



Pedestrian and Cyclist Safety Around the West Hyattsville Metro Station

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Agenda

1. Our Client
2. Problem Statement
3. Background Information
4. Methodology
5. Limitations
6. Current Issues
7. Findings
8. Recommendations
9. Acknowledgements
10. Questions





Our Client

Prince George's County Planning Department



- ★ Contact: Maha Tariq
- ★ Goals
 - Increase safety in Prince George's County
 - Increase ease of travel to other parts of the DMV via the metro





Problem Statement

The West Hyattsville Metro Station in Prince George's County is in an area prone to crime and bicycle/pedestrian crashes

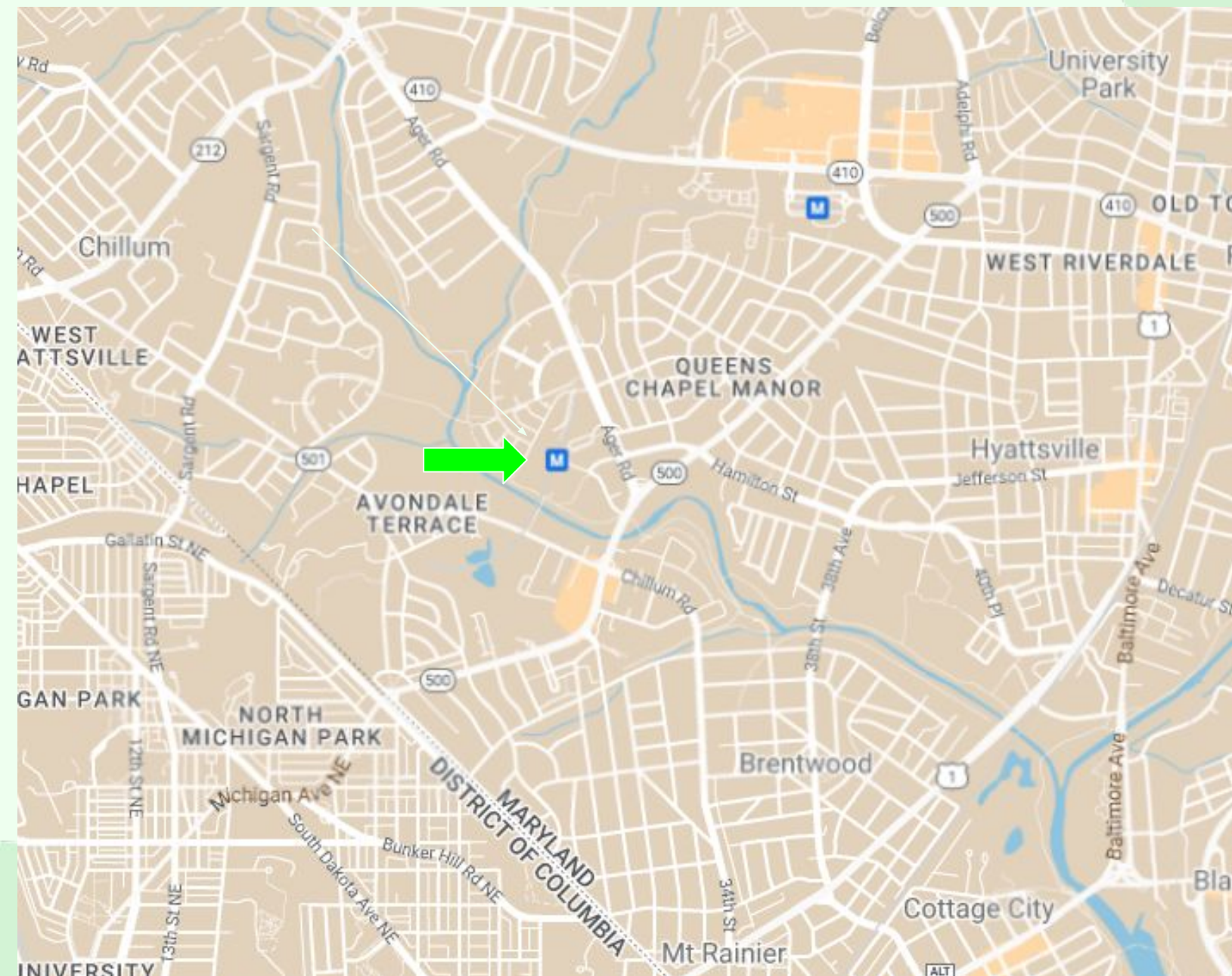


We were instructed to provide recommendations on how to increase safety around the station, ignoring financial limitations and focusing on best practices





Map of the Area Surrounding the West Hyattsville Metro Station



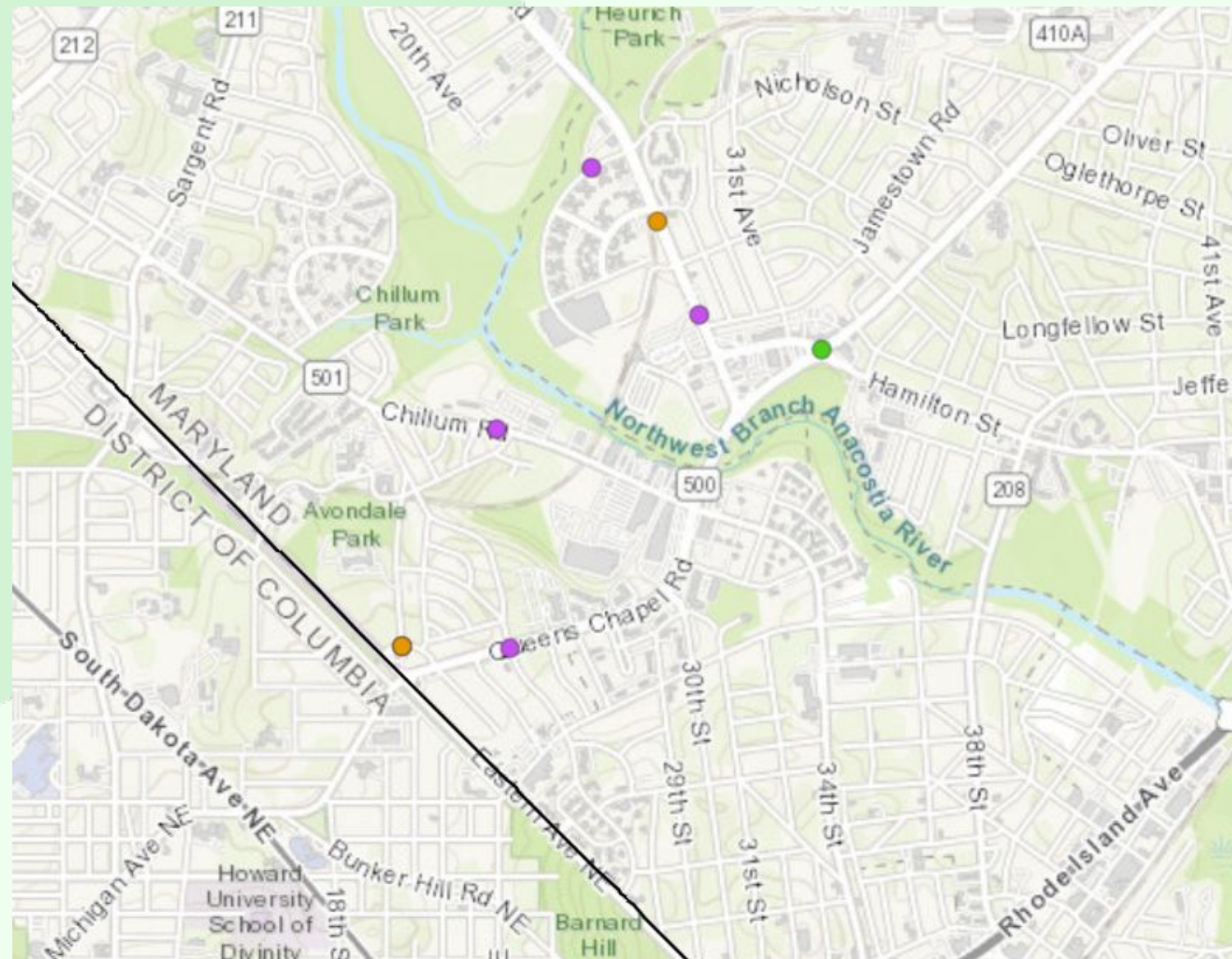
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Crash Data

