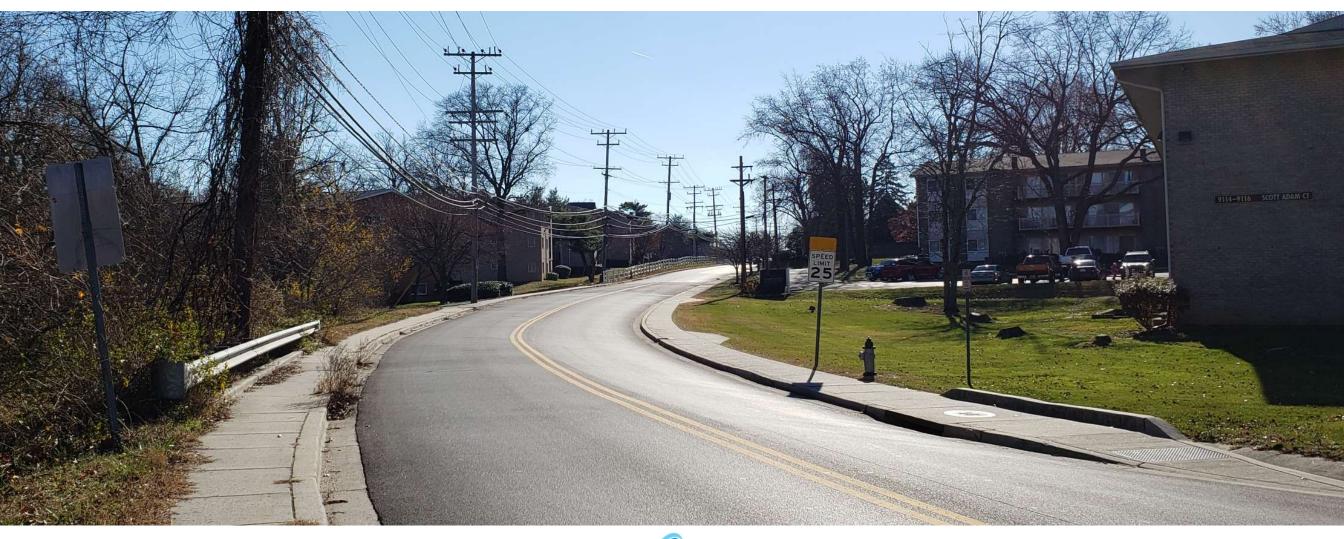
# **Bowie Road - Road Safety Audits (RSA)**









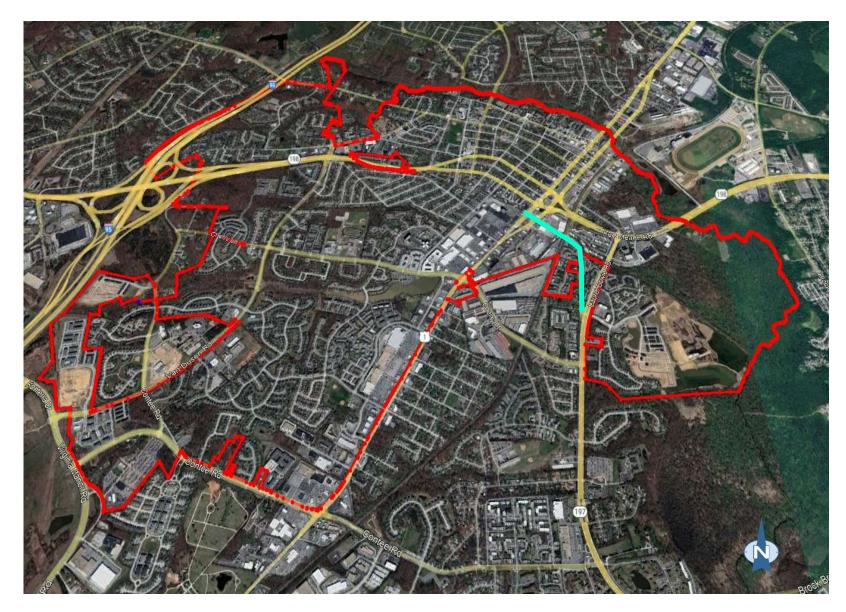




December 2022

# Bowie Road Road Safety Audits (RSA)

- Why Bowie Road
- How RSA was conducted
- Audit Findings
- Action Plans



Reference Background Map – Google Earth

#### Why Bowie Road?

- 0.7 Mile Roadway
- AADT 7,000 (pre-pandemic)
- Posted Speed Limit 25 MPH
- Bikeway Master Plan Route
- 28' Wide (in most sections)
- Mixed Use
- Laurel Rescue Squad
- High Pedestrian Activity
- 4 Traffic Signals
- Walkable to MARC Station



