

PBIC Webinar Series

Creating Active Routes to Everyday Destinations

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City of Raleigh Department of Parks,
Recreation and Cultural Resources



May 2, 2019



PBIC Webinar

pedbikeinfo.org



@pedbikeinfo



Housekeeping

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Dial into the phone line instead of using “mic & speakers”

⇒ **Webinar issues?**

Re-Load the webpage and log back into the webinar. Or send note of an issue through the Question box.

⇒ **Questions?**

Submit your questions at any time in the Questions box.



Archive and Certificates

Archive posted at www.pedbikeinfo.org/webinars

- ⇒ Copy of presentations
- ⇒ Recording (within 1-2 days)
- ⇒ Links to resources

Follow-up email will include...

- ⇒ Link to certificate of attendance
- ⇒ Information about webinar archive

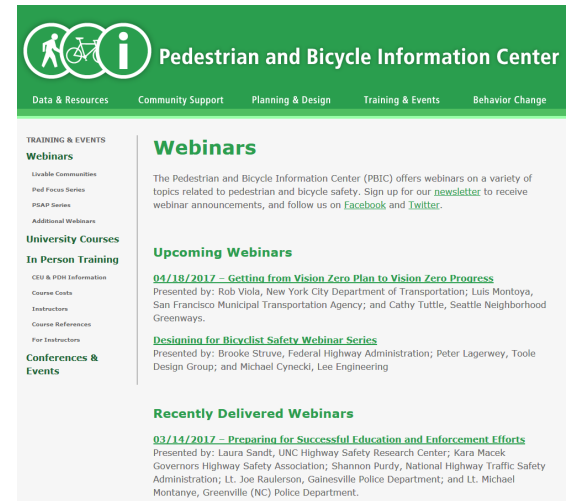
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The screenshot shows the Pedestrian and Bicycle Information Center (PBIC) website. The header includes the PBIC logo and navigation links: Data & Resources, Community Support, Planning & Design, Training & Events, and Behavior Change. The main content area is titled 'Webinars' and includes a description of the center's mission, a list of upcoming webinars (e.g., '04/18/2017 - Getting from Vision Zero Plan to Vision Zero Progress'), and a list of recently delivered webinars (e.g., '03/14/2017 - Preparing for Successful Education and Enforcement Efforts').



The screenshot shows the Facebook page for the Pedestrian and Bicycle Information Center. The page features the PBIC logo, the name 'Pedestrian and Bicycle Information Center', and the website URL 'www.pedbikeinfo.org'. It includes a 'Send Message' button, a 'Photos' section with a featured image for the 'VISION ZERO STRATEGIES SERIES', and a 'Government Organization' section with a mission statement and contact information.

Discussion

⇒ Send us your questions 

⇒ Follow up with us:

⇒ Ken Rose kfr2@cdc.gov

⇒ Chris Kochtitzky csk3@cdc.gov

⇒ TJ McCourt thomas.mccourt@raleighnc.gov

⇒ General Inquiries pbic@pedbikeinfo.org

⇒ Archive at www.pedbikeinfo.org/webinars



Making the Case:

Translating the Best Science into Effective Practice in Real World Settings

Ken Rose, MPA

Senior Advisor

Physical Activity and Health Branch

Chris Kochtitzky, MSP

Senior Advisor

Physical Activity and Health Branch

The findings and conclusions in this presentation are those of the author and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

What does walking and biking
have to do with public health?

One Of The Best Things People Can Do To Improve Their Health



Benefits for Children

- Improves aerobic fitness
- Improves bone health
- Improves academic performance



Benefits for Adults

- Active adults generally live longer and are at less risk for serious health conditions like -
 - Heart disease
 - Some cancers
 - Type 2 diabetes
 - Obesity
- For people with chronic diseases, it can help improve disease management



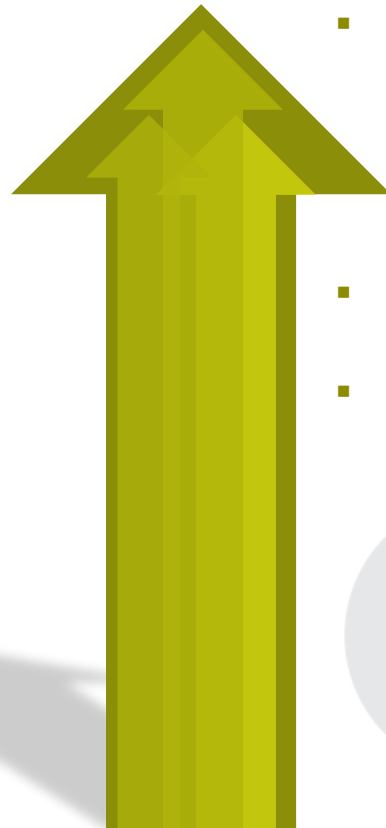
Benefits for Healthy Aging

- Reduces risk of falling
- Extends years of active life
- Delays onset of cognitive decline
- Helps prevent weak bones and muscle loss

Just to name a few...



Physical Activity Benefits Our Communities



- Active and walkable communities can help
 - Increase retail activity and employment
 - Increase property values
 - Support neighborhood revitalization
 - Reduce health care costs
- Walkable communities can improve safety for people who walk or roll in wheelchairs, ride bicycles, and drive
- Physical activity improves productivity because physically active people tend to take fewer sick days





Too few Americans get the recommended amount of physical activity

31
MILLION



About **31 million** adults aged 50 or older are inactive, meaning they get no physical activity beyond that of daily living



Only **1 in 5** adults and **1 in 5** high school students fully meet physical activity guidelines for aerobic and muscle-strengthening activities

Inadequate Physical Activity Impacts Our National Security and Military Readiness



- Both obesity and low levels of physical fitness **increase the risk for injury** among active military personnel
- **Nearly 1 in 4 young adults are too heavy** to serve in our military
- **Obesity has risen 61%** among active duty service members



Inadequate Physical Activity and Obesity Costs Lives And Dollars

1 in 10 → Inactivity contributes to premature deaths

**\$117
BILLION** →  Inadequate levels of physical activity are associated with \$117 billion in annual health care costs



www.cdc.gov/activepeoplehealthynation

A national initiative led by CDC to help

27 million Americans

become more physically active by 2027. Increased physical activity can improve health, quality of life, and reduce healthcare costs.





CDC Implementation of *Active People*

Activity-friendly Routes to Everyday Destinations (Active Routes to Schools)

Pedestrian or Bicycle Transportation Systems

- Pedestrian infrastructure
- Bicycle infrastructure
- Public transit infrastructure and access



Land Use and Environmental Design

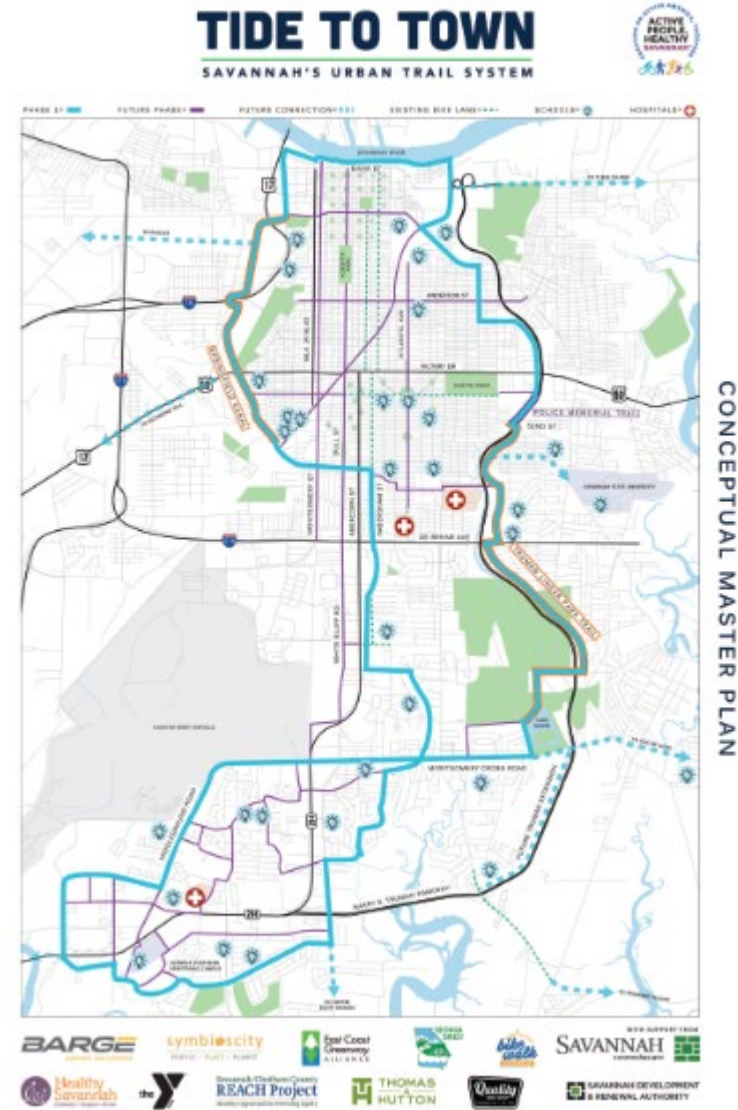
- Proximity to destinations
- Mixed land use
- Residential density
- Parks and recreational facilities



Routes + Destinations



How can this help you?

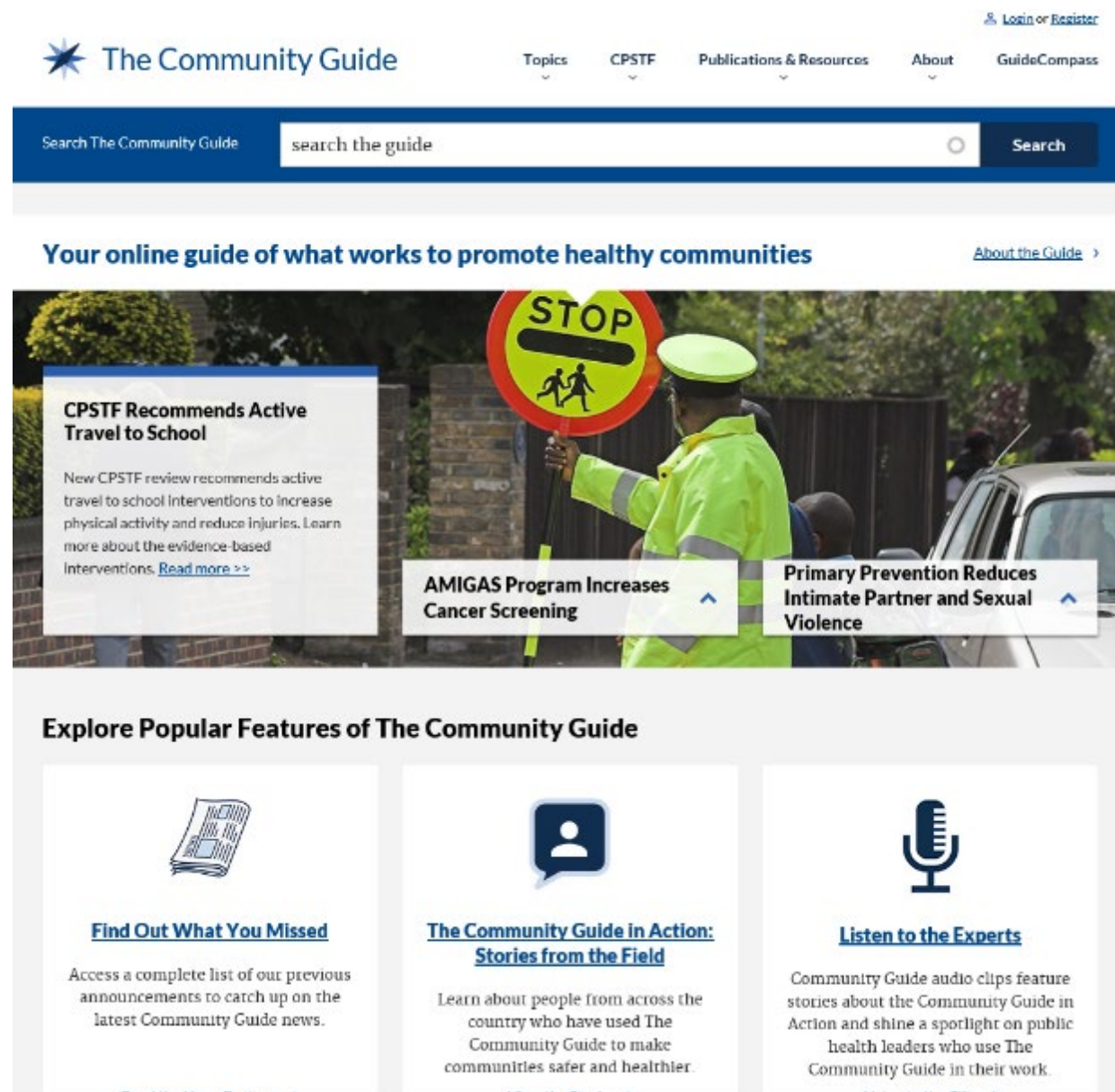




The Evidence To Make Your Case

The Community Guide

- Systematic reviews of population-based interventions
 - Communities
 - Health care systems
- Methods for the broad consideration of evidence on effectiveness and other issues
- Reviews support the findings of the Community Preventive Services Task Force (CPSTF)





Community Preventive Services Task Force (CPSTF)

2019 Community Preventive Services Task Force

- Is an independent, nonfederal, panel of public health and prevention experts
- Oversees the systematic review process and development of methods
- Produces recommendations and identifies evidence gaps to help inform decision making

- Jonathan C. Fielding, MD, MPH, MBA
- Robert L. Johnson, MD, FAAP
- Bruce N. Calonge, MD, MPH
- Douglas Campos-Outcalt, MD, MPA
- Marshall Chin, MD, MPH, FACP
- Jamie F. Chriqui, PhD
- John M. Clymer
- Ana V. Diez Roux, MD, PhD, MPH
- Ron Goetzel, PhD
- Shiriki Kumanyika, PhD, MPH
- Gilbert Omenn, MD, PHD
- Alison Cuellar, PhD
- Patrick Remington, MD, MPH
- Tista Shilpi Ghosh, MD, MPH
- Susan M. Swider, PhD, APHN-BC

UCLA School of Public Health
UMD-New Jersey Medical School
Colorado Trust
Mercy Care Plan
University of Chicago
University of Illinois
Loma Linda University
Drexel University
Johns Hopkins University
University of Pennsylvania
University of Michigan
George Mason University
University of Wisconsin
Colorado Dept. of Public Health
Rush University

Community Guide Recommendations



The Community Preventive Service Task Force recommends the following to increase physical activity:

- Based on 90 studies, built environment strategies that combine one or more interventions to improve pedestrian or bicycle transportation systems (*Activity-friendly Routes*) with one or more land use and environmental design interventions (*Everyday Destinations*).
- Based on 52 studies, interventions to increase *Active Travel to School* that utilize a combination of engineering, education, encouragement, & enforcement.
- Based on 9 studies, *social support interventions in community settings* (e.g., setting up walking or cycling groups to provide friendship and support).



The Community Guide

 Community
Preventive Services
Task Force

Economic Benefits of Active Travel to School Interventions Exceed the Cost

The Community Preventive Services Task Force (CPSTF) finds [economic benefits exceed the cost for active travel to school interventions](#), based on a systematic review of economic evidence. Included studies of U.S. Safe Routes to School programs reported economic benefits of averted injuries that were a result of street-level engineering improvements.





14 evidence-based community-wide population health interventions:

- Improve health of community (not clinical/patient-oriented)
- Demonstrate positive health impact in 5 yrs or less & cost effectiveness & savings over time



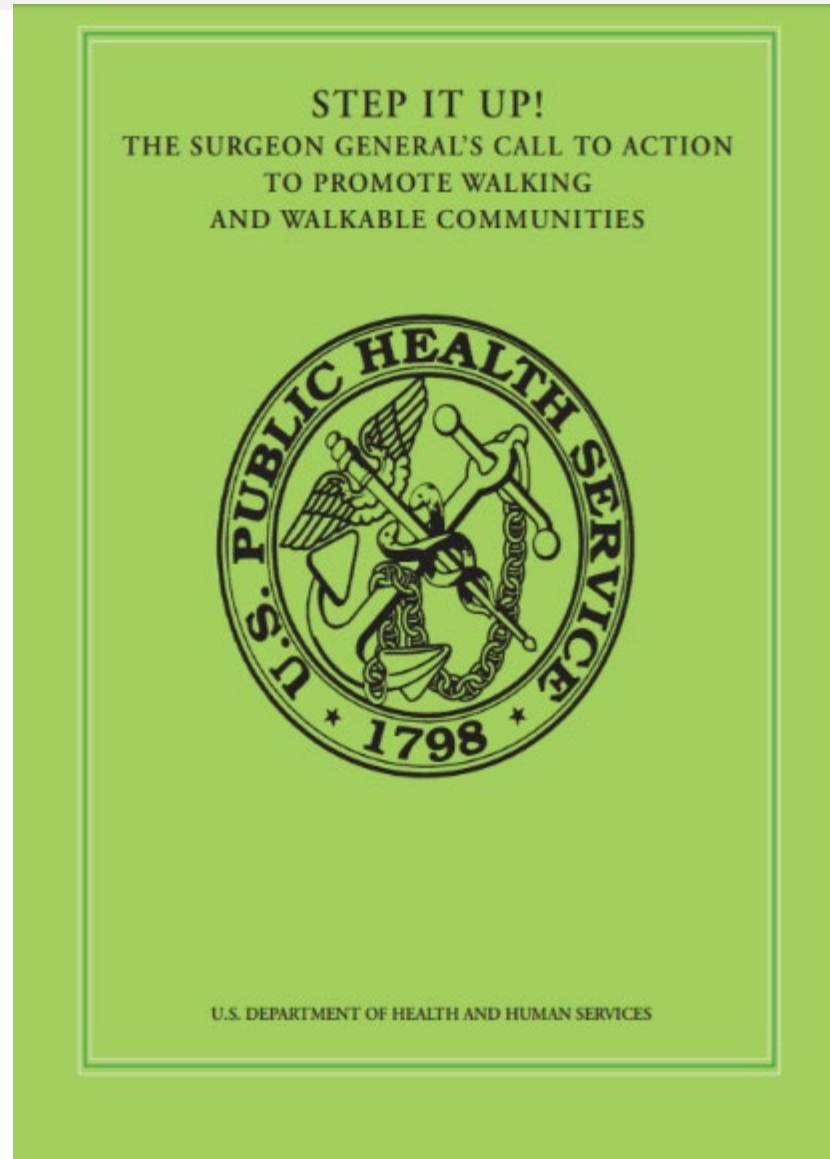
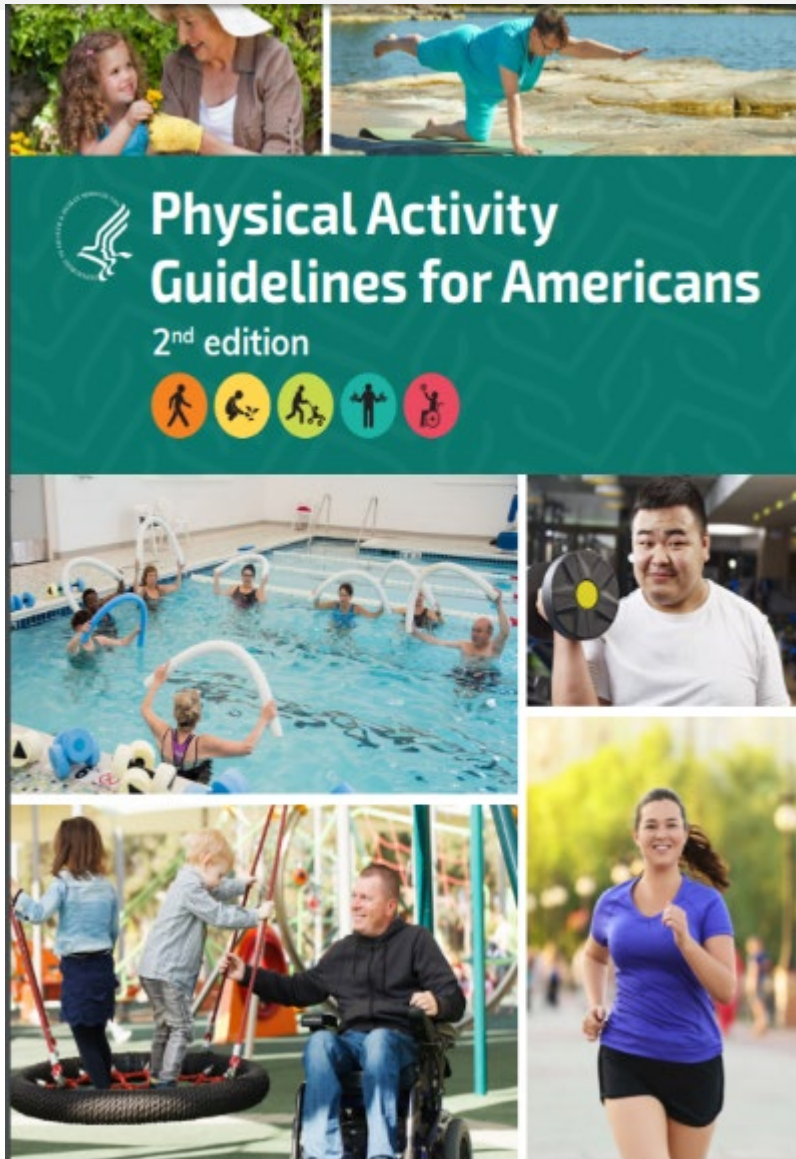
CDC HI-5 Recommendation



