

Bicycle and Pedestrian Plan

Your input is important!!

This is an opportunity to assist the Dover Kent County MPO and City of Dover in updating their Bicycle and Pedestrian Plan. A public workshop was held on Oct. 21 and we know many of you could not attend, however your input is still important to us. Please take a few minutes to review the information and submit your comments.

Do you know of any areas that have gaps in the bicycle or pedestrian networks? Do you have ideas to improve on biking and walking within Dover? Do you see areas of problems for drivers, bicyclists and/or pedestrians?

Please complete the comment form and return via email to ccourtney@dover.de.us.

If you have any questions on the materials, please call or email Carolyn Courtney at 302-736-7050.

2015 Bicycle and Pedestrian Plans - Goals & Objectives Status

Goals / Objectives	Status
City of Dover Bicycle Plan (2015)	
1) Improve the bicycle transportation network	•Ongoing
<ul style="list-style-type: none"> •Consider needs of all user groups •Identify key gaps in the network, and areas of safety concern •Develop project ideas for gaps where solutions are not immediately obvious. Seek the advice of creative and experienced professionals •Prioritize project requests and advocate for funding •Track projects from planning through completion •Seek especially to produce low-traffic, low-stress routes that are continuous •#1 goal - Create the Senator Bikeway (see pages 35-51) 	<ul style="list-style-type: none"> •Ongoing •Ongoing: this plan will identify gaps •Ongoing •Ongoing: 2017 Regional Bicycle Plan prioritized projects •Ongoing •Ongoing •Yes: Phase I of construction underway
2) Coordinate regular bicycle - route maintenance (surface cleaning & repair)	•Ongoing
<ul style="list-style-type: none"> •Identify maintenance responsibility for all bike routes •Encourage responsible parties to schedule regular maintenance •Develop communication system for reporting maintenance needs 	<ul style="list-style-type: none"> •Coordination between City and State underway •Coordination between City and State underway •Cyclists can use phone or website to report issues to City
3) Incorporate bicycle elements into land-use and development planning	•Ongoing
<ul style="list-style-type: none"> •Review local land-use and development ordinances, and recommend the incorporation of bicycle accommodations •Seek requirements of "back exits" in single-entrance developments 	<ul style="list-style-type: none"> •Incorporated in the City of Dover Comprehensive Plan •Evaluated and found non-feasible
4) Encourage adequate and secure bicycle parking	•Ongoing
<ul style="list-style-type: none"> •Identify locations where bicycle parking is especially needed •Review bicycle parking requirements in zoning codes and recommend revisions as needed •Develop programs to encourage installation of bike parking facilities where zoning requirements are not effective (e.g. bike rack contest) •Require larger proposed businesses to incorporate showers into their facility design 	<ul style="list-style-type: none"> •Ongoing: Installing in parks, required in new development •Ongoing: Planning continues to identify necessary revisions •Bike rack contest held for Library bicycle parking •No action
5) Utilize educational programs for encouraging bicycle use and safety	•Ongoing
<ul style="list-style-type: none"> •Bike-to-Work Day •Bike-to-School Day •Traffic Skills 101 (League of American Bicyclists) •Develop signage and maps for low-traffic, low-stress bicycle routes 	<ul style="list-style-type: none"> •Held annually by City of Dover •Held annually by DeIDOT along with bike rodeos •Offered classes but enrollment not sufficient •Project ongoing: i.e. Capital Trail signage
6) Monitor use of bicycle facilities	•Ongoing
<ul style="list-style-type: none"> •Select bicycle survey tools for counting cyclists •Schedule regular and repeating counts to detect changes •Survey bicyclists of all ages and abilities for unmet facility needs •Regularly report trends in commute, utility, recreational, and school cycling 	<ul style="list-style-type: none"> •Exploring feasibility with DeIDOT • " • " • "
City of Dover Pedestrian Plan (2015)	
1) Improve the pedestrian transportation network	•Ongoing
<ul style="list-style-type: none"> •Consider needs of all user groups •Identify key gaps in the network, and areas of safety concern •Develop project ideas for gaps where solutions are not immediately obvious. Seek the advice of creative and experienced professionals •Prioritize project requests and advocate for funding •Track projects from planning through completion 	<ul style="list-style-type: none"> •Ongoing •Ongoing: this plan will identify gaps •Ongoing •Ongoing •Ongoing
2) Incorporate pedestrian elements into land-use development planning	•Incorporated in City of Dover Comprehensive Plan
3) Provide for routine and timeline maintenance (cleaning and clearing) of walkways, especially after snowfalls and rainfalls	•Ongoing
<ul style="list-style-type: none"> •Establish maintenance responsibilities, and coordinate actions •Educate road snowplow operators, to eliminate blockage of walkways •Actively provide notice and citations to property owners •Integrate sidewalk maintenance (snow, debris, and vegetation removal) into routine actions of City street crews 	<ul style="list-style-type: none"> •Coordination between City and State underway •Coordination between City and State underway •Ongoing •Prioritized by Public Works
4) Provide physical maintenance of walkways	•Ongoing
<ul style="list-style-type: none"> •Replacement of damaged or root-lifted concrete, blacktop, or brickwork •Restriping of crosswalks and other painted markers 	<ul style="list-style-type: none"> •Ongoing: coordinated between City and State •Ongoing: coordinated between City and State



Level of Traffic Stress (LTS) / Types of Bicycle Infrastructure

How Traffic Stress is Measured

Level of Traffic Stress analysis uses factors such as the speed of traffic, volume of traffic, and the number of lanes to rate each roadway segment on a scale of 1 to 4, where 1 is a low-stress place to ride and 4 is a high-stress place to ride. It analyzes the total connectivity of a network to evaluate how many destinations can be accessed using low-stress routes.

