



Angela D. Alsobrooks  
*County Executive*



Michael D. Johnson, P.E.  
*Director*

# Transportation, Infrastructure, Energy and Environment (TIEE) Committee

January 26, 2023



Angela D. Alsobrooks  
County Executive

# Core Services and Expertise



Michael D. Johnson, P.E.  
Director

## The Department of Public Works & Transportation provides an array of services



Director's Office  
- Communications  
- Vision Zero



Administrative Services



Engineering and  
Project Management



Highway Maintenance



Multimodal Transportation/  
Transit Services



Storm Drain Maintenance



Angela D. Alsobrooks  
County Executive

# DPW&T Operations



Michael D. Johnson, P.E.  
Director



Operates a transit system consisting of approximately 100 fixed-route buses and 60 paratransit vehicles, conducting ~3,000,000 passenger-trips annually

Increasing multimodal transportation options by redesigning for accessibility, connectivity and safety while creating a diverse range of travel options  
Implementation of Innovative Transportation solutions to establish a proactive posture to meet the demands for transportation within our County.



Transportation infrastructure includes 900 bridges along with sidewalks, curbs/gutters, driveway aprons, shoulders, and storm water management facilities  
Maintains 3,000 acres of grassy area in the County

Oversees more than 800 stormwater management facilities.  
Cares for more than 100,000 trees located in the County's right-of-way





Angela D. Alsobrooks  
County Executive

# PGC Transit Transformation Initiative



Michael D. Johnson, P.E.  
Director

The PGC Transit Transformation (PGCTT) Initiative encompasses:

- The Transit Vision Plan is a five-year plan for aligning and advancing citizen and stakeholder transit needs, initiatives, goals, and objectives
- WMATA is studying the County's system (TheBus) as part of the region wide Better Bus Network Redesign efforts
  - DPW&T partners with WMATA and meets with their planning consultants to develop recommendations
- Planning for a more expansive public outreach process when the Transit Vision Plan kicks off



DPW&T conducted a survey from October 7 to December 31, 2022. Received ~500 responses about the County's transit services, including:

- 30% of respondents do not have access to a vehicle
- 35% use transit services daily
- Over 80% use transit to commute for work
- Safety, reliability and affordability are key areas of focus





Angela D. Alsobrooks  
County Executive

# County's Zero Emission Bus (ZEB) Transition



Michael D. Johnson, P.E.  
Director

- DPW&T has committed to reducing the transit carbon footprint by having a 70% electric fleet by 2035
- DPW&T is coordinating efforts to launch the *Proud to Charge* initiative funded by the \$25 million USDOT FY22 Low and No Emission grant award from the Federal Transit Administration - ZEB includes a total of \$40 million from federal and state grants, plus local matching funds
- The *Proud to Charge* initiative includes:
  - Purchasing additional buses
  - Incorporation of in route charging infrastructure
  - Installation of a microgrid system
  - Improvement of electrical systems at the facility, and
  - Workforce development





Angela D. Alsobrooks  
County Executive

# Battery Electric Buses



Michael D. Johnson, P.E.  
Director

## Pilot Testing the Battery Electric Buses Underway

- Began October 31, 2023
- Includes 12 Battery Electric Buses on three routes; 51X (Upper Marlboro), 30 (Camp Springs/Clinton), and 15X (Greenbelt)

## Next Steps

- Anticipate delivery of 6 Battery Electric Buses, summer 2023
- Installation of charging infrastructure
- D'Arcy Road facility enhancements
- Design/build microgrid system
- Zero Emission Facility Needs Study







Angela D. Alsobrooks  
County Executive

# TheBus 2022 Fall Service Changes



Michael D. Johnson, P.E.  
Director

- Evaluate operational data
- Identify service gaps and deficiencies
- Engage riders, operators, and the public throughout the process



Routes	Fall 2022 Service Changes Implemented
15x - Greenbelt to New Carrollton Metro	40-minute frequency Route operates 6-10am and 3-7pm
Schedule Adjustments	
18 – Langley Park/Addison Road Metro	Time adjustments
21 – New Carrollton/Upper Marlboro	Change bus frequencies
51X – Equestrian Center/ Courthouse	Increase frequencies
34 – Suitland Metro	Add midday service



Angela D. Alsobrooks  
County Executive

# Recent Transit Accomplishments



Michael D. Johnson, P.E.  
Director

Federal Transit Administration and State Grant Awards	Award Amount	Local Match	Grand Total
2019 Low-No Emissions	2.2M	4.4K	2.6M
2019 Volkswagen Mitigation	2.4M		2.4M
2021 Low-No Emission	\$5.2M	1.4M	6.2M
2022 Bus and Bus Facility	\$25M	5M	30M

- DPW&T has been awarded over \$40 million in federal and state grants.
- Funding supports zero emission fleet transitions including infrastructure charging, microgrid, facility upgrades, and workforce development.