Map Source: CONNECT Explorer

# Previous Improvements on Bowie Road

24-Hour Pedestrian Count 996 Pedestrian Crossing (2012)

- 2012 Sidewalk Installation
- 2014 Traffic Signal Installation
   (Sidewalk and Ped Signal)
- 2017 Sidewalk Installation

112 accidents in 2 years (LPD)1 Pedestrian Fatality in 2020

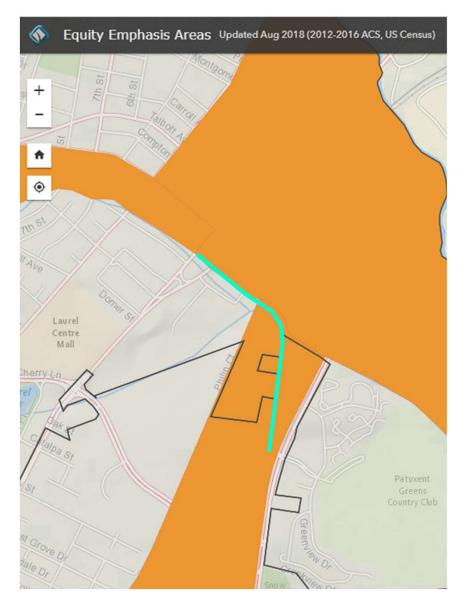




National Capital Region **Transportation Planning Board** 

# **Regional Roadway Safety Program**

Provide short-term consultant services to member agencies to address safety issues.



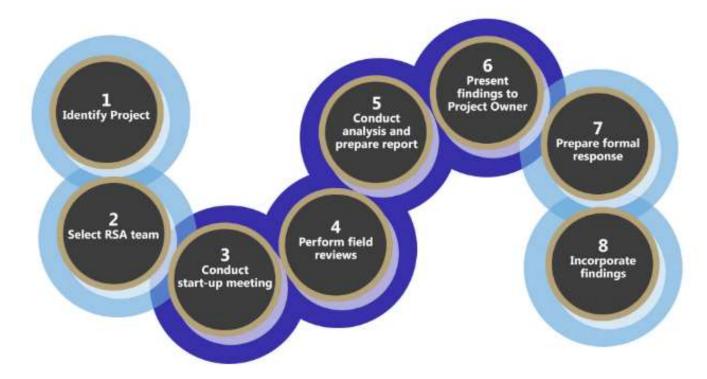
Reference Map – WMCOG EEA Map

Powered by esri

#### **Road Safety Audits (RSA)**

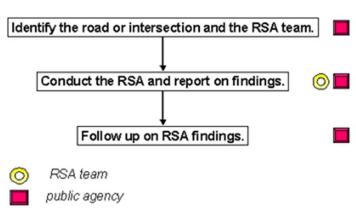
# Responsibilities





Typical Eight-Step RSA Process (Source: FHWA)

#### **RSA Procedures**



Simplified Three-Step RSA Process (Source: FHWA)

- 24-Hour Speed & Volume Data Collection
- 3-Hour AM & PM Turning Movement Count Collection
- Pedestrian & Bicycle Activity Observation
- Crash Data Review
- Field Audit

#### **Our Field Audit Team**

- Maryland SHA D3 Office
- Prince George's County DPW&T
- COG National Capital Region
   Transportation Planning Board
- City of Laurel DPW
- Century Engineering & T3 Design
  - ✓ Traffic Safety
  - ✓ Road Design/Drainage Design
  - ✓ Pedestrian & Bike Operation
  - ✓ Traffic Control Device Design
  - ✓ Traffic Operation
  - ✓ Complete Streets



