



BIKE 
FAIRFAX CITY
Live Life Connected
on Two Wheels



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Acknowledgments

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Glossary of Terms

PREVIOUSLY PROPOSED PROJECT: A project that has already been proposed in a previous plan such as the *2017 Fairfax Multimodal Transportation Plan*.

PROGRAMMED PROJECT: A project that is currently in the design phase, under construction, or has some level of funding associated with it.

BIKEWAY: A general term that includes bike lanes, paths, and designated streets or routes that provide for bicycle travel.

BIKE LANES: Bike lanes provide a dedicated lane for bicycle travel on the roadway utilizing striping, pavement markings and signage.

BUFFERED BIKE LANE: A buffered bike lane is an on-street bike lane that has a painted buffer either between the bike lane and parked cars, between the bike lane and the standard motor vehicle lane, or both.

LOCAL ACTIVITY CENTER: A local Activity Center, as defined in the city's *Comprehensive Plan*, are locations in the City where pedestrian-oriented, mixed use development is strongly encouraged to accommodate future growth. These Activity Centers include Old Town Fairfax, Northfax, Fairfax Circle, Pickett and Main, and Kamp Washington.

LONG TERM IMPROVEMENT: Long term improvements identify higher volume / higher speed corridors that will likely require long planning horizons and major investments.

TRAFFIC STRESS: As one measurement of the user experience, "traffic stress" is the perceived sense of danger associated with riding in or adjacent to vehicular traffic. A low stress roadway or bicycle facility means that it feels comfortable and safe for users of the street, particularly bicyclists.

NEIGHBORWAYS: Neighborways are streets with low vehicle volumes and speeds that prioritize bicycle travel through signage, pavement markings, and/or traffic calming.

OFF-STREET PATH: Off-street paths, also referred to as trails, provide a bike facility completely separated from the roadway; often shared with pedestrians, may vary in design and location (e.g. park trails, sidepaths next to roads, short connector trails, etc.)

SEPARATED BIKE LANE: On-street bicycle facilities physically separated from motor vehicle traffic using bollards, curbs, or parking.

SPOT IMPROVEMENTS: Spot improvements are design features aimed to address challenging locations, usually at intersections and crossings.

SUPER SHARROWS: Super sharrows are enhanced large pavement markings centered in the travel lane used to reinforce that people bicycling share the road with motor vehicles.

TRIP GENERATOR: A trip generator is a key destination within the community that people frequently travel to. Trip generators were used in this plan to understand the demand for bicycling on specific corridors.

COMPLETE STREETS: Roadways designed and operated to enable safe access and travel for all users, including pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities.

Executive Summary

Why Create a Bike Plan?

The City of Fairfax Bicycle Plan, *Bike Fairfax City*, outlines a comprehensive bike network as a key component of a sustainable multimodal transportation system. The recommendations in this plan support many of the goals in the *2035 Comprehensive Plan*.

A comprehensive bike network will benefit all transportation modes—biking, walking, driving, and public transit. Bicycle infrastructure has been shown to improve safety for all street users, can reduce congestion, provide more transportation options, and improve the economy, environment, health, and opportunity.

The Plan's Vision

Bike Fairfax City Vision Statement:

"In 2035, Fairfax is a city where residents of all ages and abilities can safely and efficiently travel within and between neighborhoods and destinations using a connected network of low stress bikeways. Biking is a convenient, safe, and desirable choice for transportation and recreation. Bicycle facilities, programs, and policies foster health, equity, and sustainability, and contribute to the unique and vibrant Fairfax community."

The Plan's Goals

The six goals below build upon the vision statement, relate directly to the values from the *2017 Fairfax Multimodal Transportation Plan*, and expand on lessons learned from national bicycle research. The goals have been adapted to promote bicycle travel within and between neighborhoods in the City of Fairfax.



CONNECTED



VIBRANT



SAFE + SECURE



ROBUST



INTERGENERATIONAL
CITY



GREEN

What's in the Plan?

- Documentation of past and current bicycle planning processes in the City of Fairfax.
- Analysis of existing conditions for biking and how it relates to the larger transportation system in the city and region.
- Recommended policies, programs, and a comprehensive network of on-road bikeways and off-street paths.
- Strategies to implement the plan recommendations.

Existing Conditions

An existing conditions analysis was performed to better understand trends and issues related to biking in Fairfax City today. This work sets the stage for the development of the recommended network, proposed policies and programs and implementation strategies to advance bicycling in Fairfax City.

