



FAIRFAX COUNTY

# Safe Streets for All Program Recommendations

DRAFT 2022





## Contents

<b>Introduction</b>	<b>3</b>
<b>Prioritizing Safety</b>	<b>3</b>
<b>Principles of a Safe Streets for All Approach</b>	<b>6</b>
<b>Program Recommendations</b>	<b>7</b>
Glossary of Abbreviations	7
Funding + Staff Capacity Building	8
Policy + Planning	10
Street Design + Traffic Engineering	12
Equity + Social Justice	14
Education + Traffic Safety Culture	15
Monitoring + Evaluation	16

# Introduction

This document provides a framework for a Fairfax County Safe Streets for All Program designed to address systemic transportation safety issues with a focus on active transportation users and equity on roads in Fairfax County. The framework includes proposed education, policy, planning, programmatic and design strategies that can be implemented in a phased approach. Some of the strategies could be implemented as pilots; others require close coordination and support from stakeholder agencies, or will need one-time or recurring funding. Implementation will occur in a phased approach as staff capacity and resources allow.

Potential strategies are presented within the following framework:

- **Proposed Program Recommendations** – A list of potential strategies that would help advance active transportation safety in Fairfax County.
- **Stakeholders** – Key stakeholders that the Fairfax County Department of Transportation will need to coordinate with to implement the recommendation.
- **Implementation Cost** – Recommendations are assigned a likely implementation cost depending on complexity, construction needs and stakeholder buy-in.

The strategies are not presented in order of priority.

## Key Stakeholders

- BOS – Board of Supervisors
- CTB – Commonwealth Transportation Board
- DEI – Department of Economic Initiatives
- DMB – Department of Management and Budget
- DPD – Department of Planning and Development
- DPWES – Department of Public Works and Environmental Services
- CEX – Office of the County Executive
- FCDOT – Department of Transportation
- FCPA – Park Authority
- FCPD – Police Department
- FCPS – Public Schools
- HD – Health Department
- LDS – Land Development Services
- NCS – Neighborhood Community Services
- NPS – National Park Service
- OPA – Office of Public Affairs
- VDOT – Virginia Department of Transportation



## Prioritizing Safety

Complete streets aim to prioritize safety for all users, regardless of mode of transportation, age, race, income, or ability. While the status quo accepts traffic deaths and injuries as inevitable, safe streets programs work towards eliminating traffic injuries and fatalities through a combination of engineering, education, policy, and planning. Reducing traffic-related deaths in Fairfax County will require a data-driven approach to project implementation and prioritization of investments.

Nationally, pedestrians and bicyclists are more likely to be involved in a traffic collision that results in a severe or fatal injury. Communities of color and low-income communities experience traffic crashes disproportionately.

**In Fairfax county, during the five-year study period, from 2014 – 2018, there was an**

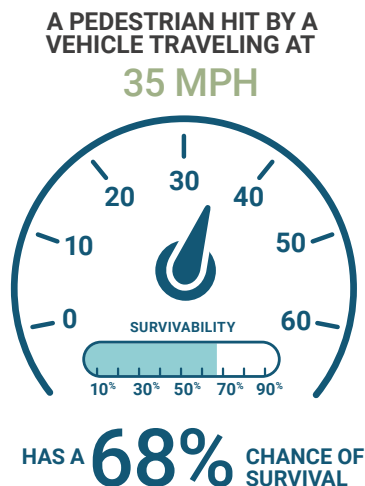
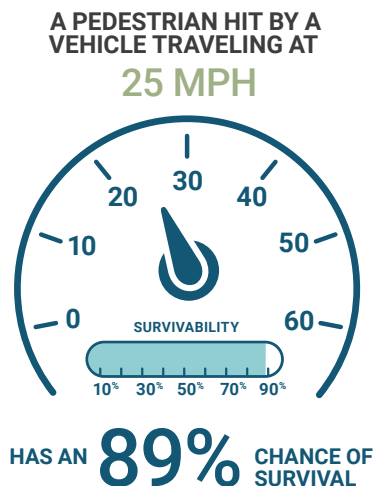


**average of 189 pedestrian crashes and 68 cyclist crashes per year.**

The maps on the following pages show the distribution of all pedestrian and bicycle crashes throughout Fairfax county, highlighting where clusters and fatal crashes occurred.

