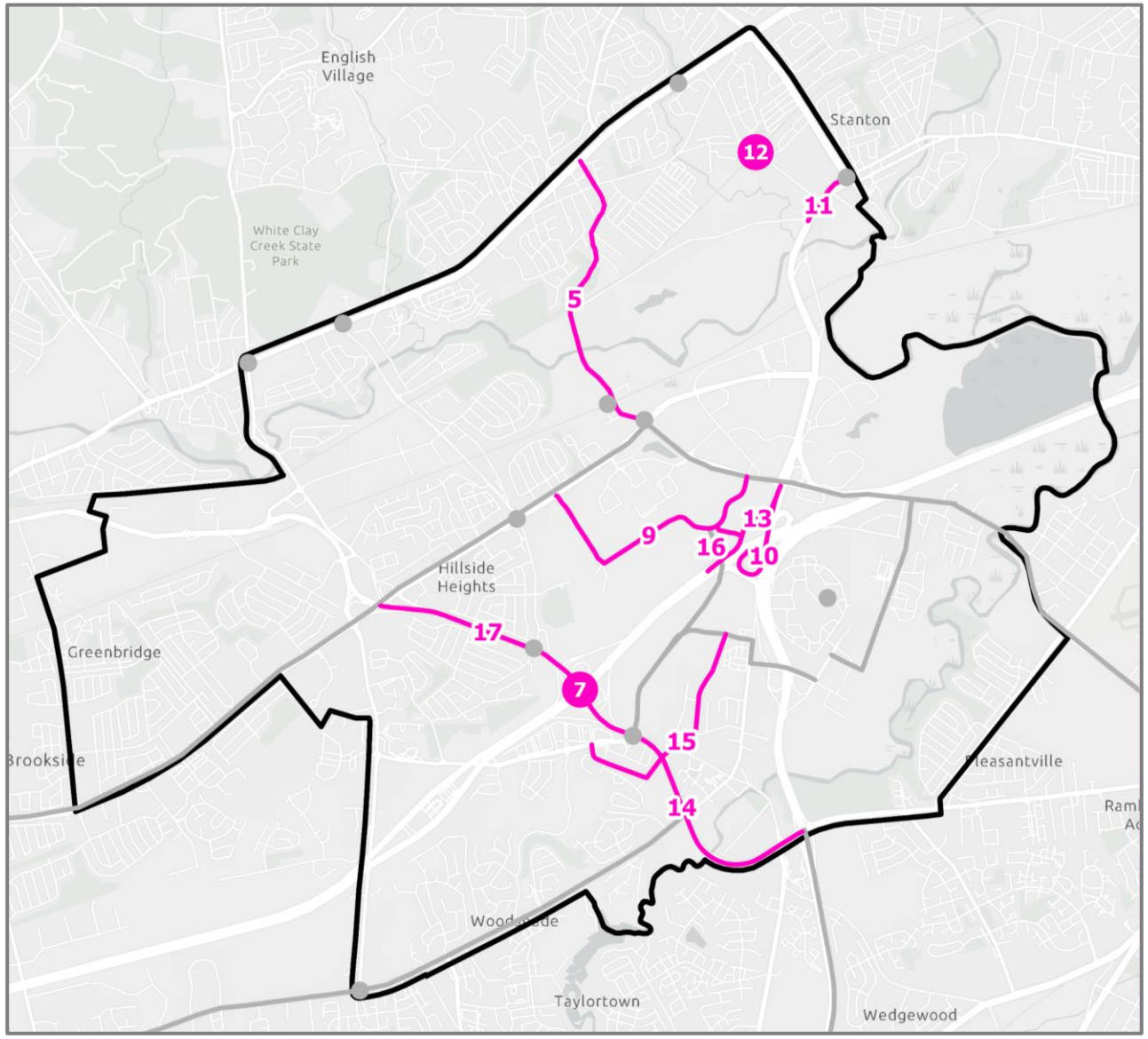
Spotlight Topic: Deeper dive into bicycle/pedestrian improvements

Committee's Weighted Project Prioritization Results



Rank	Label	Project
1	EE	Micro Transit (DTC) (not mapped)
2	MM	Transit Access Improvements (not mapped)
3	NN	Pedestrian/Bicycle Improvements Along Existing Roads (not mapped)
4	OO	Pedestrian/Bicycle Connections Serving Existing Communities (not mapped)
5	S	Churchman's Road Extended, SR 2 to SR 4
6	LL	New bus transit routes (not mapped)
7	QQ	SR 273 at I-95 Interchange Reconfiguration
8	FF	Automated Transit Vehicles (DTC) (not mapped)
9	JJ	Opening Samoset Drive/Continental Drive: SR 4 to Churchman's Road
10	Z	Southbound SR 1 to Northbound I-95 Connection
11	W	SR 7 Intersections: SR 7/Telegraph Road, SR 7/Delaware Park Boulevard
12	KK	Telegraph Road/St. James Road Railroad Underpass
13	Y	Southbound SR 1 to Southbound I-95 Connection
14	U	SR 273: 3rd lane NB & SB between SR 1 and I-95
15	GG	Christiana Bypass
16	X	Southbound I-95 Access from Continental Drive
17	PP	SR 273: 3rd lane NB & SB between I-95 and SR 4

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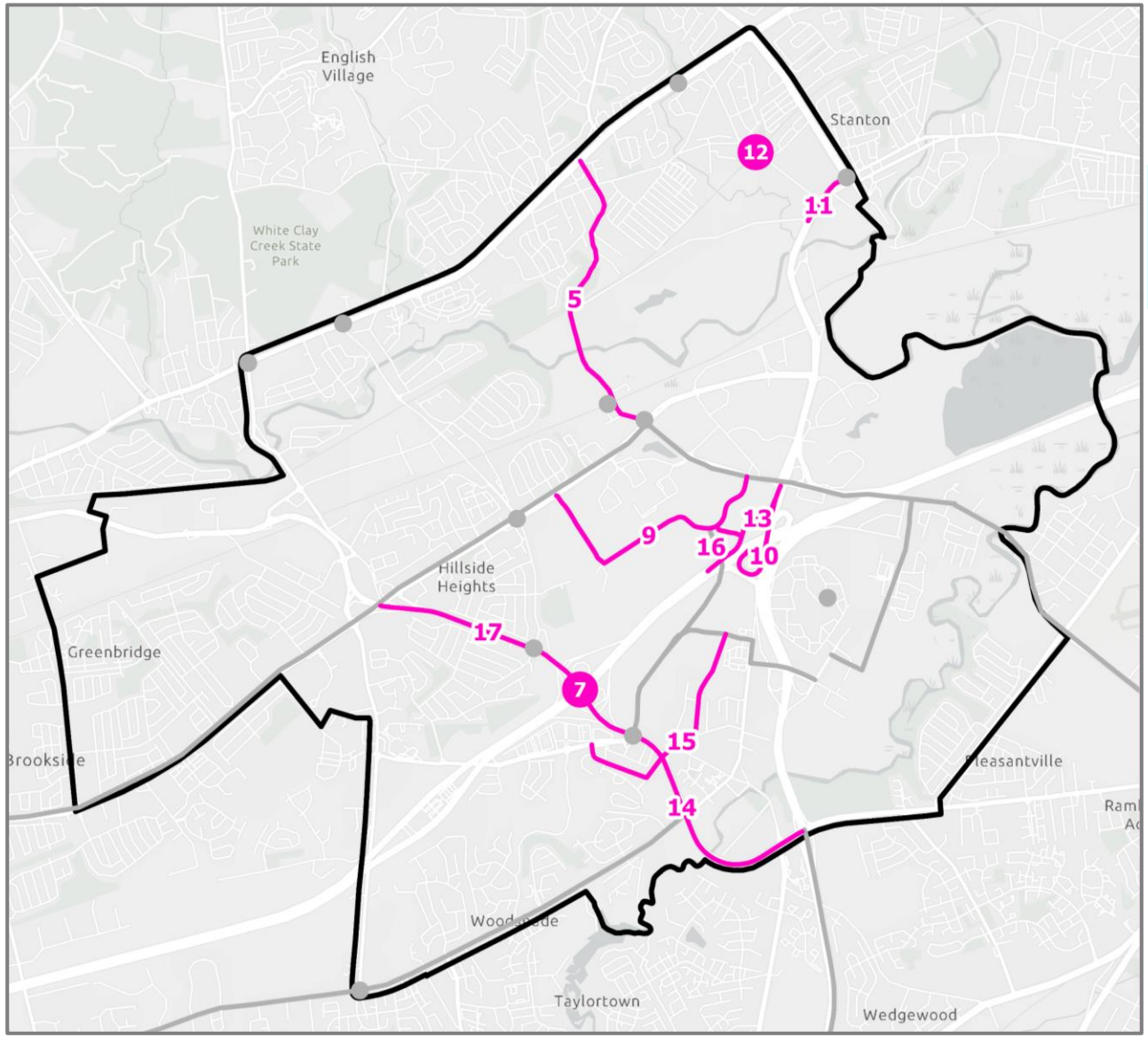