Type of Analysis Completed	Key Observations
Planning History	The <i>2017 City of Fairfax Multimodal Transportation Plan</i> sets a clear vision for transportation in the City of Fairfax and directly informed the goals of this plan.
Review of Existing + Planned Bike Network	The city's compact development and existing neighborhood streets and off-street trails provide opportunities for short distance trips ideal for biking. However, gaps in the trail network and barriers on major roadways limit connectivity across the city.
Safety Analysis	81% of bicycle crashes in the past decade occurred on major arterials such as Main St and Fairfax Blvd.
Traffic Stress	Major arterials create high stress bike experiences while local, neighborhood streets and off-street trails generally provide low stress experiences.
Bicycle Trip Generators + Existing Access	Activity Centers, such as Old Town and Northfax, are where most of the major destinations are located. These locations, however, are often along high volume, high speed corridors.

Public Input

Public input for the *Bike Fairfax City* plan included an online survey, online interactive map, steering committee meetings, a public workshop, and public comment periods on the draft plan.

While the public participation wasn't statistically representative, we generally heard that people preferred: more separated bicycle facilities, better connections to trails and other community destinations, and increased safety for bicyclists.

Recommended Bicycle Network

The recommended bicycle network was developed using the findings from existing conditions analysis, understanding public input, and applying professional judgment. The result is a connected network of low stress bikeways including neighborways, off-street paths, spot improvements, and long term improvements, such as separated bike lanes. Other improvements such as standard bike lanes and super sharrows complement the low stress network.

In addition to physical infrastructure, the plan includes policy and program recommendations such as updated design standards, traffic safety policies, evaluation strategies, and education and encouragement programs.

Basis of the Recommended Bicycle Network

EXISTING CONDITIONS

Previous Plans + Policies
 Current Road Conditions
 Safety Analysis
 Level of Traffic Stress
 Trip Generation
 Circulation Patterns
 Fieldwork

PUBLIC INPUT

Steering Committee
 User Survey
 Interactive Map
 Public Workshop



PROFESSIONAL JUDGMENT

Best Practices
 Engineering Judgment

Facility Types

Different types of bikeways are better suited for different roadways based on considerations such as how fast and how frequently vehicles use the road and the roadway width. The following bikeways and project types are part of the recommended network design “toolbox”.



RECOMMENDED: 43 Locations

Spot improvements are design features aimed to improve challenging locations, usually at intersections and crossings.



RECOMMENDED: 2.4 MILES

Bike lanes provide a dedicated lane for bicycle travel on the roadway utilizing striping, pavement markings and signage.



RECOMMENDED: 19.7 MILES

Neighborways are streets with low vehicle volumes and speeds that accommodate bicycle travel through signage, pavement markings, and/or traffic calming.



RECOMMENDED: 3.5 MILES

Off-street paths provide a bike facility completely separated from the roadway, are often shared with pedestrians and may vary in design and location (e.g. park trails, sidepaths next to roads, or short connector trails).



