



Leveraging Big Data to Support Pedestrian and Bicycle Planning

National Capital Region
Transportation Planning Board
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Introduction

Bryan Barnett-Woods

Principal Transportation Planner
Department of Public Works
City of Rockville

BBWoods@rockvillemd.gov
240-314-8527



Agenda

- City of Rockville
- ACRS Data
- Count Data
- Automated Enforcement Data
- Near Miss Data
- City Projects



Beall Ave

City of Rockville

- 10 miles NW of Washington DC
- Approx. 67K people
- Diverse Community
- Montgomery County Seat
- Bronze Level Bicycle Friendly Community
- Two Metrorail Stations



Gibbs St



Millennium Trail

City of Rockville

- Multimodal
 - Automobiles
 - Transit
 - Pedestrian
 - Bicycling
- Mobility
- Accessibility



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ACRS Data

- Objective and Consistent
- Detailed
- Updates required for crash injury updates



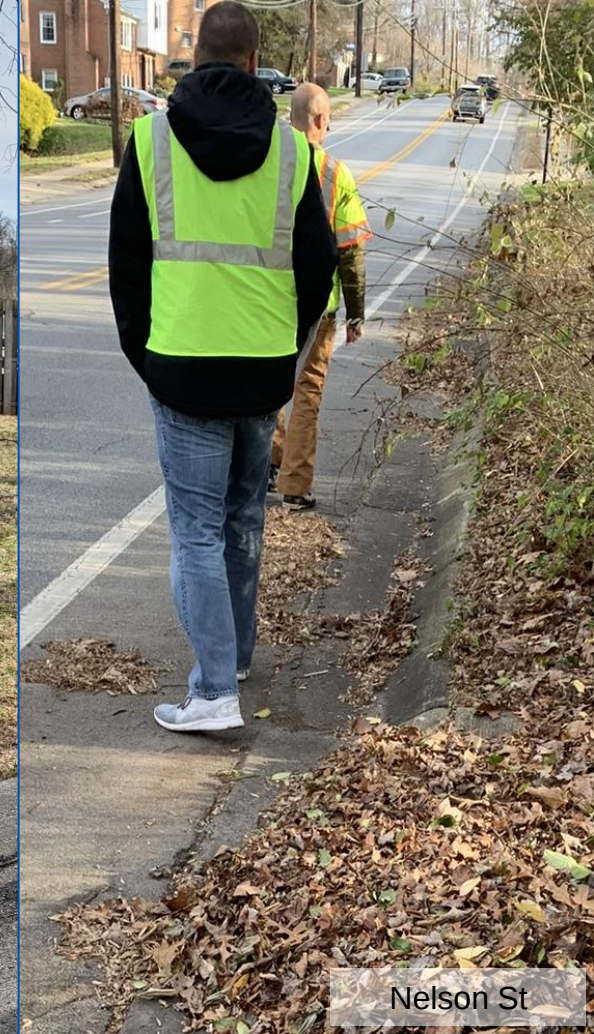
Count Data

Mechanical & Turning Movement Counts

- Traffic Volumes
- Speed
- Vehicle Classifications
- Ongoing City-Wide Program
- Developer Projects & Resident Service Requests



Midway Ave



Nelson St

Count Data

Pedestrian and Bicycle Counts

- 8 Counters
 - 1 Bicycle-Only
 - 2 Pedestrian-Only
 - 5 Pedestrian and Bicycle
- 24-hr Data Collection
- Directions and Volume



Count Data

Uses

- Justify Improvements
- Period comparisons



Automated Enforcement

Traffic Cameras

- Speeding
- Red Light
- Residential Streets
- 35 MPH
- Calibration
- +12 MPH Speeding
- No Stop at Red Light