Based on a systematic review of the research, CDC's HI-5 Initiative recommends *introducing or expanding public transportation options* in order to:

- Provide opportunities for increased physical activity in the form of walking or biking on either end of the trip
- Reduce motor vehicle emissions and the significant health burdens they represent.

Other Supporting Resources





The Tools and Resources to You Need

Implementation Tool and Resources



Bicycling and Walking in the U.S.



BICYCLING AND WALKING
IN THE UNITED STATES

2

BENCH

BICYCLING AND WALKING

IN THE

UNITED STATES

20

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2014

BICYCLING
& WALKING
in the United States

2014

Alliance for Biking & Walking

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Alliance for Biking & Walking



prepared by

Alliance



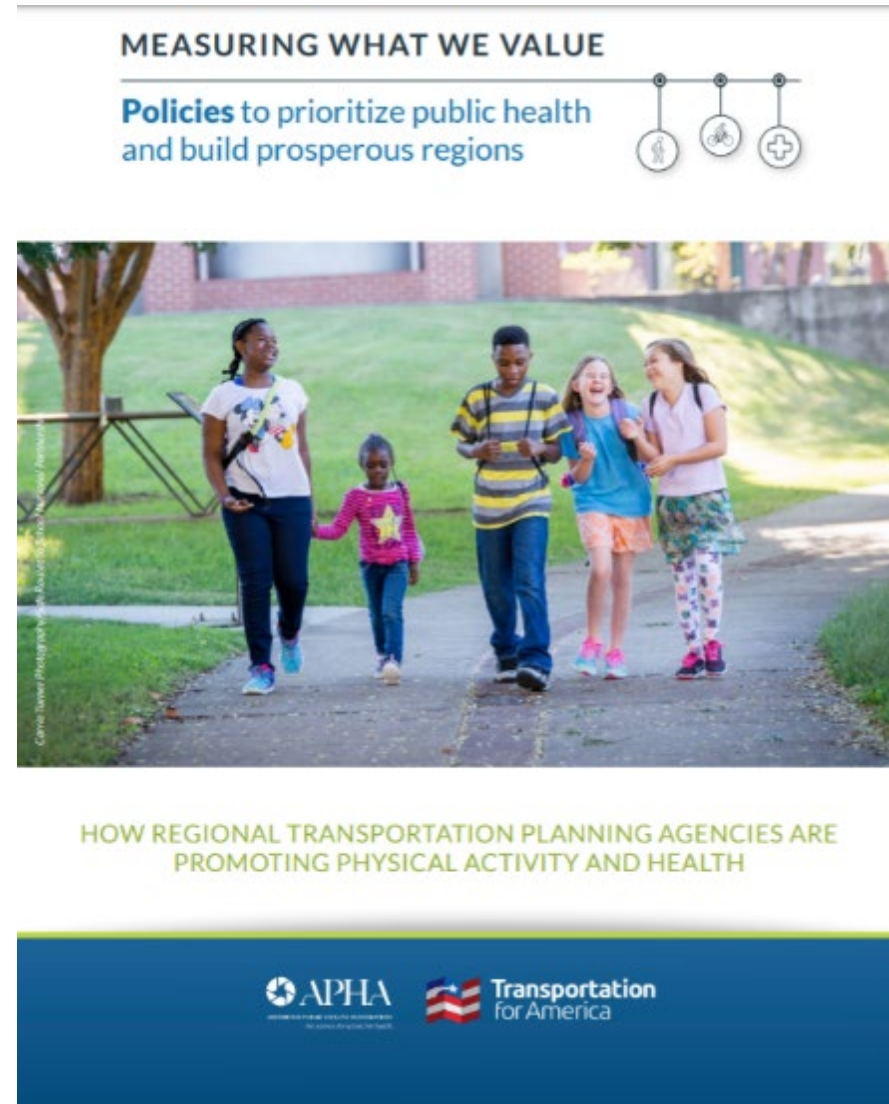
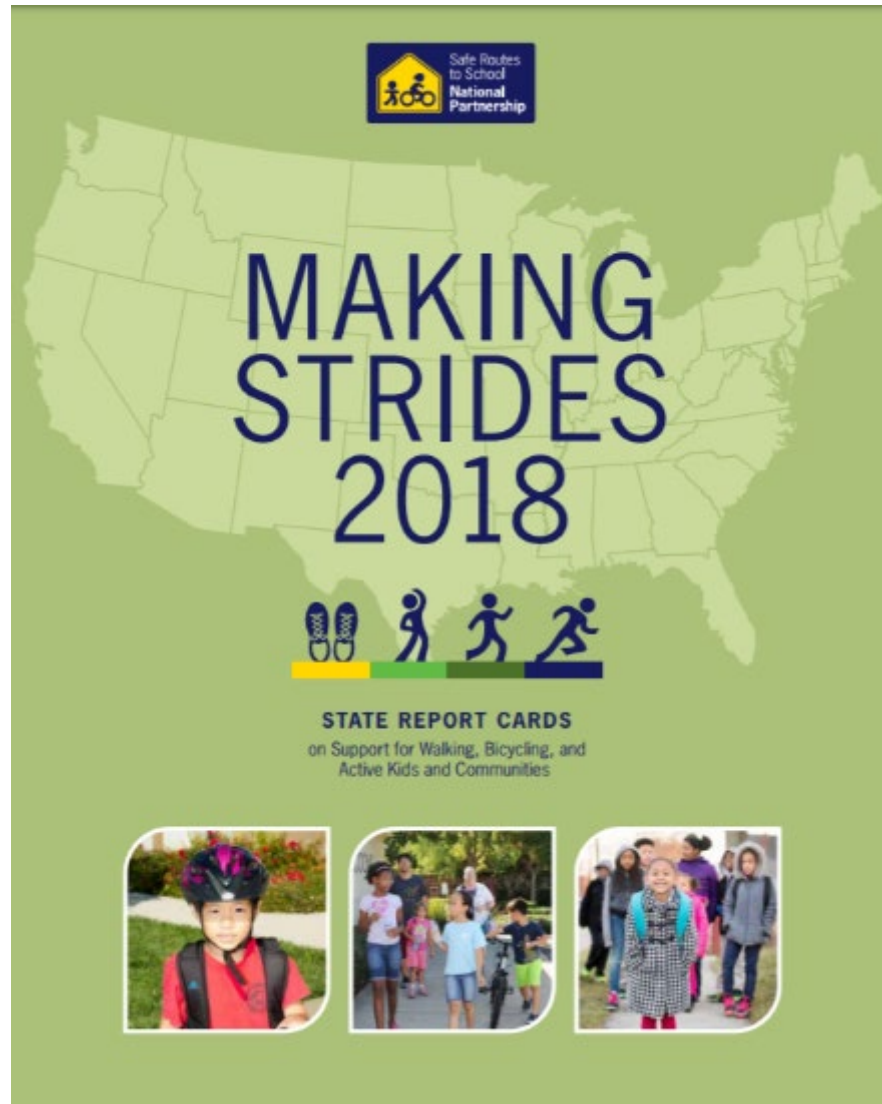
BENCHMARKING REPORT



Bicycling & Walking in the United States

2018 BENCHMARKING REPORT

Implementation Tool and Resources



Implementation Tool and Resources



← → ↻ 🔒 https://www.transportation.gov/transportation-health-tool 🔍 ☆ C



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Contact Us

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Washington, DC 20590
United States
tht@dot.gov ✉

Business Hours:
9:00am-5:00pm ET, M-F

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Transportation and Health Tool Home

Indicator Data

Indicator Profiles

Strategies

Literature and Resources ▼

Scoring Methodology

Background

Transportation and Health Tool



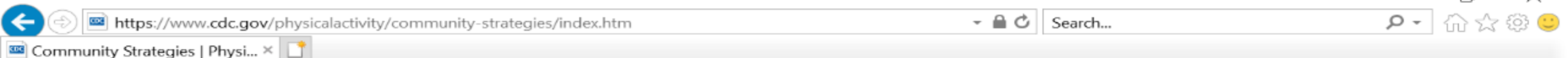
Photo credit: www.pedbikeimages.org / Laura Sandt

What is the Transportation and Health Tool?

The Transportation and Health Tool (THT) was developed by the U.S. Department of Transportation and the Centers for Disease Control and Prevention to provide easy access to data that practitioners can use to examine the health impacts of transportation systems.

The tool provides data on a set of transportation and public health indicators for each U.S. state and metropolitan area that describe how the transportation environment affects safety, active transportation, air quality, and connectivity to destinations. You can use the tool to quickly see how your state or metropolitan area compares with others in addressing key transportation and health issues. It also provides information and resources to help agencies better understand the links between transportation and health and to identify strategies to improve public health through transportation planning and policy.

Implementation Tool and Resources



Physical Activity

Physical Activity

About Physical Activity



Physical Activity Basics

Initiatives



Data & Statistics



Resources & Publications



Community Strategies



Connecting Routes + Destinations



Worksite Physical Activity



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Division of Nutrition, Physical Activity, and Obesity

[CDC](#) > [Physical Activity](#)

Community Strategies



Creating or modifying environments to make it easier for people to walk or bike is a strategy that not only helps increase physical activity, but can make our communities better places to live. Communities designed to support physical activity are often called active communities. *The Guide to Community Preventive Services* recommends strategies to increase physical activity that are related to walkability—community-scale urban design, street-scale urban design, and improving access to places for physical activity (including providing maps and descriptive information).

Check out the resources below for even more ways to increase physical activity in the community.

Connecting Routes + Destinations

[This package of resources](#) can help state and local health departments, public health professionals, and community organizations as they aim to build more activity-friendly communities. To increase physical activity, the Community Preventive Services Task Force (CPSTF) [recommends](#) built environment approaches that combine one or more interventions to improve pedestrian or bicycle transportation systems (activity-friendly routes) with one or more land use and community design interventions (everyday destinations).



Additional Resources

Physical Activity in the Community

- [Active People, Healthy NationSM](#)

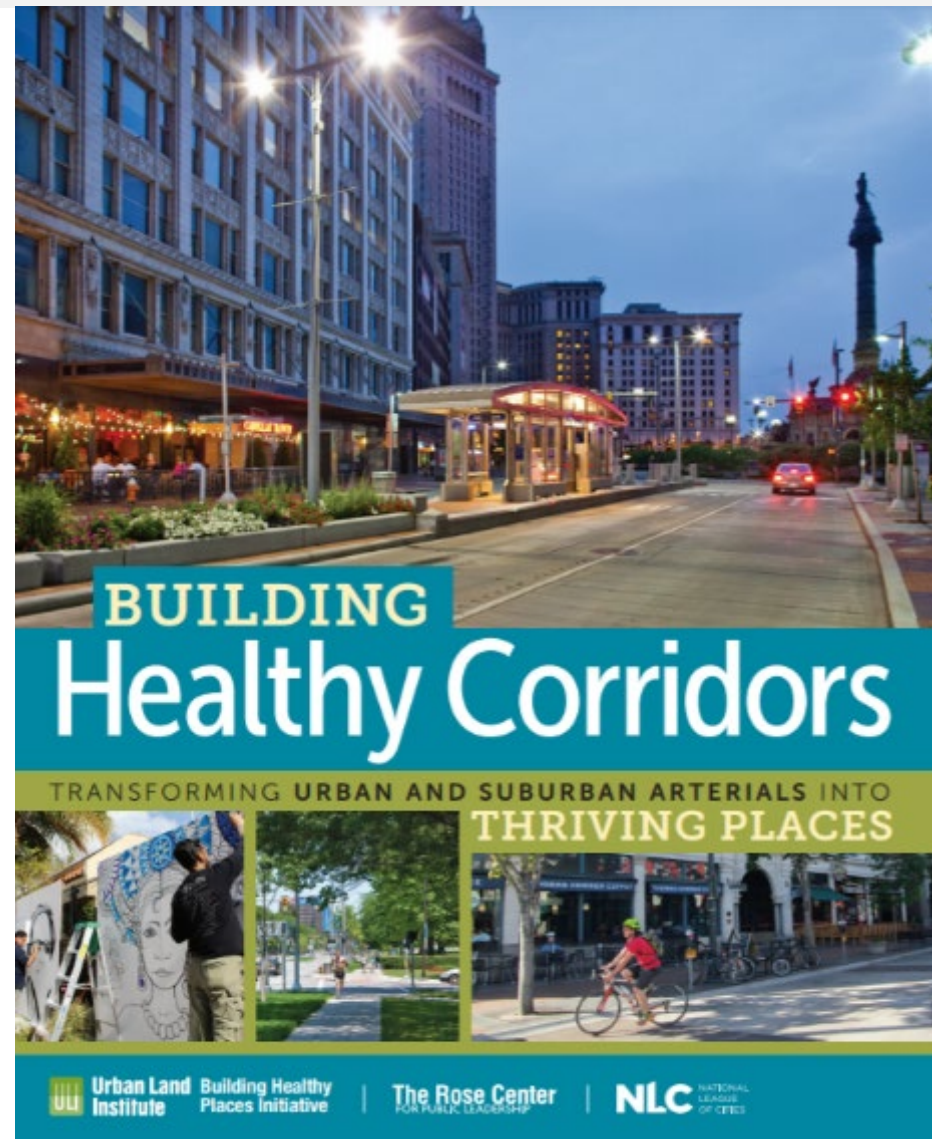
CDC is working with states and communities to improve the built environment as part of Active People, Healthy Nation – Creating an Active America, TogetherSM. This initiative aims to help 27 million Americans become more physically active by 2027 to improve their overall health and quality of life and to reduce healthcare costs.

Implementation Tool and Resources



ULI Building Healthy Corridors: Transforming Urban and Suburban Arterials into Thriving Places

- Although reinventing the street, sidewalk, and adjacent properties along corridors has received a lot of attention, less consideration has been paid to restructuring the corridors.
- The *healthy corridors approach* considers how the corridor contributes to the overall health of the surrounding community, including supplying opportunities to be physically active. It also considers safety, housing affordability, transportation options, environmental sustainability, and social cohesion, as well as modifications that would link residents to the corridor and improve connections to jobs and other parts of the community.





2019 DANGEROUS BY DESIGN



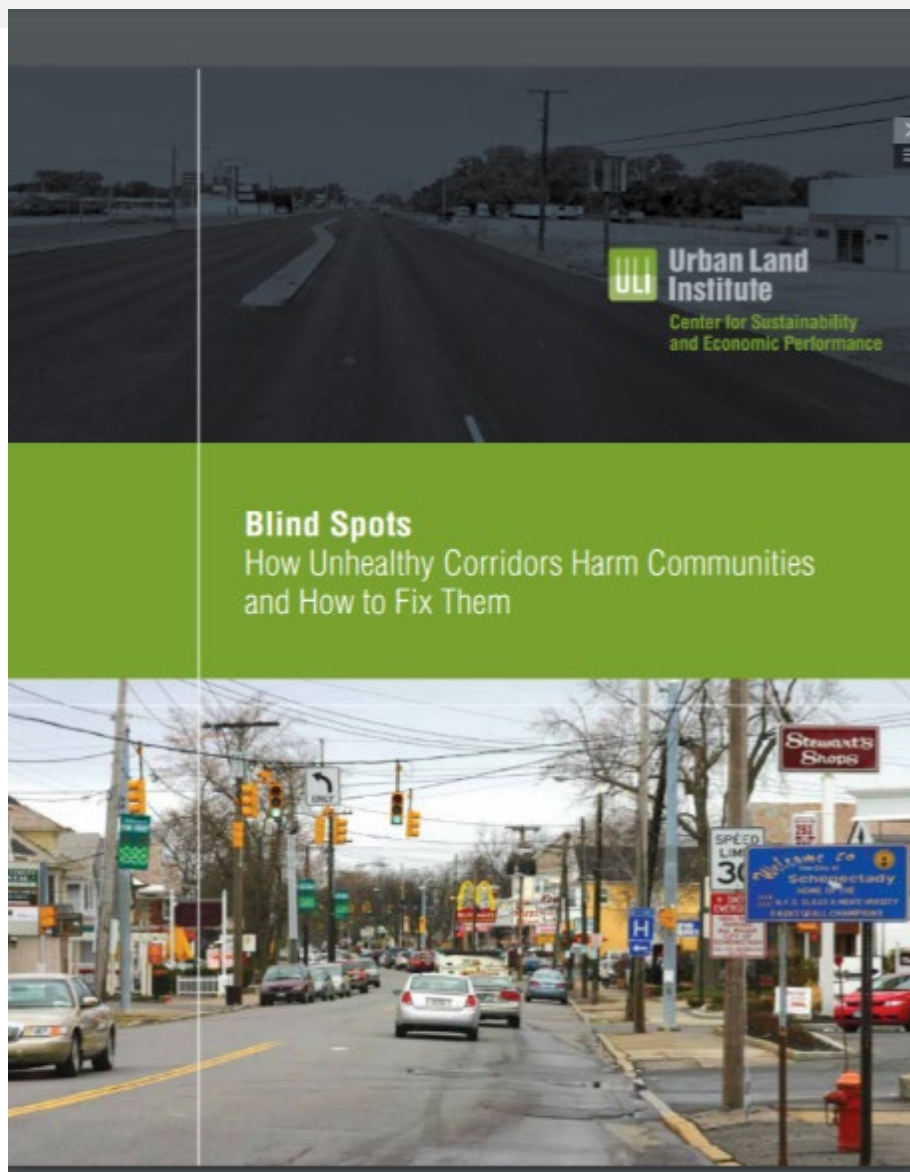
Dangerous By Design

- Ranks states and metropolitan areas around the country using our “Pedestrian Danger Index”, or PDI.
- The index measures how deadly it is for people to walk based on the number of people struck and killed by drivers while walking, controlling for the number of people that live in that state or metro area and the share of people who walk to work.
- Accompanied by an interactive maps of pedestrian fatalities from the period in the report as well as sortable tables of all state- and metro-level data.