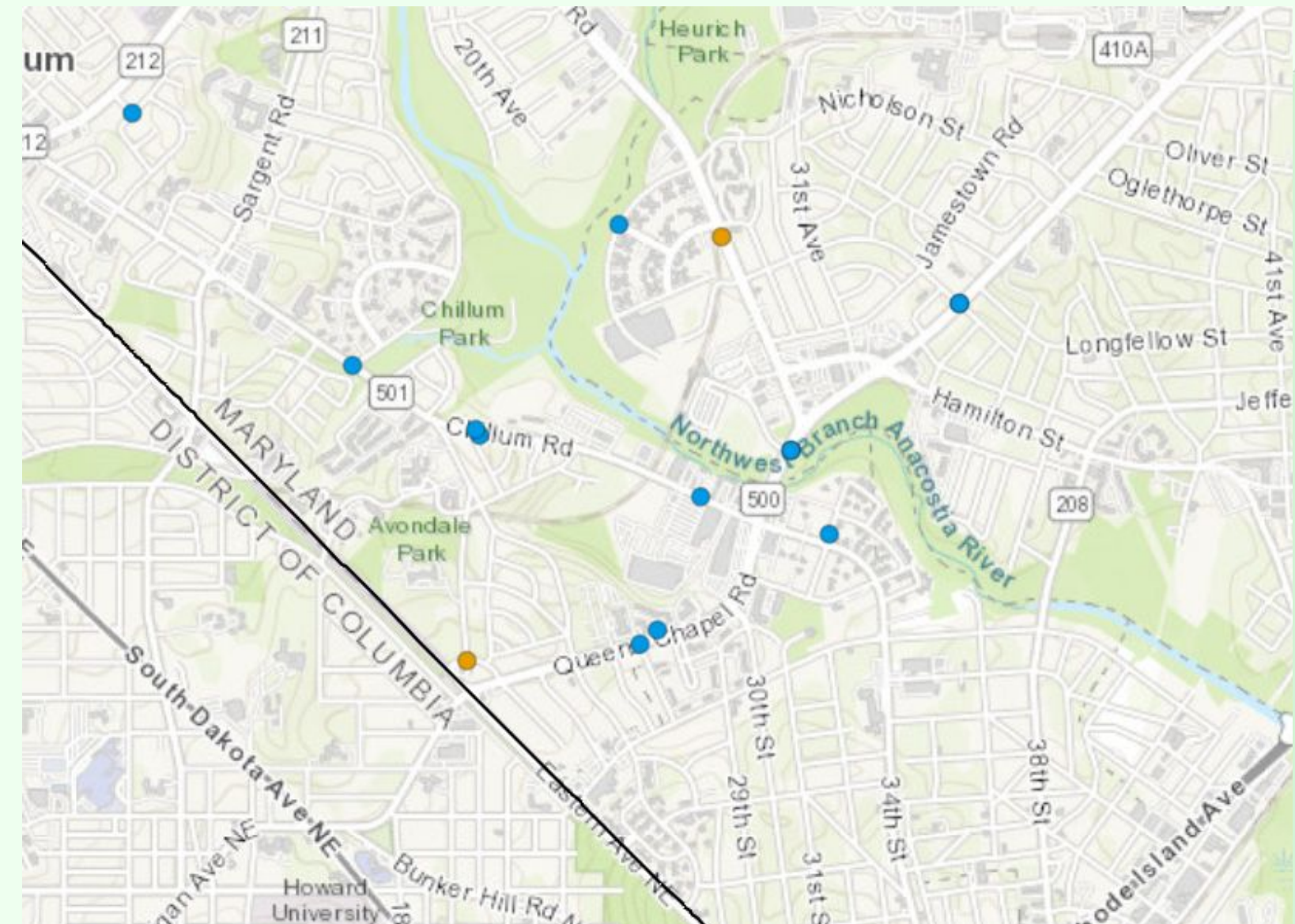


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Fatal Crashes by Mode Key:

Vehicle
Pedestrian
Bike



Key:

Pedestrian Fatal Crashes
Pedestrian Serious Injury



Annual Average Daily Traffic (AADT)

ROAD	AADT
Queens Chapel Road	18,302–29,673
Ager Road	9,502–11,792
Hamilton Street	10,792
Chillum Road	13,212
Sargent Road	8,905





Hyattsville Ward 5 Crime Data Q1 2023

CRIME	FREQUENCY
Theft	21
Stolen Vehicles	11
Assaults	9
Citizen Robberies	6
Carjacking	3
Commercial B & E	2
Commercial Robbery	1
Homicides	1





Methodology

Mixed Methodology

Conducted interviews with representatives for key stakeholders

- ★ Hyattsville Community Development Corporation, Prince George's County Planning Board, and the Prince George's County Planning Department WHQC SMA and Sector Plan Staff

Classified three main priorities: **pedestrians, bicyclists, and crime**

- ★ Literature analysis of peer-reviewed and academic journals to inform best practices and use as supplemental information and context

Observed the area through site visits and maps

- ★ Created recommendations based on all of the information we gathered

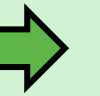




Limitations

- ★ We were unable to complete several interviews because of a lack of response, including WMATA and a meeting with the City of Hyattsville that fell through
- ★ Unable to access recent area-specific crime statistics from Mount Rainier, the Maryland National Capital Park Police, or the Metro Transit Police
- ★ Lacked the capacity to investigate the roots of crime in the area around the Station and methods for preventing the creation of criminals
- ★ Turnaround time prevented us from investigating signal timing issues





Current Issues





Cycling

- ★ Roads only have **traditional bike lanes**, if any cyclist protection at all
- ★ Major road intersections with bike lanes are not conducive to cyclist safety
- ★ **High speed limits** in residential neighborhoods
 - Excluding Mount Rainier





Pedestrians

- ★ **Lack of crosswalks**, especially **signalized crosswalks**, on major roads
- ★ Pavement is bland and uninviting
- ★ Storefronts are **not in close proximity** to main roads and access points





Crime

- ★ Large portions of surrounding trails **lack lighting and security cameras**
- ★ **Prevalence of negative land** use such as empty lots and liquor stores
- ★ Lack of developed area around the Station





Findings



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Cycling



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Cycle Tracks

- ★ Cycle tracks have been **proven to be safer** than bike lanes
- ★ The studies cited in our report found that cycle tracks led to **28 percent lower injury rates and 53 percent less crashes**