Speed is a factor in many of these instances. The one recorded fatal cyclist collision occurred on a road with a speed limit between 36 and 50 miles per hour. For pedestrian collisions, roadways with a speed limit of 25 miles per hour or lower had the lowest rate of fatal or severe crashes. This is consistent with findings that suggest that speed is one of the most significant determinates of severe and fatal collisions involving pedestrians. At 25 miles per hour, nearly nine in ten pedestrians will survive the collision. At 40 miles per hour, only 35% of pedestrians will survive.

Furthermore, the perception of safety by the public can be a significant barrier in encouraging



Tefft, B. C. Impact speed and a pedestrian's risk of severe injury or death. Accident Analysis & Prevention 50 (2013) 871-878.

active transportation. People who choose to drive might have otherwise walked or biked, but felt that the current infrastructure prioritizes people who travel in cars, and puts active transportation users at risk. Complete streets not only directly addresses unsafe street design, but can indirectly address traffic safety by reducing the number of motor vehicles on the road.



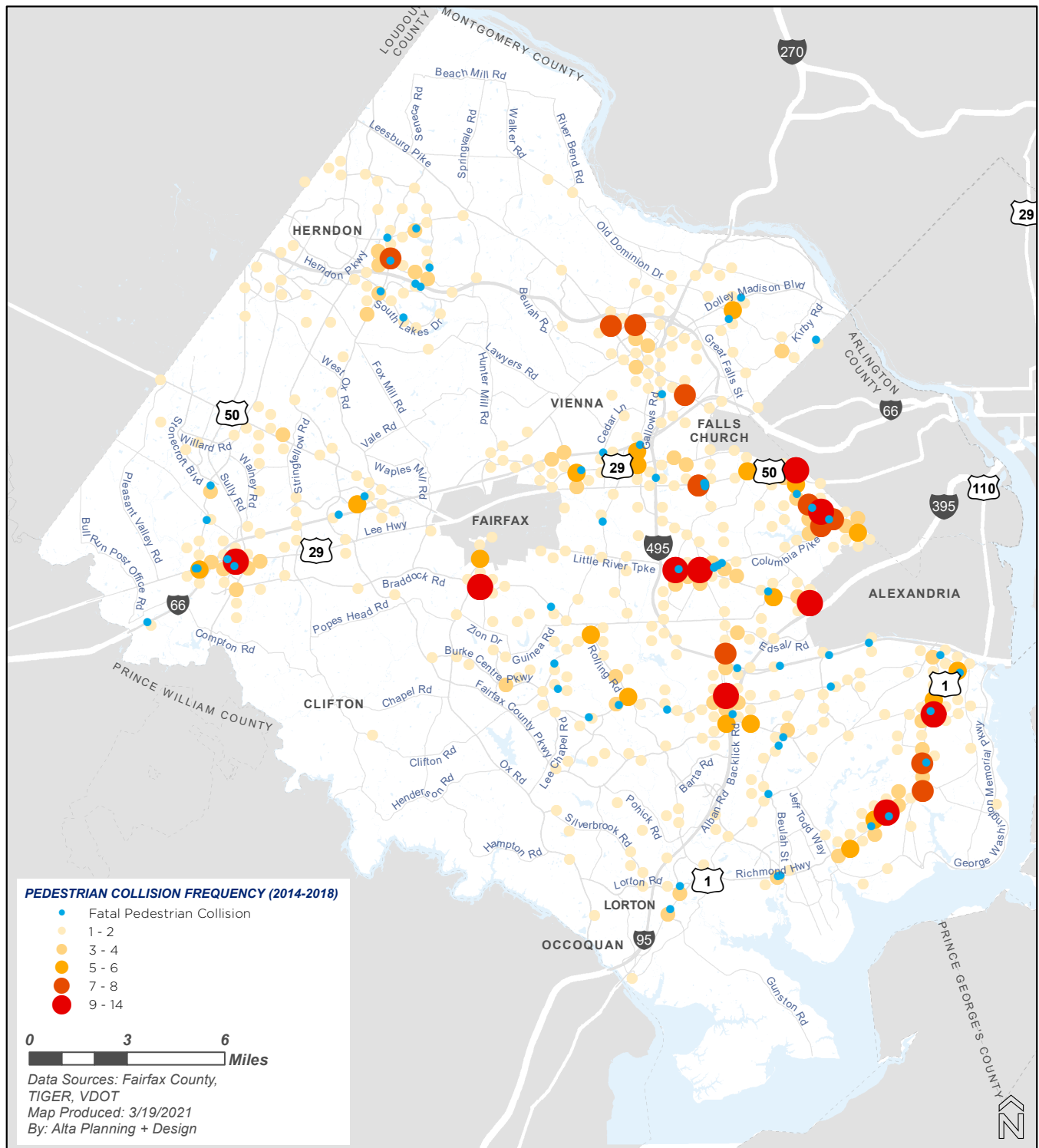
**When asked to describe their experience using active transportation in Fairfax county, 27% of public survey respondents (265 of 999) stated that the current active transportation network feels unsafe.**