Blind Spots: How Unhealthy Corridors Harm Communities and How to Fix Them

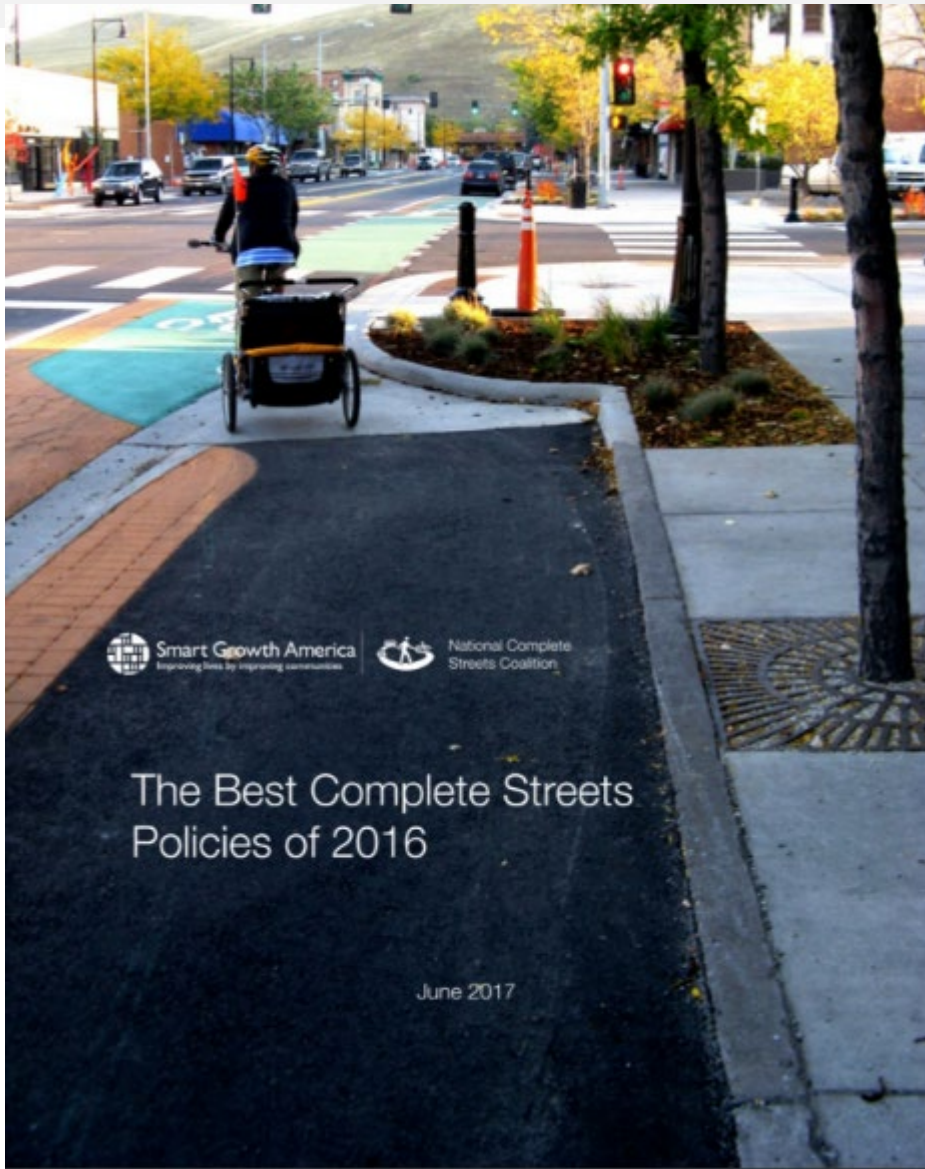
- This report by the Urban Land Institute and Smart Growth America examines unhealthy corridors, including their prevalence and location, the conditions they share, and the impact they have on people's lives.
- It explores the land use and transportation decisions that give rise to and perpetuate their existence, as well as opportunities to use policy and practice levers to shape them into something better.





Real World Examples

Community-Scale: Complete Streets Policies



Muskogee, OK Complete Streets Policy

- *Muskogee will make every effort to create a safe, reliable, efficient, integrated, and connected transportation network that will enhance the safety, mobility, and health for people of all ages and abilities...The City of Muskogee shall make complete streets practices a routine part of everyday operations and shall measure the success of this Complete Streets policy on an annual basis using, but not limited to, the following performance measures:*
 - *Linear feet of new/repaired sidewalks and other pedestrian accommodations (paths, trails, etc.)*
 - *Total miles of new bike lanes (designated and shared use)*
 - *Number and type of crosswalk/intersection improvements*
 - *Percentage of transit stops accessible by sidewalk*
 - *Rates of children walking or biking to school*

Community-Scale: Complete Streets Guidelines



North Carolina Department of Transportation Complete Streets Planning and Design Guidelines



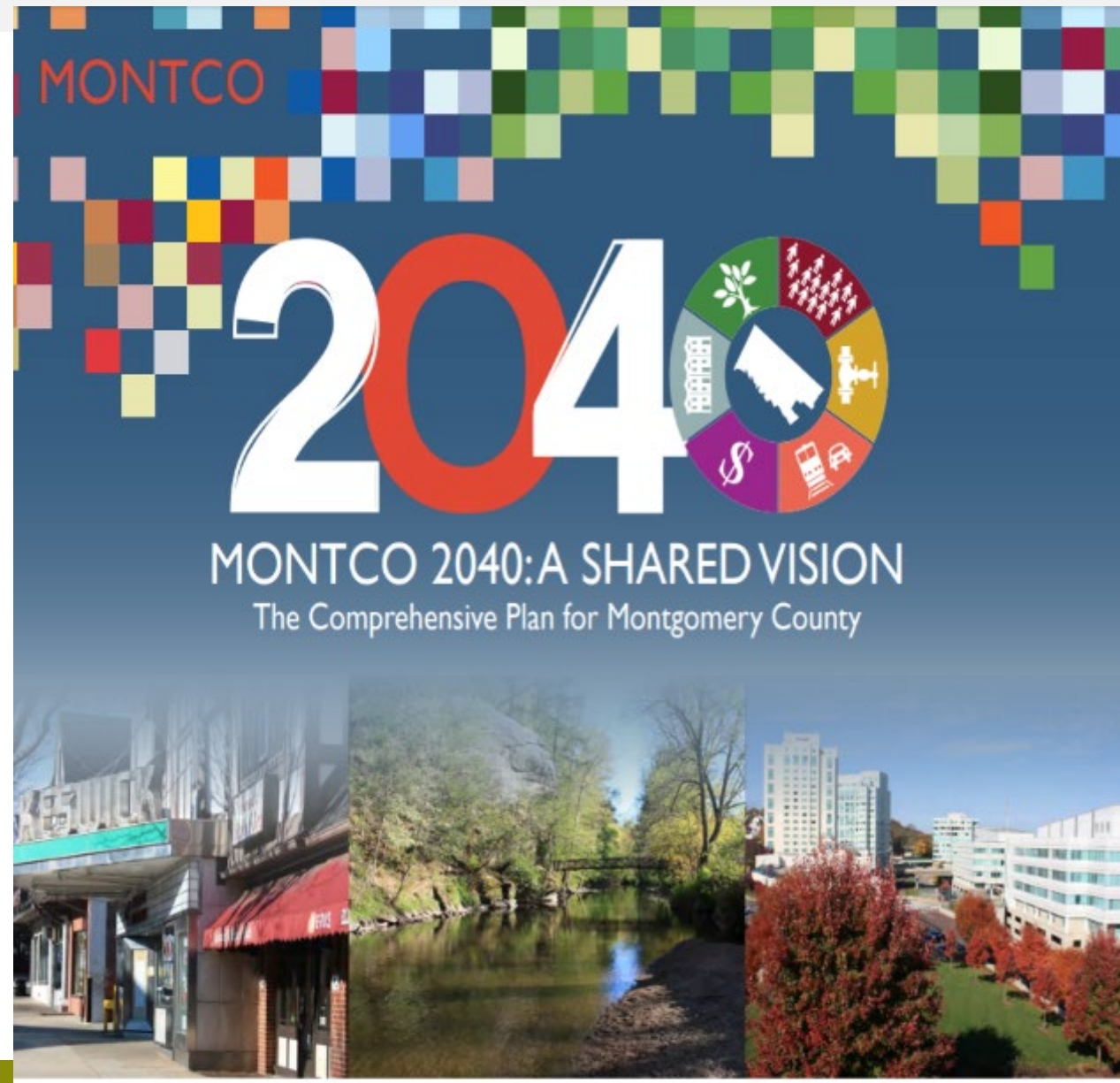
North Carolina Department of Transportation Complete Streets Planning & Design Guidelines

- These guidelines are intended to provide comprehensive guidance for incorporating complete streets into everyday practice (including new construction, widening, modernization projects, and maintenance projects).
- NCDOT is committed to:
 - Providing an efficient multi-modal transportation network in NC such that the access, mobility, and safety needs of motorists, transit users, bicyclists, and pedestrians of all ages and abilities are safely accommodated;
 - Working in partnership with local government agencies, interest groups, and the public to plan, fund, design, construct, and manage complete street networks

North Carolina Department of Transportation Complete Streets Planning and Design Guidelines Appendices



Community-Scale: Comprehensive & Ped-Bike Plans



Montgomery County, PA Suite of Plans

- ***Montco 2040: A Shared Vision***
 - **Connected Communities**
 - Improved transportation choices
 - Trails & greenways connecting multiple places
 - Vibrant downtowns and destinations accessible by everyone
- ***Walk Montco***
 - Guidelines to improve the ability of people to walk
- ***Bike Montco***
 - Guidelines for a safe and efficient bicycle network for everyone
- ***Montco Trails, Parkland, and People 2015***
 - The outdoor network should sustain human health

Community-Scale: Active Design Guidelines



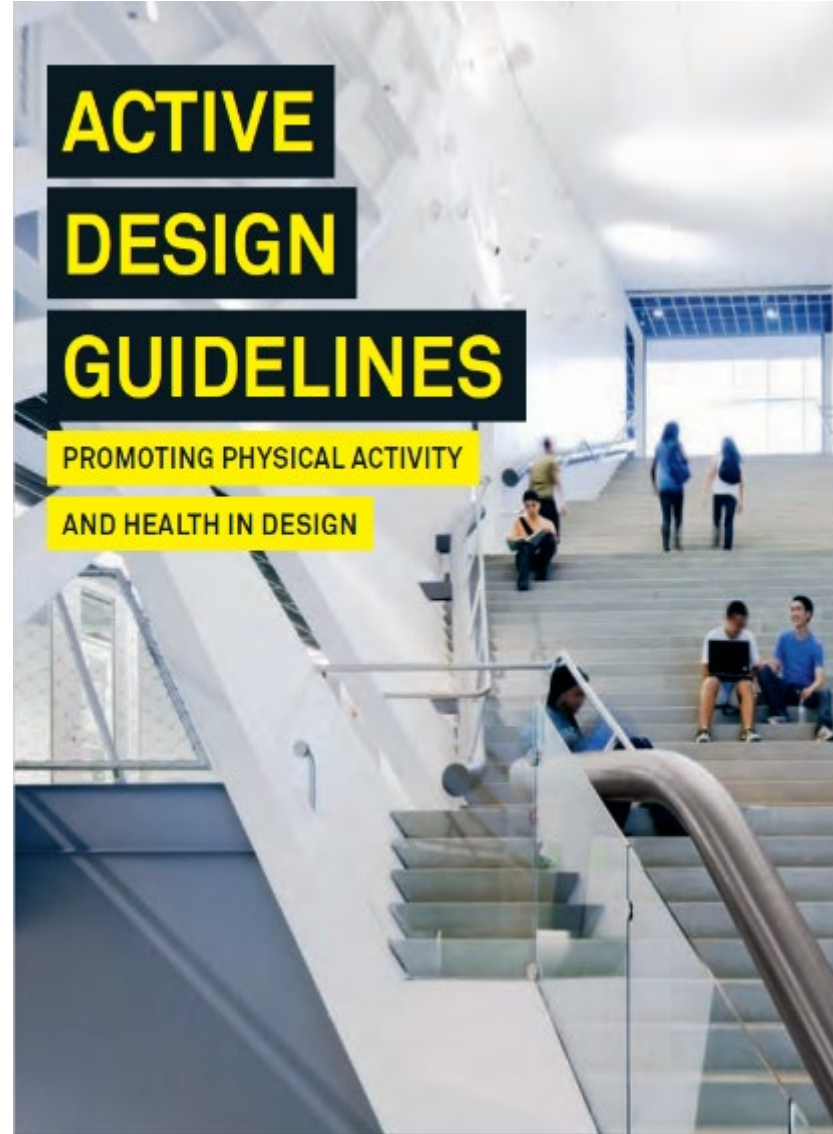
MODEL for LIVING STREETS DESIGN MANUAL

Los Angeles County 2011



ACTIVE DESIGN GUIDELINES

PROMOTING PHYSICAL ACTIVITY
AND HEALTH IN DESIGN



ACTIVE DESIGN

SHAPING THE SIDEWALK EXPERIENCE



Neighborhood-Scale: Pop-Up Projects



Memphis MEMFix Pop-Up Program



Corridor-Scale: Healthy Corridor Projects



Euclid Avenue Cleveland, Ohio

Enhancing a Corridor through Transit Investment



Second Street Rochester, Minnesota

Creating Place with Infrastructure and Streetscape Improvements



ULI Building Healthy Corridors: Case Example

■ Cleveland, OH: Euclid Avenue

- In strategic partnerships with state, federal, and local stakeholders—including the Cleveland Clinic, University Hospitals, and the Cleveland Regional Transit Authority—\$10 million of the total investment was put toward improving sidewalks, bike lanes, and the utility infrastructure. Design improvements along the corridor include lighting and 1,500 trees. Adjacent neighborhoods were given distinct identities.

■ Rochester, MN: Second Street

- In the western section, four lanes were reduced to three to address left-turn collisions and to calm speeds. Significant improvements were made along the eastern section by adding bike lanes, landscaped medians, new left-turn lanes within one block of every business, and painted, on-street parking spaces.

ACTIVE ROUTES TO EVERYDAY DESTINATIONS

RALEIGH'S NEIGHBORHOOD & COMMUNITY CONNECTIONS PROGRAM

TJ McCourt
City of Raleigh

thomas.mccourt@raleighnc.gov



PARK SYSTEM PLANNING FOCUSED ON ACCESS AND EQUITY

Walking Offers Big Benefits

Walkers are approximately

3x

more likely to meet physical activity recommendations than non-walkers.²



of adults reported walking at least 10 minutes a week for leisure or transportation.²

Physical activity can reduce risk of diseases such as



as well as stroke, Type 2 Diabetes and some cancers.³

Walking is the **most popular** aerobic activity⁴

Parks Promote Walking

People living within a
10-minute
walking distance of a park

have higher levels of physical activity and lower rates of obesity.⁵



Group walking

in nature can significantly lower depression, stress and enhance mental well-being.⁶

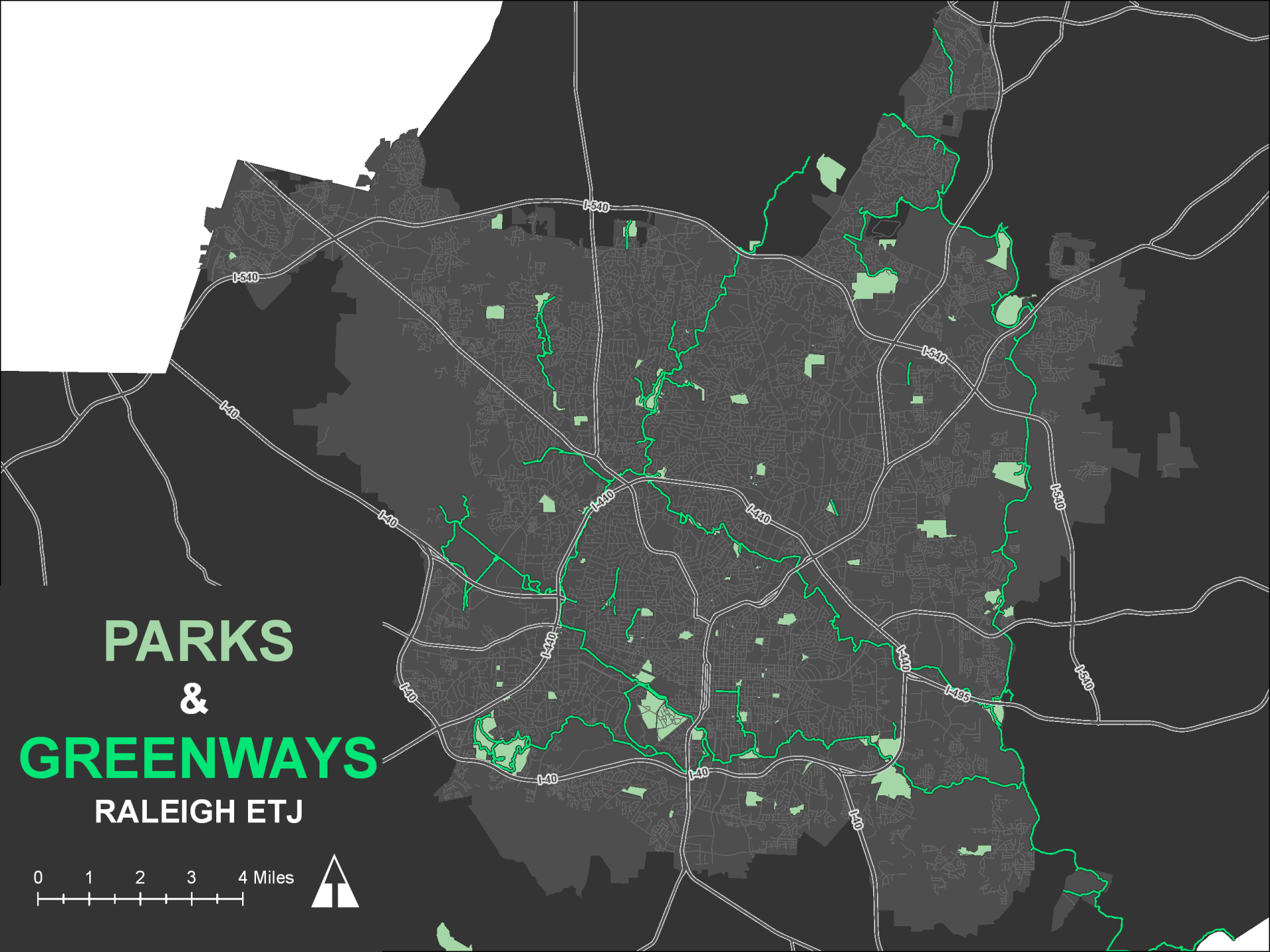
*“Bringing people to parks
and parks to people”*