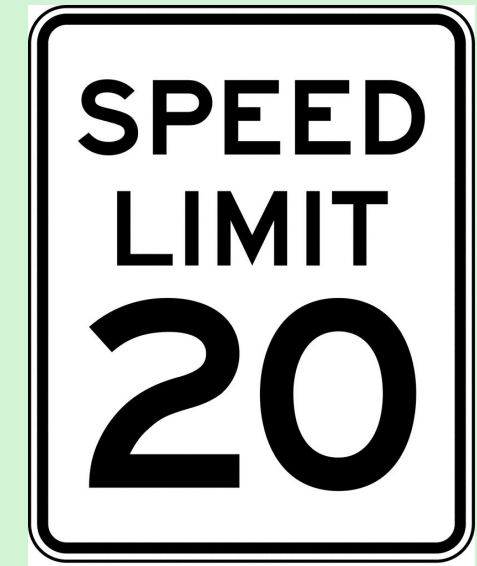
Intersection Management

- ★ **Over 40 percent** of cyclist fatalities occur at urban intersection
- ★ Protected intersections reduce turning speed and increase the rate of driver glances before a right turn
- ★ **Drivers yield to cyclists 96 percent of the time and pedestrians 100 percent of the time**



Cycling

Speed Limit Reductions



- ★ Crashes involving cars travelling 20-30 miles per hour double the fatality rate compared to those traveling 20 miles per hour or less
- ★ There is a threshold effect for fatality rates for cars driving beyond 20 miles per hour
- ★ SUVs increase the odds of a fatality
- ★ SUVs now make up a majority of cars on the road in every state and new car sales





Cycling

Dutch bicycle facility selection matrix

Lane configuration	Average daily traffic (vehicles/day)	Street type and speed limit			
		Urban local street	Urban through street	Rural local road	Fast traffic road
		30 km/h (19 mph)	50 km/h (31 mph)	60 km/h (37 mph)	70+ km/h (44+ mph)
Two-way traffic with no centerline	<2500	Mixed traffic ^a	Bike lane ^b or cycletrack ^c	Advisory bike lane ^d Bike lane ^b or cycle track ^c	Cycle track or low-speed service road
	2000–3000				
	3000–5000 >4000	Bike lane or cycle track	Bike lane or cycle track ^c		
Two lanes (1 + 1)	any	Bike lane or cycle track	Bike lane or cycle track ^c		
Four lanes (2 + 2) or more	any	(Does not exist)	Cycle track or low-speed service road		





Pedestrians

Crosswalks & Sidewalks



- ★ Locate and address roads without sidewalks and crosswalks
 - ★ Federal Highway Administration found **sidewalks can prevent 88%** of pedestrian injuries
 - ★ Roads without sidewalks are **200%** more likely to experience pedestrian crashes
- ★ **High visibility crosswalks** reduce acceleration and throttle pedal actuation of drivers
 - ★ Must be paired with a form of **traffic calming**





Pedestrians

Median Refuge Islands

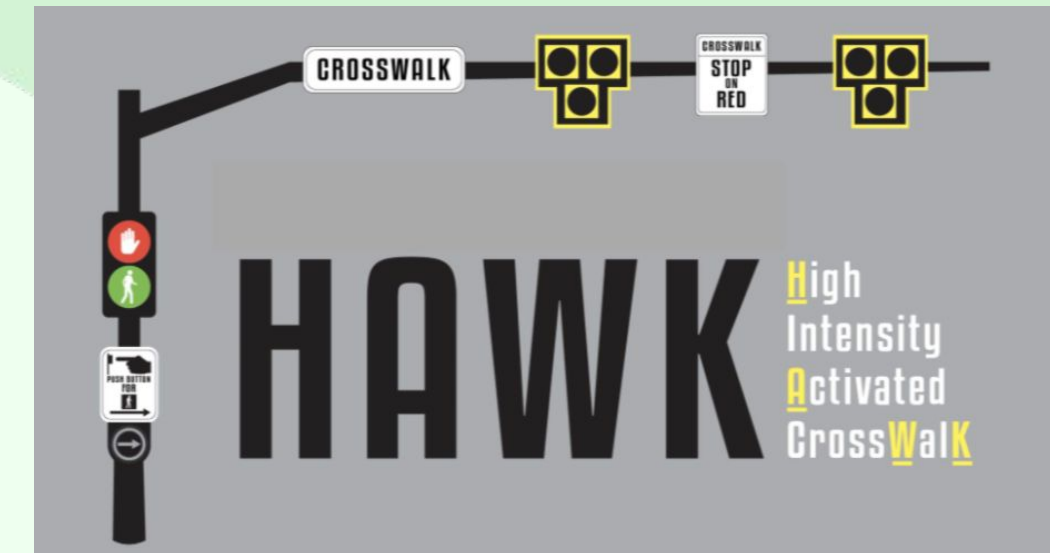
- ★ Federal Highway Administration proven countermeasure - **reduce pedestrian involved crashes by 56%**
- ★ National Cooperative Highway Research Program found median refuge islands lead to a **33% reduction in pedestrian crashes**
- ★ Roads with an Annual Average Daily Traffic (AADT) of over 9,000 are good candidates





Pedestrians

HAWK Beacons



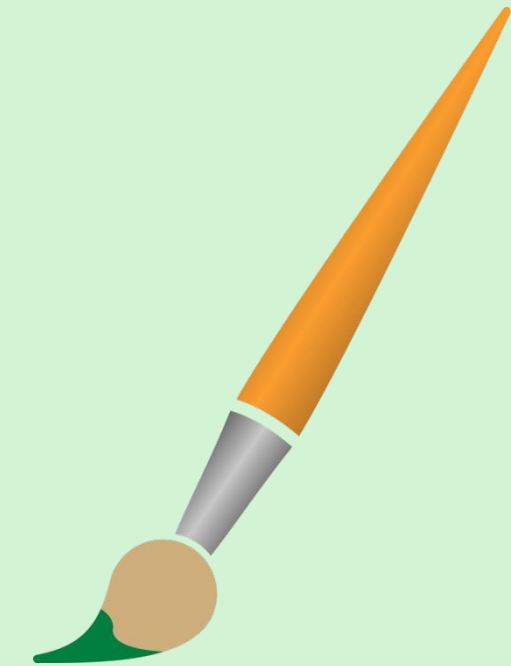
- ★ High Intensity Activated Crosswalk beacons reduce pedestrian crashes at intersections
- ★ 2017 NCHRP study found **76% reduction in pedestrian crashes at intersections with HAWK** beacons paired with advanced yield or stop markings
- ★ A 2010 FHWA study found they **reduced pedestrian crashes by 69%**
- ★ FHWA recommends HAWK beacons at locations where pedestrians must cross three or more lanes of traffic and/or an AADT above 9,000.





