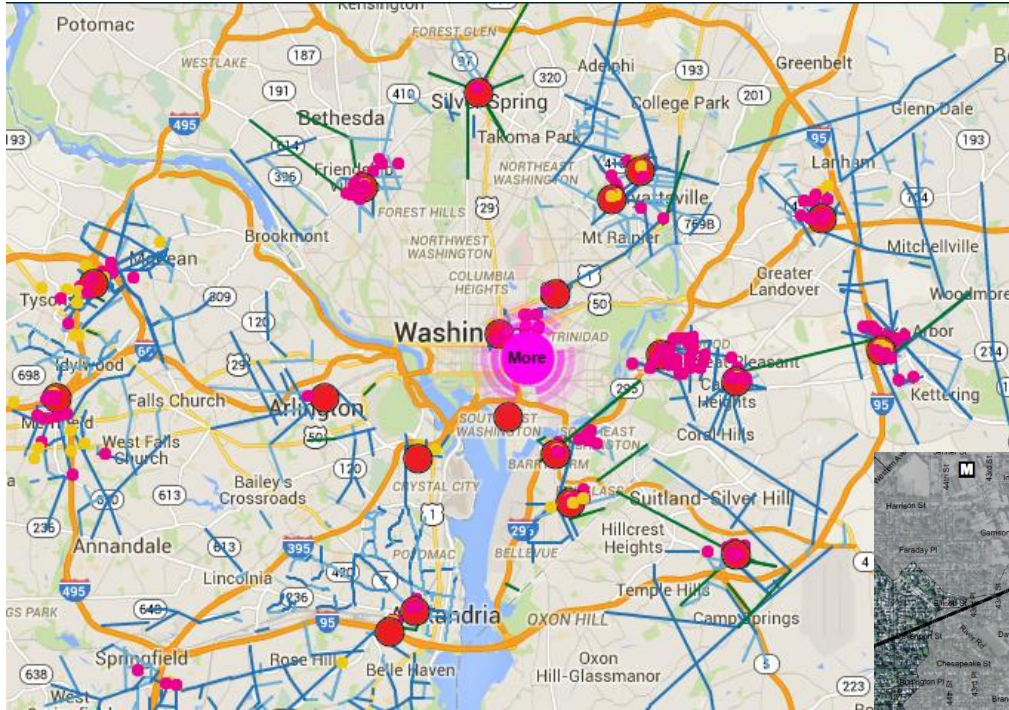


# DC Metrorail Walkshed Analysis

TPB Presentation  
May 10, 2018

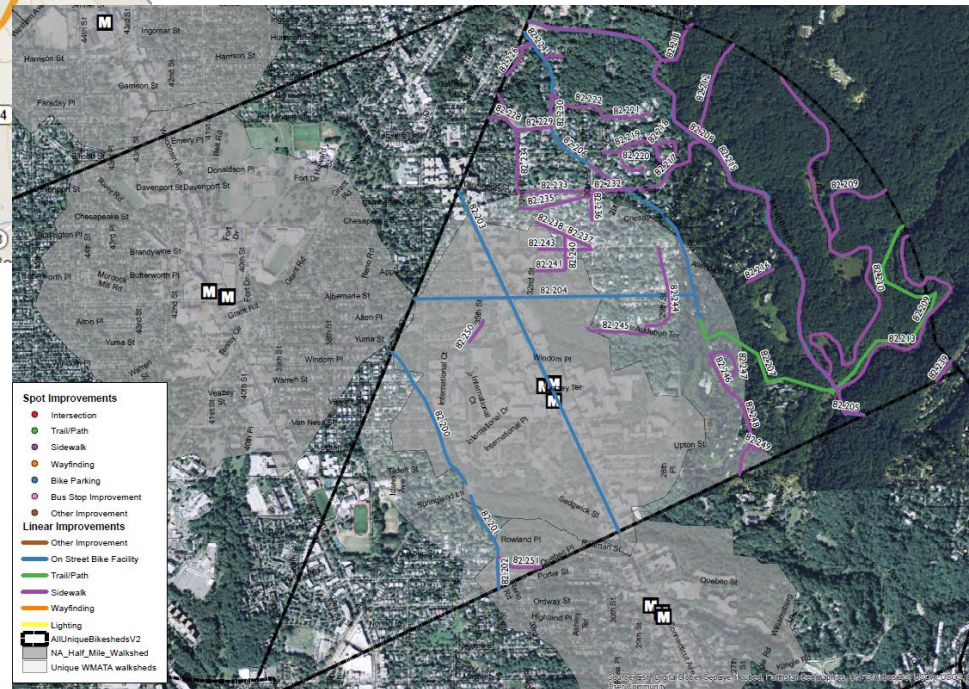


# Background



2015 MWCOG Priority Station Access Database

2016 WMATA Station Access Database



# The Core Team



Ryan Westrom, DDOT



Stephanie Walder, PG Co. DPWT



Alia Anderson, Toole Design Group



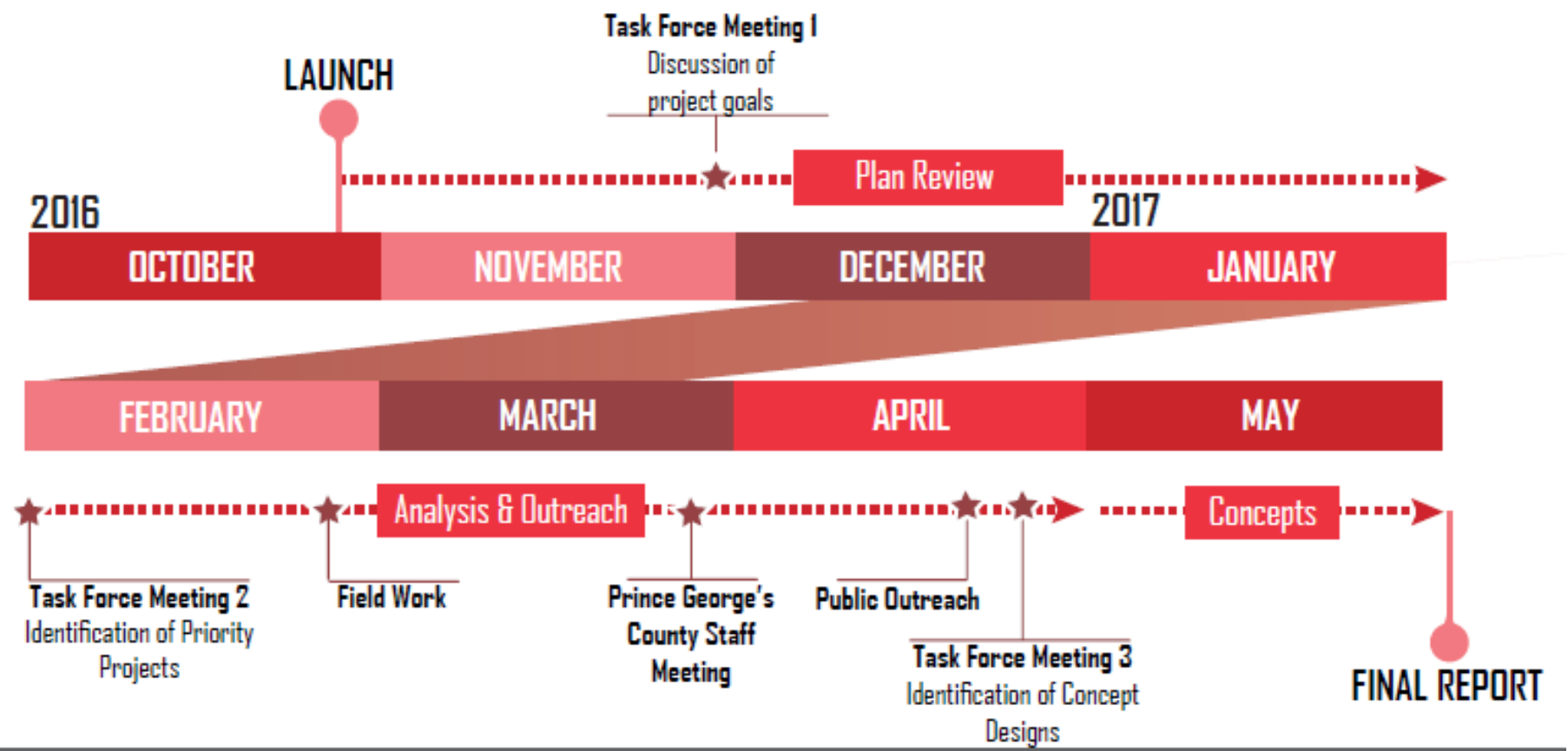
Eli Glazier, Toole Design Group



# Focus Areas



# Timeline



# Process

- Plan Review
- Field Work
- Public Engagement
- Analysis
- Priority Projects
- Cost Estimates
- Concept Plans