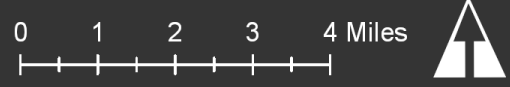
10,000 acres



115 miles

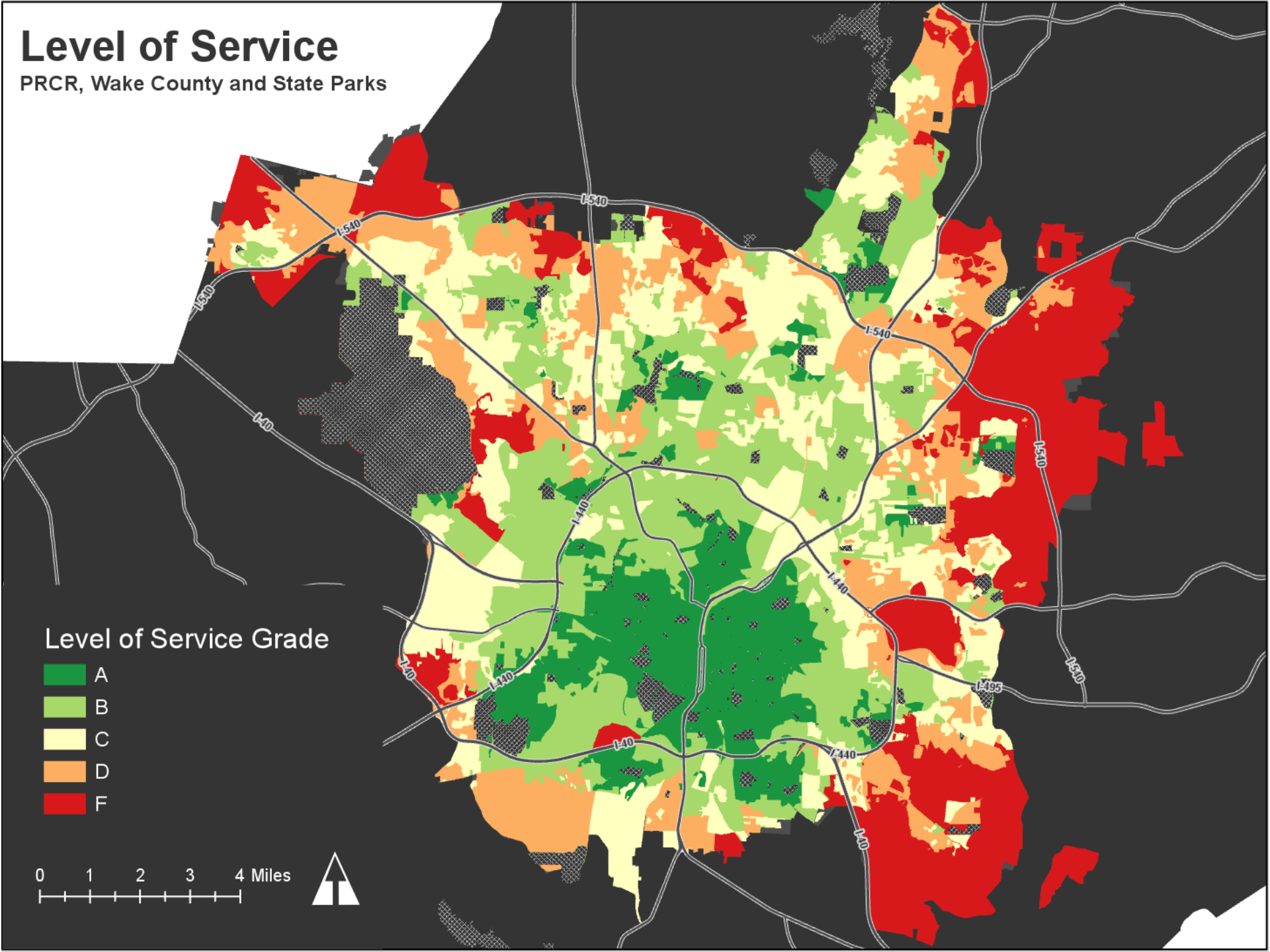


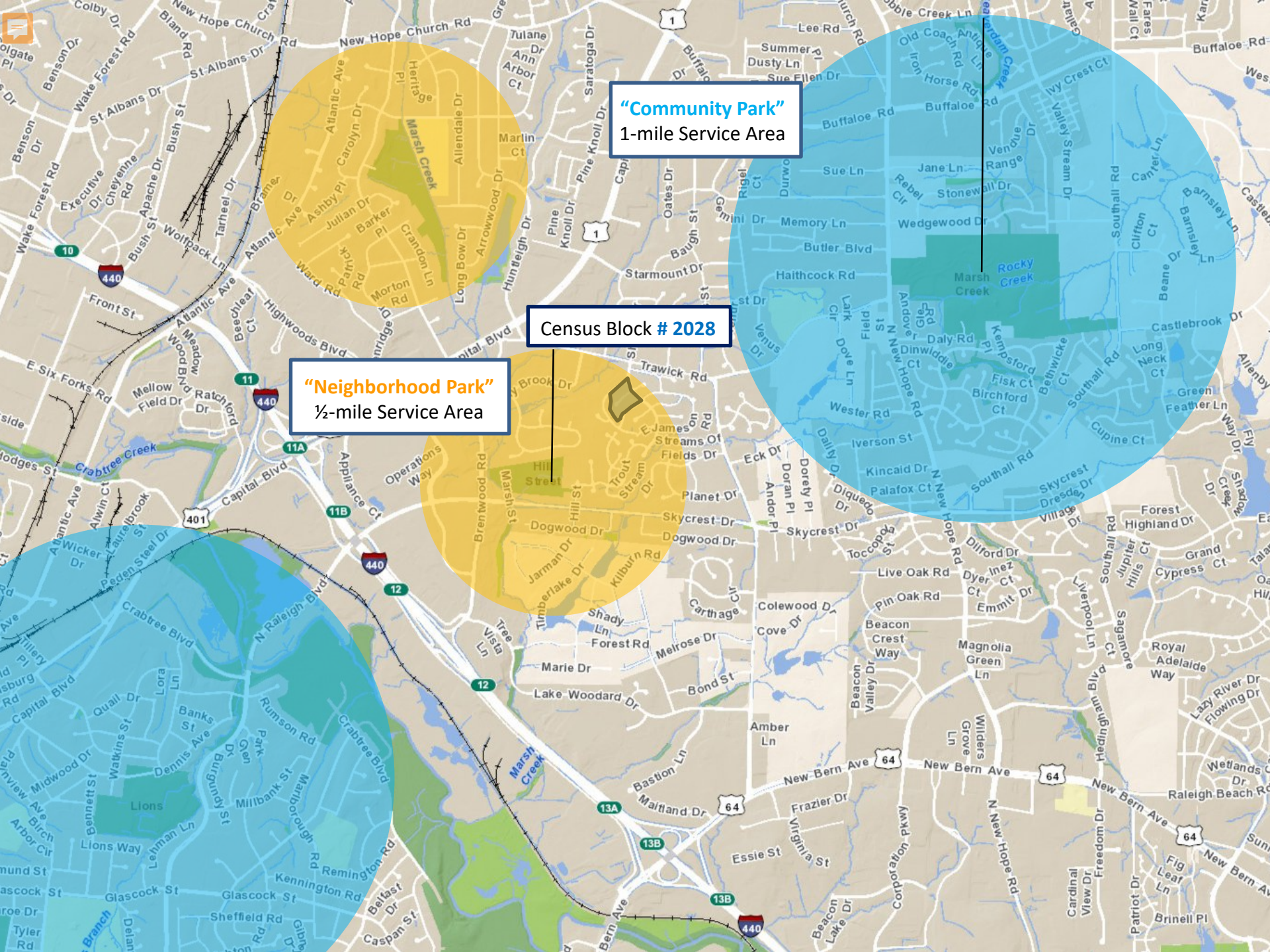
**PARKS
&
GREENWAYS**
RALEIGH ETJ



Level of Service

PRCR, Wake County and State Parks





"Community Park"
1-mile Service Area

Census Block # 2028

"Neighborhood Park"
1/2-mile Service Area

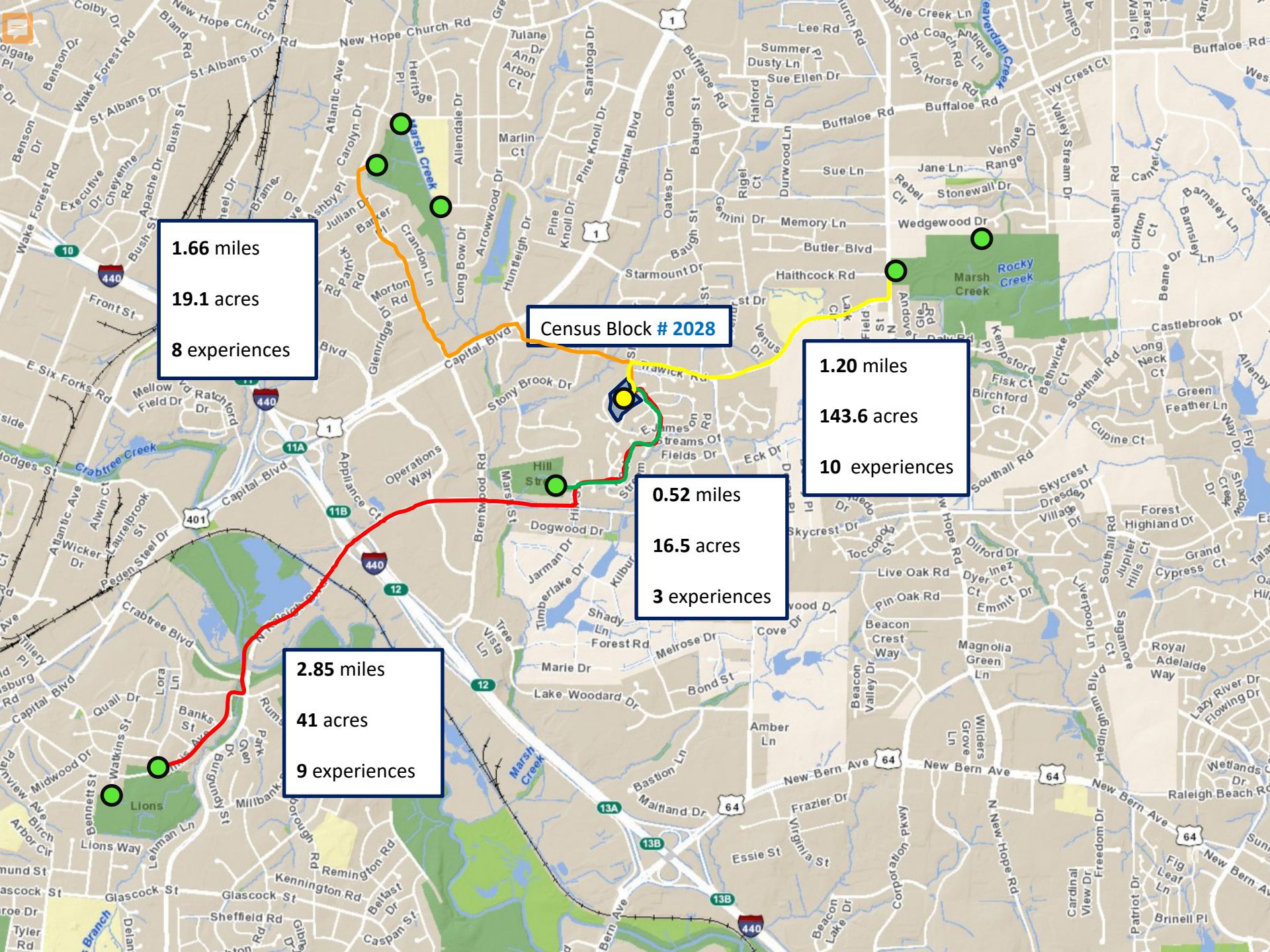
1.66 miles
19.1 acres
8 experiences

Census Block # 2028

1.20 miles
143.6 acres
10 experiences

0.52 miles
16.5 acres
3 experiences

2.85 miles
41 acres
9 experiences



Census Block # 2028

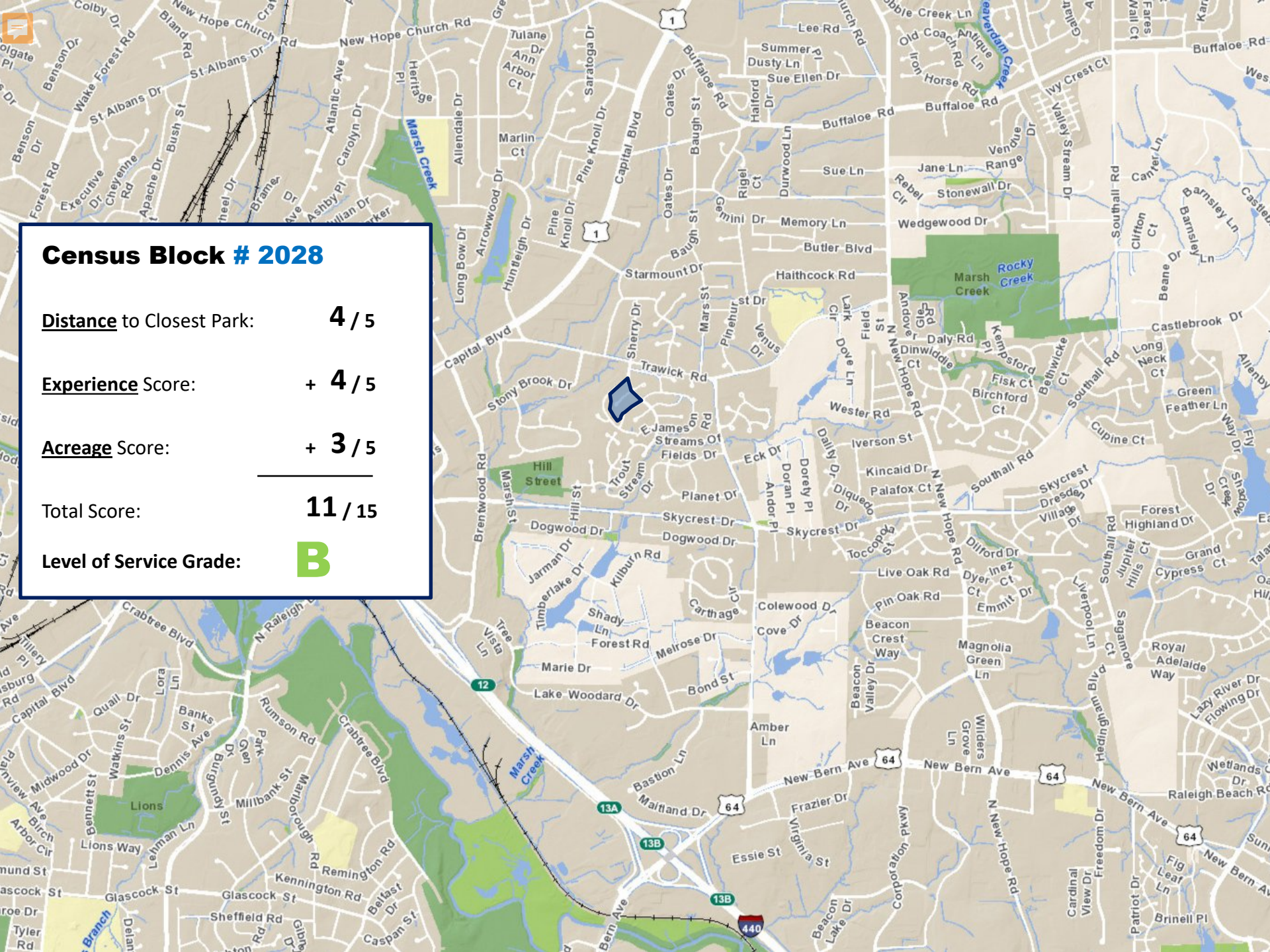
Distance to Closest Park: 4 / 5

Experience Score: + 4 / 5

Acreeage Score: + 3 / 5

Total Score: 11 / 15

Level of Service Grade: **B**



Grade Total Score

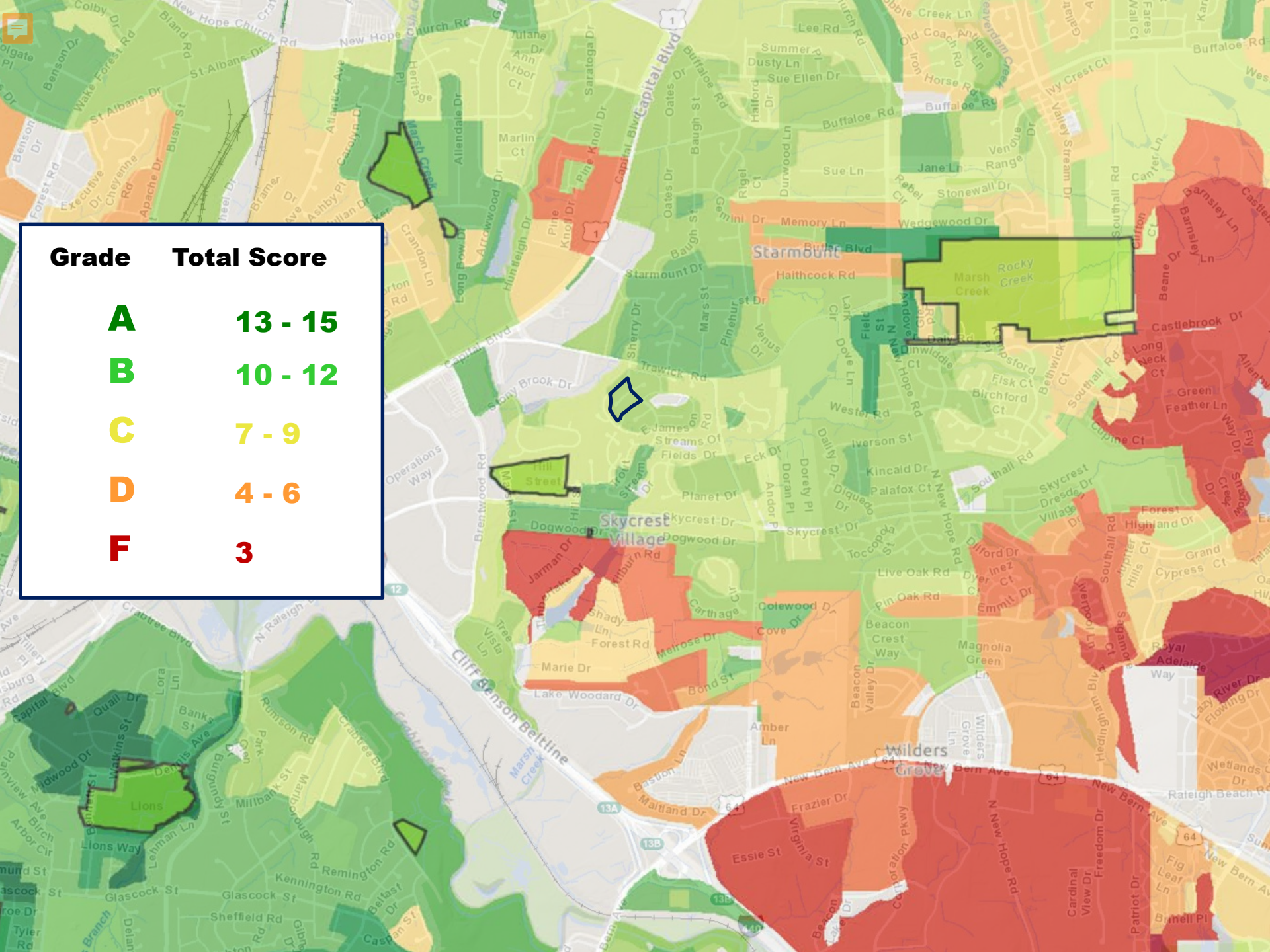
A 13 - 15

B 10 - 12

C 7 - 9

D 4 - 6

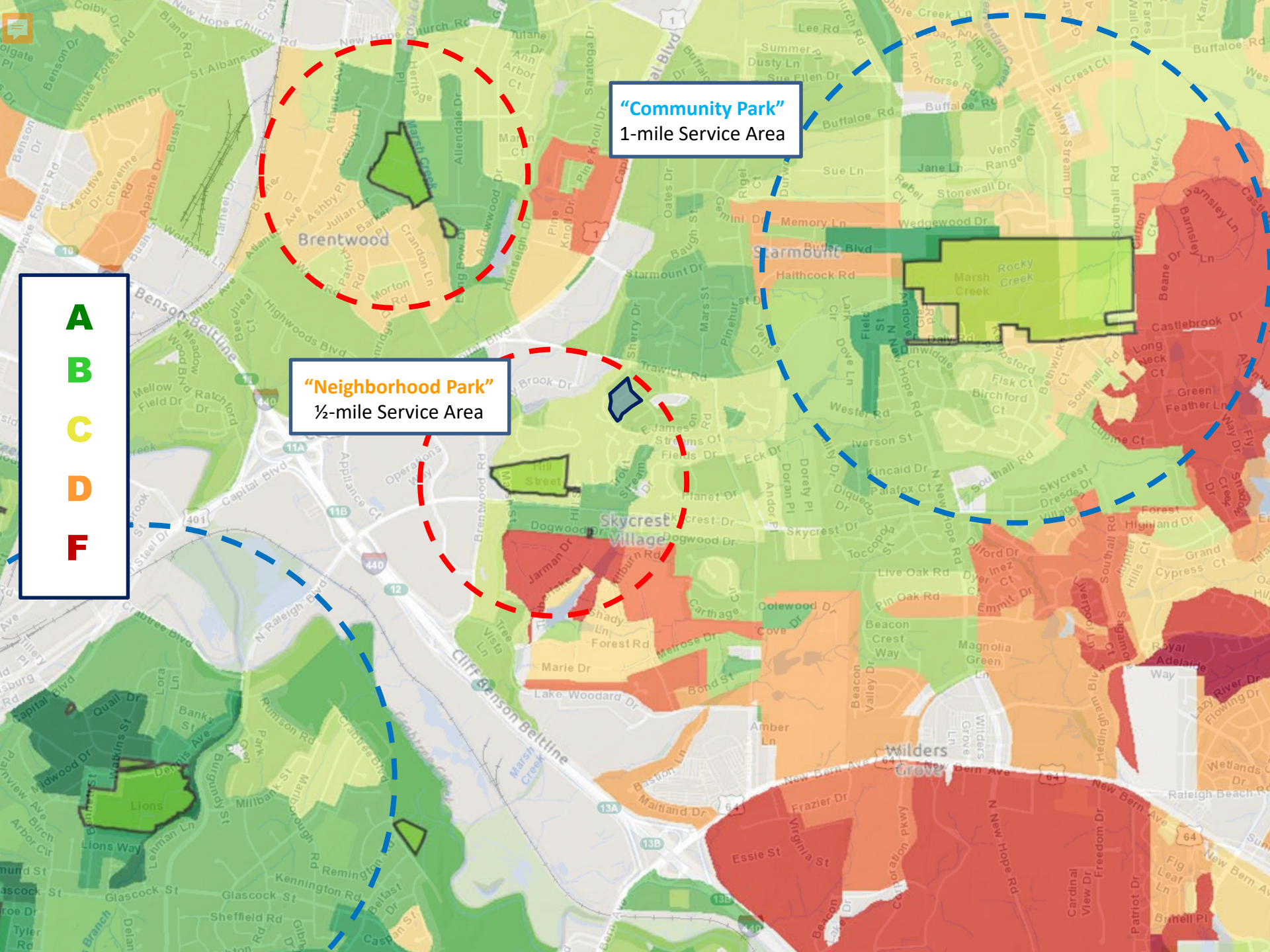
F 3



- A
- B
- C
- D
- F

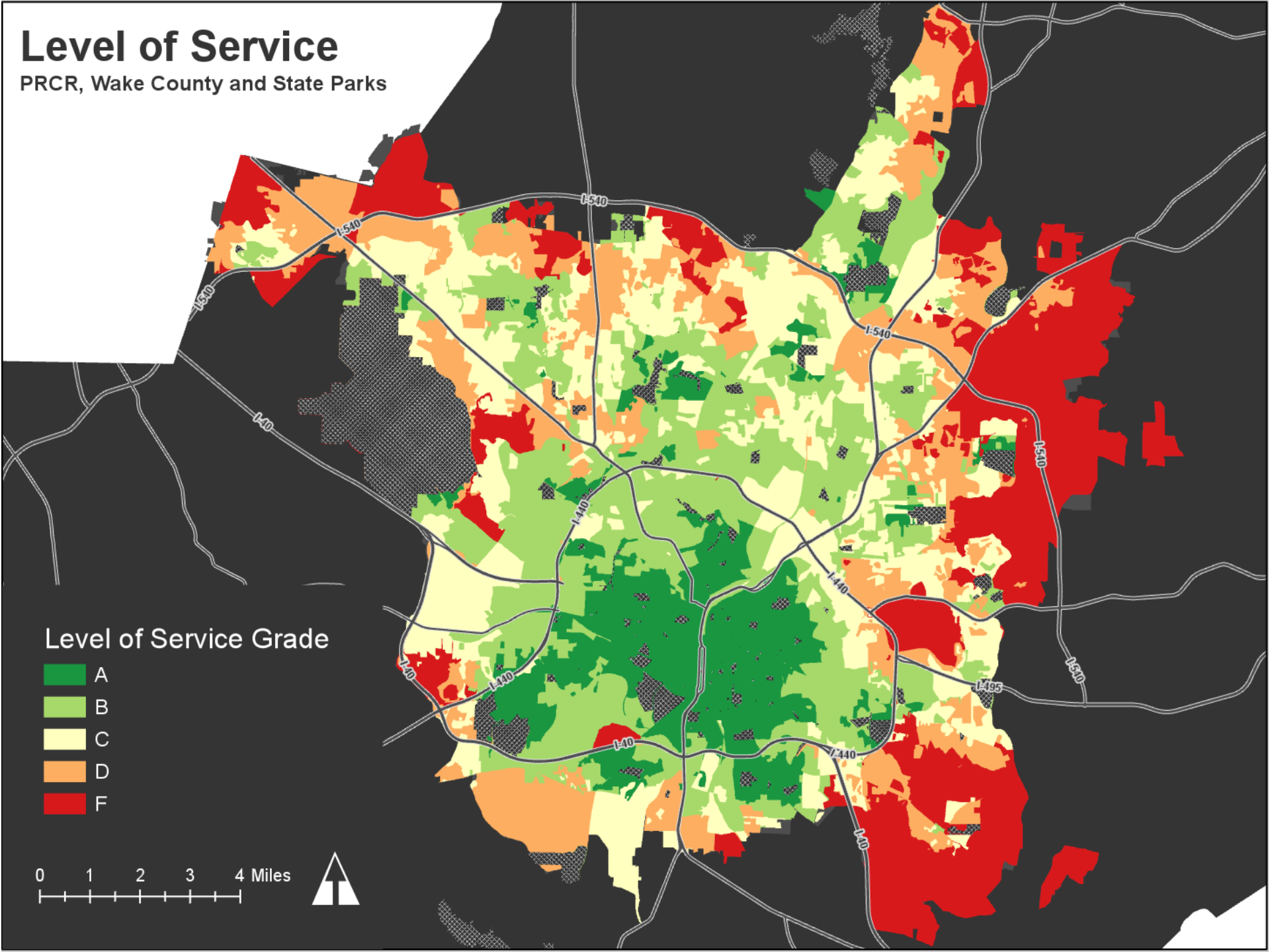
“Community Park”
1-mile Service Area

“Neighborhood Park”
½-mile Service Area



Level of Service

PRCR, Wake County and State Parks





NEIGHBORHOOD & COMMUNITY CONNECTIONS PROGRAM

1. Improve **walkable access** to existing neighborhood parks
2. Promote **health equity** by investing in communities that are most vulnerable to negative health outcomes
3. Establish clear, quantitative criteria to drive **funding priorities**



