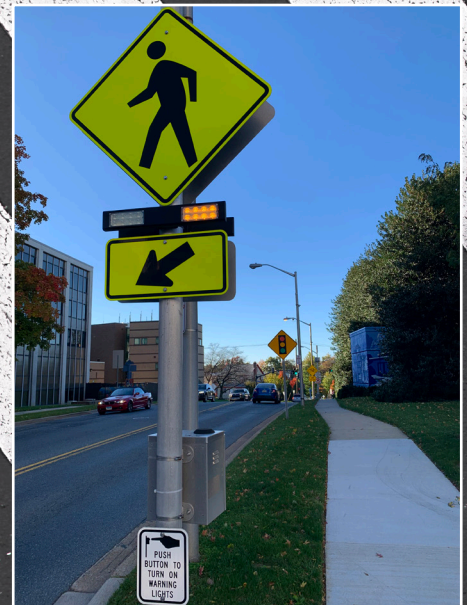




**Adopted by the Mayor and Council,
October 30, 2023**

City of Rockville Pedestrian Master Plan

City of Rockville · Department of Public Works · Traffic and Transportation Division
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Acknowledgements

This Plan was prepared by the City of Rockville Department of Public Works, Traffic and Transportation Division. Internal assistance was provided by the Department of Community Planning and Development Services, Department of Recreation and Parks, and the Rockville City Police Department.

The Rockville Pedestrian Advocacy Committee, the Rockville Bicycle Advisory Committee and the Transportation and Mobility Commission provided input throughout the process and submitted letters of support for its approval.

Accessibility Acknowledgement

The City of Rockville strives to provide documents and plans that meet accessibility guidelines and can be used by all residents, visitors and stakeholders. The font, colors, alternative text for images, and paragraph and column formatting consider readers who may use screen readers for accessibility. Maps provided in this plan are displayed at a scale to show the entire city on a single page. All maps in this plan are provided on the City of Rockville website in a format that can be zoomed in for specific features. For additionally accessibility resources, please contact the City of Rockville ADA Coordinator.

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A crossing guard stops motorists so students can cross the street safely.

Photo Credit: City of Rockville

Chapter 1: Vision

The City of Rockville Vision Zero Action Plan, approved in 2020, directed the city to develop a Pedestrian Master Plan (Plan) that would establish a pedestrian vision for the community and recommend the necessary actions to achieve it. The Pedestrian Vision for Rockville is:

All residents and visitors to Rockville can choose to safely, comfortably, and conveniently walk or roll throughout the city, because the transportation network and built environment support pedestrian travel and anticipate the needs and abilities of everyone walking and rolling.

This Plan amends, clarifies, and in many cases provides more details regarding the pedestrian facility and policy planning to the city's Comprehensive Plan, Rockville 2040, and helps implement the city's Transportation Vision, which states:¹

Rockville's transportation system will provide residents, businesses, employees, and visitors with multiple options for moving about the city through a variety of modes and paths while ensuring access for persons of all abilities and mobilities...Rockville will continue to transition to a more walkable community and contribute to regional efforts to create safe, efficient, and environmentally sustainable mobility.

¹ Rockville 2040: Comprehensive Plan of the City of Rockville, Maryland. p. 51, 2021



People walk and roll for all types of trips and in all conditions. A comprehensive pedestrian network benefits people in any weather.

Photo Credit: City of Rockville

Furthermore, this plan is consistent with the Maryland Transportation Vision which seeks:²

A well-maintained, multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers.

This Plan is intended to be used by city staff, elected officials, residents, developers and visitors as a guide for understanding and improving pedestrian infrastructure and programs over the next ten years. While many of the action items included in this Plan will be implemented by the Department of Public Works as the lead department, all departments in the city should be familiar with this Plan, reference this Plan as part of their work programs, and support its implementation.

Complementing both the Vision Zero Action Plan's and the Comprehensive Plan's visions, this plan seeks to:

- Make Rockville the most walkable city in Maryland and fully commit to improving the pedestrian experience in all aspects of civic life. Whether walking or rolling, Rockville's residents and visitors should be able to travel safely, comfortably, and directly for recreational, economic, and social purposes.
- Enable walking and rolling to be a part of every trip, regardless of purpose and recognize that everybody has the right to walk or roll safely in Rockville.
- Ensure Rockville develops pedestrian facilities for safe, direct and convenient walking and rolling that provide a utility and amenity value to the city, contribute to more equitable transportation, improve public health outcomes, reduce adverse-transportation impacts to the environment and enhance public spaces for better economic and social activity.
- Establish pedestrian travel as a fundamental consideration in planning, design and development. Through the continued support of the pedestrian experience, Rockville will take steps toward fulfilling its goals of increasing safety, advancing the goals of the city's Climate Action Plan, including reducing greenhouse gas emissions and vehicle miles traveled, promoting healthier lifestyles, and providing transportation opportunities for all residents.

² Rockville 2040: Comprehensive Plan of the City of Rockville, MD. p. 51, 2021.