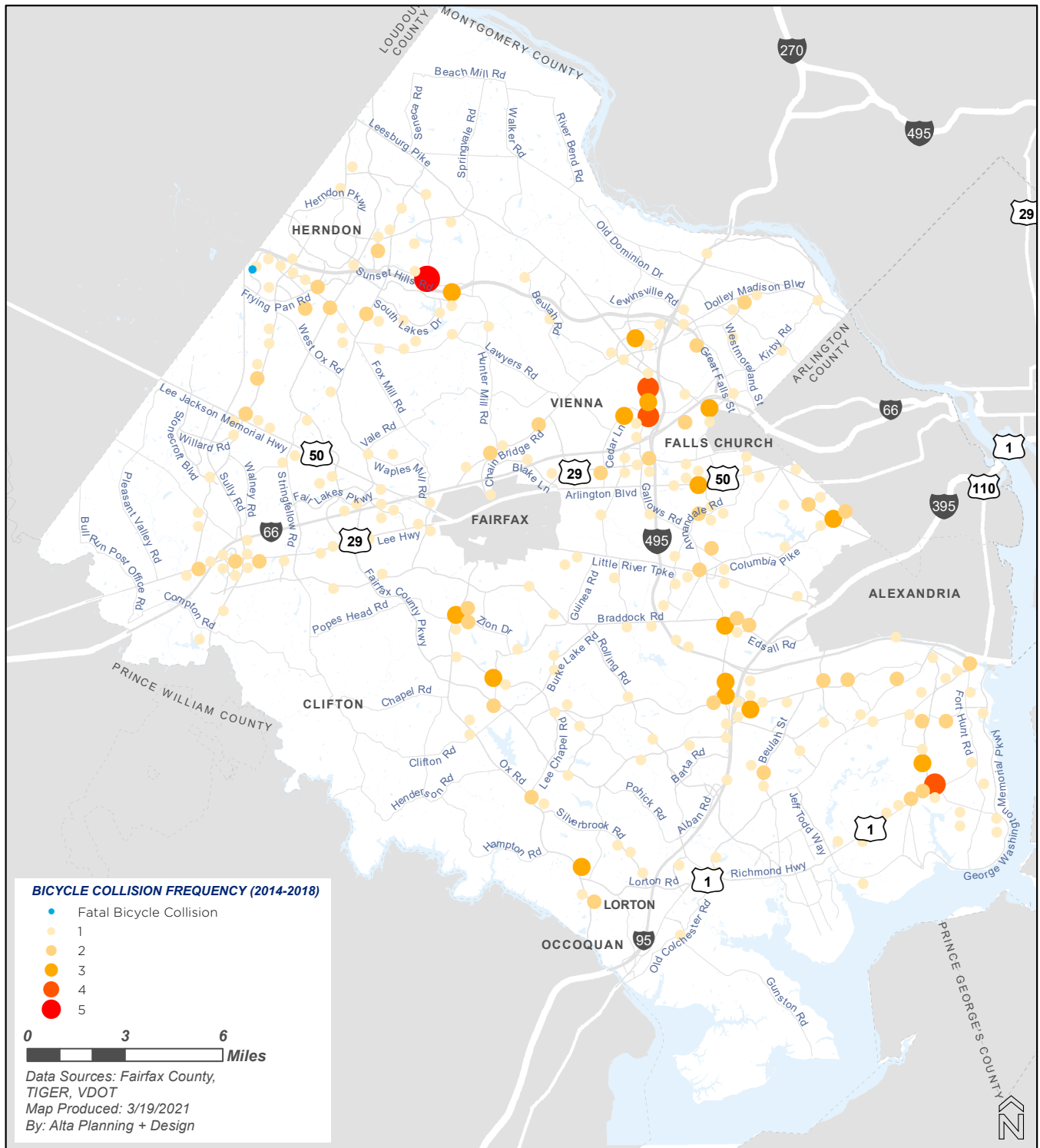
**The following comments are a sample of responses to the ActiveFairfax public survey that asked users to describe their experience walking, or riding a bike, scooter or another small vehicle in Fairfax County.**

