



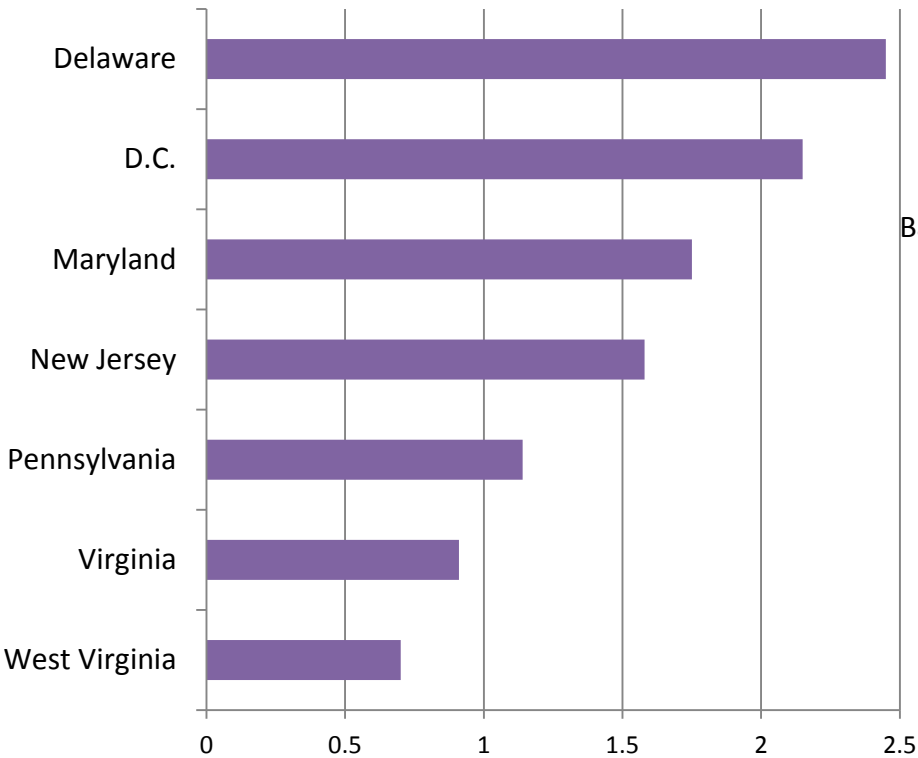
Pedestrian and Bicycle Safety

Prince George's County Department of Public Works and Transportation
Maryland State Highway Administration
Maryland Highway Safety Office
Maryland-National Capital Park and Planning Commission
Prince George's County Police Department

Pedestrian Fatalities in Maryland

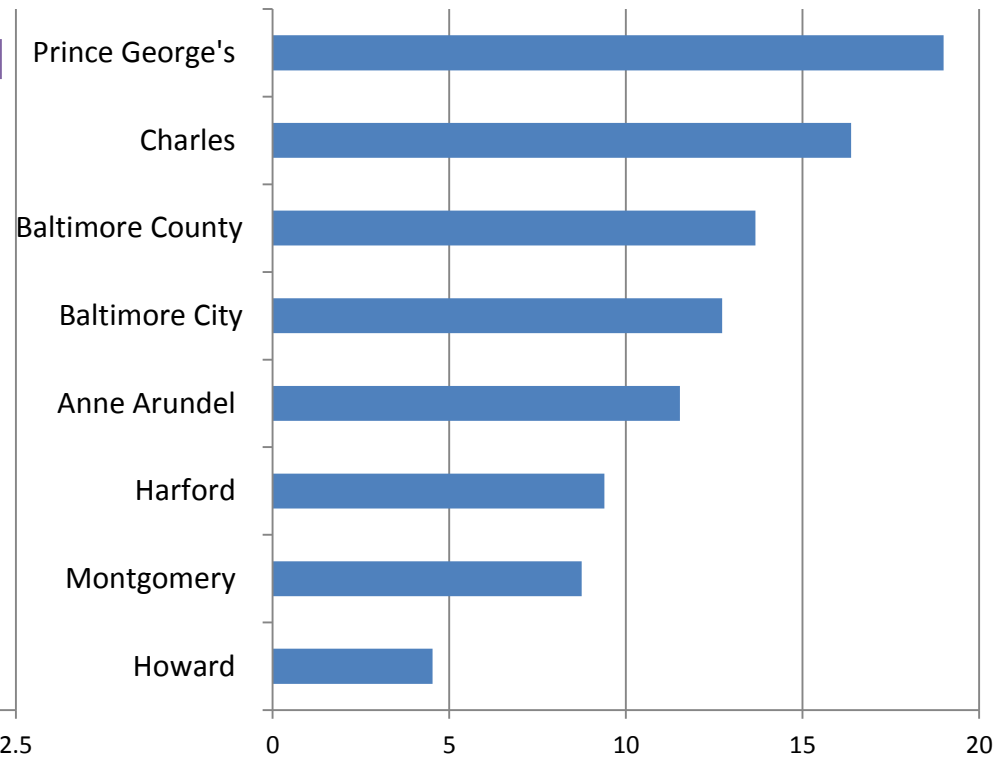
Maryland has the 8th highest number of pedestrian fatalities (per 100,000 people) in the nation. Within Maryland, Prince George's County has the highest number of pedestrian fatalities (per 100,000 people).

Pedestrian Fatalities Per 100k (2010)



Source: National Highway Traffic Safety Administration, August 2012 (2010 Data).

Pedestrian Fatalities Per 100k (2006-12)



Source: Maryland State Highway Administration (2006-2012 Data)

Pedestrian and Bicycle Collisions in Maryland

In Maryland, pedestrian and bicycle collisions are concentrated inside the Capital Beltway in Montgomery and Prince George's County, in the 270 corridor in Montgomery County, and around and within Baltimore City.

