

THE MARYLAND DEPARTMENT OF TRANSPORTATION
MOTOR VEHICLE ADMINISTRATION
MARYLAND HIGHWAY SAFETY OFFICE (MHSO)

MHSO Data Resources

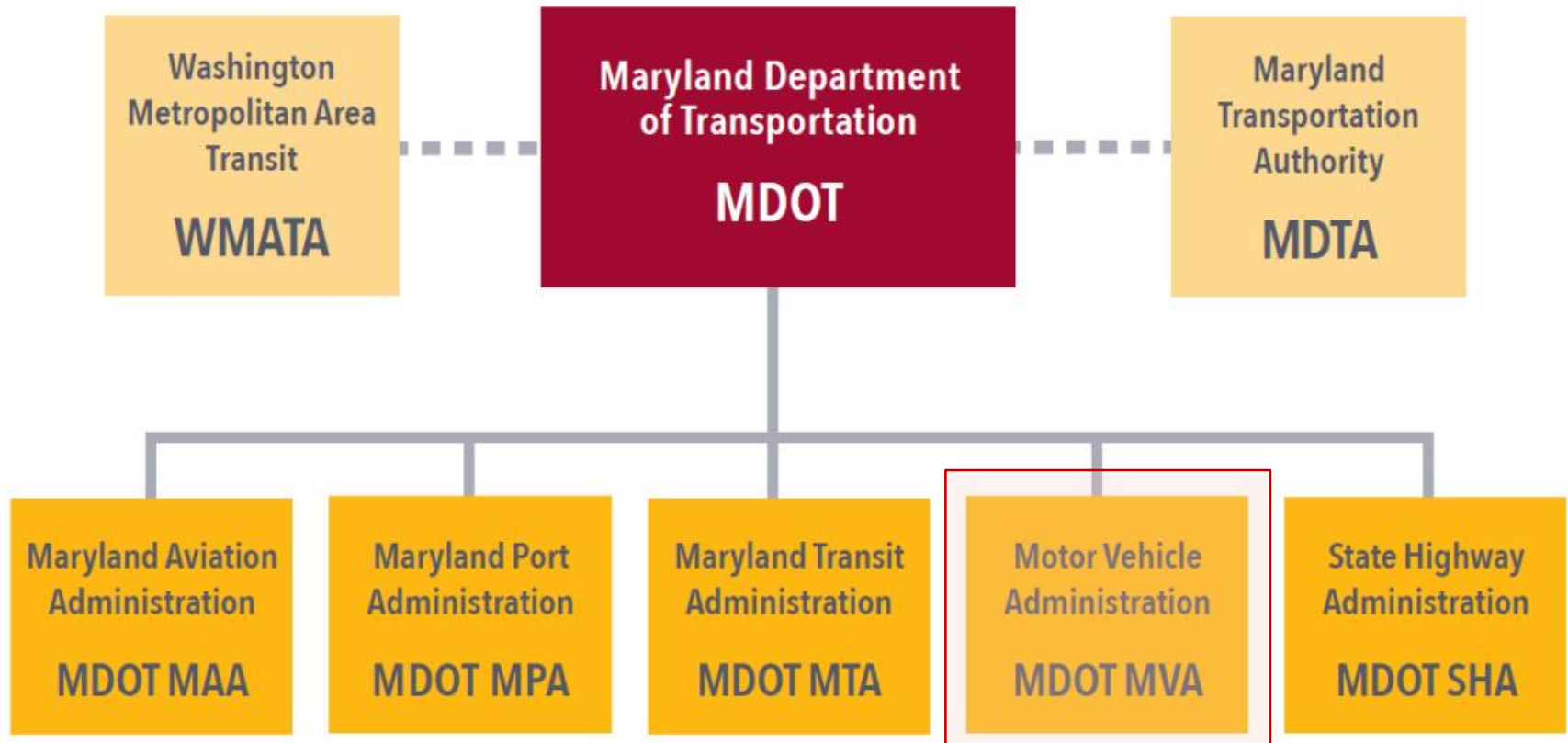
Baltimore Data Day 2023



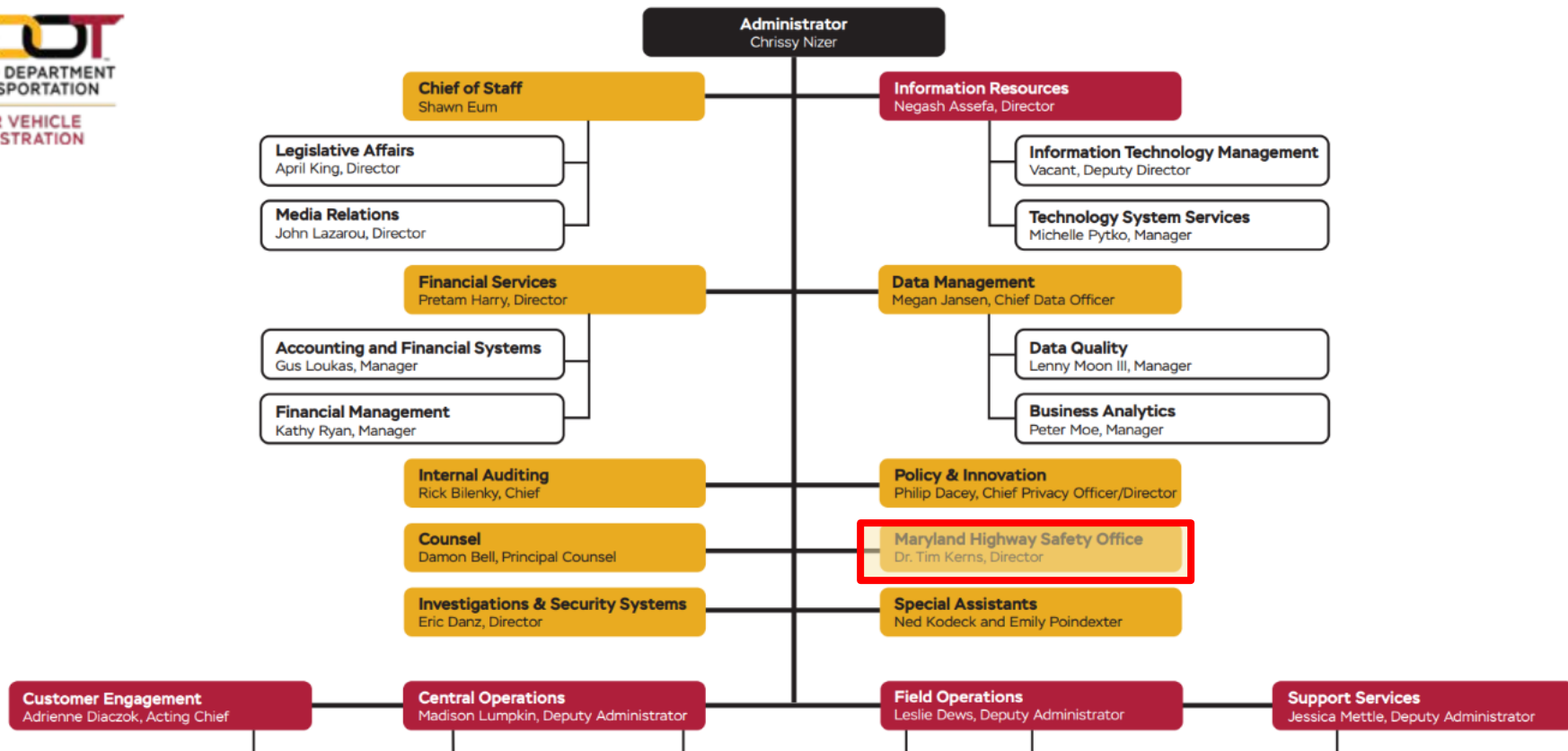
OBJECTIVES

- Describe the MHSO Traffic Records Program.
- Describe the MHSO traffic safety data resources.
- Illustrate the Maryland crash data workflow.
- Demonstrate crash data resources available online.

THE MDOT ORGANIZATION

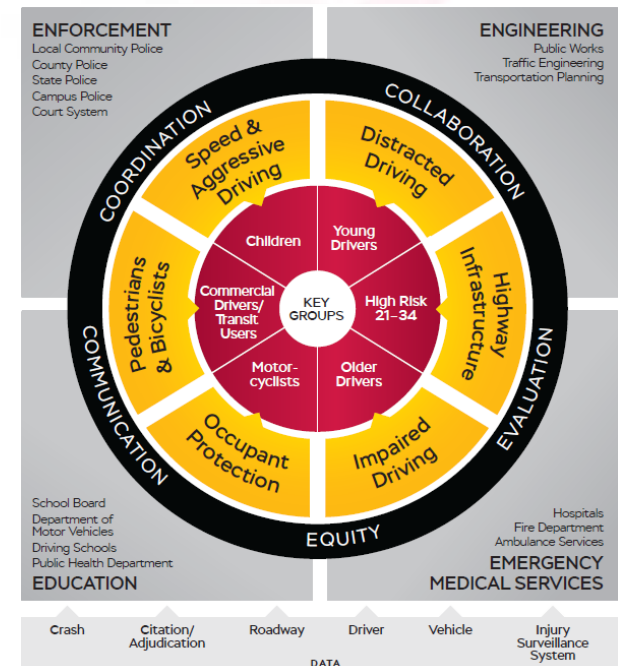


MDOT > MVA > MHSO



MHSO TRAFFIC RECORDS PROGRAM

- Data system improvements (NHTSA – Federal Funding).
- Traffic Records Coordinating Committee (TRCC).
- Data analysis support.
- Strategic Highway Safety Plan (SHSP) support.
 - Emphasis Area Teams (EATs): Data Strategies and Action Steps.
- Grantees
 - UMB–National Study Center (NSC)
 - Washington College
 - Crash Core



TRCC

MDOT MVA
Administrator,
Governor's
Representative for
Highway Safety
(Chrissy Nizer)

TRCC Executive
Council



SHSP Executive
Council

Tri-Agency
Council for
Crash Data
Management

TRCC Technical
Council

Emphasis Area
Teams

Crash Data
Management
Advisory
Subcommittee

Crash Data
Accessibility
Subcommittee

Other
Subcommittees
Task Forces
(As Needed)

Data Strategy
Leads



Crash Report



- Driver & Occupant Characteristics
- Non-Motorist Characteristics
- Time/Day/Month/Year
- Location
- Vehicle Characteristics
- Event Characteristics
- Environment
- Contributing Factors


Vehicle Information **Crash Details**

SCAN Tag # State Type VIN ☒
Year Make Model Expiration Year
Insurance Information
Company Name Policy Number **Vehicle Unknown**

