

#mcbikeplan

# THE BICYCLE MASTER PLAN

A stylized graphic of a bicycle wheel and frame, rendered in white and dark blue. The frame is a vertical line with a horizontal bar at the top, and the wheel is a vertical line with a horizontal bar at the bottom. The graphic is positioned to the left of the main title text.

Focus on the Corridor Cities Transitway  
Kickoff Meeting April 20, 2015

# Tonight's Presentation

## 1. The Bicycle Master Plan Update

- Overall Update
- Focus on Corridor Cities Transitway area

## 2. Planning Tools

## 3. How connected is the bicycle network around the CCT?

# Meet & Greet

1. Talk with Staff
2. Complete Comment Card
3. Review Boards
  - Project Schedule
  - Existing Master Plan Recommendations
  - LSC Loop
  - Connectivity Analysis

The Bicycle Master Plan Update

# OVERALL UPDATE

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# Purpose

- Enable great places
- Bring recommendations in line with current best practices
- Improve bicycle access and mobility
- Consolidate bikeway recommendations

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# New User Groups





# Standard Bike Lanes



**Shared Use Path**

Metropolitan Branch Trail



# Two-Way Cycle Tracks



**Buffered Bike Lanes**



# Bicycle Boulevard

Palo Alto, CA

# Purpose

- Enable great places
- Bring recommendations in line with current best practices
- **Improve bicycle access and mobility**
- Consolidate bikeway recommendations



Capital Bikeshare

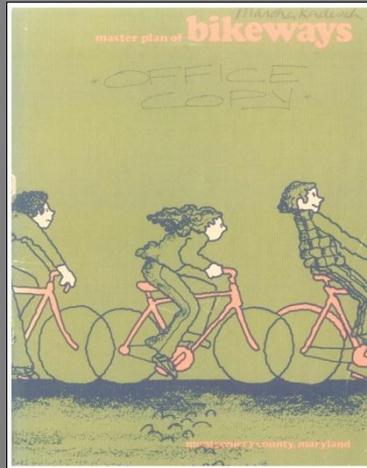


**Bike Stations**

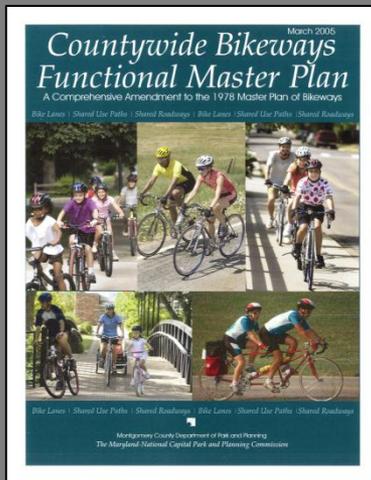
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# Functional Plans



1978 Master Plan of Bikeways

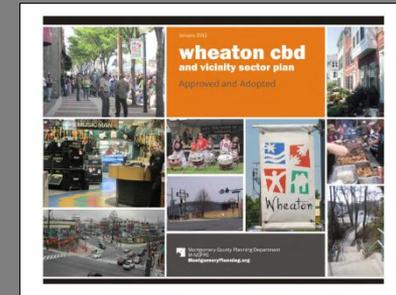


2005 Countywide Bikeways  
Functional Master Plan

# Area Master Plans



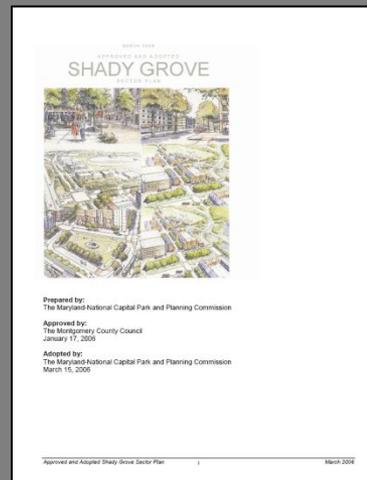
GSSC (2010)



Wheaton CBD (2012)



White Flint (2010)



Shady Grove (2006)



Long Branch (2013)

# Schedule

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July 1, 2015	Start Work
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The Bicycle Master Plan Update

# **FOCUS ON CORRIDOR CITIES TRANSITWAY AREA**

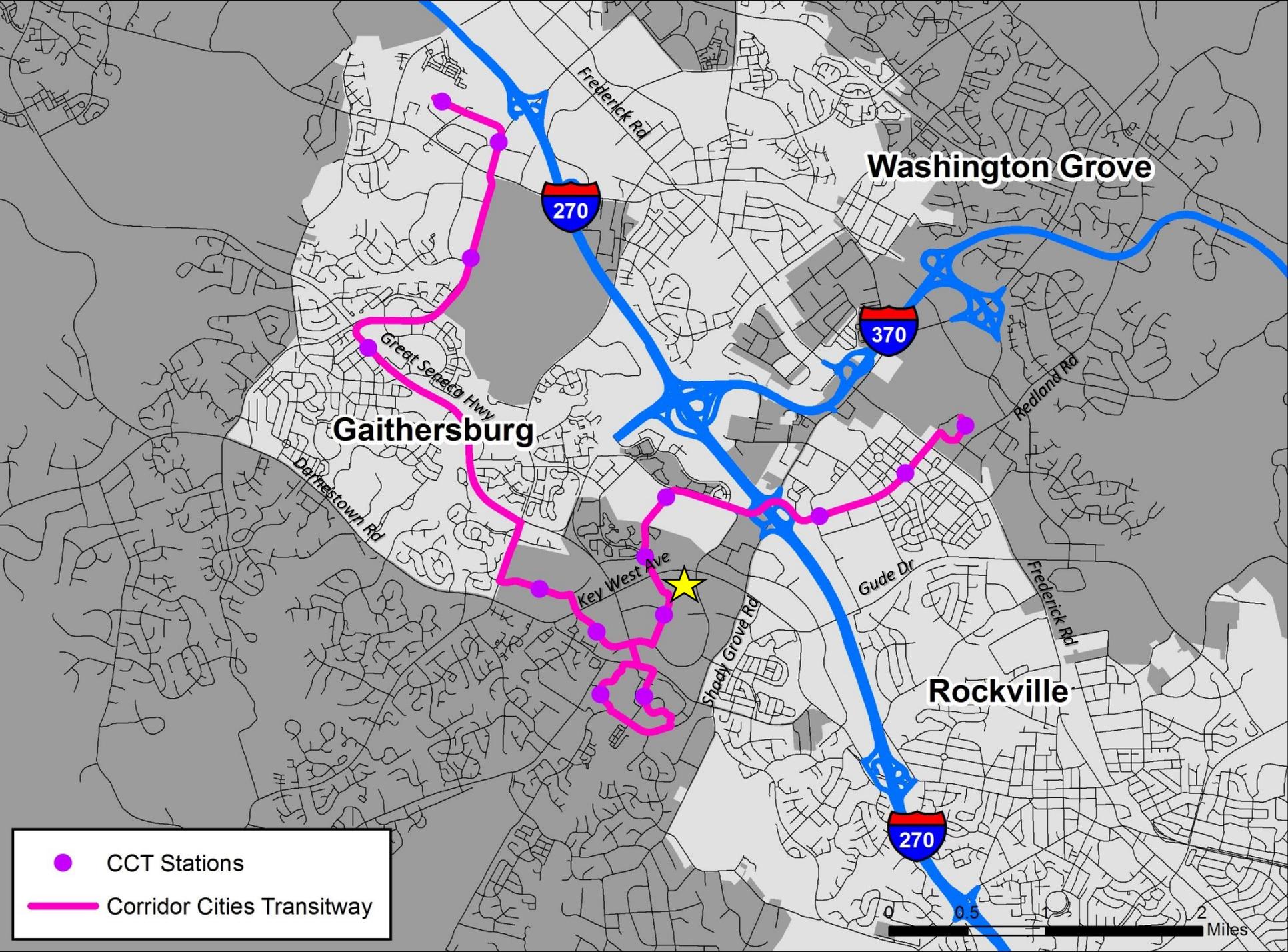
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# Great Seneca Science Corridor Implementation Advisory Committee

- Established by Planning Board in 2011

- Recommendation:

*“develop a regional bikeway network plan to maximize the coordination, connectivity, and effectiveness of the regional bikeway systems in providing access to Phase 1 of the CCT stations and the communities they serve.”*