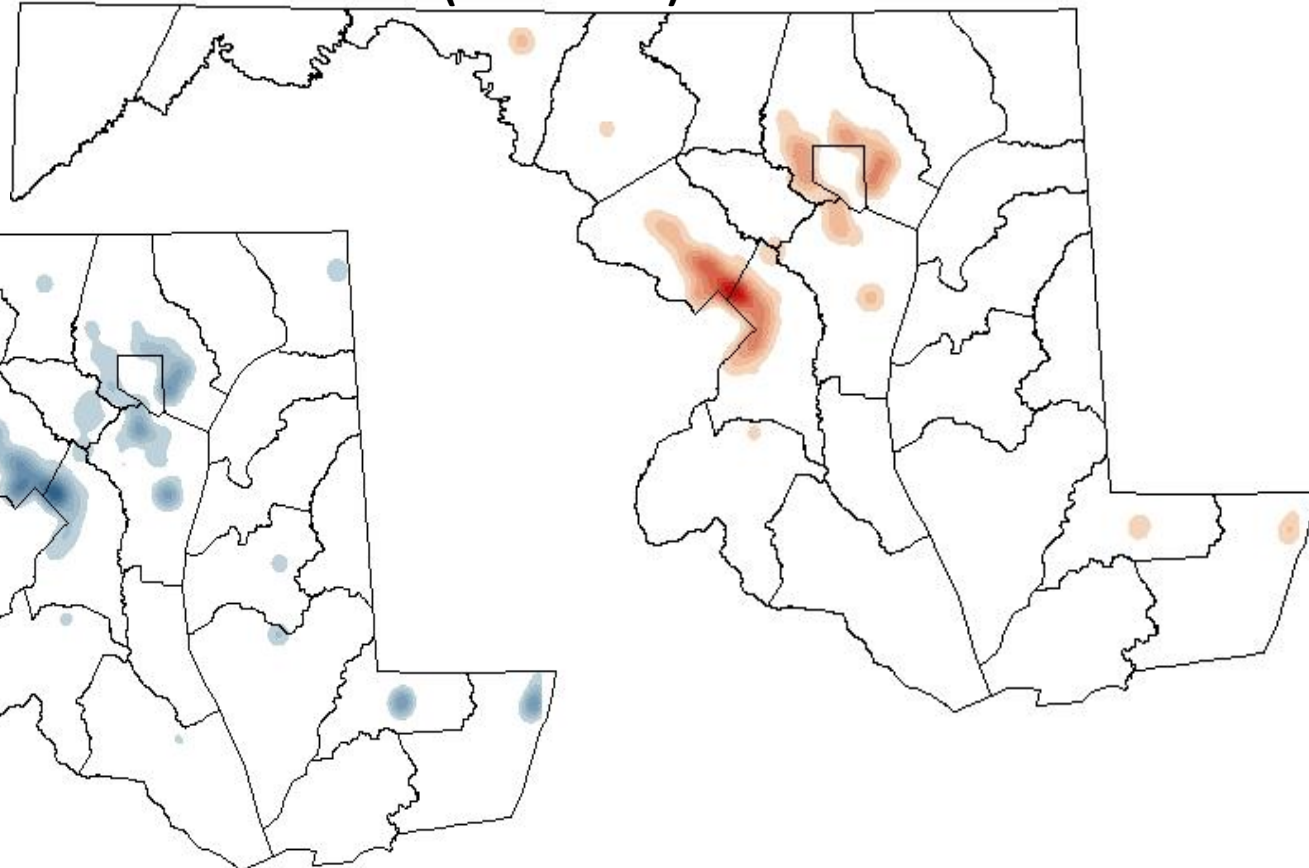
Note: Data from Baltimore City contain records of crashes but not locations; accordingly, those crashes do not appear in the maps below.

Pedestrian Collisions

(2006-2012)

Bicycle Collisions

(2006-2012)



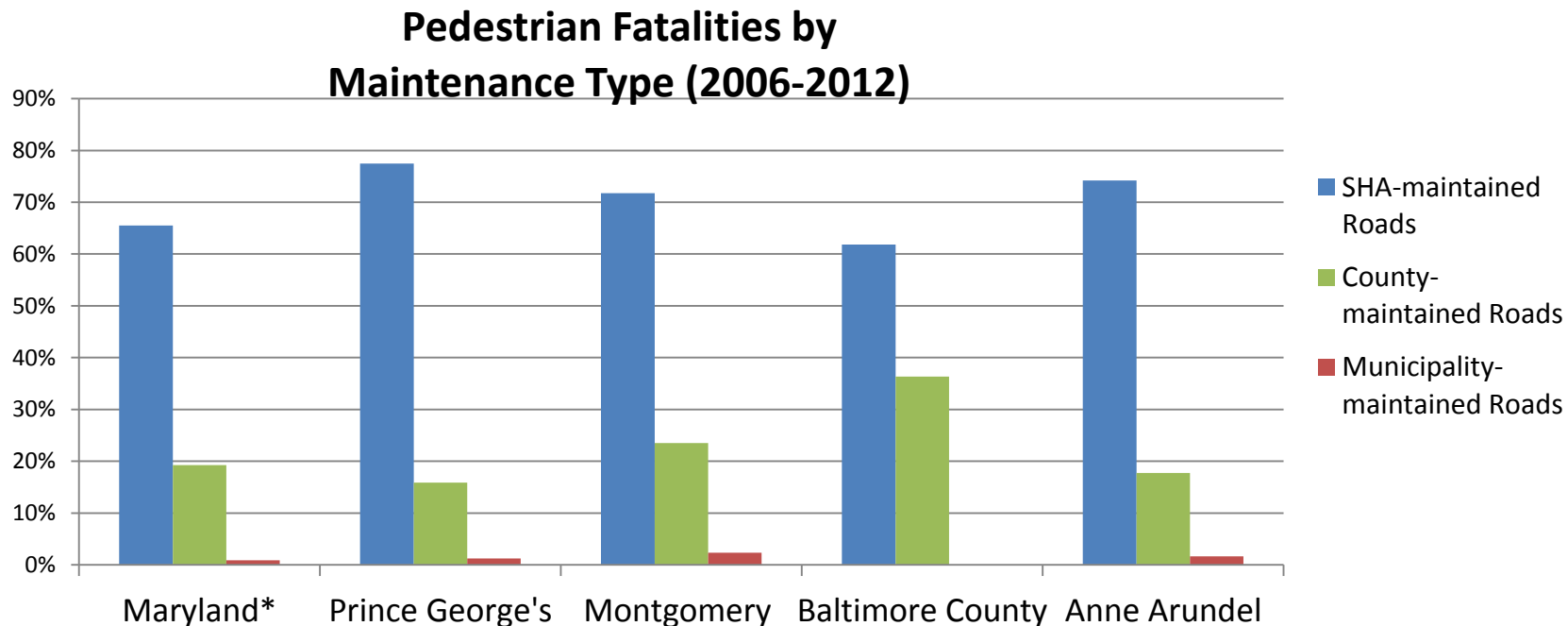
Source: CountyStat analysis of Maryland State Highway Administration (SHA) data

Wednesday, January 02, 2013

Pedestrian Collisions by Maintenance Type

In Maryland—as well as in Prince George’s and Montgomery Counties— a slightly greater percentage of pedestrian collisions occur on state-maintained roads than on county roads. In all counties, state roads account for the majority of fatalities.