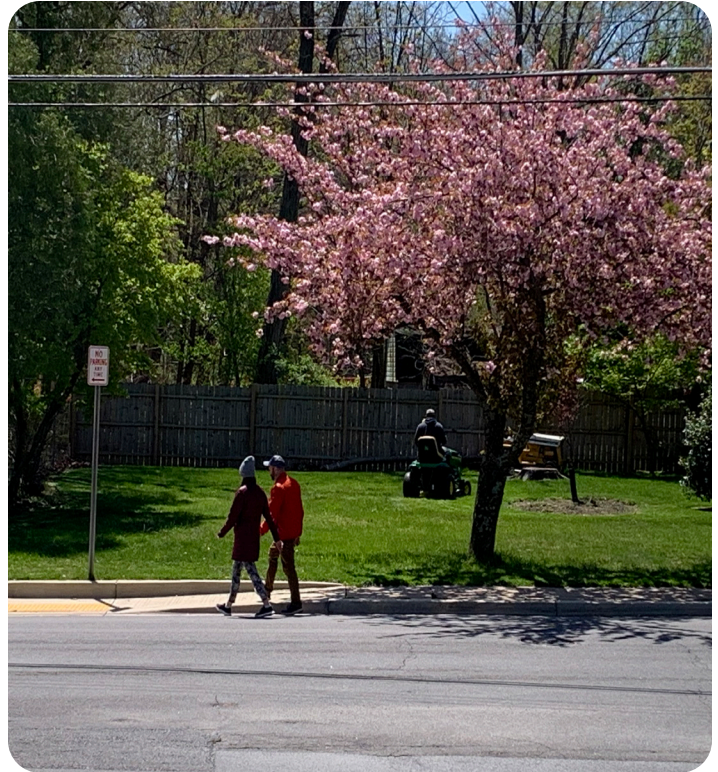
This Plan is the first Pedestrian Master Plan for Rockville and is designed to reflect opportunities for improving the pedestrian experience city-wide, including improvements to publicly and privately owned properties. This plan will help achieve the Rockville Vision Zero Action Plan to eliminate transportation related fatalities and serious injuries, as well as complement the city's Bikeway Master Plan, which outlines where and how to implement and advance bicycle transportation in the public right-of-way and within city parks.

Transportation infrastructure often has the most direct impact on the ability for residents and visitors to choose to walk or roll to help meet their daily transportation needs. This includes whether neighborhood streets have sidewalks, whether marked crosswalks are placed at intersections, or a shared use path can help provide a shorter route for the trip.

The development patterns and the land use decisions for a community also directly impact a neighborhood's walk-and-roll-ability. Neighborhoods and communities that permit a variety of uses often increase walk-and-roll-ability and the desire for residents and visitors to choose walking and rolling because it is the shortest and most convenient trip. Regulations in the zoning ordinance related to off-street parking, distances between buildings and the street, and the density permitted can all increase or decrease the distance of a pedestrian trip. Development patterns that favor smaller or no parking lots, buildings closer to each other, and building entrances closer to the street and sidewalk are more likely to encourage walking and rolling.

This Plan does not explicitly make recommendations for land use and development changes. However, future Comprehensive and Neighborhood Plans should consider how changes in land use can improve walking and rolling in Rockville.

This Plan proposes to enhance the sidewalk network and construct new pedestrian connections in the City of Rockville. Moreover, this plan proposes to develop new and update existing policies and practices that influence and impact pedestrian transportation to better meet the needs of people walking and rolling. Fully implemented, this Plan will expand and reinforce a safe, equitable, comfortable, and convenient pedestrian network that is interwoven throughout the city, connecting destinations, and supporting the multimodal future envisioned in Rockville 2040 and the Bikeway Master Plan.



Pedestrians cross Frederick Avenue in the Lincoln Park neighborhood.

Photo Credit: City of Rockville

Section 1.1 - Terminology and Acronyms

Pedestrian – the term, “pedestrian” is used in the Plan as a general term to describe any person who travels by foot or with the assistance of a mobility device. This includes walking, running, walking with the use of a white cane, audio assistance device, walkers, or using wheelchairs, knee walkers, mobility scooters, or other devices. This does not include automobiles, rideshare e-scooters or bicycles.

Walking and Rolling – the terms, “walking” and “rolling” and variations of these terms (e.g. “walk and roll”) are inclusive terms used to describe individual mobility for all abilities and does not include travel by automobiles, bicycles, or rideshare e-scooters.

While this plan is designed for guiding a pedestrian transportation vision in Rockville, it also includes recommendations for shared use paths, which can be used by bicyclists. Shared use paths accommodate both modes and any shared use paths that would be evaluated or constructed as part of this plan are expected to be used by both pedestrians and bicyclists.

This Plan uses the following acronyms:

ADA - Americans with Disabilities Act

AASHTO – American Association of Highway and Transportation Officials

BRT - Bus Rapid Transit

CTR – Comprehensive Transportation Review

DPW – Department of Public Works

MCDOT – Montgomery County

Department of Transportation

MCPS - Montgomery County Public Schools

MD MUTCD – Maryland Manual on Uniform Traffic Control Devices

MDOT SHA – Maryland Department of Transportation State Highway Administration

NACTO - National Association of City Transportation Officials

RCPD – Rockville City Police Department

RBAC – Rockville Bicycle Advisory Committee

RPAC – Rockville Pedestrian Advocacy Committee

TMC - Transportation and Mobility Commission



A pedestrian activated beacon on Wootton Parkway.

Photo Credit: City of Rockville



People walk and roll for multiple purposes in Rockville. This includes shopping, recreation, commuting, and business purposes.

Photo credit: City of Rockville

Section 1.2 - Why Walk and Roll?

Everyone in Rockville – residents, employees, and visitors – are pedestrians at some point. Trips to a nearby park or school may be done entirely by walking or rolling. Other trips, such as going to work, may primarily be by bicycle or motor vehicle, but still include walking and rolling at each end of the trip to get from one's vehicle to their destination. Lastly, trips such as shopping or other business may use transit, which includes walking or rolling to access the bus or train. Without walking and rolling, most trips would be nearly impossible, and it is important that accommodating pedestrian travel is planned and carried out with intention.