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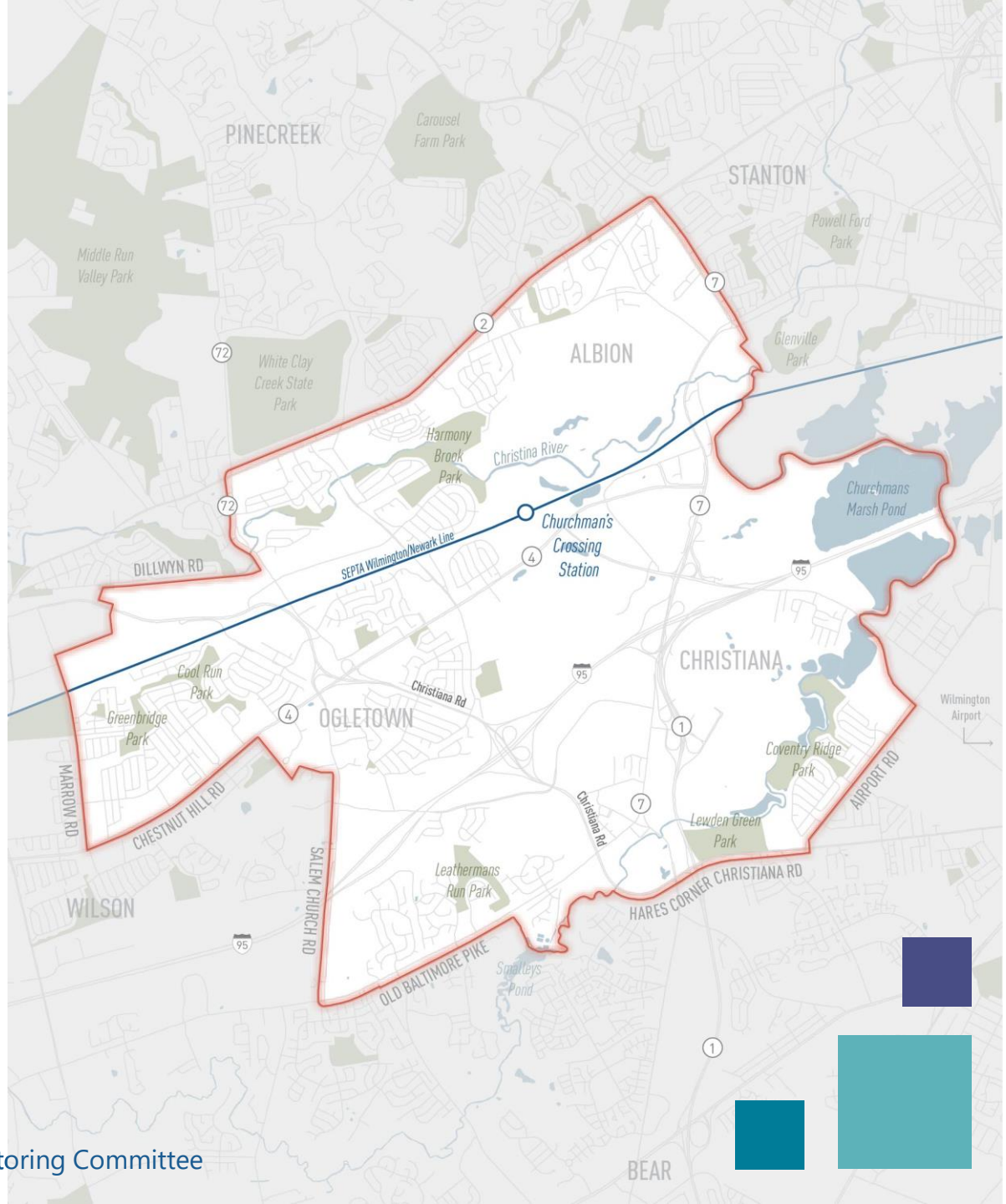
Introduction

- Tristan Jackson, AICP, Transportation Planner | RK&K
- Paul Moser, PE, Bike and Ped Engineer | DelDOT

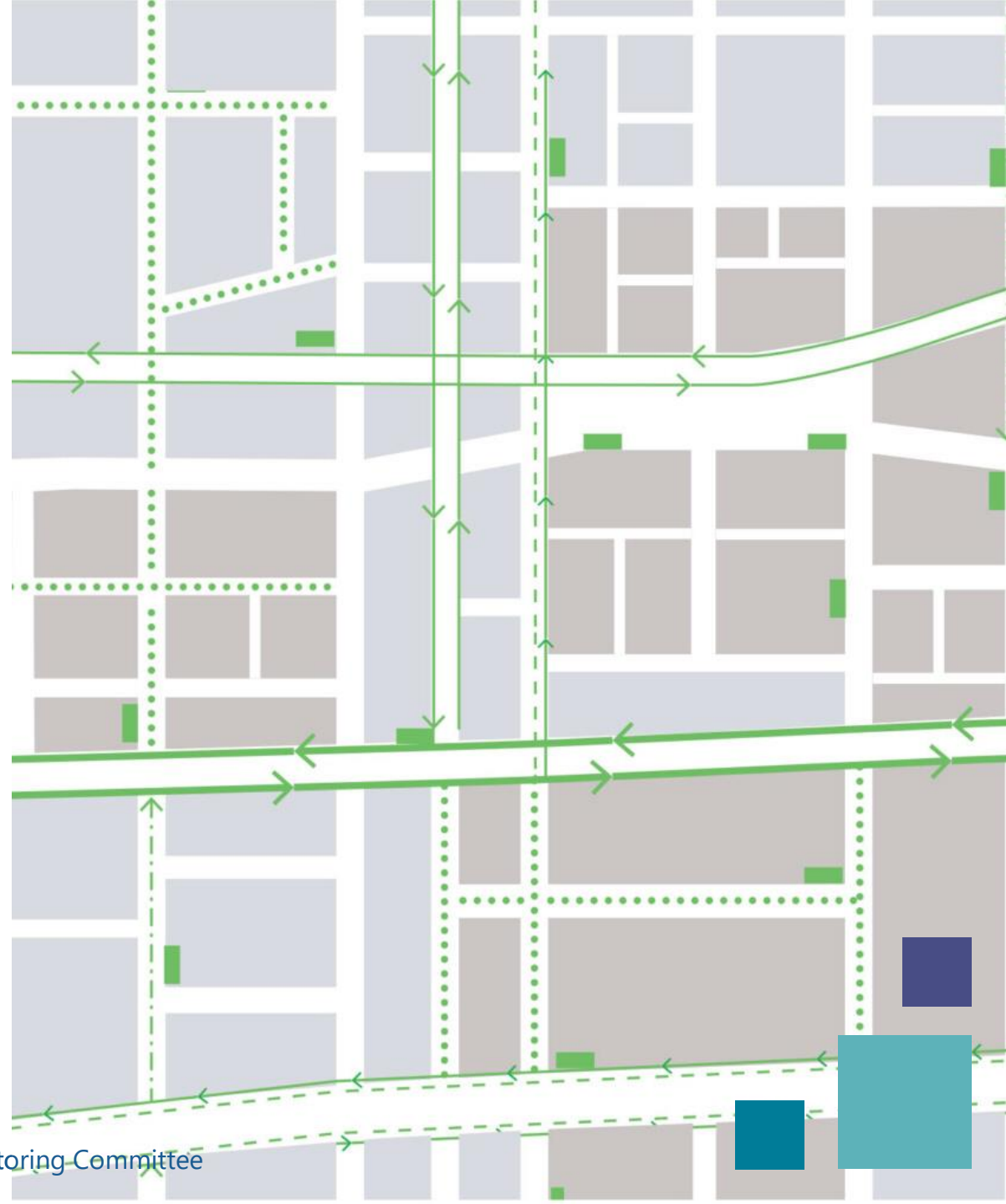
Background

- **Previously:** Funding for bicycle and pedestrian improvements were prioritized but specific projects were not identified.
- In the Committee's prioritization exercise, bicycle and pedestrian improvement ranked in the top five.
- The Committee and the project team will define and prioritize bike/pedestrian projects in the Churchman's Crossing area that are actionable and eligible for further design and implementation.
- **Desired Outcome:** The Committee will agree on a method for selecting bicycle and pedestrian projects.



