

Montgomery PlanningAspen Hill Vision Zero Study

Advisory Group February 21, 2019 Harmony Hills Elementary School



ASPEN HILL VISIONZERO **STUDY** * & * 🖚

Road Classification Table

			Posted				
Road	From	То	Limit	Lanes	Classification	ROW	Road Ownership
	Matthew						
Connecticut	Henson	Georgia Ave	45 mph	6	Major Highway	150 ft	State
Connecticut	Georgia Ave	Bel Pre	40 mph	4	Arterial	80 ft	County
	Matthew						
Georgia	Henson	Connecticut	45 mph	6	Major Highway	150 ft	State
Georgia	Connecticut	Bel Pre	50 mph	6	Major Highway	150 ft	State
Aspen Hill Road	Georgia Ave	Grenoble	30 mph	4	Arterial	80 ft	County
Aspen Hill Road	Grenoble	Parkland	30 mph	2	Arterial	80 ft	County
Independence St	Connecticut	Parkland	25 mph	2	Residential Primary	70 ft	County
	Matthew						
Parkland	Henson	Aspen Hill	25 mph	2	Residential Primary	70 ft	County
Bel Pre	Connecticut	Georgia Ave	35 mph	4	Arterial	80 ft	County
Grand Pre	Bel Pre	Georgia Ave	30 mph	2	Residential Primary	70 ft	County



MC ReactMap: www.mcreactmap.com





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MC ReactMap: what we heard



- narrow and too close to the road."
- Dean Rd all the way to the shopping center."
- the Georgia near home depot. It's terrifying to watch."

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1. "It is very dangerous to walk to the nearby commercial establishments such as the Aspen Hill Shopping Center because of the narrow sidewalks and high speed limits. When I walk to these establishments with my children we have to single file in order to walk safely and hope that nobody is coming in the opposite direction. It appears that more affluent neighborhoods in the county have more pedestrian friendly options."

2. "The sidewalks are not protective of pedestrians [on Connecticut Avenue]. They are too

3. "There are too many driveways at [the shell] gas station [on the corner of Aspen Hill Road and Connecticut Avenue]. Makes it uncomfortable and unsafe for pedestrians.

4. "Residents from the surrounding neighborhoods walk to the Aspen Hill shopping center. Cars are so close to pedestrians as they walk to the shopping center. Widening these sidewalks is a matter of pedestrian safety. Please, please widen [Connecticut Avenue] from

5. "The driveway to home depot is crazy. I've see a few fender benders. Lots of people cross

ASPE Pedestrian Level of Comfort VZERO **STUDY**



- Good residential sidewalk network
- Low speed neighborhood streets
- High speed roadways lack buffers between travel
 - lanes and sidewalks
- Major intersections lack pedestrian refuges
- Several unmarked crosswalks at intersections
- Several unsignalized crossings

ASPEN HILL VISIONZERO * * * STUDY Pedestrian Level of Comfort Analysis





Veirs Mill Corridor example

- Pedestrian Level of Comfort illustrates how short- and long-term recommendations affect connectivity
- Choose local destinations (bus stops, schools, post office, etc.)

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-term recommendations affect connectivity etc.)

ASPEN HILL Aspen Hill Crashes (2015 – 2019) IONZERO **STUDY** * 💰 💰 🚗





ASPEN HILL VISIONZERO * * * * STUDY Aspen Hill All Crashes (2015 – 2019)



ASPEN HILL VISIONZERO * * * STUDY SEVERE and Fatal Crashes (2015 – 2019)





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Georgia Avenue between Bel Pre Road and Heathfield Road

Georgia Avenue between Heathfield Road and Connecticut Avenue

Georgia Avenue between Connecticut Avenue and Aspen Hill Road

Georgia Avenue between Aspen Hill Road and Hewitt Avenue

Connecticut Avenue between Bel Pre Road and Grand Pre Road

Connecticut Avenue between Grand Pre Road and Georgia Avenue

Connecticut Avenue between Georgia Avenue and Aspen Hill Road

Connecticut Avenue between Aspen Hill Road and Independence Street

Aspen Hill Road between Connecticut Avenue and Georgia Avenue



W Frankfort Dr

Vista Park

Kemper Sr.

Parkland Magnet Middle School for..

kland Dr

8

Grenoble Dr

Landgreen St

Keating St

Aspen Hill Rd

13

AutoZone

Matth Man data @2018 Google

Aspen Hill

Kmart 🤤

Aspen Hill Rd 6



Google

The Home Depot 🎱

Kohl's Aspen Hill 🍚

Aspen Hill

Shopping Center

- Connecticut Avenue at Bel Pre Road
- Connecticut Avenue at Georgia Avenue
- Connecticut Avenue at Aspen Hill Road
- Connecticut Avenue at Independence Street
- Georgia Avenue at Bel Pre Road
- Georgia Avenue at Aspen Hill Road
- Georgia Avenue at Hewitt Avenue

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

United States

Strathmore

Park

- Aspen Hill Road at Parkland Drive
- Georgia Avenue at Heathfield Road
- Georgia Avenue at Home Depot driveway
- Georgia Avenue at Northgate Plaza
- Bel Pre Road at Grand Pre Road / Tynewick Drive
- Connecticut Avenue at Grand Pre Road
- Connecticut Avenue at Home Depot driveway
- Connecticut Avenue at Aspen Hill Shopping Center
- Aspen Hill Road at Aspen Hill Shopping Center

The following are examples of various infrastructure improvements that have a demonstrated impact on safety. These examples have been implemented in Montgomery County, the Washington Region, and throughout the Country. This is not a comprehensive list of all possible safety improvements or future recommendations

With these examples are listed the objective, the advantages and challengers of each type of infrastructure improvement. The list of challenges and advantages are not comprehensive. Not all examples are appropriate for all types of roadways.