Industry Awards	Entity
Transit System of the Year, 2022	Transportation Association of Maryland
Transit Driver of the Year, 2022	Transportation Association of Maryland
Transit Fleet of the Year, 2022	Greater Washington Region Clean Cities Coalition







Angela D. Alsobrooks  
County Executive

# Capital Improvement Projects



Michael D. Johnson, P.E.  
Director



Storm Drain  
Improvement  
and Culvert  
Repair



Bridge Repair,  
Reconstruction  
And  
Construction



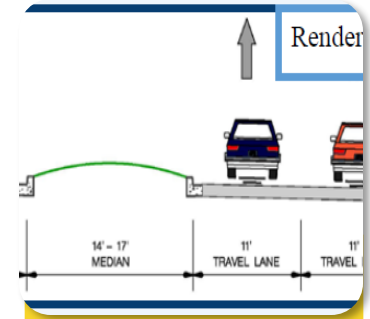
Intersection,  
Traffic Signal  
and Street  
Light  
Improvements



Roadway  
Improvements  
and  
Maintenance  
of Traffic



Sidewalk,  
Pedestrian  
Access and  
Bikeshare



Project  
Planning and  
Developer  
Projects



Angela D. Alsobrooks  
County Executive

# Enhanced Focus on Safety



Michael D. Johnson, P.E.  
Director

## National Roadway Safety Strategy

The United States Department of Transportation National Roadway Safety Strategy (NRSS) outlines the Department's comprehensive approach to significantly reducing serious injuries and deaths on our Nation's highways, roads, and streets. This is the first step in working toward an ambitious long-term goal of reaching zero roadway fatalities.



## Call to Action / More Opportunities

- Vision Zero Prince George's – Safe System Approach
- Safe Streets and Roads for All – Grant Application (7 roadway projects)
- Bridge Investment
- Economic Development in the Region