# Congress Heights

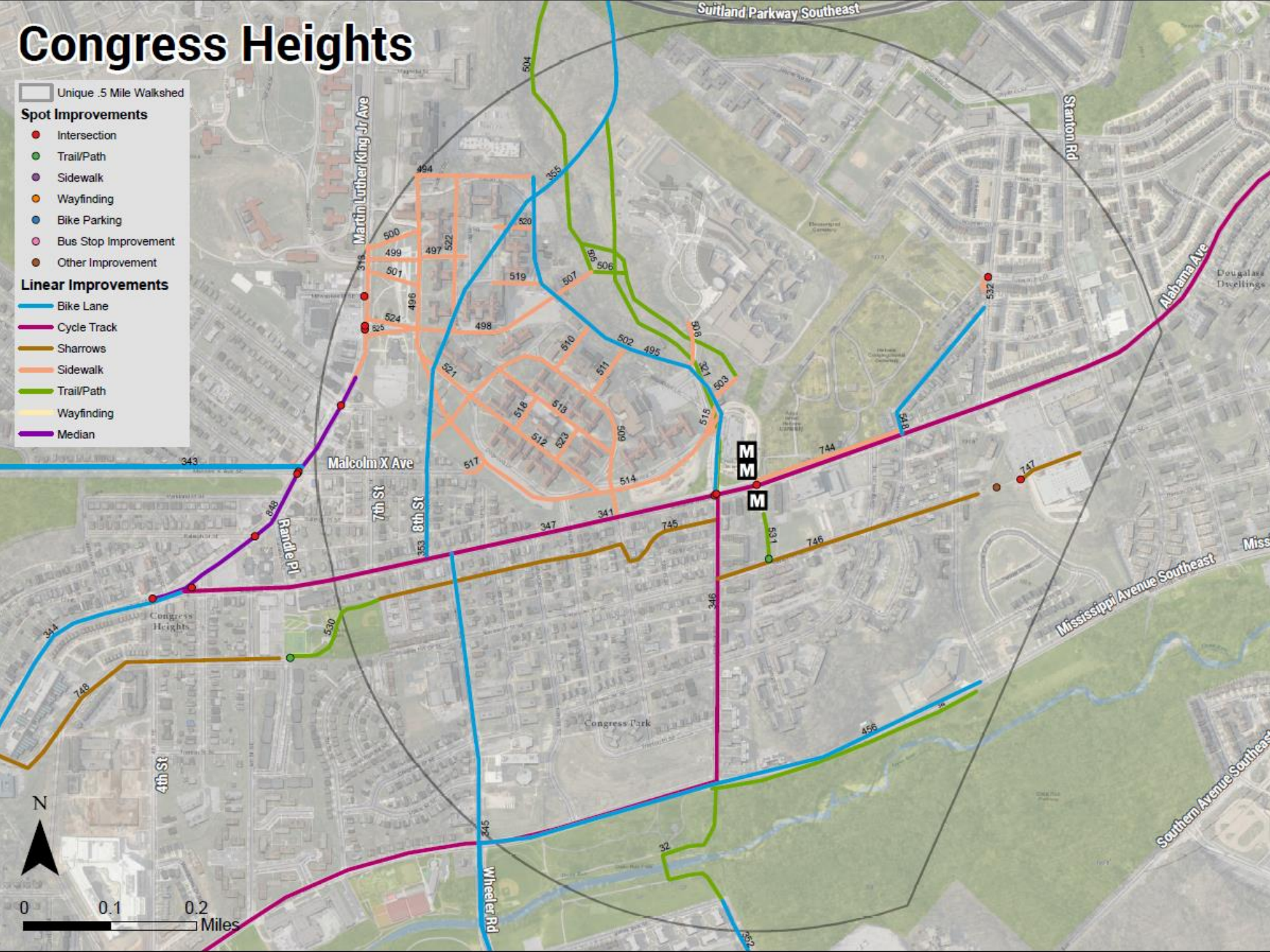
Unique .5 Mile Walkshed

**Spot Improvements**

- Intersection
- Trail/Path
- Sidewalk
- Wayfinding
- Bike Parking
- Bus Stop Improvement
- Other Improvement

**Linear Improvements**

- Bike Lane
- Cycle Track
- Sharrows
- Sidewalk
- Trail/Path
- Wayfinding
- Median

