NO TRAFFIC DEATHS BY 2030 IN MONTGOMERY COUNTY

VISION ZERO

NO TRAFFIC DEATHS BY 2030 IN MONTGOMERY COUNTY

OUR PLAN TO ELIMINATE FATALITIES AND SEVERE INJURIES ON OUR ROADS BY 2030

TWO-YEAR ACTION PLAN • PRESENTATION TO MID-COUNTY CAB • 09/25/18
WHAT IS VISION ZERO?
1. Transportation–related deaths and severe injuries are **preventable and unacceptable**.

2. **Human life takes priority over mobility** and other objectives of the road system. The road system should be safe for all users, for all modes of transportation, in all communities, and for people of all ages and abilities.

3. Human **error is inevitable**; the transportation system should be designed to anticipate error so the consequences are not severe injury or death.

4. People are inherently vulnerable, and **speed is a fundamental predictor of crash survival**. The transportation system should be designed for speeds that protect human life.

5. **Safe human behaviors**, education, and enforcement are essential contributors to a safe system.

6. **Policies and practices at all levels of government need to align**, making safety the highest priority for roadways.

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**Pedestrian Chance of Survival by Vehicle Speed**

<table>
<thead>
<tr>
<th>Hit by a Vehicle Traveling at:</th>
<th>20 MPH</th>
<th>30 MPH</th>
<th>40 MPH</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 out of 10 pedestrians survive</td>
<td>5 out of 10 pedestrians survive</td>
<td>Only 1 out of 10 pedestrians survive</td>
<td></td>
</tr>
</tbody>
</table>

Graphic courtesy of: Vision Zero Network
HOW IS VISION ZERO DIFFERENT?

**TRADITIONAL APPROACH**
- Traffic deaths are INEVITABLE
- PERFECT human behavior
- Prevent COLLISIONS
- INDIVIDUAL responsibility
- Saving lives is EXPENSIVE

**VISION ZERO**
- Traffic deaths are PREVENTABLE
- Integrate HUMAN FAILING in approach
- Prevent FATAL AND SEVERE CRASHES
- SYSTEMS approach
- Saving lives is NOT EXPENSIVE

Graphic courtesy of: [Vision Zero Network](http://VisionZeroNetwork.org)
A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged

Updated
January 2018
Graphic courtesy of: Planning Dept. (Draft design, not official)
CREATING COMPLETE STREETS

PEDESTRIAN SCRAMBLE

Photo Credit: Flickr/tilex, Licensed under Creative Commons

PROTECTED BIKE LANES

Photo Credit: MCDOT, Used with permission

PEDESTRIAN HYBRID SIGNALS (HAWK BEACON)

Photo Credit: Wikimedia/KJBurns, Licensed under Creative Commons

SIGNAL TIMING

LIGHTING
Vision Zero – Sweden's Results vs. US

Traffic Fatalities per 100,000 Population

Year


US

15.9 10.9

SWEDEN

6.5 2.7
PEDESTRIAN SAFETY INITIATIVE
PREVIOUS ROADWAY SAFETY EFFORTS

2002 Blue Ribbon Panel

Montgomery County Blue Ribbon Panel
On Pedestrian and Traffic Safety

FINAL REPORT

Setting Safety in Motion:
Recommendations for Creating Walkable Communities
in Montgomery County, Maryland

Delegate William A. Bronrott, Chair
January 2002

www.co.md.us

2007 Pedestrian Safety Initiative

Montgomery County Executive Isiah Leggett
Pedestrian Safety Initiative
December 2007
RESULTS FROM PEDESTRIAN SAFETY INITIATIVE

Collisions per 100k Population

Pre-Initiative

Post-Initiative

Total Collisions
Severe and Fatal Collisions
Fatalities


12.6 15.1 13.1 12.3 13.8 12.2 10.4 8.2 8.4 7.4 7.1 5.0 6.8

1.1 1.9 1.7 2.0 1.5 1.2 1.1 0.6 1.3 0.9 1.3 0.8 1.0

0 5 10 15 20 25 30 35 40 45 50


Total Collisions
Severe and Fatal Collisions
Fatalities
VISION ZERO
2-YEAR ACTION PLAN
### DATA ANALYSIS – 5 YEAR TREND

#### Severe Collisions

<table>
<thead>
<tr>
<th>Year</th>
<th>Vehicle Occupant</th>
<th>Pedestrian</th>
<th>Cyclist</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>319</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>2013</td>
<td>298</td>
<td>72</td>
<td>15</td>
</tr>
<tr>
<td>2014</td>
<td>262</td>
<td>15</td>
<td>67</td>
</tr>
<tr>
<td>2015</td>
<td>213</td>
<td>63</td>
<td>11</td>
</tr>
<tr>
<td>2016</td>
<td>201</td>
<td>44</td>
<td>17</td>
</tr>
</tbody>
</table>