“Traffic stress... is a combination of perceived danger and other stressors... associated with riding a bike close to motor traffic.”

- Northeastern University Professor Peter Furth, 2012.

This explanation of Level of Traffic Stress is from *Blueprint for a Bicycle-Friendly Delaware: A Statewide Policy Plan*.

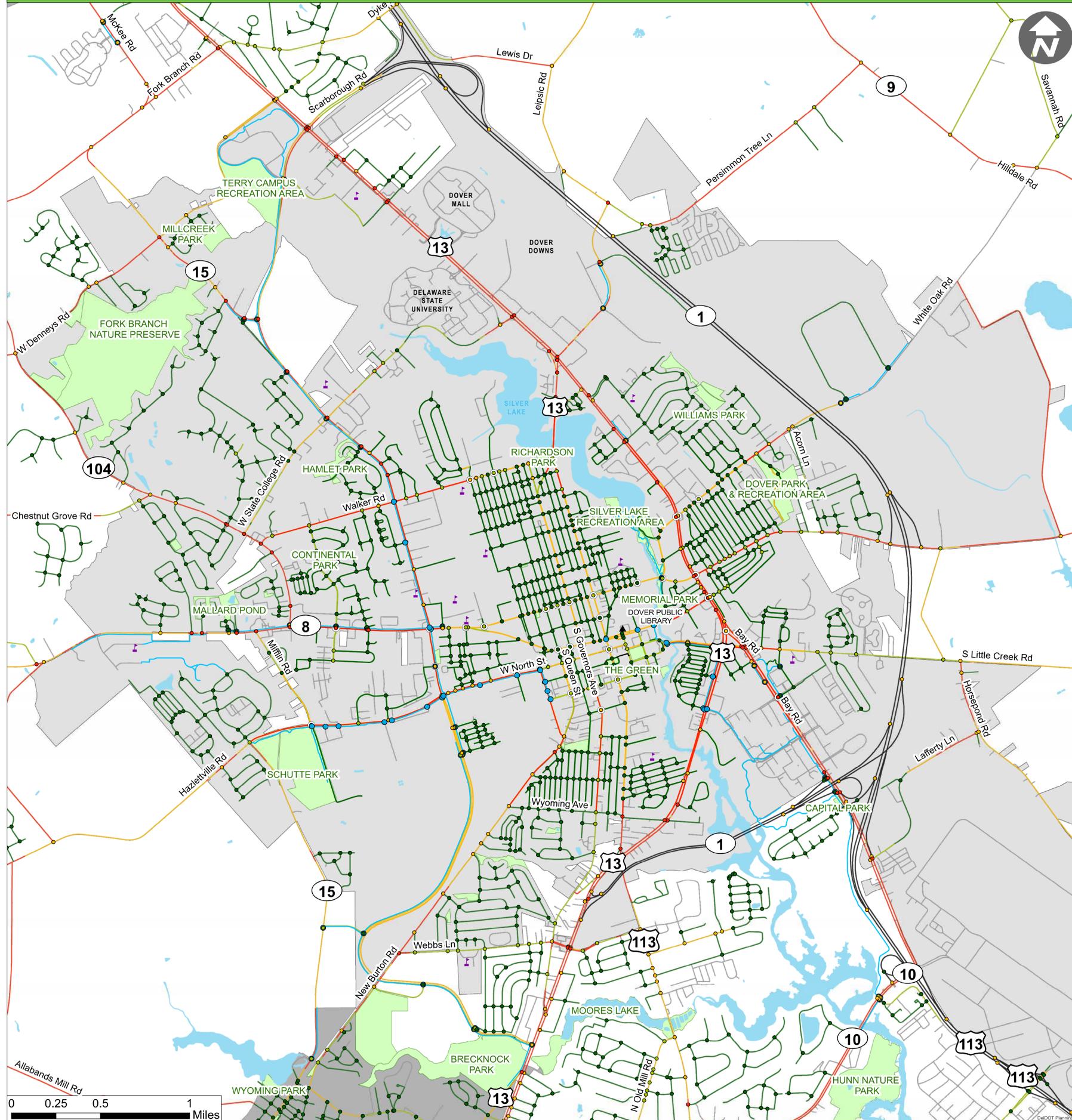
The Blueprint Plan requires that bicycle plans and projects seeking state funding are developed through a locally-driven planning process to ensure that investment is driven by local needs and priorities. The state will prioritize locally-driven projects to ensure they are cost-effective, feasible, and connected to regional and statewide networks. Using LTS analysis, we can identify how to best create an interconnected network.

Level of Traffic Stress	Description	Example
1	Safe for children to use; Usually completely separated from auto traffic	
2	Tolerated by most mainstream adult populations of cyclists; Roads with low volume and low speed auto traffic	
3	Tolerated by riders who are enthused and confident; Heavy traffic with separated bike facility	
4	Only tolerated by strong and fearless riders; cyclists must interact with high volumes or speeds of auto traffic.	