CRITERIA

1. Circuity

2. Community Vulnerability

3. Pedestrian Safety

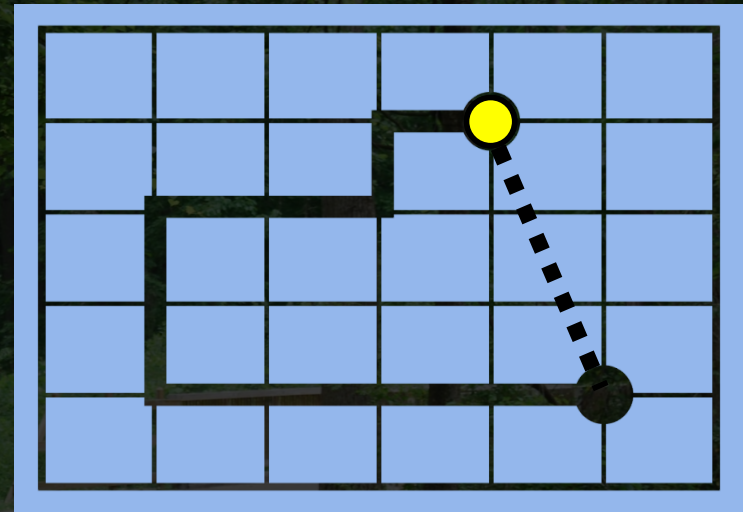


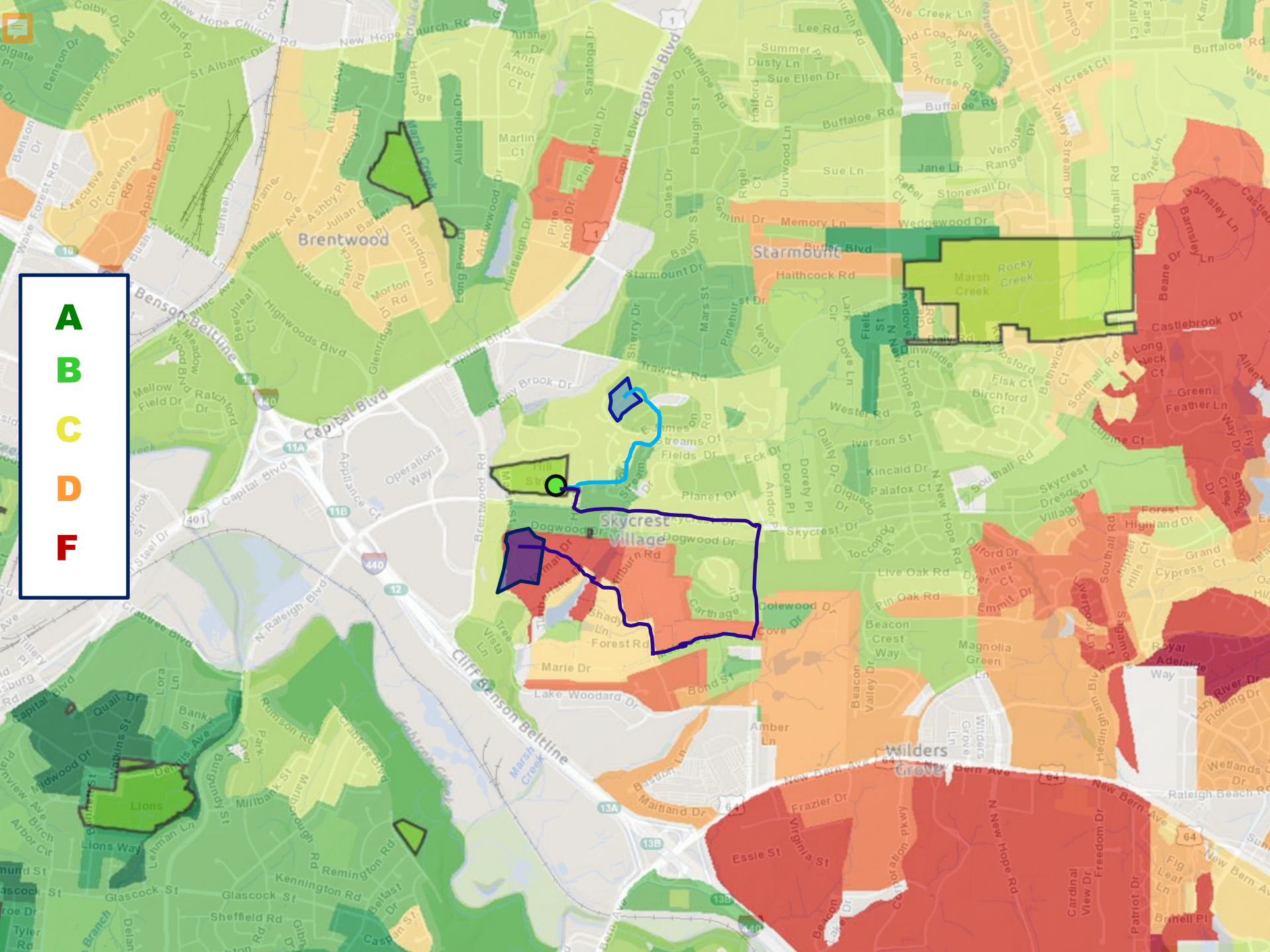
CRITERIA

1. Circuity

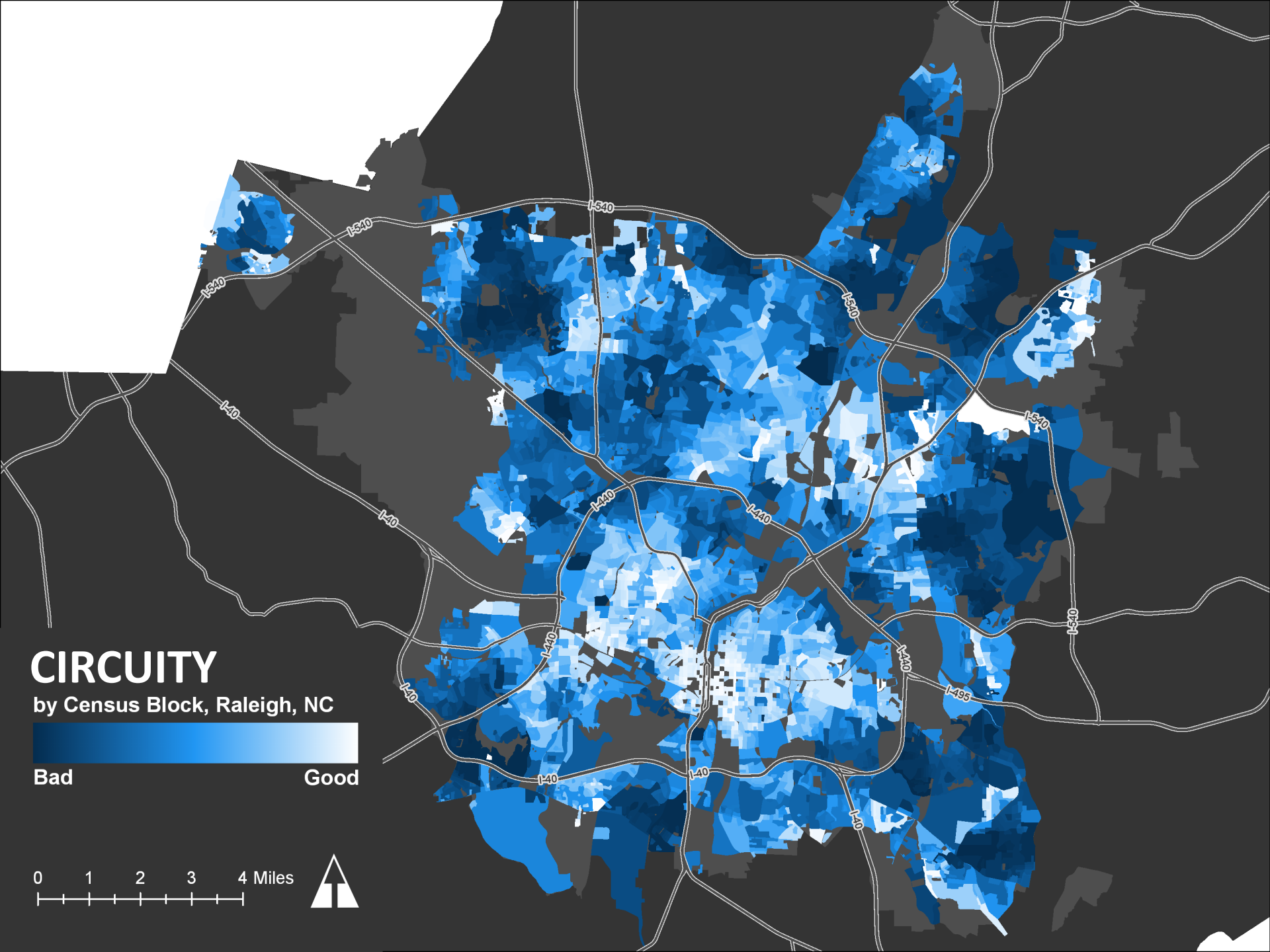
2. Community Vulnerability

3. Pedestrian Safety





- A
- B
- C
- D
- F



CIRCUITY

by Census Block, Raleigh, NC



Bad

Good

0 1 2 3 4 Miles





CRITERIA

1. Circuity

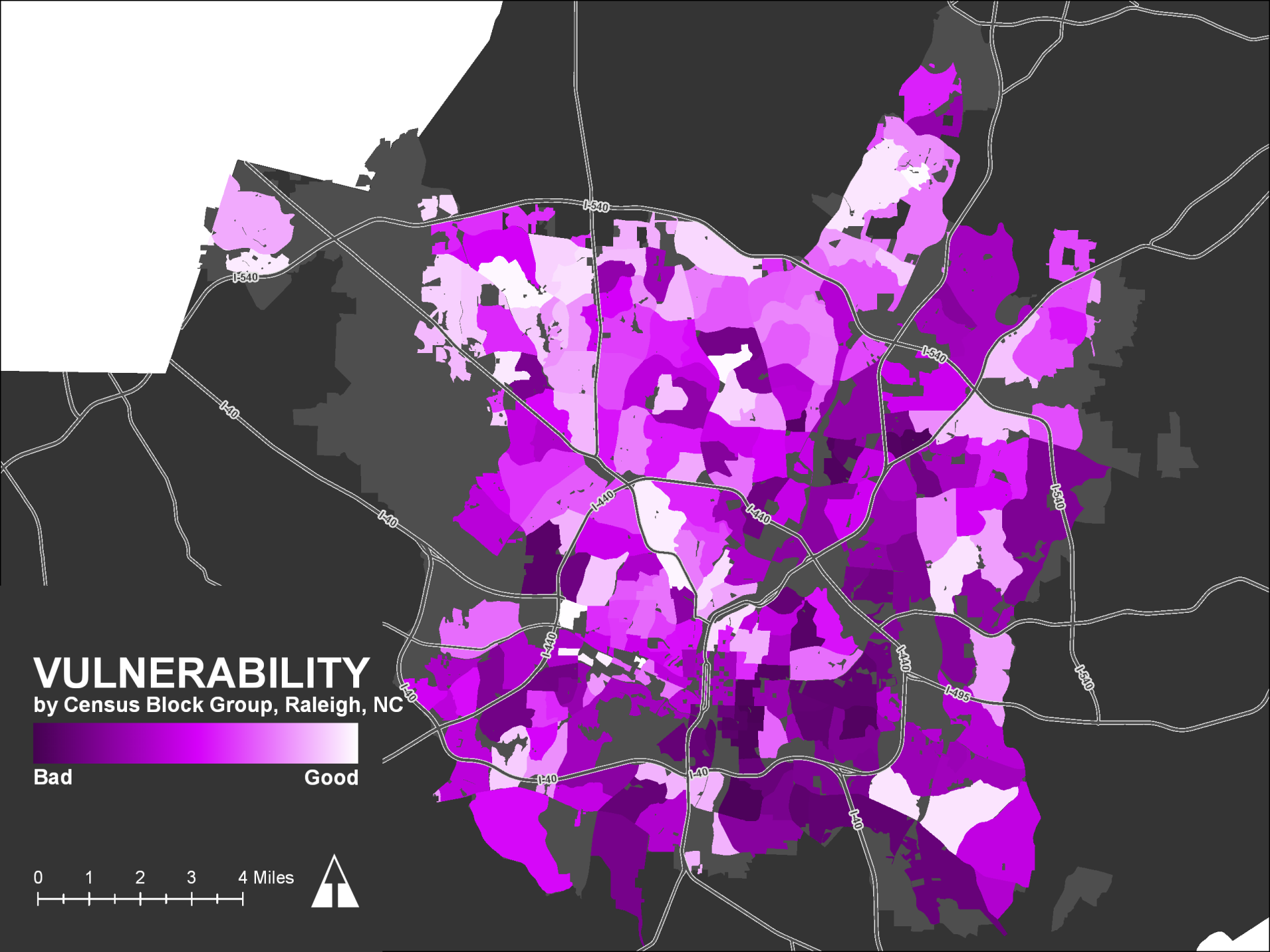


2. Community Vulnerability



3. Pedestrian Safety





VULNERABILITY

by Census Block Group, Raleigh, NC



Bad

Good

0 1 2 3 4 Miles



CRITERIA