Approach and Philosophy

- Bicycle and pedestrian projects will be selected from a network approach, with an overarching and long-term vision
- Network approach allows for greater long-term value and congruity with the entire transportation network
- Comprehensive network plan is generally more favorable when it comes to funding, especially large-scale capital funding



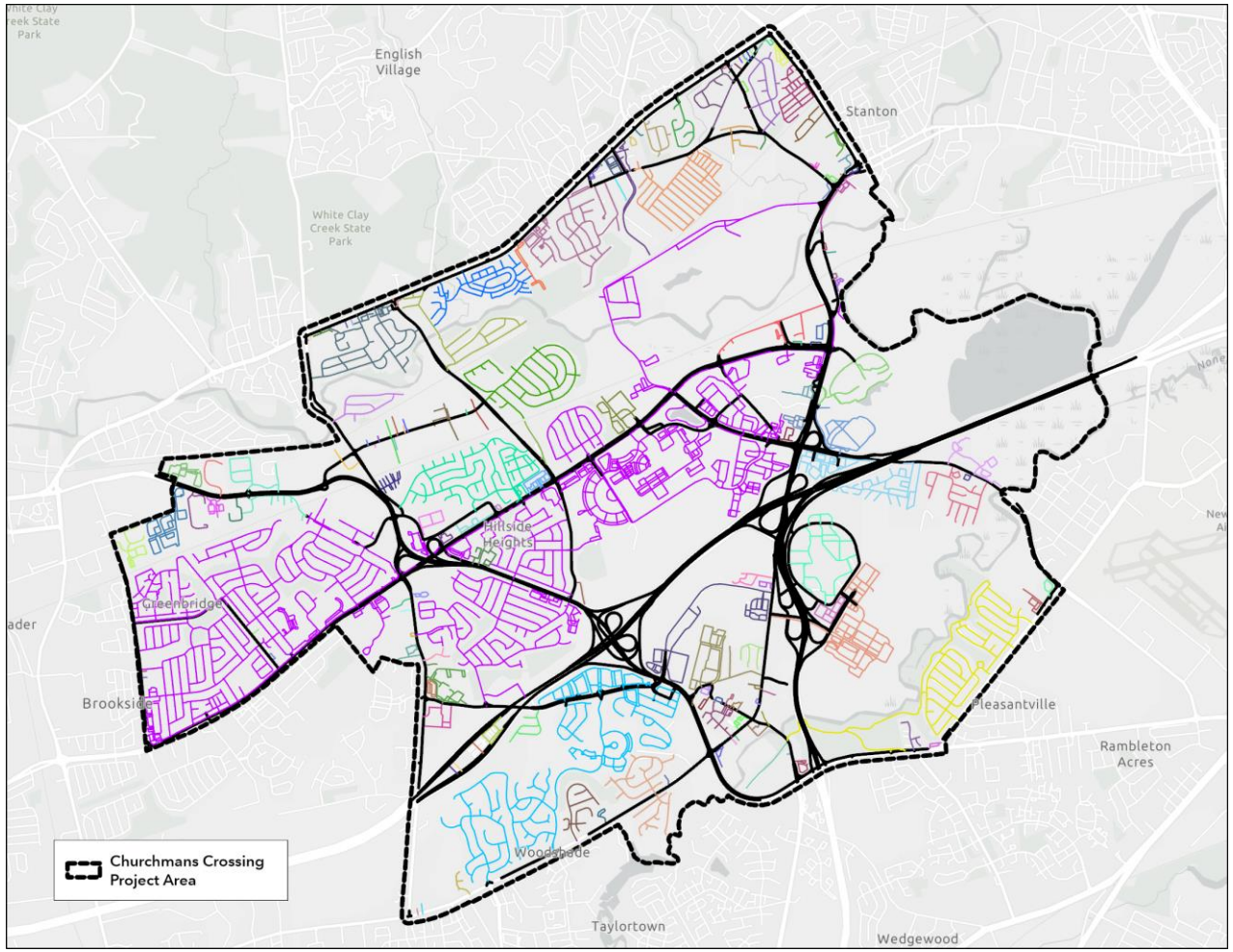
Approach and Philosophy

- The two main foundational philosophies to improving the network include:

- **Comfort**: Maximizing comfort for bicyclists and pedestrians provides safety benefits to all road users.

- **Connectivity**: Connectivity improvements that allow people to efficiently travel across Churchman's Crossing by foot or bicycle.

Connectivity Benefits



- Connectivity within the Churchman's Crossing area → trip generators and points of interest.
- Connectivity to sidewalk, trail, and other non-motorized networks in adjacent areas.
- Connectivity to other forms of transportation, notably local and regional transit options.

Methodology

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- **Qualitative**:
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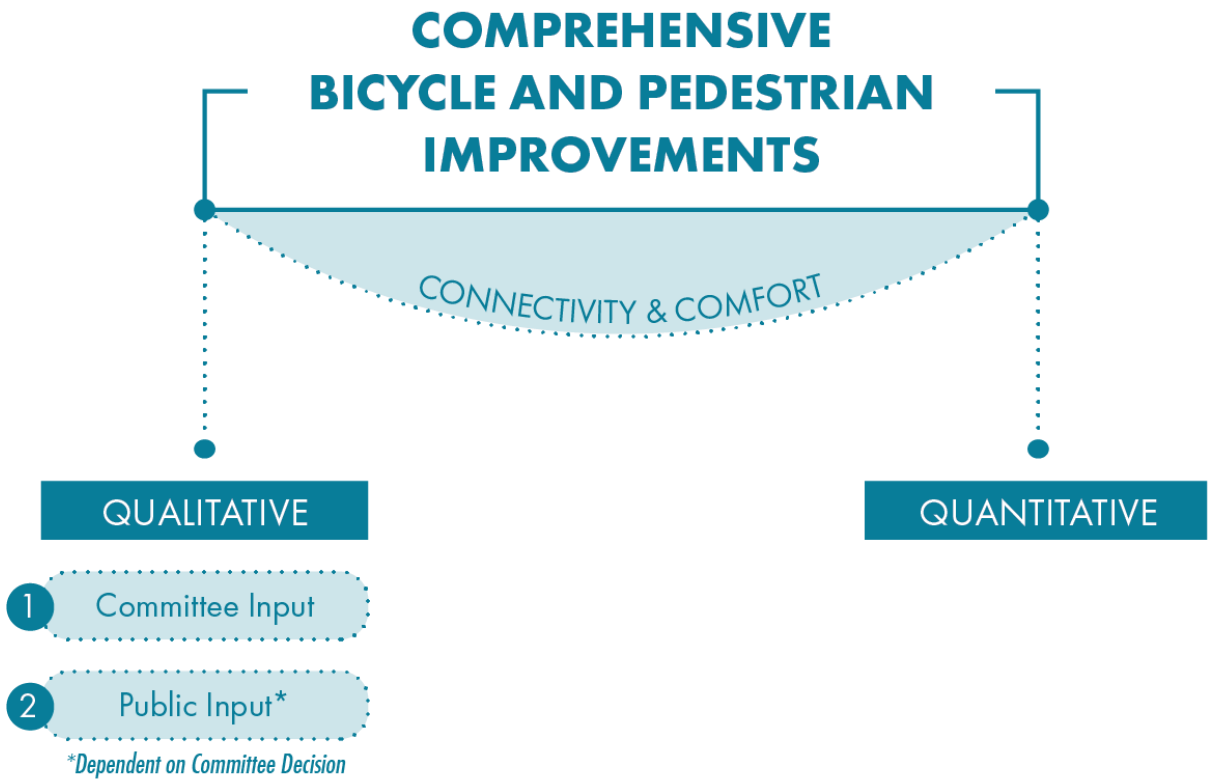
  - Potential public input via annual public workshop in May 2024