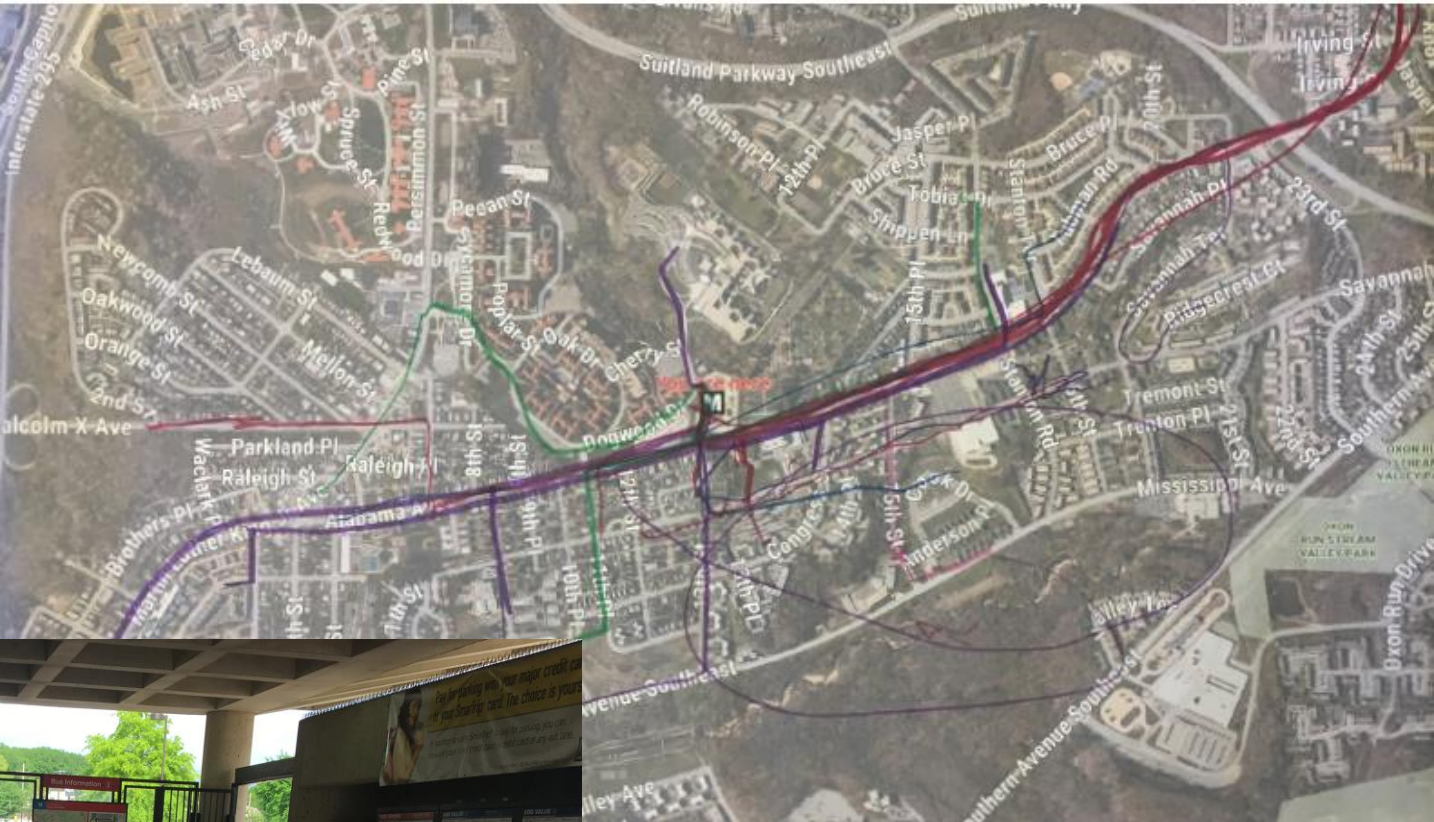


# Outreach





# Outreach



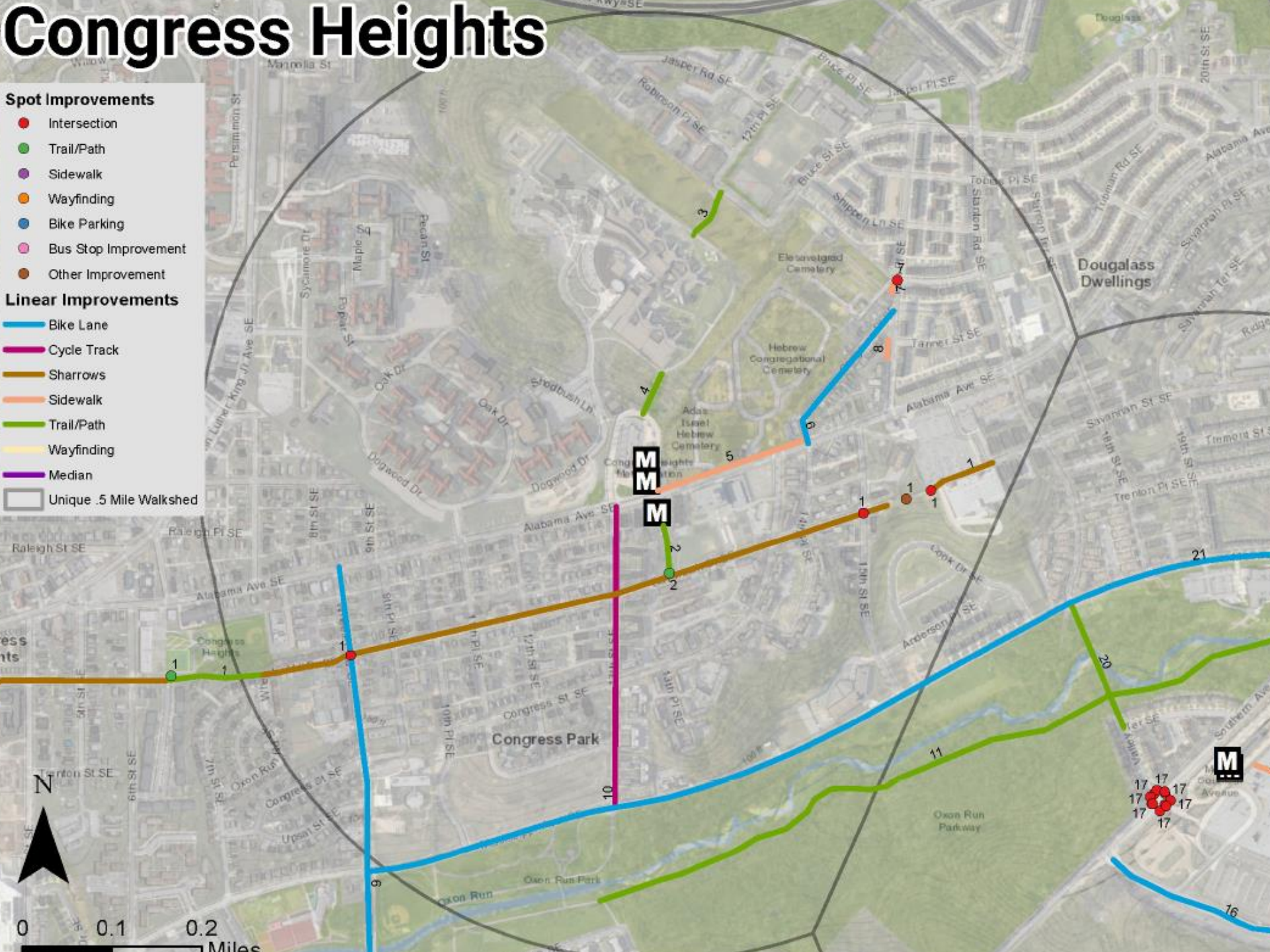
# Congress Heights

## Spot Improvements

