KENT COUNTY SS4A (SAFE STREETS AND ROADS FOR ALL) COMPREHENSIVE SAFETY ACTION PLAN

SAFETY WORKING GROUP MEETING #3

MARCH 20, 2025

Agenda

- Recap of past activities
- Revised high injury network
- Safety countermeasure toolkit
- Public engagement round 2 approach
- Next steps, including implementation planning

Recap of past activities

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METROPOLITAN PLANNING ORGANIZATION

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Safety Action Planning Process

Establish a **vision** for transportation safety

Analyze **safety, mobility, and equity** data

Incorporate **community feedback**

Develop **projects and strategies** to address roadway safety issues

Plan Goal:
Reduce fatal and serious injury crashes by 50% by 2040 and eliminate fatal and serious injury crashes by 2050.

Fall / Winter 2024/25
Safety Data Analysis

Winter 2025
Engagement Round 1: Understanding Local Perspectives

Public workshop held January 13 + Survey

We are here!

Winter 2025
Develop Recommendations

Spring 2025
Engagement Round 2: Feedback on Recommendations

Spring / Summer 2025
Draft and Final Safety Action Plan

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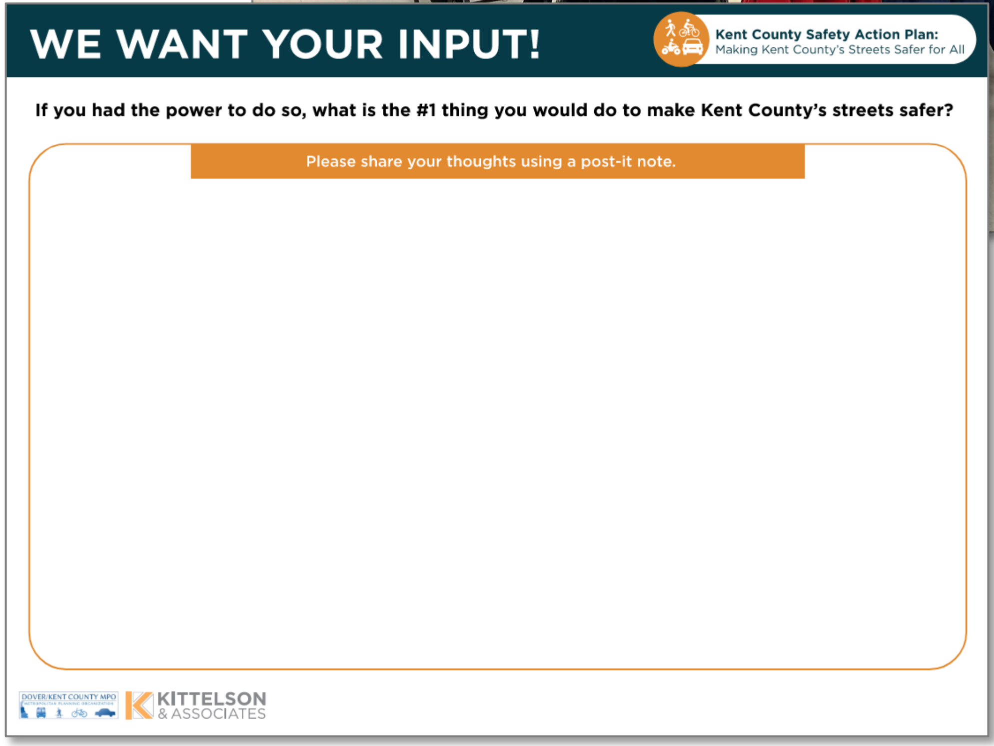
Engagement Recap

Public Workshop:

- January 13, 4:00 – 7:00 pm at the Modern Maturity Center in Dover
- About 10 people in attendance
- What we heard:
  - Increase active transportation infrastructure
  - Participants indicated they felt unsafe traveling along US 13 south of the City of Dover



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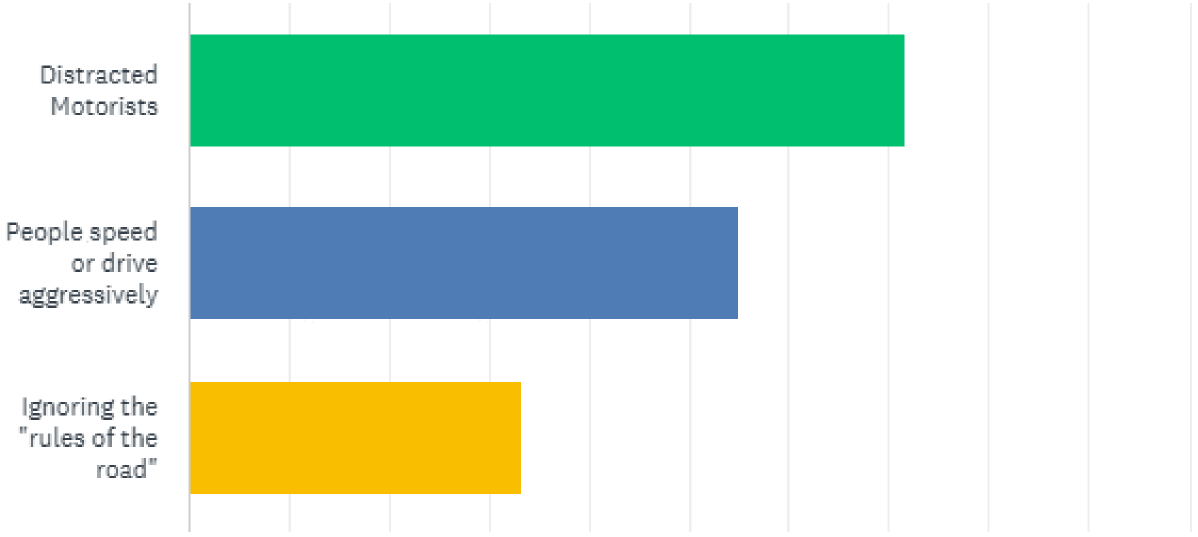
Engagement Recap

Survey Results:

- 67 respondents
  - 60% women
  - 90% white
  - Majority from:
    - Milford
    - Magnolia
    - Dover
    - Camden
    - Smyrna

Top 3 Traffic Safety Issues



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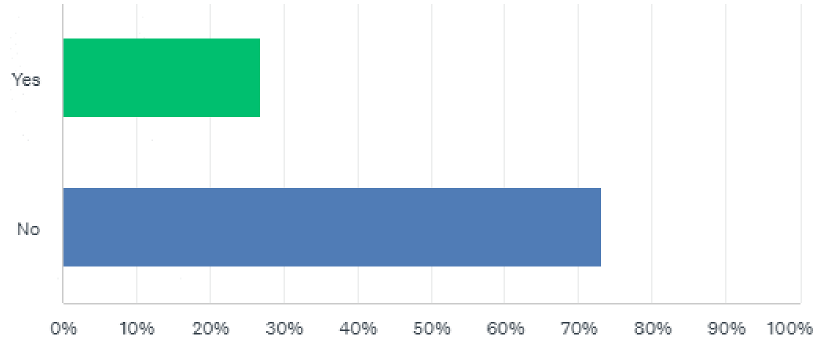
Engagement Recap

Survey Results:

45% of respondents said they feel **somewhat or very unsafe biking** in Kent County

Nearly 50% of respondents said they feel **somewhat or very unsafe walking** in Kent County

Almost 27% of respondents have or has someone in their household with a mobility disability



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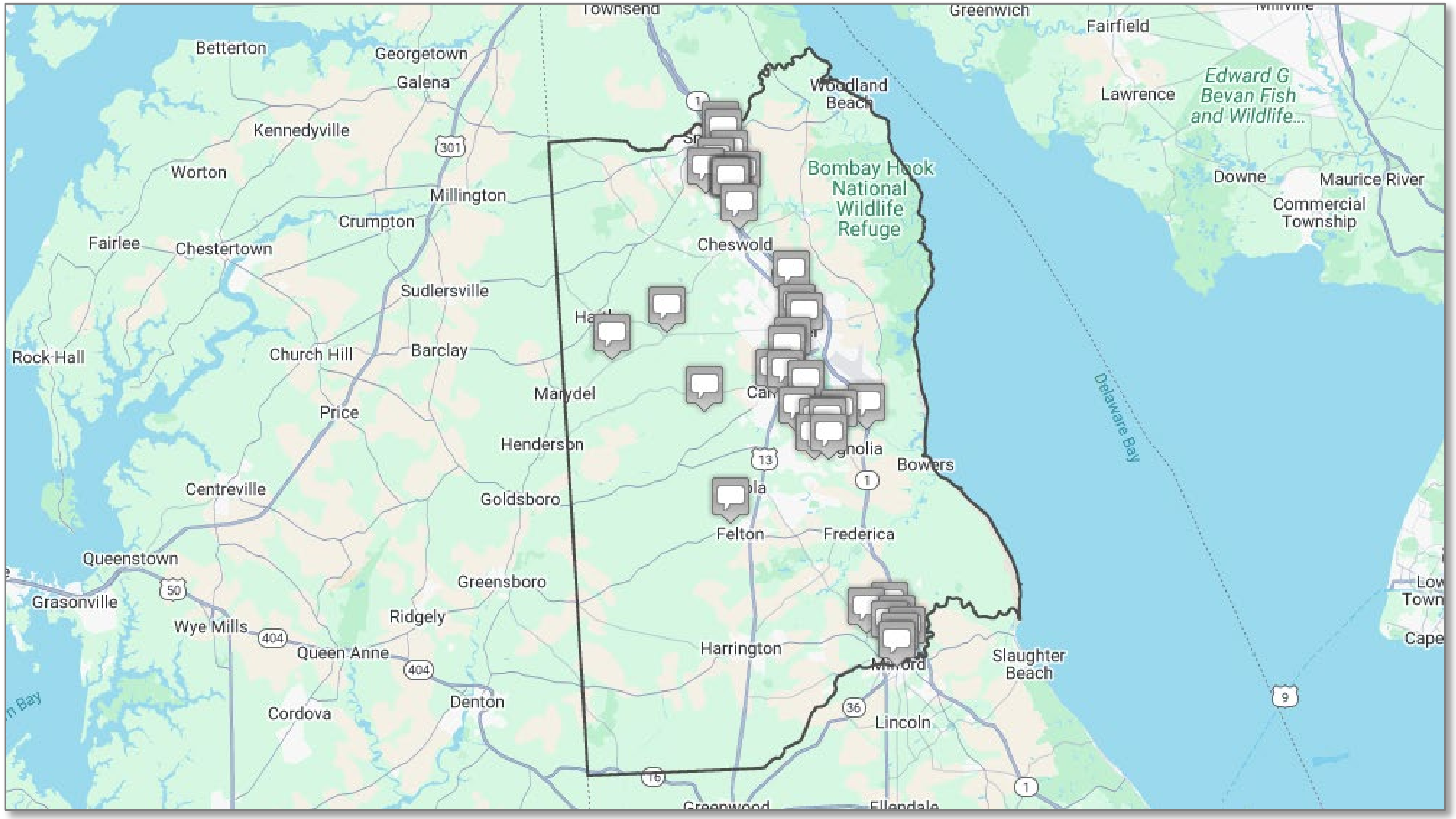
Engagement Recap

Project information is also being shared via an online story map!