**Washington Grove**

**Gaithersburg**

**Rockville**



● CCT Stations

— Corridor Cities Transitway



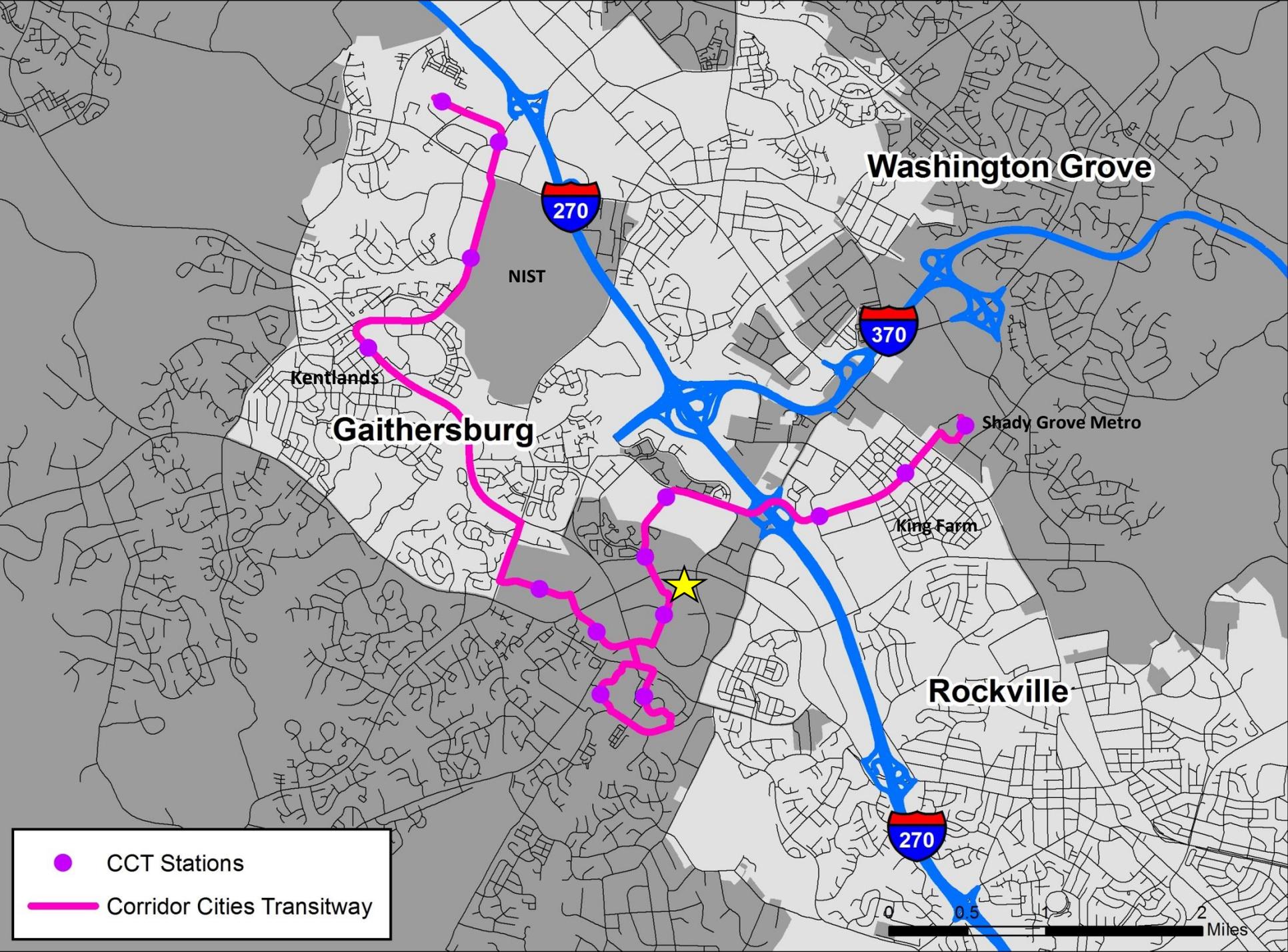
# Objectives

Facilitate coordination with:

- Corridor Cities Transitway
- LSC Loop
- Development applications

Preserve the ability to:

- Create a high-quality bicycle network that connects CCT stations to the surrounding community, while the master plan is under development.



Washington Grove

270

NIST

Kentlands

Gaithersburg

370

Shady Grove Metro

King Farm

Rockville

270

● CCT Stations

— Corridor Cities Transitway

0 0.5 2 Miles

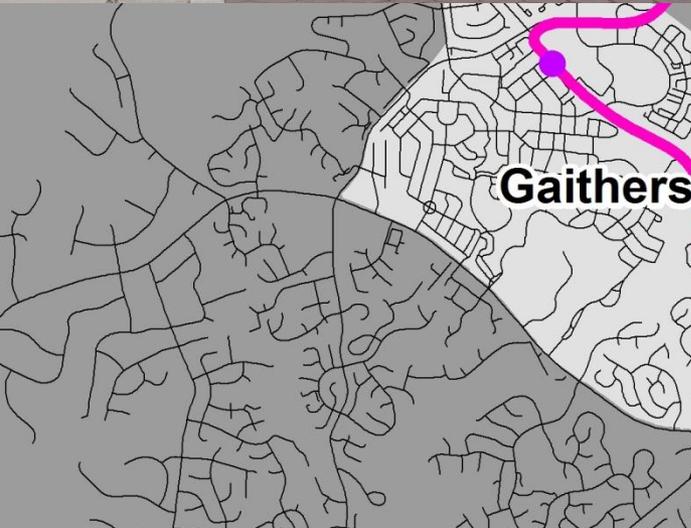
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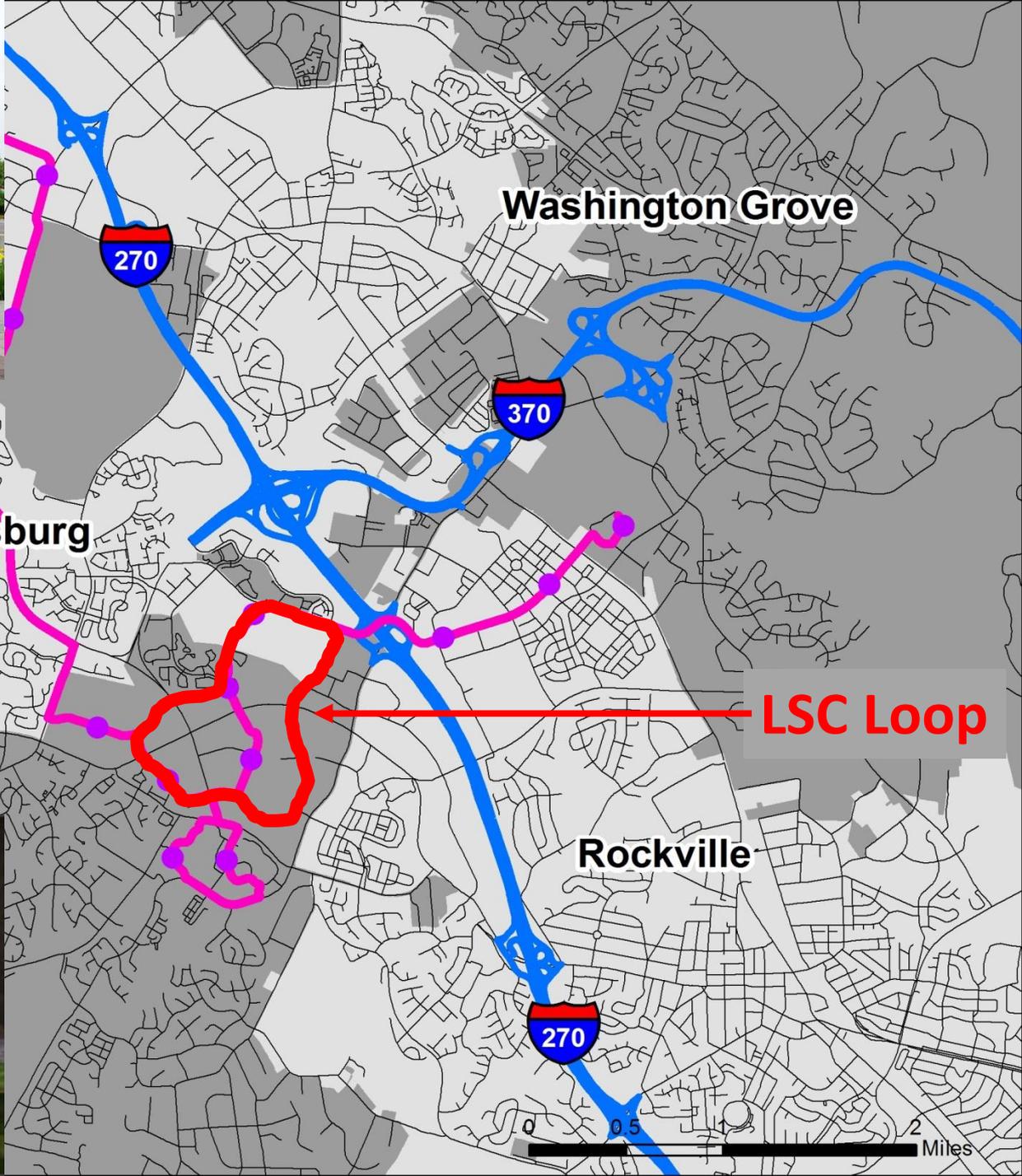
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On-Road with CCT