- I purposely chose my neighborhood because of its sidewalks. I can walk to the grocery stores, library, bus stops, church, etc.
- "I tried biking in my area, but I gave up because I don't feel that it's safe. Walking is fairly safe, but drivers seldom yield to pedestrians even when pedestrians are in the crosswalk and have the right of way."
- "It is frustrating and dangerous. Even with marked, dedicated bike lanes and sharrows vehicles do not yield/acknowledge bicycles. And I am not referring to just distracted drivers: at least six drivers in the past year have deliberately targeted me on my bicycle with harassment and physical threats."











## Principles of a Safe Streets for All Approach

- Traffic deaths and serious injuries are avoidable and should not be accepted.
- Protecting human life is the highest priority.
- The people who design, build, and manage roads have a shared responsibility to prevent crashes that result in serious injury or death.
- All road users have a shared responsibility to prevent crashes that result in serious injury or death.
- Rather than waiting for crashes to occur and reacting, a proactive approach should be taken to make the transportation system safe for all users including pedestrians, cyclists, and people traveling in vehicles.
- A safe system means a system that is designed for all ages and abilities, including youth and elders, and individuals with physical, visual, or cognitive disabilities.
- Lack of safety should not be a trade-off for faster mobility. Pedestrians and cyclists are particularly vulnerable, and speed is a fundamental predictor of crash survival. Rather, the transportation system should be both safe and efficient for all users.





## Funding + Staff Capacity Building

Proposed Program Recommendations	Stakeholders	Implementation Cost*
Establishment of a Safe Streets for All program focused on the implementation of the proposed recommendations below.	FCDOT; BOS; CEX; DEI; VDOT	\$
Establishment of an interdisciplinary Task Force to provide oversight of the Safe Streets for All Program.	Various agencies and community organizations	\$
Creation of at least one staff position to run the Safe Streets for All Program and monitor performance. Grow staff capacity as needed.	FCDOT; BOS; DMB	\$
Allocation of adequate funding and maintenance of safety related equipment, marking and signage such as Rapid Flashing Beacons, Pedestrian Hybrid Beacons, crosswalk markings, Yield to Pedestrian signage, street and walkway lighting, etc.	FCDOT; VDOT; DPWES; BOS; DMB	\$
Requirement of every transportation-related project (studies, capital projects, comprehensive plan amendments; etc.) to include an active transportation expert on the consultant team.	FCDOT; VDOT	\$
Prioritization of maintenance and active transportation capital improvements along high-risk pedestrian and bicycle corridors and to provide access to major activity centers.	FCDOT; DPWES; BOS; VDOT	\$
Allocation of dedicated funding for the Safe Streets for All Program for implementation of pilot projects, studies and other safety-related non-capital efforts such as educational campaigns.	FCDOT; BOS	\$