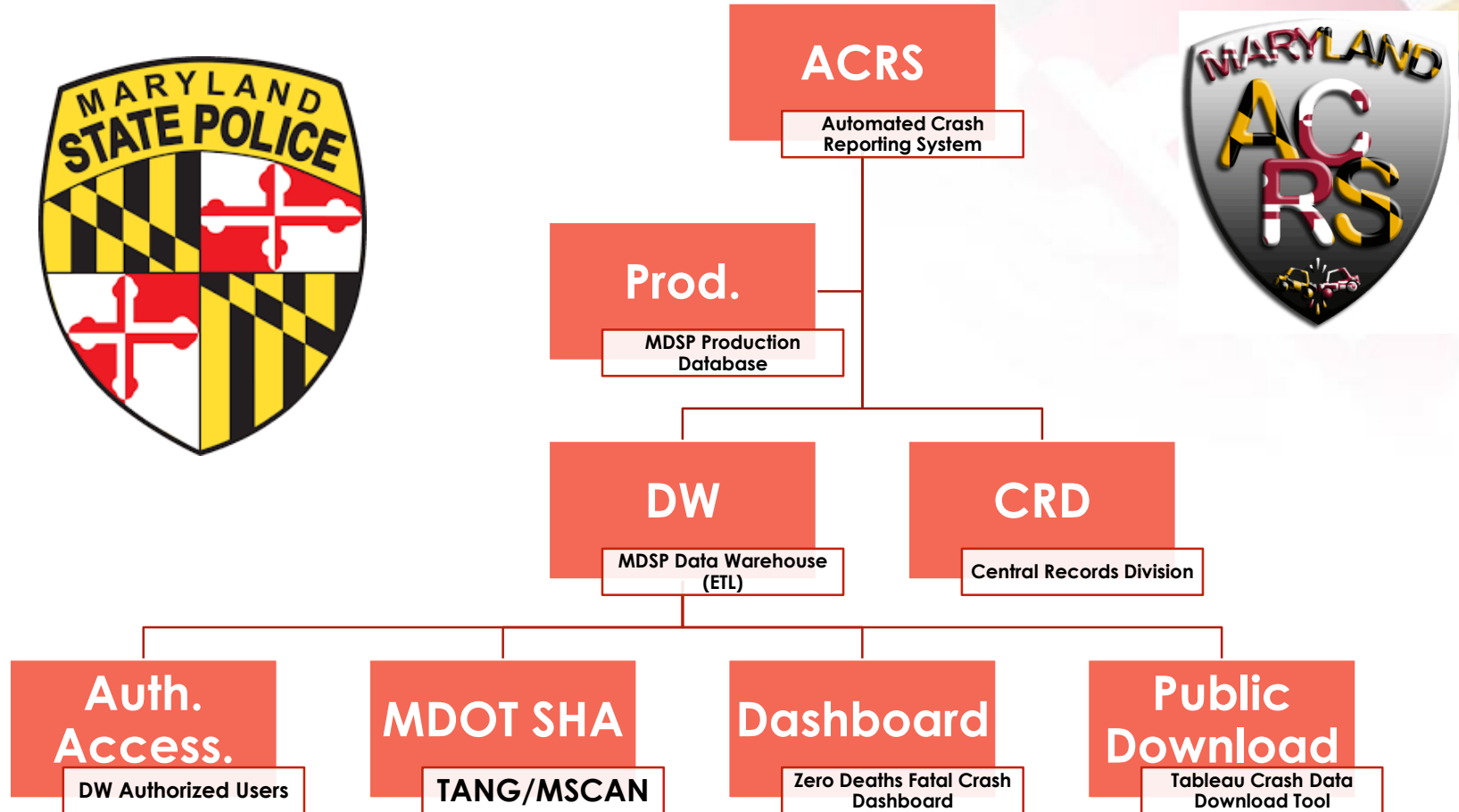
SCAN **Registered Owner**
☐ Same As Vehicle Driver
Name
Address
City
Home Phone () -

Vehicle Status

Special Function	Let
Towed Vehicle	
Emergency Motor Vehicle Use	



CRASH REPORTS WORKFLOW



ZERODEATHSMD.GOV

ZERO DEATHS
MARYLAND

NEWS & EVENTS

SEARCH



[ROAD SAFETY](#) [HOW YOU CAN HELP](#) [HIGHWAY SAFETY OFFICE](#) [GRANTS](#) [RESOURCES](#) [LAW ENFORCEMENT](#)

EVERY CRASH IS PREVENTABLE. EVERY LIFE COUNTS.

Maryland is dedicated to saving lives and preventing injuries from motor vehicle crashes.

[About Us →](#)





ZERO DEATHS
MARYLAND


ZERODEATHSMD.GOV


Go to: <https://zerodeathsmg.gov/resources/crashdata/>

Allegany County

Crash Data Summary (2021) 


Crash/Crime Clock 


Problem ID 


Safety Equipment Use –
Fatalities and Injuries (2012
-2021) 


Safety Equipment Use –
Serious Injuries (2012 -2021) 

Anne Arundel County

Crash Data Summary (2021) 


Crash/Crime Clock 


Problem ID 


Safety Equipment Use –
Fatalities and Injuries (2012
-2021) 


Safety Equipment Use –
Serious Injuries (2012 -2021) 

Baltimore City

Crash Data Summary (2021) 

Crash/Crime Clock 

Problem ID 

Safety Equipment Use –
Fatalities and Injuries (2012
-2021) 

Safety Equipment Use –
Serious Injuries (2012 -2021) 

Baltimore County

Calvert County

Caroline County

**EVERY LIFE
COUNTS.**

**ZERO DEATHS
MARYLAND**

ZERODEATHSMD.GOV

Statewide Data Resources

[Crash Summary Report -
Statewide \(2021\)](#)



[Problem Identification - Statewide
\(2021\)](#)



[Crash/Crime Clock - Statewide
\(2021\)](#)

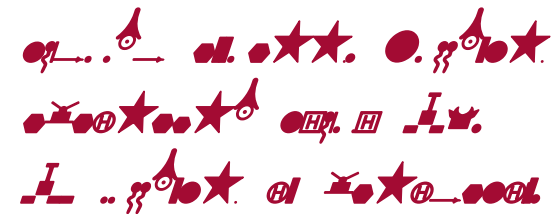


Statewide						
Crash Summary						
	2017	2018	2019	2020	2021	5 Year AVG.
Fatal Crashes	518	485	496	546	524	514
Injury Crashes	34,664	33,936	32,928	25,352	28,084	30,993
Property Damage Crashes	80,259	83,626	82,561	69,698	80,048	79,238
Total Crashes	115,441	118,047	115,985	95,596	108,656	110,745
Total of All Fatalities	558	512	535	573	563	548
Total Number Injured	51,391	50,011	48,668	36,777	40,788	45,527



