US 1 Quick Facts

Corridor Length: 10.9 Miles from Elkridge to North Laurel

Posted Speed Limits: 35 MPH to 50 MPH

Sidewalks: 6.4 Miles of Sidewalk

- ► 0.9 miles of roadway with sidewalk on both sides
- ► 4.6 miles of roadway with sidewalk on one side
- ► 6.0 miles of roadway with no sidewalks

Bike Lanes: 0.4 miles

Crosswalks: 8 Marked Crosswalks across US 1

Bus Stops: 31 RTA, 14 MTA, 2 shared RTA/MTA

- ► 11 RTA stops and 10 MTA stops have no sidewalk access
- ► 24 RTA stops, 8 MTA stops, and both shared stops are more than 500 feet from a crosswalk across US 1

2016 Crash History: 257 total crashes

- ► 161 Property Damage Crashes
- ► 92 Injury Crashes (3 pedestrian crashes, 1 bike crash)
- ► 4 Fatal Crashes (4 pedestrian crashes with 5 fatalities)

US 1 Safety Evaluation

PRESENTATION OF FINDINGS

SEPTEMBER 1, 2020

BRTB
Baltimore Regional Transportation Board

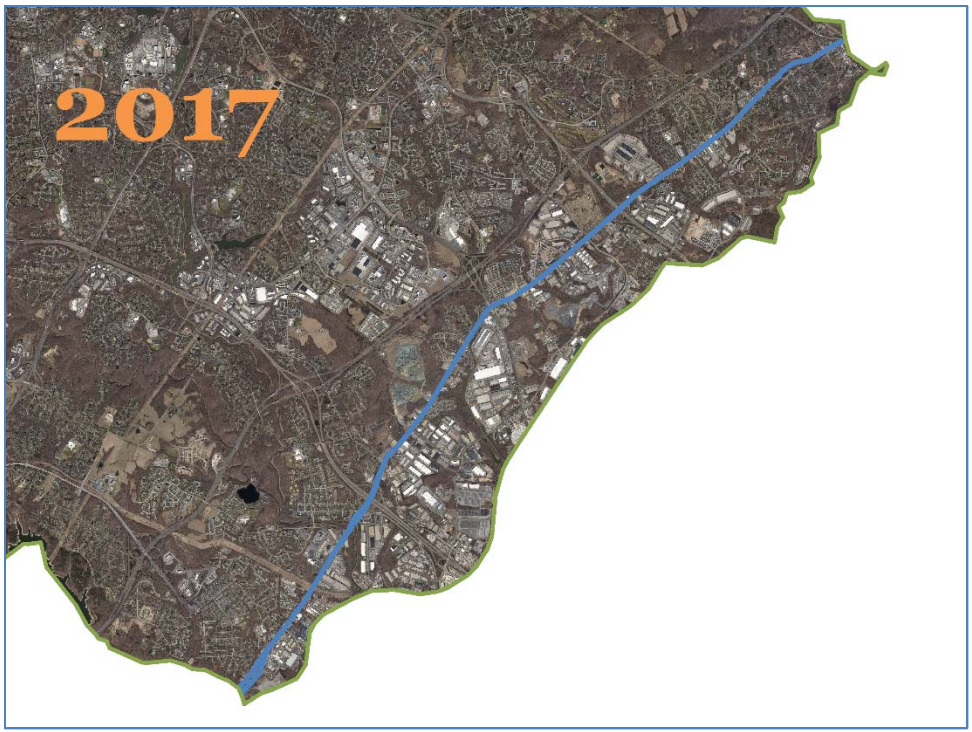
MDOT
MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

HC
Howard County
Office of Transportation

Presentation Outline

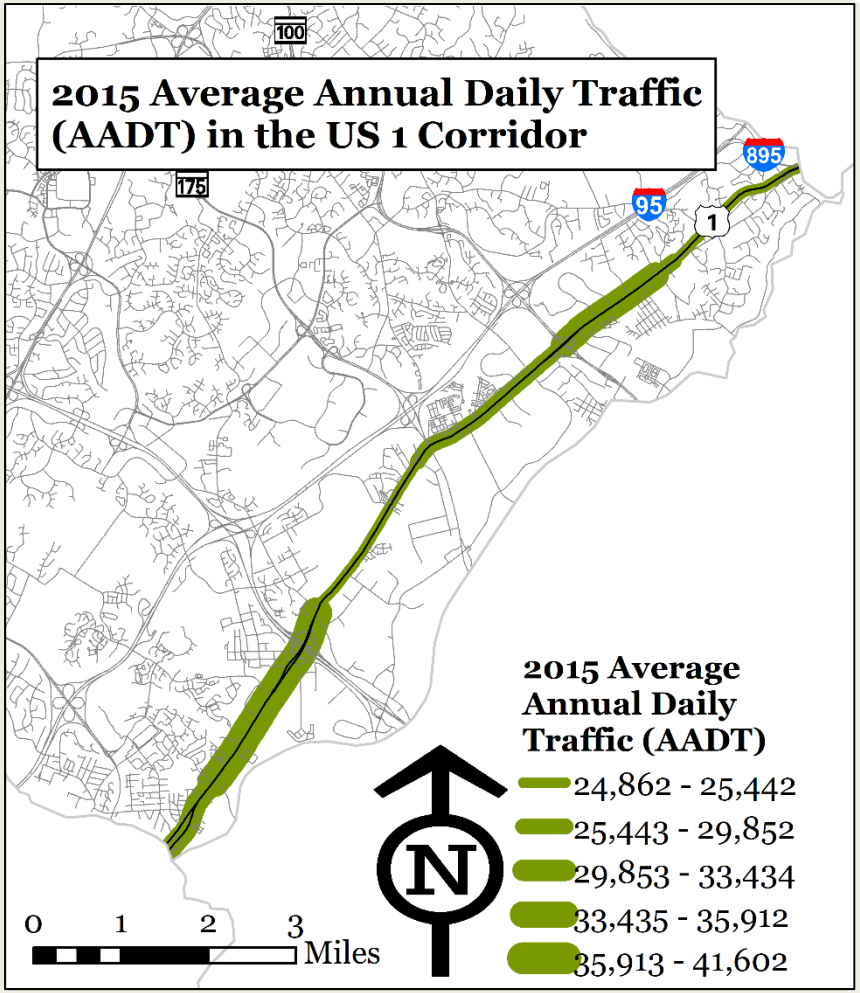
1. Background and History
2. Evaluation Process
3. Recommendations and Concepts
4. Current Status and Next Steps