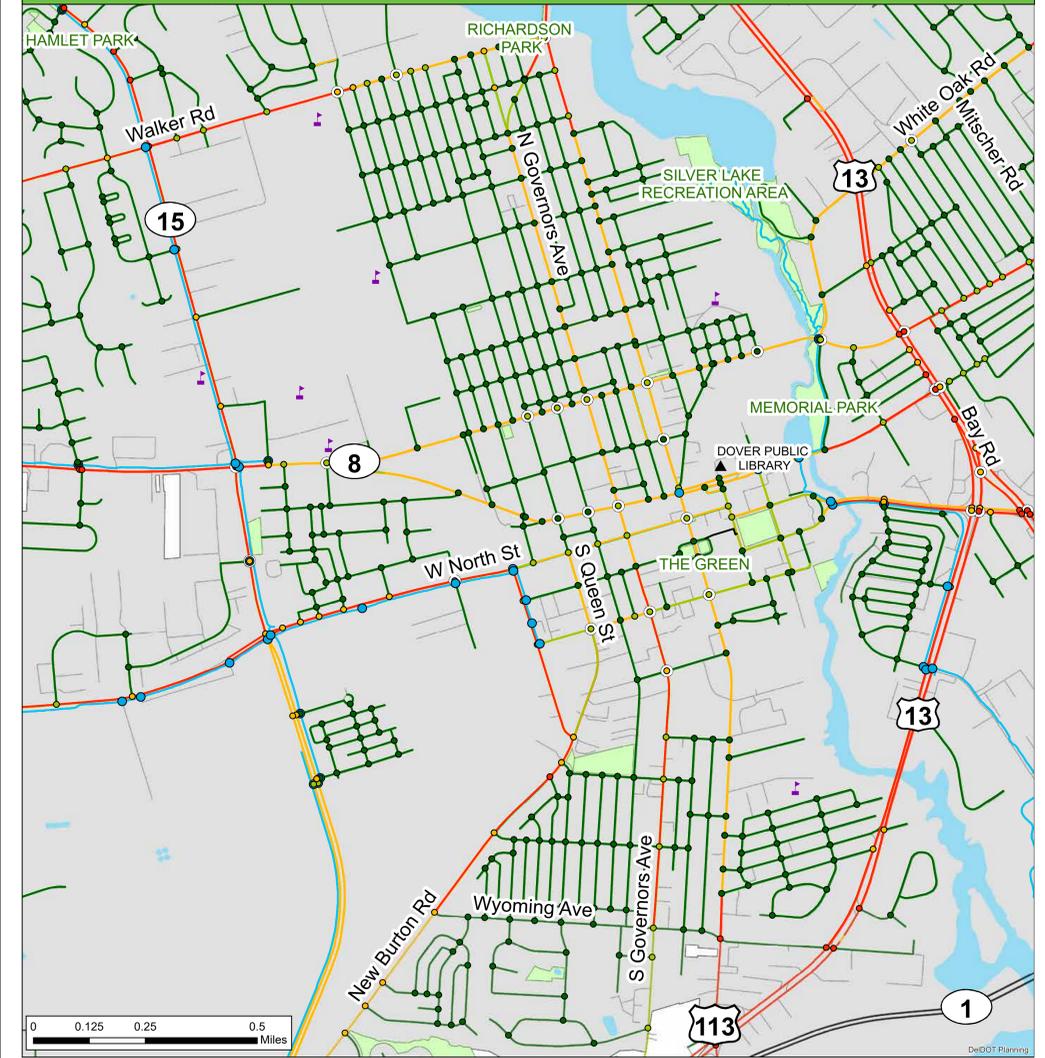
Number of Lanes	Average Daily Traffic	<25 mph	30 mph	35 mph	40 mph	45 mph	50+ mph
2-way street (no centerline)	0-750	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4
	751-2000	LTS 1	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
	2001-3000	LTS 1	LTS 2	LTS 3	LTS 4	LTS 4	LTS 4
	3001+	LTS 2	LTS 2	LTS 3	LTS 4	LTS 4	LTS 4
1 through lane per direction (1-way street or 2-way street with centerline)	0-750	LTS 1	LTS 2	LTS 2	LTS 3	LTS 3	LTS 4
	751-2000	LTS 1	LTS 2	LTS 3	LTS 3	LTS 4	LTS 4
	2001-6000	LTS 2	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4
	6001+	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4	LTS 4
2 through lanes per direction	0-6000	LTS 3	LTS 3	LTS 3	LTS 4	LTS 4	LTS 4
	6001+	LTS 3	LTS 4				
3+ through lanes per direction	any ADT	LTS 3	LTS 4				

This table shows the characteristics (number of lanes, volumes of traffic, and speed of traffic) that impact bicycle comfort. The Dover Bicycle and Pedestrian Plan update will utilize the level of stress methodology and map to analyze and prioritize future projects as recommended by the Statewide Blueprint Plan.

Level of Traffic Stress - Dover



Level of Traffic Stress - Downtown Dover



Level of Traffic Stress (LTS) is a measure being used by DeIDOT to better understand how comfortable streets are for bicycle riding.

LTS 1, displayed in dark-green, represents streets suitable for most bicyclists, including children.