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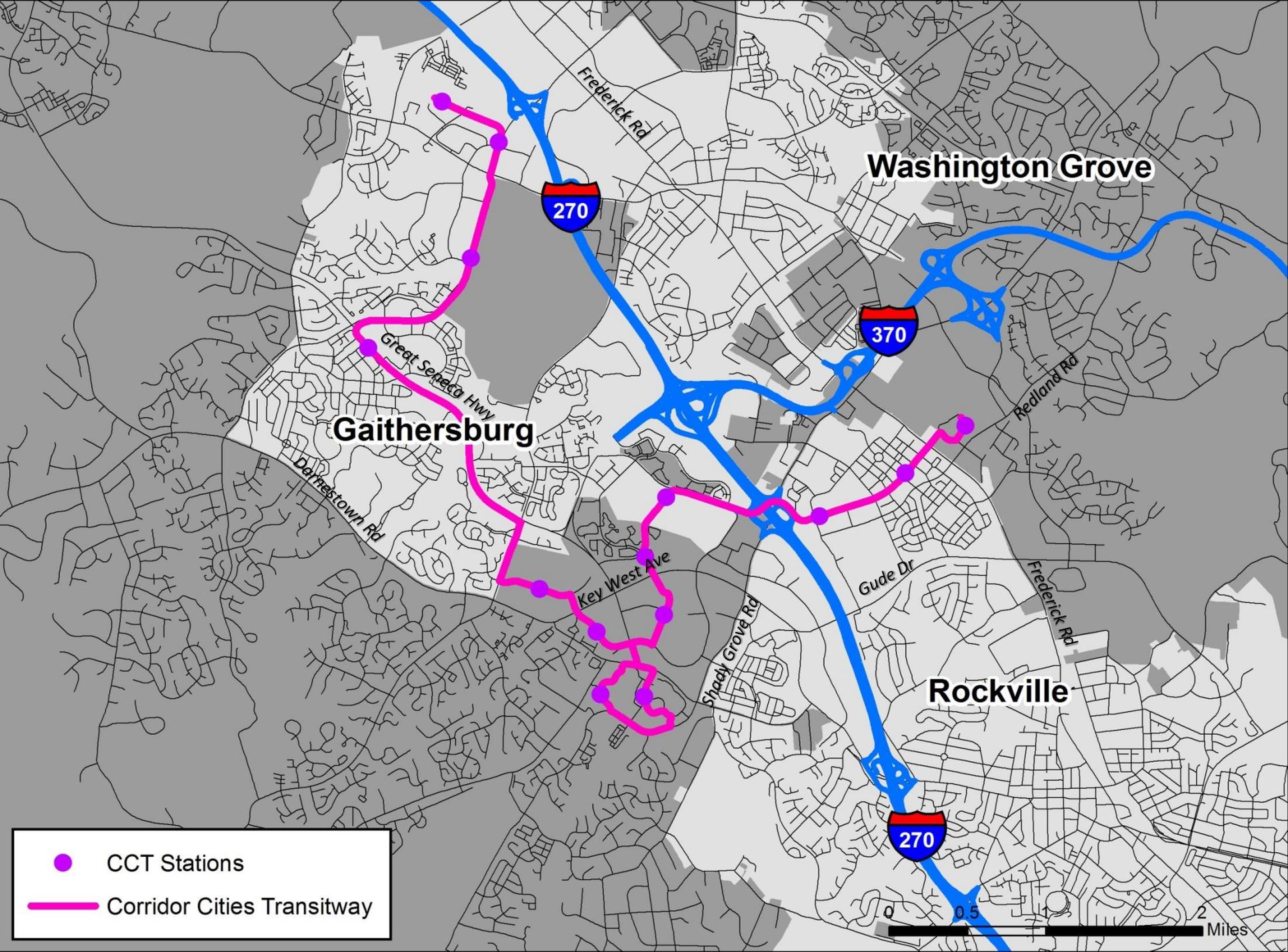
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**Washington Grove**

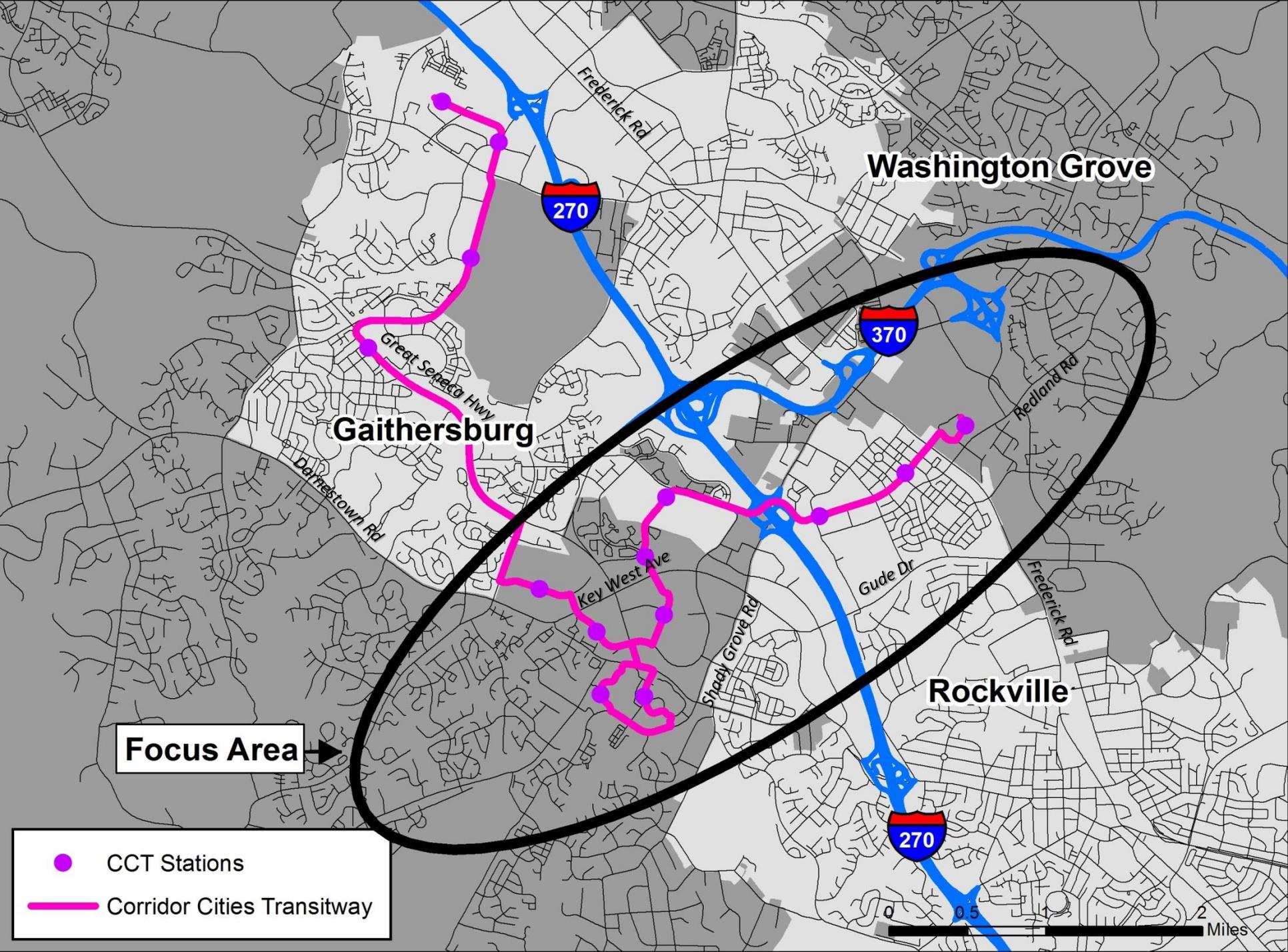
**Gaithersburg**

**Rockville**

● CCT Stations

— Corridor Cities Transitway





Washington Grove

270

370

Gaithersburg

Great Seneca Hwy  
Dorrestown Rd

Redland Rd

Key West Ave

Gude Dr

Frederick Rd

Shady Grove Rd

Rockville

Focus Area

270

- CCT Stations
- Corridor Cities Transitway

0 0.5 2 Miles

# Scope

- Bikeway Recommendations
- Bicycle Parking at Transit Stations
- Refinements likely
  - methodology report (March 2016)
  - particularly outside station areas

**Least Separation**

**Most Separation**



**SHARROW  
(2A)**



**STANDARD BIKE  
LANE (2B)**



**BUFFERED BIKE  
LANE (2C)**



**TWO-WAY  
CYCLE TRACK (2D)**



**SHARED USE  
PATH (2E)**

# Scope

- Bikeway Recommendations
- Bicycle Parking at Transit Stations
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**Union Station, Washington, DC**



**Berkeley, CA**

# Scope

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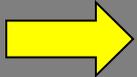
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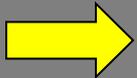
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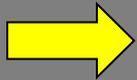
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# RESEARCH

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# Four Types of Transportation Cyclists



Strong and Fearless (~1%)



Enthused and Confident (~10%)