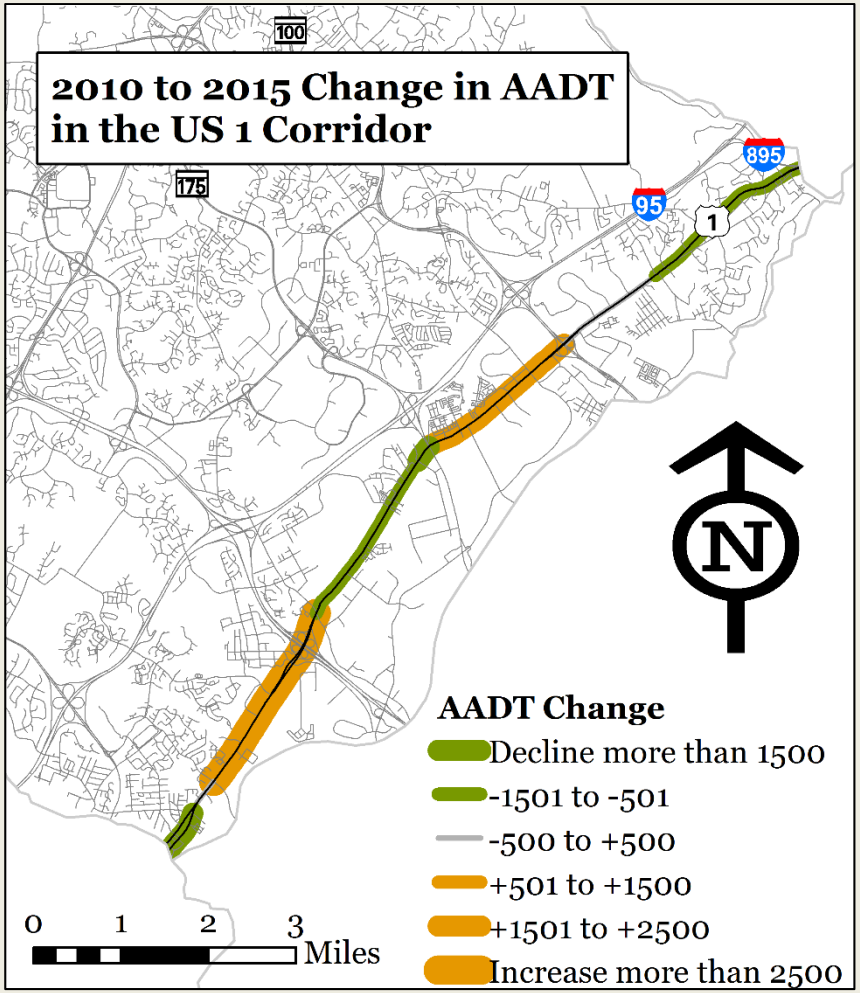
Background and History



US 1 in Howard County

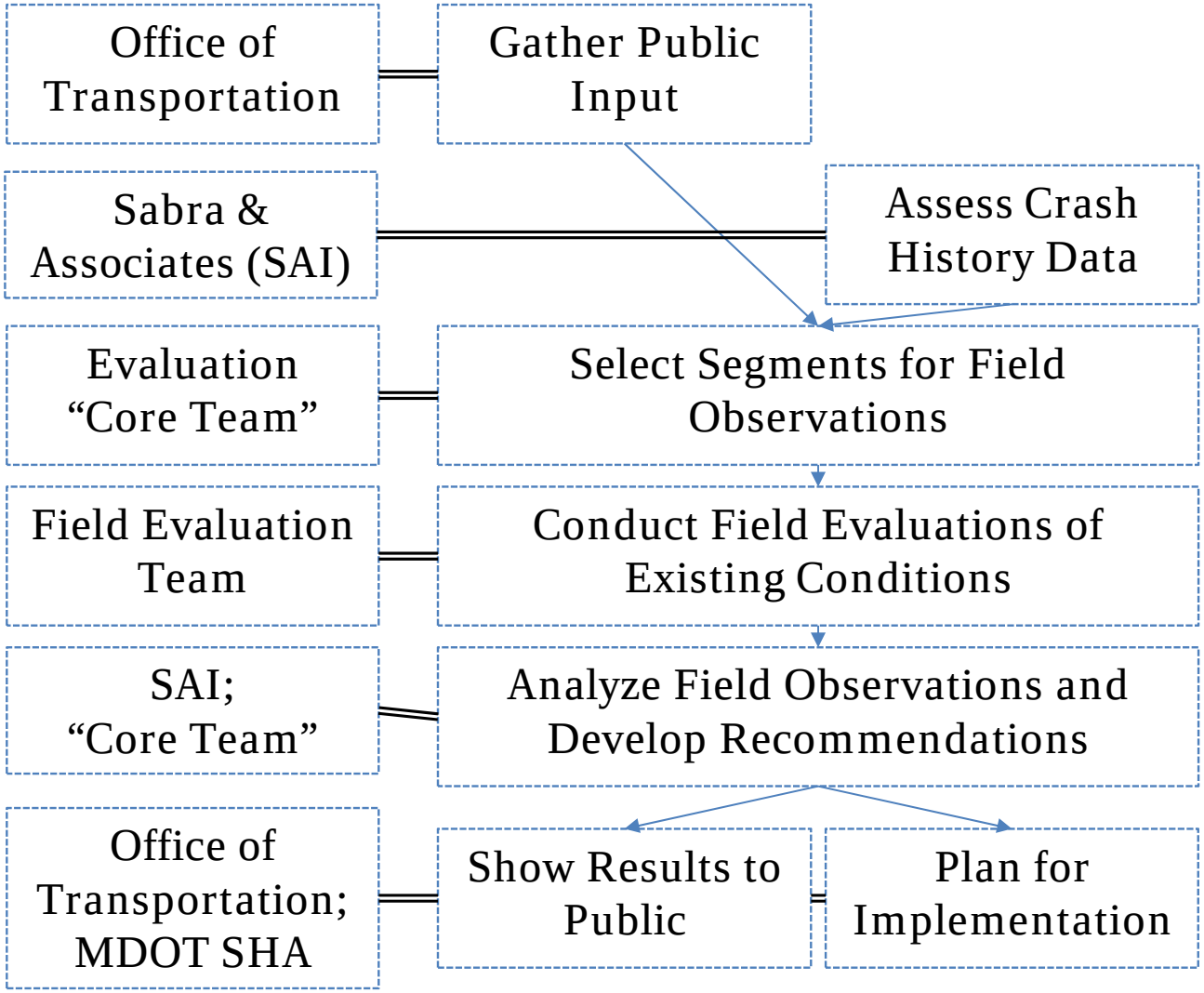
Trends in the US 1 Corridor: Vehicle Traffic





Evaluation Process

Evaluation Process

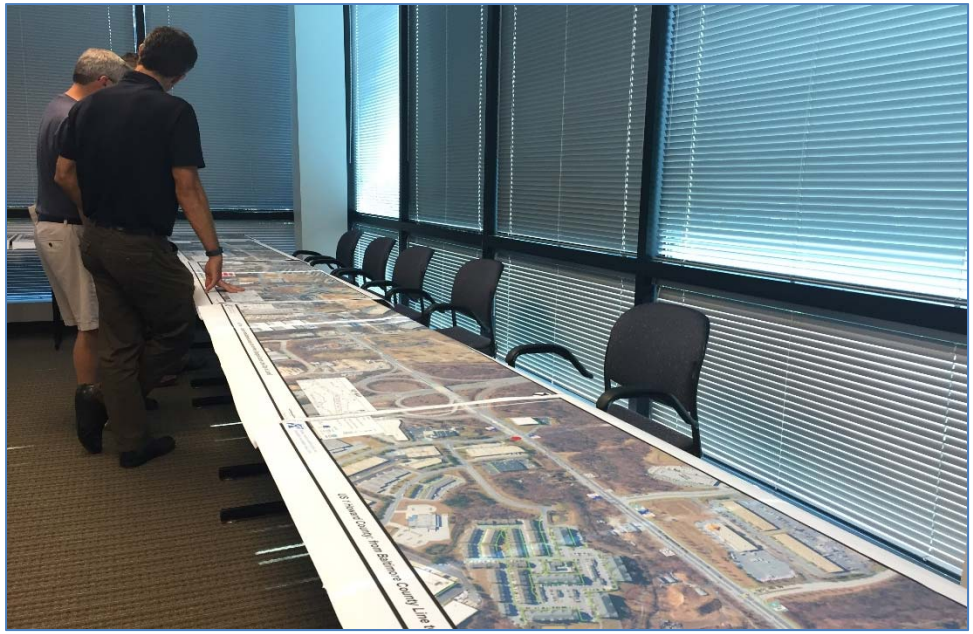


Core Team Members

The core team consisted of representatives of the following departments, offices, and agencies:

- Maryland Highway Safety Office
- MDOT SHA District 7 (Howard, Carroll, and Frederick Counties)
- MDOT SHA Office of Traffic and Safety
- Baltimore Metropolitan Council
- Howard County Department of Public Works
- Howard County Police Department
- Howard County Office of Transportation

Public Input



2 open houses

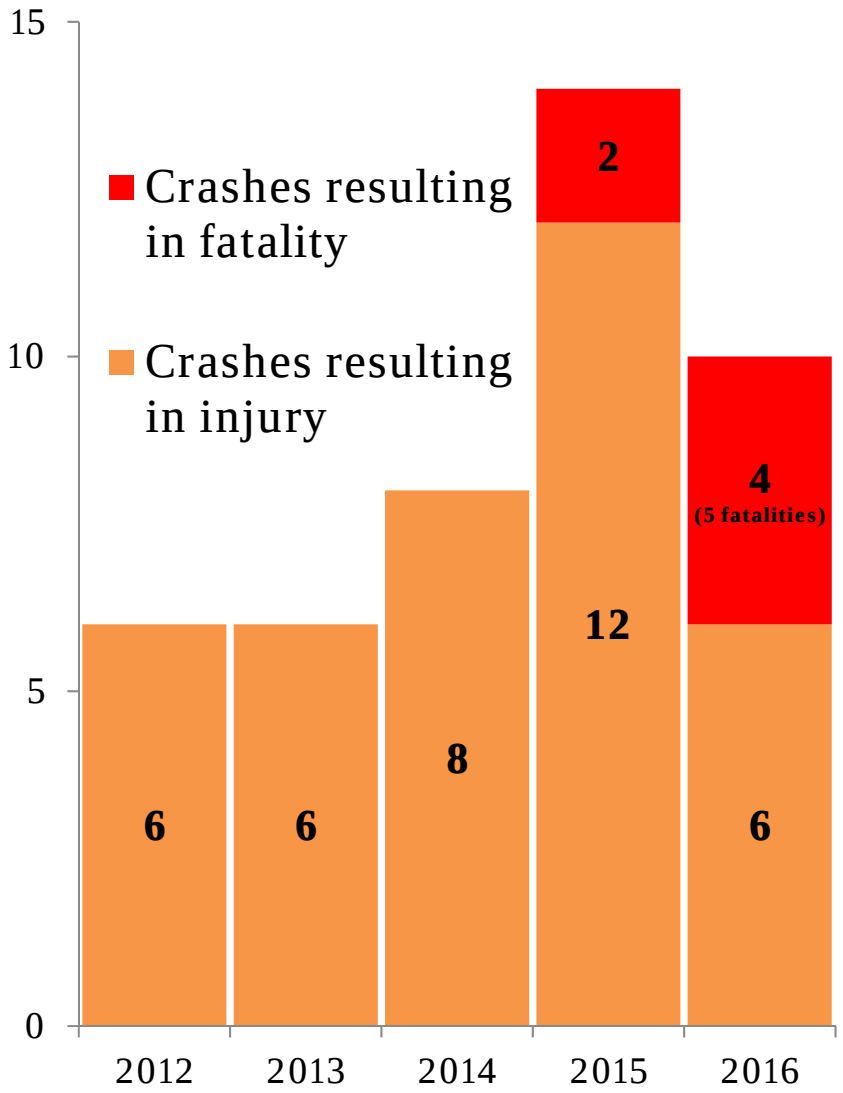
36 attendees

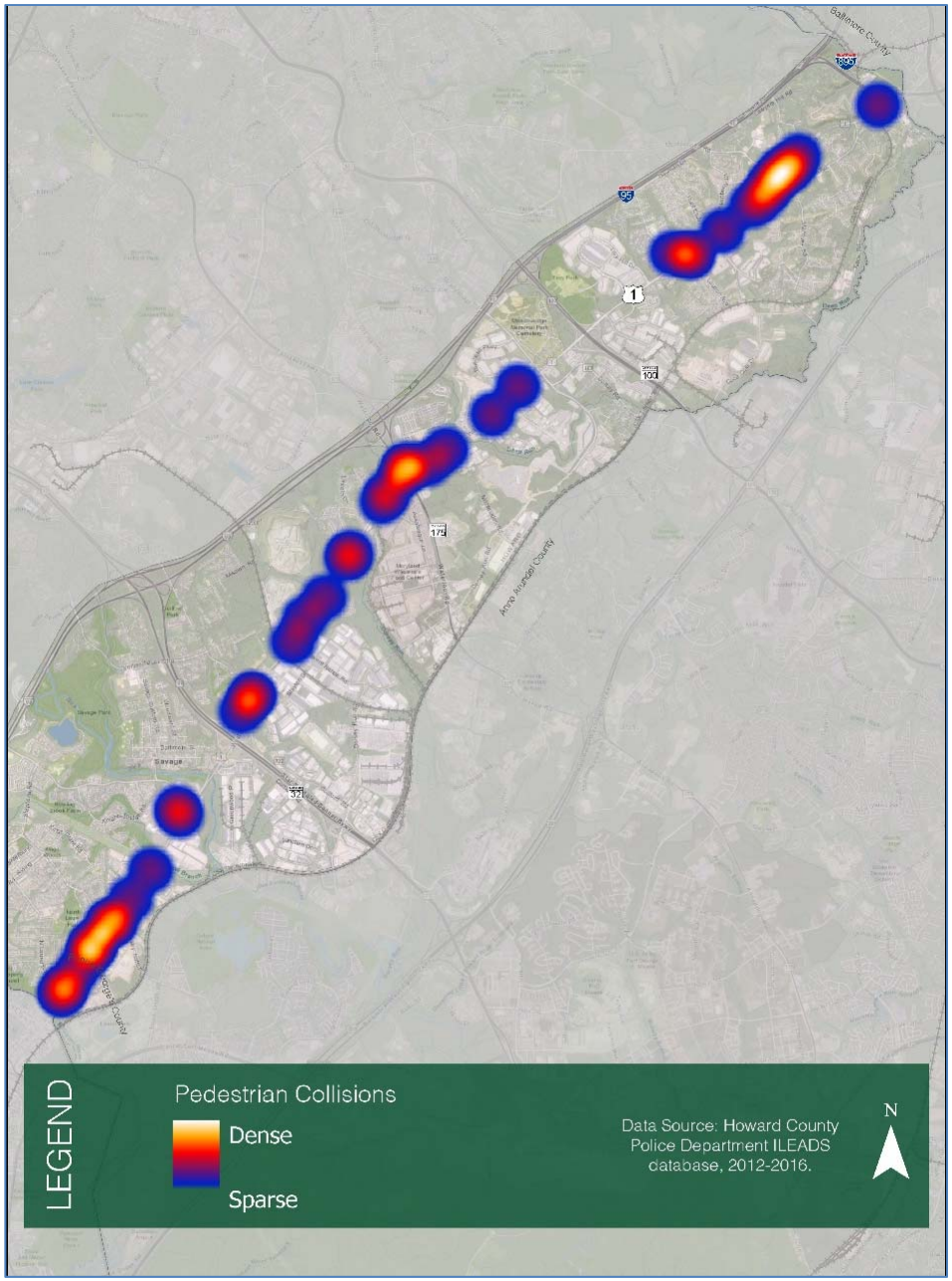