Angela D. Alsbrooks  
County Executive

# Capital Projects Overview – Public Map



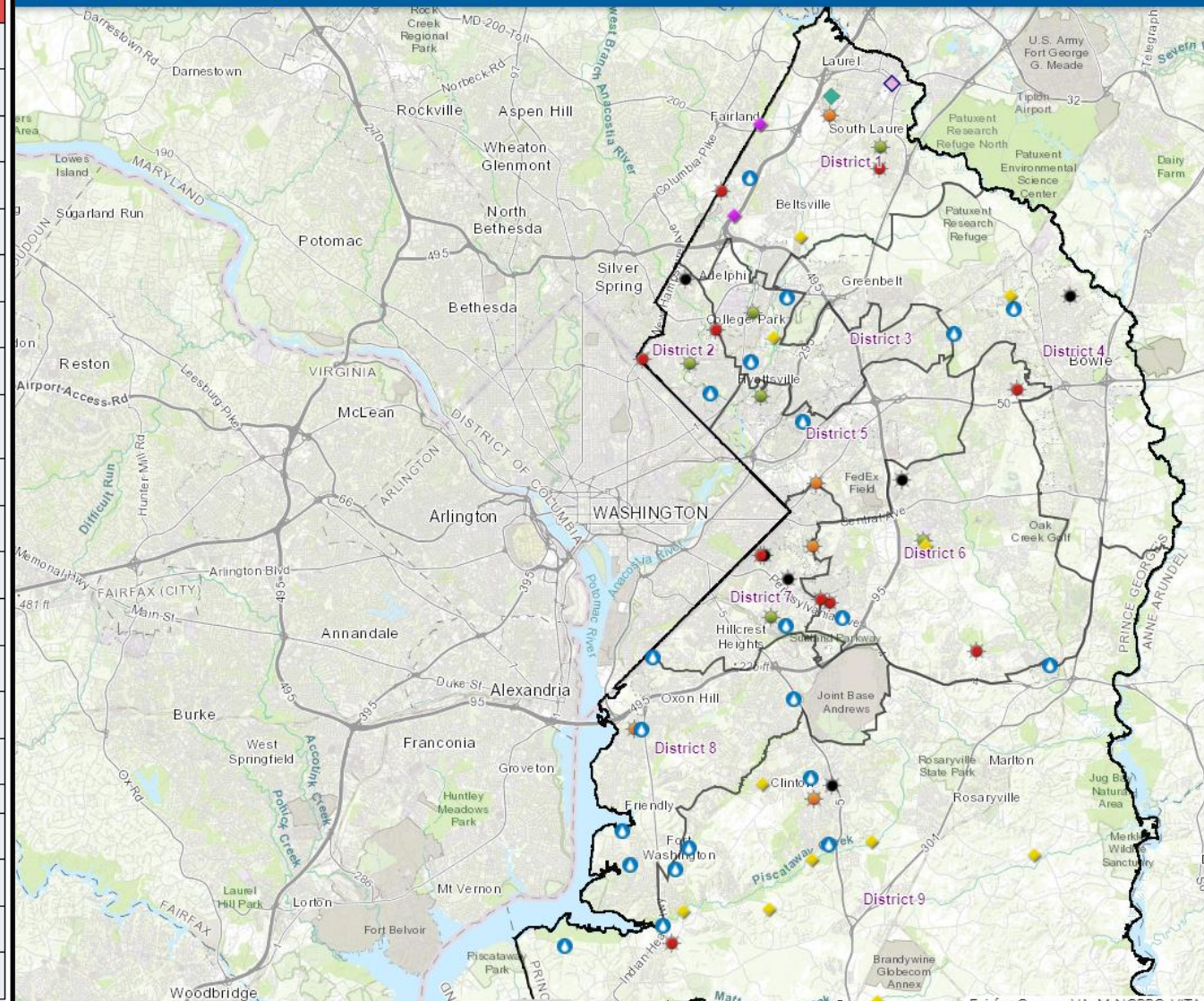
Michael D. Johnson, P.E.  
Director

## CIP PROJECTS UNDER CONSTRUCTION

CIP Project Name	Project Type	Project Manager	Project Status
<a href="#">Ager Rd. Green/Complete Streets Improvement</a>	Green/ Complete Street	Sophady Uong	Construction
<a href="#">Allentown Rd. at Old Branch Ave. Drainage Repairs</a>	Drainage Improvement	Sophady Uong	Construction
<a href="#">Allison St. Levee Project</a>	Drainage Improvement	Elizabeth McKinney	Construction
<a href="#">Bowie Rd. Culvert Improvements</a>	Culvert Repair	Jay Shah	Contract Ad and Award Process
<a href="#">Calverton Blvd. Channel Improvements</a>	Drainage Improvement	Charlie Griffith	Construction
<a href="#">Cherry Hill Rd. at Maryland Farms Improvements</a>	Intersection Improvement	Elizabeth McKinney	Complete
<a href="#">Clear Creek Dr. Drainage Improvements</a>	Drainage Improvement	Construction	Construction
<a href="#">Contee Rd. Extended - US-1 to Konterra Drive</a>	Major Roadway	Elizabeth McKinney	Complete
<a href="#">Culvert Repair/Replacement Program - Nelson Perrie Rd. Culverts</a>	Culvert Replacement	Nawaf Esayed	Contract Ad and Award Process
<a href="#">Daisy Ln. Drainage Improvements</a>	Drainage Improvement	Dwight Joseph	Construction
<a href="#">Groveton Dr. Outfall Improvements</a>	Drainage Improvement	Elizabeth McKinney	Construction
<a href="#">Indian Head West Outfalls Repair</a>	Drainage Improvement	Charlie Griffith	Construction
<a href="#">Longfield Drainage Study</a>	Drainage Improvement	Charlie Griffith	Contract Ad and Award Process
<a href="#">Marlboro Pk. Pedestrian Safety Improvements Ph. 1</a>	Pedestrian Safety	Unmesh Patel	Construction
<a href="#">Montpelier Dr. Green Street Improvements</a>	Green / Complete Street	Unmesh Patel	Construction
<a href="#">Owens Rd. Channel Drainage Improvement</a>	Drainage Improvement	Charlie Griffith	Contract Ad and Award
<a href="#">Safe Routes to School CIP Project</a>	Pedestrian Safety	Sophady Uong	Construction
<a href="#">Sunnyside Ave. Bridge Replacement over Indian Creek</a>	Bridge Replacement	Elizabeth McKinney	Construction
<a href="#">Swann Rd. Green/Complete Street Improvements</a>	Green/Complete Street	Sophady Uong	Complete
<a href="#">Temple Hill Rd. Bridge Replacement over Pea Hill Branch</a>	Bridge Replacement	Jay Shah	Construction
<a href="#">Trafalgar Ct. Outfalls Improvement</a>	Drainage Improvement	Sophady Uong	Construction