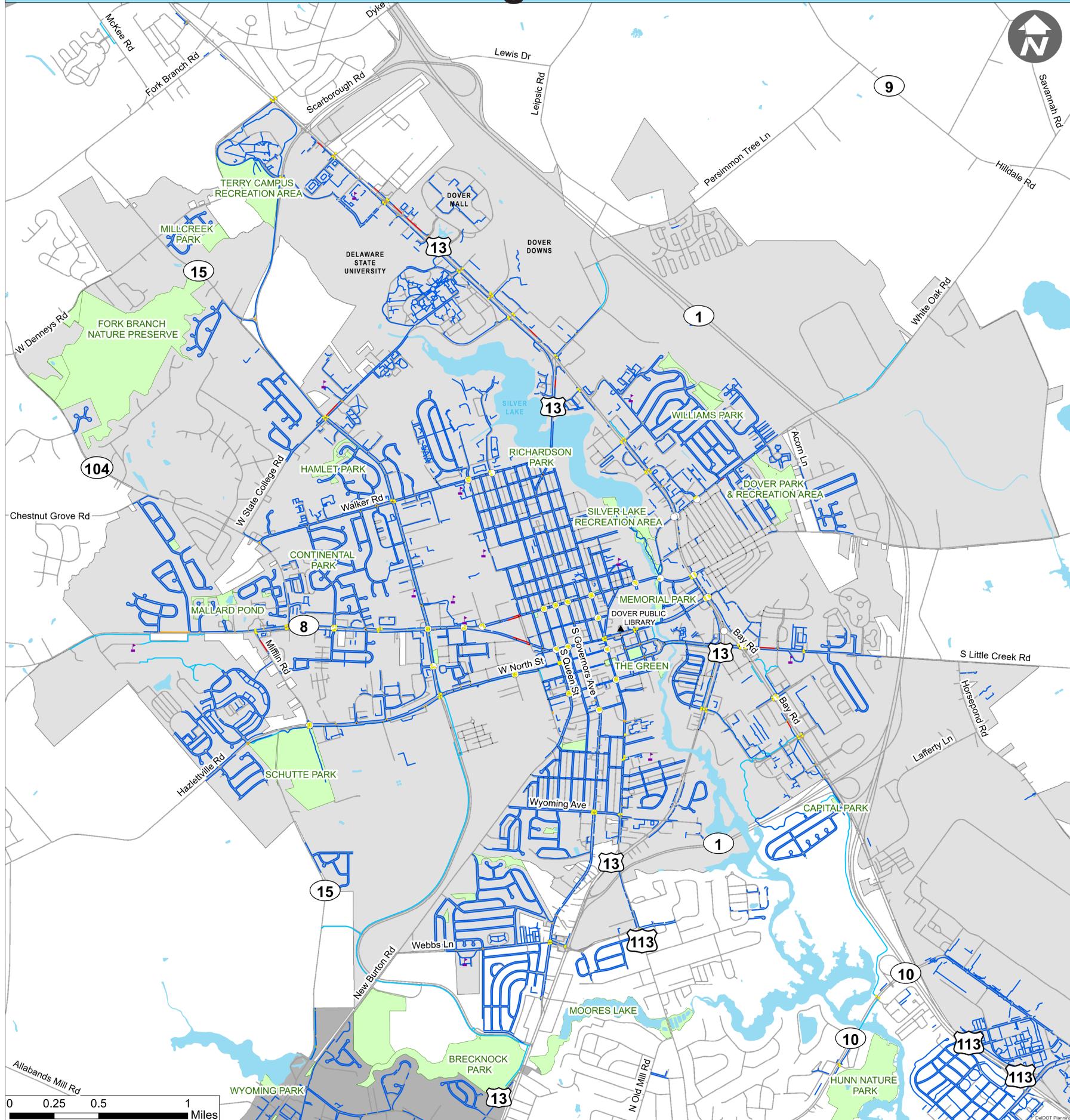
As the LTS increases, traffic speed, traffic volumes, lane configurations, and space for cycling become more intense, and represent a more dangerous or higher stress experience, reducing the proportion of people that may be comfortable riding a bicycle on that street.