In addition to pedestrian travel being a part of every trip, regardless of the primary mode of travel, pedestrian travel can be used for all types of trips in Rockville. People can walk and roll for commuting, accessing transit, shopping, going to eat,

and meeting friends and family, among other reasons. These trips can be more easily made by walking and rolling if sufficient infrastructure is in place and safety concerns are met.

Walking and rolling can provide both physical and mental health benefits to the individual. Furthermore, replacing short motor vehicle trips with pedestrian trips reduces motor vehicle congestion and its detrimental noise and environmental effects.

Walkable and rollable communities often require less infrastructure and maintenance investments, making them more resilient to unexpected fiscal changes in a community. They also are an effective approach to focus activity in a specific area, which can lead to spillover benefits including higher diversity of businesses and housing types.

Lastly, pedestrian travel is one of the most efficient and equitable modes of transportation. Pedestrian travel doesn't require expansive interchanges, complicated intersections, parking lots for vehicle storage, or widened roads and extended lanes that motor vehicle travel requires. Walking and rolling does not demand as great of an individual financial investment as other modes, such as the monthly payments and associated maintenance costs of automobiles. Often the greatest barrier to pedestrian travel are the facilities dedicated for other transportation modes. If a destination is accessible by walking or rolling, it becomes a destination that is accessible to everyone, including those who choose to drive or bike. Destinations that prioritize motor vehicle accessibility reduce and can eliminate access for those who cannot afford to, or have the ability to, use a motor vehicle.

Pedestrian travel is a significant component of Rockville’s multimodal transportation network. This plan seeks to address the nuances associated with pedestrian travel and to anticipate and accommodate the needs of all pedestrians.

Section 1.3 - Plan Goals

This Plan establishes four main goals to improve walking and rolling in Rockville and to achieve this Plan’s Vision. These goals, developed in coordination with RPAC, respond to general concerns related to safe and convenient walking and rolling, and to recommendations raised through public comments.

Goal 1 – Ensure Accessibility

Strive to ensure that all people have access to destinations in Rockville and that improving access should be provided over expanding mobility.

Additional improvements and pedestrian facilities are often needed to enhance accessibility, beyond what current pedestrian activity may suggest. Increasing accessibility and investing in pedestrian improvements can encourage more people walking and rolling, which is desirable for the city. Accessibility also relates to providing facilities that can accommodate people riding wheelchairs, using walkers or other pedestrians with disabilities.

The US Architectural and Transportation Barriers Compliance Board (US Access



Board) issued a final ruling to provide minimum guidelines for the accessibility of pedestrian facilities in the public right-of-way. The guidelines were adopted and made effective on September 7, 2023. These guidelines ensure that facilities used by pedestrians, such as sidewalks and crosswalks, constructed or altered in the public right-of-way by federal, state, and local governments are readily accessible and usable by pedestrians with disabilities. The guidelines are used in regulations issued by other federal agencies implementing the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and the Architectural Barriers Act, and compliance with those enforceable accessibility standards is mandatory.³

The city will continue to follow the US Access Board’s Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way and recognizes that compliance with the guidelines should not prevent

A comprehensive pedestrian network supports travel for people of all abilities.

Photo credit: City of Rockville.

3 88 Federal Rule 53604



Accessibility vs. Mobility

While related, accessibility and mobility are different measures of individual transportation. Mobility refers to the distance that can be traveled in a specific amount of time and is a function of the individual's travel mode and the investment and maintenance of public infrastructure. Accessibility refers to the number of destinations that can be reached within a specific amount of time and is a function of the built environment. More accessible streets (top image) tend to have destinations closer together, higher mobility streets tend to provide for faster movement (bottom image).



Differentiating between the two is important because the improvements necessary to achieve one may undermine the other. For instance, a high-speed, multi-lane roadway is necessary to increase mobility as it allows motorists to travel faster. However, these types of roadways compromise walkability because they are often difficult to walk along and cross making it difficult to access destinations, despite close proximity.

improving existing facilities.