Redland Blvd

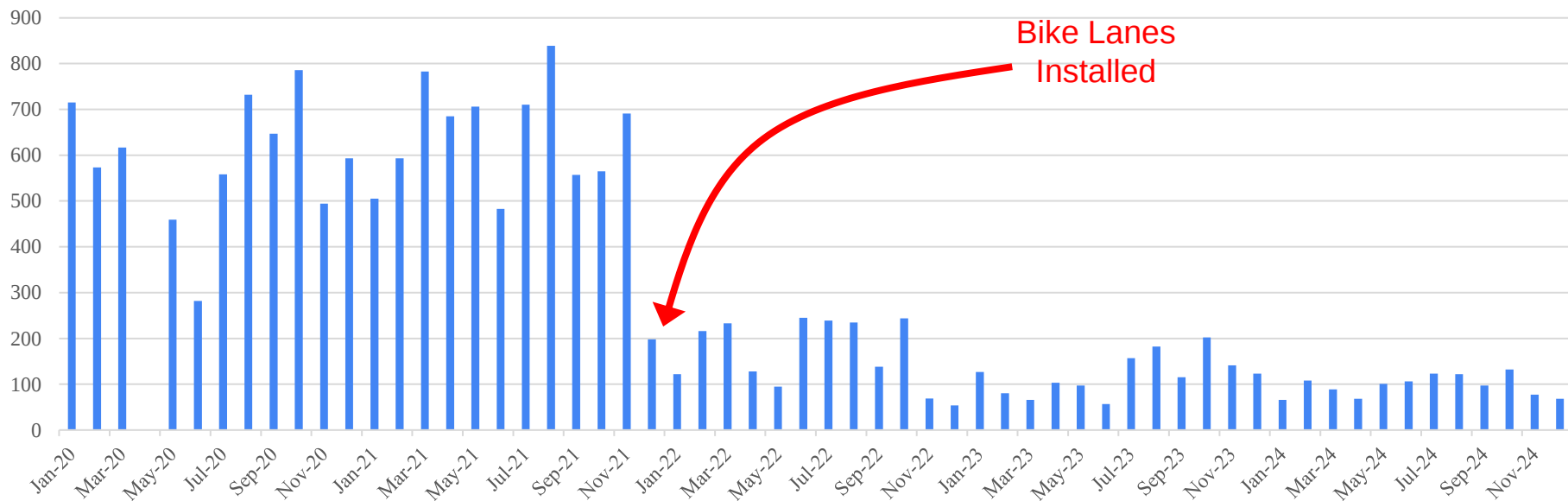


Nelson St



Automated Enforcement

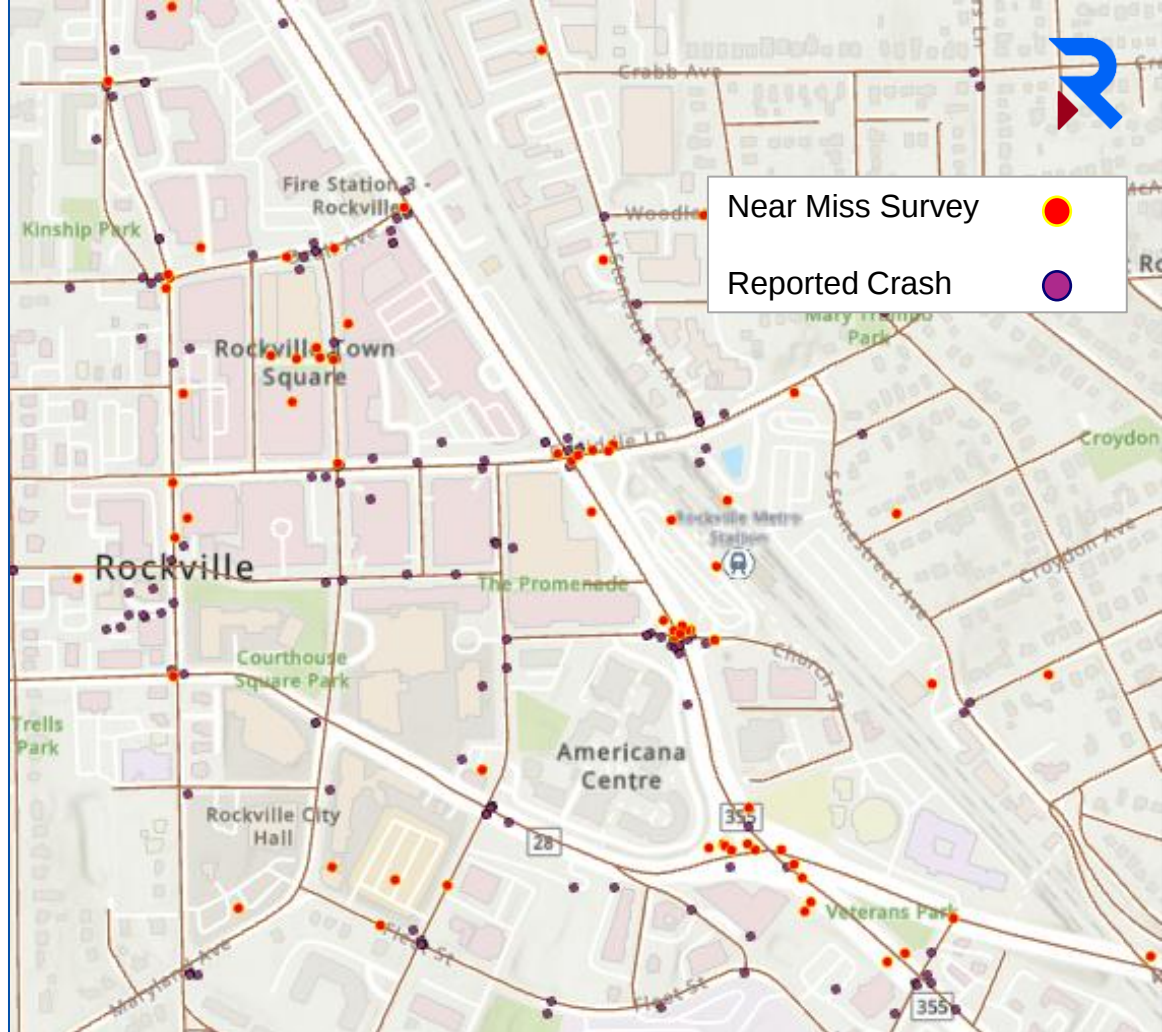
Eastbound Maryland Avenue Mobile Speed Monitoring System Issued Speed Citations 2020-2024