## Capital Improvement Program (CIP) Active Projects

Public Works & Transportation Website



### Legend

- DPWT CIP PROJECTS**
- Drainage Improvement
  - ◆ Bridge Replacement
  - Green/Complete Street
  - Pedestrian Safety
  - Major Roadway
  - Intersection Improvement
  - ◆ Bridge Repair
  - ◇ Culvert Repair
  - ◆ Culvert Replacement

### Councilmanic Districts



### County Boundary



[View the map](#)



## Priority: Address Backlog of PGC311 Service Requests

To expeditiously close out a significant number of PGC 311 service requests and develop an efficient process to assign, investigate, manage, and complete service requests.

This new process will alleviate the backlog and significantly reduce closure rates for all DPW&T service types.

- 
- Accessibility Ramp Requests
  - Bus and Taxi Program Information and Inquiries
  - Damaged Mailbox Business or Residential
  - Graffiti Removal
  - Grass and Weeds Removal
  - Litter and Illegal Dumping
  - Pavement Markings New or Refresh
  - Pond Issues
  - Pothole Repair
  - Repair Traffic Calming, Signals, Signs, Streetlights
  - Request New Bus Stop and Bus Stop Amenities
  - Request New Traffic Sign
  - Request New Traffic Signals and Street Light
  - Roadway Emergency
  - Streets and Sidewalk Issues
  - Tree Debris and Stump Removal
  - Trees New, Removal, Replacement or Trimming
  - Bus Stop and Bus Shelter Issues
-



Angela D. Alsobrooks  
County Executive

# Overall Approach



Michael D. Johnson, P.E.  
Director

- **Understand the current backlog of service requests**
- **Investigate and inspect all outstanding requests**
  - Most 311 backlog requests:
    - Tree Trimming, drainage issues, paving/concrete
  - Concrete work:
    - In-depth review of every outstanding 311 request for concrete repairs
    - Analyze additional techniques to address minor trip hazards on sidewalks
- **Build internal resources and streamline processes**
  - Additional contractor resources
  - Internal staffing needs
  - Assessing production rates



Download the **PGC311 APP** to your [iPhone](#) or [Android](#) today.





Angela D. Alsobrooks  
County Executive



Michael D. Johnson, P.E.  
Director



Download the PGC311 APP to  
your [iPhone](#) or [Android](#) today.





Angela D. Alsobrooks  
County Executive

# Pavement Management



Michael D. Johnson, P.E.  
Director

DPW&T uses a Pavement Assessment Management System (PAMS) methodology to evaluate asphalt condition. Staff then develops a list of roads to receive a resurfacing treatment. The goal is to apply the right surface treatment at the right time based on the results of the overall pavement evaluation. Prince George's County makes an effort to utilize preservation treatments to extend the service life of streets throughout the county. Examples of pavement preservation techniques include:

- Crack Seal**
- Slurry seal**
- Asphalt Cut and Patch**
- Pothole Repairs**



GOOD – PCI = 80



FAIR – PCI = 60



POOR – PCI = 30



VERY POOR – PCI = 15



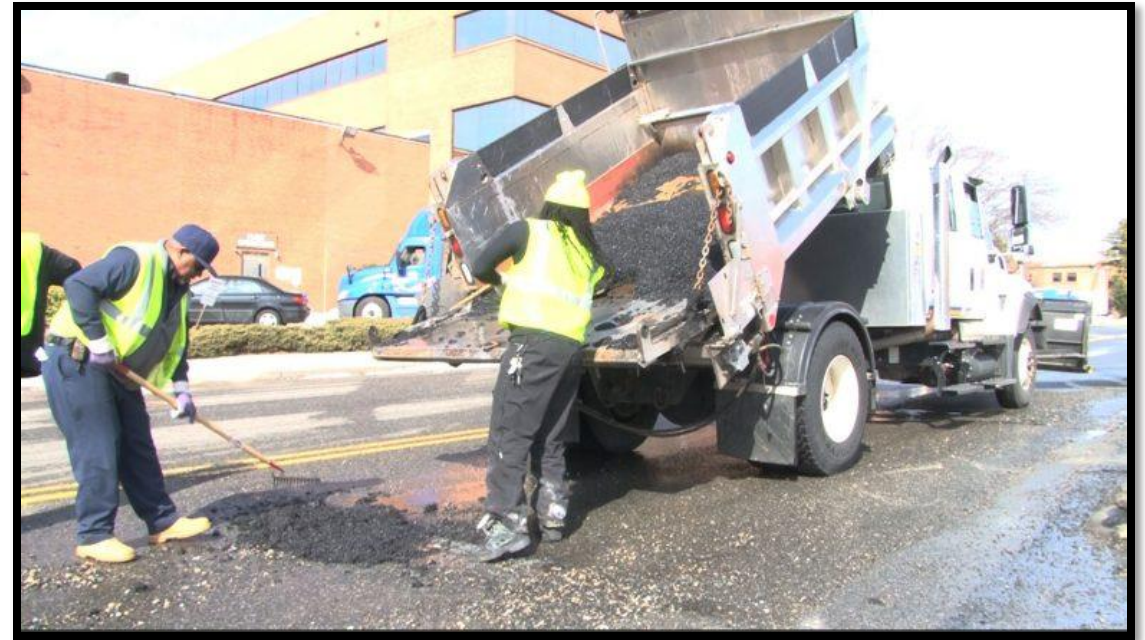
Angela D. Alsobrooks  
County Executive

# Pavement Management



Michael D. Johnson, P.E.  
Director

The County schedules pavement maintenance five years in advance based on asphalt conditions and funding availability. Areas identified as those most in need are placed on the 5-year schedule. DPW&T fills potholes reported into 311 Customer Service Request system within 72 hours.



[Pavement Preservation Fact Sheet](#)



Angela D. Alsobrooks  
County Executive

# Pavement Management



Michael D. Johnson, P.E.  
Director

- Roads are surveyed every 5-10 years
- Survey vehicle drives every County maintained road
- Collects data and photographs which are used to update the PAMS database
- Survey vehicle takes scans of the road every 50 feet and can detect cracks as small as one mm in width
- The next planned scan of County roads is scheduled for Spring 2023



Pavement Survey Vehicle





Angela D. Alsobrooks  
County Executive

# Vision Zero safe Streets for Everyone Strategy



Michael D. Johnson, P.E.  
Director

Vision Zero is a strategy to **eliminate all traffic fatalities and severe injuries**, while increasing safe, healthy, equitable mobility for all road users.

The County Executive and Council launched Vision Zero Prince George's in 2019 – commitment to make our streets safe for everyone by 2040.

The foundation of Vision Zero is the U.S. DOT/FHWA **Safe System Approach** – a proactive response to traffic safety to ensure human mistakes never lead to serious injury or death.



The key to achieving Vision Zero is a combination of the six essential elements for a safe transportation system.



DPW&T applied to U.S. DOT's [Safe Streets and Roads for All](#) grant program. Announcements are expected in January.



Angela D. Alsobrooks  
County Executive


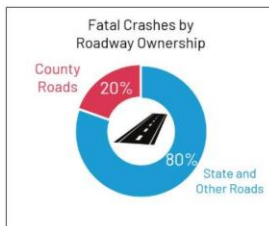
# The Problem

Since 2015, the county has had the highest number of traffic fatalities every year compared to all counties, according to data from the National Highway Traffic Safety Administration Fatality Analysis Reporting System.

Maryland Counties by 2020 Ranking		Fatalities					Percent of Total					
		2016	2017	2018	2019	2020	2016	2017	2018	2019	2020	
1	Prince Georges	78	99	103	113	109	15	18	20	21	19	
2	Baltimore County	54	73	85	60	63	10	13	17	11	11	
3	Baltimore City	53	44	34	49	62	10	8	7	9	11	
4	Anne Arundel County	44	44	55	41	50	8	8	11	8	9	
5	Montgomery County	42	33	34	37	46	8	6	7	7	8	
6	Howard County	23	17	20	23	29	4	3	4	4	5	
7	Charles County	29	35	21	19	26	6	6	4	4	5	
8	Frederick County	16	27	17	24	23	3	5	3	4	4	
9	Worcester County	15	8	8	11	20	3	1	2	2	4	
10	Cecil County	21	31	26	19	17	4	6	5	4	3	
<b>Sub Total 1.*</b>		<b>Top Ten Counties</b>	<b>390</b>	<b>432</b>	<b>409</b>	<b>413</b>	<b>445</b>	<b>75</b>	<b>77</b>	<b>80</b>	<b>77</b>	<b>78</b>
<b>Sub Total 2.**</b>		<b>All Other Counties</b>	<b>132</b>	<b>126</b>	<b>103</b>	<b>122</b>	<b>122</b>	<b>25</b>	<b>23</b>	<b>20</b>	<b>23</b>	<b>22</b>
<b>Total</b>		<b>All Counties</b>	<b>522</b>	<b>558</b>	<b>512</b>	<b>535</b>	<b>567</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

Maryland is ranked 15th in the United States with a pedestrian fatality rate of 2.15 per 100,000 people while Prince George's County's overall pedestrian fatality rate is 3.3 per 100,000 people

22% of fatal crashes happen on 10 roads in Prince George's County.