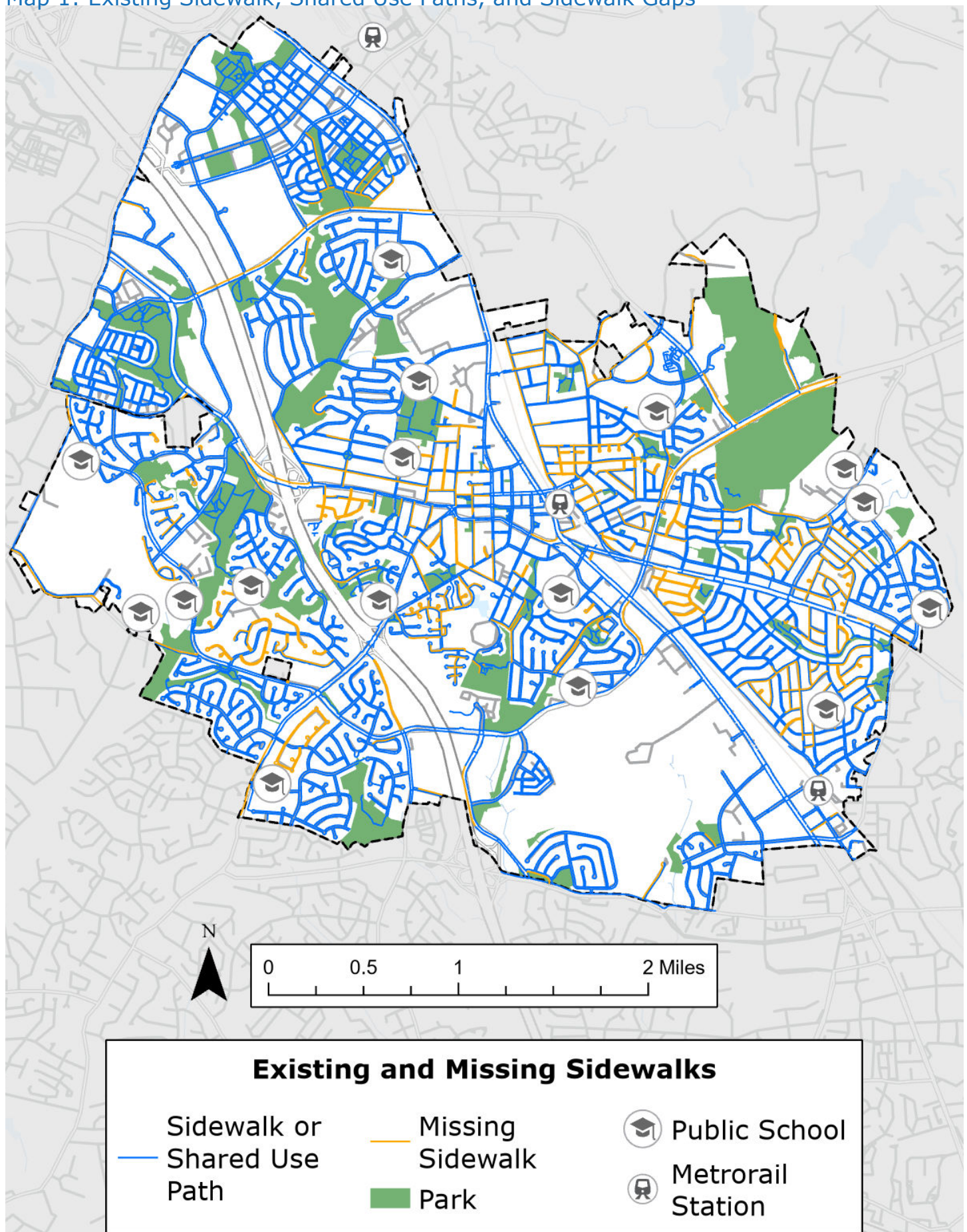
Ensuring accessibility not only requires creating new pedestrian facilities for barrier-free travel, but also reducing travel delays, and ensuring current facilities are maintained. The city should continue to prioritize construction of sidewalk gaps for future capital improvement projects as well as an ongoing review of built facilities to reduce or eliminate obstacles to pedestrian travel.

Map 1, Existing Sidewalks, Shared Use Paths, and Sidewalk Gaps (on the next page), indicates locations in the City of Rockville where there are existing sidewalks and shared use paths, or where there are sidewalk gaps, which are roadway segments which do not have sidewalks on one or both sides.

Goal 2 – Advance Equity

Advance transportation equity through development, capital improvement projects, and maintenance. All Rockville residents, employees, and visitors have the right to access local destinations, regardless of their travel mode and the transportation system. Both the built infrastructure and the policies guiding its use, should support all modes

Map 1: Existing Sidewalk, Shared Use Paths, and Sidewalk Gaps



and ensure the right to move freely and safely throughout the city.

Transportation equity means the transportation system should strive to achieve parity in outcome for individuals regardless of their mode of travel. This does not mean that all modes are given equal resources and attention, but that resources and attention are allocated to each mode as necessary to create a complete, convenient, and safe multimodal system.

People walking and rolling have a greater degree of freedom when choosing routes, but are also more vulnerable to the impacts of other modes and the built environment. As such, additional infrastructure beyond what is considered for motor vehicle or bicycle travel is often necessary to support safe, comfortable, and convenient walking and rolling.

Furthermore, the City of Rockville recognizes that walking and rolling are often the primary mode of transportation for low-income individuals and other disadvantaged groups. As such, additional and deliberate measures, especially related to roadway design and enforcement, need to be taken to produce more socially just outcomes.

Goal 3 – Increase Walking And Rolling

Plan and build for a desired level of pedestrian activity and support efforts to reach that level. The City of Rockville acknowledges that more people walking is a benefit for the city. Unlike driving, in which more people driving leads to congestion, more noise, more crashes, and is not desirable, more people walking leads to a safer, healthier, quieter city with more opportunities for activity. While many of Rockville’s streets and neighborhoods were built in an era that did not recognize the needs for pedestrian travel, the city now strives to build and rebuild in a manner that accommodates all modes, which is recognized through the Complete Streets Policy and the multimodal goals and objectives of the Comprehensive and Neighborhood Plans.

The City of Rockville recognizes that pedestrian activity will not materialize on its own and it is often necessary to build safe and direct pedestrian facilities before gains in walking and rolling can be achieved. Moreover, even with new infrastructure, efforts should be made to support walking and rolling and to encourage residents to consider walking and rolling for some of their individual trips. The city should continue to support and participate in events that encourage walking and rolling, such as Car Free Day, Walk to School Day and Walktober.

Goal 4 – Institutionalize Walking And Rolling

Incorporate more supportive pedestrian policies into existing transportation practices and programs. There are many transportation-related policies and practices in the city that impact walking and rolling, including the city’s Complete Streets Policy, the Guidelines for Neighborhood Traffic Management, and the Rockville Vision Zero Action Plan, among others.