Source: CountyStat analysis of Maryland State Highway Administration (SHA) data



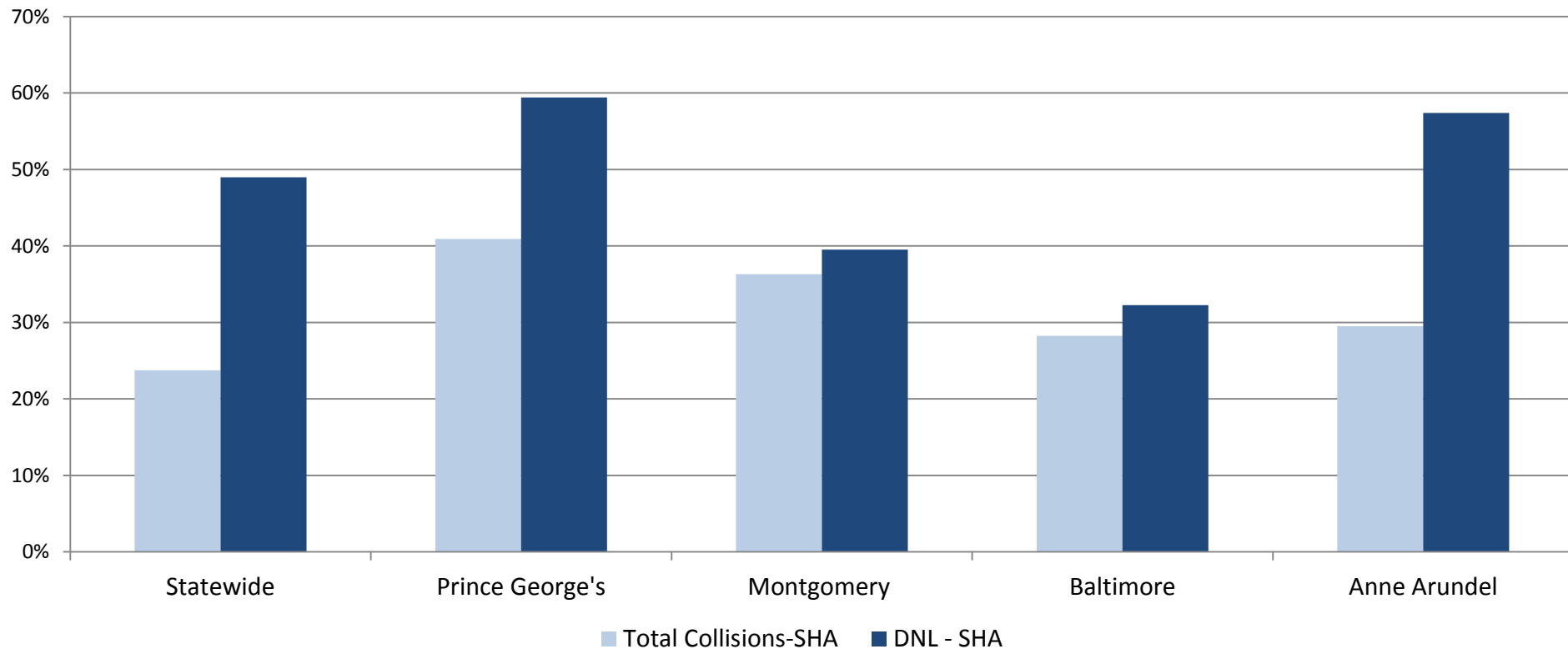
*"Municipality" figure does not include Baltimore City-maintained roads, which account for 30% of collisions and 10% of fatalities in the state.

In Prince George’s County, State roads make up 12% of total road mileage but account for 41% of pedestrian collisions and 77% of pedestrian fatalities.

Pedestrian Collisions by Lighting Condition

In Prince George's County, roughly 60% of pedestrian collisions reported as occurring in the dark without roadway lighting ("Dark-No Lights") occur on state roads, as opposed to only 41% of total collisions.

State Road Pedestrian Collisions: Total versus "Dark-No Lights" (2006-2012)