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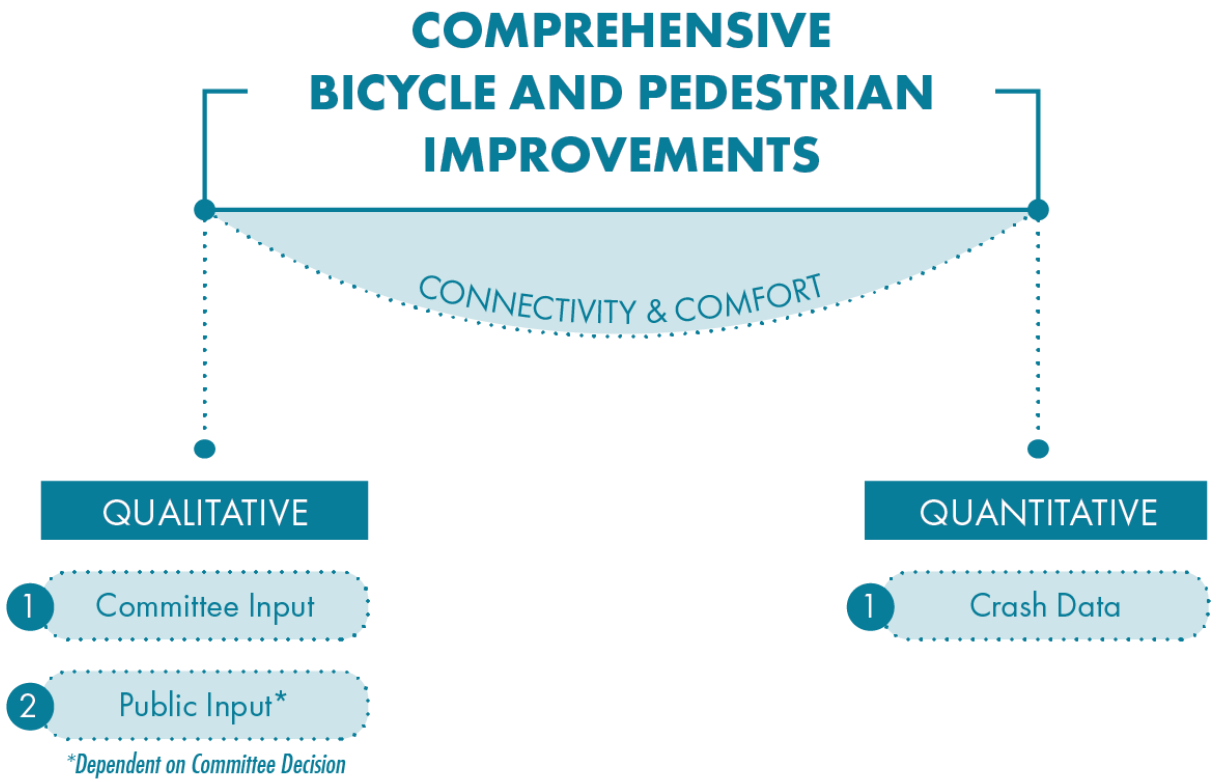
- **Qualitative**:
  - Committee feedback on the Comment Map
  - Potential public input through another public facing Comment Map
- **Quantitative**
  - Crash Data



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- **Quantitative**
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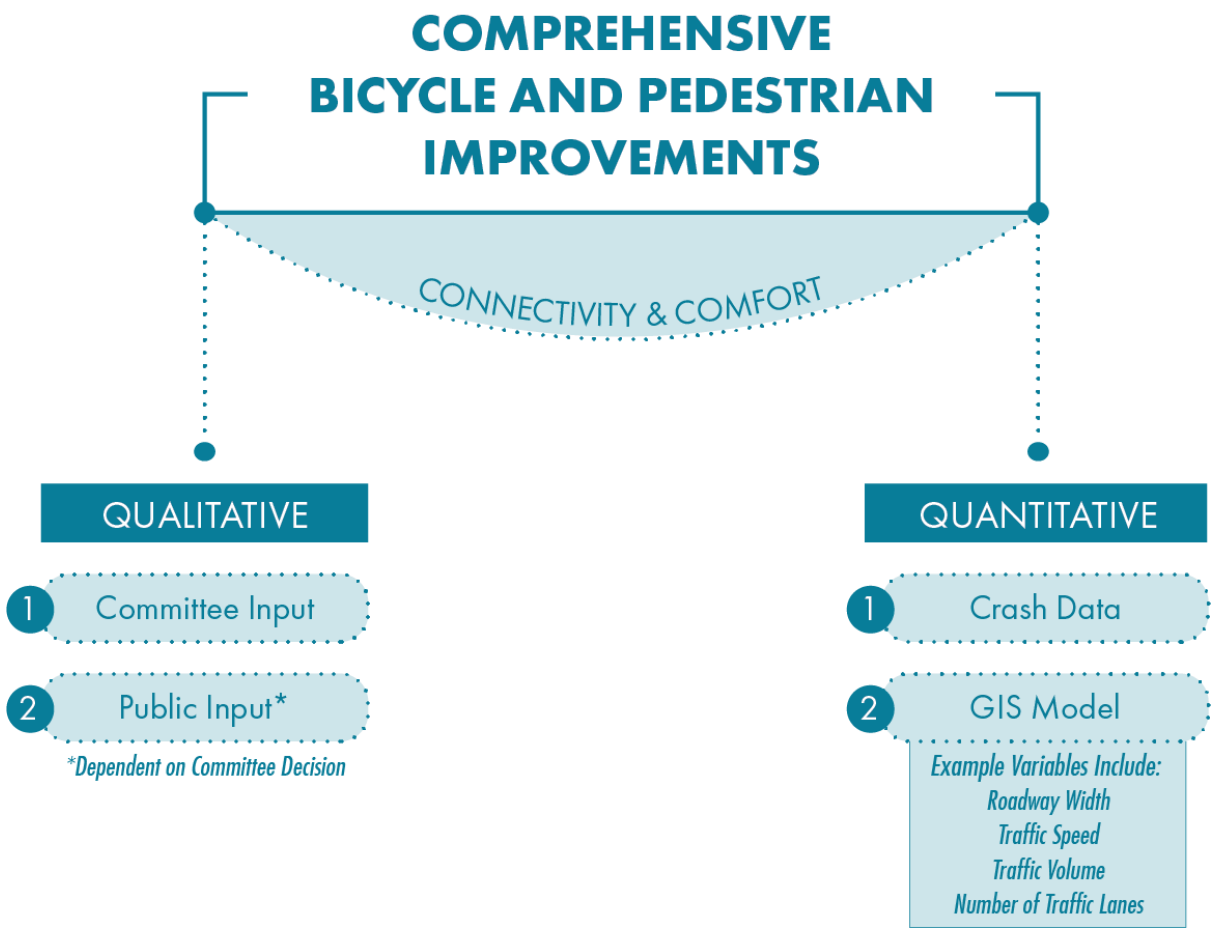
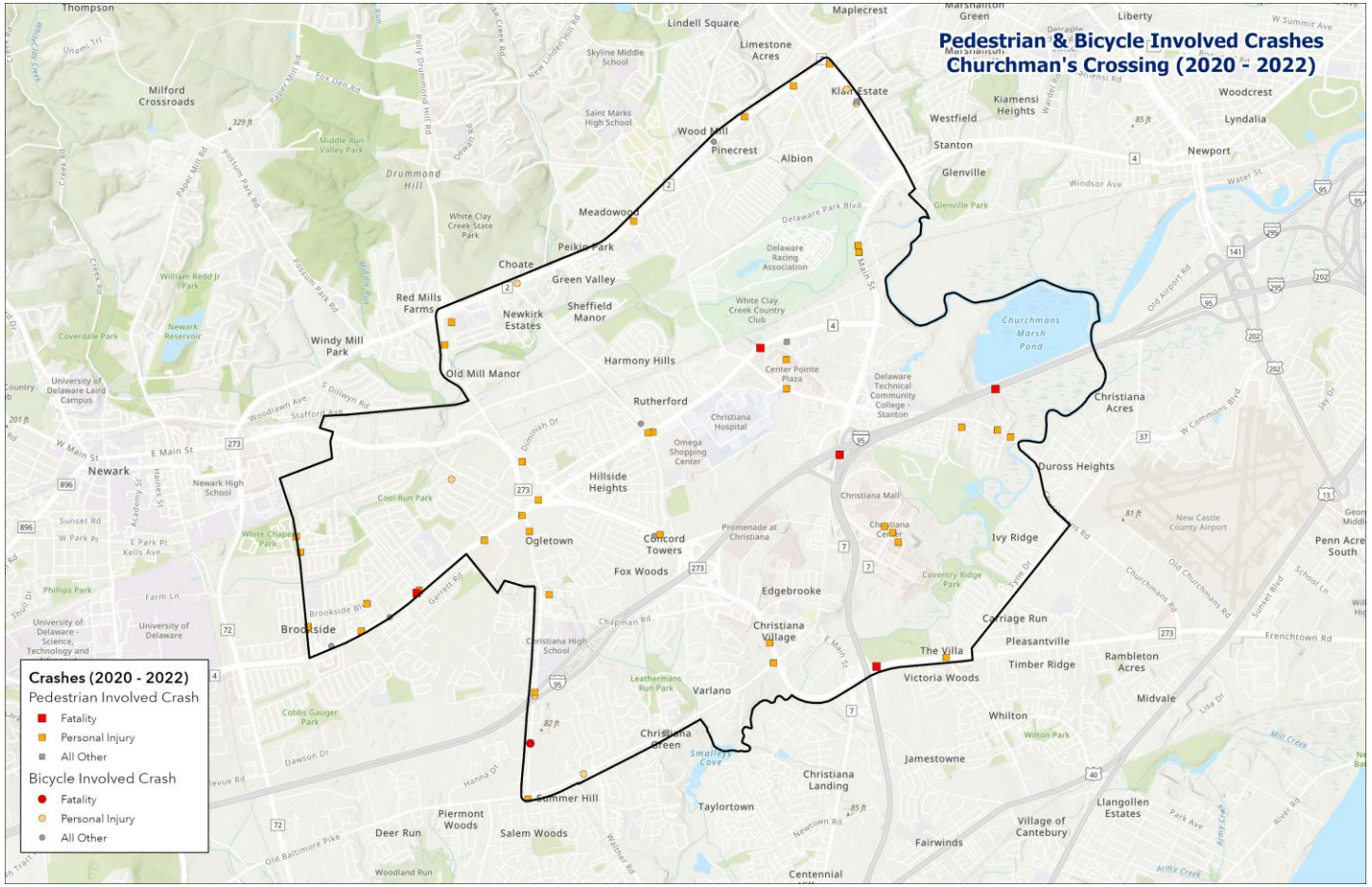
  - DelDOT GIS Prioritization Model