Pedestrians

Street Art



- ★ Bloomberg Philanthropies Study found a **50% decrease in pedestrian crash rate**, a **38% decrease in injuries** and a **27% increase in drivers yielding to pedestrian**
- ★ The FHWA Manual on Uniform Traffic Control Devices (MUTCD) rescinded recommendations that originally recommended against street art

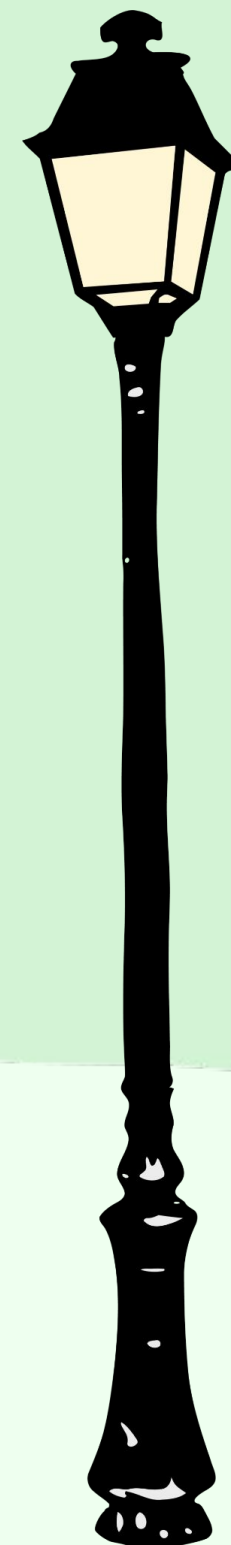




Crime

Lighting

- ★ Only a **small portion of the Northwest Branch Trail** that leads to the West Hyattsville Metro Station has lighting
- ★ **Fear of crime** and an **inability to properly see** the trail ahead can lead to people taking dangerous routes on busy roads
- ★ Study from the University of Chicago shows that **lighting reduces crime by 36%**



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Crime

Negative Land Use

- ★ The Station is surrounded by large parking lots **that rarely fill up**
- ★ There are several **empty lots and liquor stores** in the surrounding area
- ★ Studies have shown that there is **significant correlation** between vacant properties and crime, in particular **aggravated assault and assault with a weapon**
- ★ Negative land use can be addressed through **urban revitalization efforts** and community engagement





Recommendations



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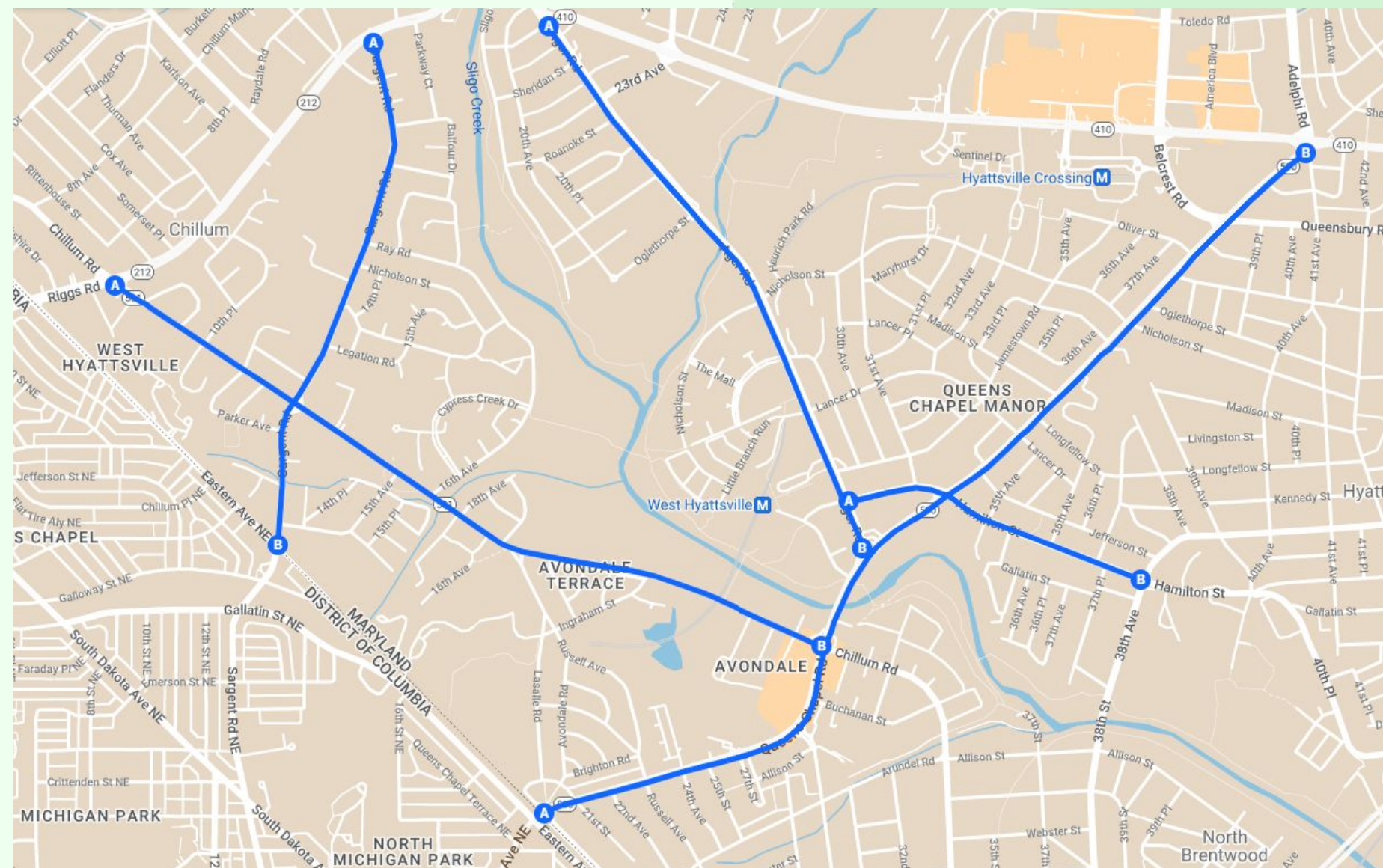