About 10 People

2 Surveys:

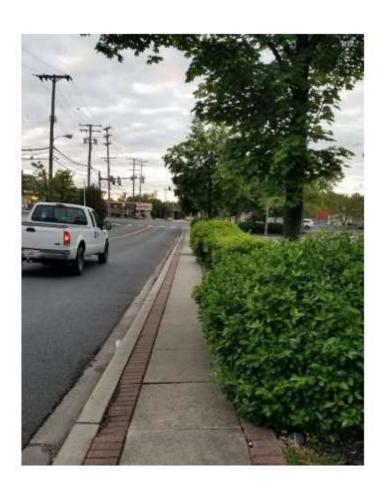
AM Peak and Midday

#### Goals

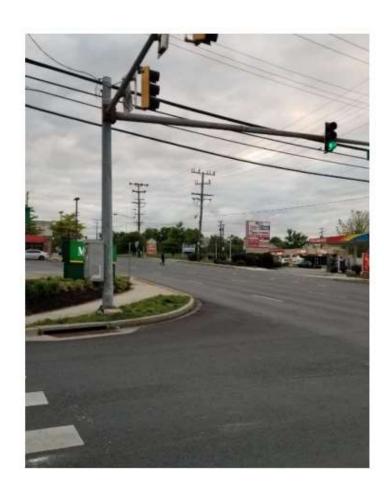
- Address Roadway Safety Issues
- Improve Roadway Safety for all Users
- Reduce Fatal/ Serious Injury Crashes
- Provide Safer Bikeway



Deteriorating sidewalk



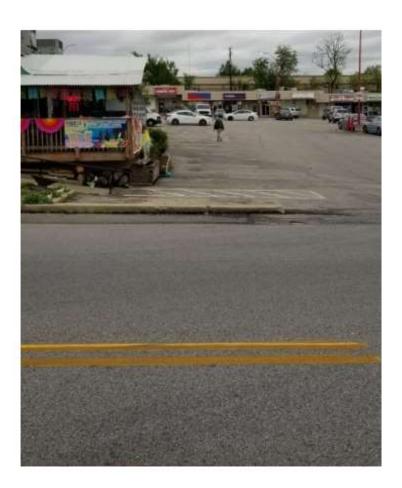
Shrubs overgrowing sidewalk



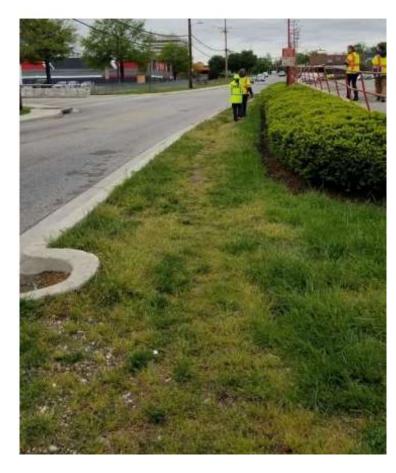
No ped crossing at north leg (NB US 1)



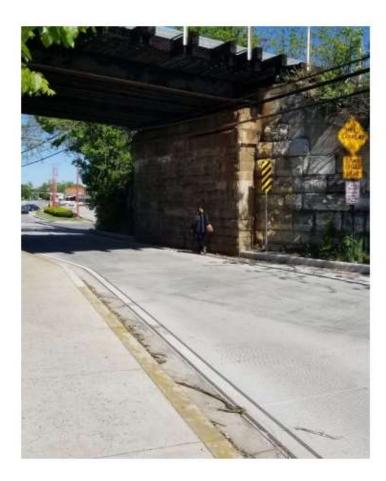
Sidewalk only on one side



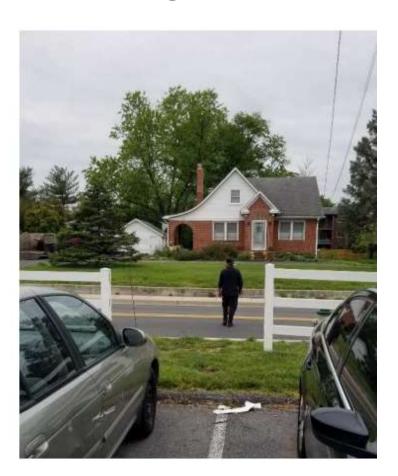
Sidewalk stop at the restaurant



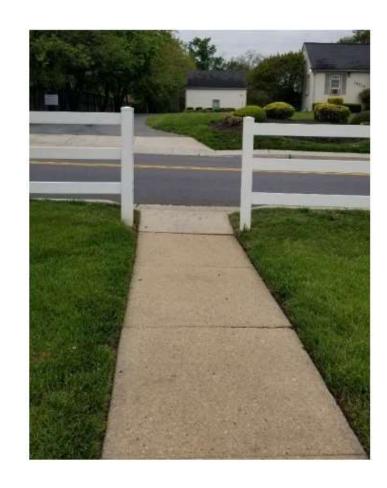
No sidewalk adjacent to plaza/ supermarket



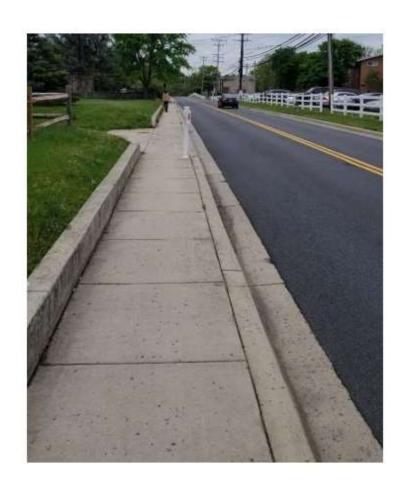
Pedestrian not using sidewalk under CSX railroad bridge