## Funding + Staff Capacity Building, cont'd.

Proposed Program Recommendations	Stakeholders	Implementation Cost
Development of a locally funded Safe Routes to School program in partnership with FCPS. Creation of at least one staff position to run the Safe Routes to School Program serving students K-12 and provision of dedicated funding for programming and studies. Scale up staff capacity as needed.	FCDOT; FCPS; BOS; NCS; HD; DMB	\$\$
Development of a Safe Routes to Parks, Trails and Community Services* program in partnership with FCPA, NOVA Parks and NPS, NCS, and the HD.	FCDOT; FCPA; NOVA Parks; NPS; BOS; NCS; HD	\$\$
Determination of maintenance responsibility for all sidewalk and trail segments. Allocation of adequate funding, staffing and equipment to clear sidewalks, bikeways and transportation trails of hazards, debris and obstructions.	FCDOT; VDOT; BOS; DPWES; DMB ; FCPA; NOVA Parks; FCPD; General Assembly, CTB	\$\$
Allocation of adequate funding for sidewalks, bikeways and transportation trails for resurfacing, restriping and reconstruction.	FCDOT; BOS; DPWES; DMB; FCPA; NOVA Parks; NPS; VDOT; General Assembly, CTB	\$\$
Development of an inclusive Slow Streets Program to supplement the Traffic Calming Program and provide dedicated funding.	FCDOT; DMB; VDOT; BOS	\$\$
Allocation of adequate funding to expedite building out the active transportation network.	FCDOT; BOS; FCPA; NOVA Parks; NPS	\$\$\$



## Policy + Planning

Proposed Program Recommendations	Stakeholders	Implementation Cost
Development of a Safe Streets for All Policy that prioritizes the protection of human life in the planning, design, and operation of Fairfax County's roadway network. Set short-, medium- and long-term targets.	FCDOT; VDOT; FCPD; HD; BOS; DPD; LDS	\$
Development of a comprehensive Complete Streets Policy to provide the transportation and land use connection.	FCDOT; VDOT; DPD; BOS; LDS	\$
Development of strategies that prioritize active transportation safety in planning and funding efforts using data, targets, and metrics.	FCDOT; VDOT; DPD; BOS	\$\$
Development of a policy that encourages public and private sector employers to provide safe and convenient access for active transportation users and transit riders to their main building entrance from the public street, sidewalk or trail, as well as secure bike parking.	FCDOT; DEI; Employers	\$
Identification of potential updates to the Comprehensive Plan Transportation Plan Map and the Transportation Policy Plan Transportation Element to reflect a Safe Streets for All approach.	FCDOT; VDOT; DPD; BOS	\$\$
Development of a walkway maintenance and snow/ice removal regulation, adopt a sidewalk, and a trail maintenance and snow/ice removal policy that directs property owners to keep sidewalks and trails along roads in front of their property free of debris, vegetation, snow and ice. Provide a needs-based waiver system for low-income residents and develop a plan to do the maintenance work at these locations.	FCDOT; VDOT; DPWES; NPS; OCA; BOS	\$\$
Development of a county-wide lighting plan based on equity, environmental and safety factors.	FCDOT; VDOT; DPWES; FCPA; NOVA Parks; NPS; BOS	\$\$

## Policy + Planning , cont'd.

Proposed Program Recommendations	Stakeholders	Implementation Cost
Development of a policy that would reduce the speed limit on local streets in residential and business districts to 15 mph on the state-maintained network.	VDOT; FCDOT; BOS; General Assembly; CTB	\$
Completion of an active transportation safety audit within a mile of each public school and provide adequate funding for safety improvements, prioritizing high risk/high traffic areas.	FCDOT; FCPS; NCS; HD; DMB	\$\$\$
Completion of an active transportation safety audit within a mile of each public park, community service location*, and high capacity transit route. Provide adequate funding for safety improvements, prioritizing high risk/high traffic areas.	FCDOT; FCPA; NOVA Parks; NPS; NCS; HD; DMB; VRE; WMATA	\$\$\$
Pursue revisions of Virginia state laws and policies related to multi-modal transportation safety including policies addressing topics such as distracted driving, 15mph speed limit, reduction of vehicle miles traveled, in-vehicle safety technology, and storage of snow/ice on walkway, bikeways and ramps.	FCDOT; VDOT; DPD; DEI; OCA; BOS; Advocates; General Assembly; CTB	\$
Development of a policy that would require new developments (rezoning and by-right) to provide adequate and safe access to their property for active transportation users, including improvements to the closest safe street crossing.	FCDOT; VDOT; LDS; DPD; DEI; General Assembly	\$