## Vision Zero Prince George's High Injury Network for Pedestrian and Bike Crashes



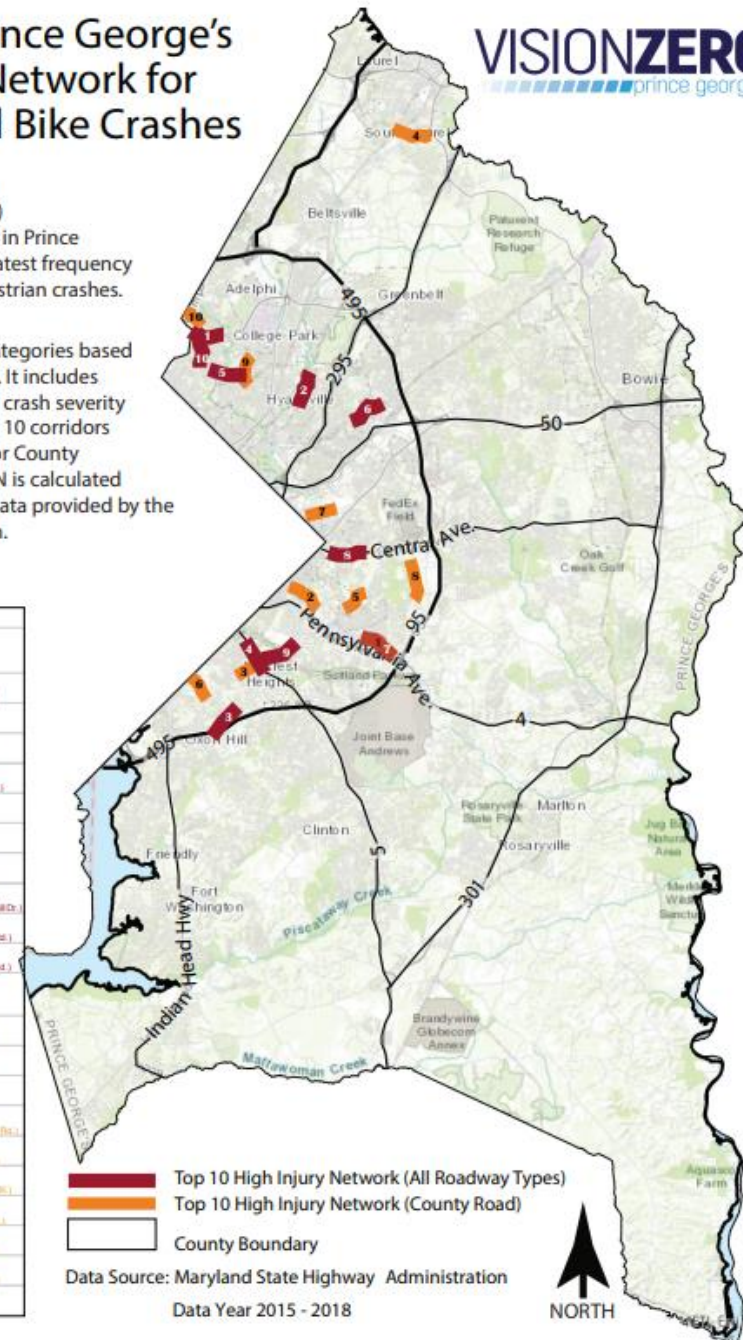
The High Injury Network (HIN) represents one-mile corridors in Prince George's County with the greatest frequency and severity of bike and pedestrian crashes.

The HIN is divided into two categories based on the ownership of roadway. It includes the 10 corridors with greatest crash severity for all roadway types and the 10 corridors with greatest crash severity for County maintained roadways. The HIN is calculated based on 2015 - 2018 crash data provided by the State Highway Administration.