41 comment forms

89 specific locations

14 emails received

4 boards and commissions





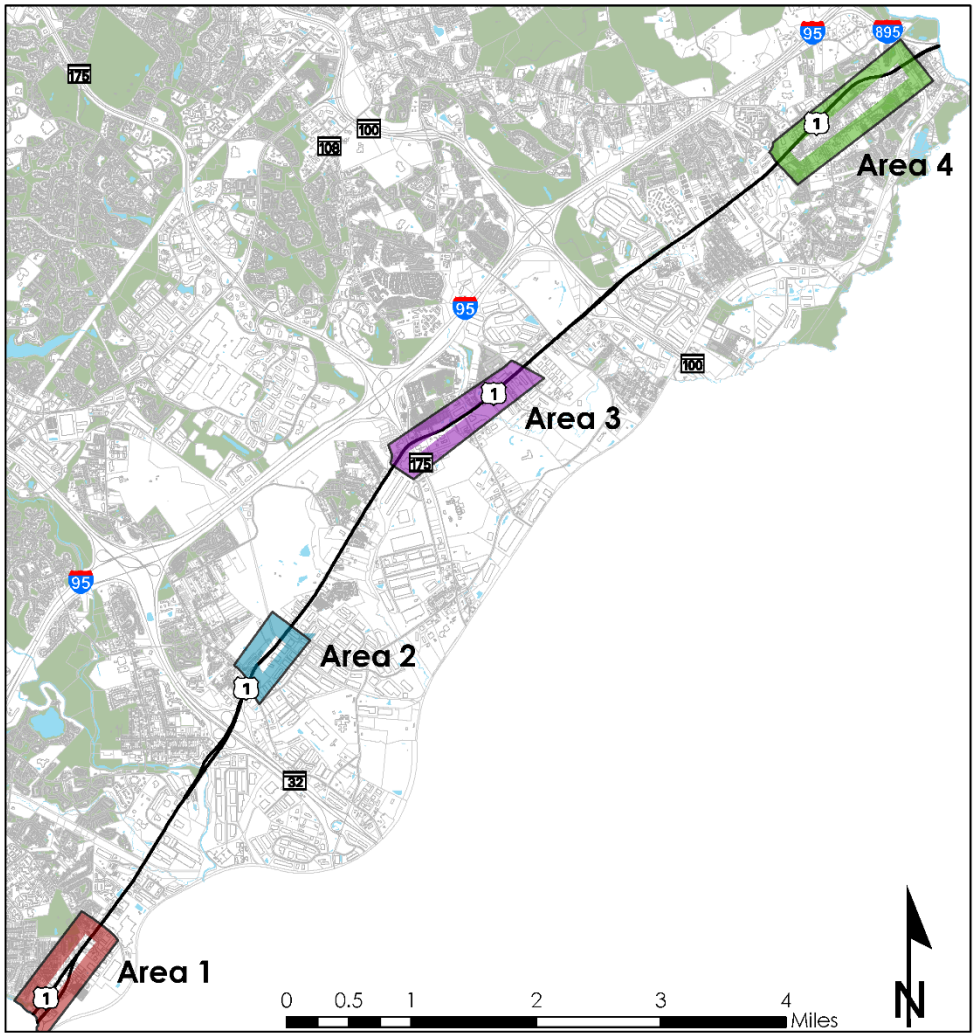
CRASH HISTORY: PEDESTRIAN AND BICYCLE

Area 1: City of Laurel/ Howard County Line to Whiskey Bottom Road

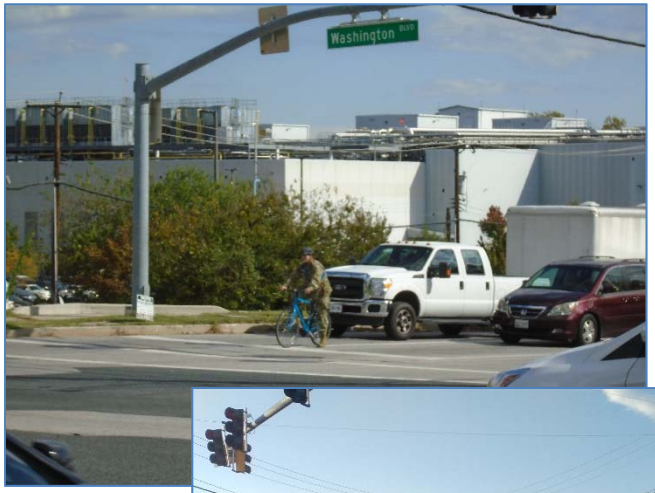
Area 2: Guilford Road to Patuxent Range Road

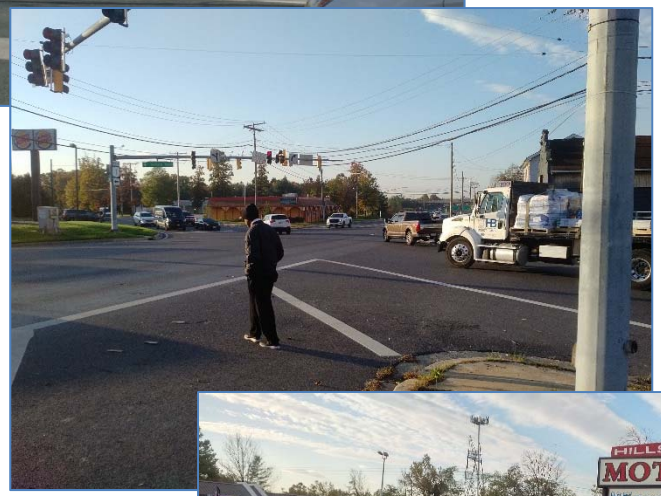
Area 3: Assateague Drive to Brookdale Drive