Source: CountyStat analysis of Maryland State Highway Administration (SHA) data



MD-4 (Pennsylvania Avenue) and Donnell Drive

Wednesday, January 02, 2013



Edmonston Road

Wednesday, January 02, 2013



MD-202 (Landover Road) at the Publick Playhouse

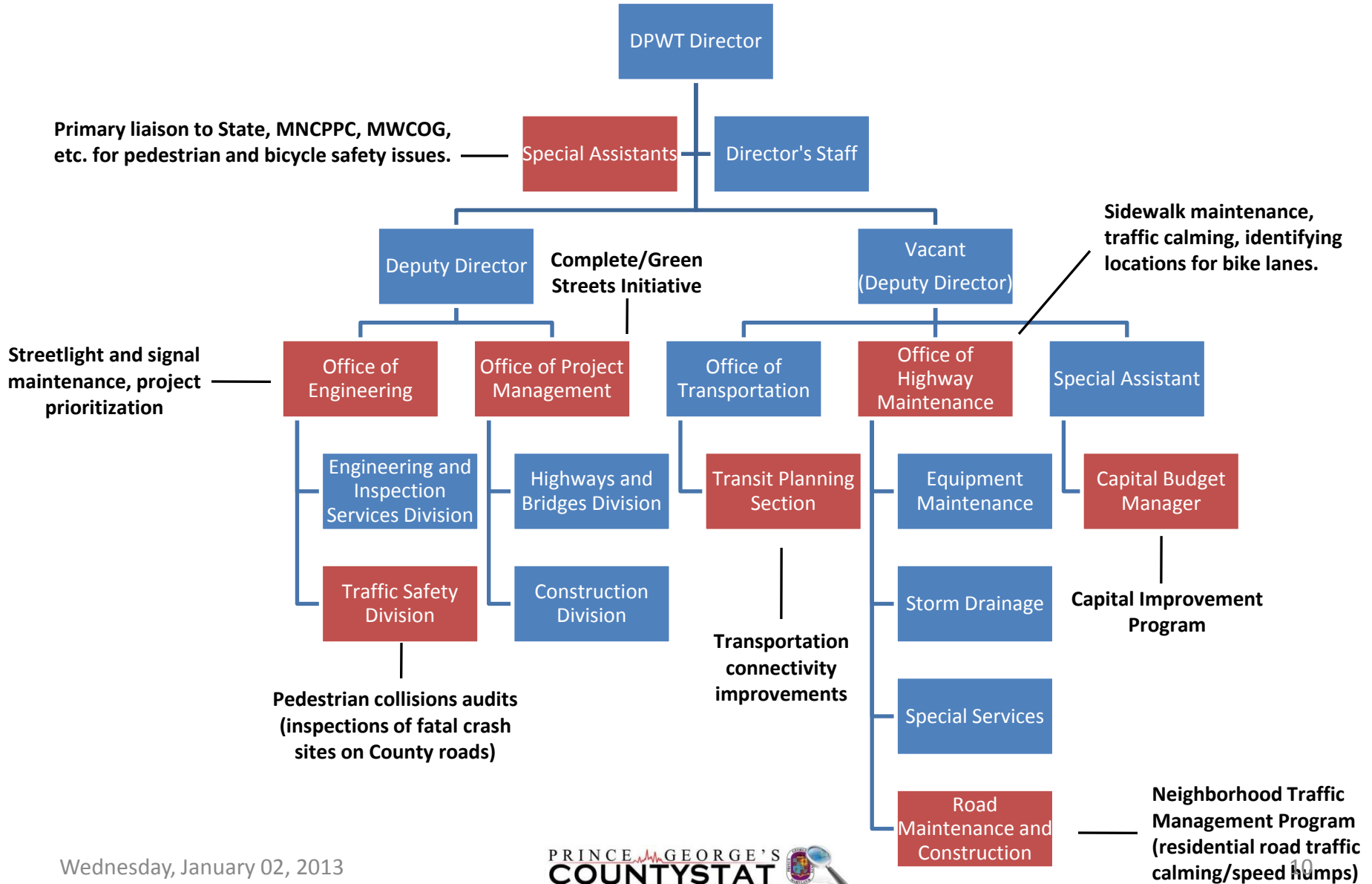
Wednesday, January 02, 2013



Marlboro Pike and Brooks Drive

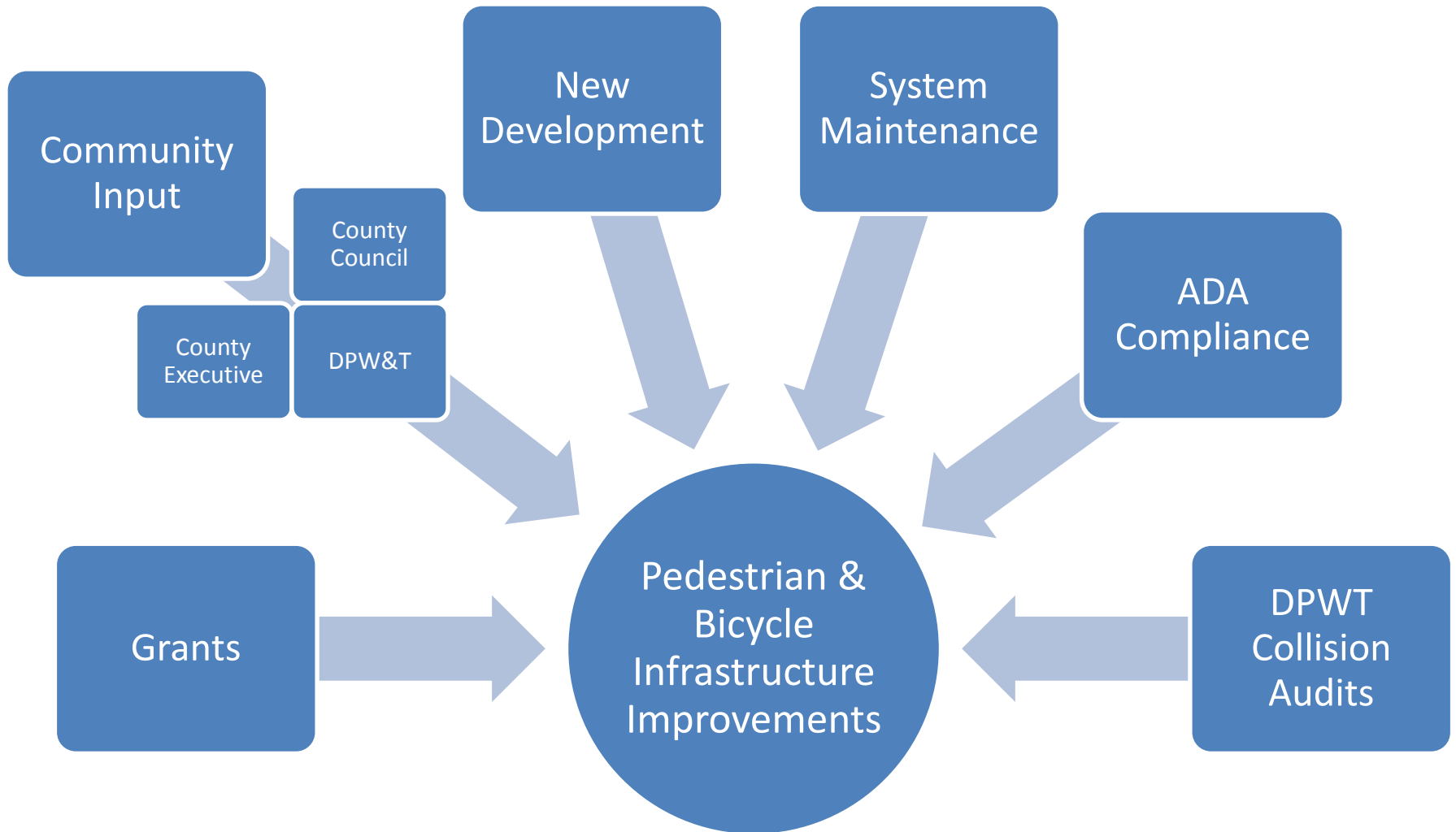
Department of Public Works & Transportation