Online Map Results:

- 41 total comments
- Many concerns about speeding
- Emphasis on US 13 / Hickory Ride Road as a key intersection
- Clustered along US 13 & US 113 and in Dover
- Context and concerns for specific intersections and corridors



Revised high injury network

Priority corridors and intersections

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High injury network

2% of roads in Kent County account for 30% of all fatal and suspected serious injury crashes.

- A “high injury network” (HIN) represents those parts of the roadway network that have historically had the greatest frequency of severe crashes.
- This network provides some guidance on where safety improvements may be prioritized.*
- However, the high injury network does NOT represent the only places where safety improvements will be recommended. Safety concerns in rural areas and smaller municipalities will be addressed through systemic safety recommendations.

*Note that some segments of the HIN have been adjusted to logical endpoints or to fill small gaps.

High injury network

HIN update: Improved crash severity data

- More detailed crash classification:
  - Before: fatal, injury, PDO (property damage only)
  - Now: fatal, serious injury, moderate injury, minor injury, PDO
- Why it matters:
  - Grouping all injury crashes can distort severity impact at crash locations
  - A nuanced approach better identifies high-severity crash locations (fatal & serious injury) aligned with the Safe System Approach.

Equity Focus Areas

- DelDOT established two levels of Equity Focus Areas (EFAs)
  - Moderate
  - Significant
- EFAs are based on:
  - Median household income
  - % of limited English proficiency households
  - % of population in poverty
  - Minority population percentages
- There are a total of 30 Equity Focus Areas in Kent County
  - 12 significant
  - 18 moderate

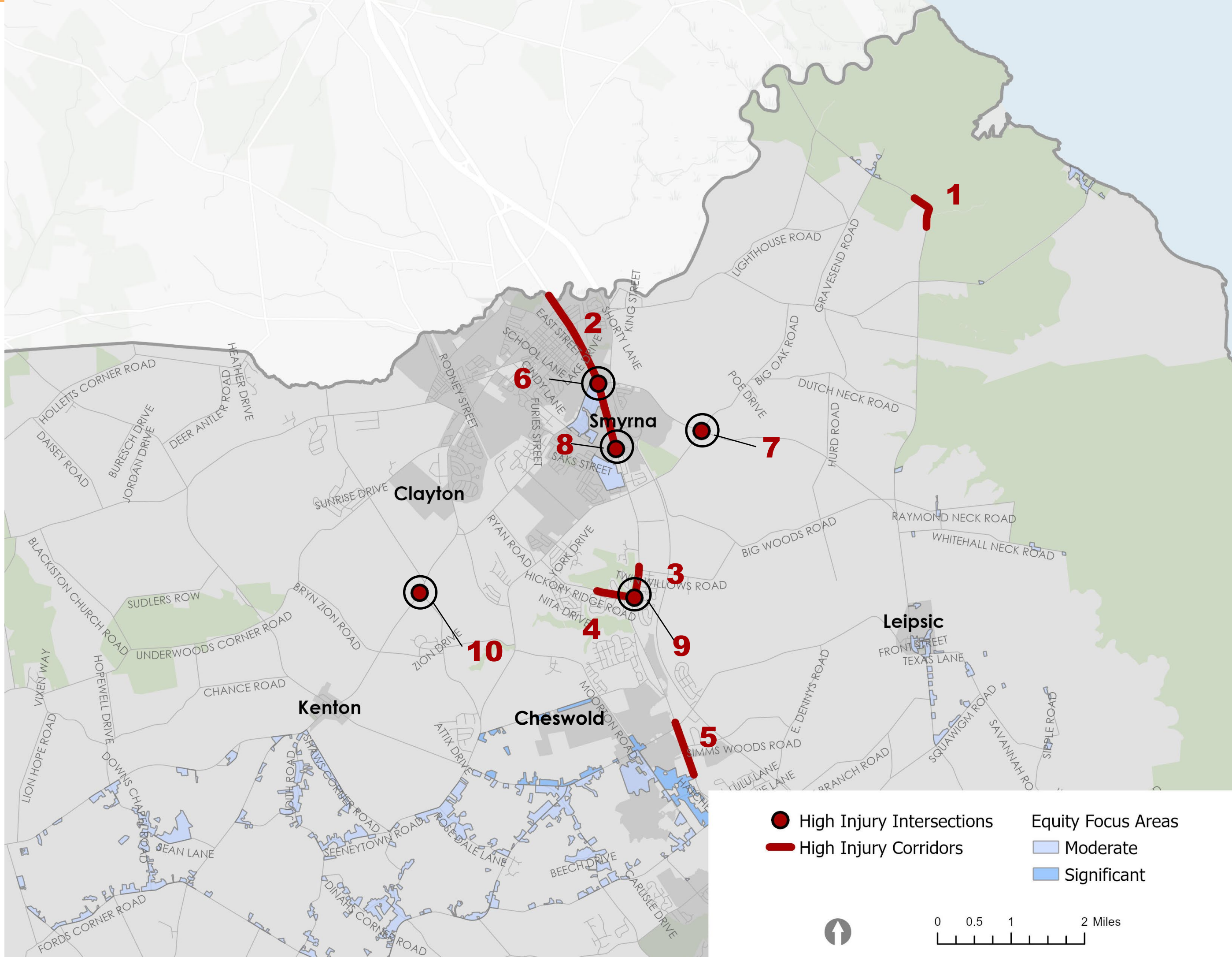
High injury network

Segments:

1. Hay Point Landing Rd, 0.6 miles east of Lighthouse Rd to 0.1 miles south of Florio Rd
2. US 13, Duck Creek to Carter Rd
3. US 13, Twin Willows Rd to Hickory Rd
4. Hickory Ridge Rd, 0.2 miles west of Northridge Dr E to US 13
5. US 13, Main St/Fast Landing Rd to Carlson Way

Intersections:

6. US 13/Smyrna Leipsic Rd
7. Big Oak Rd/ Smyrna Leipsic Rd
8. US 13/S Carter Rd
9. US 13/Hickory Ridge Rd
10. SR 15/Mount Friendship Rd



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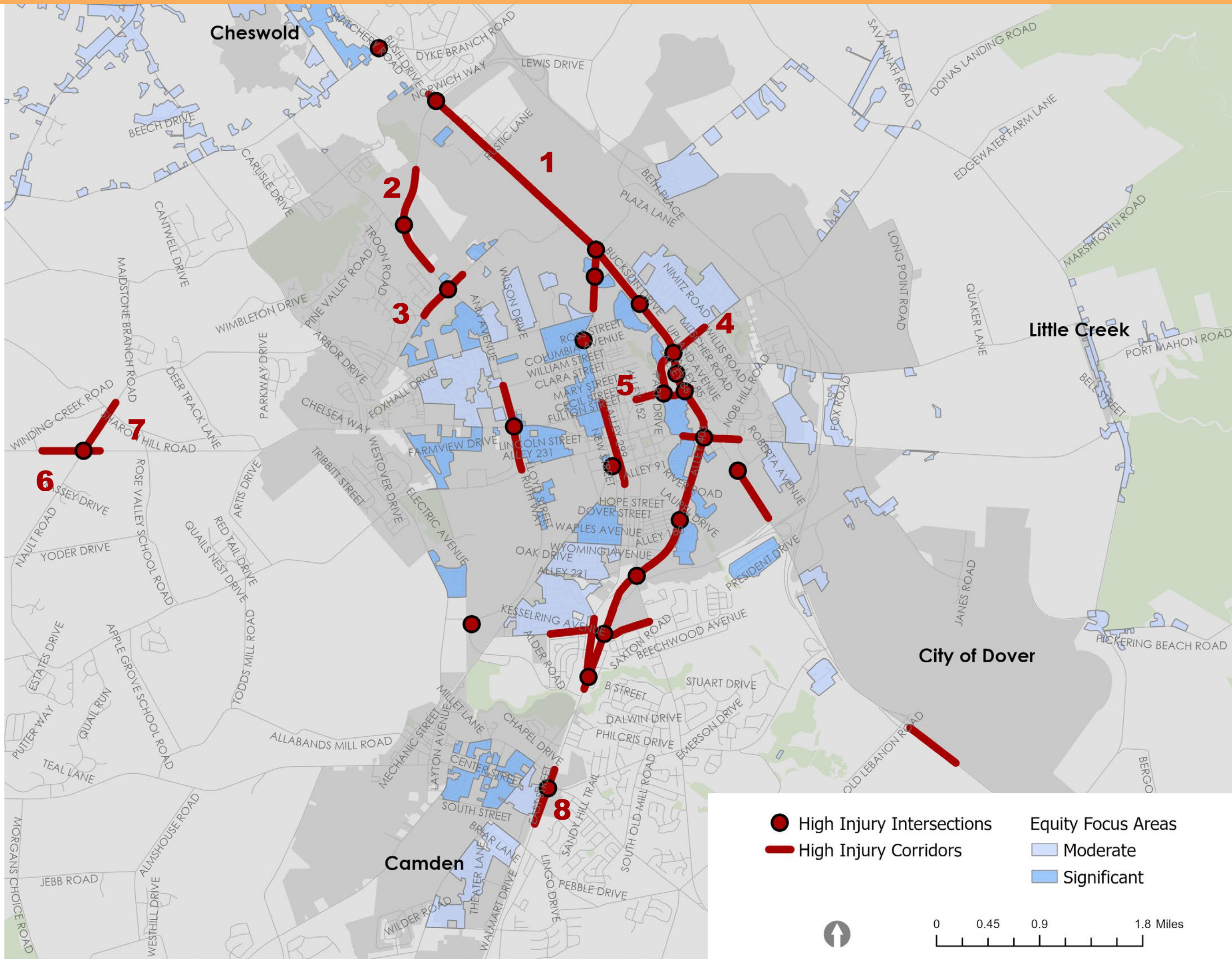
High injury network

Segments (1 of 2):

1. US 13, Scarborough Rd to South Taylor Dr
2. Scarborough Rd, 0.3 miles south of Crawford Carroll Ave/Delaware Tech Dr to south of Gemstone Blvd
3. College Rd, Oakmont Dr to College Park Dr
4. White Oak Rd/Kings Hwy NE, Spruance Rd to SR 8/Division St
5. SR 8/Division St, John Hunn Brown Rd to Kings Hwy SW
6. SR 8, Winding Creek Rd to 0.2 east of Nault Rd/Chestnut Grove Rd
7. Chestnut Grove Rd, SR 8 to 0.1 miles north of Sharon Hill Rd
8. US 13, Old North Road to US 13 at Positive Outcomes Charter School