RECOMMENDED: 0.87 MILES

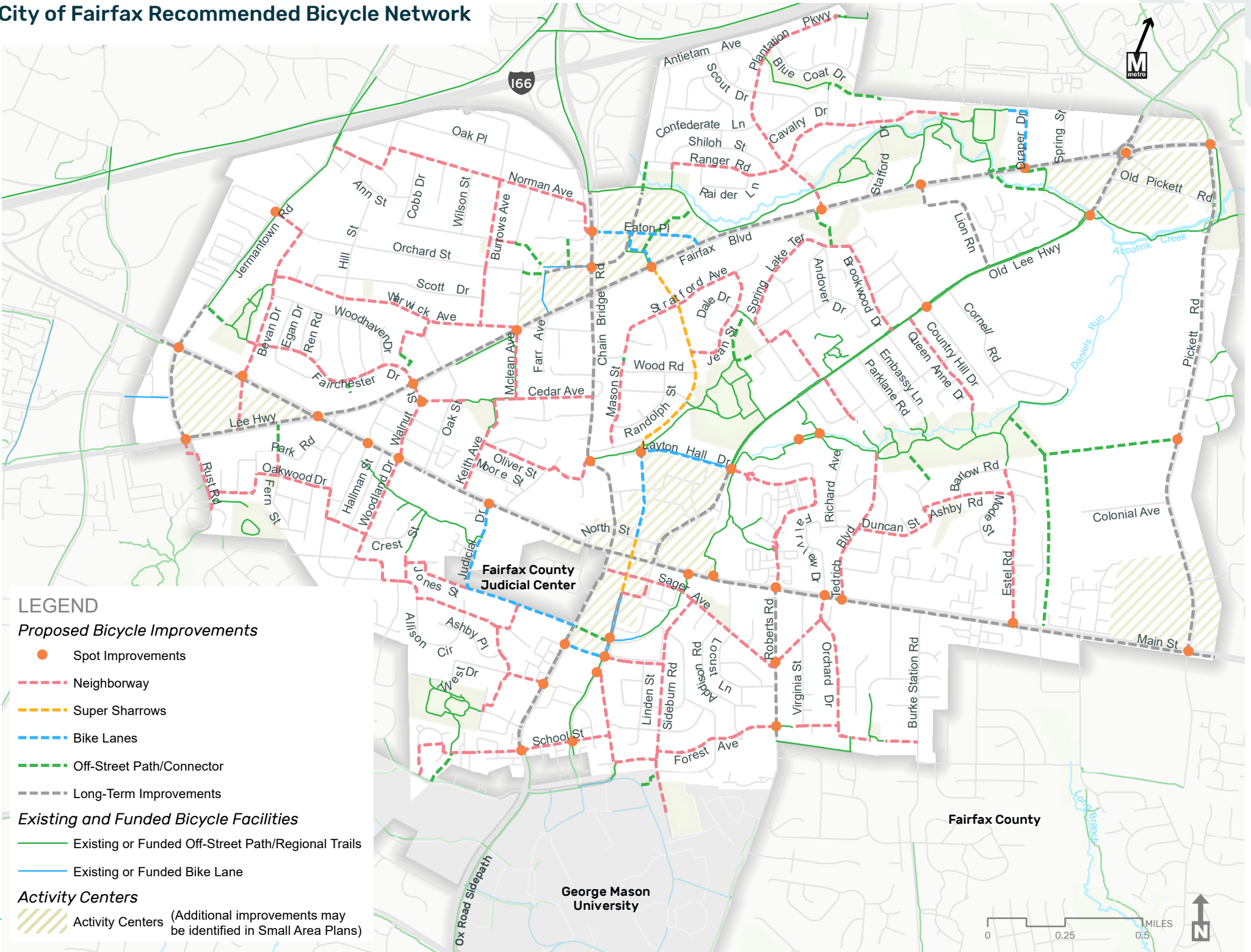
Super sharrows are enhanced large pavement markings centered in the travel lane used to reinforce that bikes share the road with motor vehicles.



RECOMMENDED: 13.6 MILES

Long term improvements identify higher volume / higher speed corridors that will likely require long planning horizons and major investments.

City of Fairfax Recommended Bicycle Network



LEGEND

Proposed Bicycle Improvements

- Spot Improvements
- - - Neighborway
- - - Super Sharrows
- - - Bike Lanes
- - - Off-Street Path/Connector
- - - Long-Term Improvements

Existing and Funded Bicycle Facilities

- Existing or Funded Off-Street Path/Regional Trails
- Existing or Funded Bike Lane

Activity Centers

- Activity Centers (Additional improvements may be identified in Small Area Plans)



Plan Implementation

The project team developed a strategy to guide implementation of the recommended infrastructure improvements, policies, and programs. The implementation strategy includes the following:

- prioritized short- and long-term projects;
- action items to implement the program and policy recommendations and the prioritized short-term and long-term projects;
- conceptual designs for three example projects to highlight the recommended design principles; and
- potential funding sources.

Network Prioritization

Given limited funding, the City of Fairfax must decide how to prioritize the implementation efforts recommended in this plan. In order to identify high priority initiatives, the project team developed prioritization criteria (connectivity, demand, feasibility, safety and high need) to guide short term and long term projects.

Action Items

Action items are proposed for implementation of several of the program and policy recommendations, such as updating city standards with current bicycle facility design best practices, incorporating bicycle recommendations into maintenance and operations programs, and developing an annual report card to measure progress on the bicycle plan goals.

In addition, the action items outlined on the right will help guide implementation of the prioritized infrastructure recommendations.

Short Term Projects

21.5 Miles and 22 Spot Improvements

Short term projects are projects that are recommended for completion within the next 5 years. The short term network includes the entire neighborway network as well as other projects that met most of the prioritization criteria. The City should engage stakeholders to develop wayfinding signage for the neighborway network, identify traffic calming elements, and determine a final design concept for the short-term spot improvements and bikeways.