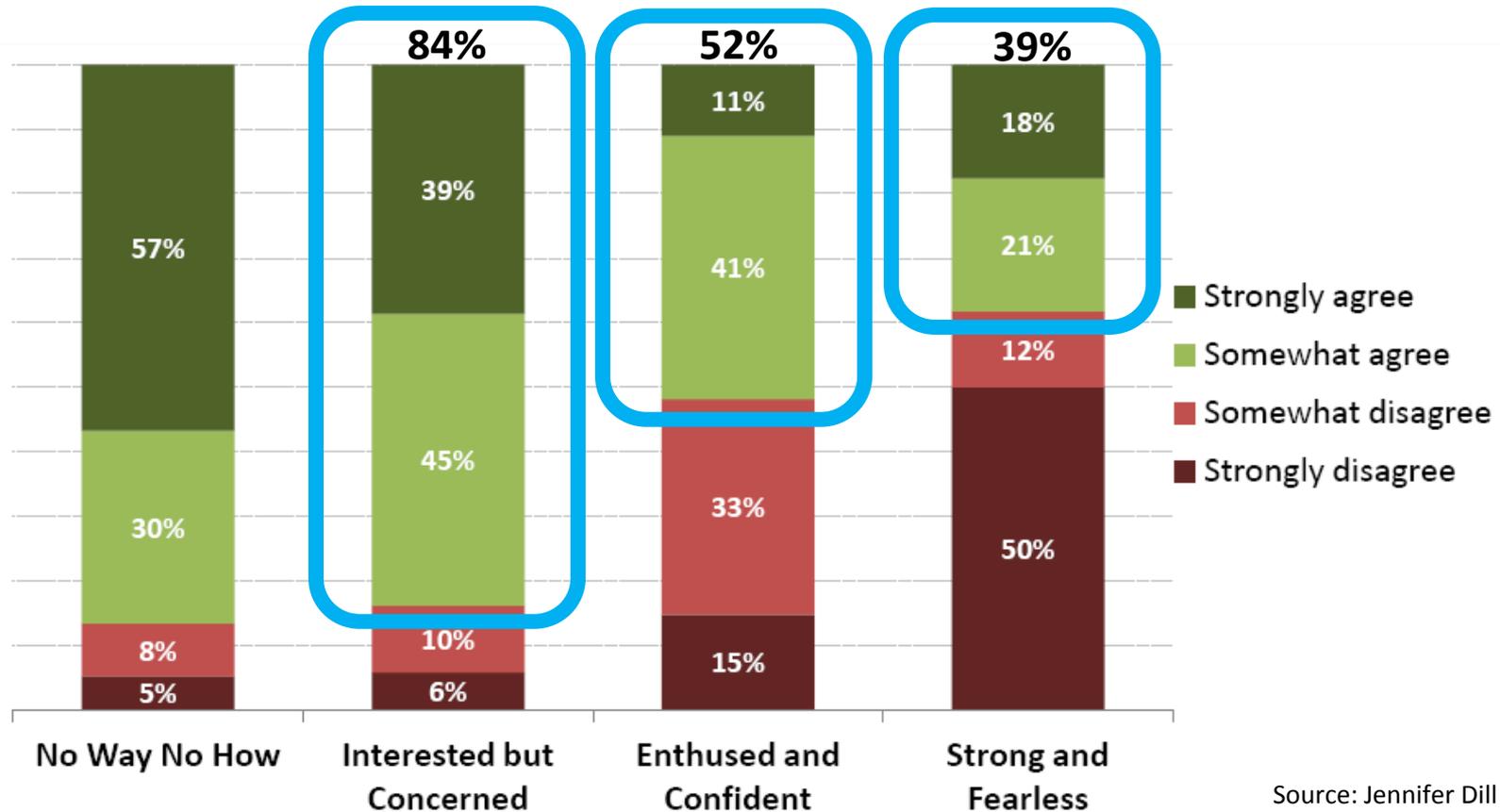


Interested but Concerned (~60%)



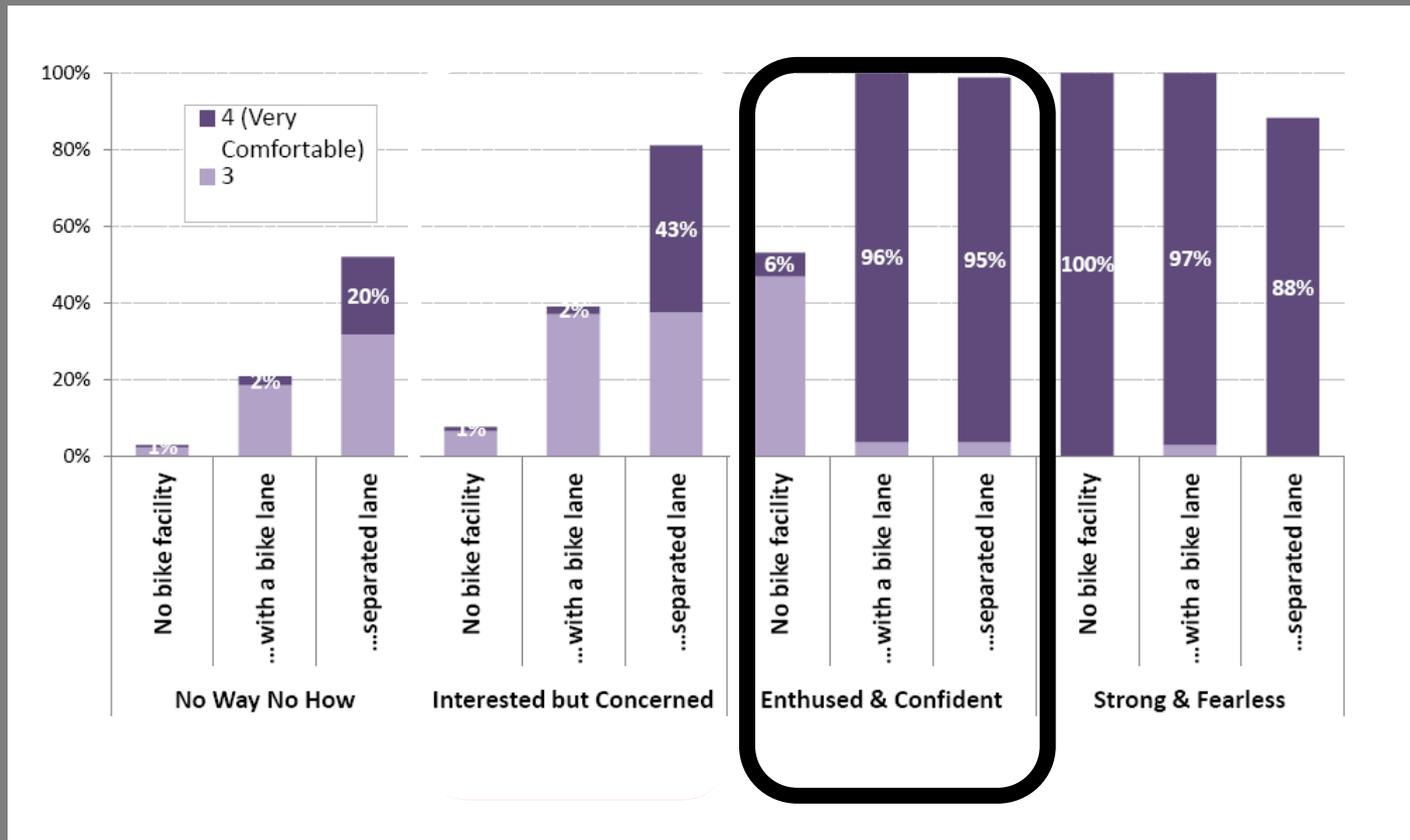
No Way, No How (~30%)

“If or when I ride a bike, I’m concerned about being hit by a motor vehicle...”