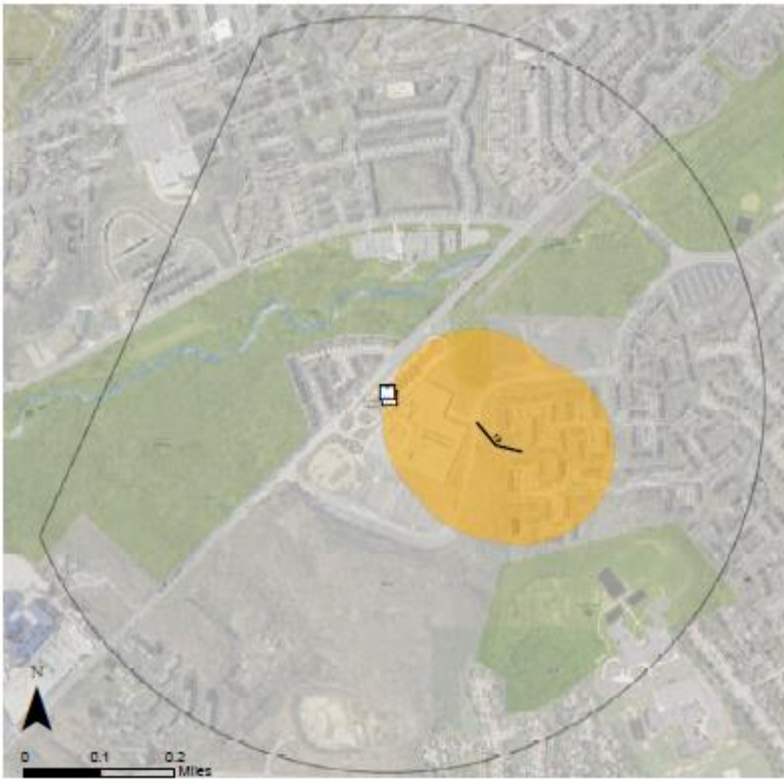
- Intersection
- Trail/Path
- Sidewalk
- Wayfinding
- Bike Parking
- Bus Stop Improvement
- Other Improvement