Functions related to pedestrian and bicycle safety are spread throughout DPW&T



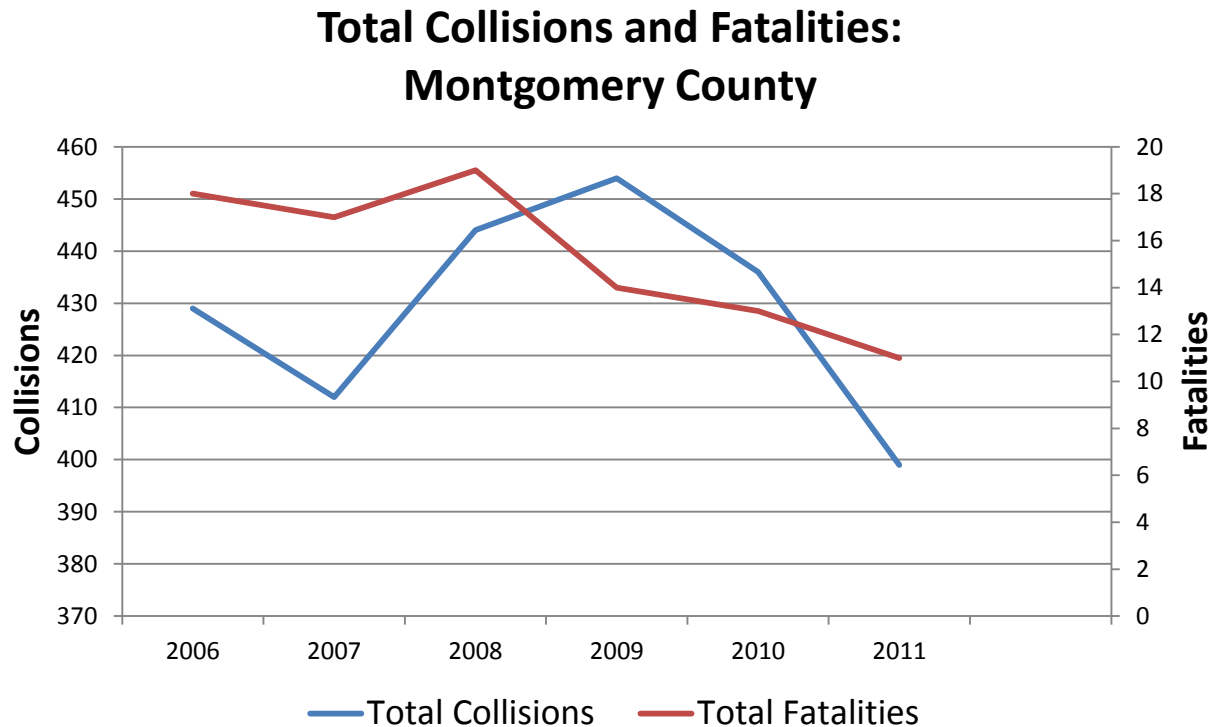
Pedestrian & Bicycle Infrastructure

Current Mechanisms for Generating Pedestrian and Bicycle Infrastructure Improvements



Best Practice: Montgomery County

In 2008, Montgomery County launched the Pedestrian Safety Initiative. The initiative aimed to reduce pedestrian crashes and ensure safe and convenient travel options.



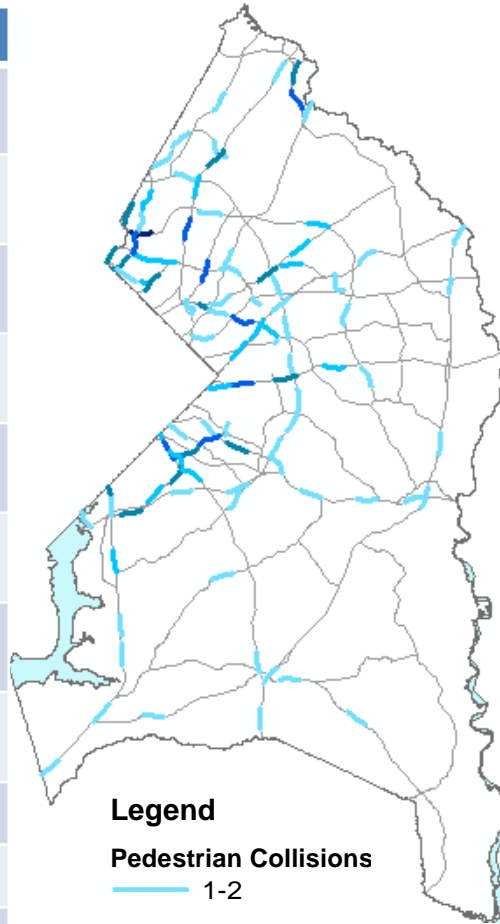
A cornerstone of the Pedestrian Safety Initiative was the selection of High Incidence Areas (HIAs) – places with the highest densities of pedestrian collisions—where pedestrian safety improvements could be targeted.

High Incidence Areas: Prince George's County

One-mile long stretches of road with at least one pedestrian collision recorded between 2009 and 2011.