Pedestrian infrastructure improves the accessibility of an area and can improve the quality of life surrounding a street. This is an added value to the city. Policies and practices should reflect and accommodate this additional benefit.

Policies should recognize the inherent trade-off that is often made when designing

streets to balance travel modes; improvements that are used to increase the capacity of a roadway or limit the delay for a motorist often comes at the expense of an improvement that provides additional facilities for pedestrians, i.e., the more vulnerable road user. This can be very apparent, such as adding an additional travel lane for motor vehicles, or subtle, such as when the design of a neighborhood street encourages a travel speed higher than the posted limit.

The city should explicitly weigh these trade-offs and ensure that policies, programs, and decisions for roadway projects are based on these principles, so that funding for construction and maintenance accommodate the needs of all pedestrians.

Pedestrians can use the road, too.

Pedestrians should travel along a sidewalk parallel to a roadway and cross at an intersection or a crosswalk. However, there may be instances in which a pedestrian travels in the roadway, such as an obstructed sidewalk or accessing a vehicle parked on the street.

Pedestrians must yield to motorists on the roadway. The Maryland Transportation Code indicates, “if a pedestrian crosses the roadway at any point other than in a marked crosswalk or in an unmarked crosswalk at an intersection, the pedestrian shall yield the right-of-way to any vehicle approaching on the roadway.”¹ Similarly, at crosswalks, “a pedestrian may not suddenly leave a curb or other place of safety and walk or run into the path of a vehicle which is so close that it is impossible for the driver to yield.”²

At crosswalks, motorists, “...shall come to a stop when a pedestrian crossing the roadway is: (i) On the half of the roadway on which the vehicle is traveling; or (ii) approaching from an adjacent lane on the other half of the roadway.”³

Lastly, motorists are required to operate vehicles in a responsible manner and are also responsible for avoiding collisions. The Transportation Code indicates, “... the driver of a vehicle shall exercise due care to avoid colliding with any pedestrian,” as well as “...exercise proper precaution on observing any child or any obviously confused or incapacitated individual.”⁴

1 MD. Transportation Code § 21-503, 2022.

2 MD. Transportation Code § 21-502, 2022.

3 MD. Transportation Code § 21-502, 2022.

4 MD. Transportation Code § 21-504, 2022.



The City of Rockville Pedestrian Advocacy Committee meets monthly to discuss issues facing Rockville pedestrians and opportunities to improve walking and rolling in the city

Photo Credit: Rockville Pedestrian Advocacy Committee

Chapter 2: Planning Process

Developing the first Pedestrian Master Plan requires a review of the Rockville 2040 Comprehensive Plan, Vision Zero Action Plan, Climate Action Plan, and related transportation plans to assess how pedestrian travel is incorporated and how to build on the success of earlier plans. This process includes evaluation of existing transportation policies and practices that impact walking and rolling.

Additionally, developing this plan requires outreach with stakeholder groups and the public to ensure that their ideas, suggestions, and concerns are adequately considered, incorporated, and addressed. Through this planning process, staff coordinated with RPAC, RBAC, and TMC to solicit additional ideas for the Plan.

The draft Plan was released to the public in May 2023. It was made available online and was shared with the public, RPAC, RBAC, TMC, all Commissions, and city community associations for additional comments. The draft Plan was also shared with the Maryland Department of Planning who submitted comments on behalf of other state agencies. City staff collected all comments and responded to them as part of the public hearing process.

Section 2.1 – Plan Summaries

The Rockville 2040 Comprehensive Plan was adopted and approved by the Mayor and Council in August 2021. In addition to proposing projects in all Planning Areas to increase walkability and access, the Transportation Element includes the following six goals, all of which are related to improving walking and rolling:¹

¹ Rockville 2040: Comprehensive Plan of the City of Rockville, Maryland. p. 52, 2021



A police officer observes traffic as students walk to school.

Photo Caption: City of Rockville

1. Provide safe transportation facilities for all modes by implementing Complete Streets projects and attaining Vision Zero goals.
2. Promote walking, rolling, and bicycling modes with new and upgraded facilities.
3. Maximize the use and value of transit assets and services.
4. Update development review standards to reduce vehicle miles traveled and promote alternative modes of travel.
5. Plan for new mobility technologies and reduce carbon emissions and other pollutants from transport.
6. Manage and improve Rockville's roadway and trail network to provide for safe and comfortable movement of people walking, rolling, and driving, for all types of trips and delivery of good and services.

This Pedestrian Master Plan is consistent with and supports the goals of the Comprehensive Plan.

The Rockville *Vision Zero Action Plan* was adopted and approved by the Mayor and Council in July 2020. Vision Zero is a data-driven and multidisciplinary traffic safety strategy with the ultimate goal of eliminating all transportation related fatalities and serious injuries. Since pedestrians are often the most vulnerable people on the roadway and more likely to experience a serious injury or fatality in a crash, improving pedestrian safety is a crucial step towards achieving Vision Zero.

The city's Vision Zero Action Plan recognizes all people traveling, those walking and rolling, bicycling, using transit, and driving make mistakes, however mistakes should not result in death or a serious, life-altering injury. It is important to reduce the severity of harm from those mistakes, as well as reduce the opportunity for mistakes to happen. The Vision Zero Action Plan is organized into thirty action items with specific objectives. Pedestrian-specific action items include:²

2. Update City Road Designs and Standards
4. Evaluate Crossings and Unsignalized Intersections
7. Accelerate Sidewalk Construction
8. Create Pedestrian Master Plan
17. Join Montgomery County on Safe Routes to School Activities

This Pedestrian Master Plan aligns with the goals and action items of the *Vision Zero Action Plan*. Improvements to the pedestrian environment that are primarily designed to increase the amount of walking and rolling are often the same types of projects and

² City of Rockville Vision Zero Action Plan. p. 11, 2020.

policies that improved transportation safety.