Near Miss Data

Near Miss Survey

- City Website
- Anonymous reporting
- Different Types of Traffic Movements and Incidents
- Response Bias
- Limited Data Set
- Consistent with Crash Data
- One-off data points in neighborhoods



Near Miss Data

Near Miss Camera

- Consultant provided
- Vehicle-Vehicle
- Vehicle-Pedestrian
- Vehicle-Bicycle
- Seconds Between Overlap in Space
- Intersection Traffic Patterns
- New Data Sets



Lewis Ave &
Edmonston Dr

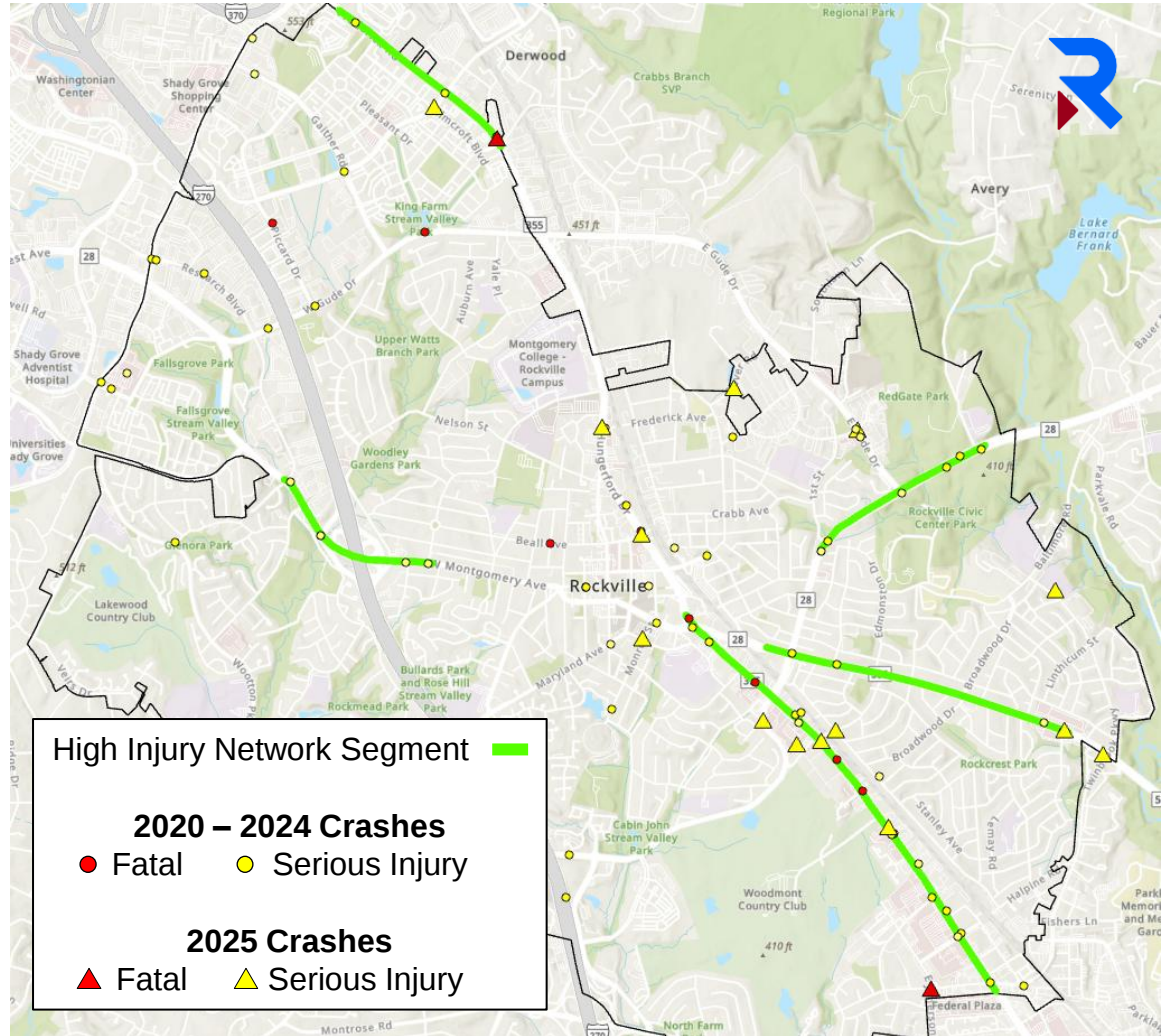
Vision Zero

- Eliminate serious injuries and fatal crashes
- Multidisciplinary
- For everyone
- 30 Action Times
 - Engineering
 - Education
 - Enforcement
 - Policy



Vision Zero

- Crash Histories
 - High Injury Network
 - Hot Spots