RANK	SEVERITY	ROADWAY
<b>Top 10 High Injury Network All Roadway Types</b>		
1	120	University Blvd. (Edward Pl. to West Park Drive)
2	83	Kenilworth Ave. (Centers Ln. to River Rd.)
3	70	St Barnabas Rd. (State Hill Rd. to Weaver Rd.)
4	70	Branch Ave. (St. Barnabas Rd. to Naylor Rd.)
5	62	East West Hwy (Ager Rd. to Belcrest Rd.)
6	60	Annapolis Rd. (Deerfield St. to Park Ln.)
7	60	Marlboro Pike (University Rd. to Carroll St.)
8	55	Central Ave. (Maryland Park Dr. to Popper Mill Cr.)
9	53	Silver Hill Rd. (Sutland Rd. to St. Barnabas Rd.)
10	52	Riggs Rd. (East West Hwy. to University Blvd.)
<b>Top 10 High Injury Network County Road</b>		
1	60	Marlboro Pike (University Rd. to Carroll St.)
2	33	Marlboro Pike (Walker Mill Rd. to 50th Ave.)
3	26	Iverson St. (23rd St. to Belcrest Rd.)
4	25	Contee Rd. (Belcrest Ave. to Laurel Bowers Rd.)
5	24	Walker Mill Rd. (Belcrest Rd. to Raven Blvd.)
6	22	Wheeler Rd. (Greenway Ave. to Greenway St.)
7	22	Sheriff Rd. (Greenway Ave. to Greenway St.)
8	22	Ritchie Rd. (Greenway Ave. to Edgewood Dr.)
9	21	Belcrest Rd. (East West Hwy. to Adams Rd.)
10	18	Merrimac Dr. (Greenway St. to 50th Ave.)

- Top 10 High Injury Network (All Roadway Types)
- Top 10 High Injury Network (County Road)
- County Boundary

Data Source: Maryland State Highway Administration  
Data Year 2015 - 2018







Angela D. Alsobrooks  
County Executive

# Publicly Available Crash Data



Michael D. Johnson, P.E.  
Director

Crash Data is available on both State and County websites

## [ZeroDeathsMaryland.gov](https://www.mhso.maryland.gov/zero-deaths-maryland)

The Maryland Highway Safety Office (MHSO) of the MDOT MVA provides **real-time** and **monthly** crash data for Prince George's County.



**Year to Date Maryland Fatality Summary**

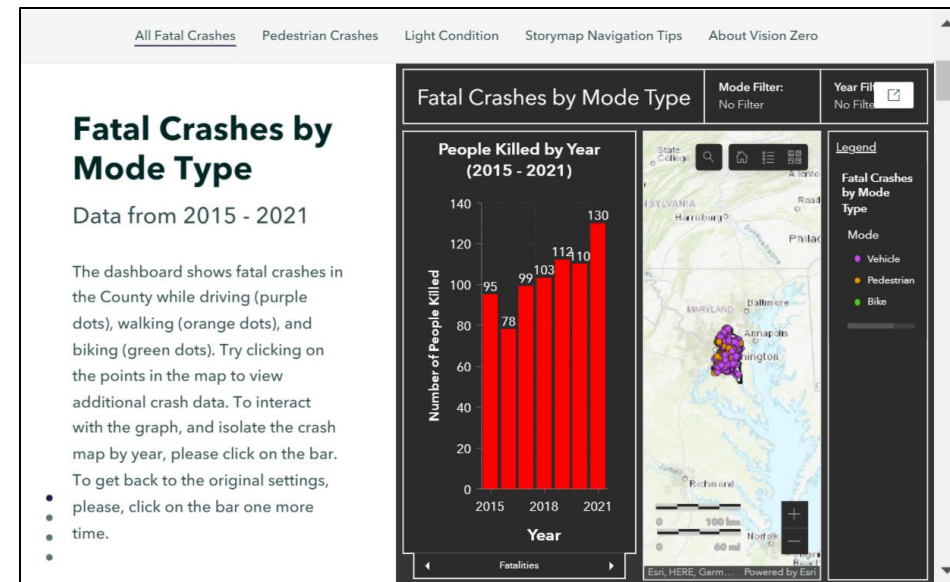
Each month data will be updated with the most recent information.  
Data is subject to change.

YTD Fatality Summary Report (as of 12/1/22)	2021 Fatality Summary Report (as of 9/26/22)
---	--

## [VisionZeroPrinceGeorges.com](https://www.visionzero.org/prince-georges)

Vision Zero Prince George's shows **2015-2021** crash data for Prince George's County.

We update our dashboard when the state releases the finalized data for the given year. The state also confirms our [High Injury Network](#).



In January 2022, Maryland Highway Safety Director, Tim Kerns, and Vision Zero Prince George's Coordinator, Andrea Lasker, [presented](#) data and updates to the County Council.