The City of Rockville *Climate Action plan*, approved by the Mayor and Council in January 2022, includes the following Action Items directly related to walking and rolling:³

C-10: Work with WMATA, MDOT, and Montgomery County to maximize transit accessibility and ridership and enhance mobility options

C-14: Expand active transportation and shared micro-mobility networks by implementing improvements in the Bicycle Master Plan and Vision Zero Plan

C-15: Adopt and implement a Pedestrian Master Plan

This plan further discusses the importance of reducing vehicle miles traveled as a component to meeting the city's climate goals. A convenient and safe pedestrian network is key to replacing motor vehicle trips with walking and rolling, especially for short distance trips.



Comprehensive pedestrian facilities leading to and from bus stops can make transit more convenient and increase its use.

Photo credit: City of Rockville

The City of Rockville is included in the Montgomery County Sustainable Community Action Plan, which includes the following strategy for the City of Rockville:

Support City of Rockville's work to implement Complete Streets infrastructure in coordination with construction of the BRT system.

This Plan is consistent with this strategy and will contribute to advancing Complete Streets throughout Rockville, including streets which will be used to access a future BRT.

Section 2.2 – Survey Response Summary

A pedestrian survey was available on the Plan's website from January 2022 to May 2023. During that time, residents, visitors, and employees were encouraged to visit the website and complete the survey. Reminders about the survey were shared during RPAC, RBAC, and TMC Commission meetings, in Rockville Reports, through the city's social media accounts, and directly to community organizations. Students were also able to obtain one Student Service Learning Hour for participating in the survey. 239 people participated in the online survey.

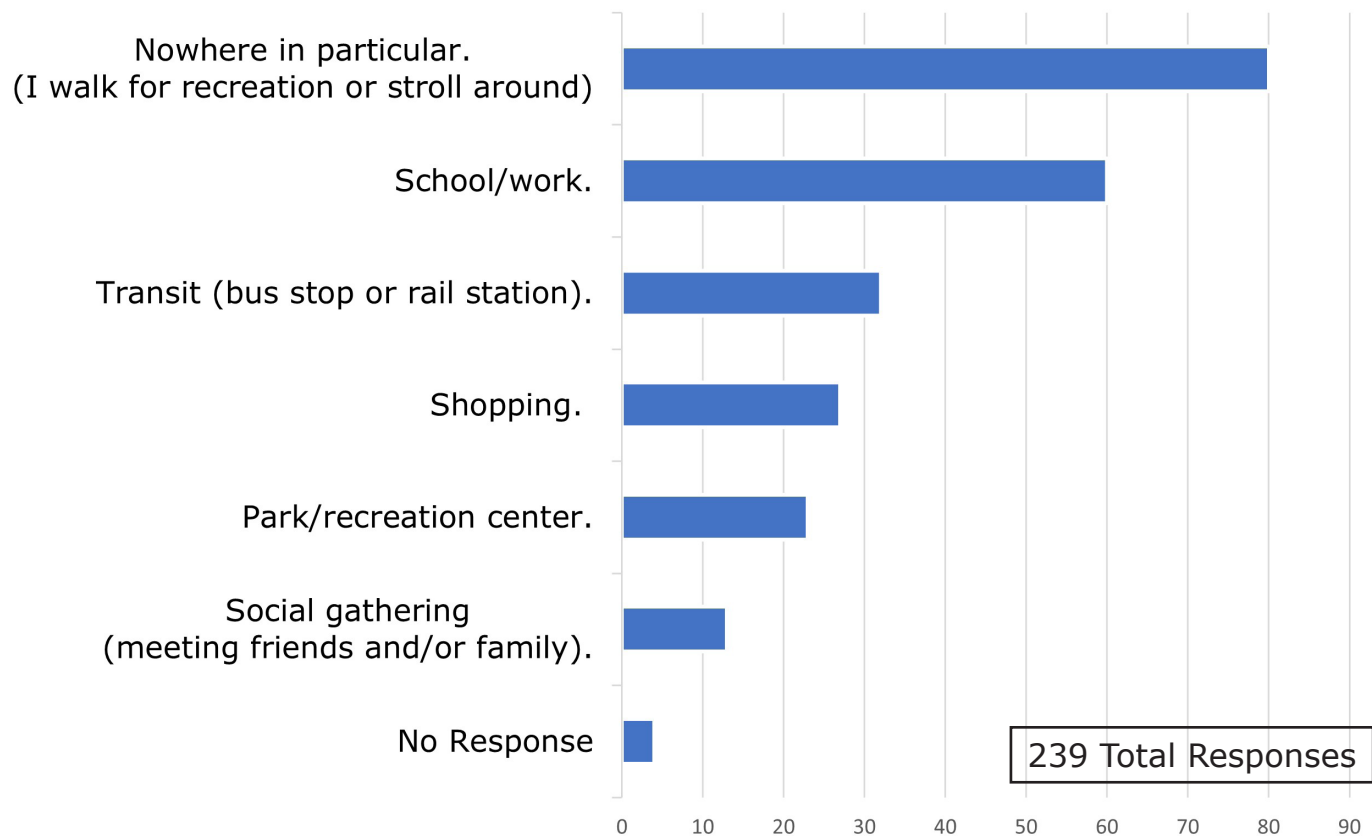
This survey solicited information on a variety of topics, including types of pedestrian

³ City of Rockville Climate Action Plan. p. 58, 2022.

trips, walking and rolling to school, concerns about walking and rolling, suggestions for improving walking and rolling, and questions soliciting an open-ended free response.