BENCHMARK REPORTS

County	2017	2018	2019	2020	2021	AVG.	REPORTS					
Allegany	674	673	655	695	802	700						
Anne Arundel	10,496	10,698	10,638	8,557	9,481	9,974						
Baltimore	20,824	22,623	21,701	17,796	20,331	20,655						
Calvert	1,212	1,255	1,124	956	Route Type		2017	2018	2019	2020	2021	
Caroline	477	520	515	465	IS		11,897	13,453	12,879	10,614	12,160	
Carroll	2,001	2,124	2,109	1,674	US		9,138	9,546	9,208	7,773	9,215	
Cecil	1,778	1,912	1,743	1,524	MD		32,519	33,895	32,883	26,614	29,971	
Charles	2,901	3,070	2,914	2,482	CO		26,593	28,341	28,169	22,908	25,599	
Dorchester	572	545	563	517	MU		10,159	9,720	9,243	7,692	8,265	
Frederick	3,627	3,759	3,602	2,780	GV		87	115	90	66	65	
Garrett	600	508	542	461	SR		107	134	129	57	68	
Harford	3,345	3,511	3,323	2,848	OP		533	500	519	445	457	
Howard	4,162	4,278	4,125	2,990	Parking Lots		8,167	7,922	7,740	5,827	6,591	
Kent	187	223	241	210	Unknown		16,241	14,421	15,125	13,600	16,265	
					Total Crashes		115,441	118,047	115,985	95,596	108,656	
Montgomery	14,294	14,239	13,851	9,730	11,186	12,660						
Prince George's	18,422	19,624	20,555	17,149	19,961	19,142						
Queen Anne's	866	765	790	728	780	786						
St. Mary's	1,633	1,800	1,755	1,448	1,681	1,663						
Somerset	358	326	330	280	298	318						
Talbot	796	923	775	689	801	797						
Washington	2,593	2,663	2,525	2,328	2,483	2,518						
Wicomico	2,278	2,262	2,217	1,975	2,142	2,175						
Worcester	1,429	1,339	1,402	1,278	1,460	1,382						
Baltimore City	19,916	18,407	17,990	16,036	17,898	18,049						
Total Crashes	115,441	118,047	115,985	95,596	108,656	110,745						



PROFILES: MORE DETAIL (BY REQUEST)

Baltimore Co. - Pedestrians On Foot Involved Crash Profile Non-Motorist Information

Category	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Fatalities	18	14	21	21	18	19	16	27	21	19
Suspected Serious Injuries	60	53	64	67	51	69	72	62	67	56
Suspected Minor Injuries	154	149	187	201	256	255	177	167	180	138
Possible Injuries	143	155	125	132	130	148	204	186	182	140
Total Injured & Killed	375	371	397	421	455	491	469	442	450	353

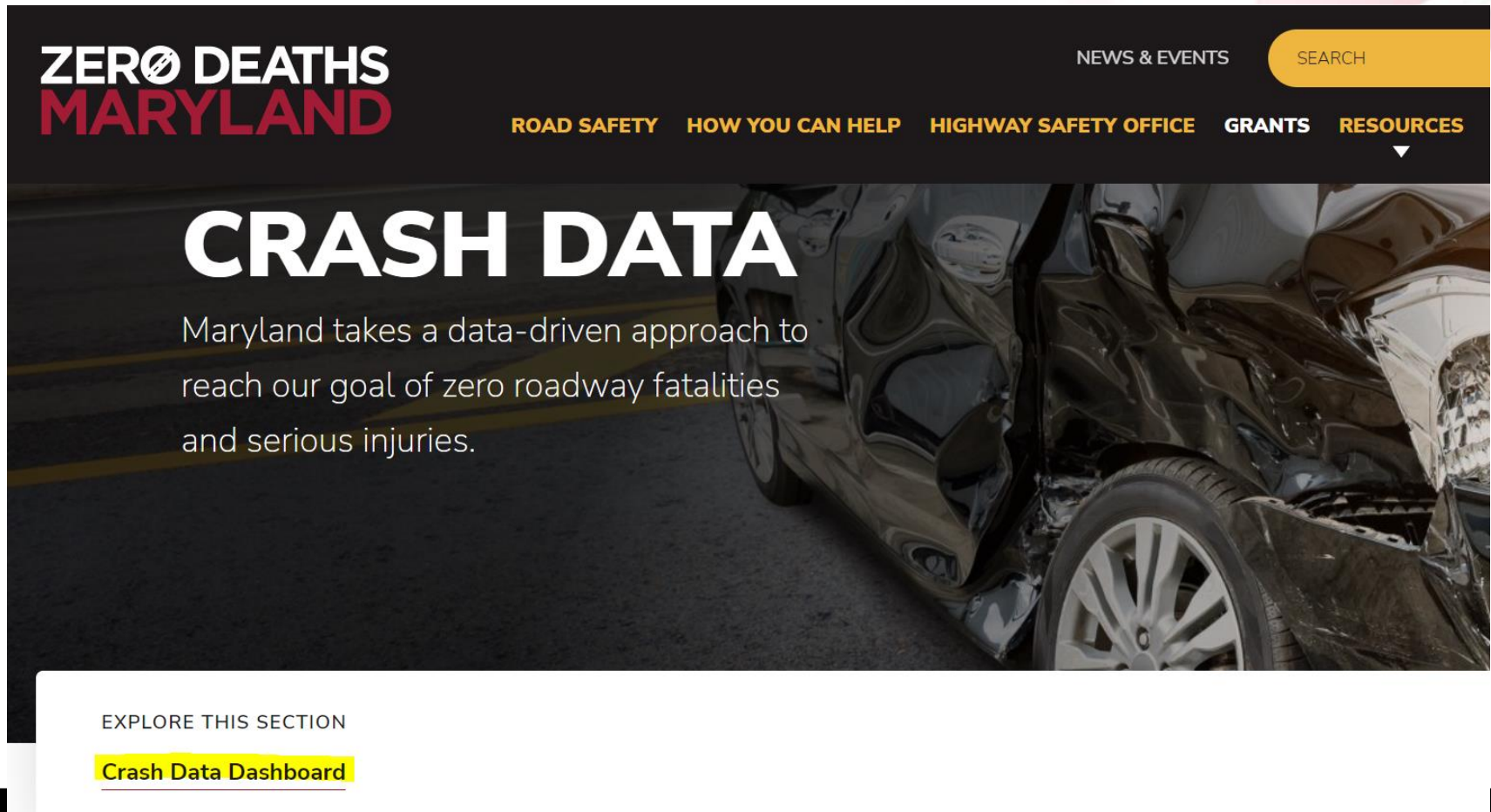
Baltimore Co. - Pedestrians On Foot Involved Crash Profile Non-Motorist Information