Legend

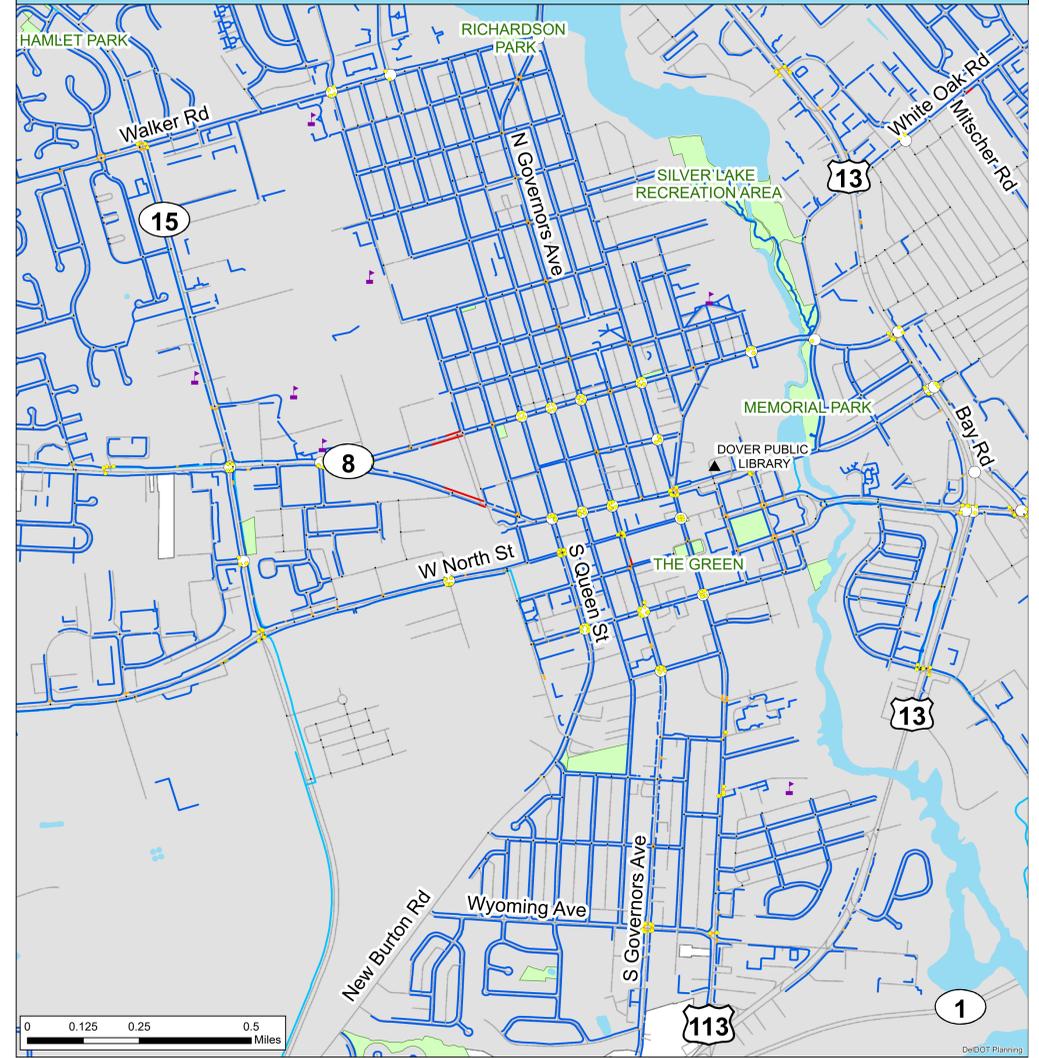
Level of Traffic Stress Intersections	Level of Traffic Stress Roadways	Other Features
● Trail	1	— Trails
● 1	2	○ Signalized Intersections
● 2	3	▲ Libraries
● 3	4	▲ Schools
● 4		■ Parks
		■ Municipal Boundaries

SOURCE: DeIDOT Planning

Pedestrian Existing Conditions - Dover



Pedestrian Existing Conditions - Downtown Dover



Legend

○ Signalized Intersections	— Sidewalk
● Unsignalized Intersections	— Marked Crosswalk
● Pedestrian Signal	— Trails
▲ Libraries	■ Parks
■ Schools	■ Municipal Boundaries
— Missing Sidewalk Link	