Chart A: Online Survey - Destinations

Where do you walk/roll the most often?



The first question asked survey respondents where they walk/roll the most often. The most common response was, "Nowhere in particular (I walk for recreation or to stroll around)." If the survey responses are combined to create recreational (Nowhere in particular, Park/recreation center, and social gathering) and non-recreational categories (School/work, transit, and shopping), there is a nearly even split, with slightly more respondents indicating non-recreational trips than recreational trips. Chart B on the following page shows this. Regardless of purpose, a complete pedestrian network with sidewalks, curb ramps and safety features are necessary.

The online survey also requested respondents to indicate how frequently they choose to walk or roll for non-recreational purposes. This includes shopping trips, commuting trips, or trips for business purposes. More than half of the respondents indicated that they took pedestrian trips at least three times a week.

When asked about concerns related to walking and rolling in Rockville, the respondents provided responses related to their interaction with other travel modes. Concerns regarding crossing large or busy intersections was the most common response, followed by concerns related to proximity of motor vehicles.

Survey respondents were able to submit up to three concerns about walking and

Chart B: Online Survey - Destinations, Categorized

**Where do you walk/roll the most often?
Categorized by Recreational and Non-Recreational
Trips**

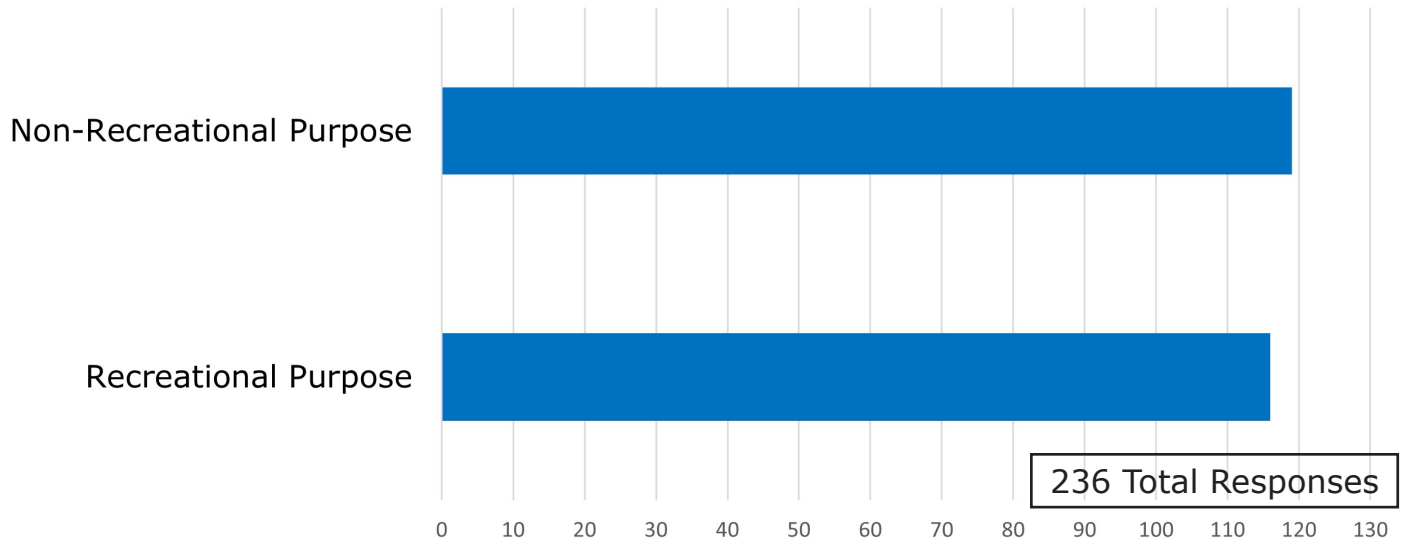
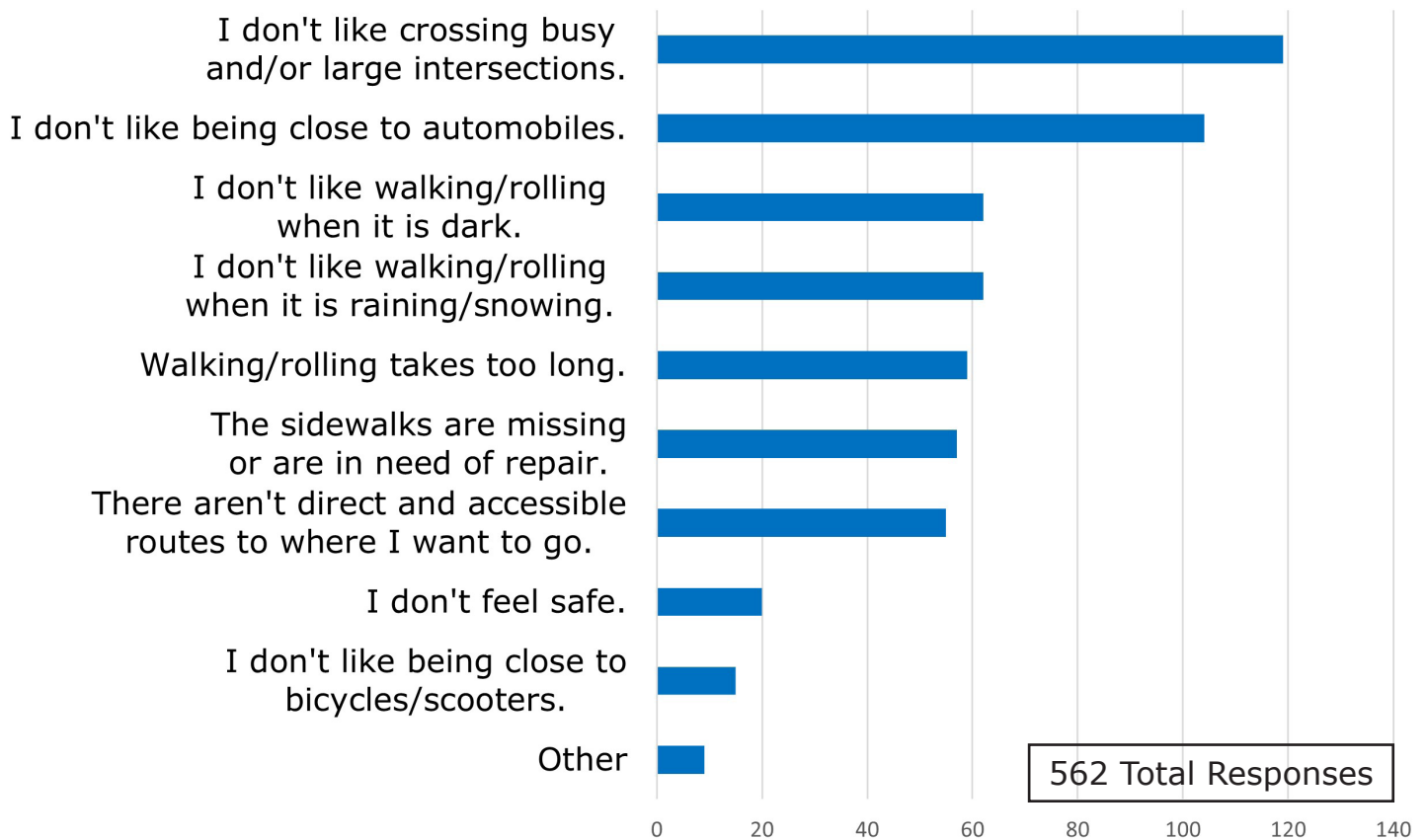