These are examples only for reference and educational purposes only. This is not a list of recommendations for the Aspen Hill area. No recommendations have been made as part of the Study process.

ASPEN HILL VISIONZERO X & M STUDY Controlled Crossings



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Objective: Provides designated crossing times for pedestrians and bicyclists

Advantage: Frequent controlled crossings may reduce crossings at other locations.

Challenge: May result in changes to cycle lengths and additional delay to vehicles at some locations. Pedestrians may not push buttons to request pedestrian light.

ASPEN HILL Sidewalks, Bike Lanes, and Bus Stops **ONZERO STUDY**



Objective: Provides designated space for each road user.

Advantage: Road users should know where they belong. Conflict points with other modes are in predictable, regulated locations such as designated crossings or intersections. Slows traffic.

Challenge: May be costly. May require more right of way. Functions best with other traffic calming measures.



Objective: Visually and physically narrow the roadway to slow speeds and reduce crossing distances.

Advantage: Creates safer and shorter crossings for pedestrians. Increases the available space for street furniture, benches, plantings, stormwater management and street trees. Increases visibility of pedestrians. Reduces turning speeds.

Challenge: May reduce on-street parking. May adversely affect truck movement.

Extend the sidewalk or curb line out into the parking or travel lane, which reduces the effective street width.

ASPEN HILL VISIONZERO * * * * STUDY Re-striping (narrowing) traffic lanes



Objective: Reduce speeds, increase safety, and redistribute space to other users.

Advantage: Redistributes space, creating opportunities for new infrastructure. Slows traffic, improving safety for all road users.

Challenge: Consider large vehicles such as trucks, emergency vehicles, and buses. May encourage traffic to divert to other local streets

Repaint the traffic lanes to make them narrower.

Street trees and landscaping





Objective: Visually narrows the roadway to slow vehicle speeds, creates physical barrier between motorists and pedestrians.

Advantage: Creates physical and mental barrier between pedestrians and vehicles. May provide shade, and protection from light rain. Slows traffic. Improves attractiveness of street. Increase privacy. Absorb noise. Improve environmental factors such as pollutant and stormwater absorption,

Challenge: May reduce site lines. May be costly to maintain.

ASPEN HILL VISIONZERO STUDY Pedestrian Intersection Lighting





Lighting features specifically geared for pedestrians. Pedestrian lighting characteristics include: brighter or colored lighting over marked crosswalks and sidewalks as well as lighting at a lower height than street lighting (less than 25 feet).

Objective: Increase pedestrian visibility and safety, specifically during dark hours.

Advantage: Reduces nighttime crashes by increasing visibility of pedestrians.

Challenge: Can be challenging to meet pedestrian thresholds to install lighting.

Credit Michele Weibart http://pedbikesafe.org/PEDSAFE/cm_images/LigIII2.jpg

Speed bumps and tables



Objective: Slow vehicle speed.

Advantage: Slows vehicles and make pedestrians more visible at uncontrolled crossings.

Challenge: Should not be placed on streets wider than 60 feet. May create additional maintenance costs.

Raised midblock traffic calming devices that reduce vehicle traffic speed.

Pedestrian Refuge or Island



Objective: Reduces the exposure time experienced by a pedestrian in the intersection.

Advantage: Provides space for pedestrians to wait if they cannot cross in the time provided. Especially helpful for vulnerable, slower pedestrians

Challenge median.

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Challenge: May encourage more pedestrians to wait in



Reduce curb radii



Reducing the size of a corner radius. Curb radius can often be reduced without affecting the effective turn radius.

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Objective: shorten crossing distances for pedestrians. Allows for better pedestrian ramp alignment and reduce vehicle speeds during turning movements.

Advantage: Reduces speed of turning vehicles, which may reduce crashes and crash severity. Increases visibility of pedestrians and motorists. Requires less ROW.

Challenge: Possible issues for larger vehicles, will need to determine the effects on trucks.

Remove channelized turn lanes



Objective: To reduce intersection complexity and remove an unimpeded vehicle movement that creates high vehicle turning speeds.

Advantage: Removes uncontrolled crossing, allowing pedestrians to cross. Slows right vehicle turns.

Challenge: Possible issues for larger vehicles. Increased pedestrian clearances may increase pedestrian and vehicle delay. May increase vehicle delay even if right turn lane maintained

Reconfiguring intersection geometry by removing channelized right turn lanes.

Leading Pedestrian Interval



NACTO Urban Street Design Guide

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IZERO

3-7 seconds of walk signal given to pedestrians prior to the traffic light turning green for vehicles.

Objective: give pedestrians time to enter the enter section before turning vehicles enter

Advantage: Increase visibility of crossing pedestrians to motorists and provide better view of traffic. Helpful for vulnerable, slower moving pedestrians. Relatively low cost compared to other counter measures. Challenge: Reduces vehicle capacity. Does not prevent vehicle turns on red completely.



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Automated Speed Enforcement



Relies on fixed or mobile cameras and other equipment to detect and capture images of vehicles traveling at speeds at least 11 miles per hour above the posted speed limit

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Objective: To enforce speed limits without law enforcement officers present by ticketing drivers

Advantage: Situational compliance if a driver knows a speed camera is present. May increase compliance in areas where there is no camera present due to concern that one is present.

Challenge: Drivers may only comply in areas where they know a camera to be present.

No Right Turn on Red

Objective: To reduce conflicts by prohibiting vehicles from turning on red.

Advantage: Low cost, with minimal impact on traffic. Reduce vehicles blocking crosswalk. Reduce conflicts between vehicles turning right and pedestrians crossing right.

Challenge: May require more enforcement. May lead to more right turn on green conflicts.