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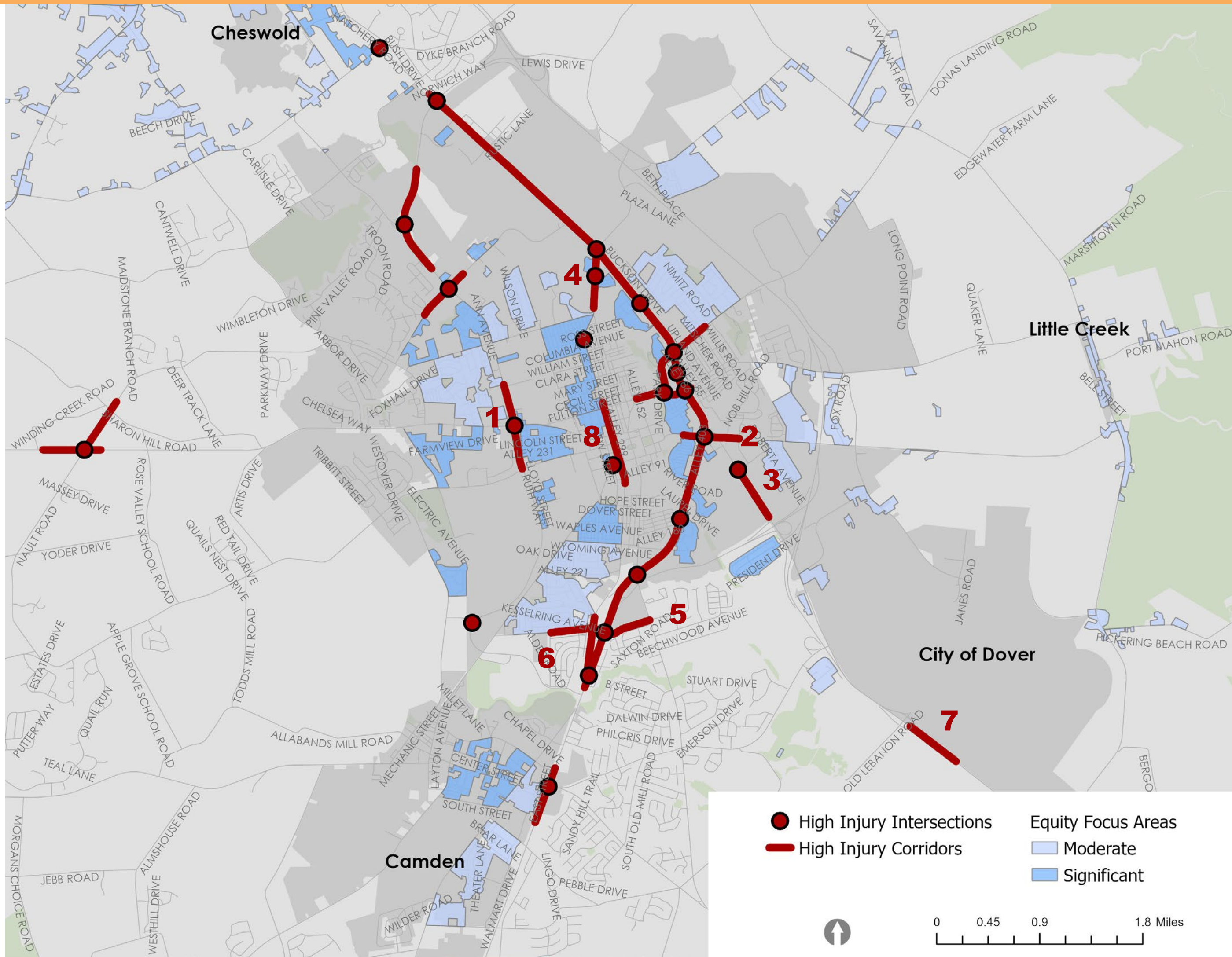
High injury network

Segments (2 of 2):

1. Salisbury Rd, Clara St Ext to SR 15
2. Little Creek Rd, J.H. Brown Blvd to River Rd
3. Bay Rd, Blue Hen Blvd to Stover Blvd
4. US 13 (N State St), Leipsic Rd to Walker Rd
5. Webbs Ln, John Clark Rd to State St
6. US 13A (Governors Ave), Fiddler Green to US 13
7. SR 1 at Dover AFB
8. S Governors Ave, W Division St to S Governors Ave at Bayhealth Kent General Hospital



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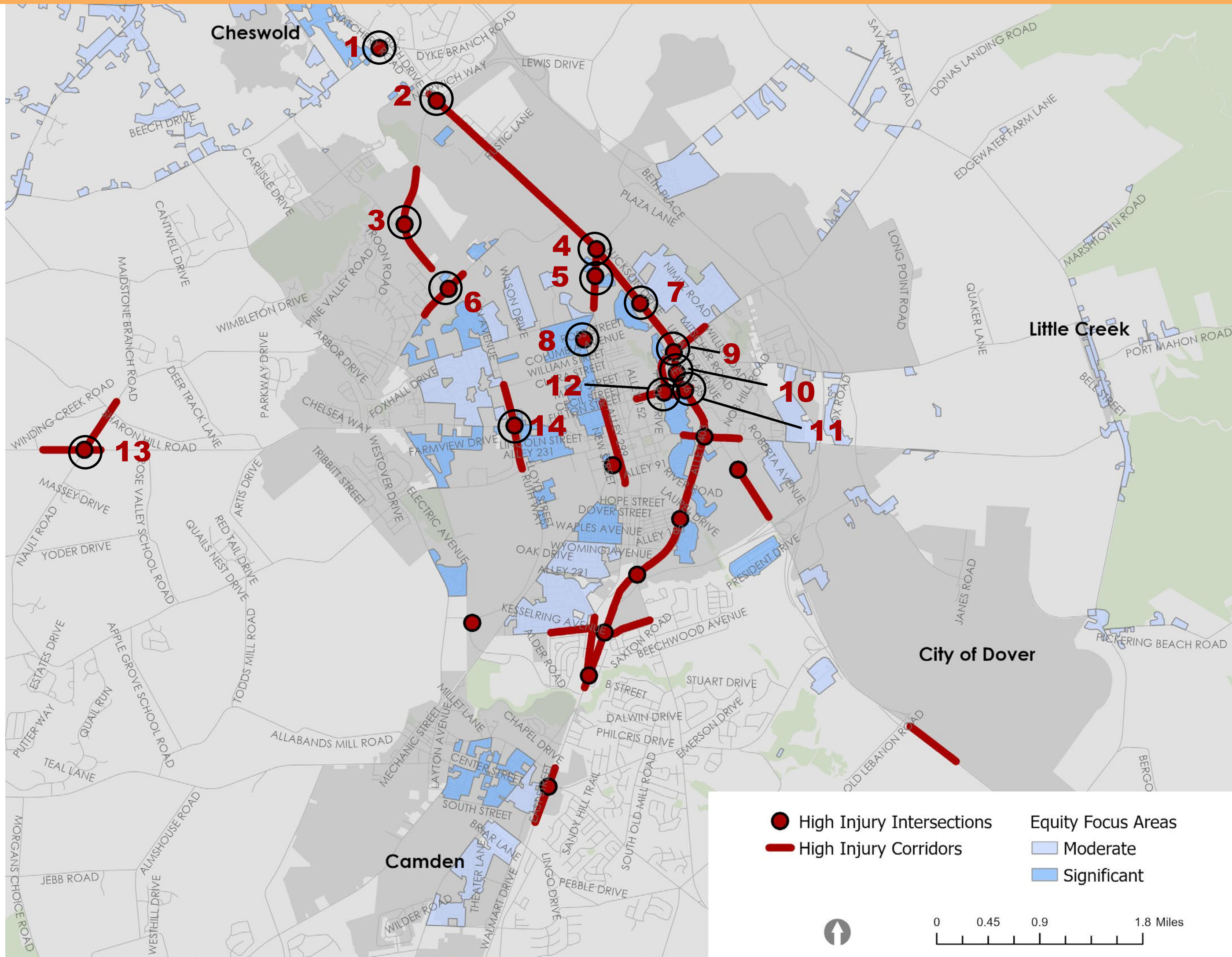
High injury network

Intersections (1 of 2):

1. US 13/Dyke Branch Rd
2. US 13/Scarborough Rd
3. Scarborough Rd/McKee Rd
4. US 13/Leipsic Rd
5. State St/Hiawatha Ln and Lepore Rd
6. SR 15/College Rd
7. US 13/Lakeview Dr
8. US 13/Columbia Ave
9. US 13/Kings Hwy
10. US 13/Maple Pkwy
11. US 13/Division St
12. Park Dr and Kings Hwy/SR 8
13. SR 8/Nault Rd
14. SR 8/SR 15



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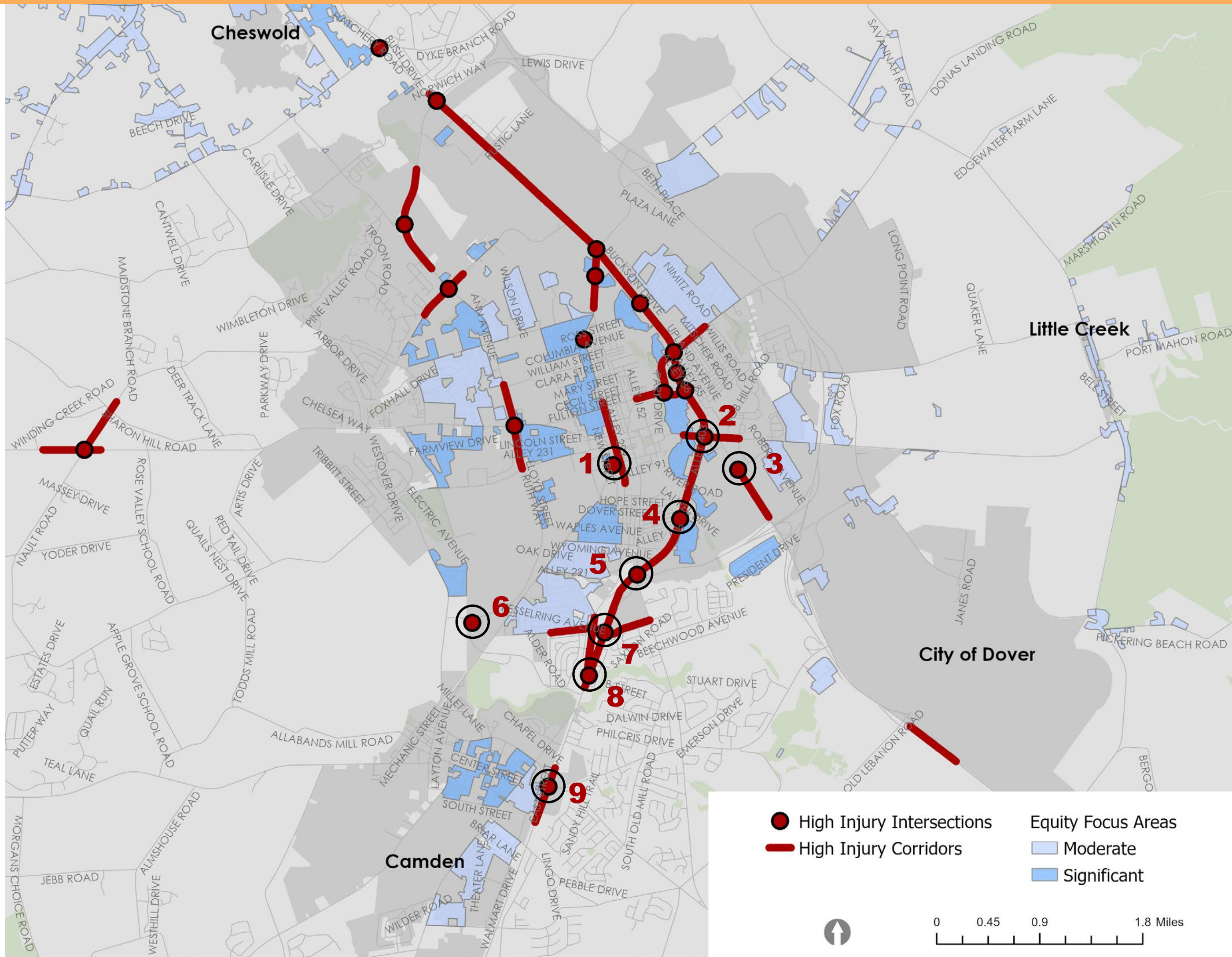
High injury network

Intersections (2 of 2):