Non-Motorist Location	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Not App.	10	9	8	14	22	11	15	18	23	12
Shoulder	18	27	21	24	18	21	23	26	23	24
Curb	9	7	10	5	11	10	11	11	15	4
Sidewalk	29	15	17	17	23	23	28	24	20	14
Outside Right of Way	10	12	13	14	18	16	16	16	17	9
On Rd. at Crosswalk	80	87	83	80	82	66	74	64	82	59
On Rd. Not at Cross.	235	245	266	241	203	224	199	190	167	155

Non-Motorist Obey Traf. Signal	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Not Applicable	25	15	20	66	169	191	162	159	174	121
No Ped. Signal	325	329	348	317	274	281	258	257	262	191
Obedyed Ped. Signal	21	22	36	31	27	27	28	16	31	23
Disobeyed Ped. Signal	28	25	29	30	31	18	29	29	22	27

FATAL CRASH DASHBOARD

<https://zerodeathsmd.gov/resources/crashdata/crashdashboard/>



**ZERO DEATHS
MARYLAND**

NEWS & EVENTS SEARCH

ROAD SAFETY HOW YOU CAN HELP HIGHWAY SAFETY OFFICE GRANTS RESOURCES

CRASH DATA

Maryland takes a data-driven approach to reach our goal of zero roadway fatalities and serious injuries.

EXPLORE THIS SECTION

[Crash Data Dashboard](#)

**ZERO DEATHS
MARYLAND**

FATAL CRASH DASHBOARD

- Launched April 12, 2023
 - *Maryland Highway Safety Summit.*
- Source: MDSP Data Warehouse (ACRS).
- Platform: Tableau.
- Updated every morning.
- Years available: 2016 to current.
- Includes open reports/
open investigations.
- No personally identifiable
information (PII).

Data Last Updated: 7/19/2023 3:01:26 AM



FATAL CRASH DASHBOARD

Definitions

FAQs

Demo Video

 [HOME](#) / [RESOURCES](#) / [CRASH DATA](#)

CRASH DATA DASHBOARD

Maryland takes a data-driven approach to reach our goal of zero roadway fatalities and serious injuries.

EXPLORE THIS SECTION

[Dashboard Data Definitions](#)

[Dashboard FAQ](#)

[Dashboard Demo Video](#)

FATAL CRASH DASHBOARD

- Sub-dashboards and features:
 - Strategic Highway Safety Plan (SHSP) Emphasis Areas
 - Statewide and Jurisdictional Fatalities
 - Interest Areas
 - Year-to-Date
 - Occupants (Drivers and Passengers)
 - Non-Motorists
 - Vehicles
 - Roadways

Fatalities		Young Drivers		Mature Drivers		Pedestrians		Motorcyclists		Bicyclists			
218		4		19		55		16		4			
Speed Related		Aggressive Driving		Distracted Driving		Impairment		Unrestrained Occupants					
56		109		59		42		49					
Emphasis Areas		Interest Areas		Year-to-Date		Occupants		Non-Motorists		Vehicles		Roadway	

FAQS

FAQs

What is the source of the data?



How can I obtain the data in this dashboard?

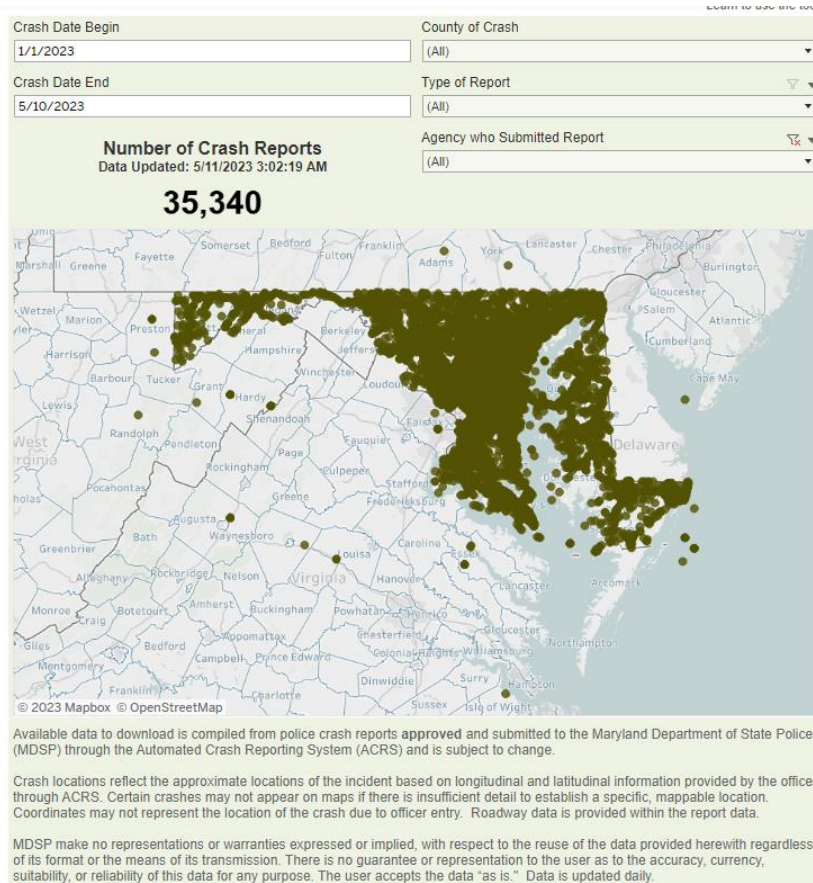
Requests for crash data should be directed to the [Central Records Division of the Maryland State Police](#). Additionally, you may download crash data from the [MDSP Crash Data Download application](#).

How do I request a report for a specific crash?