## Linear Improvements

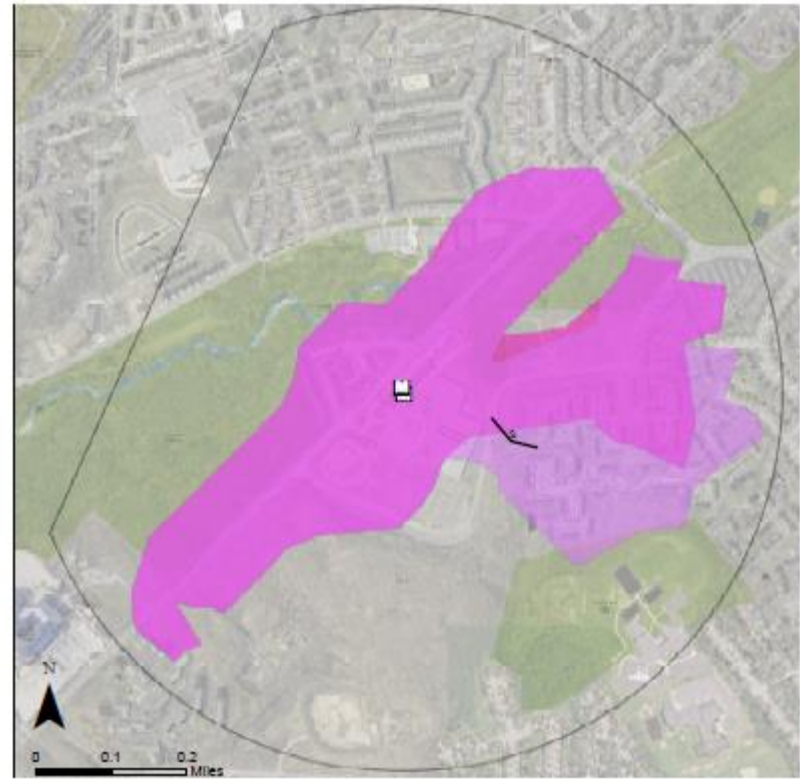
- Bike Lane
- Cycle Track
- Sharrows
- Sidewalk
- Trail/Path
- Wayfinding
- Median
- Unique .5 Mile Walkshed



## Buffer Analysis



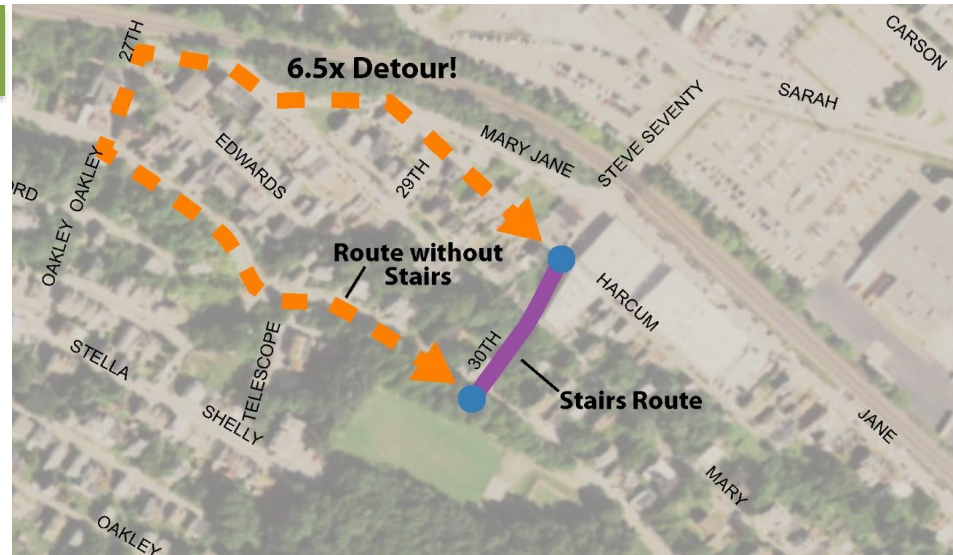
## Walkshed Analysis



# Destinations Analysis



# Detour Analysis



From Pittsburgh Citywide Steps Assessment  
Toole Design Group

# Energy Shed Analysis



From Southwest Lightrail EIS  
Toole Design Group

# Buffer Analysis

Project ID	Project	Households within 1/8 mile	Jobs within 1/8 mile	Population within 1/8 mile
11	Oxon Run Trail	861	271	2,023
12	Bike Lane on 23rd Parkway	401	57	961
13	Intersection improvements at 23rd Parkway and Oxon Run Drive	107	35	248
14	Bike Lane on Oxon Run Drive	473	126	1,138
15	Intersection improvements at Oxon Run Drive and Metro Drive	109	32	251
16	Bike Lane on Metro Drive	389	161	915
17	Intersection improvements at Southern Avenue SE and Metro Bus Loop	124	100	318
18	Metro station internal parking lot redesign for direct pedestrian access	125	64	301
19	Path from Anvil Lane neighborhood to Metro Drive	131	38	300
20	Path from Mississippi Avenue SE to Southern Avenue SE	326	191	884
21	Bike Lane on Mississippi Avenue from Wheeler Road to Southern Ave	1,598	601	4,226

# Walkshed Analysis

Project ID	Project	Households within Walkshed	Jobs within Walkshed	Population within Walkshed	Change in Households from Baseline	Change in Jobs from Baseline	Estimated New All-Day Ridership	Estimated Annual Revenue
	<b>Baseline</b>	458	233	1,126	N/A	N/A	N/A	N/A
19	Path from Anvil Lane neighborhood to Metro Drive	542	257	1,317	84	24	46	\$35,457
20	Path from Mississippi Avenue to Southern Avenue	714	336	1,817	256	103	148	\$113,150

\* Only a subset of the priority projects are shown here because the walkshed analysis uses a methodology that only applies to new pedestrian-oriented projects (i.e., those which add a sidewalk or walkway where none currently exists).