Methodology

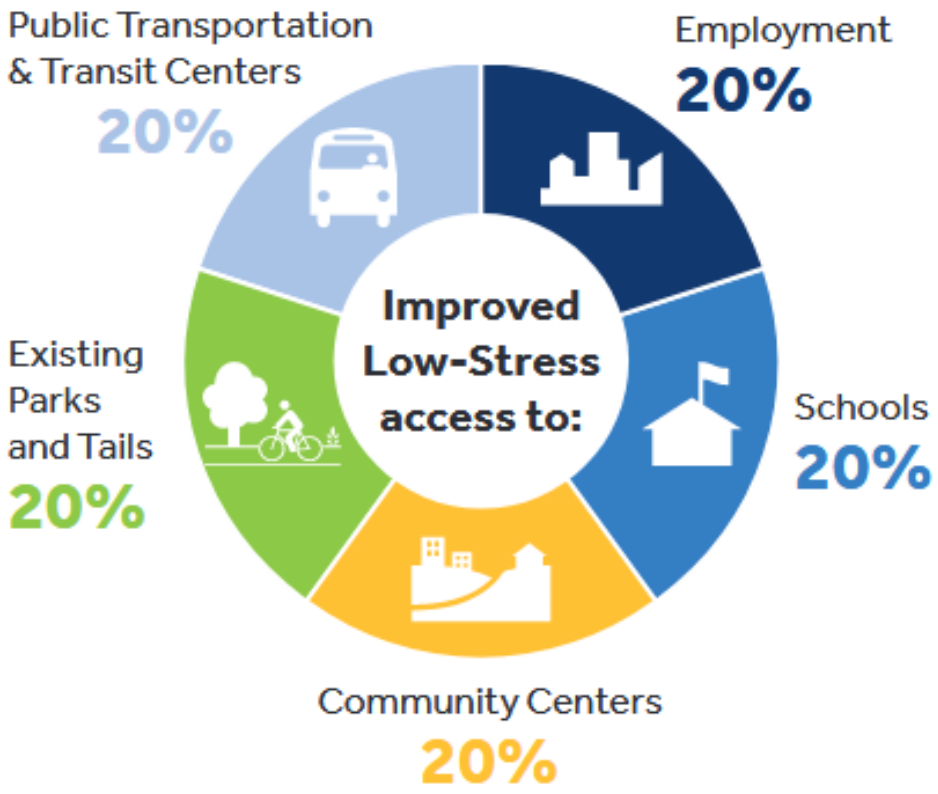


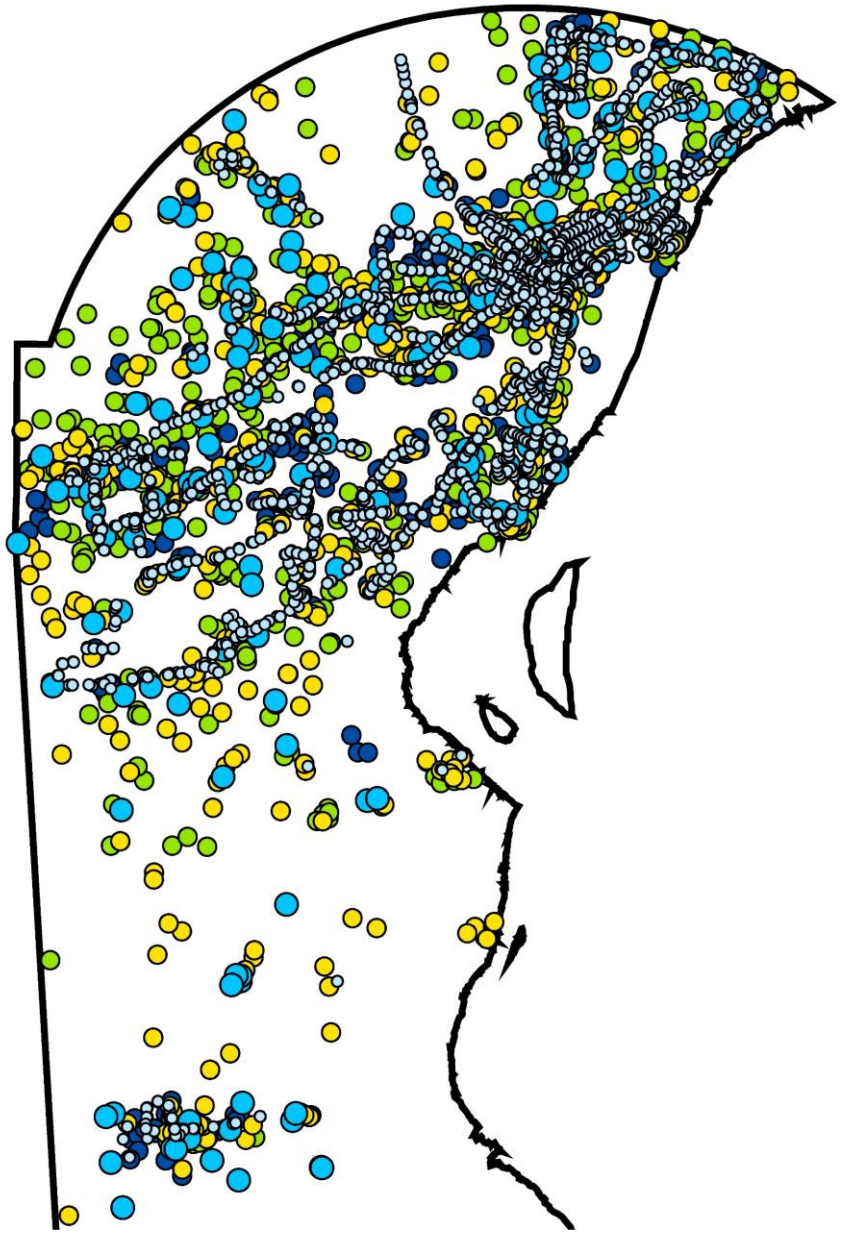
- **Crash Data and Analysis**
  - Basic overview of bike/ped crashes in the area.
  - Potential project areas with high crashes can be given higher weight in the prioritization process.