#### Fatal Collisions

<table>
<thead>
<tr>
<th>Year</th>
<th>Vehicle Occupant</th>
<th>Pedestrian</th>
<th>Cyclist</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012</td>
<td>12</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>2013</td>
<td>17</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>2014</td>
<td>23</td>
<td>23</td>
<td>9</td>
</tr>
<tr>
<td>2015</td>
<td>23</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>2016</td>
<td>19</td>
<td>11</td>
<td>3</td>
</tr>
</tbody>
</table>
REDUCTION TARGETS

Year | Target | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030

| 2018 | -20% | 60 | 49 | 45 | 41 | 38 | 30 | 23 | 19 | 15 | 11 | 8 | 4 | 0
| 2019 | -35% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2020 | -40% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2021 | -45% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2022 | -50% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2023 | -60% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2024 | -70% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2025 | -75% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2026 | -80% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2027 | -85% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2028 | -90% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2029 | -95% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0
| 2030 | -100% | 14 | 11 | 10 | 10 | 9 | 7 | 5 | 4 | 3 | 2 | 2 | 1 | 0

End of 2-Year Plan: 35% Reduction
Halfway to 2030: 70% Reduction
Vision Zero: 100% Reduction

Severe and Fatal Collisions
The High Injury Network (HIN) identifies roadway segments that have a higher amount of crashes (at least one crash per mile per year) relative to the amount of traffic on that road. MCDOT will use this initial list to identify roadways for engineering improvements.
The High Injury Network (HIN) roadways of concern in Mid-County are mainly located in Wheaton, Glenmont, and Aspen Hill. With the exceptions of Bel Pre Rd, Crabbs Branch Way, and E Gude Dr, and Shady Grove Rd, these HIN roadways are controlled and maintained by the State Highway Administration.
Crash Density was higher in neighborhoods with:

- Higher Percentage of households that speak English less than “very well”
- Higher Percentage of population that is Hispanic or Latino
- Higher Percentage of households below the poverty level
- Lower Median age
<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Key Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Engineering</strong></td>
<td>Design facilities that prioritize safety above all else</td>
<td>Reductions in severe and fatal collisions in High Injury Network (HIN)</td>
</tr>
<tr>
<td><strong>Enforcement</strong></td>
<td>Encourage safe behaviors using evidence-based high visibility enforcement</td>
<td>Hours of dedicated enforcement for factors contributing to severe and fatal collisions</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Engage the public to promote the importance of traffic laws and safe behaviors</td>
<td>Increased awareness of dangerous driving, biking, and walking behaviors</td>
</tr>
<tr>
<td><strong>Traffic Incident Management</strong></td>
<td>Ensure that when a collision occurs, prompt care is provided</td>
<td>Maintain response times for traffic collisions with injuries based on dept. standards</td>
</tr>
<tr>
<td><strong>Law, Policy, and Advocacy</strong></td>
<td>Improve the way traffic safety is managed by changing codes, laws, and policies that do not align with Vision Zero</td>
<td>Passage of significant laws and policies required to implement Vision Zero</td>
</tr>
</tbody>
</table>
TWO-YEAR ACTION PLAN – ENGINEERING

ENG-1: Crash Analysis

ENG-2: Update County Road Design Standards

ENG-3: Expand Road Safety Audits

ENG-4: Review Transit Stops

ENG-5: Redesign Trail Crossings

ENG-6: State/County Project Collaboration

ENG-7: Improve Pedestrian Signal Timing

ENG-8: Accelerate Sidewalk Building

ENG-9: Expand Low-Stress Bicycle Network
TWO-YEAR ACTION PLAN – ENFORCEMENT

ENF-1: Establish Collision Review Team
ENF-2: Increase Enforcement Activities
ENF-3: Expand Safety Camera Use
ENF-4: Improve Distracted Driving Detection
ENF-5: Collaboration with Court System
<table>
<thead>
<tr>
<th>Dangerous Behavior</th>
<th>Enforcement Activity</th>
<th>Effect on Crashes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drivers not yielding to pedestrians at crosswalks</td>
<td>Targeted driver enforcement at crosswalks</td>
<td>23% pedestrian crashes</td>
</tr>
<tr>
<td>Impaired driving</td>
<td>Publicized sobriety checkpoints</td>
<td>17% alcohol related crashes</td>
</tr>
<tr>
<td>Driver excessive speeding</td>
<td>Automated speed enforcement</td>
<td>19% reduction in severe collisions</td>
</tr>
</tbody>
</table>


If all U.S. communities had speed-camera programs like the one IIHS studied in Maryland's Montgomery County, more than **21,000 fatal or incapacitating injuries would have been prevented** in 2013.