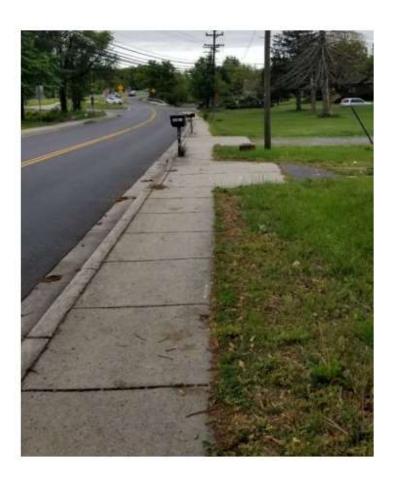
Jaywalking through fence gap



Apartment entrance at mid-block



Sidewalk pinch point (mailbox)



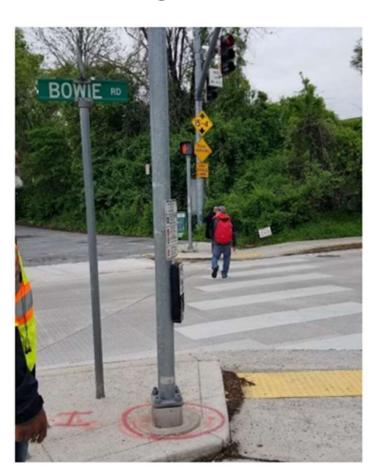
Sidewalk pinch point (mailbox)



Sidewalk pinch point (manhole)



Wide intersection w/o defined ped path Tripping Hazard at storm drain inlet



Crosswalk not high contrast



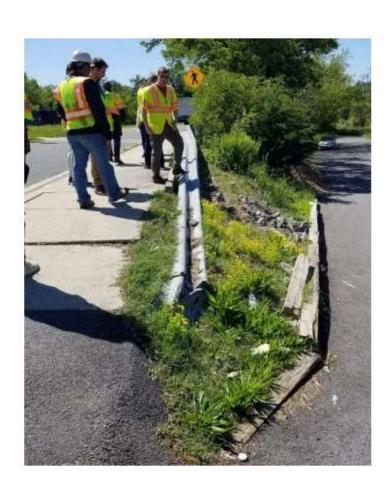
Faded pavement marking



Knock-down sign
Bus stop in the middle of intersection



Crash evidence
Unsafe crossing for bus riders



Damaged / collapsed guardrail

### **Suggestions & Actions from the Audit**

- Trim vegetation near the sidewalks completed
- Trim vegetation near the signs completed
- Align pedestrian signal with crosswalk near the CSX bridge completed
- Remove debris to eliminate tripping hazard completed
- Upgrade crosswalk near the CSX bridge completed (Prince George's County DPW&T)

#### **Ped Signal Better Aligned with the Crosswalk**



# **Crosswalk in High Contrast**





Before After Before After

#### **Debris Removal**



**Before** 



After

#### **Vegetation Trimming near Sidewalk**



**Before** 



After

#### **Suggestions & Actions from the Audit**

- Double yellow line adjustments ongoing
- Add edge lines to narrow the lanes to calm traffic ongoing
- Upgrade/install various signs along Bowie Road ongoing
- Upgrade sidewalks and ADA ramps ongoing
- Clean inlet to remove ponding water ongoing
- Eliminate sidewalk pinch point under evaluation
- Close fence opening at the apartment under evaluation (with apartment)
- Install mid-block crosswalk & RRFB under evaluation
- Add sidewalks on the other side of Bowie Road under evaluation

#### **Suggestions & Actions from the Audit**

- Add street name sign and replace pedestrian pushbutton signs ongoing (with SHA)
- Add intersection lighting ongoing (with SHA)
- Extend all-red phase and adjust signal timing ongoing (with SHA)
- Upgrade/repair signs and pavement markings ongoing (with SHA)
- Curb improvements & guardrail upgrade ongoing (with SHA)
- Relocate bus stop on MD 197 at Bowie Road intersection ongoing (with SHA & WMATA)

# **Any Questions?**



National Capital Region
Transportation Planning Board



MDOT SHA
District 3 Traffic

MDOT SHA
Office of Traffic & Safety

Prince George's County
DPW&T

# Thank you!