Cycling



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Cycle Tracks



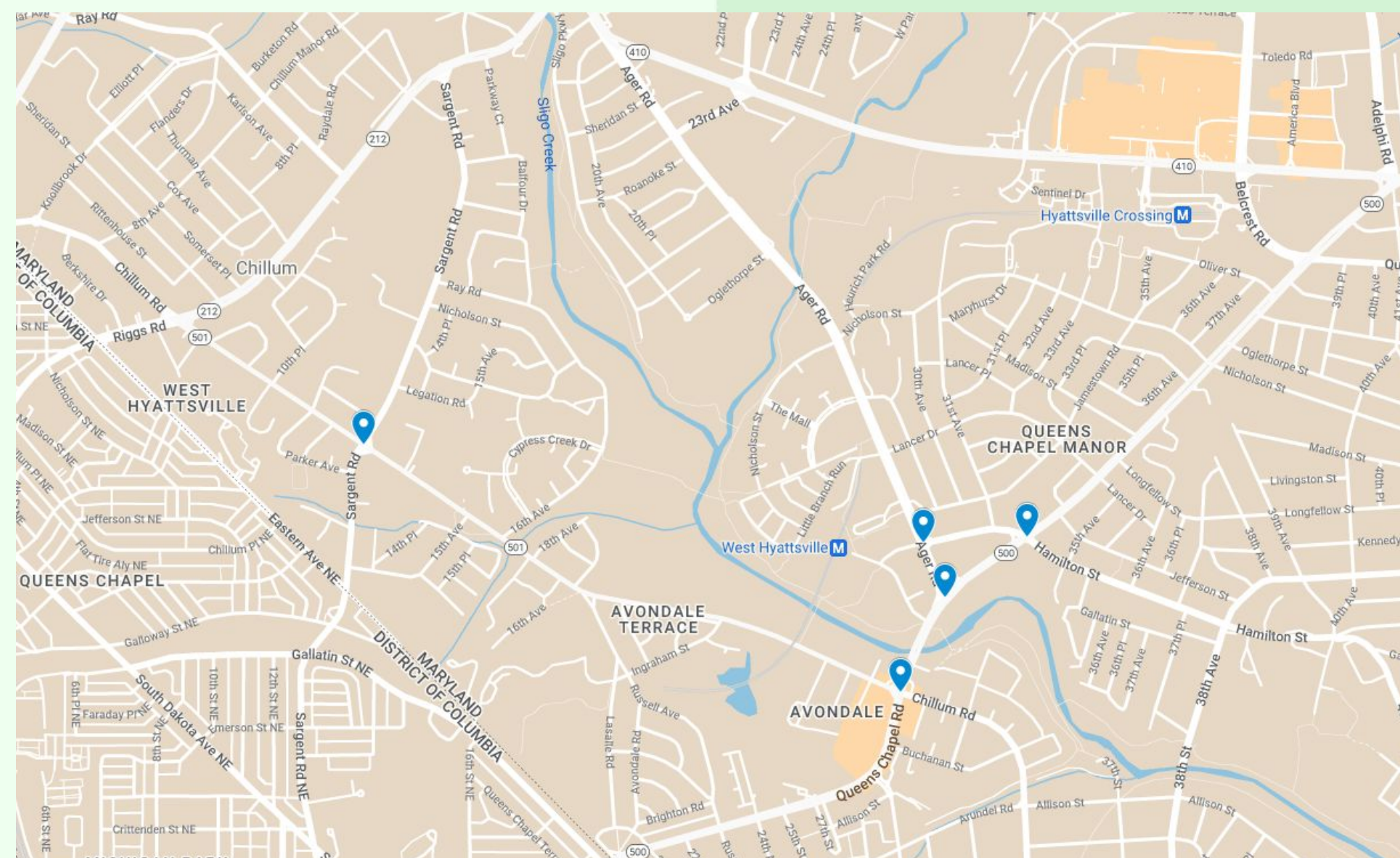


Cycling



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Protected Intersections



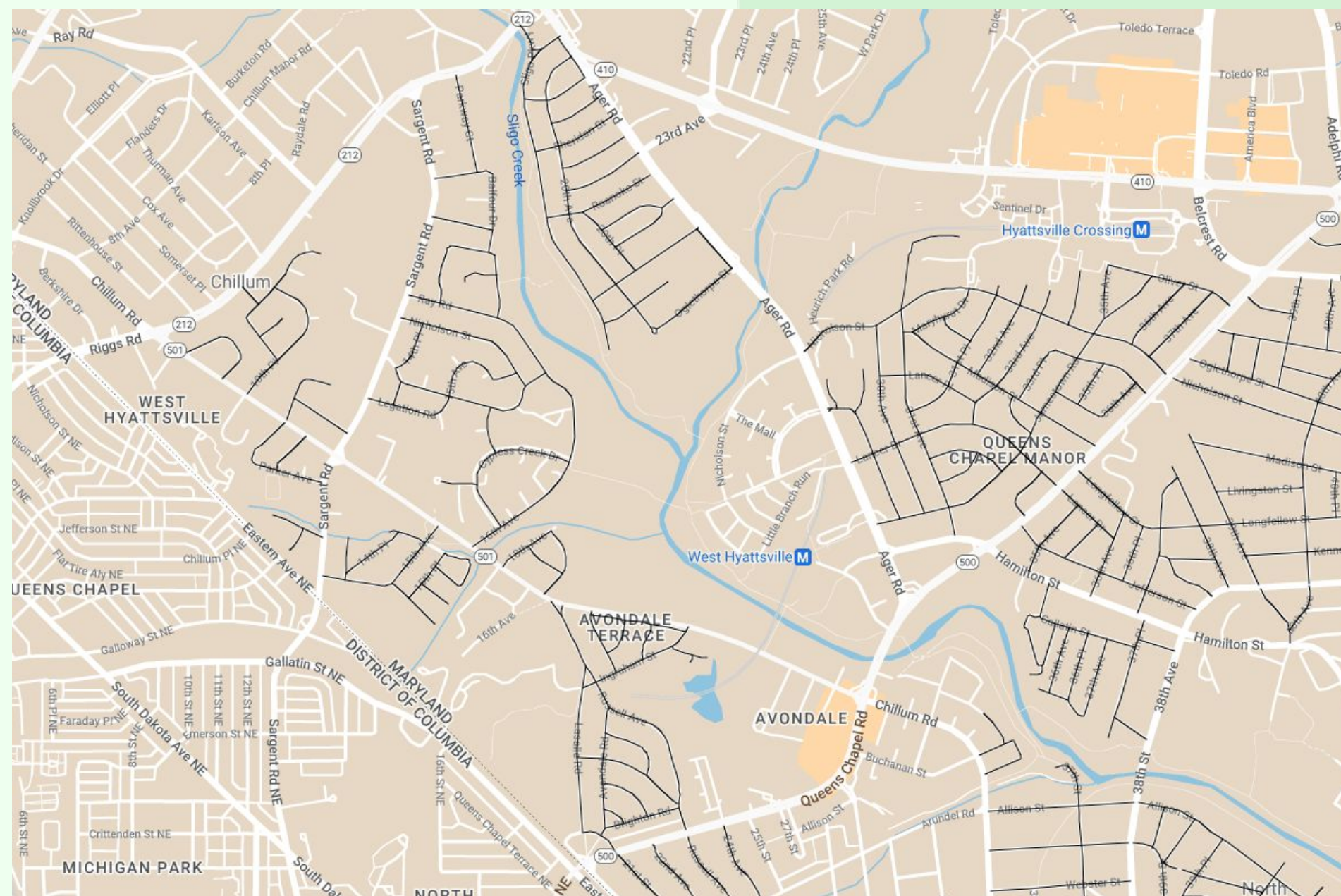


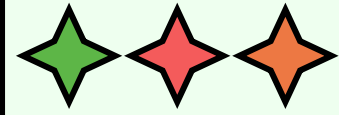