1. Circuity

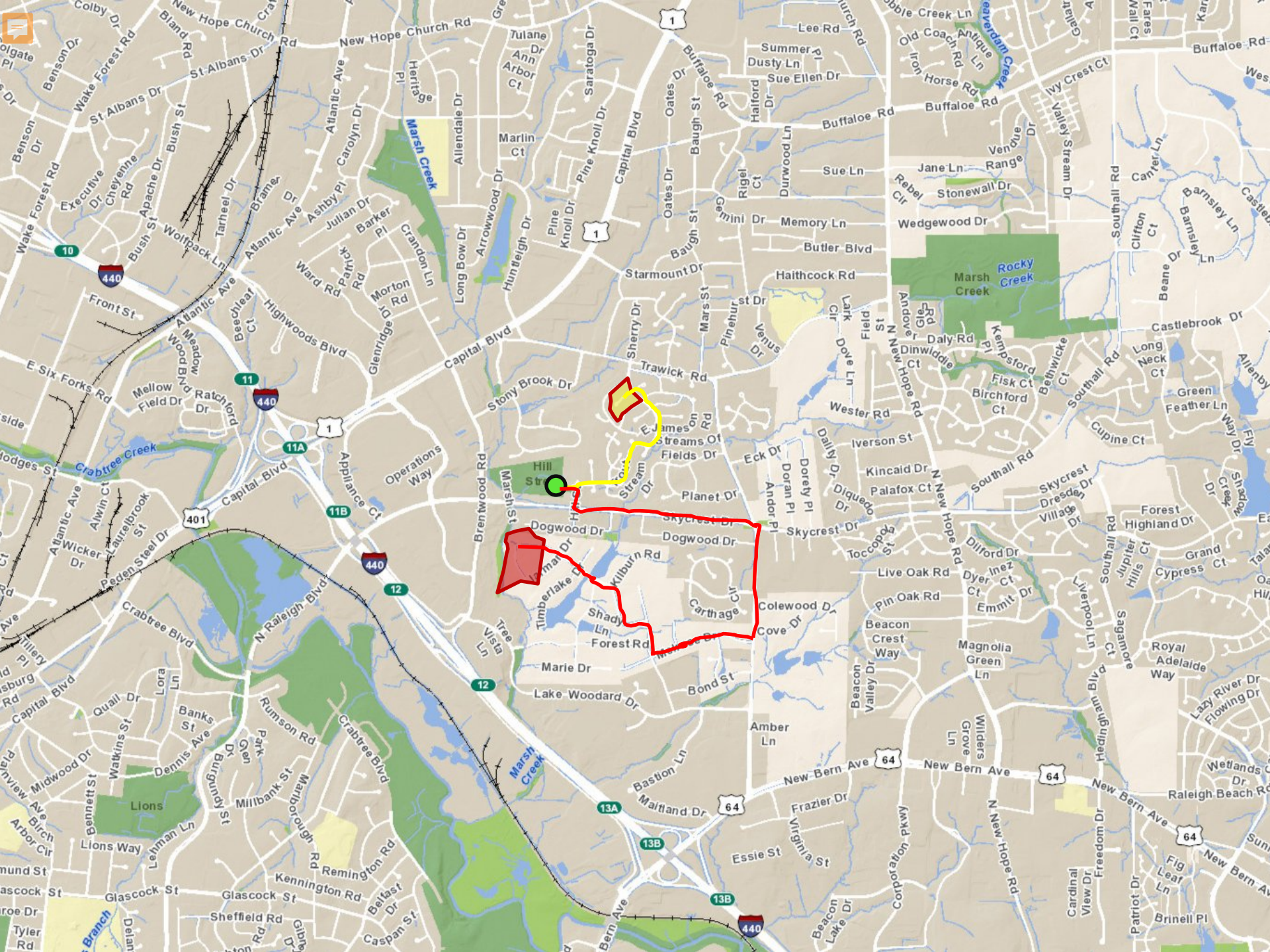


2. Community Vulnerability



3. Pedestrian Safety



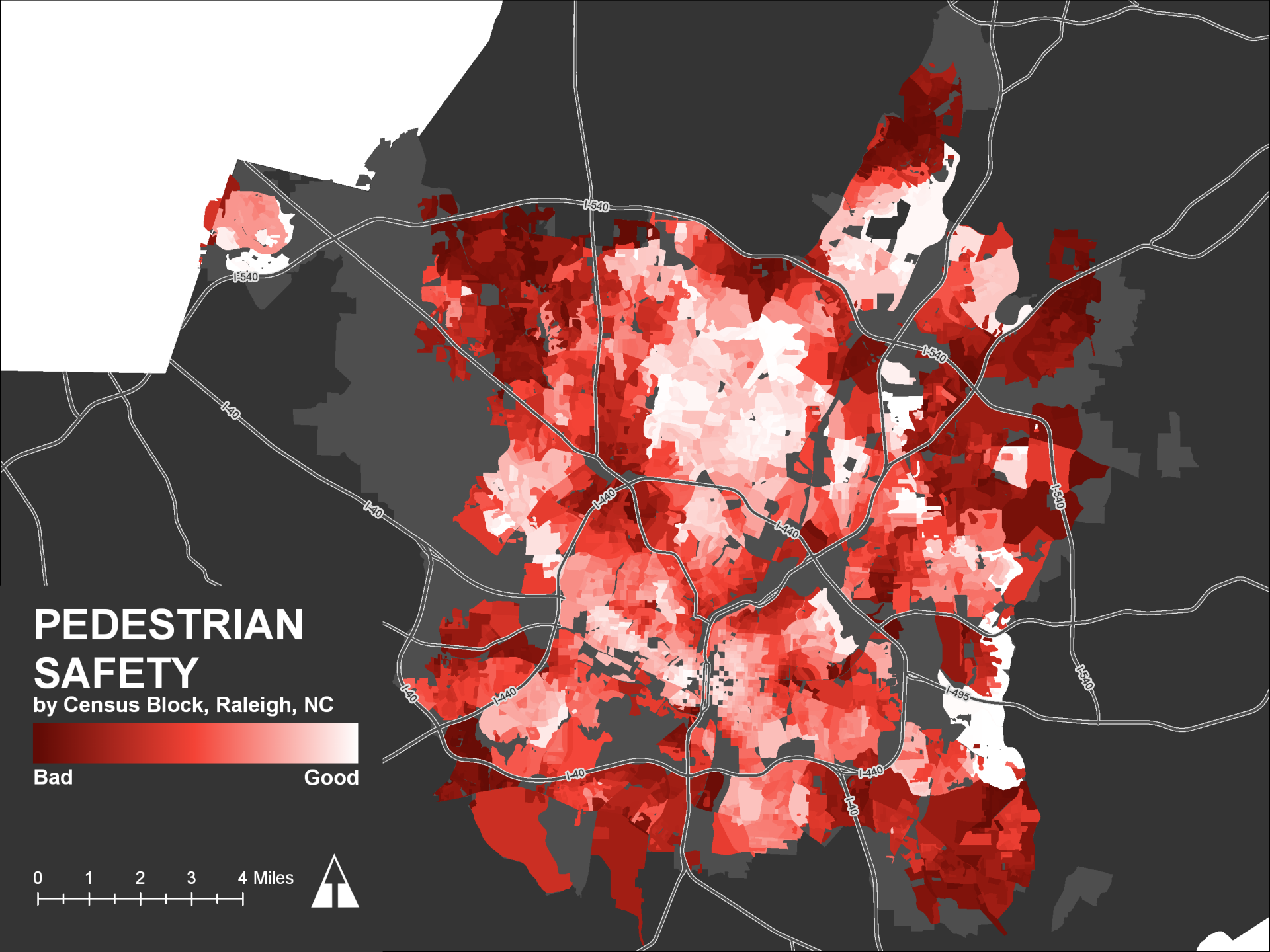


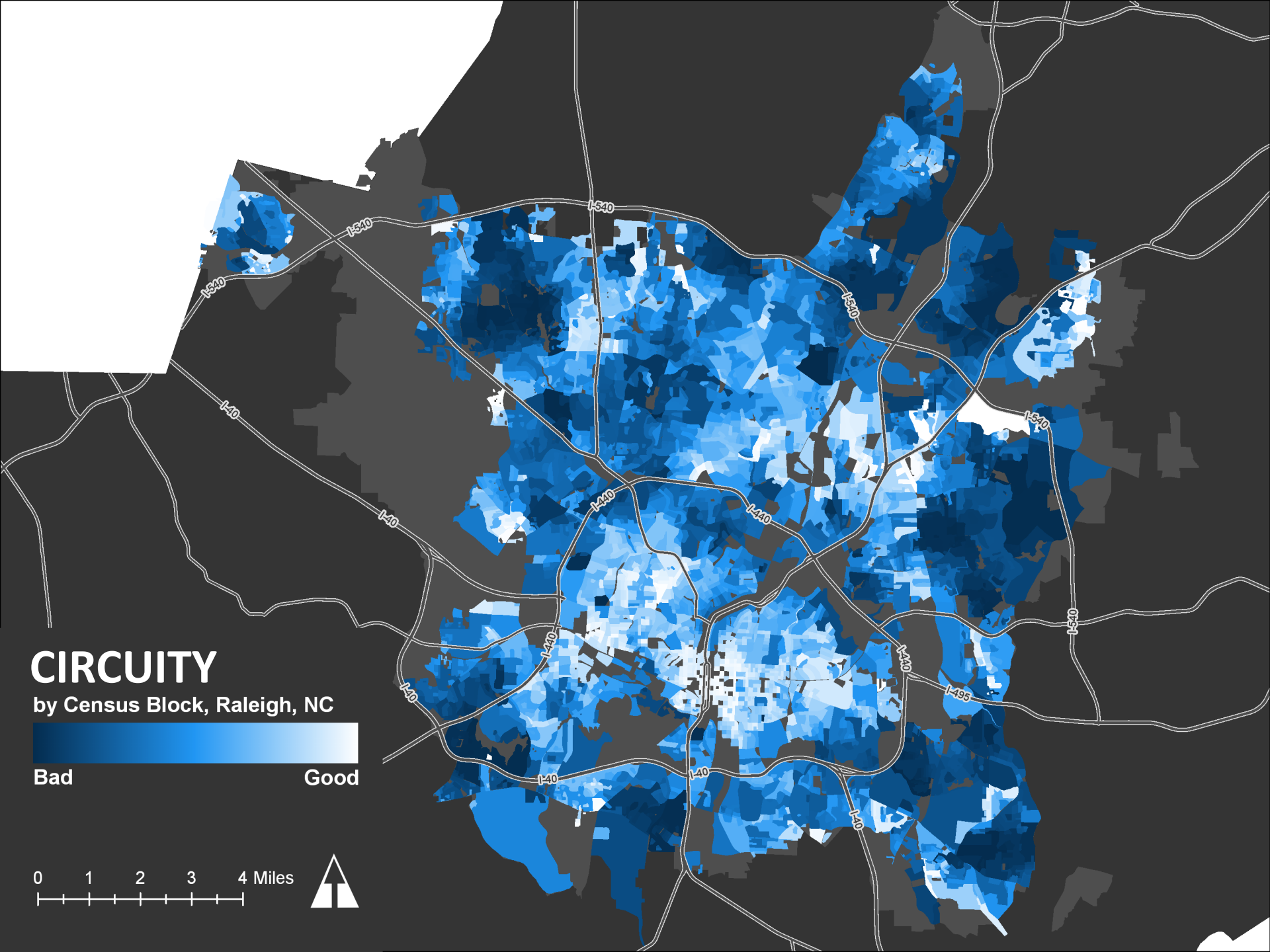
PEDESTRIAN SAFETY

by Census Block, Raleigh, NC



0 1 2 3 4 Miles





CIRCUITY

by Census Block, Raleigh, NC

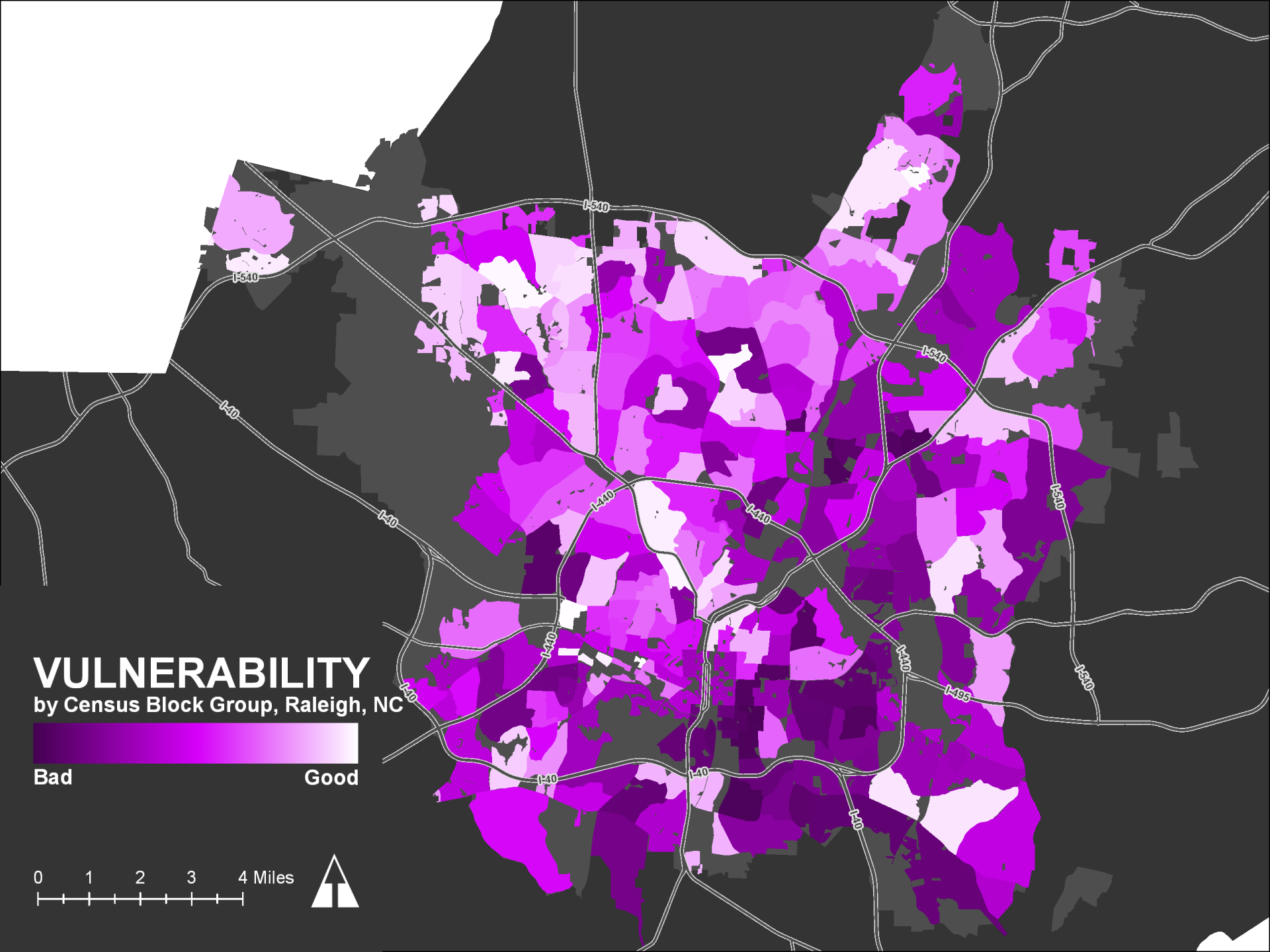


Bad

Good

0 1 2 3 4 Miles





VULNERABILITY

by Census Block Group, Raleigh, NC



Bad

Good

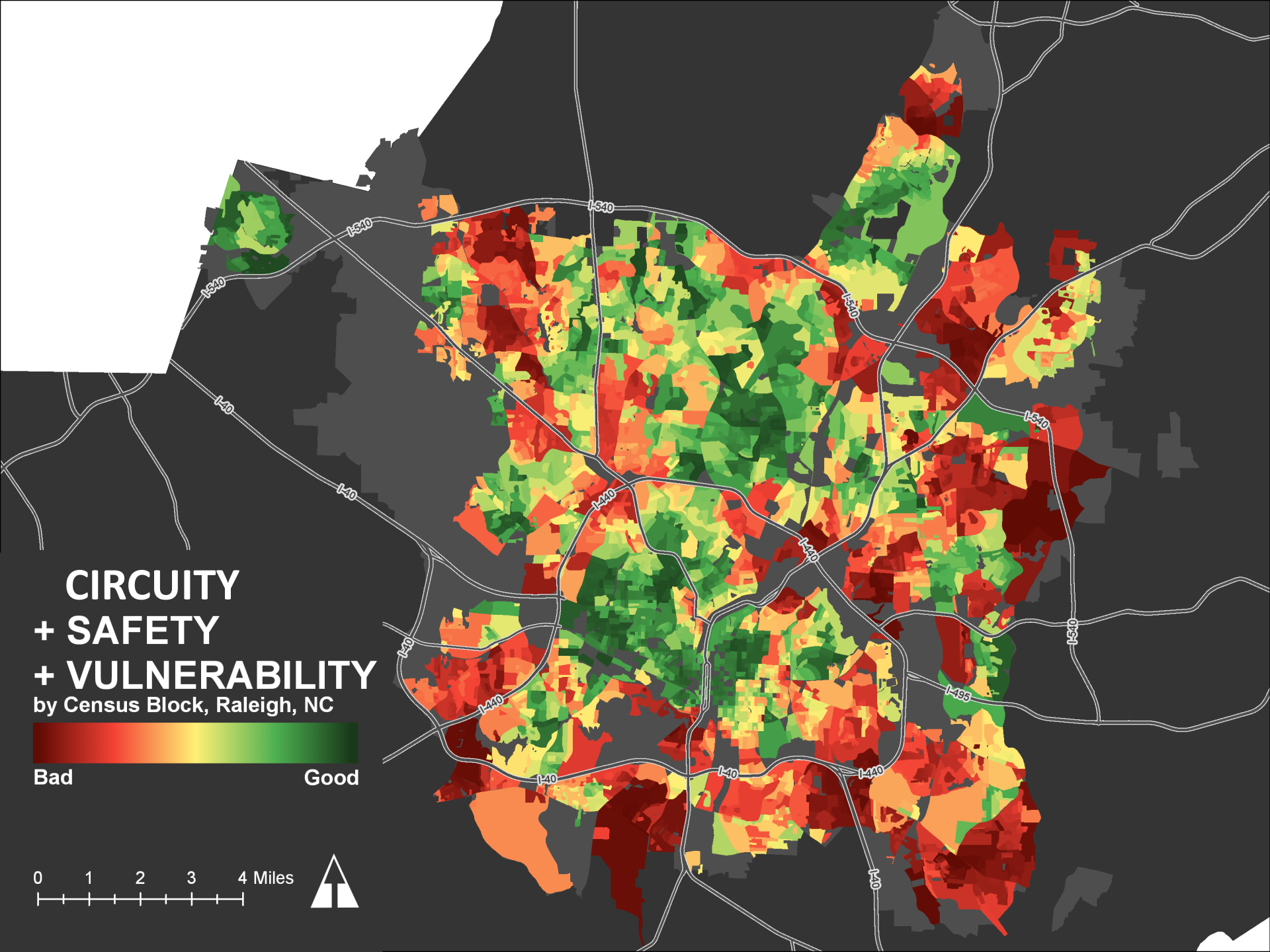
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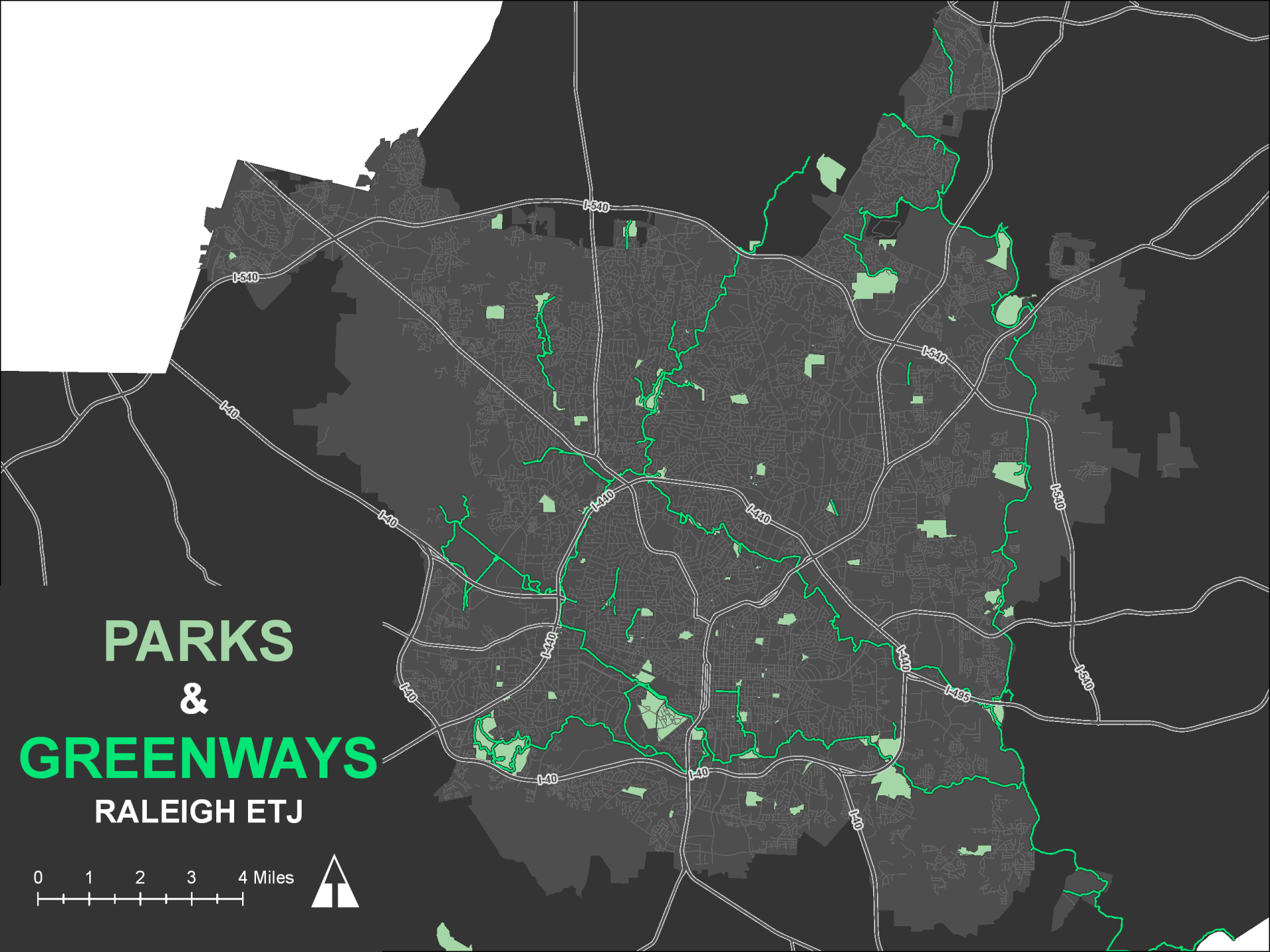


**CIRCUITY
+ SAFETY