Area 4: Greenfield Road to Levering Avenue



FOCUS AREAS

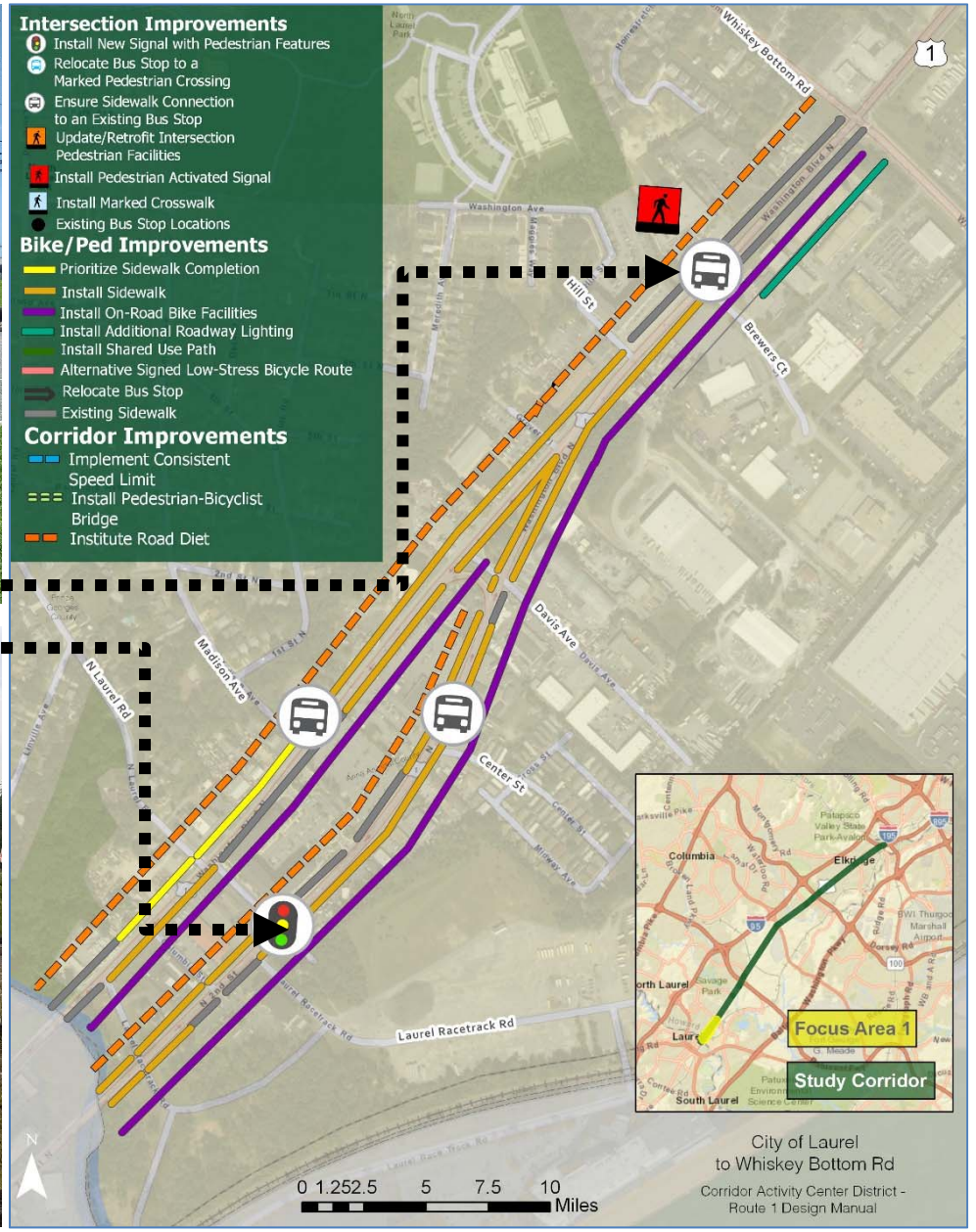




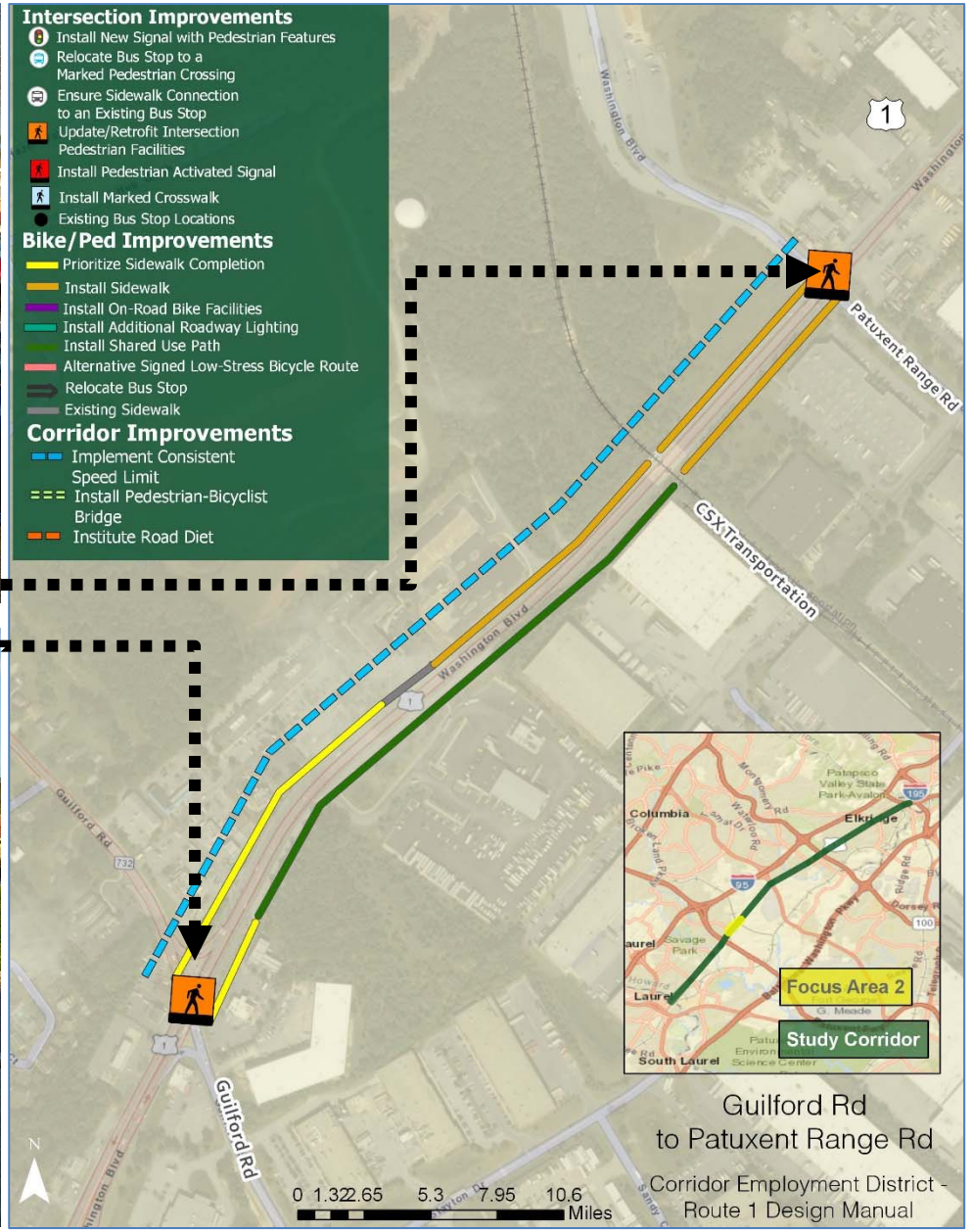
Daytime and Twilight Field Observations

- High vehicle speed incompatible with pedestrian activity
- Inadequate visibility of pedestrians
- Lack of pedestrian crossings
- Lack of sidewalks or bike facilities creating a connected non-motorized network