Cycling

Traffic Calming: Speed Limit Reduction



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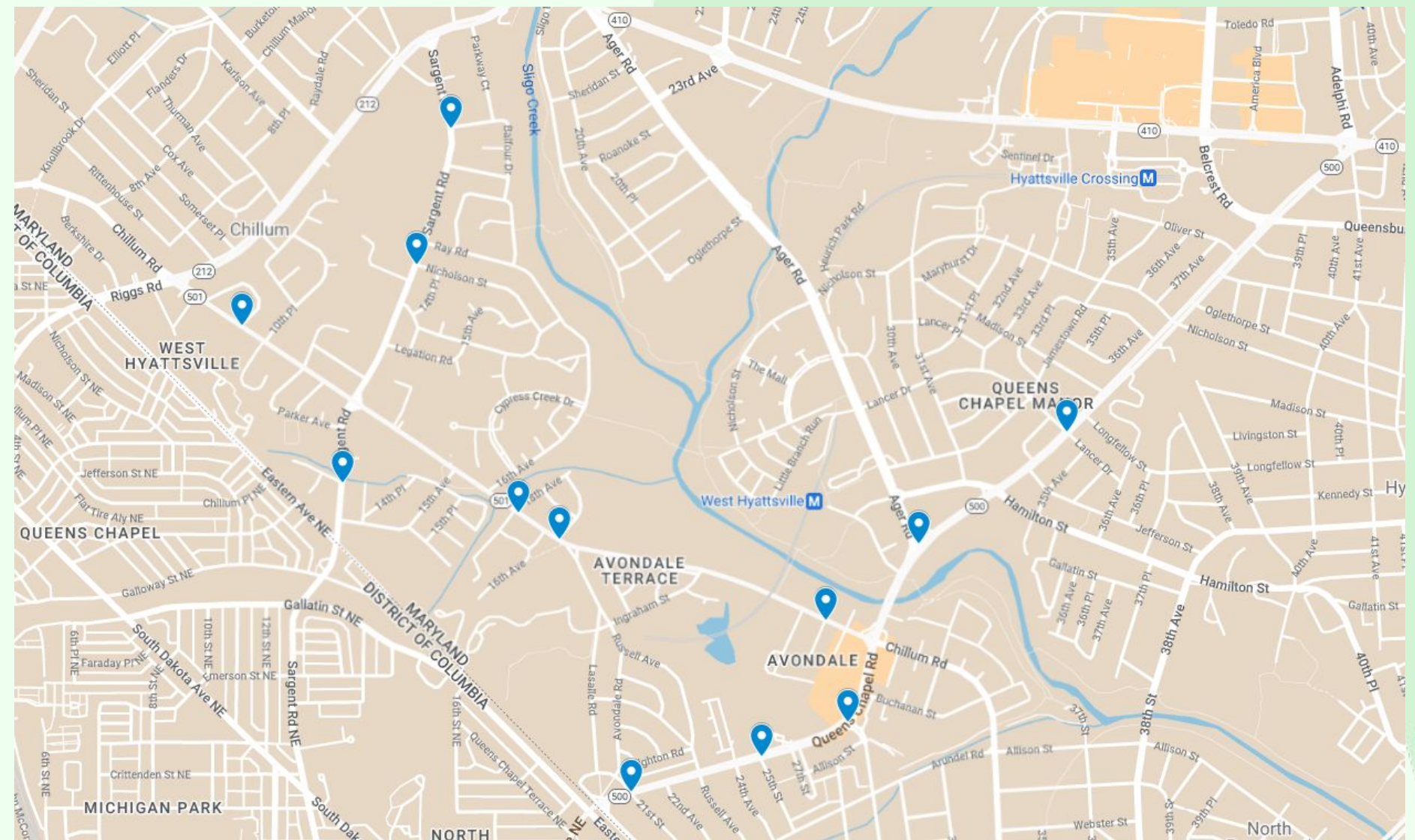


Pedestrians

Increase crosswalk prevalence



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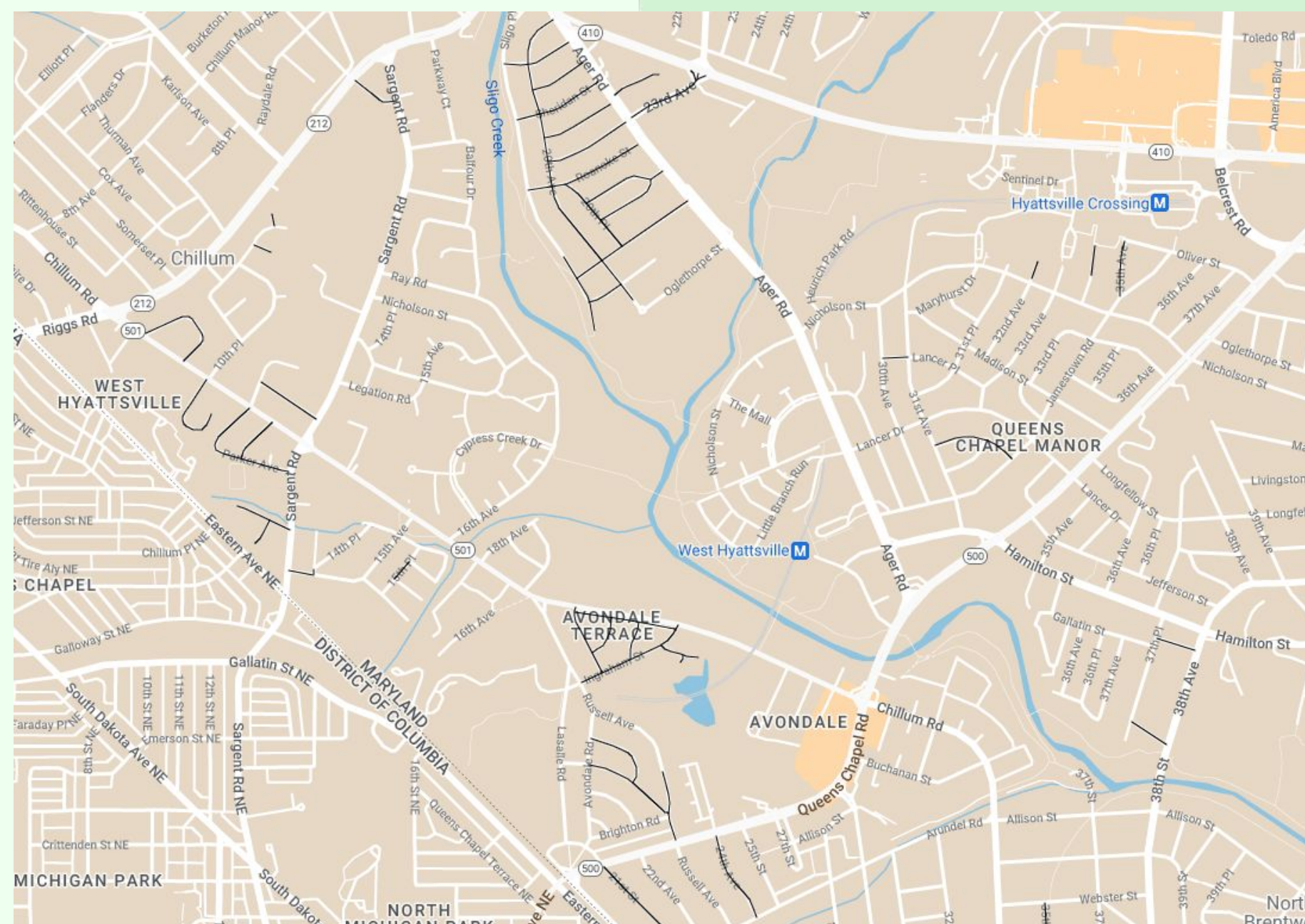
Pedestrians