1. Water St/New St
2. US 13/MLK Jr Blvd
3. Bay Rd/Blue Hen Blvd
4. US 13/Lotus St
5. US 13/State St
6. POW/MIA Pkwy/Wyoming Mill Spur
7. US 13/Webbs Ln
8. US 13/Governors Ave
9. US 13/SR 10



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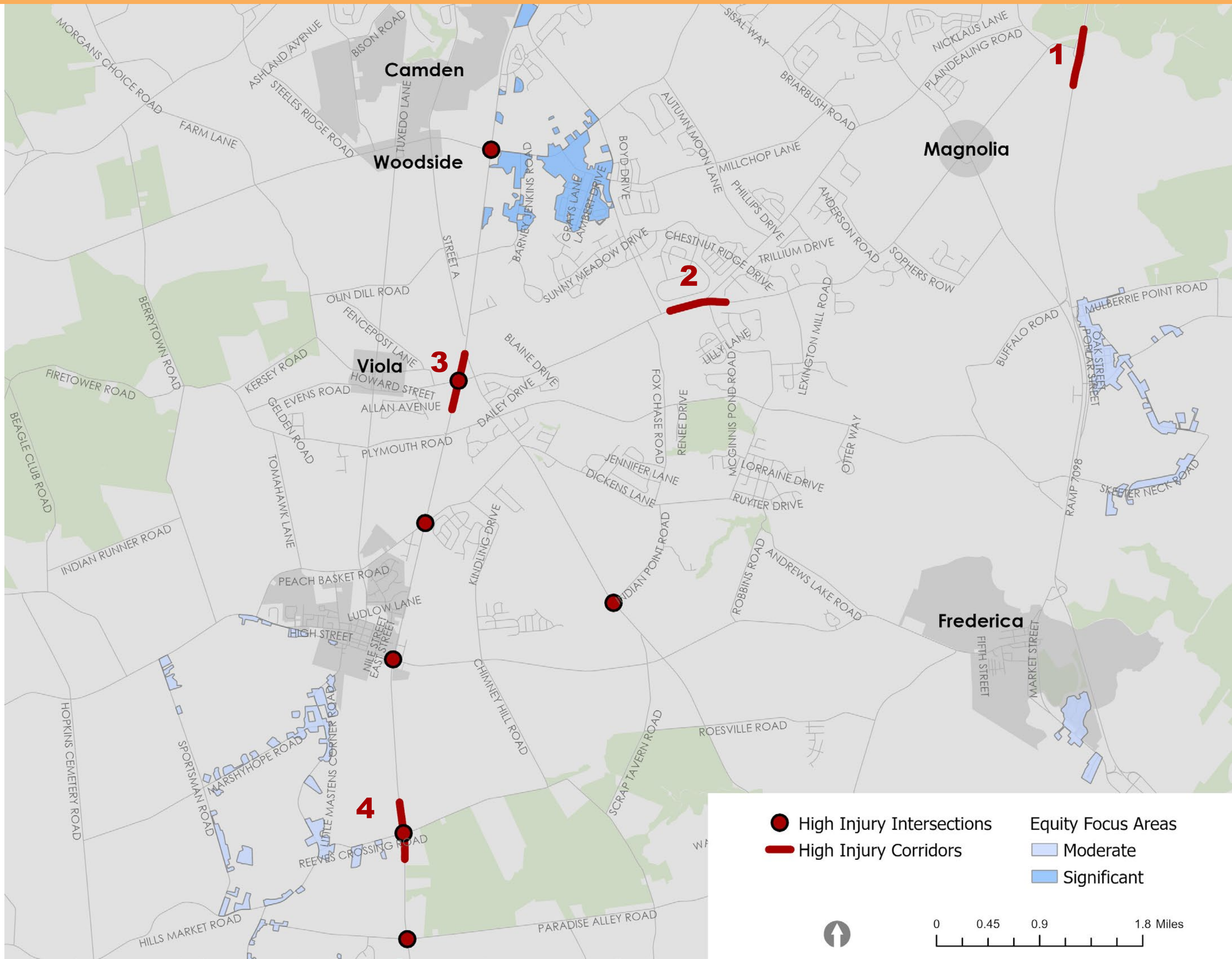
High injury network

Segments:

1. SR 1, 0.2 miles north and 0.3 miles south of Bakers Landing Rd
2. Irish Mill Rd, 0.1 miles east of Peachtree Run to 0.2 miles east of McGinnis Pond Rd
3. US 13, Canterbury Rd to 0.1 miles south of Angie Dr
4. US 13, 0.3 miles north of Reeves Crossing Rd/Killens Pond Rd to 0.1 miles south of Starkey Ln



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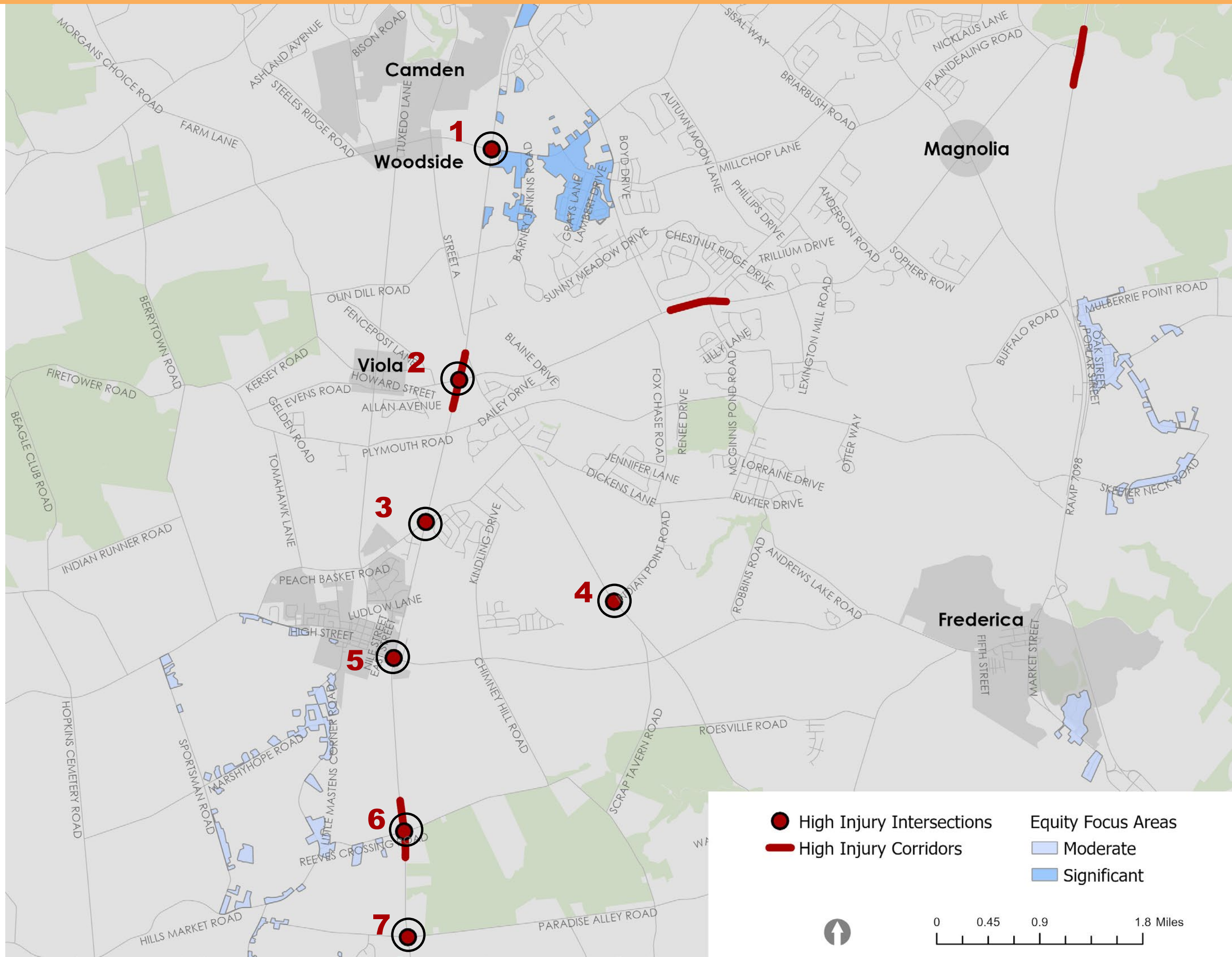
High injury network

Intersections:

1. US 13/SR 10
2. US 13/Irish Hill Rd
3. US 13/Andrews Lake Rd and Peach Basket Rd
4. Canterbury Rd/Indian Point Rd
5. US 13/E Main St
6. US 13/Killens Pond Rd
7. US 13/Paradise Alley Rd



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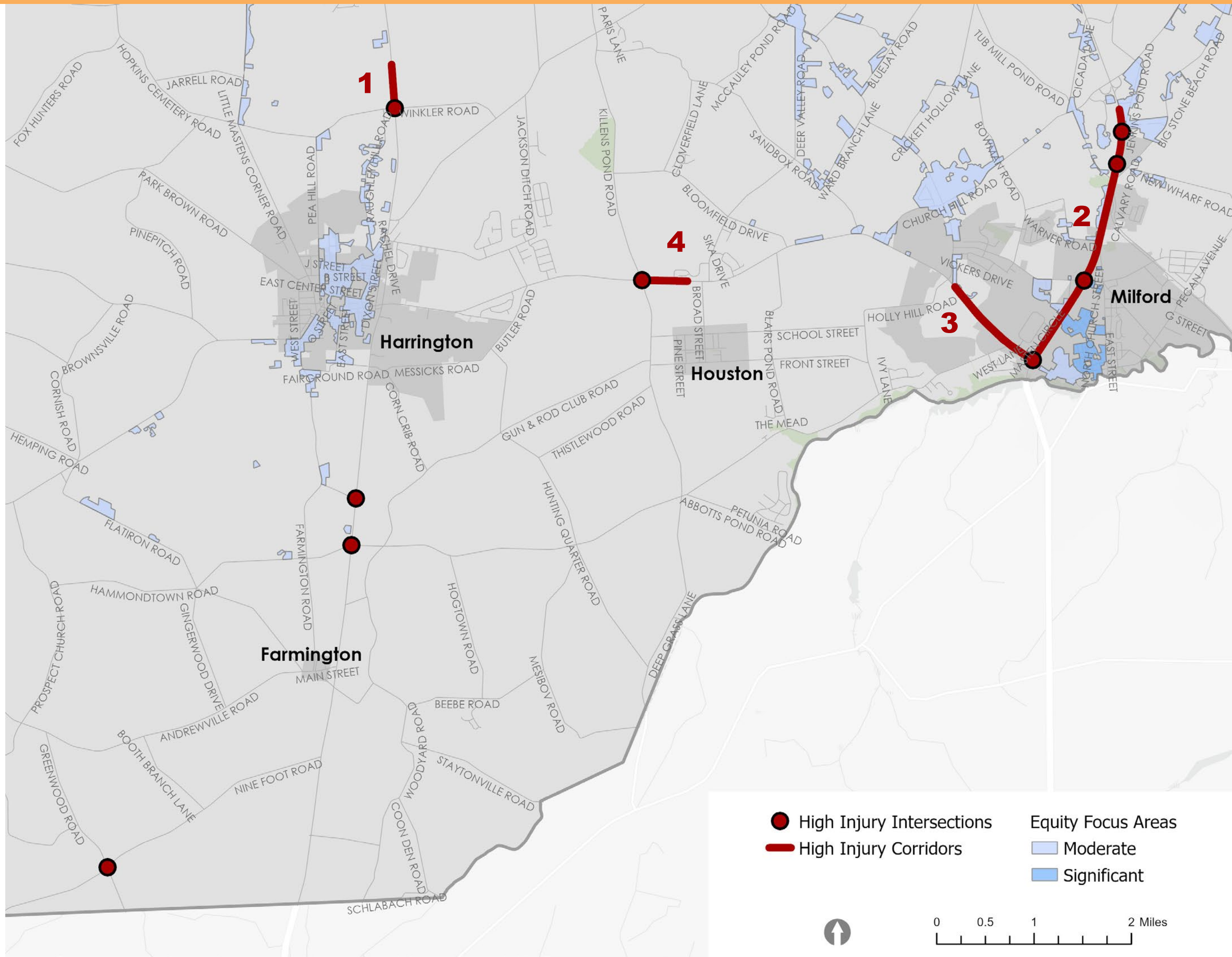
High injury network