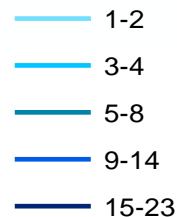
State-Maintained Roads

Route	Mile	#
MD 193 (University)	0.74-1.74	23
MD 5 (Branch Ave)	14.03-15.03	14
MD 458 (Silver Hill Rd)	1.41-2.41	12
US 1	3.75-4.75	10
MD 202 (Landover Rd)	11.35-12.35	10
MD 197 (Laurel-Bowie)	12.27-13.27	9
MD 214 (Central Ave)	0.8-1.8	9
MD 201 (Kenilworth)	3.4-4.4	9
MD 212 (Riggs)	1.2-2.2	9
MD 212 (Riggs)	0-1	8
MD 450 (Annapolis Rd)	4-5	8
MD 650 (New Hampshire)	0.03-1.03	8
MD 4 (Pennsylvania)	10.39-11.39	8



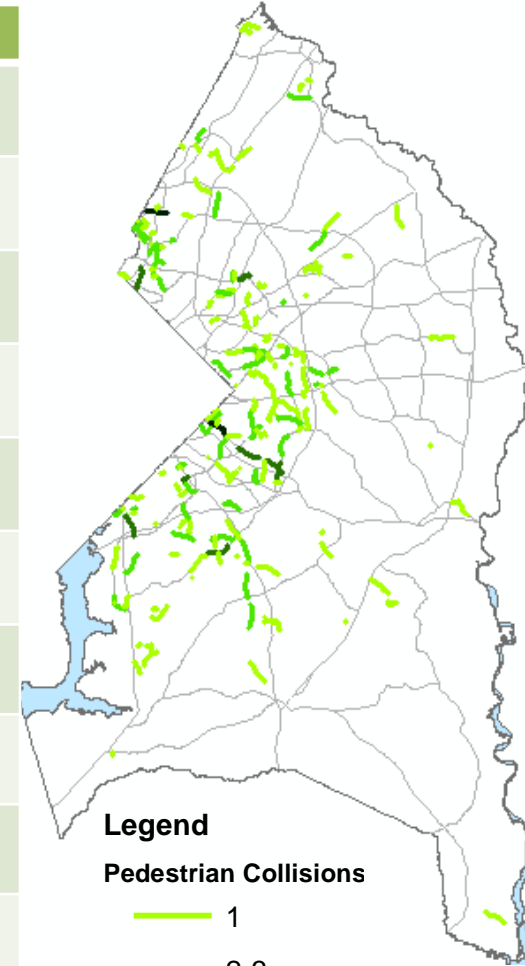
Legend

Pedestrian Collisions



County-Maintained Roads

Route	Mile	#
Marlboro Pike	0.27-1.27	7
Metzerott Road	0.02-1.02	6
Marlboro Pike	1.98-2.98	5
Sargent Road	0.11-1.11	5
Livingston Road	1.99-2.99	5
Forestville Road	0.91-1.91	5
Iverson Street	1.17-2.17	4
Allentown Road	4.35-5.35	4
Riverdale Road	1.5-2.5	4
Marlboro Pike	3.27-4.27	4



Legend

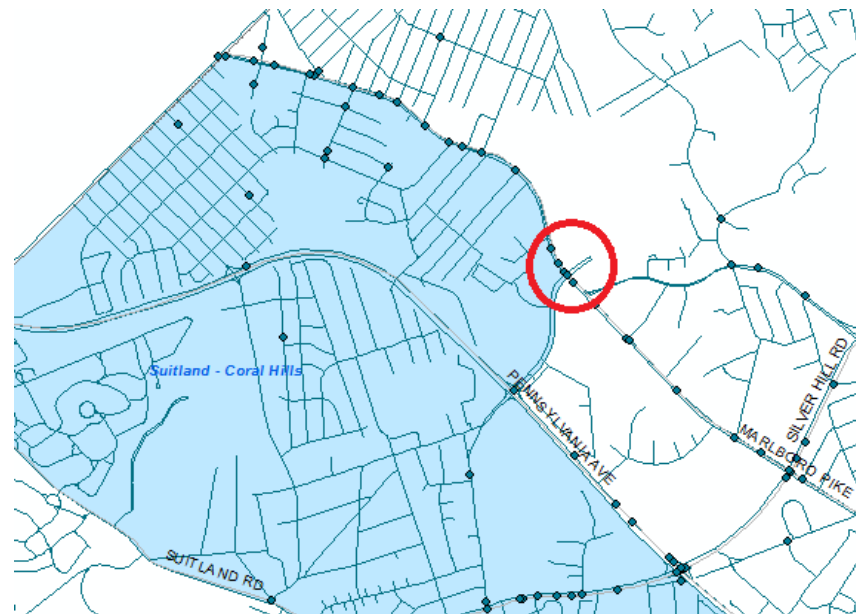
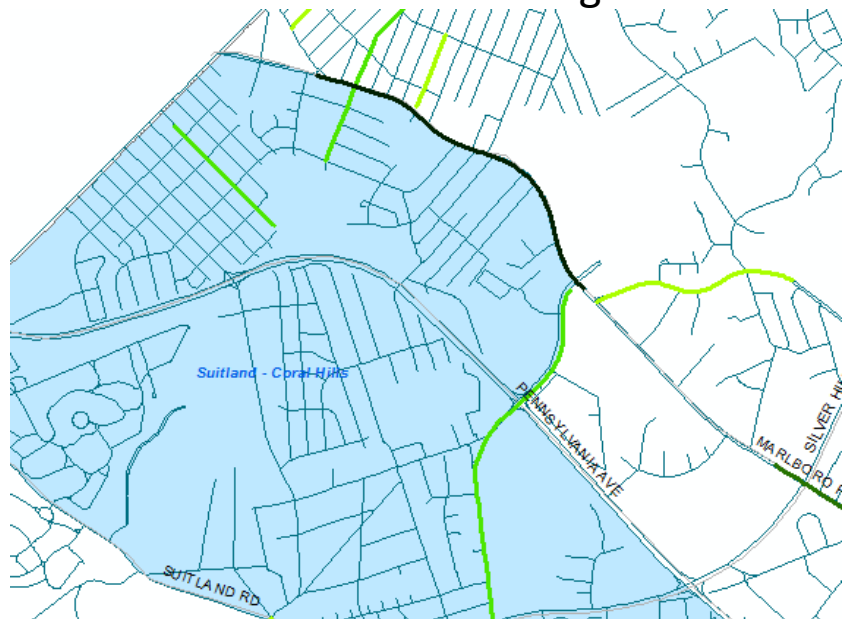
Pedestrian Collisions



High Incidence Area: Marlboro Pike

For each identified area, perform an in-depth analysis of causes, locations, and treatments.