Methodology

- **Bike Network GIS Modeling**

Figure 3-G. The categories of destinations used in project scoring for the Statewide Bicycle and Pedestrian Program

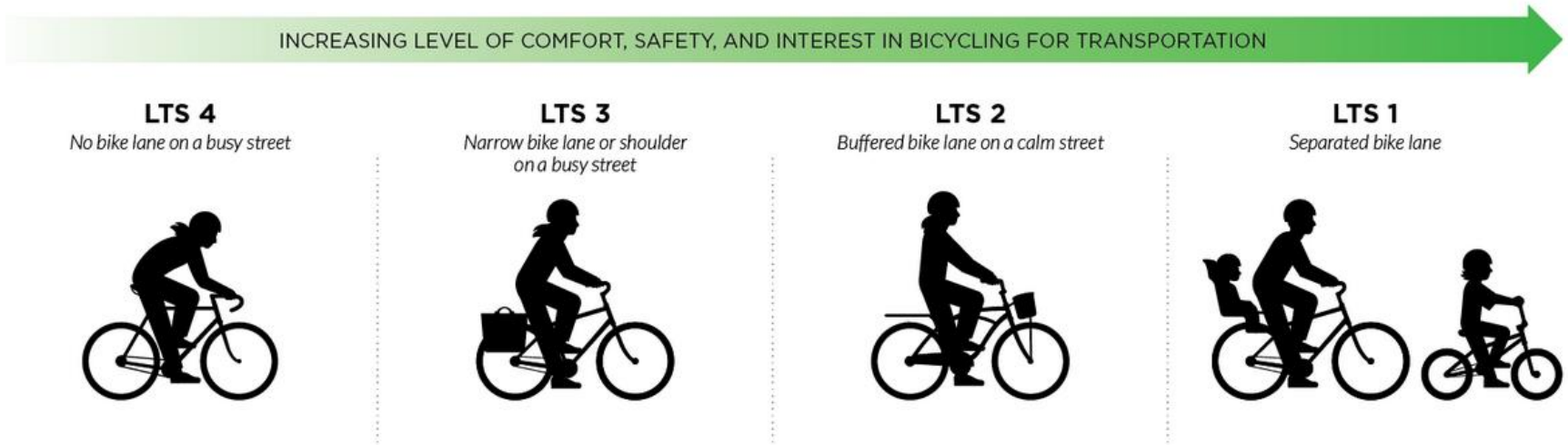


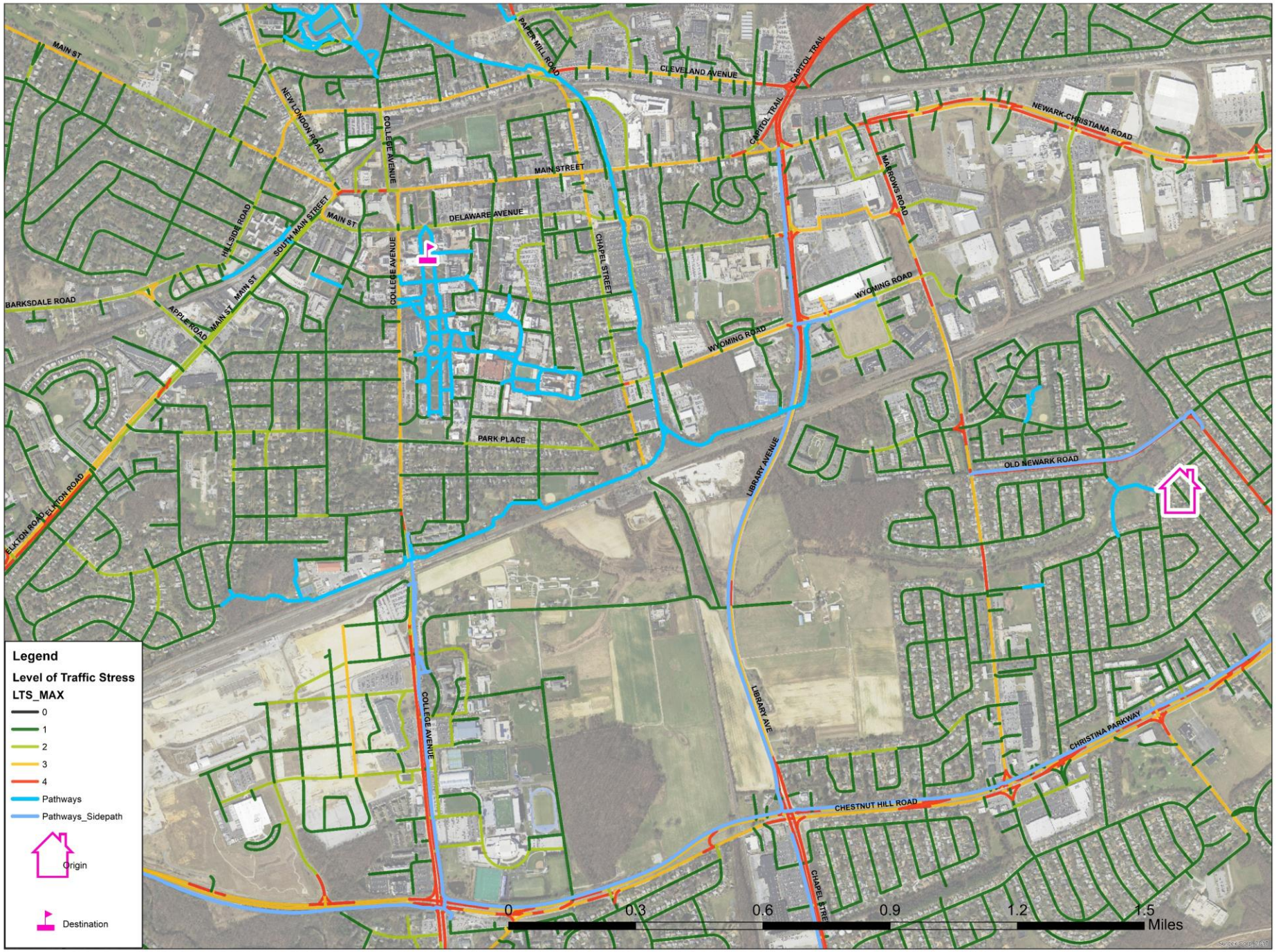


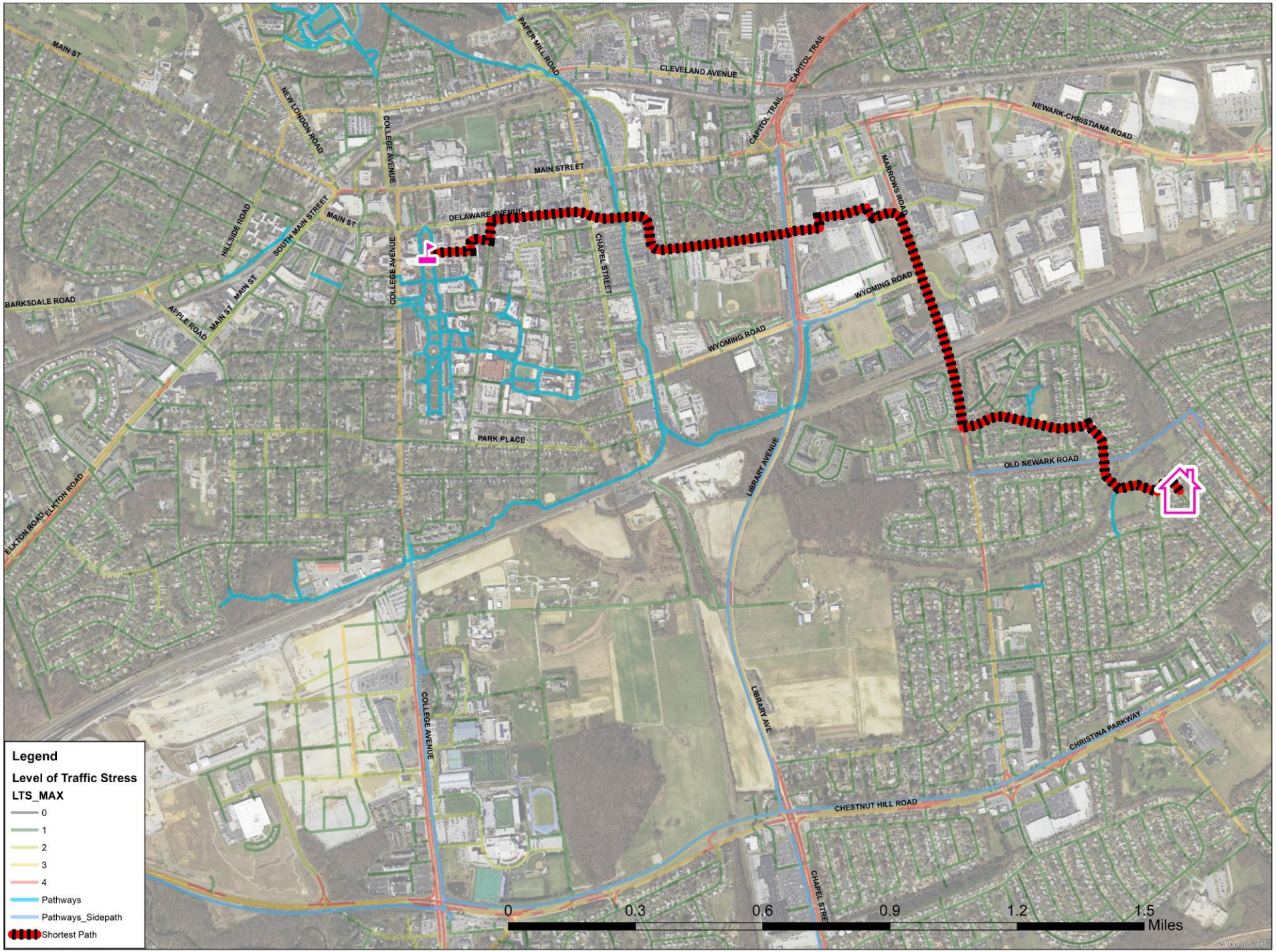
Methodology

- **Bike Network GIS Modeling**
  - A metric of suitability of a roadway for cycling
  - Each level relates to a ***type of rider***
  - Allows us to view mobility from perspective of casual cyclists and understand ***barriers*** to a useful, connected network

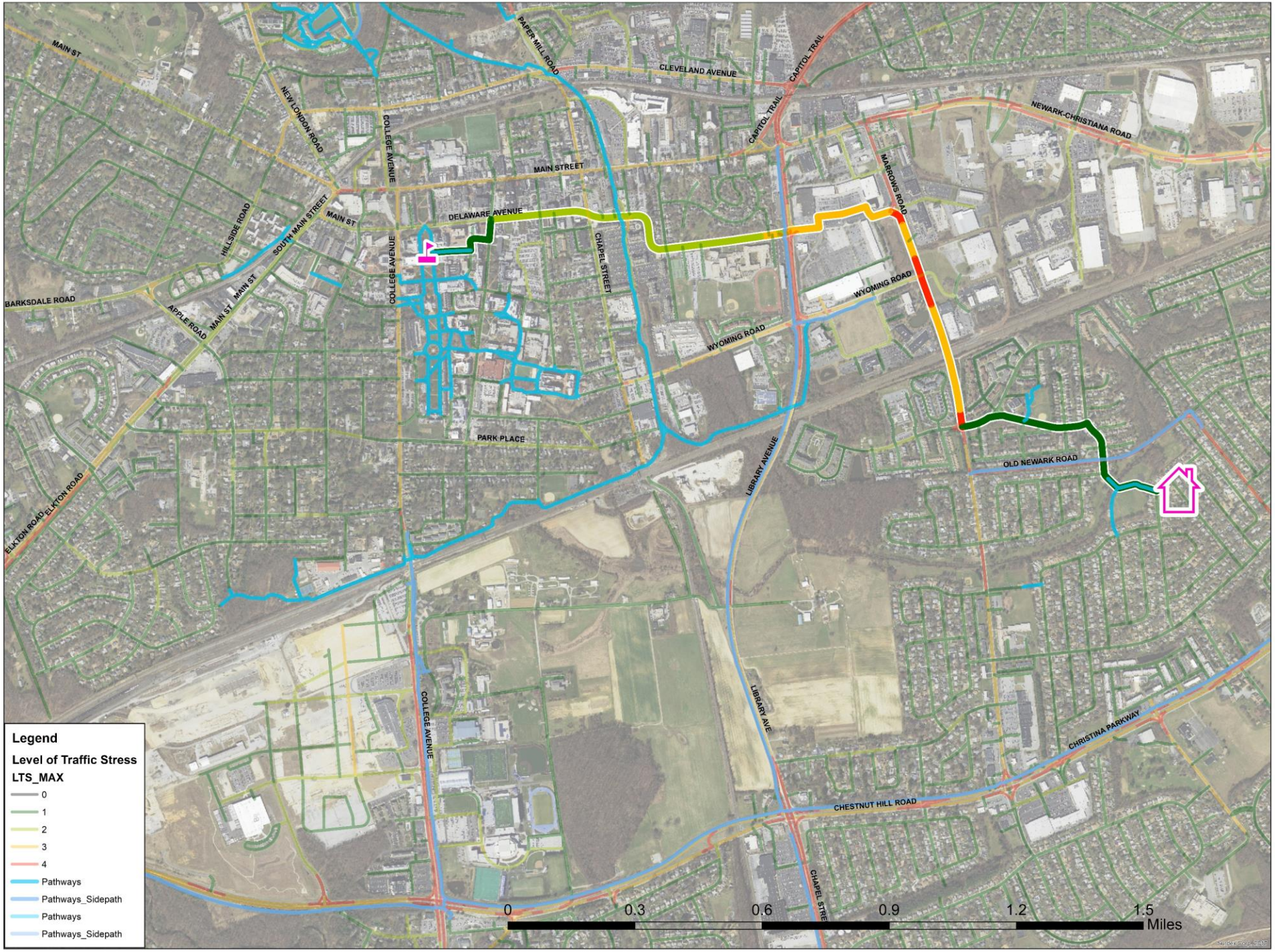
- Level of Traffic Stress
  - LTS1: 12-year-old child
  - LTS2: typical person able to bike
  - LTS3: enthusiastic and willing to tolerate some stressful roadways and intersection
  - LTS4: aggressive and willing to bike anywhere




MAIN ST
NEW LONDON ROAD
COLLEGE AVENUE
PAPER MILL ROAD
CLEVELAND AVENUE
CAPITOL TRAIL
NEWARK-CHRISTIANA ROAD
MAIN STREET
DELAWARE AVENUE
HILLSIDE ROAD
SOUTH MAIN STREET
MAIN ST
CHAPEL STREET
MARROWS ROAD
WYOMING ROAD
BARKSDALE ROAD
APPLE ROAD
MAIN ST
PARK PLACE
LIBRARY AVENUE
OLD NEWARK ROAD
ELKTON ROAD
ELKTON ROAD
CHRISTINA PARKWAY
CHESTNUT HILL ROAD
LIBRARY AVE
CHAPEL STREET
Legend
Level of Traffic Stress
LTS_MAX
0
1
2
3
4
Pathways
Pathways_Sidepath
Origin
Destination
0
0.3
0.6
0.9
1.2
1.5
Miles



