Diabetes</td>
<td>Stroke</td>
</tr>
<tr>
<td>8</td>
<td>Perinatal</td>
<td>Stroke</td>
<td>CLRD</td>
<td>Stroke</td>
<td>Stroke</td>
<td>CLRD</td>
</tr>
<tr>
<td>9</td>
<td>Stroke</td>
<td>Flu/Pneumonia</td>
<td>Flu/Pneumonia</td>
<td>HIV</td>
<td>HIV</td>
<td>Septicemia</td>
</tr>
<tr>
<td>10</td>
<td>CLRD</td>
<td>Septicemia</td>
<td>C. Pregnancy</td>
<td>C. Pregnancy</td>
<td>Septicemia</td>
<td>Homicide</td>
</tr>
</tbody>
</table>
Motor Vehicle Crashes
#1 cause of death for ages 5-24
IN OUR LIFETIME, HOW DO WE SHIFT CULTURE
Percentage of Adults Who Smoke Cigarettes: 1965-2014
Rail worker deaths - Almost Zero

Railroad Employee on Duty Fatalities
Commercial Aviation Is at Zero

2017 safest year on record for commercial passenger air travel: groups

Airliner Accidents Per 1 Million Flights 1977-2016

Statistics are based on all worldwide fatal accidents involving civil aircraft with a minimum capacity of 14 passengers, from the ASN Safety Database: https://aviation-safety.net
CAN WE MAKE A DIFFERENCE?

WHAT IS THE RIGHT NUMBER?

100+
Deaths per day in the US

ROAD TO ZERO
Double Down on What Works
Accelerate Technology
Prioritize Safety
DOUBLE DOWN ON WHAT WORKS

Advance Proven Counter-Measures

ROAD TO ZERO
DOUBLE DOWN ON WHAT WORKS

ROAD TO ZERO

SEAT BELTS WORK AND WE'VE GOT PROOF.

IN 2015, SEAT BELTS SAVED ALMOST 14,000 LIVES.

*EACH PERSON REPRESENTS 1,000
Seat Belt Use: 1981-2016
ACCELERATE TECHNOLOGY

3 Existing Technologies Can Save 10,000 Lives

- Forward Collision Warning
- Lane Departure Warning
- Blind Spot Monitor
The Levels of Autonomous Vehicles

- Level 0: HUMAN ONLY
  - The driver (human) controls everything: steering, brakes, throttle, power

- Level 1: MODERN VEHICLE
  - Most functions are still controlled by a driver, but some (like braking) can be done automatically by the car

- Level 2: MODERN PLUS
  - At least 2 functions are automated (like cruise control & lane-centering), but the driver must be ready to take control of the vehicle

- Level 3: PARTIAL AUTONOMY
  - Drivers are still necessary, but are not required to monitor the situation as with previous levels

- Level 4: FULL AUTONOMY (+ HUMAN)
  - Vehicles perform all safety-critical driving functions and monitor roadway conditions for an entire trip, with option for human driving

- Level 5: FULL AUTONOMY (NO HUMAN)
  - No option for human driving - no steering wheel or controls

http://www.techrepublic.com/article/autonomous-driving-levels-0-to-5-understanding-the-differences/
PRIORITIZE SAFETY

CREATE A SAFE SYSTEMS APPROACH TO SHIFT CULTURE
## 2017 Road to Zero Grant Recipients

<table>
<thead>
<tr>
<th>Organization</th>
<th>Grant Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chicago DOT</td>
<td>Vision Zero Garfield Park: City of Chicago</td>
</tr>
<tr>
<td>Los Angeles PD</td>
<td>Vision Zero – Priority Corridor Safety Details</td>
</tr>
<tr>
<td>National Association for County Engineers</td>
<td>Advancing Local Road Safety Practices with State DOTs</td>
</tr>
<tr>
<td>National Complete Streets Coalition</td>
<td>Safe Streets Academy</td>
</tr>
<tr>
<td>Roadway Safety Foundation</td>
<td>usRap Across America</td>
</tr>
<tr>
<td>San Francisco Metropolitan Transportation Agency</td>
<td>Vision Zero – Distracted Driving</td>
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</table>

**TOTAL** $1,000,000
WHAT CULTURE CHANGE LOOKS LIKE in NYC

All Traffic Fatalities Before & After Vision Zero

<table>
<thead>
<tr>
<th>Year</th>
<th>Before Vision Zero</th>
<th>After Vision Zero</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>260</td>
<td>258</td>
</tr>
<tr>
<td>2010</td>
<td>271</td>
<td>234</td>
</tr>
<tr>
<td>2011</td>
<td>249</td>
<td>230</td>
</tr>
<tr>
<td>2012</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td>2013</td>
<td>299</td>
<td></td>
</tr>
</tbody>
</table>

5 year average pre-VZ: 271

2016 vs pre VZ: -16%

Data as of 1/20/17
LEARNING FROM VISION ZERO

Bay St
Staten Island
Pedestrian Safety Improvements

Before
After
65% of all deaths and severe injuries involving people walking occur on just 6% of our streets.
PRIORITIZE SAFETY

THE GOLDEN HOUR
43% of fatal motor vehicle crash victims reach a hospital alive

NHTSA, 2016

EMERGENCY RESPONSE
Trauma Center Access by Helicopter

Source: TraumaMaps.org
PRIORITIZE SAFETY
THE FUTURE OF ZERO

Your car is not a phone booth. Just drive.

Traffic Sign Recognition
Drowsiness Detection & Eye Gaze Detection
Lane Departure & Pedestrian detection
Surround View Camera
Back Over Prevention

Road to Zero
GETTING TO ZERO | HOW WE CAN MAKE A DIFFERENCE
WHY ZERO IS THE GOAL
DESTINATION | ZERO

2018 Safe System Innovations Grant Winners
## 2018 Grant Recipients

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<tr>
<td><strong>America Walks / UNC</strong></td>
<td>Accelerating Adoption of Safer Systems for All Road Users</td>
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<tr>
<td>Bicycle Colorado</td>
<td>Bicycle-Friendly Driver and Confident Commuting Program</td>
</tr>
<tr>
<td>Center for Latino Progress</td>
<td>Cooperative Community Crash Reduction, Hartford CT</td>
</tr>
<tr>
<td>City of Boston</td>
<td>Boston's Safest Driver</td>
</tr>
<tr>
<td>Lorain County Public Health</td>
<td>Lorain Active Transportation Collaborative</td>
</tr>
<tr>
<td>NORC - University of Chicago</td>
<td>Underutilized Strategies in Traffic Safety</td>
</tr>
<tr>
<td>Texas A&amp;M University / Houston Methodist Hospital</td>
<td>A systems approach to reduce drowsy driving among night-shift nurses</td>
</tr>
<tr>
<td>University of Alabama at Birmingham / Safe Kids Worldwide</td>
<td>Improving Child Restraint Installation in Rural America through Interactive Virtual Presence</td>
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UPCOMING MEETINGS

May 3 - IIHS Tour
Sign up: NSC.org/RoadToZero

June 28 - 1 – 4pm
Location: NTSB