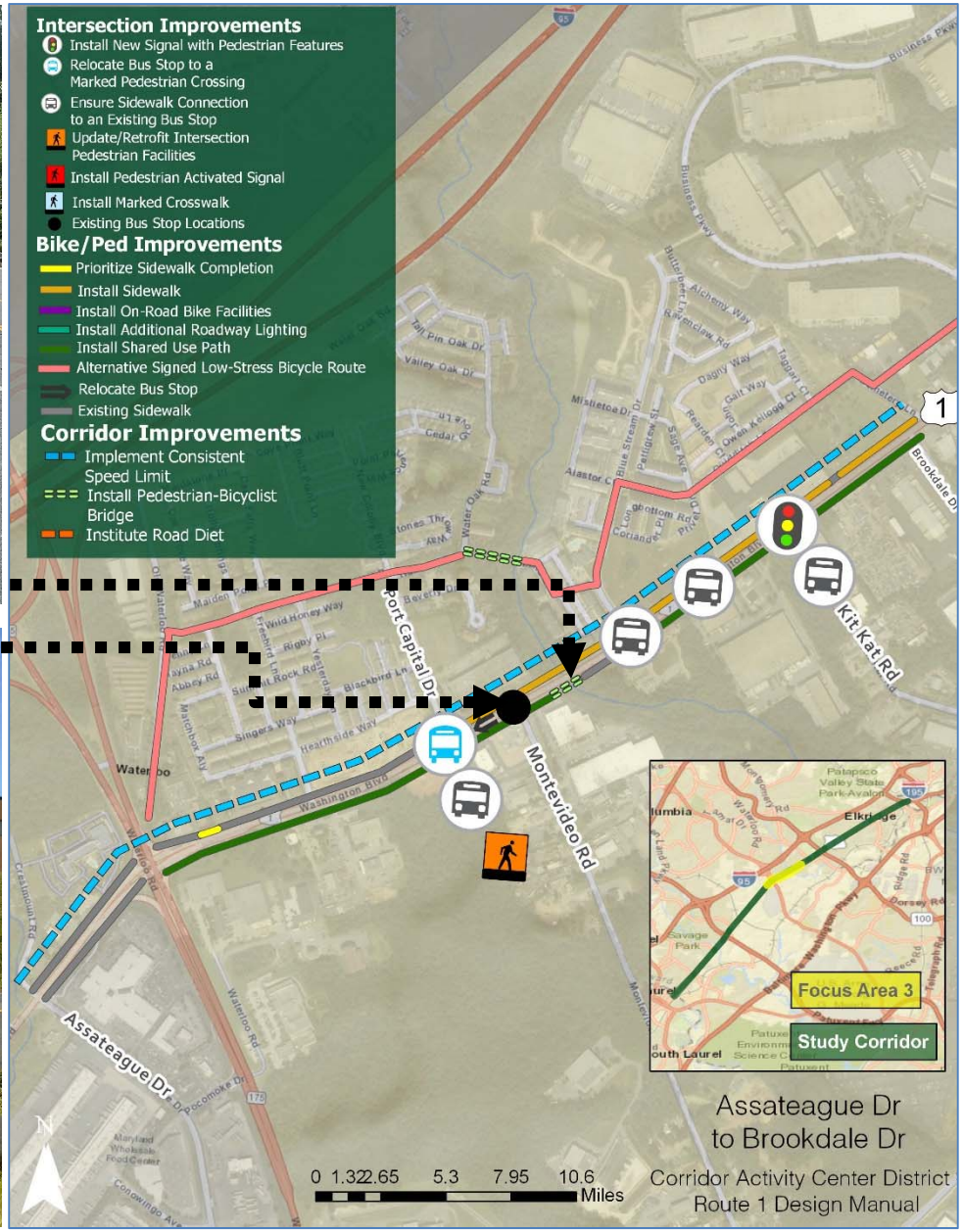
Recommendations



RECOMMENDATIONS: AREA 1

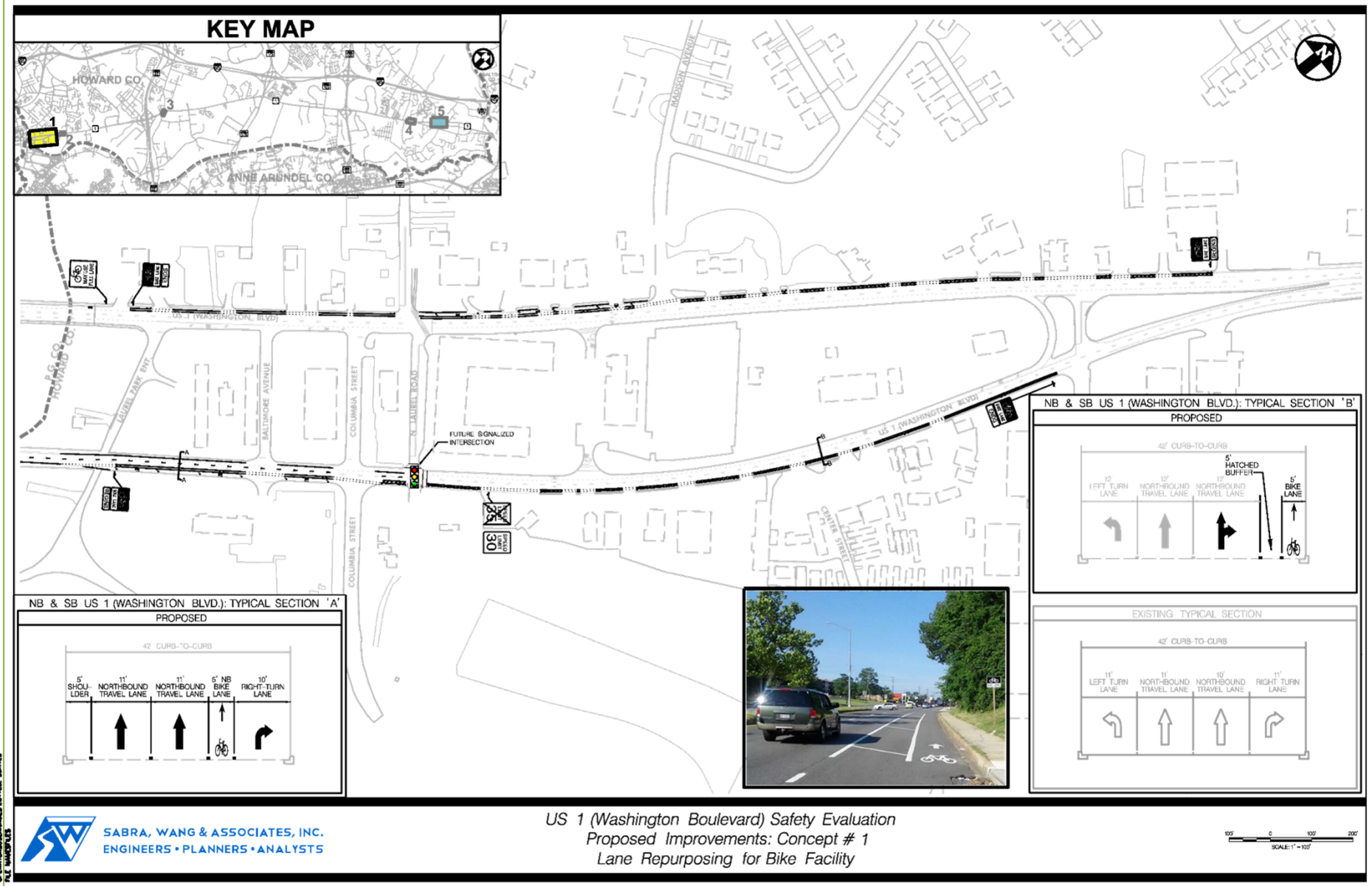


RECOMMENDATIONS: AREA 2

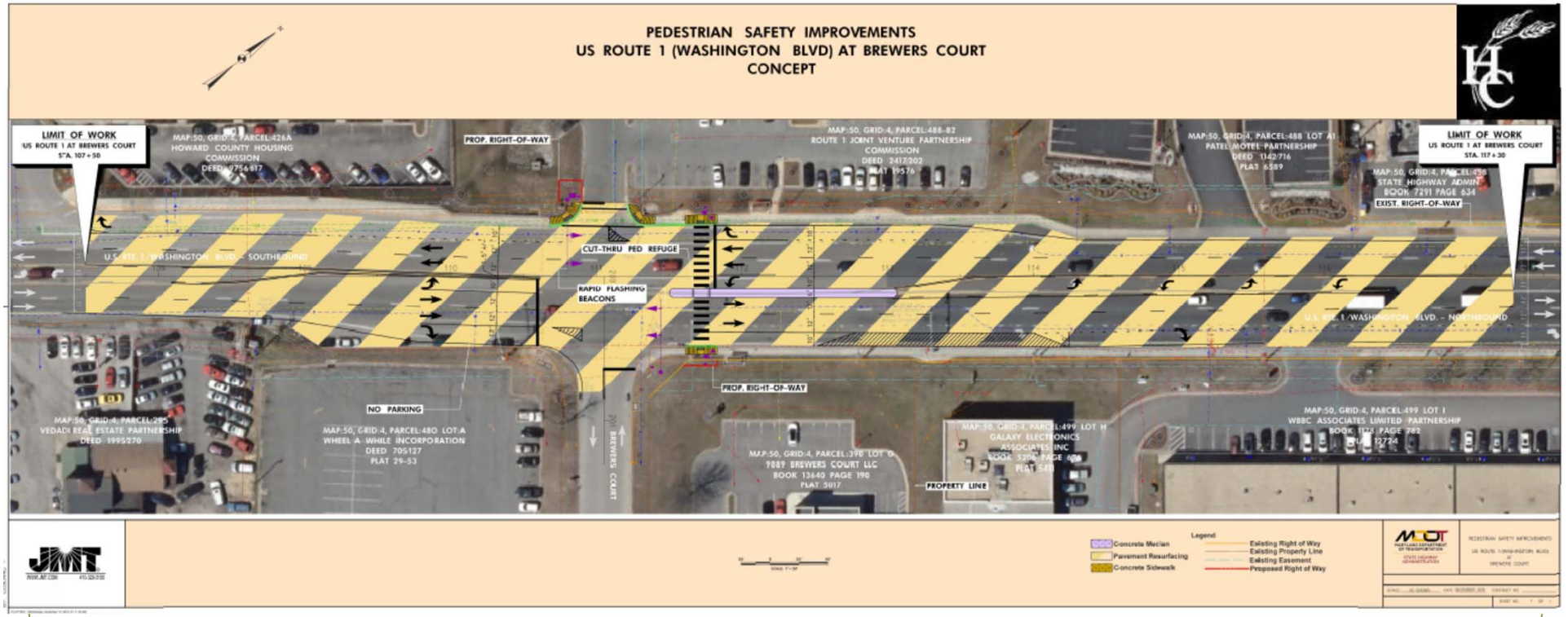


RECOMMENDATIONS: AREA 3

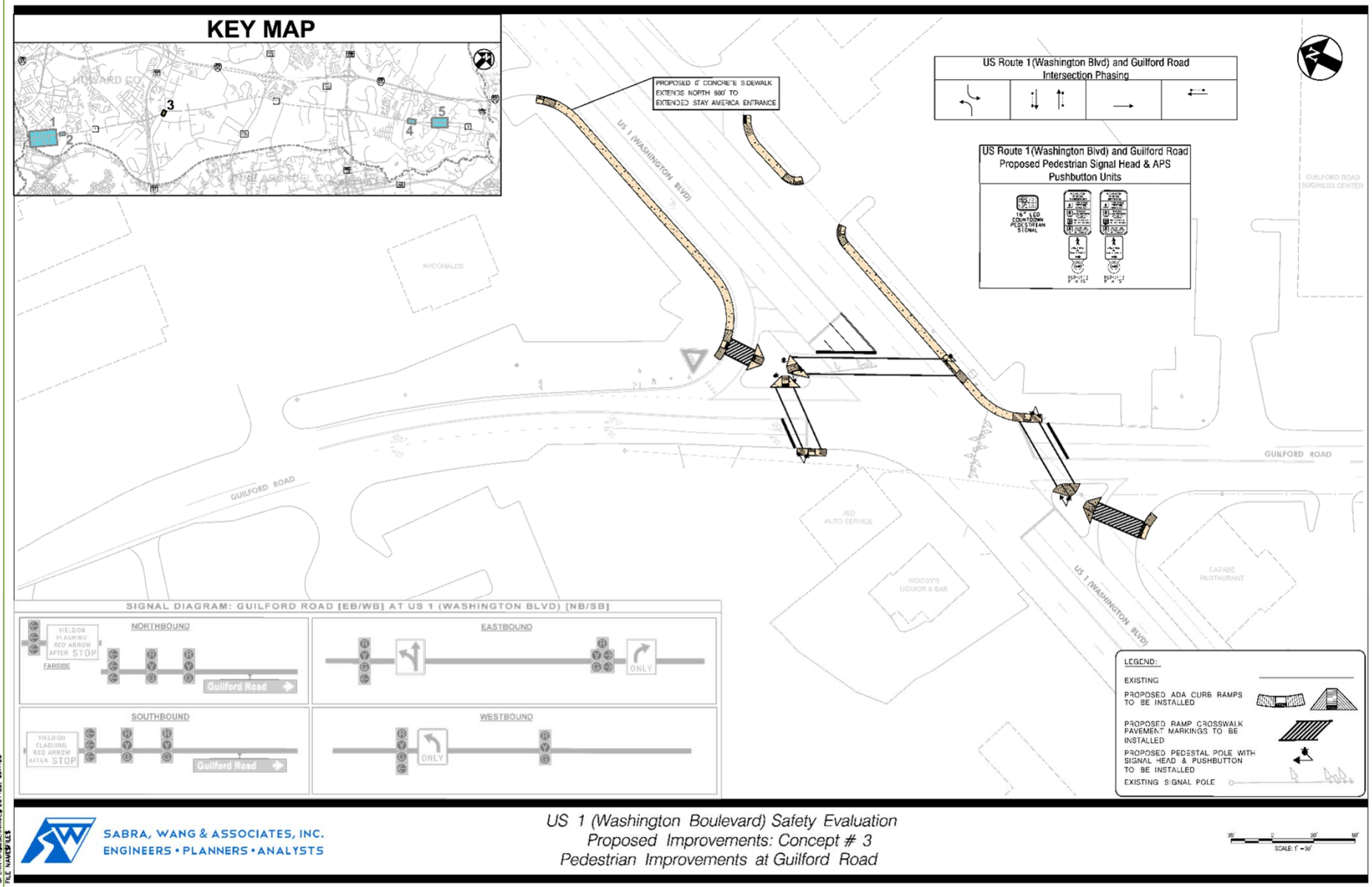
RECOMMENDATIONS: AREA 4



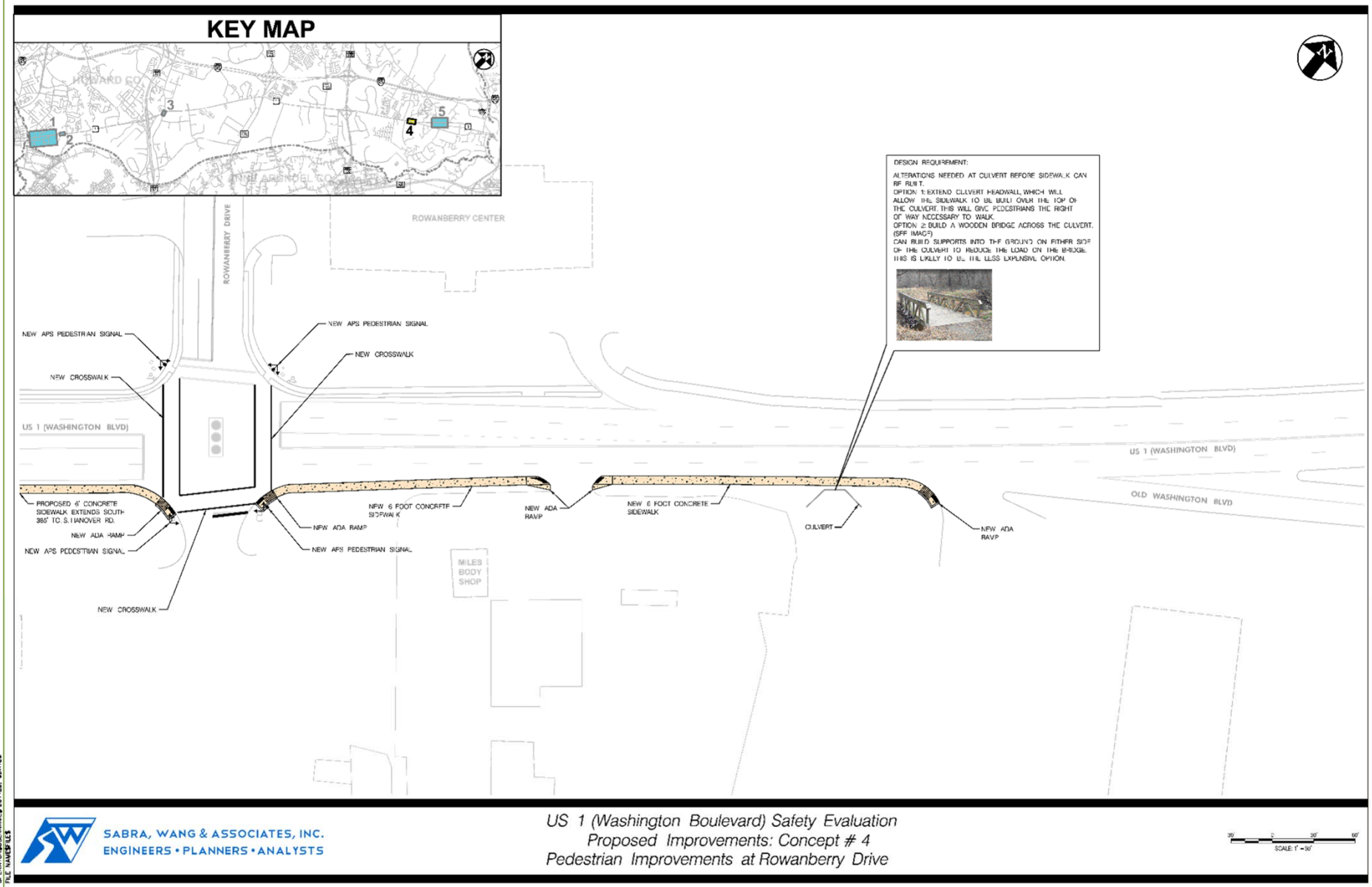
CONCEPT 1: NORTH LAUREL BUFFERED BIKE LANES



CONCEPT 2: BREWERS COURT PEDESTRIAN SIGNAL



CONCEPT 3: GUILFORD/US 1 PEDESTRIAN IMPROVEMENTS



CONCEPT 4: ROWANBERRY/US 1 PEDESTRIAN IMPROVEMENTS

CONCEPT 5: DOCTOR PATEL DRIVE PEDESTRIAN SIGNAL

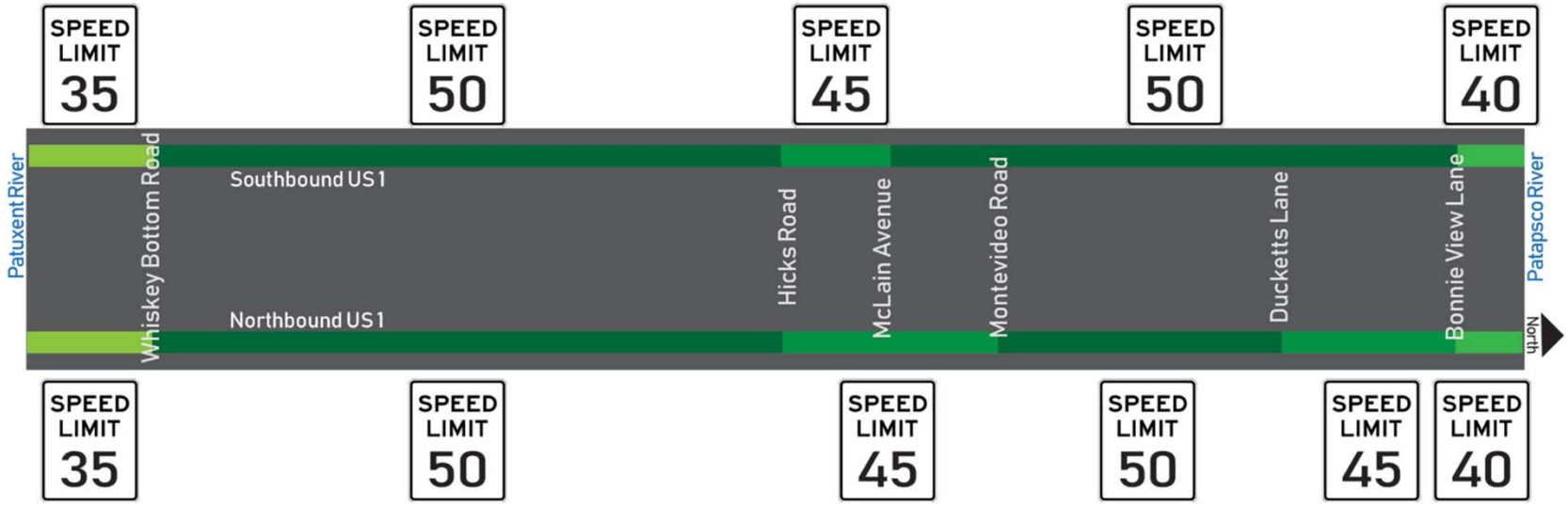
Cost Estimates