- Shortest Path
  - 2.5 miles
  - ~12 minute bike ride



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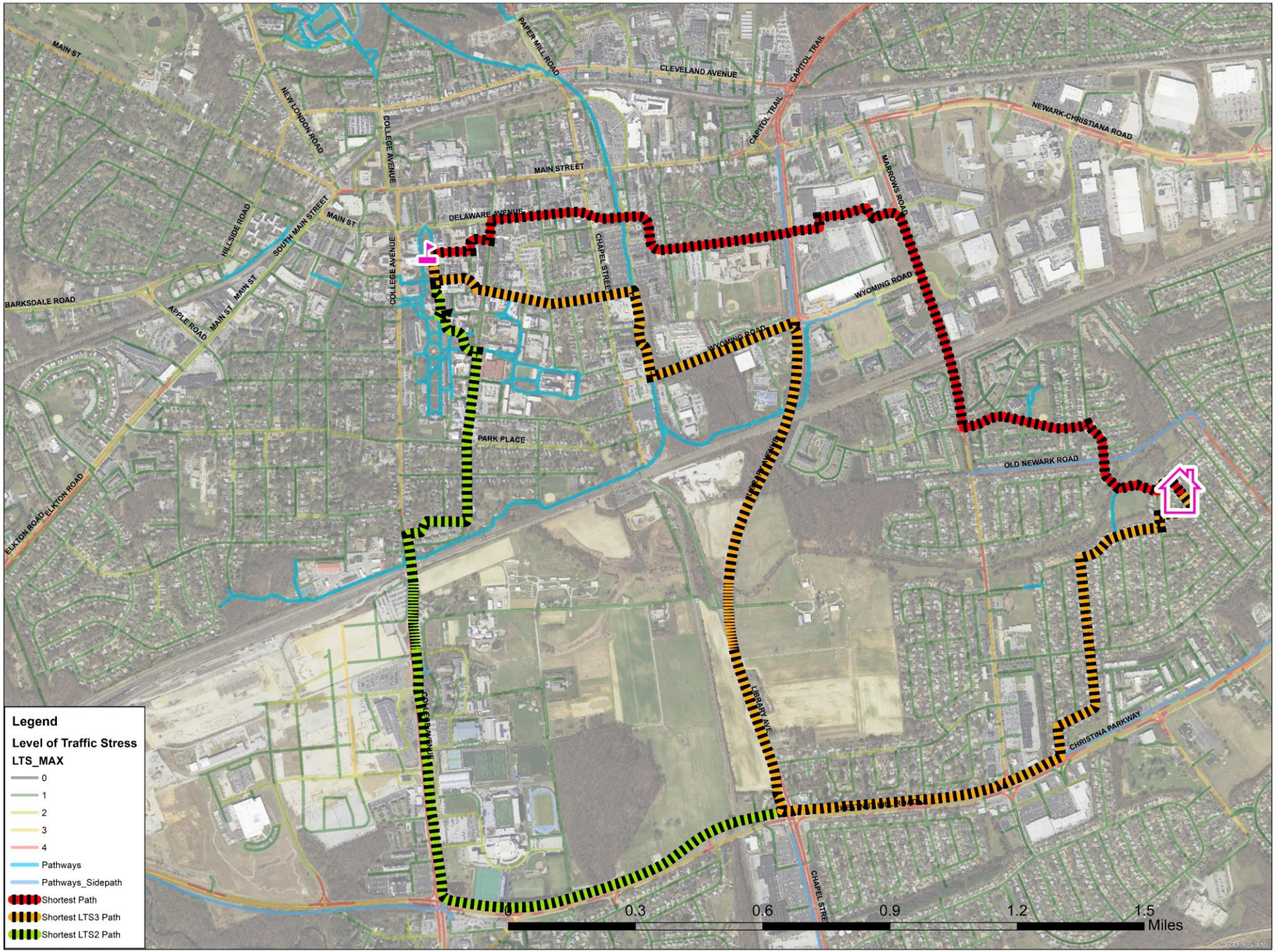


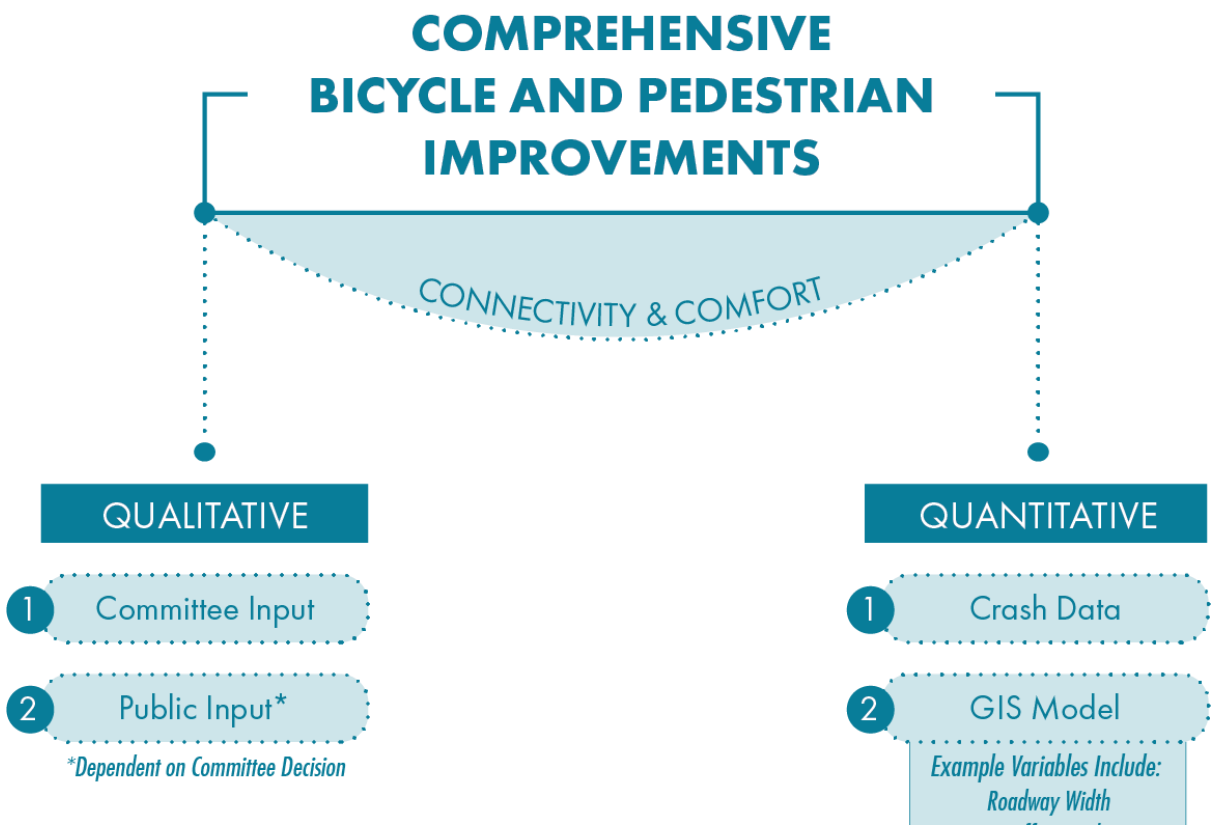
- Shortest LTS 4 Path
  - 2.5 miles
  - P =1
- Shortest LTS3 Path
  - 3.9 miles
  - 56% relative detour
  - P = 0.496
- Shortest LTS2 Path
  - 4.2 miles
  - 68% detour
  - P = 0.359
- Shortest LTS1 Path
  - Does not exist!
  - P = 0

Methodology

- **Comment Map Introduction and Demonstration**
  - https://rb.gy/8nme64
  - **Is this something we would like to open up to the public?**

Methodology

- Methodology Discussion
- What inputs would we like to use?
  - Committee Input
    - Public Input
  - Basic Crash Analysis
  - GIS Model
  - Others not suggested here?



Next Steps

- Project Team Deliverables for April 10th (next CXMC meeting)
  - Summary of Committee Comment Map
  - Public workshop draft materials
- Comment Map Deadline is March 15 (Friday)