-- IIHS Study of Montgomery County Automated Enforcement
EDU-1: Create Comprehensive Outreach Strategy

EDU-2: Expand Safe Routes to School Program

EDU-3: On-Bike Education Program for Kids

EDU-4: Fund Non-Profit Outreach

EDU-5: Outreach to County Employees

EDU-6: Cross-Departmental Team Building

EDU-7: Raise Awareness of Sleep and Safety

EDU-8: Future Technology Task Force

EDU-9: Training in the Community
TIM-1: Provide Prompt Emergency Medical Service

TIM-2: Devise Safe Incident Management Plan

TIM-3: Enhance Police Driver Training

TIM-4: Temporary Traffic Control Devices
<table>
<thead>
<tr>
<th>LPA-1: Change Policies, Regulations, and Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>LPA-2: Ensure Equity throughout Vision Zero Projects</td>
</tr>
<tr>
<td>LPA-3: Appoint Vision Zero Coordinator</td>
</tr>
<tr>
<td>LPA-4: Create Vision Zero Website</td>
</tr>
<tr>
<td>LPA-5: Create Vision Zero Feedback Map</td>
</tr>
<tr>
<td>LPA-6: Create Pedestrian Master Plan</td>
</tr>
<tr>
<td>LPA-7: Publish Collision Data</td>
</tr>
<tr>
<td>LPA-8: Improve Crash Data Collection</td>
</tr>
<tr>
<td>LPA-9: Establish Peer Learning Network</td>
</tr>
<tr>
<td>LPA-10: Review Existing Traffic Safety Programs</td>
</tr>
<tr>
<td>LPA-11: Work with Municipalities</td>
</tr>
<tr>
<td>LPA-12: Engage Outside Research Partners</td>
</tr>
<tr>
<td>LPA-13: Procure Safer Vehicles</td>
</tr>
<tr>
<td>LPA-14: Build the Ten-Year Action Plan</td>
</tr>
</tbody>
</table>

TWO-YEAR ACTION PLAN – LAW, POLICY, AND ADVOCACY
SHARED MISSION, SHARED ACCOUNTABILITY

- Monthly Steering Committee
- Quarterly Stakeholders Meeting
- Annual Progress Reports
- Annual Strategic Plan
Similarities:
• State that traffic collisions are tragic, preventable occurrences
• Use a data-driven process to identify needs and countermeasures on roadways
• Set interim and long-range reduction targets for severe and fatal traffic collisions
• Employ strategies built around engineering, education, enforcement, and emergency medical services
• Adopt similar focus areas

Differences:

<table>
<thead>
<tr>
<th>Montgomery County</th>
<th>Maryland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminate traffic fatalities by 2030</td>
<td>Reduce traffic fatalities by 50% by 2030 from 2008 baseline</td>
</tr>
<tr>
<td>Sets specific actions</td>
<td>Sets broad strategies</td>
</tr>
<tr>
<td>Each action has a deadline</td>
<td>No deadlines to implement strategies</td>
</tr>
</tbody>
</table>
Montgomery County Initiates VisionZero

Montgomery County will be one of the first county governments in the United States to initiate a Vision Zero plan. The County is putting resources in place to reduce severe and fatal collisions on County roads by 33 percent for vehicle occupants, bicyclists and pedestrians, by November 2019.

Read the Vision Zero Plan

WHAT IS VISION ZERO?

The Vision Zero concept was created in Sweden in 1997 and is widely credited for significant reductions in fatal and severe collisions on Sweden’s roads, despite increased driving, biking, and transit use. Vision Zero came to the US in 2000 with Washington State adopting its first Zero plan. In 2014, New York City became the first city to adopt Vision Zero, and the idea has since taken off. As of March 2017, Vision Zero has spread to 27 jurisdictions across the country. Vision Zero policies generally share six common principles:

1. Transportation-related deaths and severe injuries are preventable and unacceptable.
2. Human life takes priority over mobility and other objectives of the road system. The road system should

Copy of Plan: http://montgomerycountymd.gov/visionzero/

follow us on twitter

@VisionZeroMC
VISION ZERO PROJECTS IN MID-COUNTY
### FY19 – FY24 CIP Budget Increases for Vision Zero