Concept		Pavement Markings - Bike Lane	Signage	Curb Ramps	New Traffic Signals	Retrofit Pedestrian Signals	Crosswalk Markings	Sidewalk	Leased Lighting Heads	Concept Total
Concept 1	**Lane Repurposing for Bike Facility**	$20,000	$10,000	$10,000	$230,000	$10,000	$5,000	—	—	**$285,000**
Concept 2	**Pedestrian Activated Signal**	—	$5,000	$20,000	$150,000	—	$5,000	—	—	**$180,000**
Concept 3	**Signal Upgrade Retrofit for Pedestrian Signals**	—	$2,500	$40,000	—	$25,000	$10,000	$100,000	—	**$177,500**
Concept 4	**Signal Upgrade Retrofit for Pedestrian Signals**	—	—	$15,000	—	$25,000	$10,000	$75,000	—	**$125,000**
Concept 5	**Pedestrian Activated Signal**	—	$5,000	$15,000	$150,000	—	—	$100,000	$30,000	**$300,000**
Element Sum		**$20,000**	**$22,500**	**$100,000**	**$530,000**	**$60,000**	**$30,000**	**$275,000**	**$30,000**	
									Sub-Total Costs	**$1,067,500**
									100 % Contingency for design fee, environmental mitigation, utilities, and right of way acquisition	$1,067,500
									Total Costs	**$2,135,000**

Corridor-Wide Recommendations

Context-Sensitive Speed Limit

- Max speed limit of 45 MPH
- Lower speed limit in pedestrian-dense areas
- Change speed limit in increments of 5 MPH



Contact

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