MDSP CRASH DATA DOWNLOAD

<https://mdsp.maryland.gov/Pages/Dashboards/CrashDataDownload.aspx>



- Years available:
 - 2018 – year-to-date.
- Data subject to, *and will*, change.
 - Officer report updates; record updates.
 - Updated every morning.
 - Only approved reports.

NATIONAL STUDY CENTER RESOURCES

- Crash Outcome Data Evaluation System (CODES)
- Online data request form
- Standard reports (e.g., crash/crime clocks)
- Ad hoc inquiries
- In-depth analysis, e.g.,
 - Ignition Interlock
 - Pedestrian 360-degree
 - Pedestrian/Bicyclist Fatality Review
- Data Coordination for the SHSP Emphasis Area Teams
- Experts in epidemiology, statistics, traffic records, data collection and quality...and more



NATIONAL STUDY CENTER FOR TRAUMA & EMS

 UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE
SHOCK, TRAUMA AND ANESTHESIOLOGY
RESEARCH CENTER



Roadway

Crash Reports

Vital Records

Citations

Registration

Pre-hospital EMS

Licensing

Inpatient Records

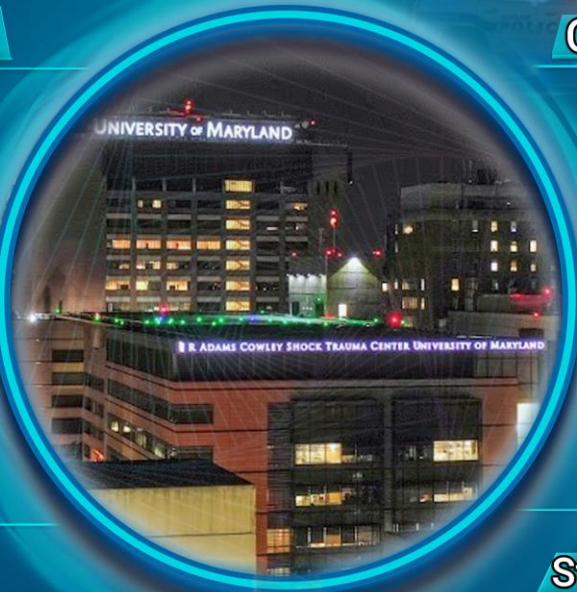
Toxicology

Emergency Dept. Data

Statewide Trauma Registry

Supplementary Datasets

- Ignition Interlock
- Motorcycle Training
- Seat Belt Observations
- Crash Reconstructions





The National Study Center for Trauma and EMS

[Back to MCTSA Home.](#)

MCTSA DATA REQUEST FORM

Your request is very important to us. We provide the following format only as a guide in helping us expedite your request as quickly and efficiently as possible using Maryland Data. Please help us by providing us with as much detail about your request as possible. Data requests may take up to 15 business days to be completed. Thank you.

(*) Indicates a required field, a response must be included in order to submit the form.

1. (*) Please enter the requested due date for this data request:

< June 2016 >						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
29	30	31	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	1	2
3	4	5	6	7	8	9

Data Requests require a minimum of 15 business days to be completed. Please plan your request accordingly.

2. (*) Please provide us with the following information so that we may service your request:

Name:

Company Name:

WASHINGTON COLLEGE

- Geospatial traffic safety analysis
- Risk-terrain analysis, alcohol-impaired drivers
- Data improvements, crash and citation
- Statewide liquor license database
- SPIDRE support
- Online mapping tool > RAVEN
 - Risk Analysis Vehicle Environment Network
- Support of SHSP EATs
- GIS Training



RAVEN – WASHINGTON COLLEGE



RAVEN Webmap



Make Requests



Training Sessions



Contact Us



Event Calendar

RAVEN

RISK ANALYSIS OF VEHICLE ENVIRONMENTAL NETWORK



Downloadable Files



Account



Logout



**ZERO DEATHS
MARYLAND**

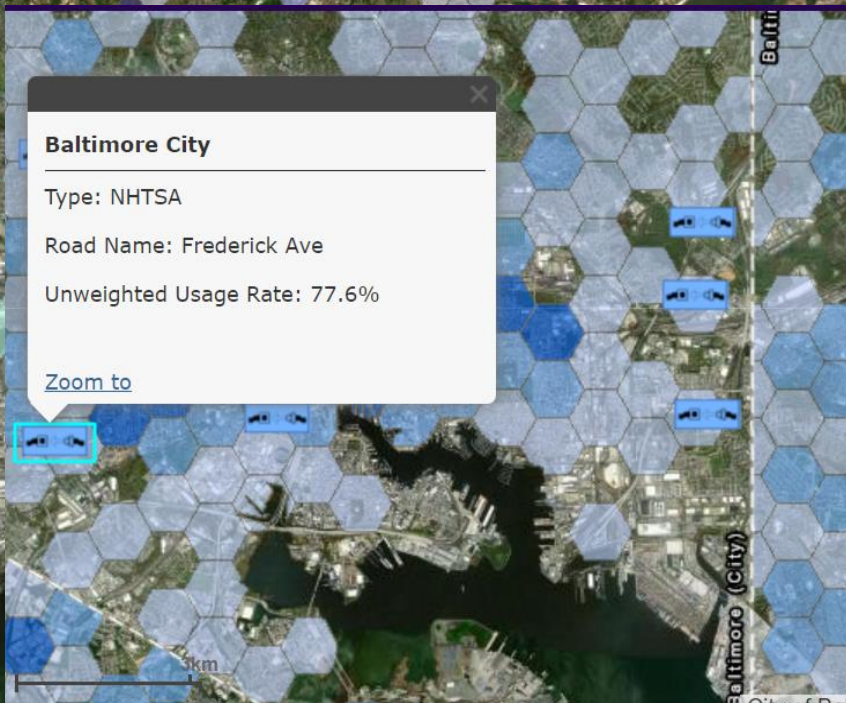
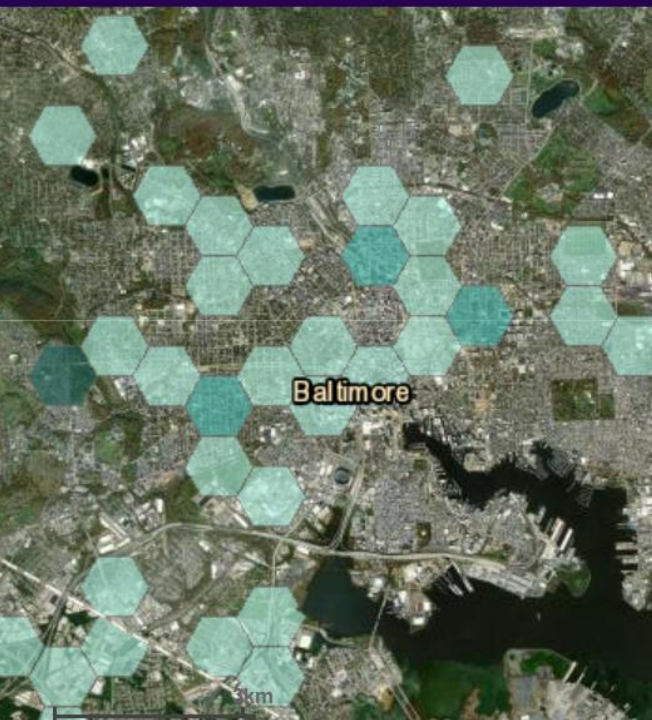