+ VULNERABILITY**
by Census Block, Raleigh, NC



0 1 2 3 4 Miles





**PARKS
&
GREENWAYS**
RALEIGH ETJ

0 1 2 3 4 Miles

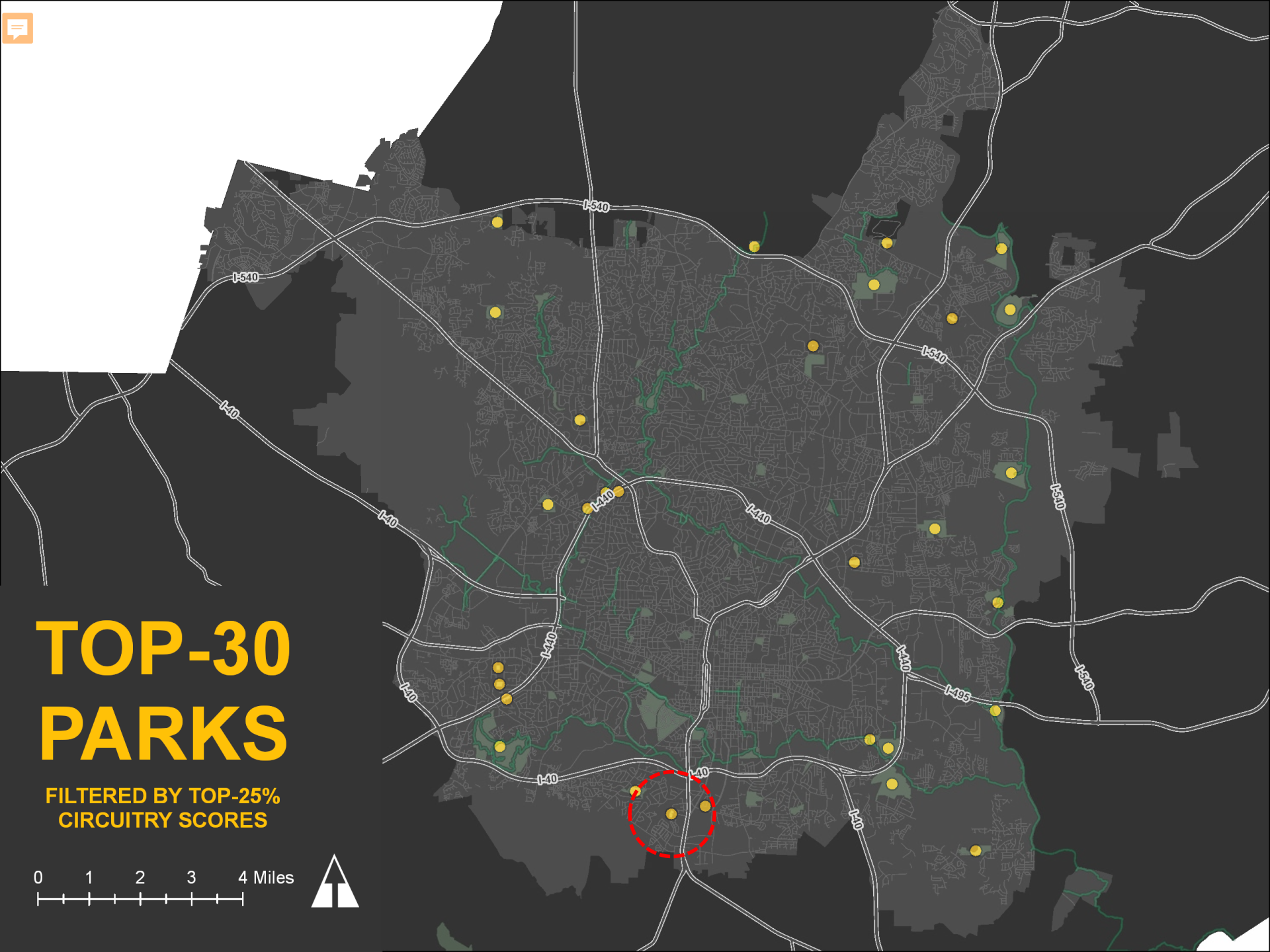




TOP-30 PARKS

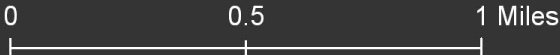
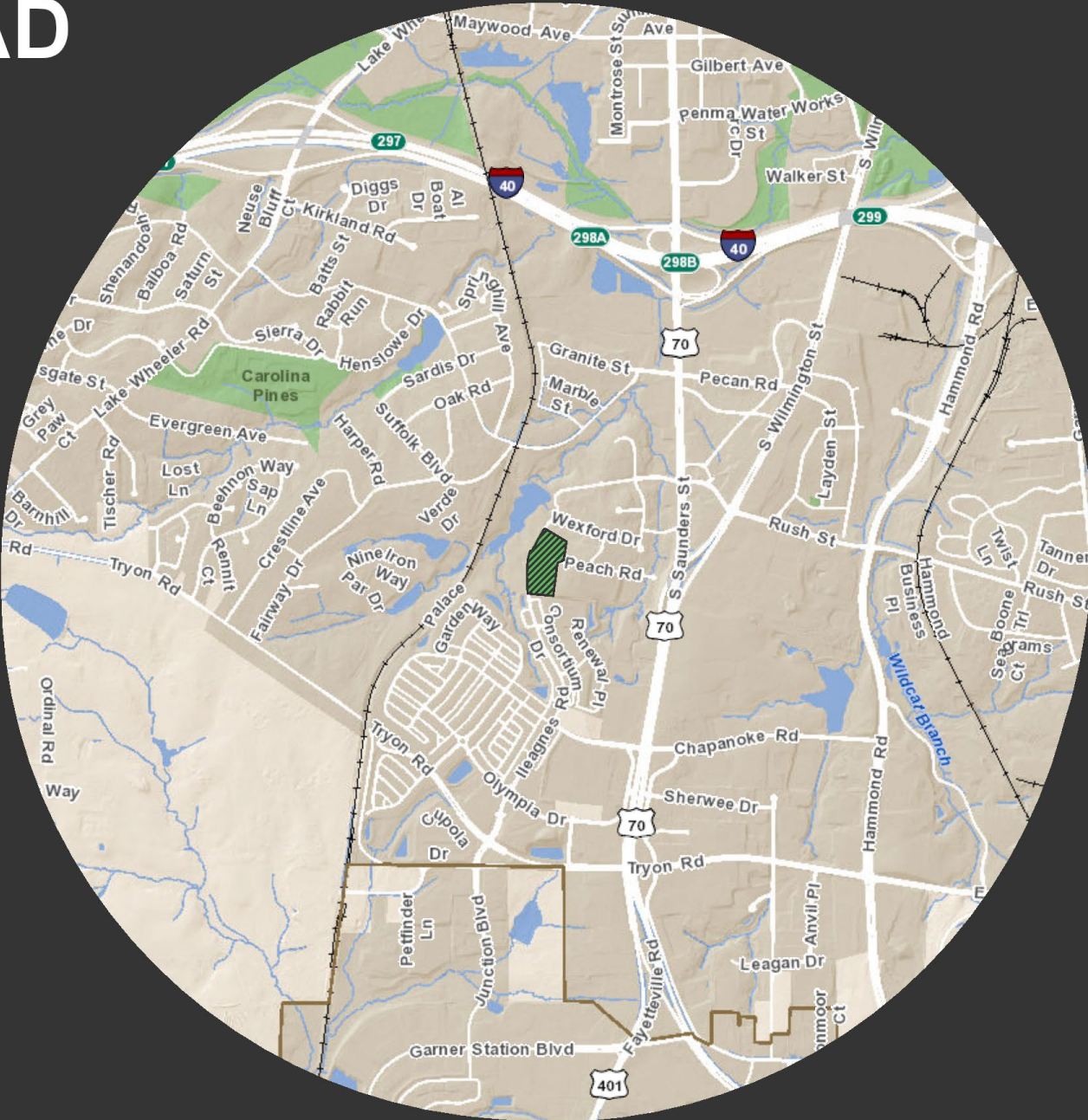
FILTERED BY TOP-25%
CIRCUITRY SCORES

0 1 2 3 4 Miles






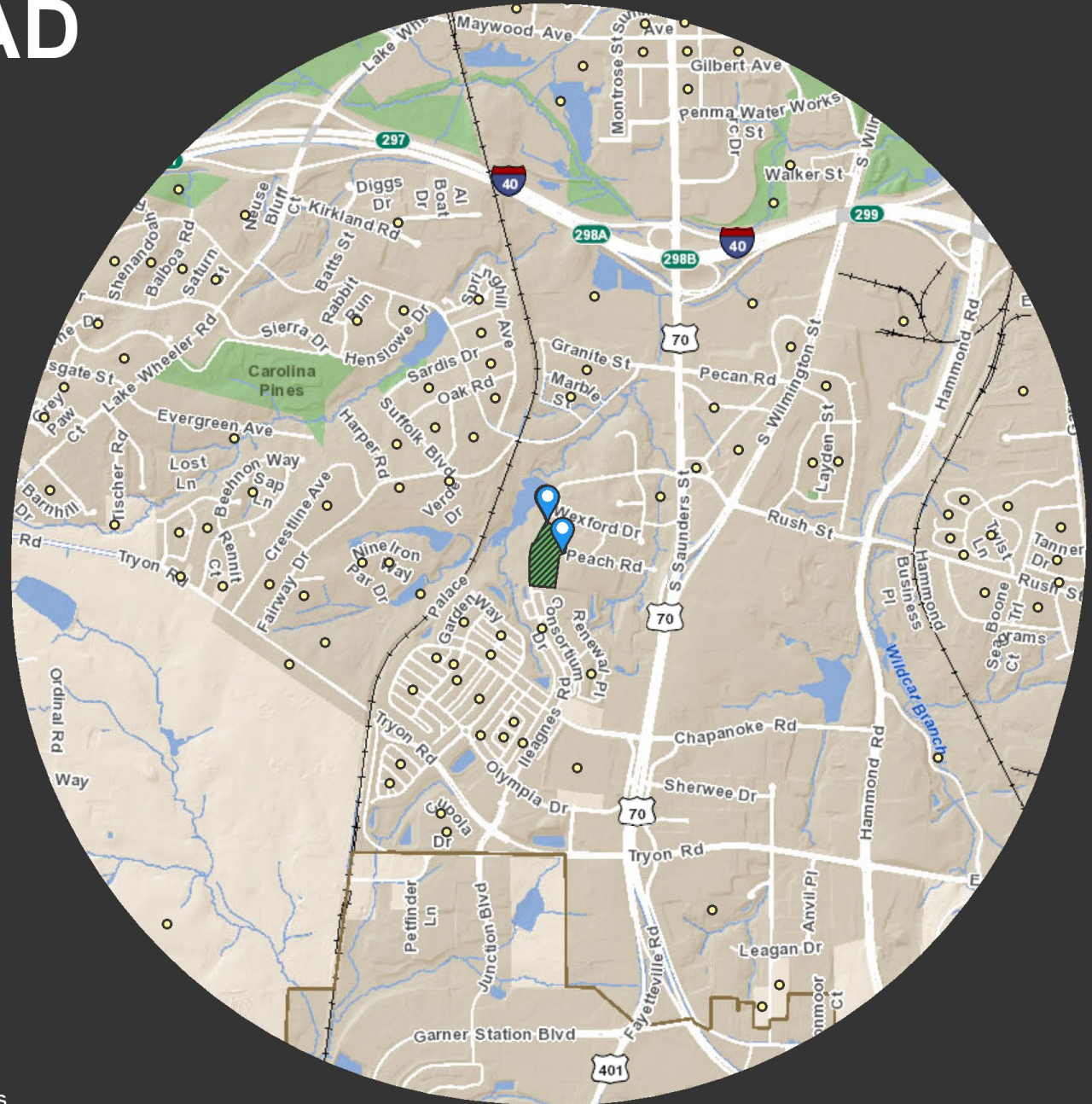
PEACH ROAD

 Peach Road Park






PEACH ROAD

-  Peach Road Park
-  Access Points (Current)
-  Census Block Centroids



A horizontal scale bar with tick marks at 0, 0.5, and 1. The unit "Miles" is written at the right end.