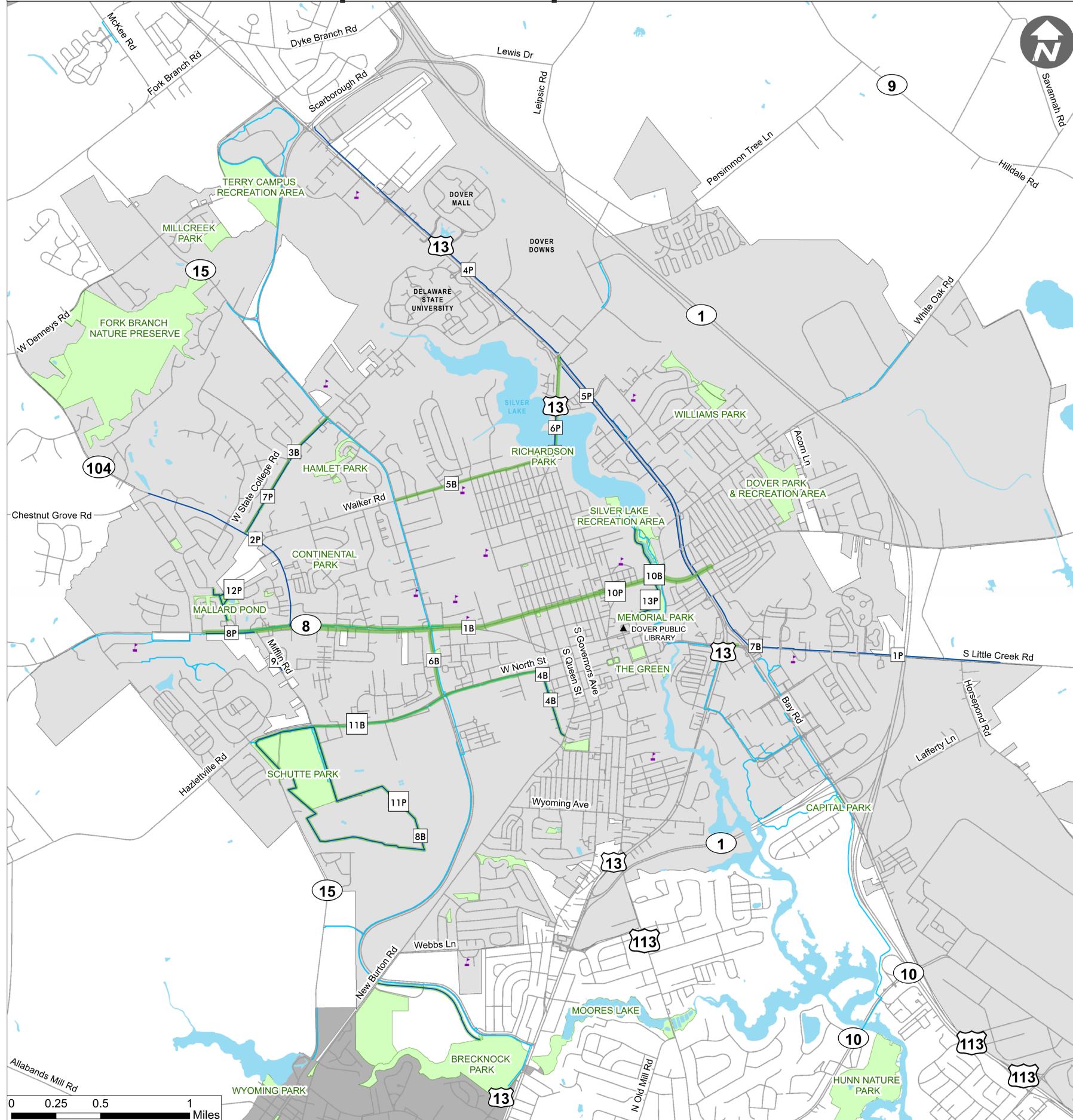
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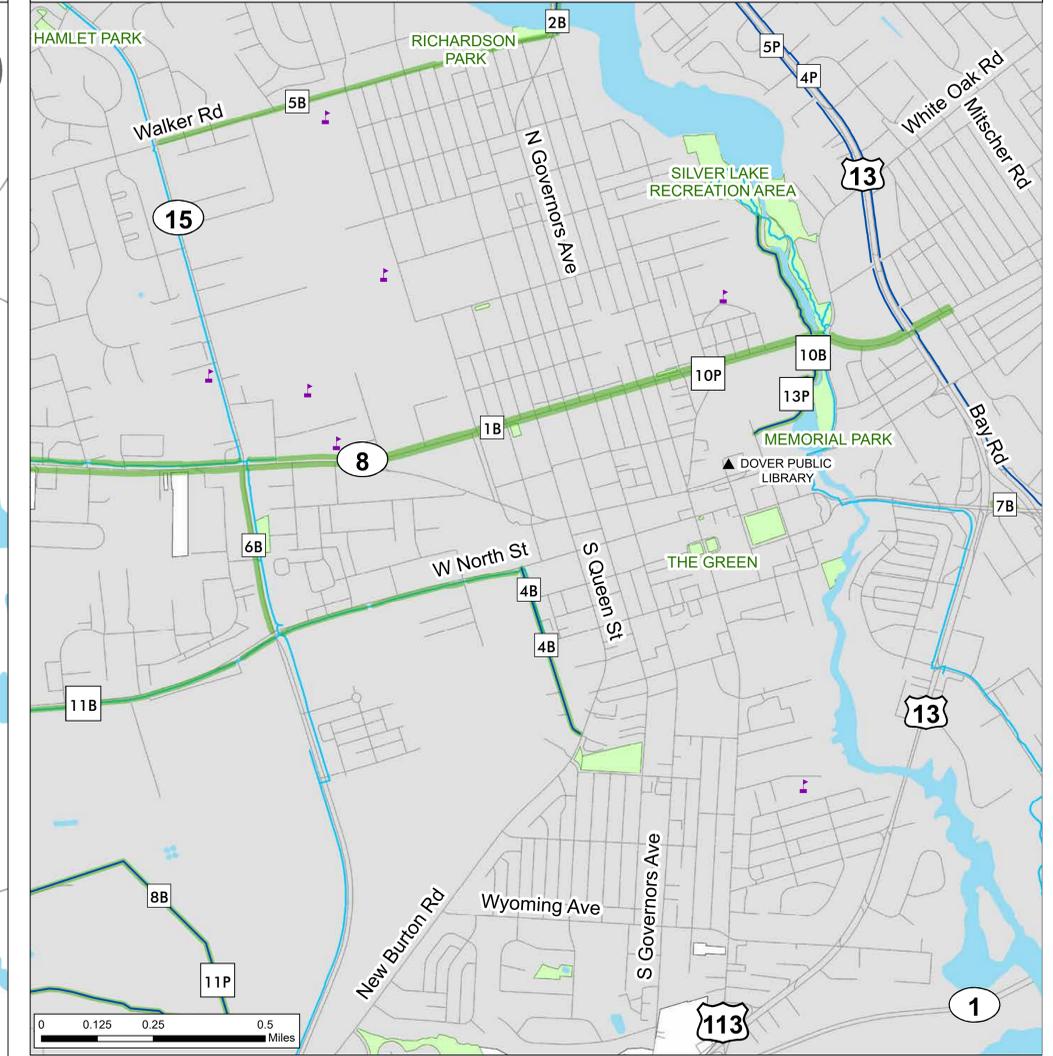
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SOURCE: DeIDOT Planning and Dover / Kent MPO

Proposed Projects - Dover



Proposed Projects - Downtown Dover



Proposed Projects from the City of Dover Bicycle Plan (2015) and Pedestrian Plan (2015)