Seatbelt Observation Sites

Shading Layers

Speeding Crashes

- ☒ 2018-2020 Hexagon Bins
- ☐ 2018-2020 Hot Spots
- ☐ 2018-2020 Road Segments
- ☐ 2017-2019 Hexagon Bins
- ☐ 2015-2018 Road Segments
- ☐ 2015-2018 Hexagon Bins
- ☐ 2015-2018 Hotspots
- ☐ 2013-2017 Road Segments
- ☐ 2013-2017 Hexagon Bins



Baltimore City

Type: NHTSA

Road Name: Frederick Ave

Unweighted Usage Rate: 77.6%

[Zoom to](#)

Overall Crashes

Pedestrian Crashes

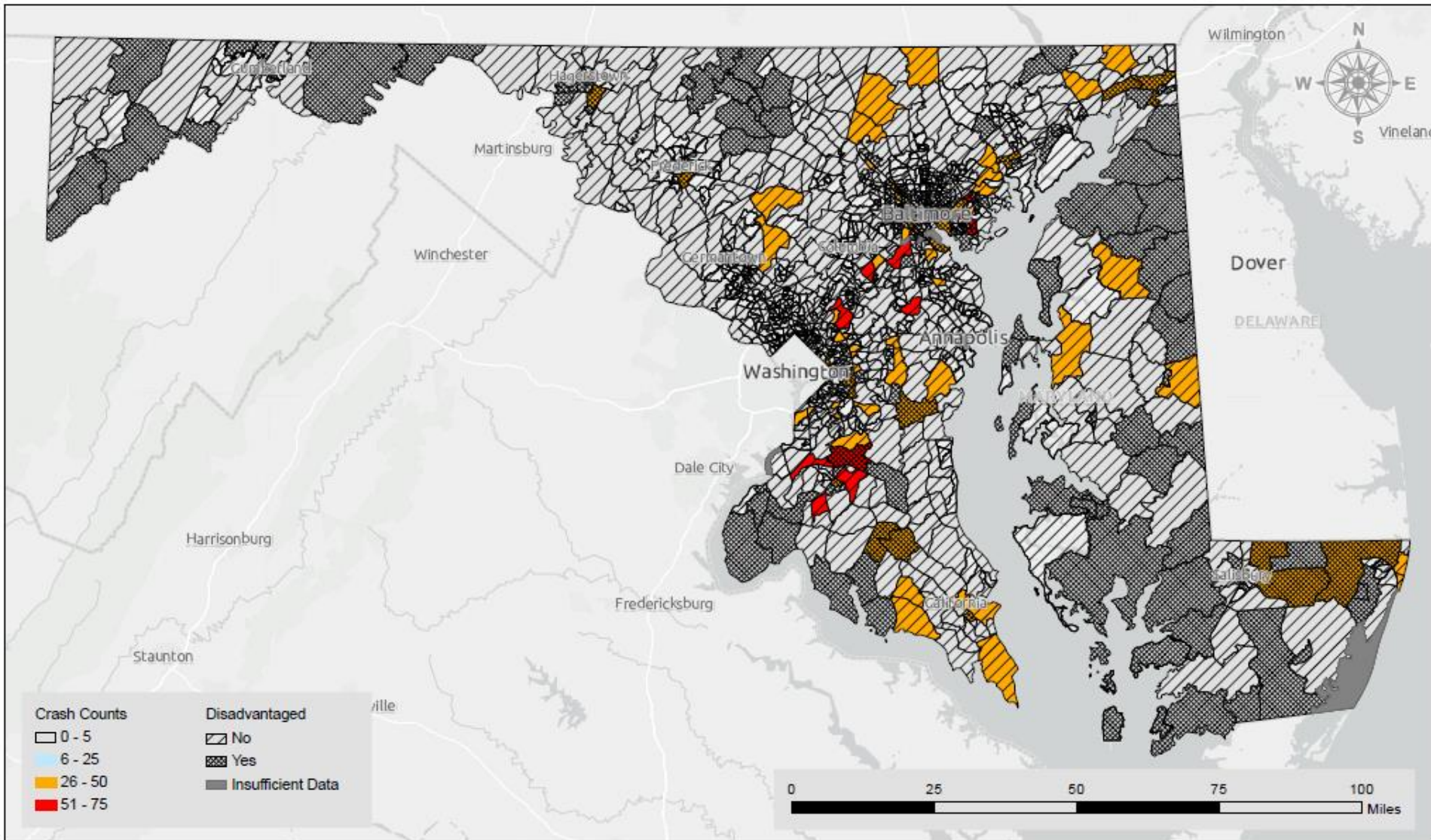
Seatbelt Observation Sites

- ☒ 2022 Locations
- ☐ 2021 Locations
- ☐ 2019 Locations
- ☐ 2018 Locations
- ☐ 2017 Locations
- ☐ 2016 Locations
- ☐ NHTSA Seat Belt Rate 2017
- ☐ NHTSA Primary Roads 2017
- ☐ NHTSA Secondary Roads 2017
- ☐ NHTSA Local Roads 2017