Segments:

1. US 13, 0.5 miles north of Winkler Rd to Winkler Rd
2. SR 1, Mercer Ave/US 113 to SR 14
3. SR 14, 0.1 miles south of Holly Hill Rd/SR 15 to US 113
4. SR 14, Deep Grass Ln to 0.13 miles east of Cams Fortune Way



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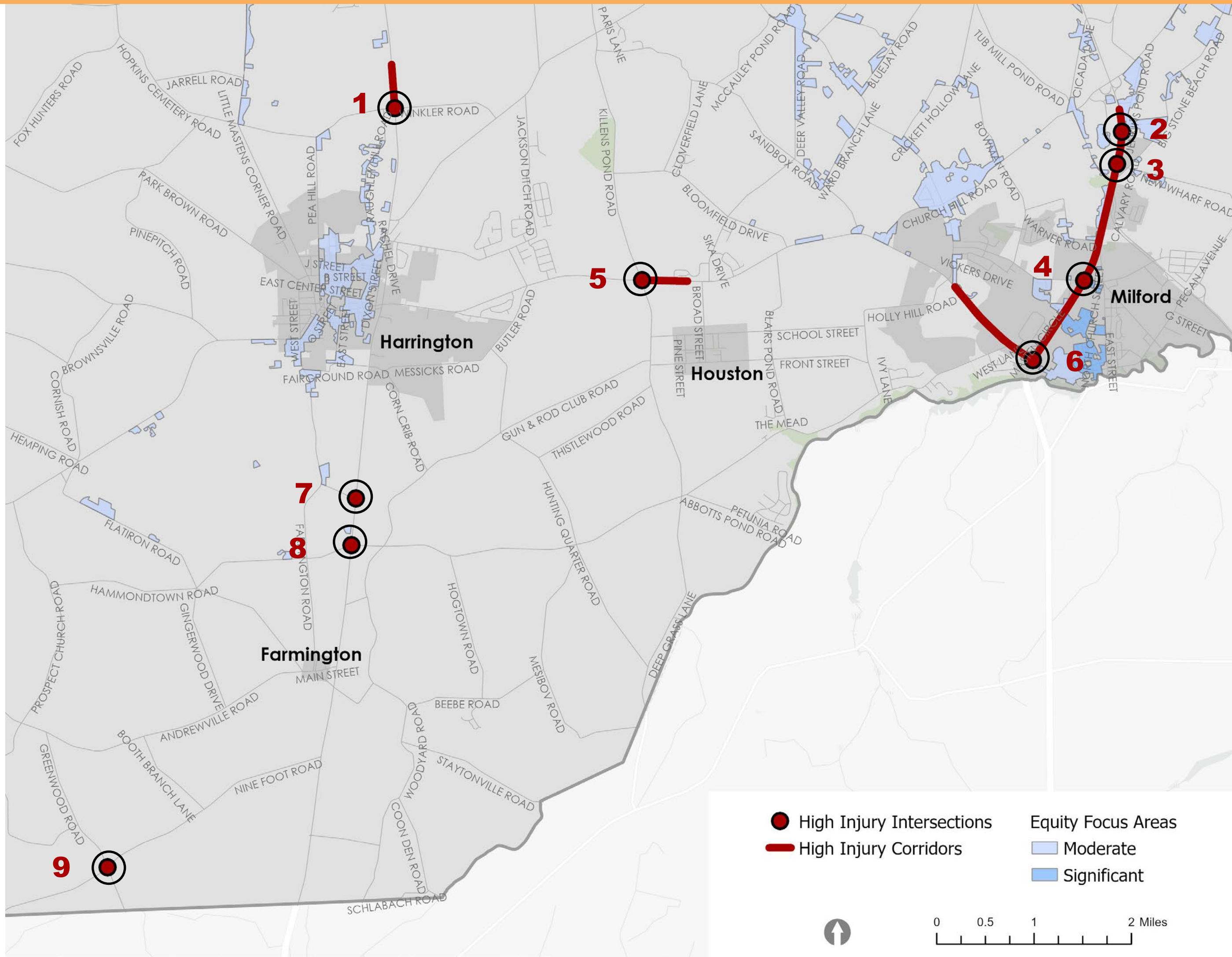
High injury network

Intersections:

1. US 13/Winkler Rd
2. SR 1/Williamsburg Dr and Jenkins Pond Rd
3. SR 1/New Wharf Rd
4. US 113/NW 10th St
5. SR 14/Deep Grass Ln
6. US 113/SR14
7. US 13/Powell School Rd
8. US 13/Williamsville Rd
9. Greenwood Rd/Nine Foot Rd



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Locations in other municipalities

- Some municipalities have locations on the high injury network, while others do not
- We examined municipalities with the goal of identifying safety actions that those municipalities can take
- Dover was excluded from this analysis because there are already so many high injury network locations in the City

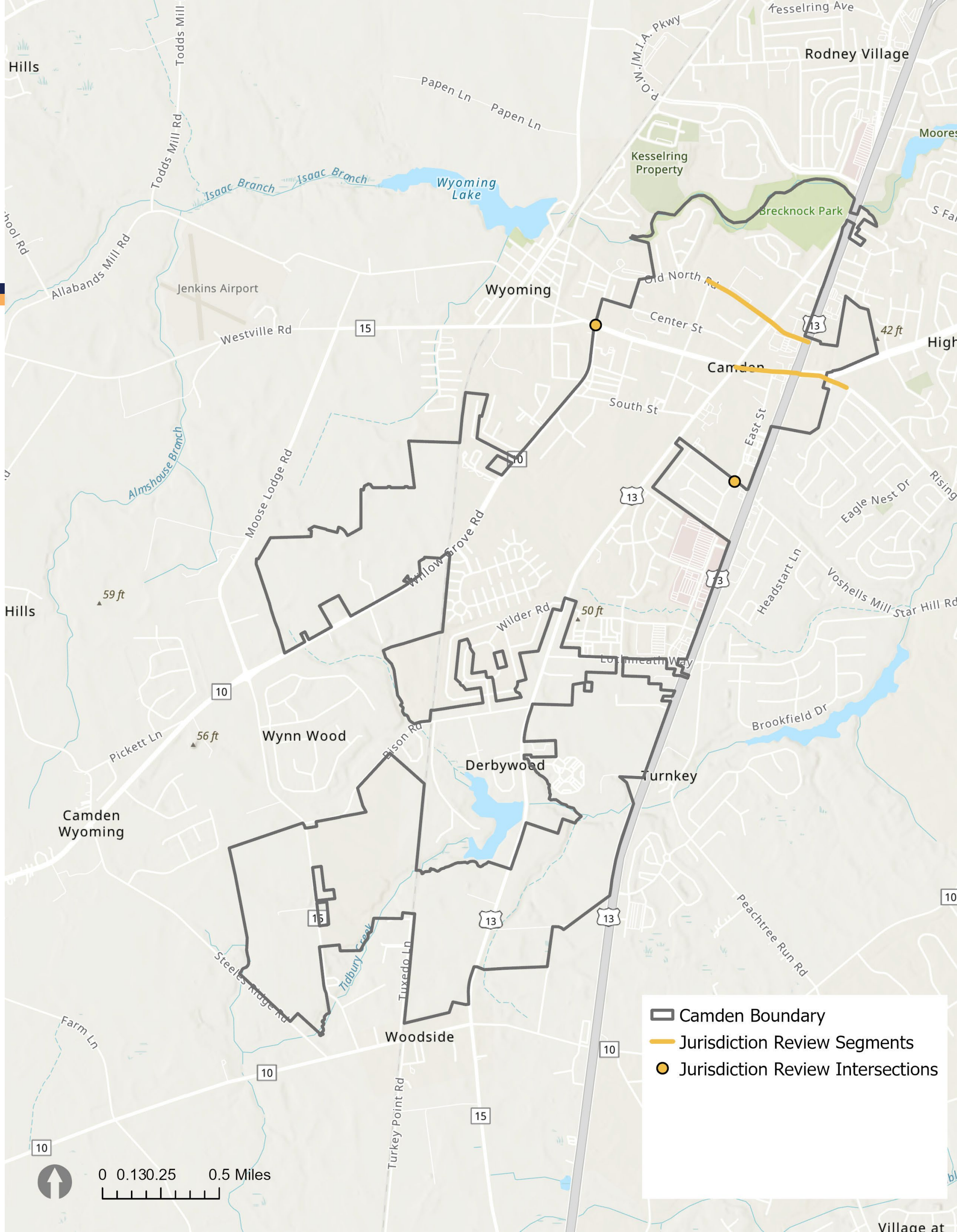
Camden

Segments:

- E Camden Wyoming Ave from S Main St to Sandy Hill Trl
- Old North Rd from S Dupont Hwy (US 13) to N West St

Intersections:

- E Camden Wyoming Ave (DE 10) and N Caesar Rodney Ave
- Voshell Mill Rd and Park Ln