City of Dover Bicycle Plan (2015) Proposed Projects	City of Dover Pedestrian Plan (2015) Proposed Projects
<ul style="list-style-type: none"> • 1B - Route 8 (Forrest Avenue / Division Street) • 2B - North State Street • 3B - College Road • 4B - West Street • 5B - Walker Road • 6B - Saulsbury Road • 7B - MLK Boulevard / South Little Creek Road • 8B - Schutte Park Trail • 9B - Fox Hall West to Route 8 • 10B - St. Jones River (west side) • 11B - North Street Trail 	<ul style="list-style-type: none"> • 1P - South Little Creek Road • 2P - Kenton Road • 3P - West Street • 4P - U.S. 13 (Northbound) • 5P - U.S. 13 (Southbound) • 6P - North State Street • 7P - College Road • 8P - Route 8 (south side) • 9P - Mifflin Road • 10P - Pennsylvania Avenue • 11P - Schutte Park Trail • 12P - Fox Hall West to Route 8 • 13P - St. Jones River (west side)

Legend

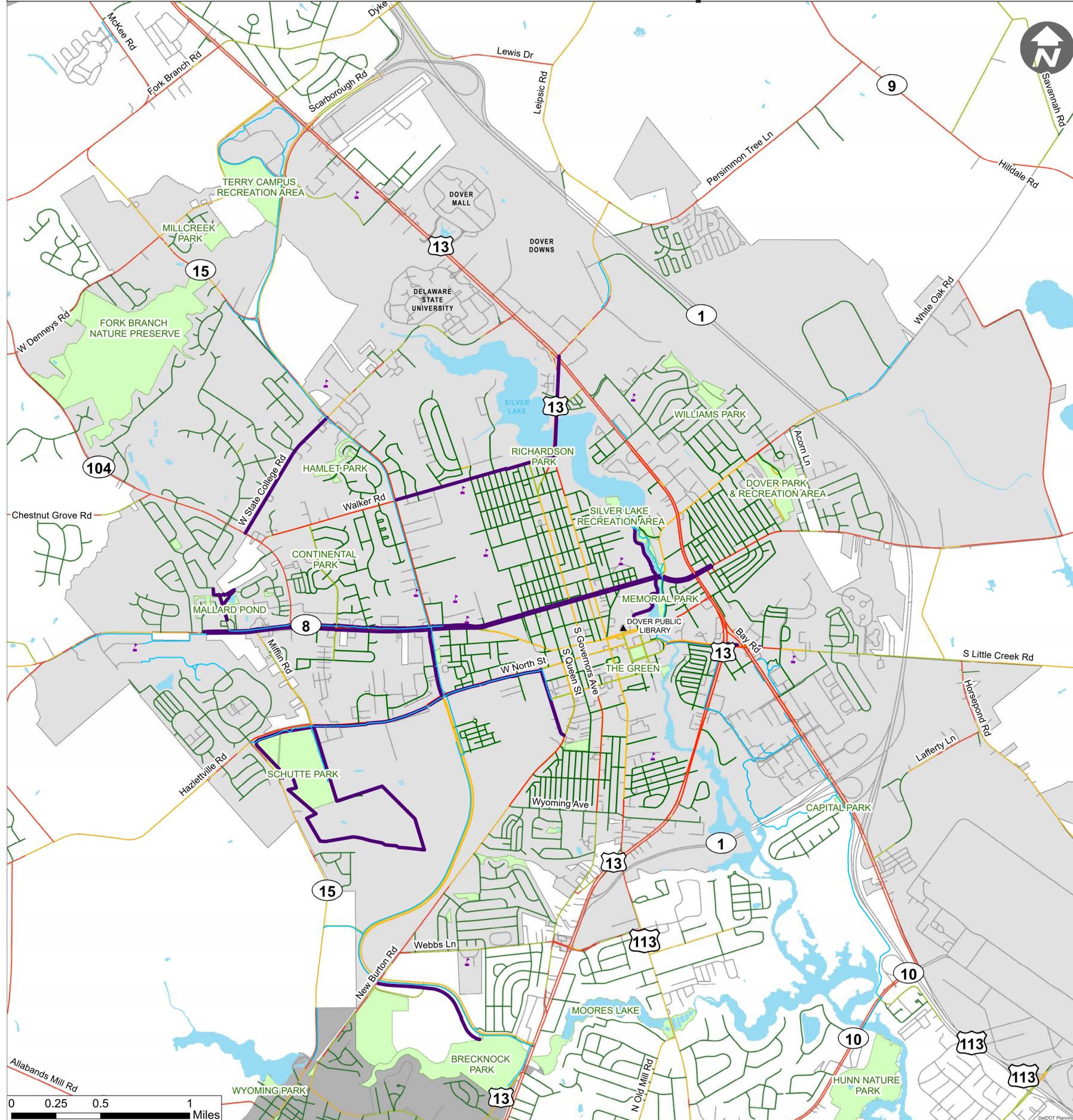
- Proposed Pedestrian Projects - 2015
- Proposed Bicycle Projects - 2015
- Trails
- Libraries
- Schools
- Parks
- Municipal Boundaries