- Near Miss Survey
 - Resident Submitted
 - Traffic Concerns
- Equity
 - Vulnerable Road Users
 - Neighborhoods
 - Resident Submitted



Transit Within Reach

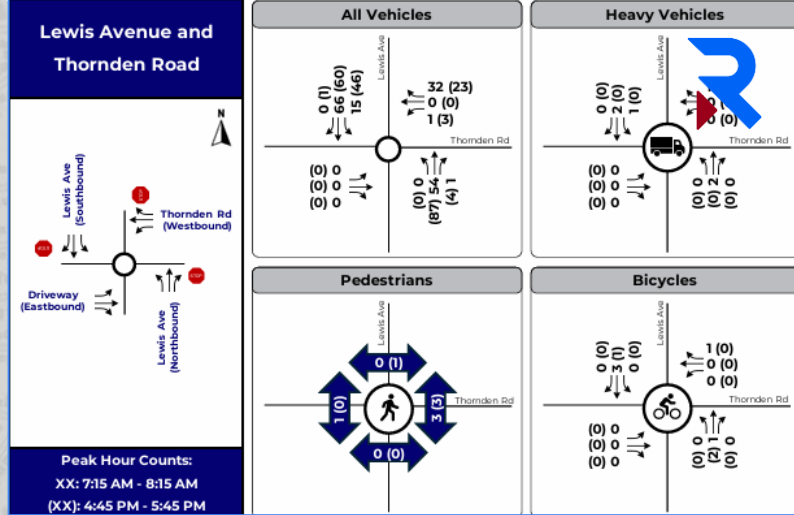
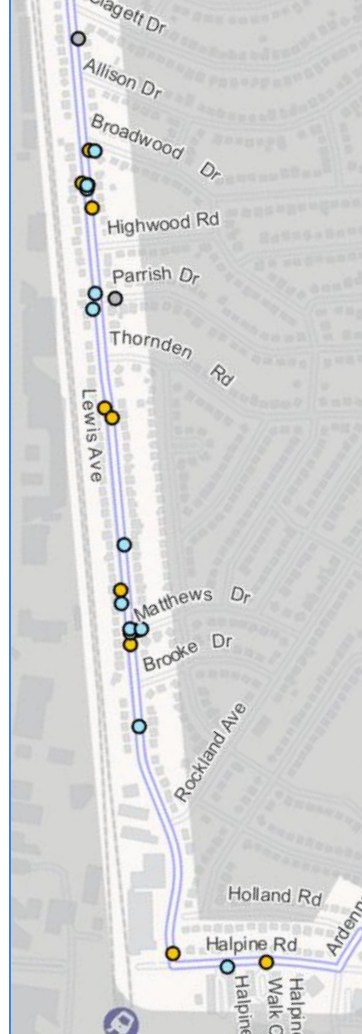
- FY 26 Project
- Twinbrook Metrorail Station Bicycle Access
 - Evaluate Feasibility
 - Prepare preliminary Design
- Ongoing
 - Existing Conditions Report
 - Proposed Improvements
 - Public Outreach



Lewis Avenue

Transit Within Reach

- Crash History
 - Mode
 - Severity
 - First Impact
- Mechanical and Turning Movement Counts
 - Volumes
 - Speeds
 - Mode
- Field Verification
 - Road geometry
 - Signage and pavement markings
- Near Miss
 - Mode
 - 24-hours



Lewis Ave

Thank you!