E.g. Marlboro Pike, Mile 0.27-1.27



[Perform an analysis of concentrated collisions locations:](#)

“A combination of systemic pedestrian improvements throughout a given area has been shown to create significant improvements to pedestrian safety. In Florida, a recent study documented the positive impact of inexpensive pedestrian safety measures. **Several small-scale pedestrian improvements** were implemented on eight high-crash corridors, following a public education and enforcement program on pedestrian safety. The two years following the installation of the improvements **resulted in a 41 percent reduction in the number of crashes.**”

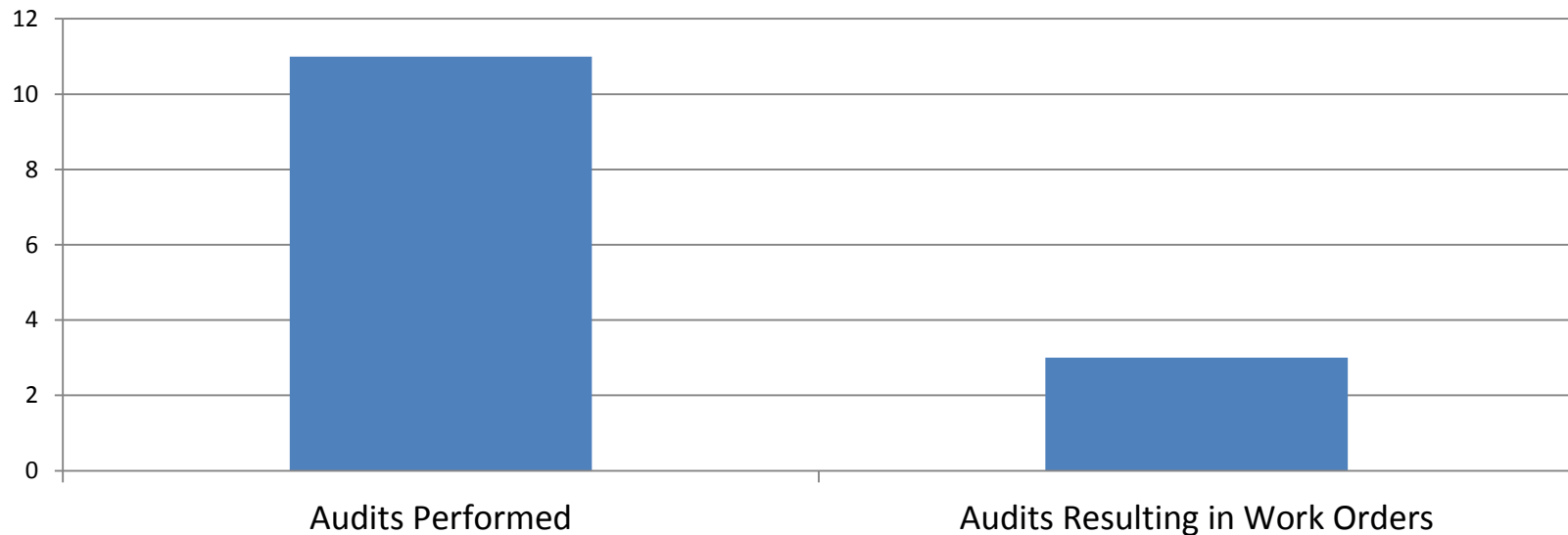
Source: “Reduction of Pedestrian Fatalities, Injuries, Conflicts and Other Surrogate Measures in Miami-Dade, Florida.” Transportation Research Board: Journal of the Transportation Research Boards, No. 2130. 2009.

Existing Pedestrian & Bicycle Safety Initiatives

Traffic Safety Division's Collision Audits

- The Traffic Safety Division of the Office of Engineering performs audits of collision locations.
- Audits are restricted to fatalities on County roads and take place after the completion of a police investigation; conditions change from the time of the accident to the time of the audit.

January-August 2012 Audits



Budgeting for Safety Improvements

Incorporate pedestrian and bicycle safety data into CIP project selection and prioritization

CIP Class	Budget Year FY 13 Amount	Current Project Selection	Suggestion for Integrating Pedestrian Safety
ADA Modifications	\$500,000	Bus stops highlighted by Department of Justice	Incorporate "Connectivity to Transit" study tiers and bus stop consolidation.
County Revitalization & Restoration 2	\$210,000	Streetlighting in TNI areas	Prioritize based on "Dark-No Lights" Collisions (including state roads)
Curb & Road Rehabilitation 2	\$22,245,000	Pavement Condition Index and requests for concrete work by contractors.	Direct additional funds towards infrastructure improvements at HIAs.
Green Street Improvements	\$1,500,000	Connectivity	Incorporate pedestrian safety data into street selection
School Access Projects	\$897,000	Safe Routes to School grants	Use pedestrian safety data from school routes for future grant applications.
Street Lights & Traffic Signals	\$2,500,000	Regular maintenance	Include "Dark-No Lights" Collision areas as priorities
Traffic Congestion Improvements	\$3,186,000	Intersection improvements, smaller projects	Incorporate pedestrian safety improvements at high incidence areas
Transportation Enhancements	\$1,220,000	Regular maintenance, traffic count program, federal sign upgrades, speed humps	Incorporate improvements in high incidence areas

Pedestrian Safety Initiatives - SHA

- Road Safety Audits
- Pedestrian Road Safety Audits
- APS/CPS at Signalized intersections
- Pedestrian Priority Locations
- Automated Speed Enforcement – School Zones
- Construction Projects Include Ped./ADA Facilities
- Work Zone MOT Plans Include Ped. Access



Opportunities for Collaboration

- Montgomery County Model:
 - Pedestrian Safety Coordinator
 - An independent group of experts perform PRSAs
 - SHA supports by providing data (counts, crash data)
 - Submit report to SHA/D3 for review and concurrence
 - SHA/D3 programs improvements identified
 - County/SHA develop a cost-sharing agreement for implementation