ACTION ITEMS: SHORT TERM NETWORK

- Network Branding + Wayfinding
- Neighborway Concept Development
- Spot Improvement + Bikeway Implementation

Long Term Projects

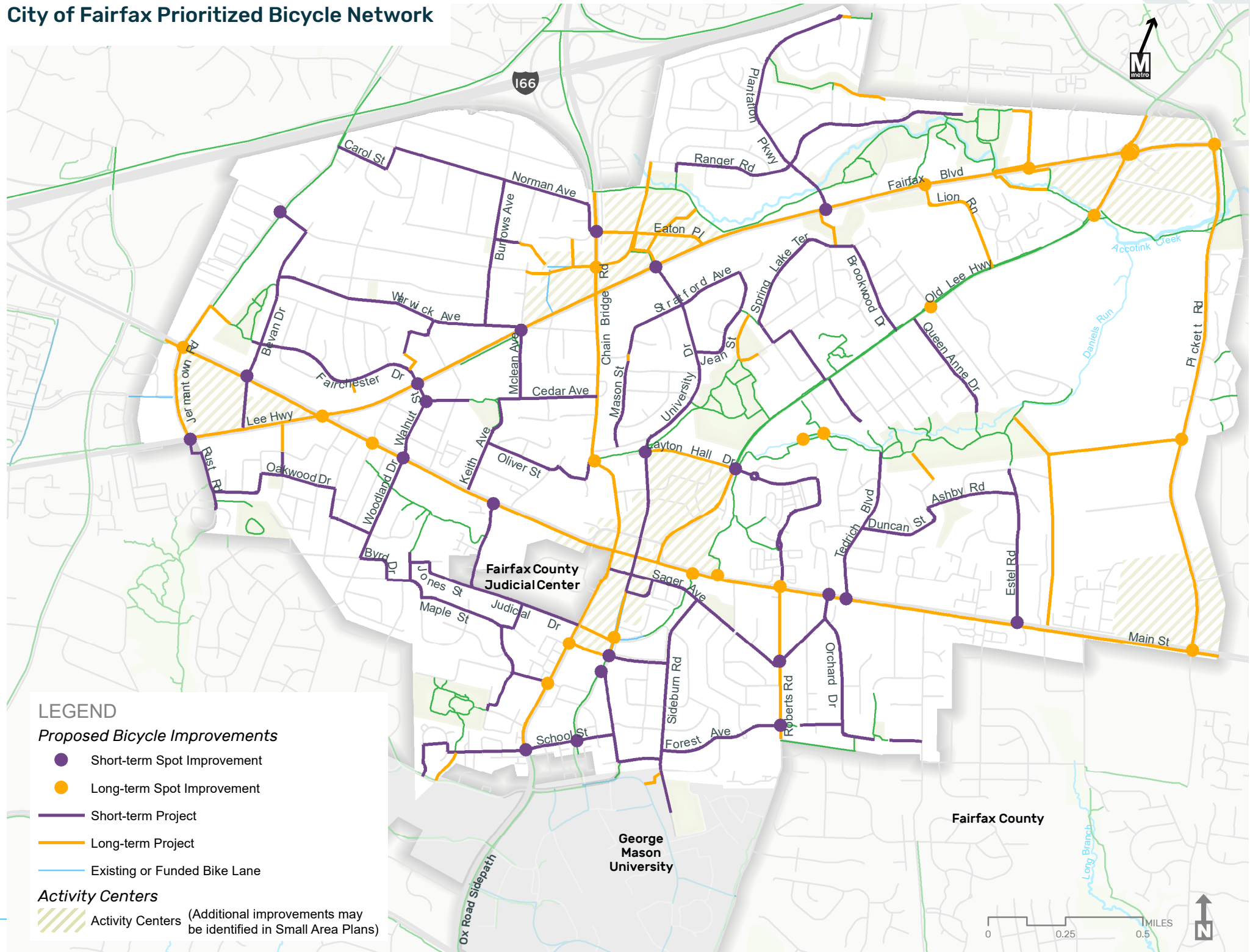
18.5 Miles and 21 Spot Improvements

Long term projects require additional traffic studies and a community design process to evaluate trade offs, and may require multi-agency coordination. Several of the projects identified in the long term network are more complicated and require more time to develop feasible concepts for the corridor and outline a strategic approach to implementation.

ACTION ITEMS: LONG TERM NETWORK

- Corridor Studies
- Focused Community Engagement
- Secure Funding

City of Fairfax Prioritized Bicycle Network



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Fairfax County
Judicial Center

George
Mason
University

Fairfax County