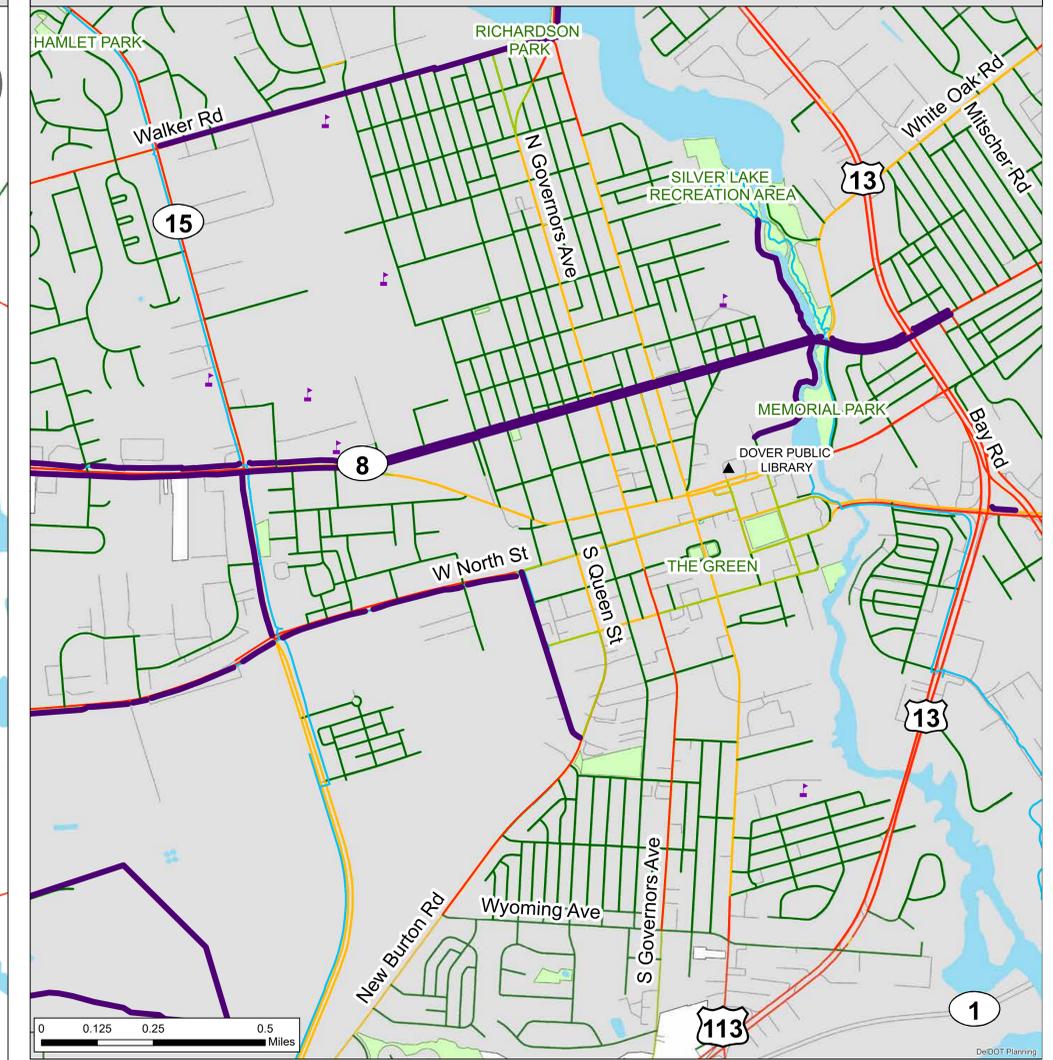
SOURCE: Dover / Kent MPO



Level of Traffic Stress Gaps - Dover



Level of Traffic Stress Gaps - Downtown Dover



Legend

- ▲ Libraries
- Schools
- Trails
- Proposed Bicycle Projects - 2015
- Parks
- ▭ Municipal Boundaries

Level of Traffic Stress Roadways

- 1 (Green)
- 2 (Light Green)
- 3 (Yellow)
- 4 (Red)



DOVER/KENT COUNTY MPO
METROPOLITAN PLANNING ORGANIZATION



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Public Workshop Comment Form

Dover Bicycle & Pedestrian Plan Update



Thank you for taking a look at the displays from the October 21st Public Workshop. We hope that you learned about the progress made on bicycle and pedestrian infrastructure and policies since the Dover Bicycle and Pedestrian Plans were last updated in 2015. We want to make sure that we capture all of your ideas on how to make Dover more friendly to walkers and cyclists.

Please share your thoughts on the below questions:

When I walk in Dover, it's for:

- Transportation
- Fitness/Recreation
- Sport/Competitions

If you walk for transportation, how often?

- Always/As much as possible
- Sometimes (at least once a week)
- Occasionally (at least once a month)
- Rarely (a few times a year)

Are there any destinations that you cannot safely access on foot? What are they?

When I bike in Dover, it's for:

- Transportation
- Fitness/Recreation
- Sport/Competitions

If you bike for transportation, how often?

- Always/As much as possible
- Sometimes (at least once a week)
- Occasionally (at least once a month)
- Rarely (a few times a year)

Are there any destinations that you cannot safely access by bike? What are they?

If you walk for fitness or recreation, where do you walk?

If you bike for fitness/recreation, where do you bike?

Do you feel safe walking in Dover?
Are there any locations that feel especially unsafe?

Do you feel safe biking in Dover?
Are there any locations that feel especially unsafe?

Please share any additional comments about what you would like to see in the updated City of Dover Bicycle and Pedestrian Plan below:

CONTACT INFORMATION (OPTIONAL)

If you would like to stay informed about the status of the plan, please provide the following:

Name: _____

Email: _____

Please return this survey to Carolyn Courtney at ccourtney@dover.de.us. Thank you!