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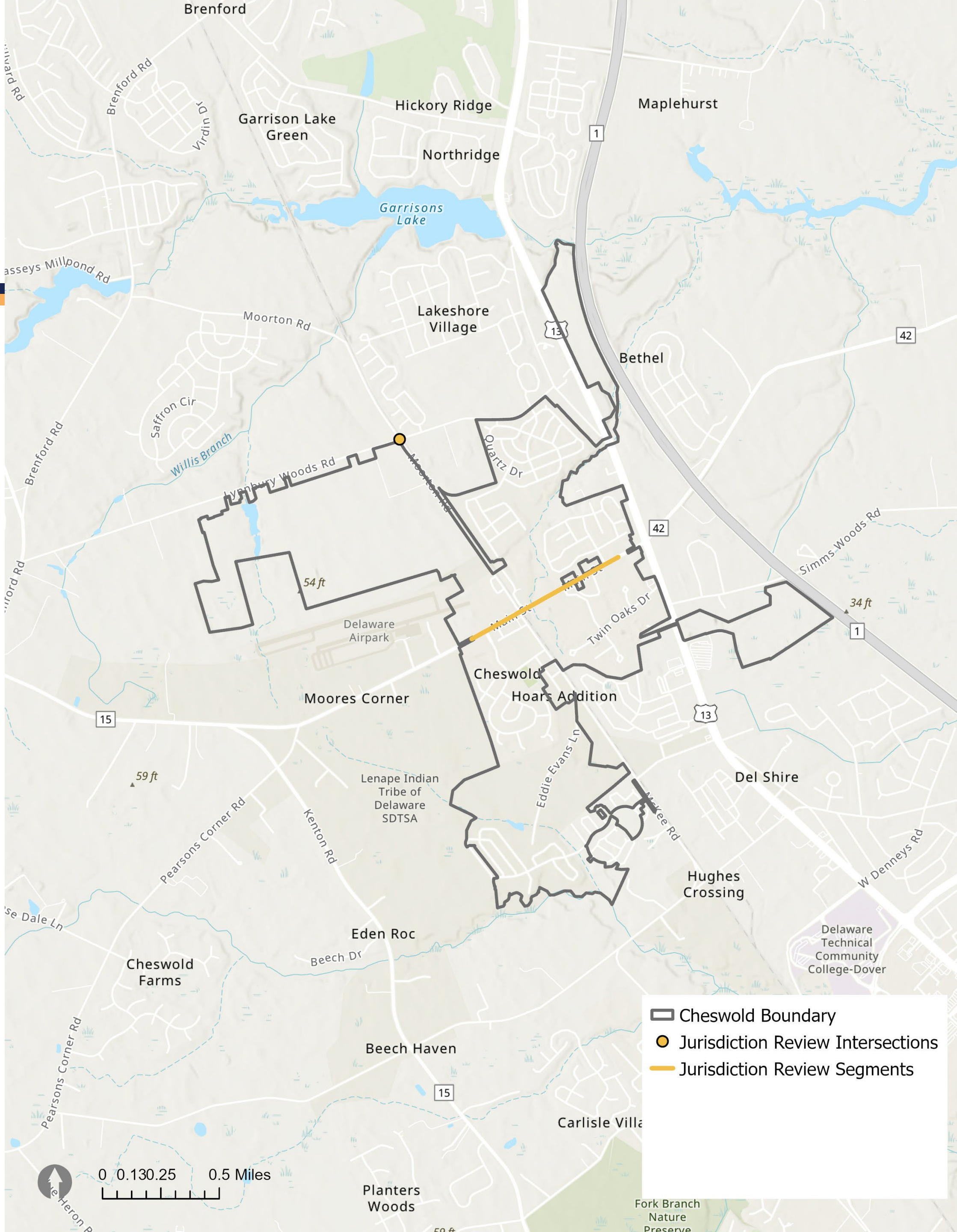
Cheswold

Segments:

- Main St from Moorton Rd to 0.06 mi E of Parker's Dr
- Main St from Holly Oak Ln to 0.07 mi W of Fox Pointe Dr

Intersection:

- Lynnbury Woods Rd and Moorton Rd



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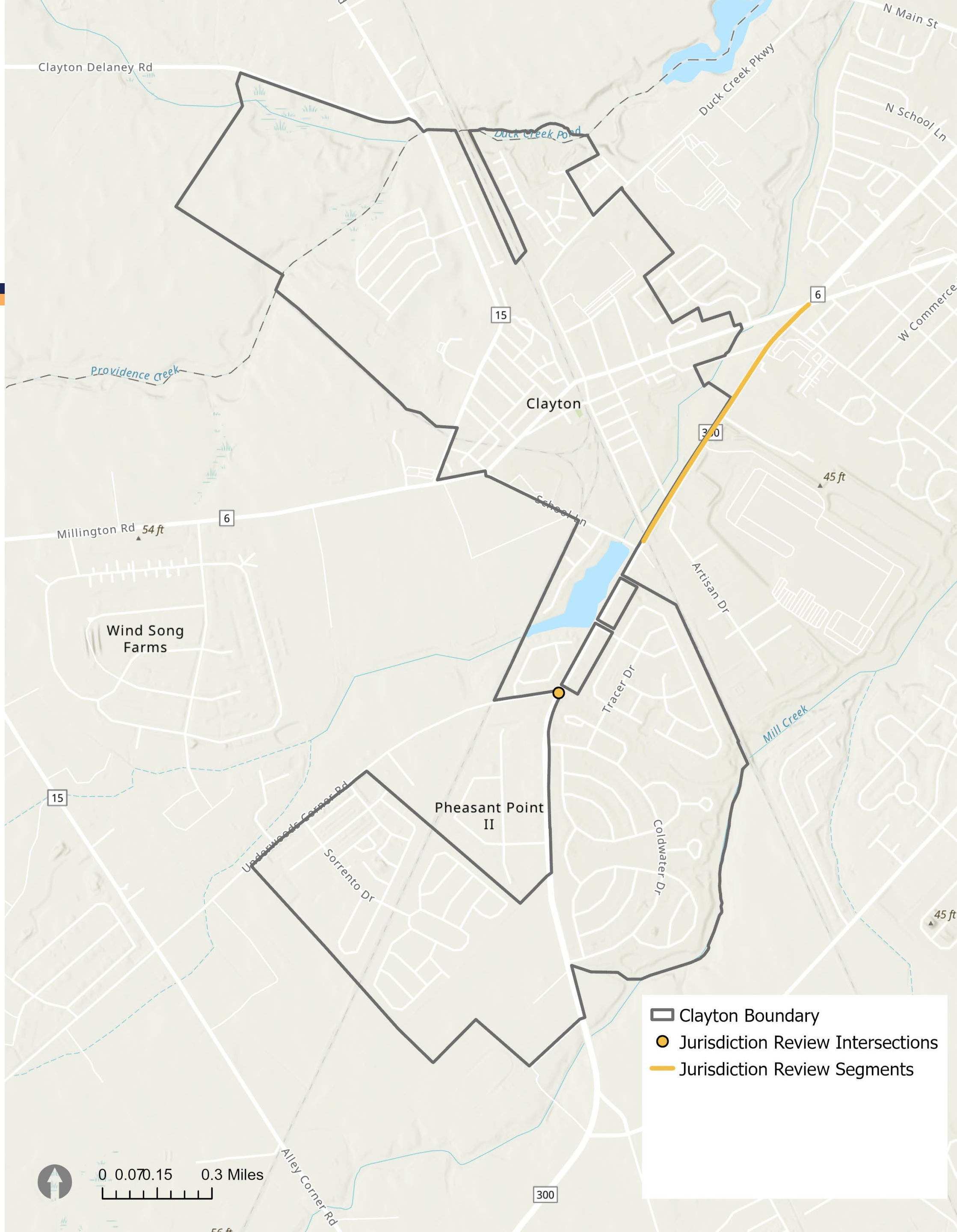
Clayton

Segments:

- Wheatleys Pond Rd from School Ln to 0.1 mi N of Baynard Farm Ln
- Wheatleys Pond Rd from 0.11 mi S of Baynard Farm Ln to Smyrna Clayton Blvd

Intersection:

- Wheatleys Pond Rd and Underwoods Corner Rd



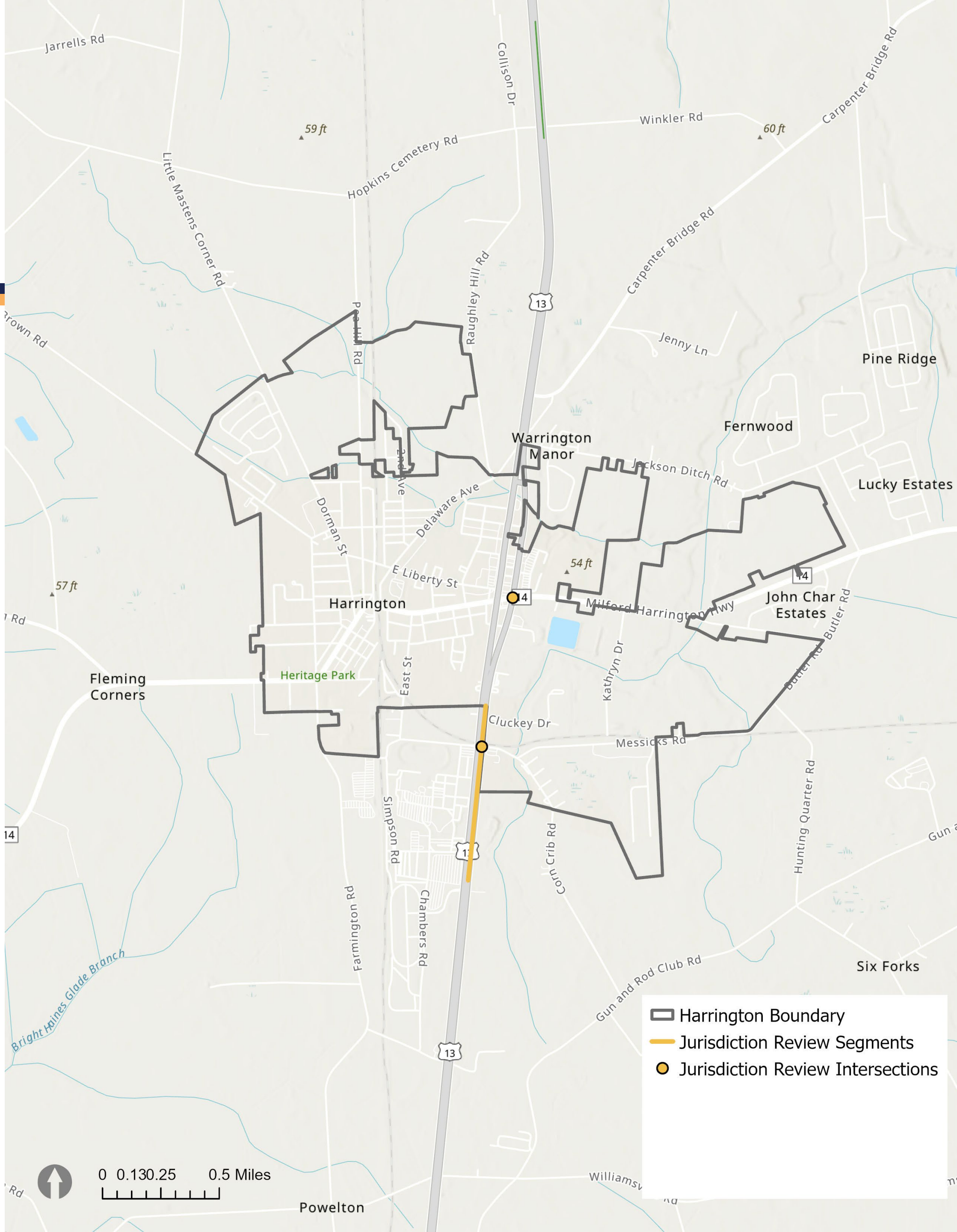
Harrington

Segments:

- Dupont Hwy (US 13) from 0.04 mi N of Raceway Blvd to 0.07 mi S of Corn Crib Rd
- Dupont Hwy (US 13) from 0.13 mi N of State Fair Blvd to 0.05 mi N of Cluckey Dr

Intersections:

- S Dupont Hwy (US 13) and Fairground Rd
- S Dupont Hwy (US 13) and Milford Harrington Hwy



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Little Creek

Segments:
- Main St from N Little Creek Rd to 0.1 mi S of Port Mahon Rd
- Main St from Lowe St to 0.15 mi N of Port Mahon Rd

Intersections:
- Main St and Port Mahon Rd
- Main St and N Little Creek Rd

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Magnolia

Segments:

- Clapham Rd from 0.17 mi E of W Walnut St to 0.09 mi W of Sophers Row
- Clapham Rd from 0.08 mi W of W Walnut St to 0.42 mi E of W Walnut St

Intersections:

- Clapham Rd and Thorn St
- N Main St and E Walnut St

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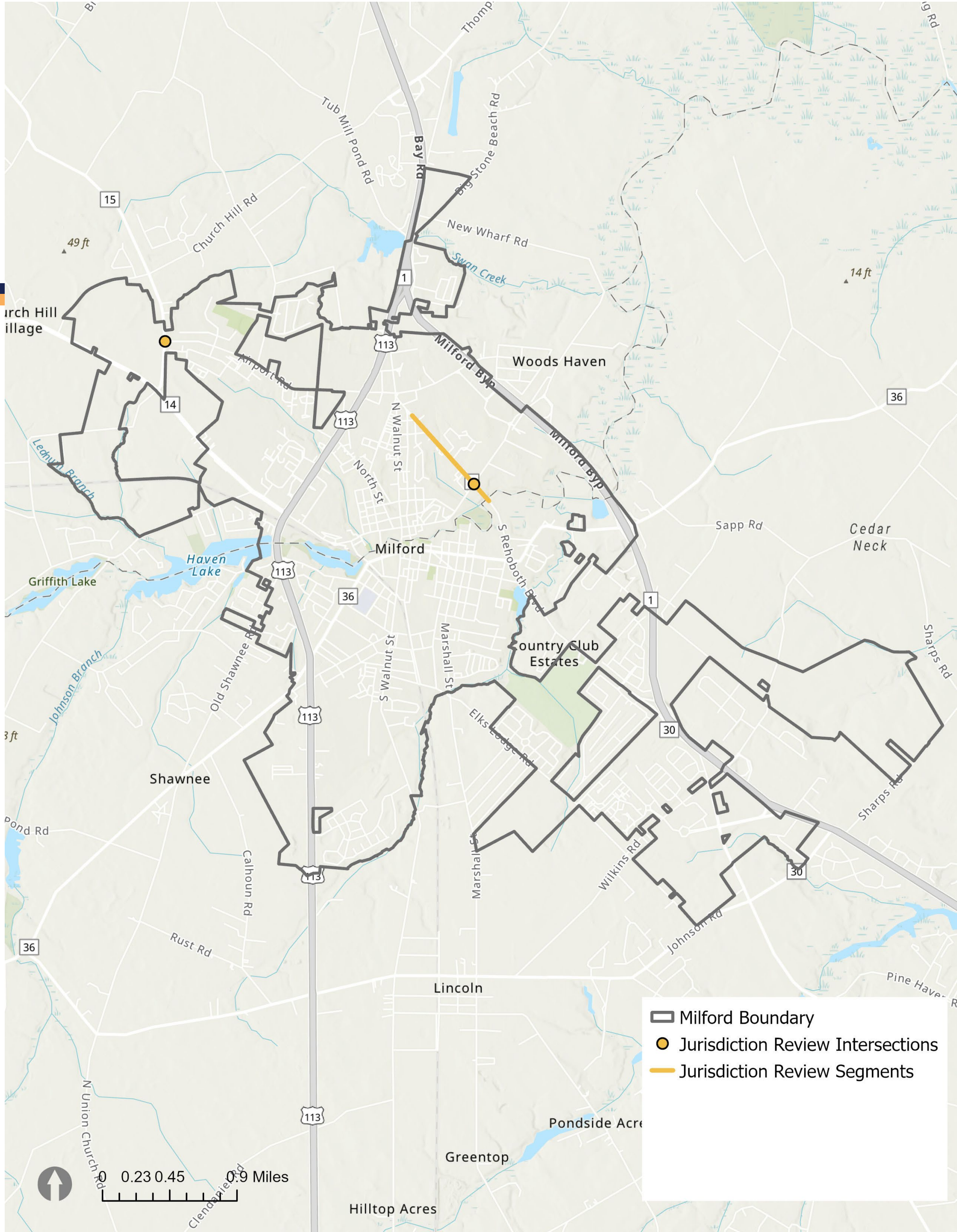
Milford

Segments:
- N Rehoboth Blvd (DE 01) from 0.15 mi S of NE Front St to 0.1 mi S of NE 8th St
- N Rehoboth Blvd (DE 01) from Brady Dr to N Washington St

Intersections:
- NE Front St and N Rehoboth Blvd
- Canterbury Rd and Airport Rd



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Smyrna

Segments:

- Smyrna Leipsic Rd/ Sunnyside Rd from S Dupont Blvd to 0.01 mi N of Lydia Dr
- S Carter Rd from S Dupont Blvd to 0.08 mi E of Salerno Dr

Intersections:

- Sunnyside Rd and W Cook Ave
- Sunnyside Rd and Rosario Rd

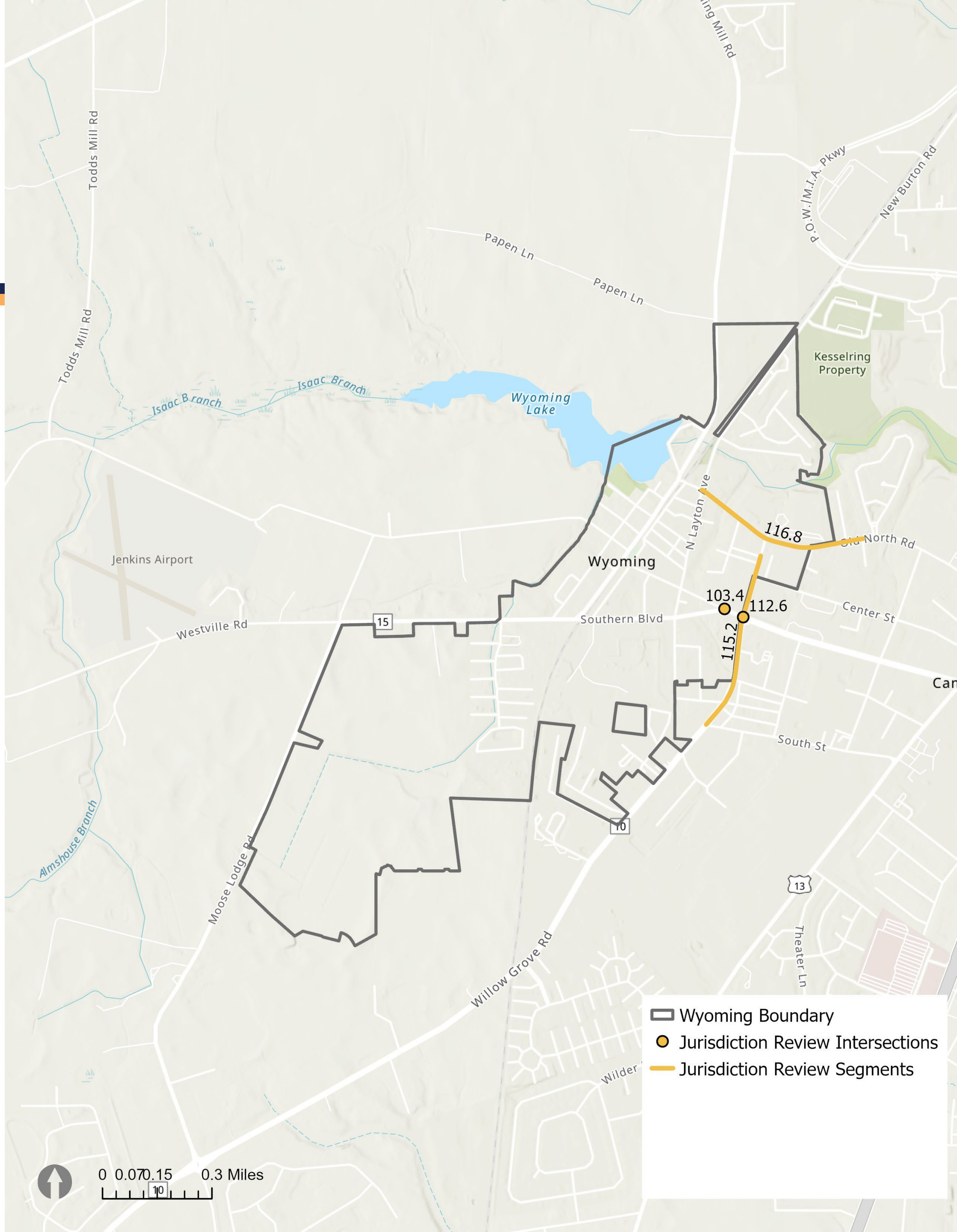
Wyoming

Segments:

- Front St from Thornley Dr to N Layton Ave
- N Caesar Rodney Ave from 0.05 mi S of Old North Rd to South St

Intersections:

- E Camden Wyoming Ave (DE 10 and N Caesar Rodney Ave
- W Camden Wyoming Ave (DE 10) and Southern Blvd



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Safety countermeasure toolkit

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Toolkit

General Approach:

- Based on Safe System approach
- FHWA *Proven Safety Countermeasures* & NHTSA *Countermeasures That Work*
- Infrastructure and non-infrastructure solutions (like enforcement, education, programs, and policies)
- Includes example photo, description, application, general cost, and crash modification factor

United States Department of Transportation

U.S. Department of Transportation Federal Highway Administration

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Resources

Proven Safety Countermeasures

FHWA's Proven Safety Countermeasures initiative (PSCi) is a collection of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries on our Nation's highways. Transportation agencies are strongly encouraged to consider widespread implementation of PSCs to accelerate the achievement of local, State, and National safety goals. These strategies are designed for all road users and all kinds of roads—from rural to urban, from high-volume freeways to less traveled two-lane State and county roads, from signalized crossings to horizontal curves, and everything in between. Each countermeasure addresses at least one safety focus area – speed management, intersections, roadway departures, or pedestrians/bicyclists – while others are crosscutting strategies that address multiple safety focus areas. Search Proven Safety Countermeasures.

Speed Management

Appropriate Speed Limits for All Road Users

Speed Safety Cameras

Variable Speed Limits

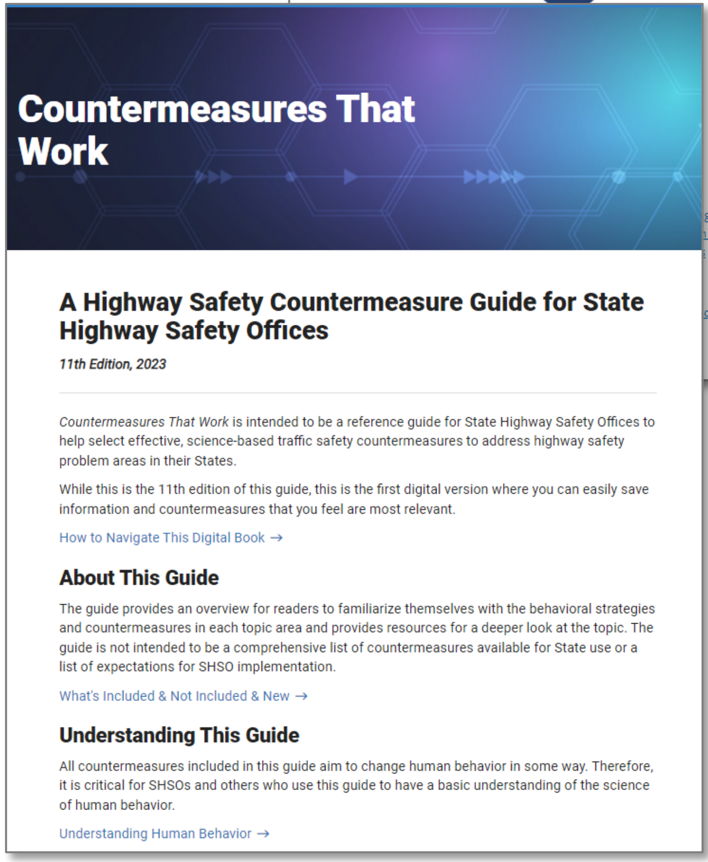
Crosswalk Visibility Enhancements

Leading Pedestrian Interval

Pedestrian Hybrid Beacons

Rectangular Rapid Flashing Beacons (RRFB)

Walkways



Countermeasures That Work

A Highway Safety Countermeasure Guide for State Highway Safety Offices

11th Edition, 2023

Countermeasures That Work is intended to be a reference guide for State Highway Safety Offices to help select effective, science-based traffic safety countermeasures to address highway safety problem areas in their States.