PEACH ROAD

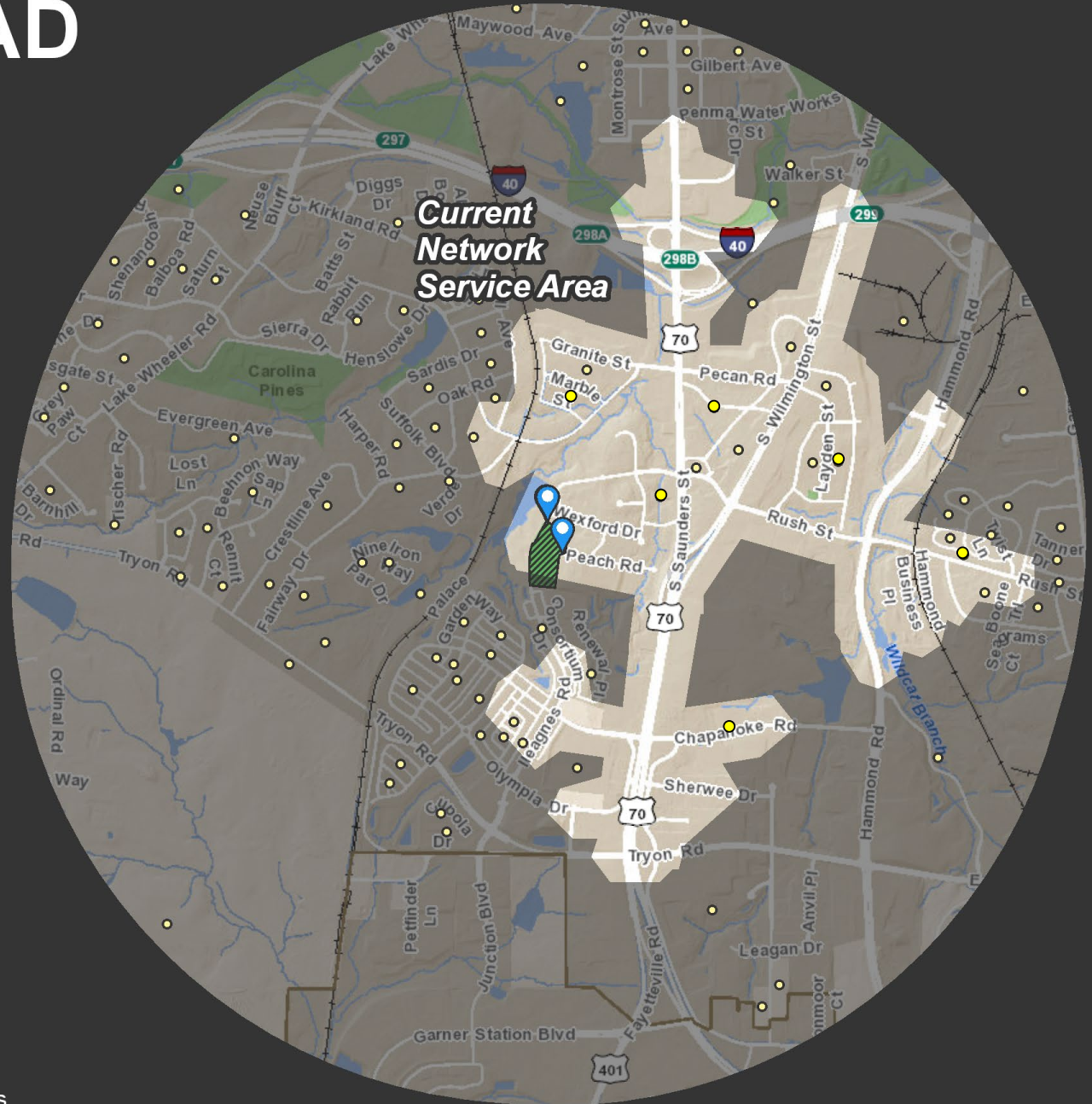
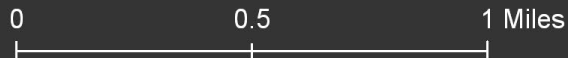
-  Peach Road Park
-  Access Points (Current)
-  Census Block Centroids

Population: 748




Safety Score: 91.4 - 10th overall



0 0.5 1 Miles



PEACH ROAD

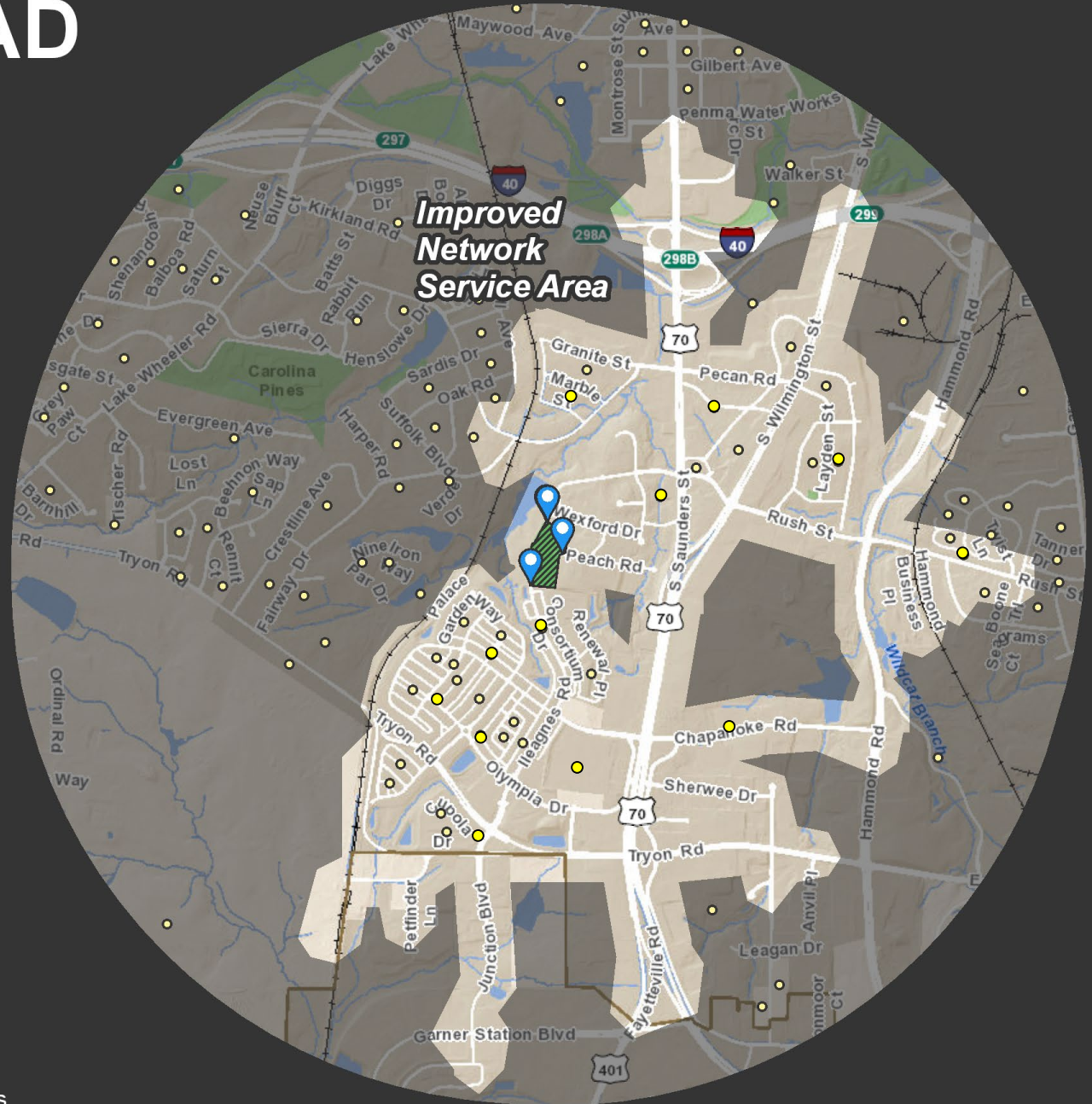
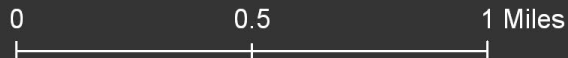
-  Peach Road Park
-  Access Points (Proposed)
-  Census Block Centroids

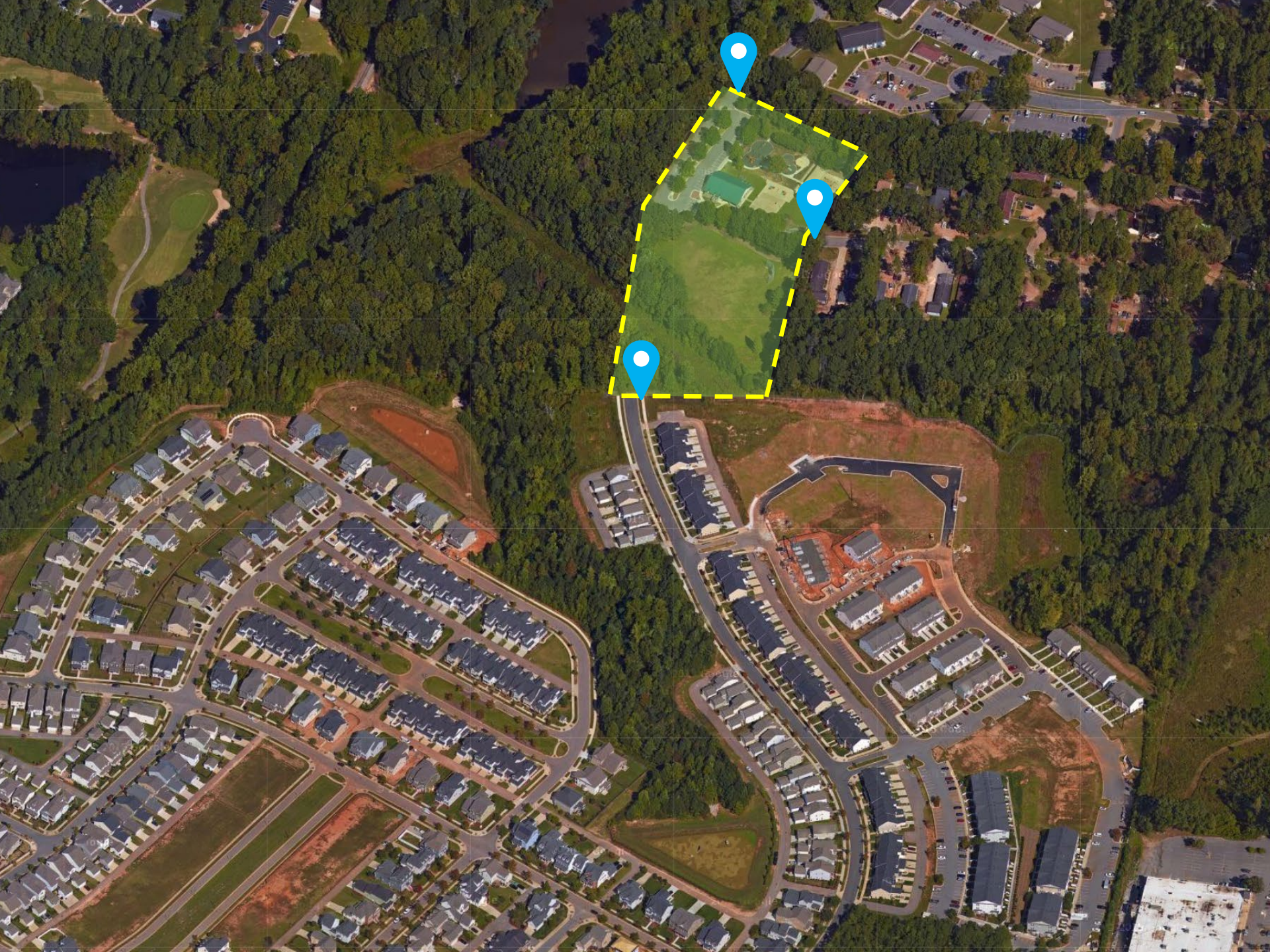
Population: 3935
(up from 748)

Safety Score: 37.3 - 62nd overall
(down from 10th)



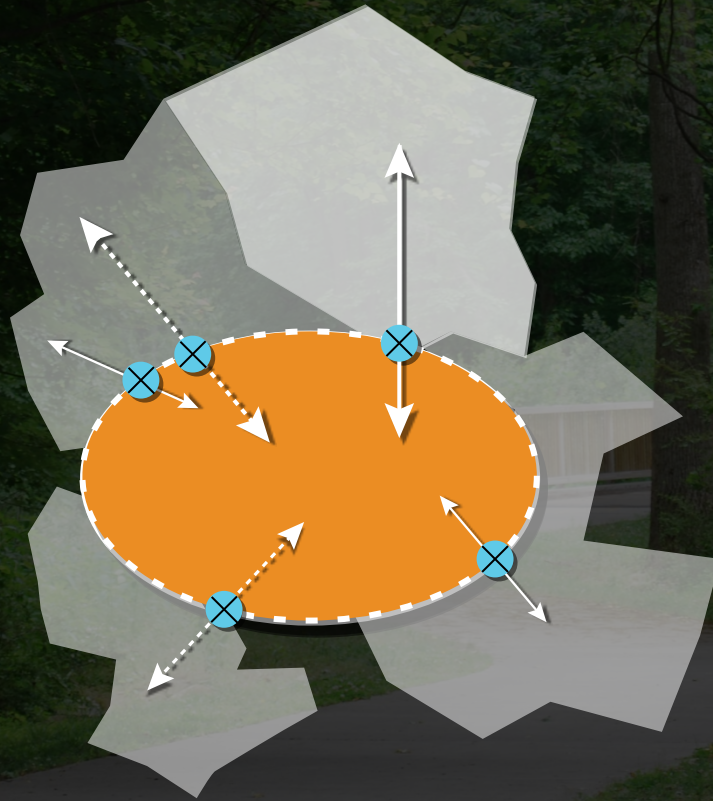
0 0.5 1 Miles







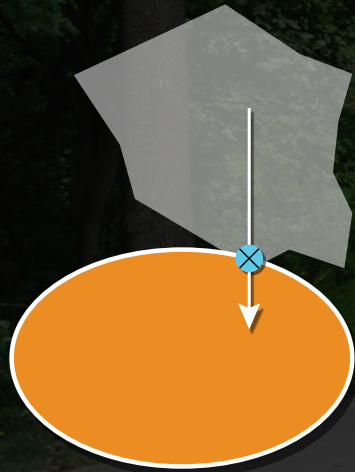
DESIGN FOR ACCESS | DESIGN FOR EQUITY



DESIGN FOR ACCESS | DESIGN FOR EQUITY

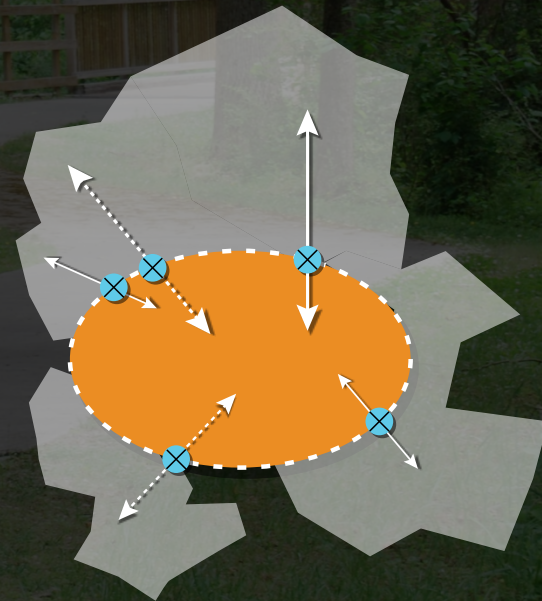
Traditional Park Development

- Focus on primary vehicular access
- Design stops at park borders
- Tightly controlled access



Accessible Park Development

- Multiple access points for variety of mobility options (car, transit, bike/ped)
- Design oriented toward surrounding community





LESSONS FROM THE N&CC PROGRAM

1. Design for **Access** = Design for **Equity**
2. Value of **cross-sector collaboration** & partnerships
3. Adopt **clear, quantitative criteria** to drive funding priorities

ACTIVE ROUTES TO EVERYDAY DESTINATIONS

RALEIGH'S NEIGHBORHOOD & COMMUNITY CONNECTIONS PROGRAM

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