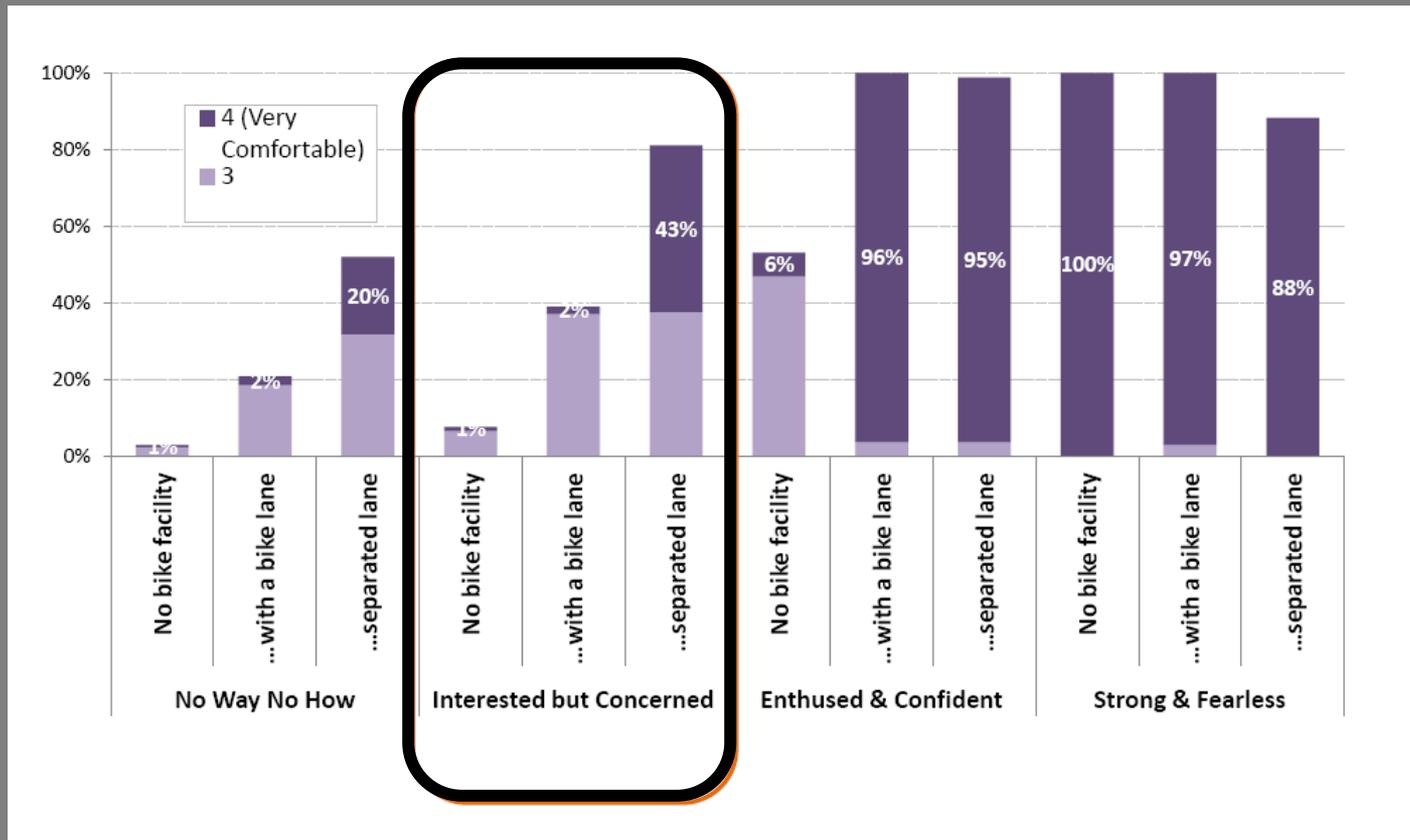
Source: Jennifer Dill

# “I’m comfortable riding on a 4-lane road with a 30 mph speed limit”



“Enthused and Confident” group is comfortable riding on arterial roads with bike lanes

# “I’m comfortable riding on a 4-lane road with a 30 mph speed limit”



“Interested but Concerned” group requires buffered bike lanes or cycle tracks on arterial roads

# Approach

All roads are part of the bike network...

...but some need bicycle facilities to make them bikeable by the general population

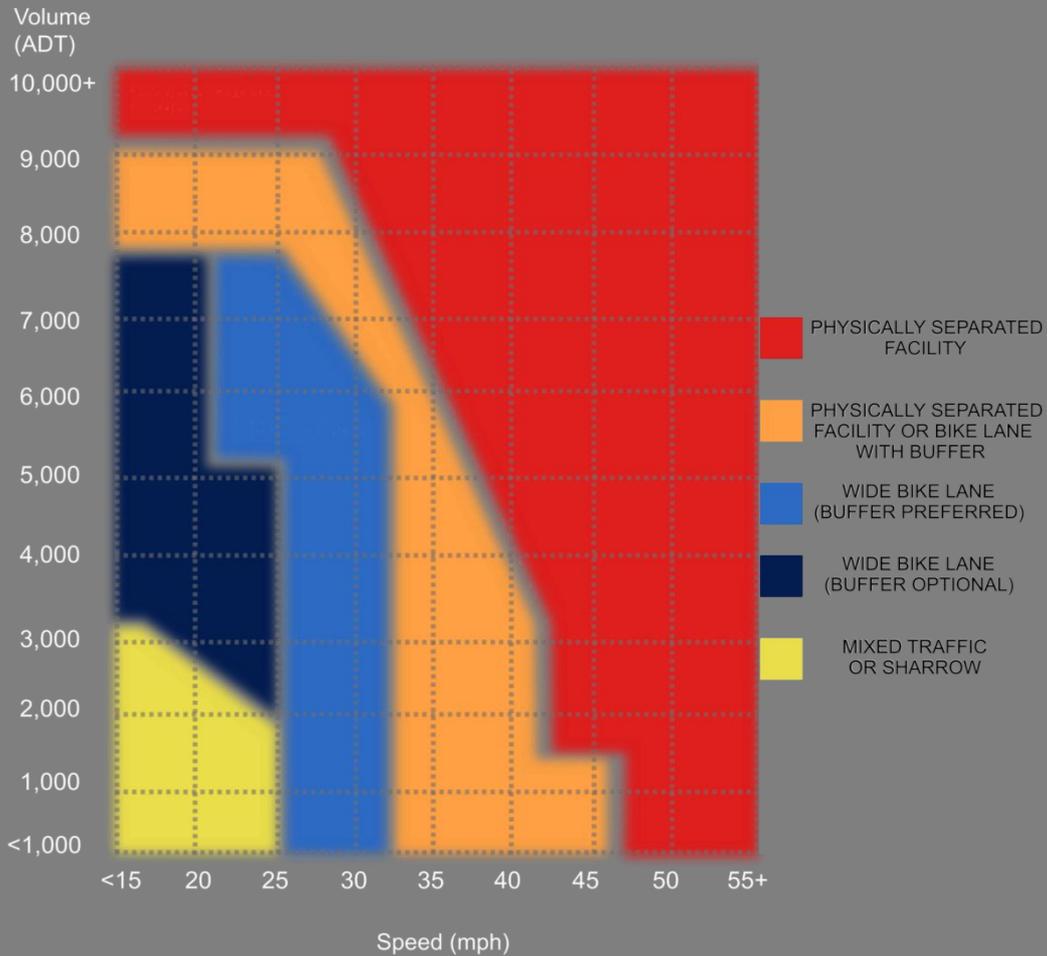


# PLANNING TOOLS

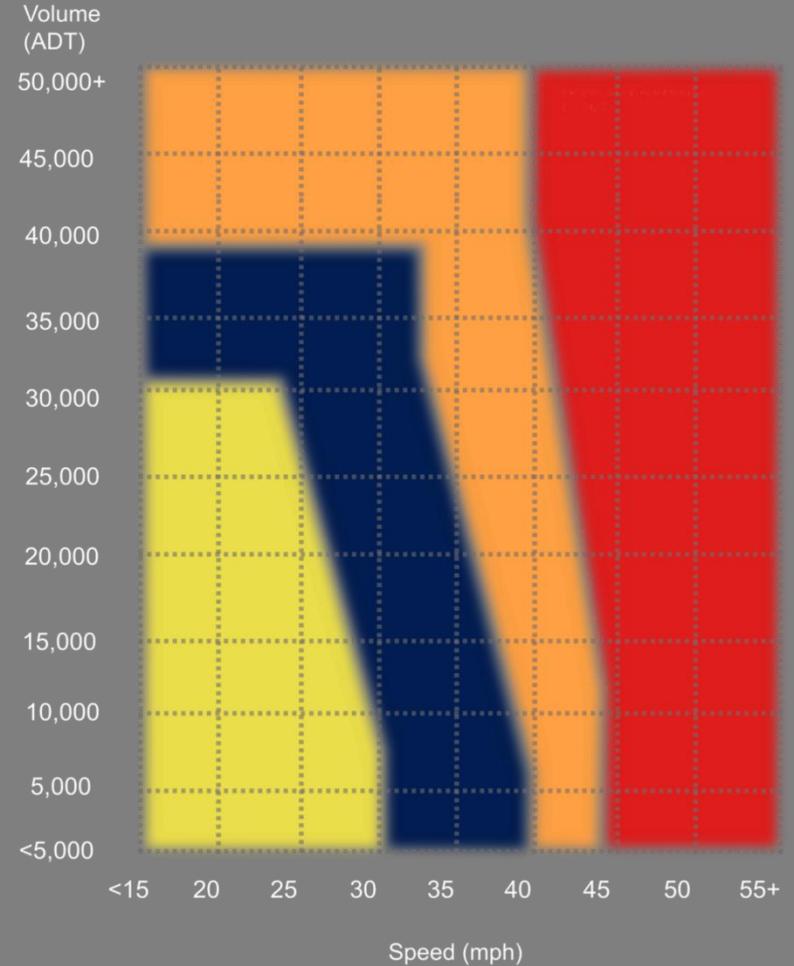
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# TOOL #1: VOLUME / SPEED CHARTS

## INTERESTED BUT CONCERNED



## CONFIDENT CYCLISTS



Great Seneca Highway (south of I-270 ramp)