NEW: MHSO EQUITY MODEL (2023)

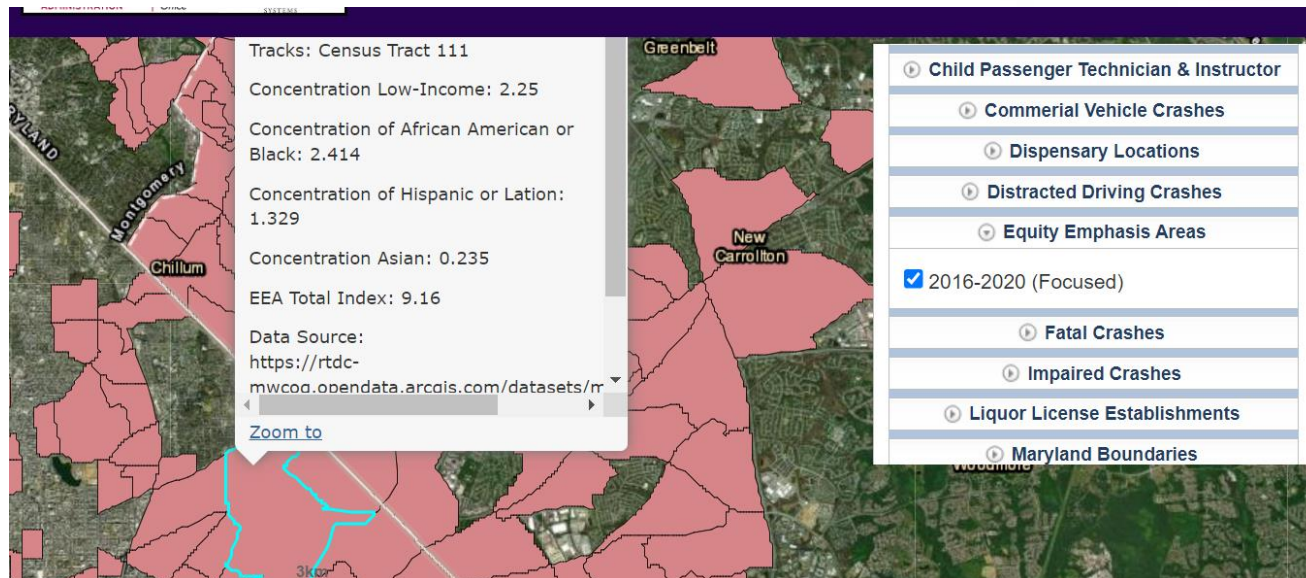
	#	COMPONENT	SCORE Stratified by Rural/Urban Area
SOCIO-ECONOMIC DISADVANTAGE	1	POVERTY Percent of population with income less than 200% of federal poverty guidelines.	1=If greater than THRESHOLD for MD 0=otherwise
	2	RACE Percent non-white population.	1=If greater than THRESHOLD for MD 0=otherwise
	3	RISK (alcohol density): Number of liquor licenses per 10K population.	1=If greater than THRESHOLD for MD 0=otherwise
TRANSPORTATION SAFETY DISADVANTAGE	4	CRASHES Annual number of injury crashes (KABCO 2 through 5).	1=If greater than THRESHOLD for MD 0=otherwise
	5	TRAFFIC VIOLATIONS (Citations) Annual number of traffic stops with moving violations. Use offender's zip code – where they live as opposed to where the offense occurs.	1=If greater than THRESHOLD for MD 0=otherwise
	6	YOUNGER AND OLDER DRIVERS A. Number of drivers 20 and younger. B. Number of drivers 65 and older.	A. 0.5=If greater than THRESHOLD for MD 0=otherwise B. 0.5=If greater than THRESHOLD for MD 0=otherwise

Maryland Fatal and Suspected Serious Injury Crashes by Disadvantaged Census Tracts (2017 to 2021)



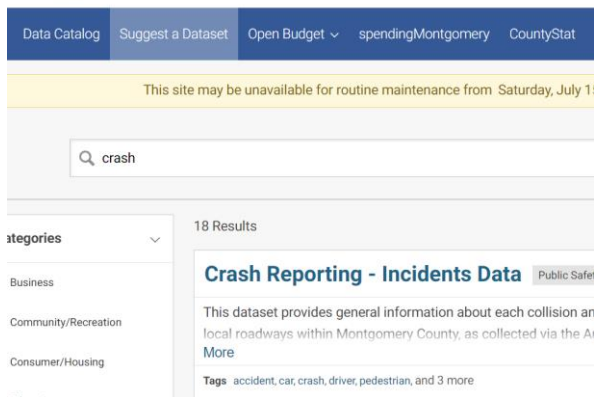
RAVEN 2.0 (2023-2024)

- Public Application(s)
- Equity Map Application
 - Online Risk Indicator Outcomes at Locations for Equity (ORIOLE)
- Trainings/Demonstrations



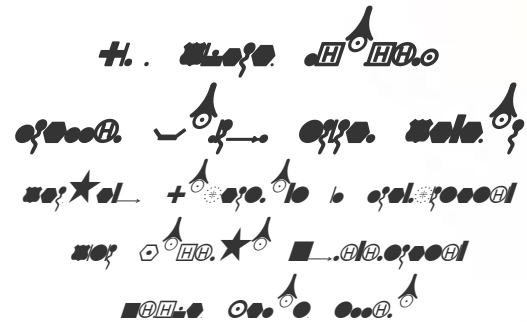
OTHER LOCAL EXAMPLES

- Prince George's County Vision Zero



- Montgomery County Open Data
- Montgomery County Vision Zero





ZERO DEATHS
MARYLAND