**Complete the
sidewalk network**



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Roads without sidewalks



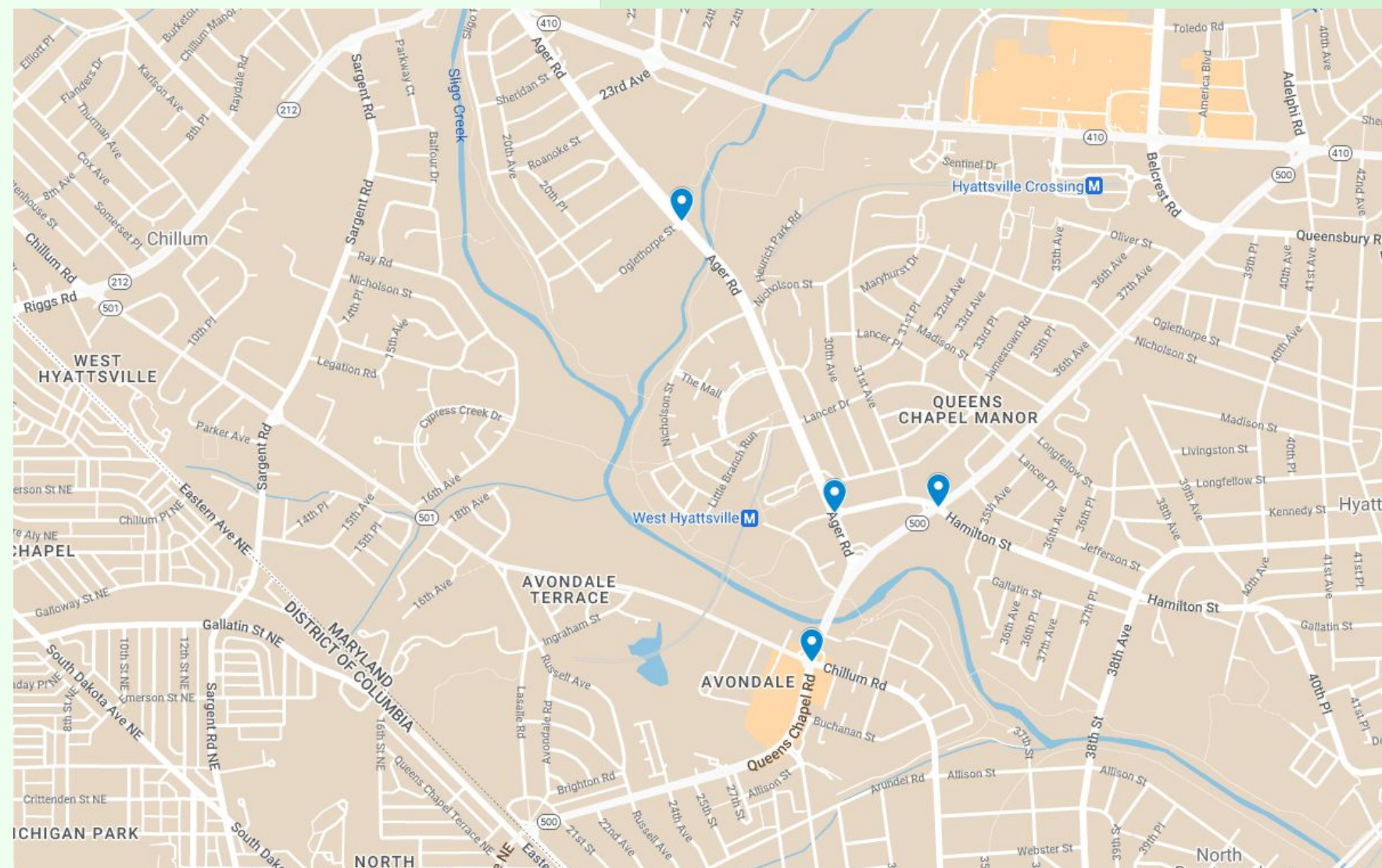


Pedestrians



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Implement Street Art



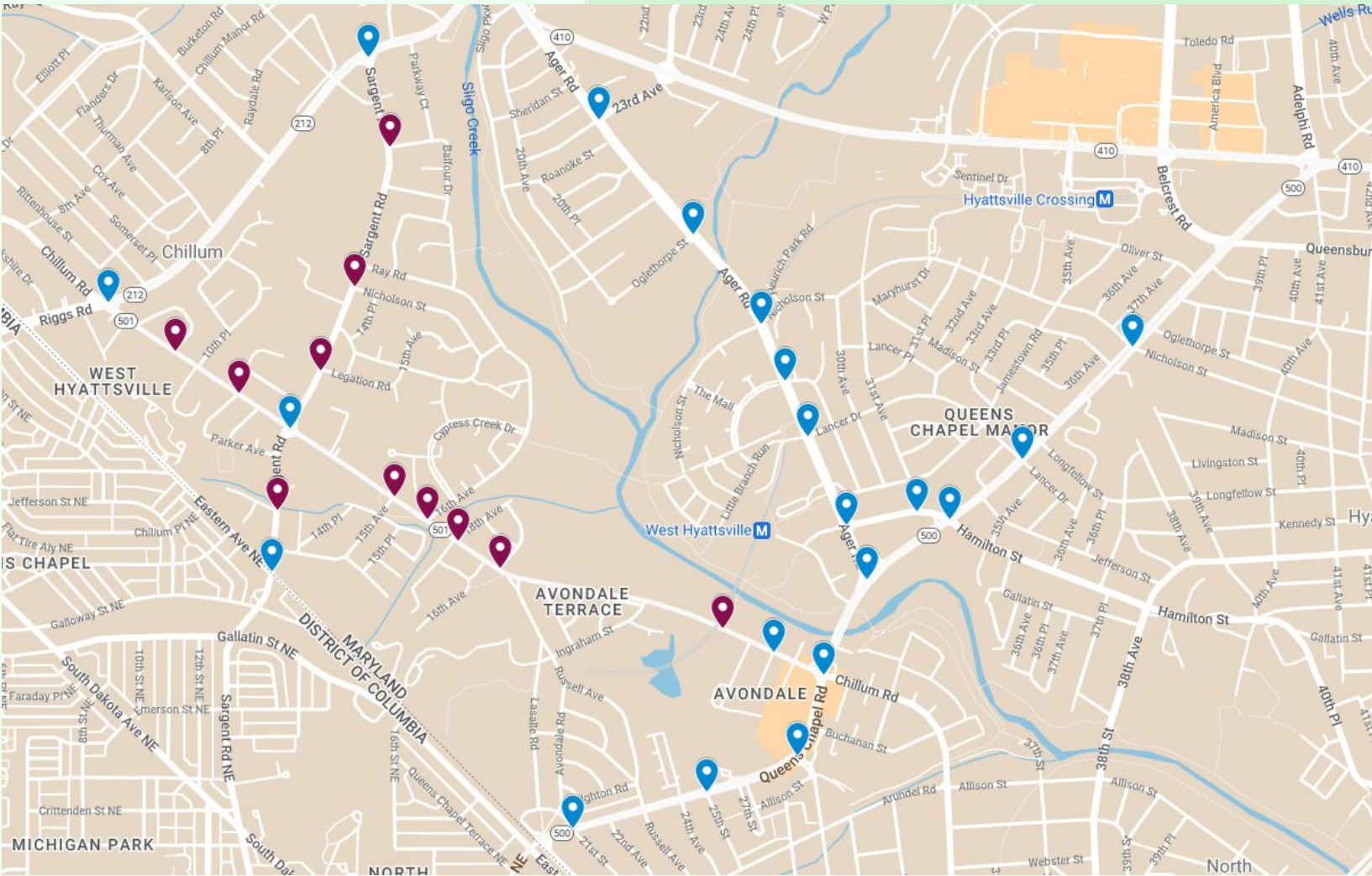


Pedestrians



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Median Refuge Islands



Key

Difficult Implementation

Easier implementation

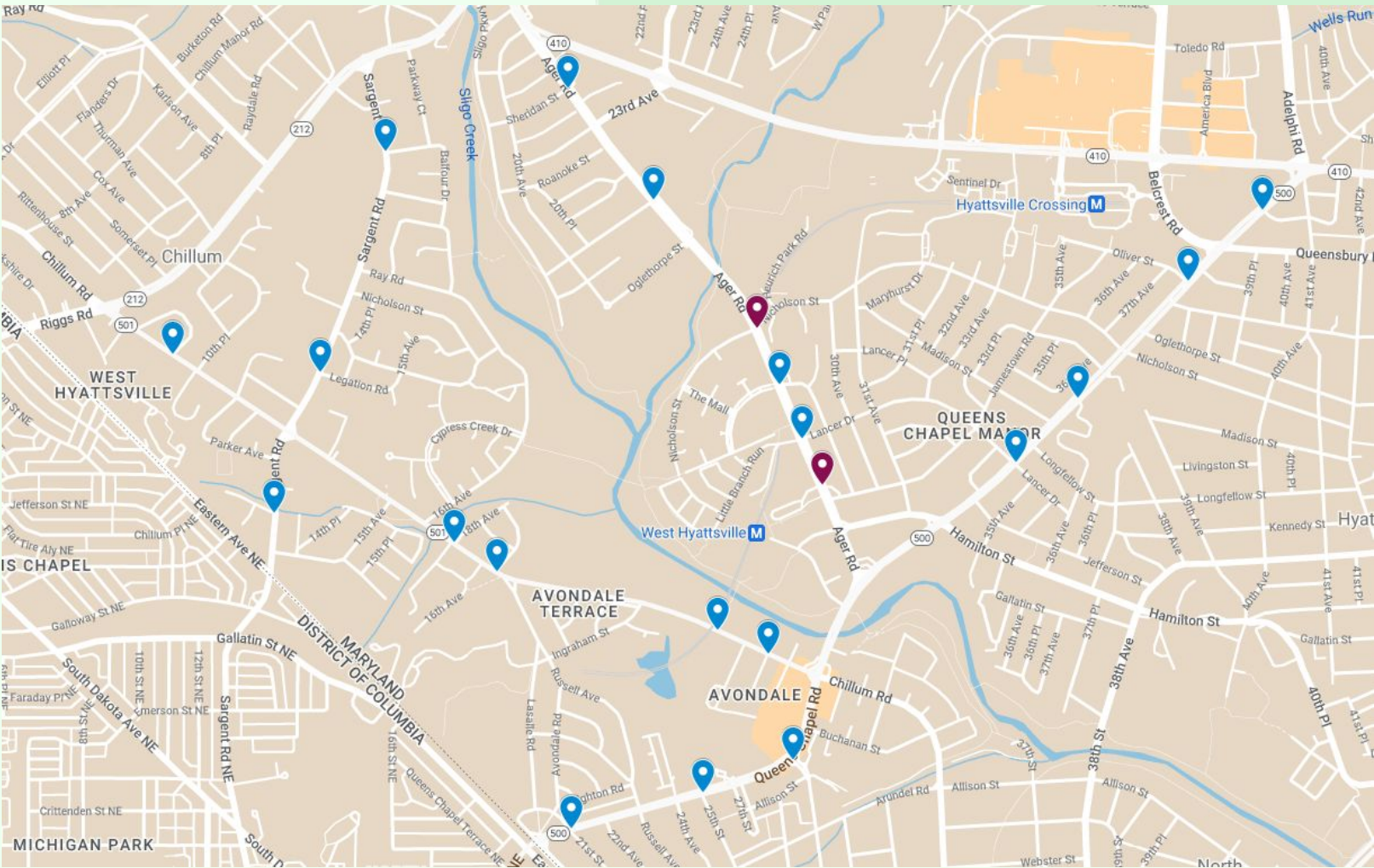


Pedestrians



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HAWK Beacons