- Bike Boulevard\*
- Trail
- Stair with Runnel
- Speed Cushion
- Traffic Diversion
- Curb Extension / Neckdown
- Other Spot Treatment

\*Bike Boulevard includes wayfinding signage and shared lane markings



300 ft ↑ N

Proposed Bike Boulevard, Savannah St SE, Congress Heights Metrorail Station



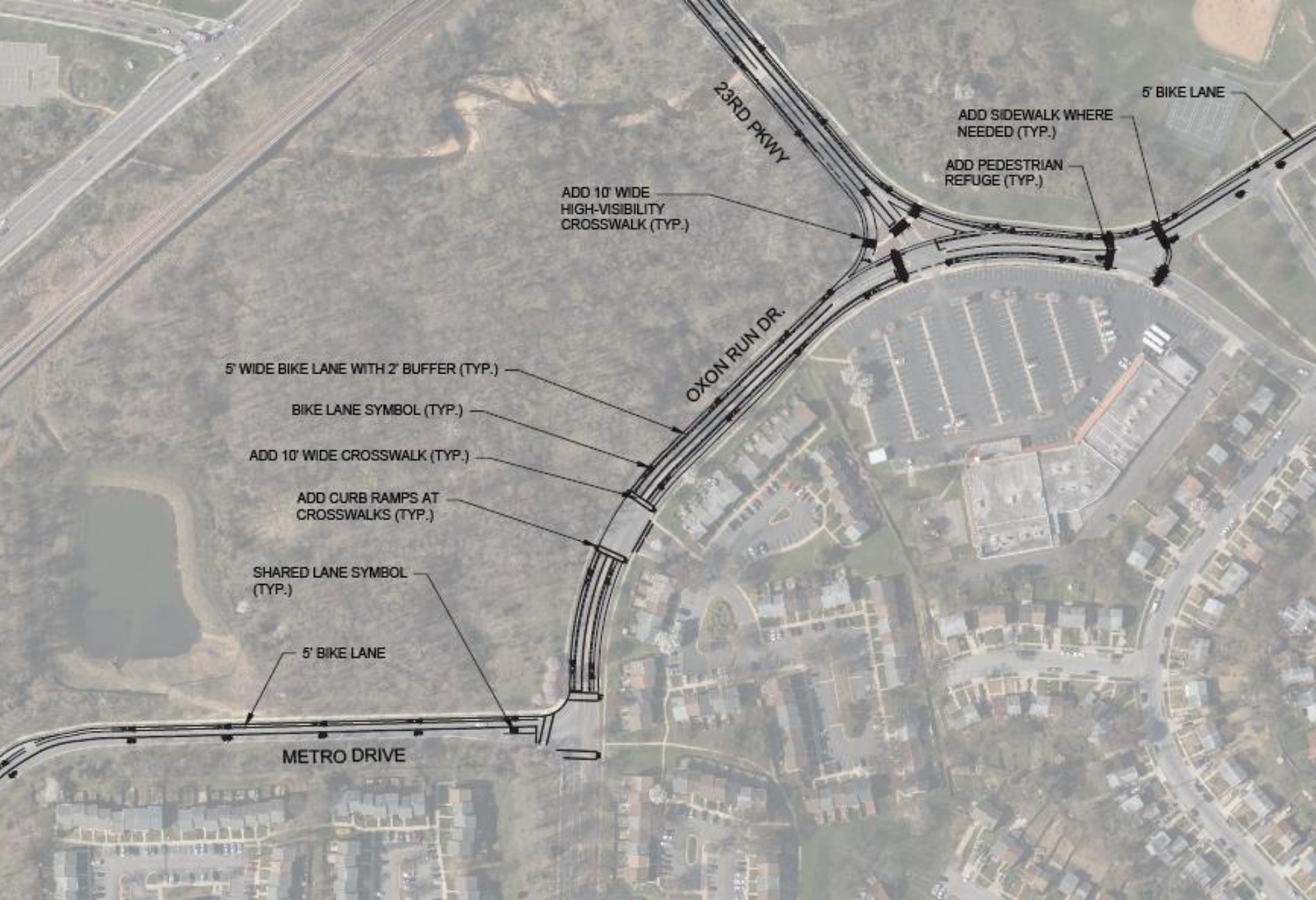


Figure 23: Plan View of Proposed Trail Concept Connecting the Hillcrest Towne community to the Southern Avenue Metrorail Station (Project #19)



Figure 24. Rendering of Proposed Treatments on Metro Drive, Facing South (Project #19)

Crossing Improvements, Metro Drive, Southern Avenue Metrorail Station



Short-term: Curb Ramps and Crosswalks Option, Southern Ave Metrorail Station



PROPOSED DOUBLE ROUNDABOUT

ADD SIDEWALK WHERE NEEDED (TYP.)  
5' BIKE LANE

ADD 10' WIDE HIGH-VISIBILITY CROSSWALK (TYP.)

ADD CURB RAMPS AT CROSSWALKS (TYP.)

CLOSE STREET  
NEW CURB  
NO THRU TRAFFIC SIGN

5' WIDE BIKE LANE WITH 2' BUFFER (TYP.)

BIKE LANE SYMBOL (TYP.)

SHARED LANE SYMBOL (TYP.)