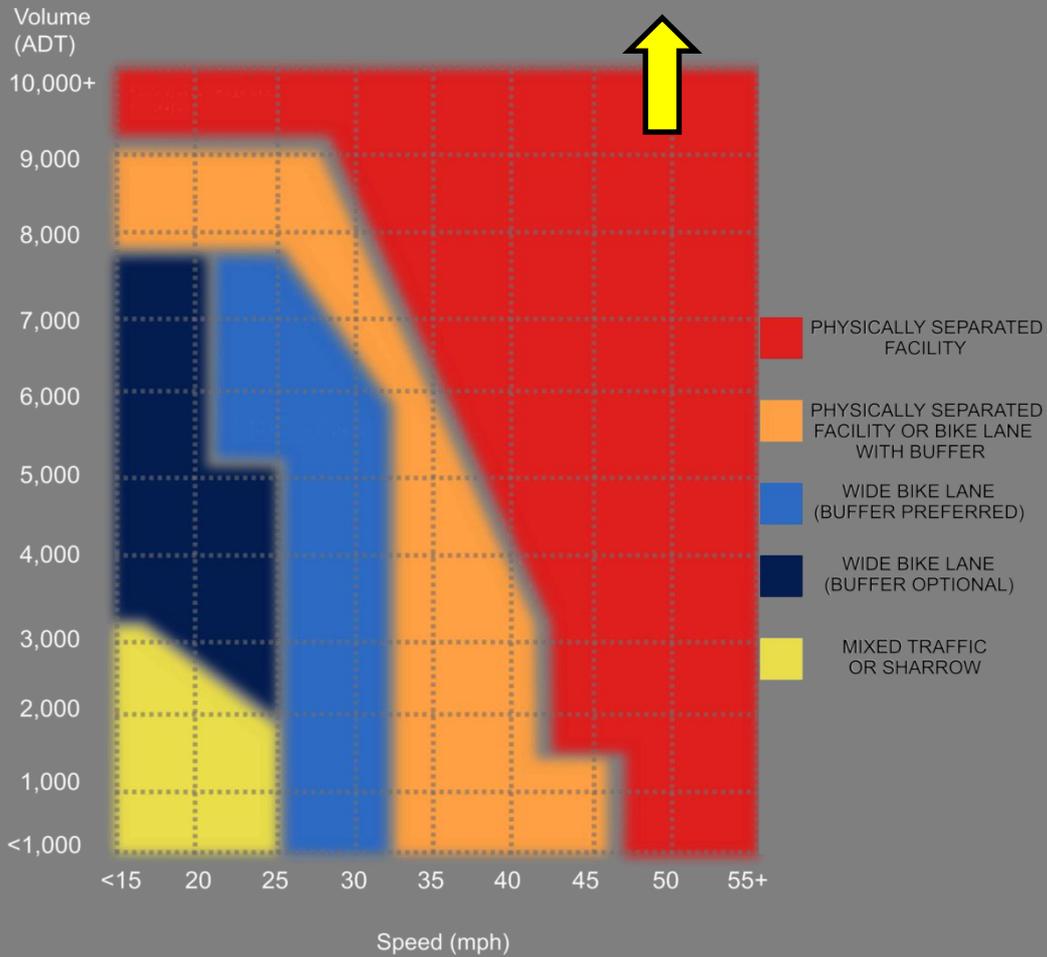
Speed: 50 mph Volume: 29,000



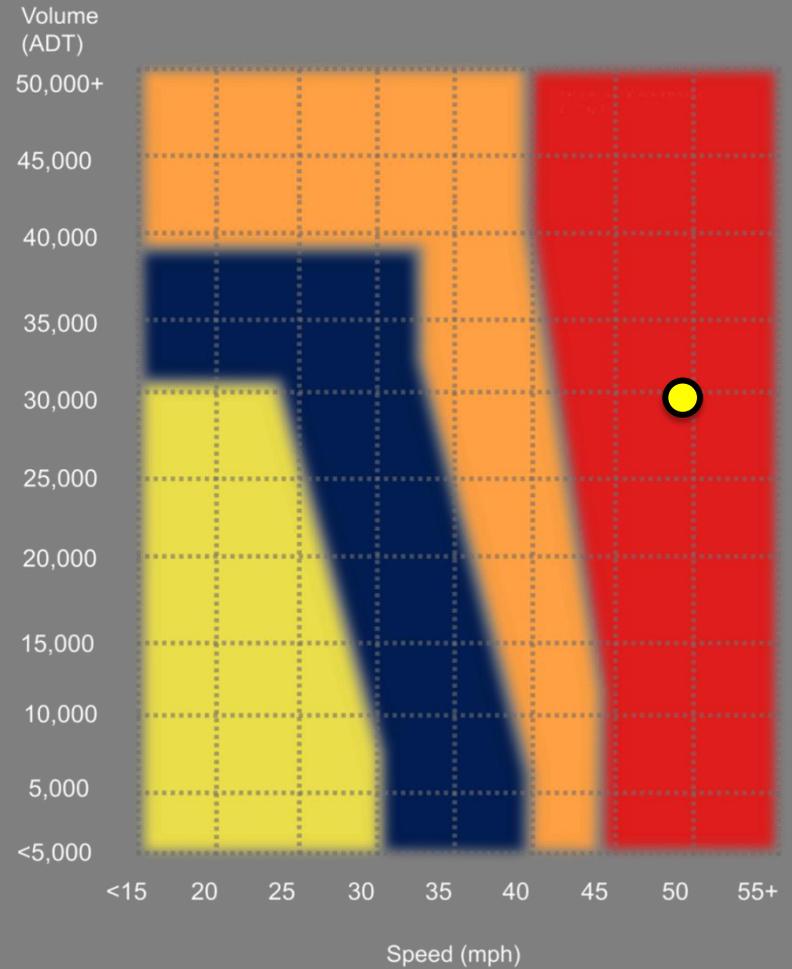
# Great Seneca Highway (south of I-270 ramp)

Speed: 50 mph Volume: 29,000

## INTERESTED BUT CONCERNED



## CONFIDENT CYCLISTS



Omega Drive (north of Key West Ave)