Angela D. Alsobrooks  
County Executive

# Engineering and Education



Michael D. Johnson, P.E.  
Director

**VISIONZERO**  
prince george's  
SAFE STREETS FOR EVERYONE.

## Achievements

Completed July 2021 to June 2022

**123** Neighborhood Traffic Management Program Studies Completed

**1,835** Street Lighting Improvements

**46** New Speed Humps

**5** Major Road Safety Projects Completed

**860,000** Square Feet of New and Replaced Sidewalk

**18** Miles of Road Resurfaced

Ager Road Green Complete Street | Hyattsville

Montpelier Drive | Laurel

Marlboro Pike | District Heights

Langley Park Area CASA Crime Prevention Coalition Project | Langley Park

Sunnyside Avenue Bridge | Beltsville



### Bladensburg Police Department Traffic Safety Day

Saturday, November 19, 11:00 AM - 3:00 PM  
Parkway Shopping Center



### Street Smart Testimonial Display for World Day of Remembrance

Sunday, November 20, 12:00 PM - 6:00 PM  
The Mall at Prince George's

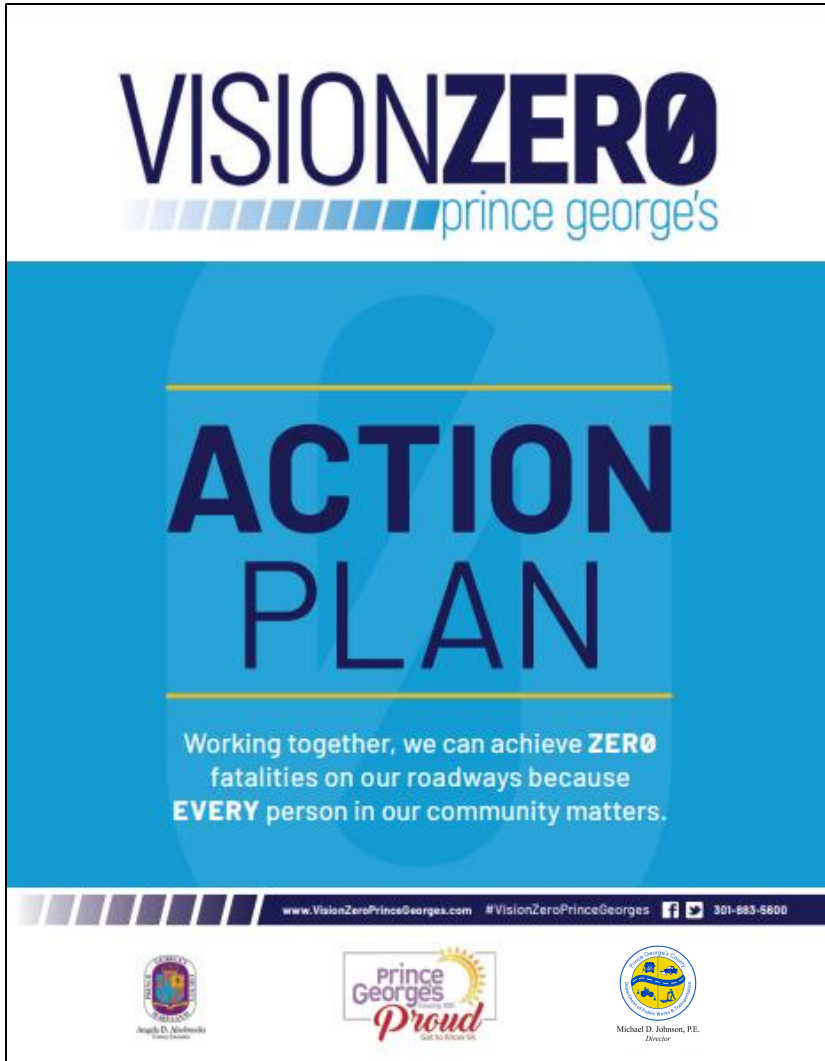


Angela D. Alsobrooks  
County Executive

# Way Forward – 2023 Vision Zero Action Plan



Michael D. Johnson, P.E.  
Director



- Education Actions
- Engineering Actions
- Evaluation Actions
- Enforcement Actions
- Emergency Response Actions
- Equity Commitment

**For more information, visit [VisionZeroPrinceGeorges.com](http://VisionZeroPrinceGeorges.com)**

The Vision Zero Action Plan is our roadmap to achieve zero fatalities and serious injuries on our roadways.

- The 2020-2022 Action Plan contained 40 specific actions that County stakeholders can implement to achieve Vision Zero
- The actions balance long-term strategy and immediate implementation activities
- DPW&T leads the coordination for implementing the actions
- DPW&T is working to update the Action Plan in 2023