While this is the 11th edition of this guide, this is the first digital version where you can easily save information and countermeasures that you feel are most relevant.

How to Navigate This Digital Book →

About This Guide

The guide provides an overview for readers to familiarize themselves with the behavioral strategies and countermeasures in each topic area and provides resources for a deeper look at the topic. The guide is not intended to be a comprehensive list of countermeasures available for State use or a list of expectations for SHSO implementation.

What's Included & Not Included & New →

Understanding This Guide

All countermeasures included in this guide aim to change human behavior in some way. Therefore, it is critical for SHSOs and others who use this guide to have a basic understanding of the science of human behavior.

Understanding Human Behavior →

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Toolkit

SAFER ROADS:

- Bicycle lanes (conventional and buffered)
- Shared spaces, bicycle boulevards
- Separated bike lanes (one- and two-way)
- Shared use paths / trails
- Wayfinding and warning signage
- Crossing treatments: high-visibility crosswalks and asphalt art
- Sight distance treatments: intersection daylighting and vegetation clearing
- Mid-block crossings and pedestrian refuges
- Pedestrian countdown signals, lead pedestrian intervals, bike signals, and accessible pedestrian signals
- Raised crosswalks and intersections

Toolkit

SAFER ROADS:

- Raised median
- Hardened centerlines and slow turn corners
- Sidewalk and ADA curb ramp improvements
- Safe crossings at bus stops
- Lighting
- Animal warning systems and crossings
- Automated visibility warning systems
- Road geometry warning systems
- Intersection collision warning systems
- Rumble strips
- Guardrails

Toolkit

SAFER SPEEDS:

- Road diets, narrowing travel lanes and striping
- Chicanes
- Bulb-outs or curb extensions
- Speed humps
- Adjusted speed limits, speed limit markings, and speed feedback signs
- Traffic signal
- Flashing red stop signs
- Street trees
- Roundabouts and neighborhood traffic circles
- Transverse line markings
- Red light running cameras

Toolkit

ADDITIONAL PROGRAMS AND RESOURCES:

- Complete Streets – existing DelDOT policy and guide
- Safe Routes to School
- Road safety audits
- Targeted enforcement
- Roadway safety campaign for farm equipment or horse-drawn buggies
- Roadway safety campaign for youth drivers
- Roadway safety campaign for seatbelts
- Pedestrian safety campaign

Toolkit

Design Summary

Design Considerations

Common Applications

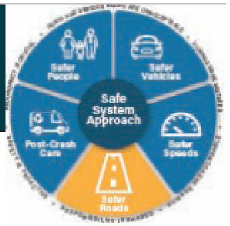
Land Use Context

Safety Benefit

Cost Range

DRAFT

Safer Roads



Crossing Treatments:
High Visibility Crosswalks and Asphalt Art


Street Mural and Bus Lane Markings

Design Summary

Improving visibility of crosswalks and intersections helps drivers to see vulnerable road users in the roadway better. Drawing attention to pavement markings help to keep drivers aware people may be walking in the street.

Considerations

- Crosswalks or improving crosswalks with high visibility paint, RRFBs especially nearby schools, bus stops, and trails crossing the roadway improve visibility of pedestrians.
- Asphalt art can help create temporary or permanent curb extensions in roadways. Art such as mural intersections, can help to slow drivers down when entering the intersection because of unfamiliar pavement markings.
- Green paint is used to denote a bike facility in an intersection.


High-Visibility Crosswalk

Common Applications

- The type of visibility treatment is dependent on the design of the roadway.
- Often placed nearby schools, hospitals or other campuses, bus stops or lanes, and trail crossings
- Intersections with high pedestrian and/or bicycle volumes.
- Asphalt art can also support placemaking strategies, such as main street programs.

Land Use Context	Safety Benefit	Cost Range
• These crossing treatments can be implemented in urban, suburban, and rural areas.	**Medium** Safety benefit can be increased with combination of pavement markings and asphalt art.	$-$$

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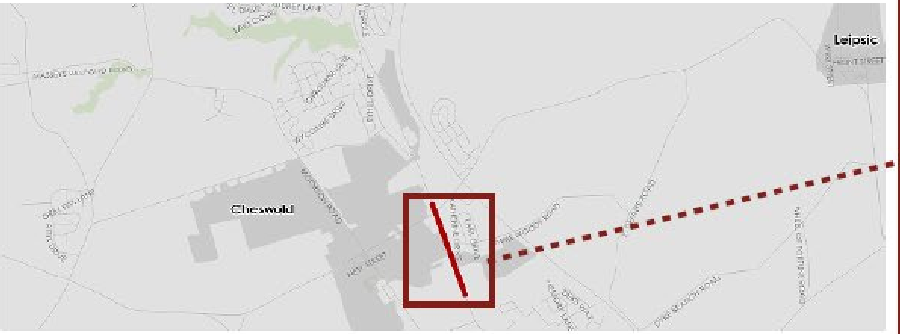
DRAFT Recommendations

Kent County Safety Action Plan:
Making Kent County's Streets Safer for All

Sample application of toolkit

US 13 through Cheswold



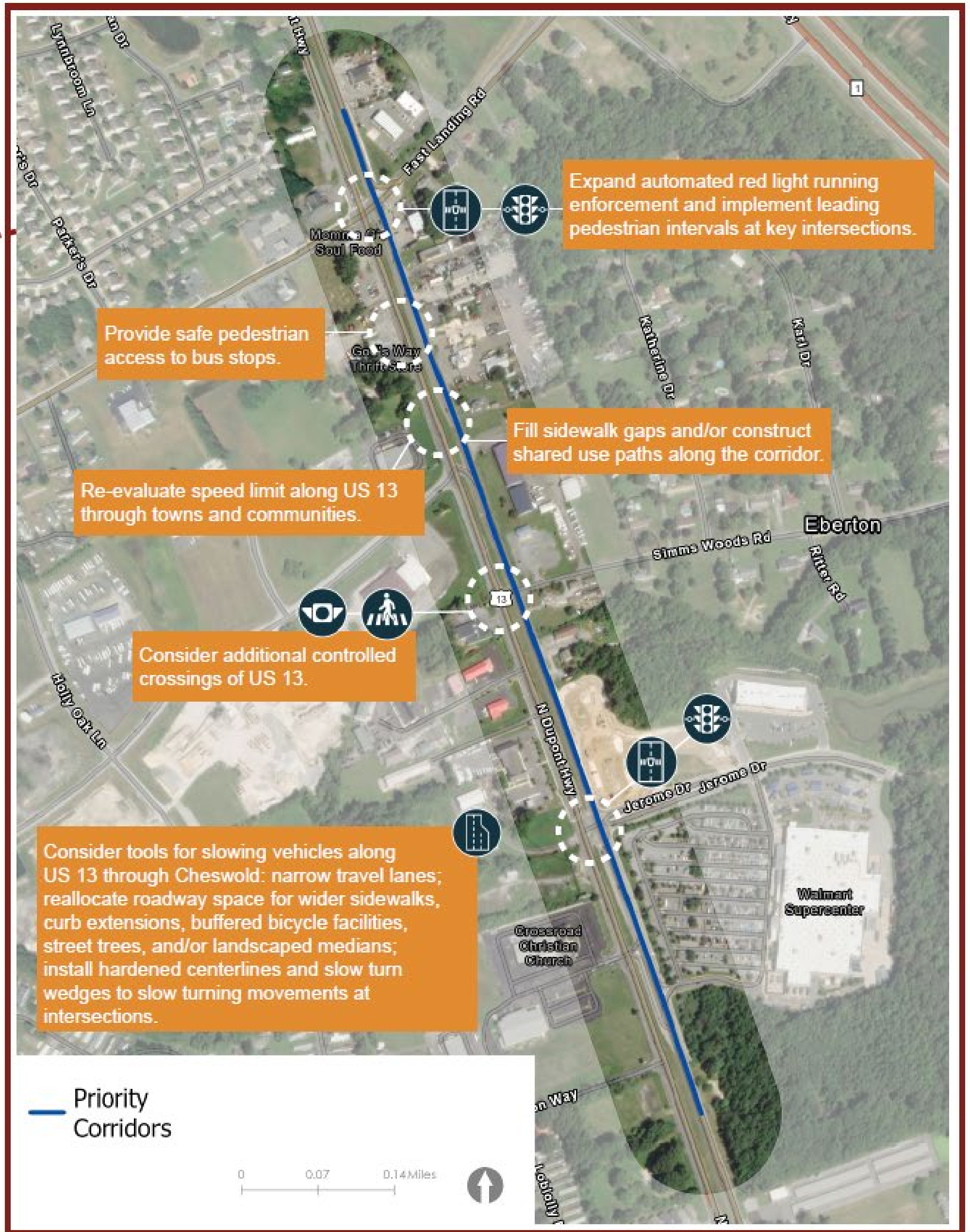
KEY CORRIDOR CONSIDERATIONS

1. Pedestrian crossings of US 13 in Cheswold are long without refuge. Some bus stops lack safe pedestrian access, and there are gaps in the sidewalk network along the corridor.

2. The speed limit along US 13 is 55 mph through Cheswold. Tools may be needed to slow traffic through communities and speed limits could be re-evaluated.

COUNTERMEASURES

- High Visibility Crosswalk
- Raised Crosswalk/Intersection
- Curb Extension
- Flashing Beacon
- Intersection Daylighting
- Signal Modification
- Median/Pedestrian Island
- Bicycle Lane
- Speed Hump
- Road Diet



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Public engagement phase 2

Previous SWG suggestions

- Provide incentives
- Use DART to get people to workshops
- Clear advertising and calls to action
- Disseminate information through many platforms
- Reach the Amish community

Public engagement approach

Phase 2

- Purpose & Goals:
  - Seek input on recommendations
  - Reach more people
- Techniques
  - Updates to online storymap
  - Host pop up events in April and May
    - Boards, activities, survey link
  - Host a virtual public workshop
    - Recording presentation

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Planned Pop Ups

Public engagement approach

Phase 2

Do you have other ideas or suggestions?

- Techniques (continued):
  - Distribute a survey link through:
    - Pop up events
    - Paid, targeted social media
    - Flyer drops at libraries, community centers, places of worship
    - Safety Working Group networks and newsletters
    - Direct mailings

Next Steps

Implementation Planning – Application Checklist

We expect SS4A implementation grant applications to be due in June!

Which projects are important to you?

Who will participate in the application process?

Where would the funding match come from?

Next steps

- Share draft recommendations with the SWG as they are prepared
- Move forward with next phase of public engagement in April and May
- Refine recommendations based on feedback
- Begin implementation planning
- Conduct SWG meeting #4 on Tuesday, May 13
  - Results of public engagement
  - Final recommendations
  - Implementation planning
- Draft Safety Action Plan and prepare final presentations

Thank you!

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