Maryland Strategic Highway Safety Plan

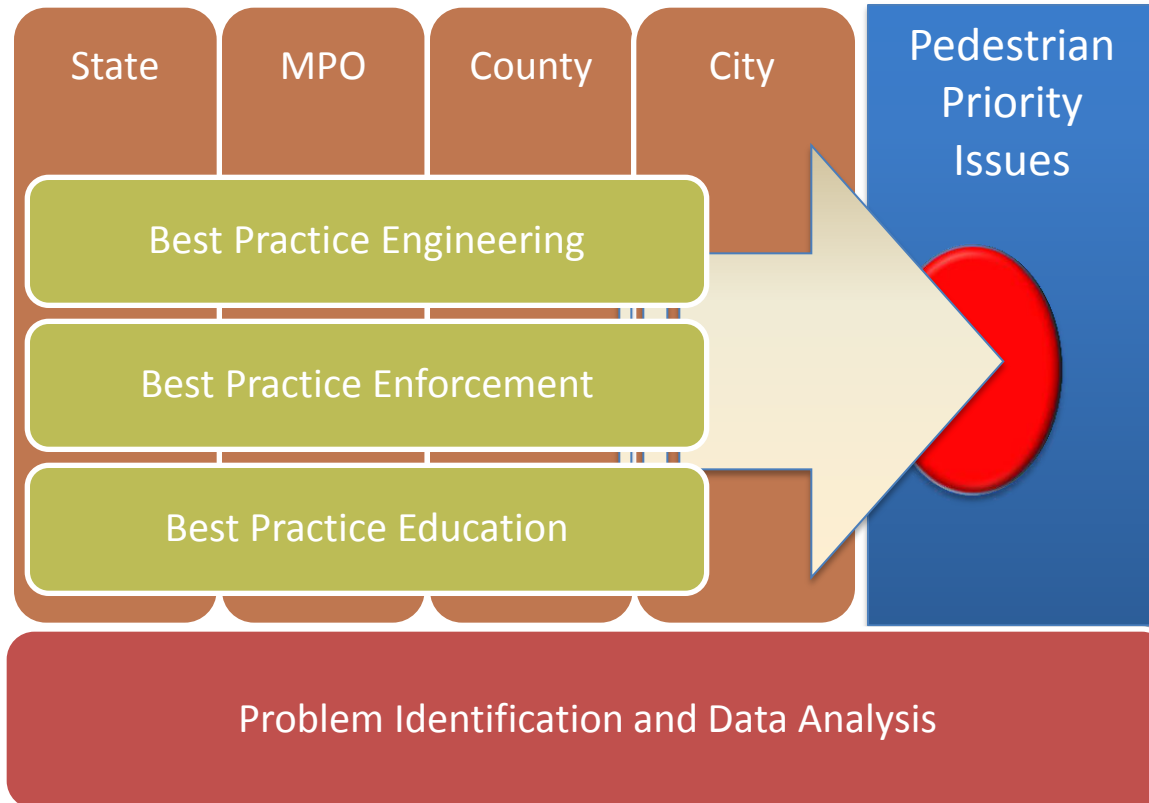
PEDESTRIAN SAFETY Emphasis Area

Collaboration with SHA – MHSO – Local Partners

- Strategy 1** Develop model process to identify and prioritize high-incident locations and system-wide pedestrian safety issues.
- Strategy 2** Develop and evaluate model approaches to engineering built environments that accommodate safe pedestrian travel.
- Strategy 3** Develop and evaluate model approaches to improving pedestrian and motorist awareness and behavior, including education & enforcement efforts.
- Strategy 4** Create partnerships among stakeholders to develop action plans that address high-priority locations and system-wide issues using comprehensive approaches to pedestrian safety.

SHSP Pedestrian Emphasis Area

- Emphasis Area Team to be Co-Chaired by SHA & Local Engineers
- 2 MHSO Regional Traffic Safety Program Mgrs will be Team Members





Pedestrian and Bicycle Safety Education Campaign

What is Street Smart?

- Street Smart focuses on Education through Mass Media
- Since 2002 /Concentrated waves of Radio, Transit, Cable, and Internet advertising designed to change driver, pedestrian, and cyclist behavior
- Supported by concurrent law enforcement
- 2012 Budget (\$634,000) Funded by:
 - Federal Funds Administered by MHSO & Partner SHSOs (VA & DC)
 - WMATA
 - Member Governments

Findings & Recommendations

Finding 1: Prince George's County does not have a data-driven strategy for improving pedestrian and bicycle safety.

- **Recommendation A:** In conjunction with Montgomery County and SHA, use collision data to select a set of priority places—High Incidence Areas—for pedestrian safety improvements.
- **Recommendation B:** Use data on pedestrian and bicycle collisions to inform project prioritization within the CIP.
- **Recommendation C:** In conjunction with M-NCPPC, SHA, and bicycle advocacy groups, develop a list of roads that are available immediately for restriping for bike lanes.

Finding 2: Functions, programs, funding and planning related to pedestrian and bicycle safety are spread among various departments in the County and within DPW&T.

- **Recommendation A:** Designate a pedestrian and bicycle safety coordinator within DPWT to administer the strategies outlined in Finding #1.
- **Recommendation B:** Create a Pedestrian and Bicycle Safety Advisory Group within County government.
- **Recommendation C:** Consider the creation of a grant writing position or realign the existing grants position within the Office of Transportation so that it covers the Offices of Engineer, Project Management, and Highway Maintenance.

Findings & Recommendations

Finding 3: Collaboration between the County and the State on pedestrian and bicycle engineering, education and enforcement activities can be improved.

- **Recommendation A:** SHA and DPWT should work to establish cost sharing agreements for engineering improvements on High Incidence Area projects located on state-maintained roads.
- **Recommendation B:** SHA and DPWT should develop a reliable forum through which to identify opportunities for collaboration on making engineering improvements during the State's routine system maintenance and ADA-compliance construction work.
- **Recommendation C:** MHSO and DPWT should share data on the locations of pedestrian and bicycle incidents; SHA and DPWT should share data on bus stop locations to facilitate SHA's bus stop consolidation work.

Finding 4: DPWT's current system of auditing collisions sites requires significant staff time but results in few work orders, captures few locations, and takes place long after the time of the collision.

- **Recommendation A:** DPWT should work with PGPD to develop a "checklist" of engineering and situational deficiencies that officers use during their investigations of crash sites, which can then be shared with the Traffic Safety Division. DPWT should then eliminate the collision audit program and use the recommendation from PGPD to develop work orders for pedestrian and bicycle improvements.