Key

Location with RRFB

No warning lights



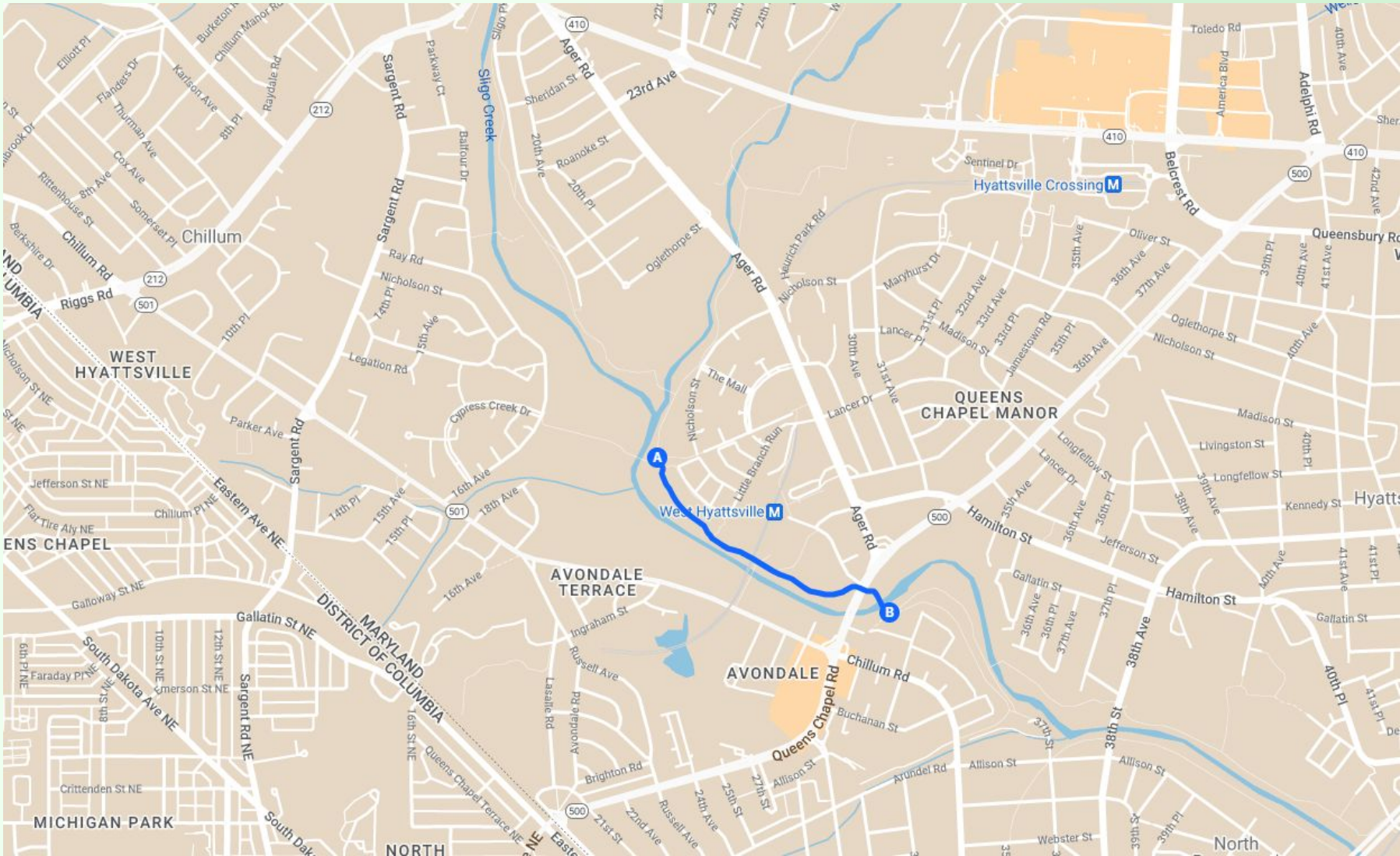
Crime



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Trail locations with lights and security cameras

Additional Trail Lighting and Surveillance Cameras





Crime

**Develop WMATA's lots
surrounding the Station**



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Crime

**Redevelop Hamilton Street
between Queens Chapel
Road and Jamestown Road**



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Questions?



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