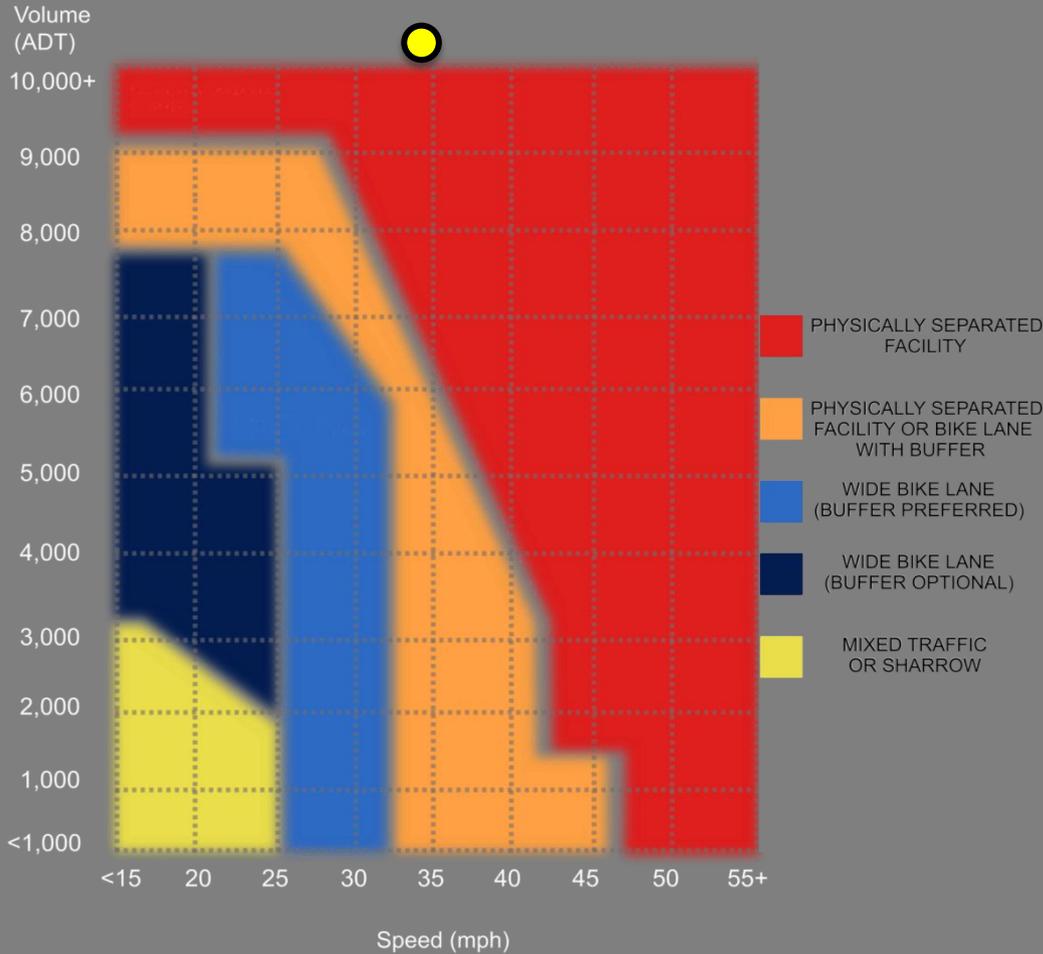
Speed: 35 mph Volume: 10,500



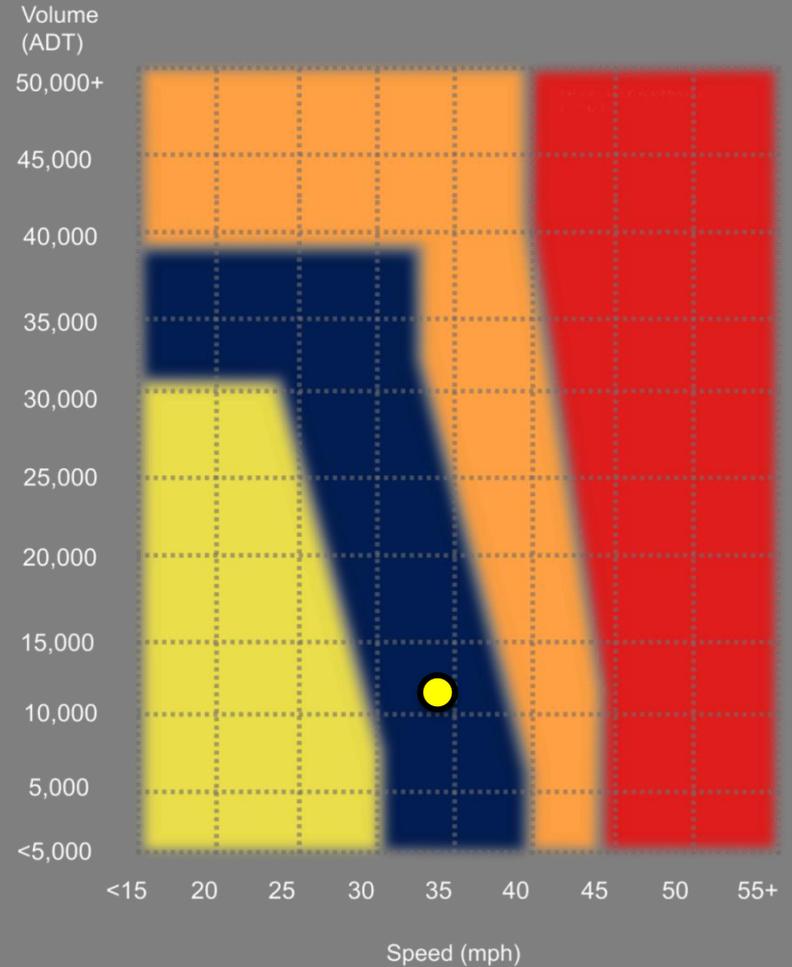
# Omega Drive (north of Key West Ave)

Speed: 35 mph Volume: 10,500

## INTERESTED BUT CONCERNED



## CONFIDENT CYCLISTS



Dufief Mill Road (south of Muddy Branch Road)

Speed: 35 mph Volume: 12,500





# Tool #2: Level of Traffic Stress\*



- High stress, suitable for 1% of the population
- Equivalent to bicycling in traffic on 40+ mph roads



- Moderate stress, suitable for 10% of the population
- Equivalent to bicycling on 4-lane roads w/ bike lanes



- Low stress, suitable for 60% of the population
- Equivalent to low-volume / low-speed roads



- Very low stress, requires little attention
- Equivalent to neighborhood roads, cycle tracks, trails

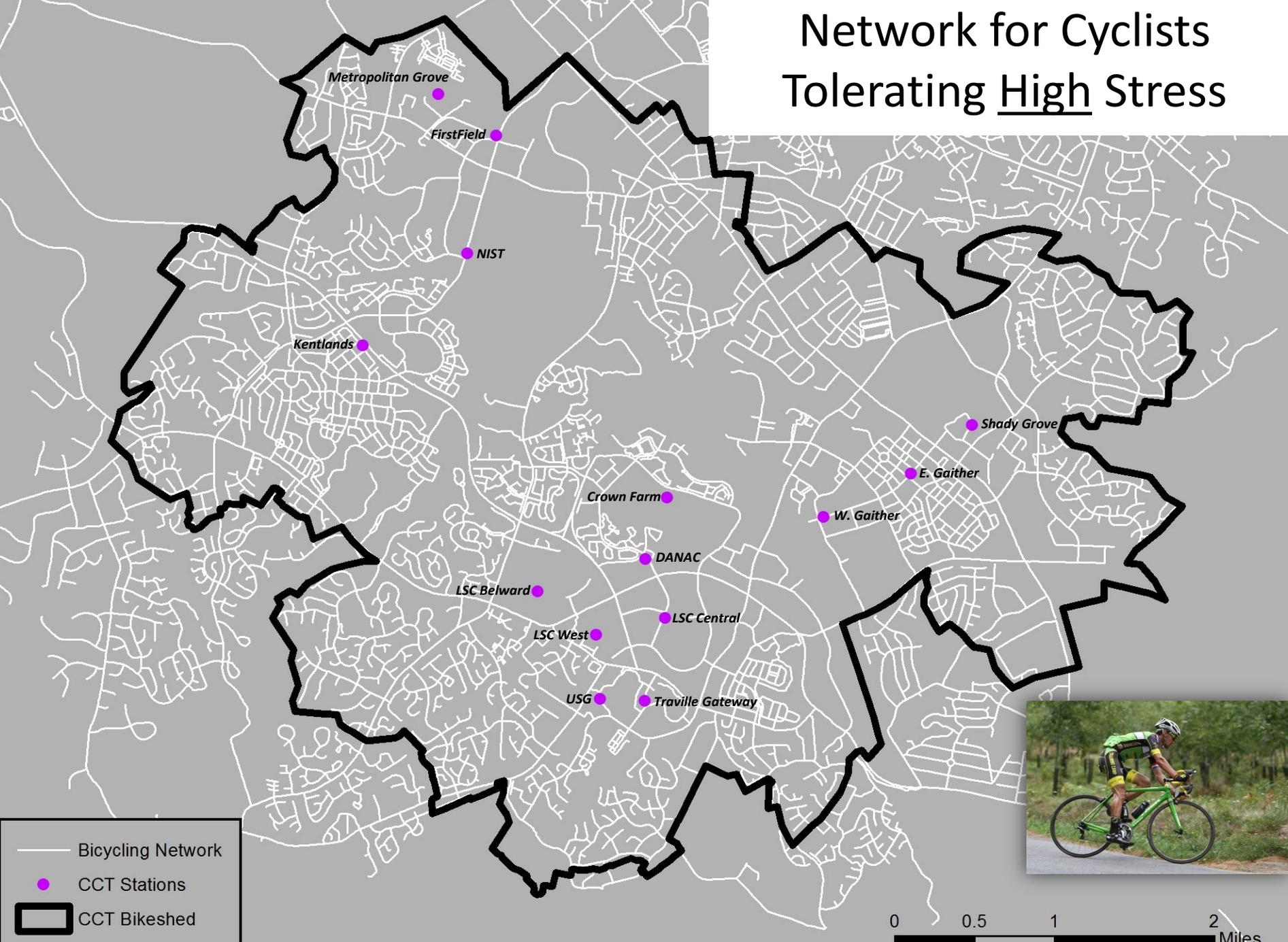
# What are Causes of Stress When Riding a Bike?

- High traffic volumes
- High traffic speeds
- Frequent parking turnover
- Crossing major roads without a signal
- Bike lane ends

# HOW CONNECTED IS THE BICYCLE NETWORK?

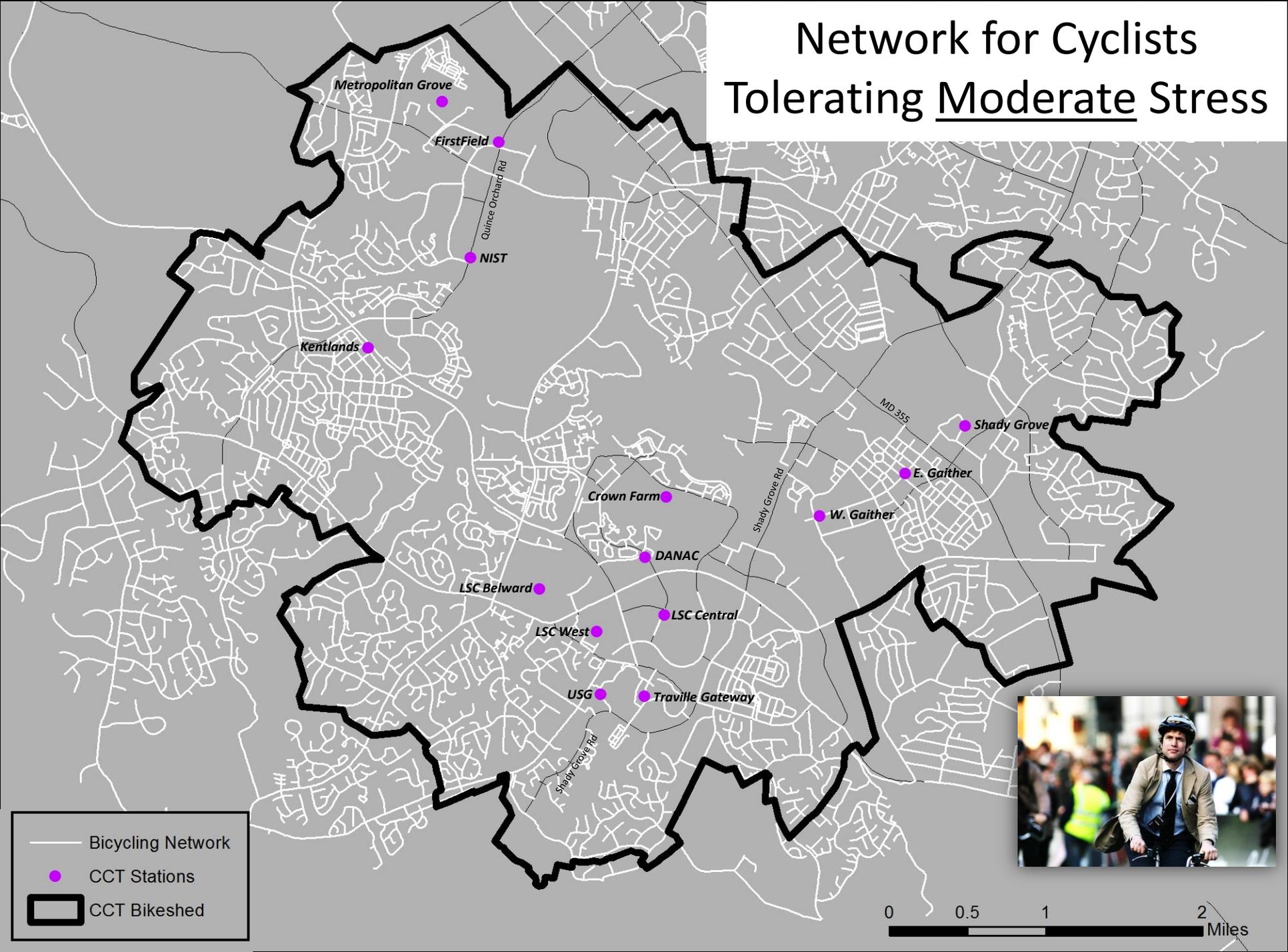
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# Network for Cyclists Tolerating High Stress