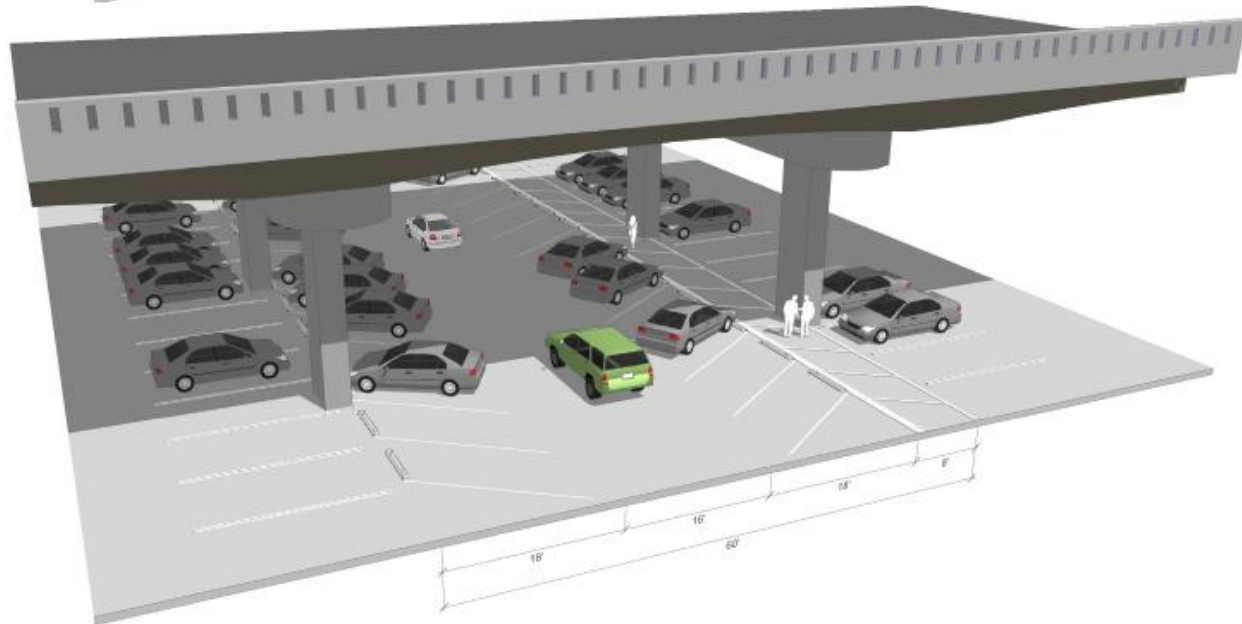
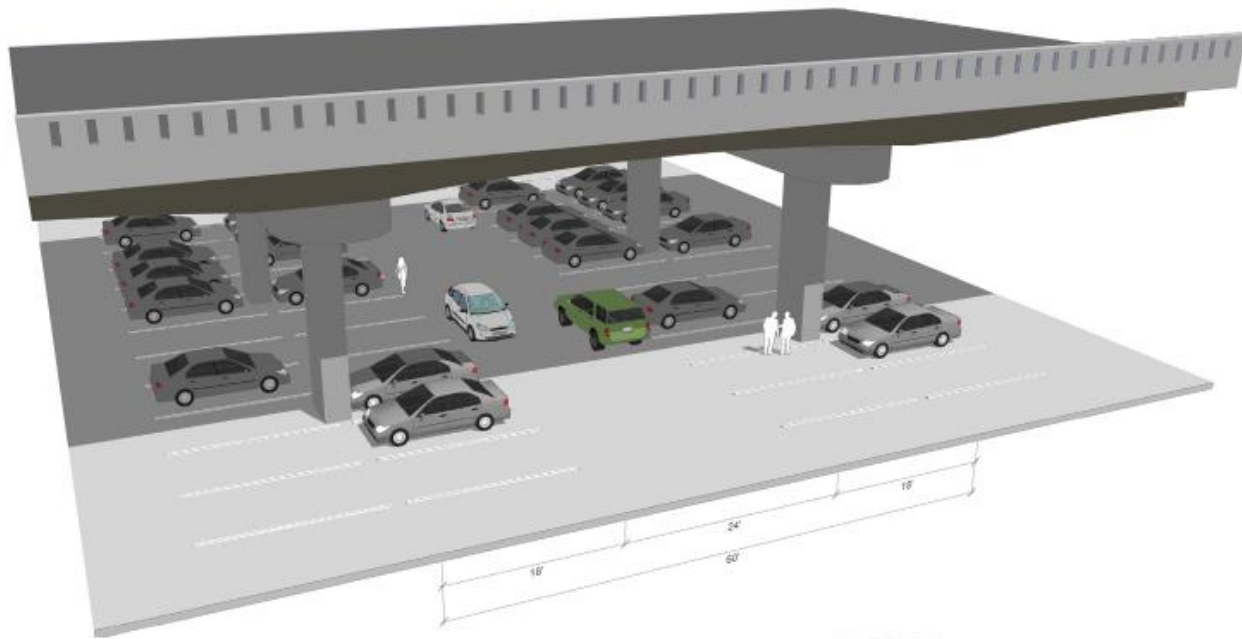
5' BIKE LANE