## Street Design + Traffic Engineering

Proposed Program Recommendations	Stakeholders	Implementation Cost
Consistent application of design solutions that simplify and narrow intersections, reduce conflicts for all users, and prioritize the safety of active transportation users.	FCDOT; DPD; DEI; VDOT	\$
Consistent implementation of planned active transportation facilities and any streetscaping requirements including providing crosswalks on all four legs of an intersection. Ensure that streetscaping does not encroach on active transportation facilities.	FCDOT; VDOT; DPD; LDS; DEI; Development Community; BOS; FCPS; DPWES; FCPA; NOVA Parks; NPS	\$
Design of new active transportation facilities prioritizing safety, comfort and convenience for facility users, using a complete streets design approach (narrow medians, travel lanes and/or reduce number of travel/turn lanes before reducing the recommended widths of the planned active transportation facility).	FCDOT; DPD; VDOT; BOS	\$
Design of new and improved existing public facilities such as schools, parks and community services to prioritize safety, comfort and convenience for people accessing the facility using active transportation. If applicable, provide access from several directions.	FCDOT; DPWES; FCPS; FCPA; LDS; NCS; NOVA Parks; VDOT	\$
Implementation of technological innovations to address traffic safety issues.*	FCDOT; VDOT; DEI	\$\$
Reduction of posted speed limits and operational vehicle speeds on roadways that provide direct access to residential, commercial, institutional, recreational, or civic land uses and transit stations, and along bus transit and high-risk corridors.	FCDOT; VDOT; General Assembly	\$\$
Development of a county-wide Complete Streets Design Guide that reflects best practices in Safe Streets for All design, context sensitive design (transportation-land use connection), active transportation facility design, and placemaking principles. Incorporation of guidance on how to implement the county-wide trail network in a variety of land use contexts and quick-build interim implementation strategies.	FCDOT; VDOT; DPD; DEI; HD	\$\$



## Street Design + Traffic Engineering , cont'd.

Proposed Program Recommendations	Stakeholders	Implementation Cost
Review of bus stop locations to ensure that they can be safely accessed from both sides of the street. Relocation of bus stops as needed and construction of sidewalks or trails to bus stops from surrounding neighborhoods. Implementation of amenity improvements such as lighting, shelters, benches, trash cans, and bike racks to high ridership bus stops.	FCDOT; VDOT; WMATA	\$\$\$
Identification of a pilot high-risk corridor to implement a safety study that analyzes crashes, engages stakeholders and residents, identifies appropriate countermeasures and implements quick-build strategies. This pilot will serve as a guide to refine the project delivery process and test the durability of quick-build solutions.	FCDOT; VDOT; DPD; DEI ; NCS	\$\$
Design of new roads with design speeds not to exceed the target operational speeds, which should be informed by the land use context, potential left turn conflicts and pedestrian activity in the area.	FCDOT; VDOT	\$
Application of design techniques to control speeds on collectors and arterials, prioritizing high-risk corridors, residential areas and commercial areas.	FCDOT; VDOT	\$\$\$
Review of VDOT Road Design Manual for opportunities to improve design standards to better meet active transportation needs and Safe Streets for All principles, and work with VDOT to make updates as needed.	FCDOT; VDOT	\$\$
Establishment of grade separated or signalized crossings for trails at uncontrolled interchange ramps.	FCDOT; VDOT	\$\$\$