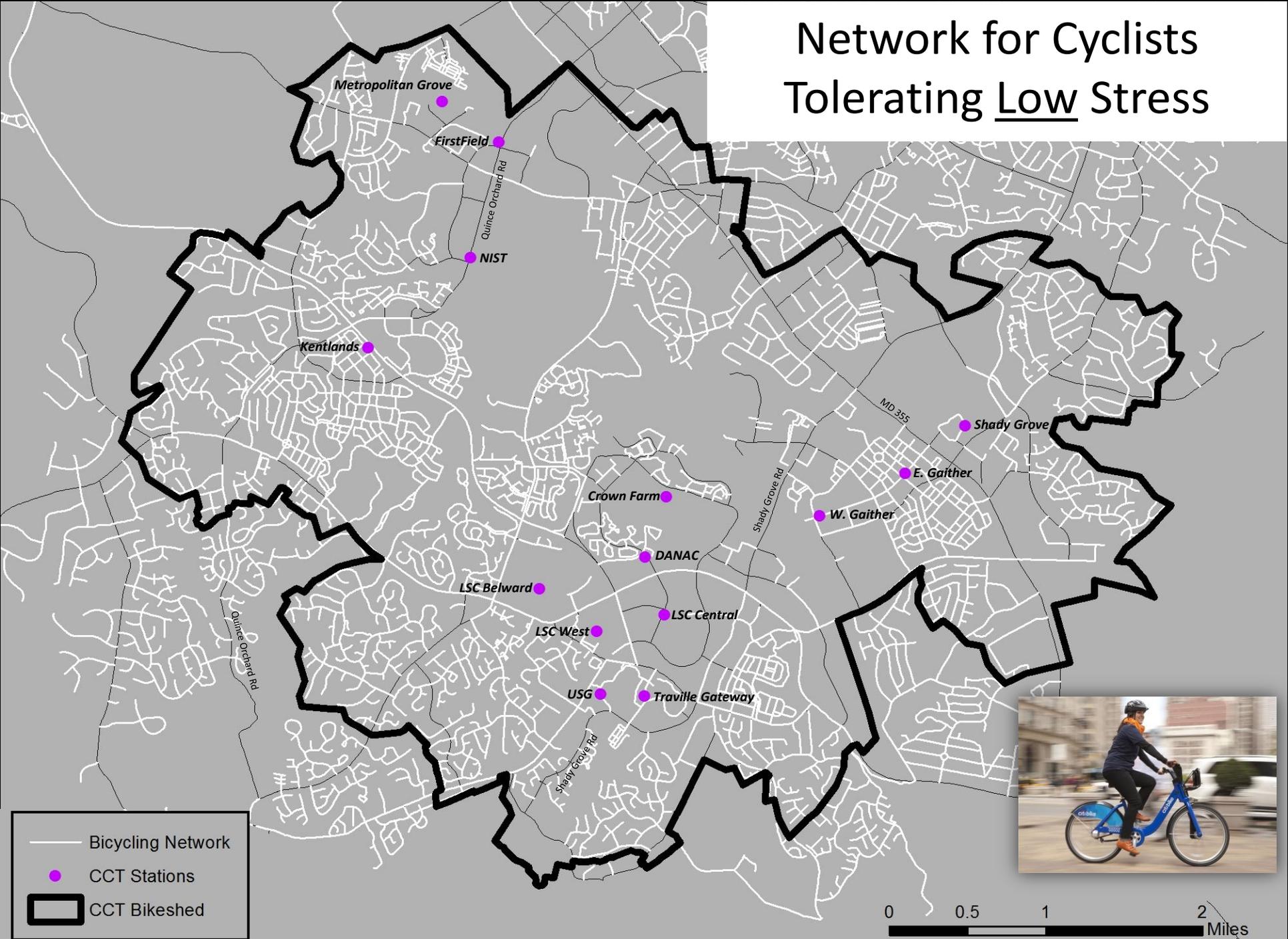


0 0.5 1 2 Miles

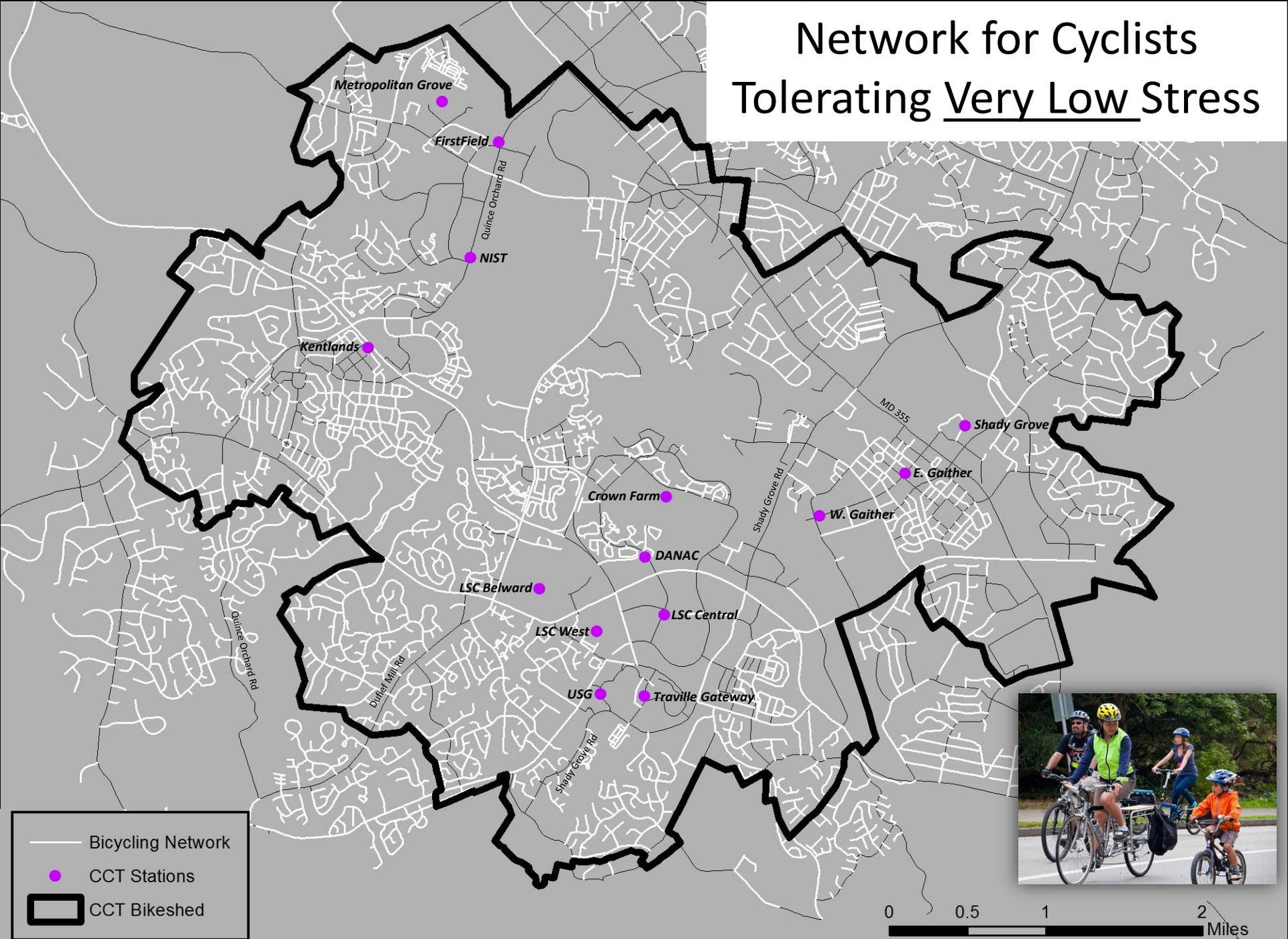
# Network for Cyclists Tolerating Moderate Stress



# Network for Cyclists Tolerating Low Stress



# Network for Cyclists Tolerating Very Low Stress



- Bicycling Network
- CCT Stations
- ▭ CCT Bikeshed

0 0.5 1 2 Miles



# How Can You Get Involved?

- Attend Meetings
- Engage with Staff
- Fill Out Comment Cards
- Email or Phone



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Questions?

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Patrick Butler

Steve Findley

[www.montgomeryplanning.org/bikeplan](http://www.montgomeryplanning.org/bikeplan)