METRO DRIVE

OXON RUN DR  
23RD PKWY

OXON RUN DR

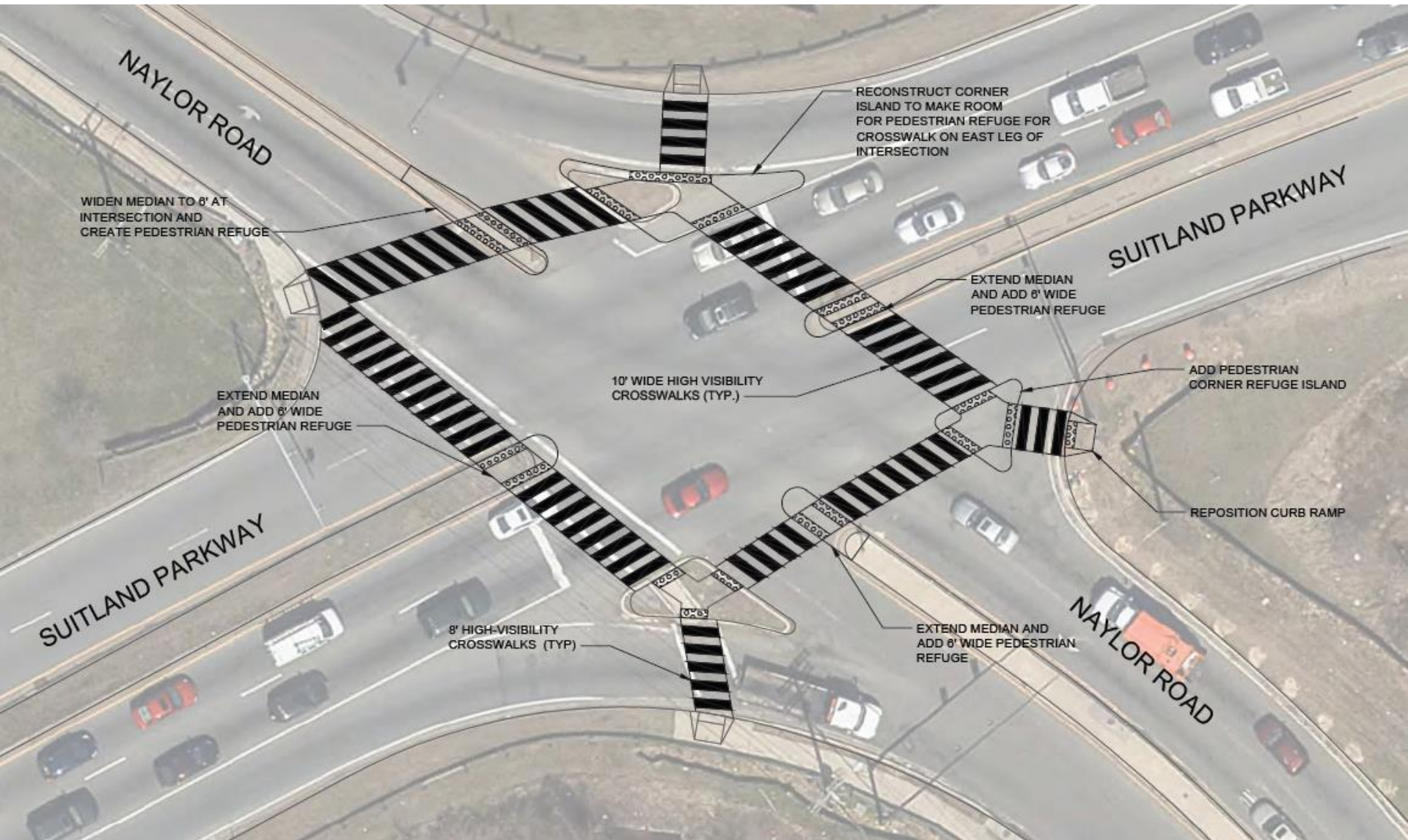
Long-term: Curb Ramps and Crosswalks Option, Southern Ave Metrorail Station



Existing (top) and Proposed (bottom) Parking Garage Layout (First Floor), Southern Avenue Metrorail Station



Proposed (bottom) Parking Garage Layout (First Floor), Southern Avenue Metrorail Station



Intersection Redesign, Suitland Parkway and Naylor Road, Naylor Road Metrorail Station

# Cost Estimates

**Project ID: 2**

*Trail through school property*

Item	Unit	Quantity	Unit Cost	Total Cost	Assumpt
Earthwork, Excavation, Grading	CY	99	\$22.00	\$2,184	1' excavat
Aggregate Base Course	CY	50	\$45.00	\$2,233	6" deep
Asphalt Courses	TON	101	\$85.00	\$8,584	6" trail
Sign Panel (Class I)	EA	1	\$150.00	\$150	
Steel Sign Post (2x2 Inch Tubing)	EA	1	\$100.00	\$100	
<b>Subtotal</b>				<b>\$13,231</b>	
<b>Lump Sum Items</b>					
Maintenance of Traffic (10%)	LS	1.00	\$1,323.00	\$1,323	
			<b>Subtotal</b>	<b>\$14,554</b>	
			20% Contingency	\$2,911	
			<b>Total Estimated Cost</b>	<b>\$17,500</b>	

Estimated Annual Metro Revenue: \$4,954



Figure 11: Proposed Trail Entrance on Savannah St. SE (Project #2)

# Cost Estimates

Project ID	Project Description	Population within 1/8 mile	Estimated Annual Revenue*	Estimated Construction Cost
1	Bike Boulevard on Savannah Street SE with Stairs and Trail to Giant grocery store	4,778	N/A	\$430,500
2	Trail from southern Metro portal to Savannah Street SE though Malcolm X Elementary school yard	748	\$4,954	\$17,500
12-16	Intersection improvements/redesign at Oxon Run Drive and 23rd Parkway. Intersection improvements at Oxon Run Drive and the Metro Access Road. Bike lanes along Oxon Run Drive, 23rd Parkway, and the Metro Access Road	3,013	N/A	\$102,800 - \$1,204,900
18	Metro station internal parking lot redesign for direct pedestrian access	301	N/A	\$9,200
19	Path from Anvil Lane neighborhood to Metro Drive	300	\$35,457	\$23,900
23	Intersection improvements at Naylor Road and Suitland Parkway	377	N/A	\$47,300
25 - 27 & 34	Sidewalk on Naylor Road from Suitland Parkway to existing sidewalk at Southern Avenue. Sidepath on Southern Avenue, Naylor Road to Suitland Parkway New sidewalk on Naylor Road north of Suitland Parkway to Southern Avenue. Closure of Naylor Road slip lane. Trail along Southern Avenue SE ROW from Naylor Road to Branch Avenue.	2,710	N/A	\$66,700



# Recommended Next Steps



- Take advantage of **repaving** schedules
- For private property, request a presentation to the **homeowners association**
- For recommendations in DC, **develop design plans** and schedule the construction of the identified projects.
- For recommendations in Prince George's County, include projects in the next **Joint Signature letter** with Maryland State Highway Administration (SHA).
- Consider applying for a design grant from the MWCOG Transportation and Land Use Connections **(TLC) Program**

# Recommended Next Steps

- For SHA roads, **coordinate with state highway staff** to advance the designs and move toward implementation
- For projects in Maryland, consider applying for funding from the **Maryland Bikeways Program**
- Identify a limited number of priority projects which may be implemented as **standalone capital projects**
- In all cases, **coordination with neighboring communities** and relevant agencies will be key to implementation