## Equity + Social Justice

Proposed Program Recommendations	Stakeholders	Implementation Cost
Collection of race, ethnicity, and disability data of pedestrian and bicycle crash victims and analyze data for disparities.	FCDOT; FCPD; DMV	\$\$
Prioritization of maintenance and capital improvements in high need areas in close partnership with the affected community, especially the most at-risk populations.	FCDOT; VDOT; FCPS; FCPA; NOVA Parks; NCS; HD; DPWES	\$
Prioritization of engagement of people experiencing vulnerabilities and groups disproportionately impacted by bicycle and pedestrian crashes in community engagement efforts, including studies and capital projects. Development of measures to assess impact.	FCDOT; VDOT; FCPS; NCS; HD	\$\$
Creation of walk and bicycle audits in partnership with communities, especially the most at-risk populations, to determine community-identified safety concerns and develop solutions. Allocation of adequate funding to implement recommendations.	FCDOT; VDOT; FCPS; NCS; HD; FCPA ; FCPD	\$\$

## Education + Traffic Safety Culture

Proposed Program Recommendations	Stakeholders	Implementation Cost
Development and implementation of a communications strategy for the Safe Streets for All program.*	FCDOT	\$
Provision of staff training on planning and design approach to Safe Streets for All best practices, including active transportation accommodations through work zones.	FCDOT; VDOT; LDS; DPWES	\$
Creation of regular and targeted campaigns in multiple languages using culturally appropriate strategies to educate the public about traffic safety and safe travel behaviors, especially as related to the highest collision factors.	FCDOT; WMATA; COG; FCPS; NCS; FCPS; NPS; NOVA Parks; OPA; HD; FCPD; VDOT	\$\$
Encouragement of private and public sector employers to provide road safety education to all employees.	FCDOT; Employers	\$
Creation of multi-modal traffic safety education to students K-12 (as part of the curriculum or through special events).	FCDOT; FCPS; Private Schools	\$\$
Creation of multi-modal traffic safety education to adults through subsidized classes. Evaluation multi-modal safety education in Drivers Ed courses and Driving Schools, providing additional guidance if necessary, and monitoring implementation.	FCDOT; FCPS; NCS; DMV; Community Partners	\$\$
Creation of a web page on the Fairfax County website that serves as an interactive “clearinghouse” for road safety information.	FCDOT; OPA	\$
Creation of engaging public outreach experiences, through temporary street and intersection redesigns that develop community awareness of the benefits of road safety interventions.	FCDOT; Community Groups; FCPS; VDOT; DPD	\$\$
Implementation of speed feedback signage at high collision locations, along high-risk corridors, and in school zones.	FCDOT; VDOT; FCPD	\$



## Monitoring + Evaluation

Proposed Program Recommendations	Stakeholders	Implementation Cost
Identification of multi-modal road safety performance measures and set short, medium and long term targets.	FCDOT; VDOT; FCPD	\$
Identification of the most common factors (i.e. alcohol, time of day, speeding, turning, distracted drivers, land use, type of available infrastructure, etc.) related to pedestrian, bicycle, and vehicular crashes and the most affected populations (i.e. age, race, etc.)	FCDOT; FCPD; VDOT; HD	\$
Collection and review of multi-modal near-miss and minor crash data to identify potential crash locations.	FCDOT; Community Organizations	\$
Establishment of an interactive web map to systematically collect transportation safety concerns from residents. Consider a corresponding hot line.	FCDOT; FCPA; NOVA Parks; NPS; NCS; HD; DIT	\$
Development of active transportation performance measures that are appropriate for the county and also for specific projects (safety, comfort, convenience).	FCDOT; HD; DPD;	\$
An Annual Safe Streets for All Report Card.	FCDOT	\$
Installation of additional permanent automated counters at key locations to track active transportation facility usage over time.	FCDOT; VDOT	\$
Establishment of manual or automated spot counts of active transportation users at a defined set of locations to identify and track gender gaps over time.	FCDOT	\$
Take advantage of technological innovations such as AI cameras or private vehicle sensors to analyze traffic safety or maintenance issues and monitor effectiveness of countermeasures after implementation.	FCDOT; VDOT	\$\$
Evaluation of the effectiveness of transportation safety improvements before and after implementation.	FCDOT; VDOT; FCPD; DPWES; HD ; FCPD	\$



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