<table>
<thead>
<tr>
<th>Project</th>
<th>FY19 – FY24 Increase</th>
<th>Project Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bethesda Bikeway and Pedestrian Facilities</td>
<td>$3,000,000</td>
<td>Construct new protected bicycle lanes in Downtown Bethesda to be known as &quot;Bethesda Loop&quot;.</td>
</tr>
<tr>
<td>Good Hope Road Sidewalk</td>
<td>$4,065,000</td>
<td>Construct new sidewalk including a new pedestrian bridge at the intersection of Hopefield Road.</td>
</tr>
<tr>
<td>Oak Drive/MD 27 Sidewalk</td>
<td>$1,416,000</td>
<td>Construct new sidewalk from the southern intersection with MD 27 to John T. Baker Middle School.</td>
</tr>
<tr>
<td>Bikeway Program Minor Projects</td>
<td>$4,920,000</td>
<td>Funding increase provides more substantial construction improvements.</td>
</tr>
<tr>
<td>Intersection and Spot Improvements</td>
<td>$1,312,000</td>
<td>Address additional intersections to address congestion relief and safety issues.</td>
</tr>
<tr>
<td>Pedestrian Safety</td>
<td>$3,600,000</td>
<td>Additional modifications to improve infrastructure for pedestrian and bicycle safety.</td>
</tr>
<tr>
<td>Traffic Signals</td>
<td>$3,000,000</td>
<td>Increase to address deficient Traffic Signals.</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$21,313,000</strong></td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Table above only shows enhanced or new project spending, not all CIP projects related to Vision Zero.
PROJECTS UNDERWAY OR PLANNED

- NEEDWOOD RD BIKE PATH
- WHEATON BiPPA DESIGN
- BEL PRE RD PRSA
- STREET OUTREACH IN WHEATON CBD
- VEIRS MILL RD REPAVING
- FOREST GLEN PASSAGEWAY
- NEW TRAFFIC SIGNALS & PED BEACONS
WHEN: Wednesday, September 26 from 6:30PM – 8:30PM
WHERE: Aspen Hill Library 4407 Aspen Hill Rd, Rockville, MD
WHY: This Vision Zero Study will be one component of an overall assessment of a variety of issues in the Aspen Hill area that will frame and inform future planning actions.
GET INVOLVED GATEWAY

Service Requests
Request a fix for current roads, sidewalks, lights, pedestrian and bicycle facilities, etc.
mc311.com

Safety Concerns
Bring to our attention unsafe facilities and behaviors in Montgomery County.

General Feedback
Let us know what you think about or how to improve Vision Zero Montgomery County.

Educational Resources
Learn about helpful safety tips that will help facilitate our Vision Zero goals.
Twitter @VisionZeroMC
visionzero@montgomerycountymd.gov
NO TRAFFIC DEATHS BY 2030
IN MONTGOMERY COUNTY
AGE OF PERSON KILLED OR SEVERELY INJURED

Drivers KSI per 100k Registered

- 13-19: 275
- 20-29: 256
- 30-39: 202
- 40-49: 181
- 50-59: 168
- 60-69: 155
- 70-79: 130
- 80+: 259

Pedestrians KSI per 100k pop.

- 0-9: 5
- 10-19: 31
- 20-29: 53
- 30-39: 34
- 40-49: 35
- 50-59: 39
- 60-69: 46
- 70-79: 43
- 80+: 47

Cyclists KSI per 100k pop.

- 0-9: 1
- 10-19: 18
- 20-29: 8
- 30-39: 8
- 40-49: 10
- 50-59: 6
- 60-69: 9
- 70-79: 5
- 80+: 5
**DATA ANALYSIS – COLLISIONS BY ROADWAY OWNER**

<table>
<thead>
<tr>
<th></th>
<th>State</th>
<th>County</th>
<th>Municipal</th>
<th>Parking Area</th>
<th>Private Drive</th>
<th>Other Public</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vehicle Occupants</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Severe and Fatal Collisions</td>
<td>57%</td>
<td>37%</td>
<td>3%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Pedestrians</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Severe and Fatal Collisions</td>
<td>44%</td>
<td>30%</td>
<td>6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Cyclists</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of Severe and Fatal Collisions</td>
<td>41%</td>
<td>49%</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>State</strong></th>
<th><strong>County</strong></th>
<th><strong>Municipal</strong></th>
<th><strong>Total</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lane Miles</td>
<td>1,167</td>
<td>4,877</td>
<td>773</td>
</tr>
<tr>
<td>Percent of Total</td>
<td>17%</td>
<td>72%</td>
<td>11%</td>
</tr>
</tbody>
</table>