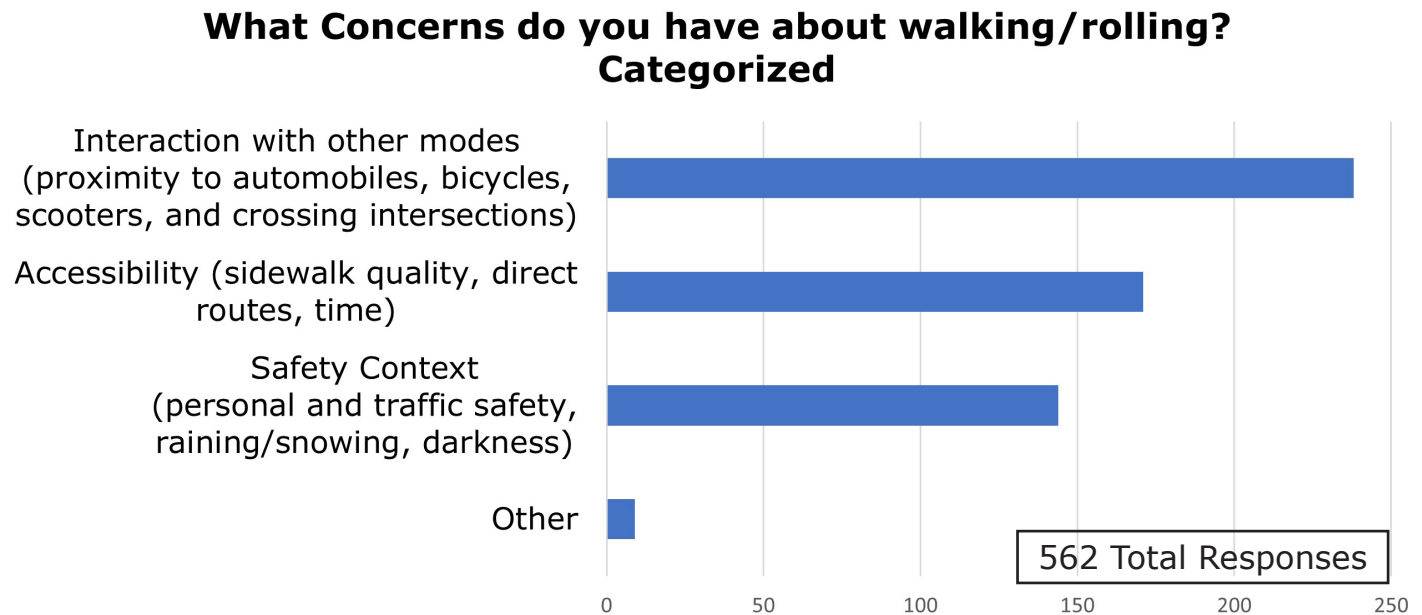
Chart C: Online Survey - Concerns

What concerns do you have about walking/rolling?



rolling. These concerns can be further categorized by concerns related to interaction with other travel modes, accessibility, and safety context. Through this perspective, the interaction between pedestrians and other travel modes, primarily motor vehicles, is the most common concern identified by the survey respondents. This is shown in Chart D.

Chart D: Online Survey - Concerns, Categorized



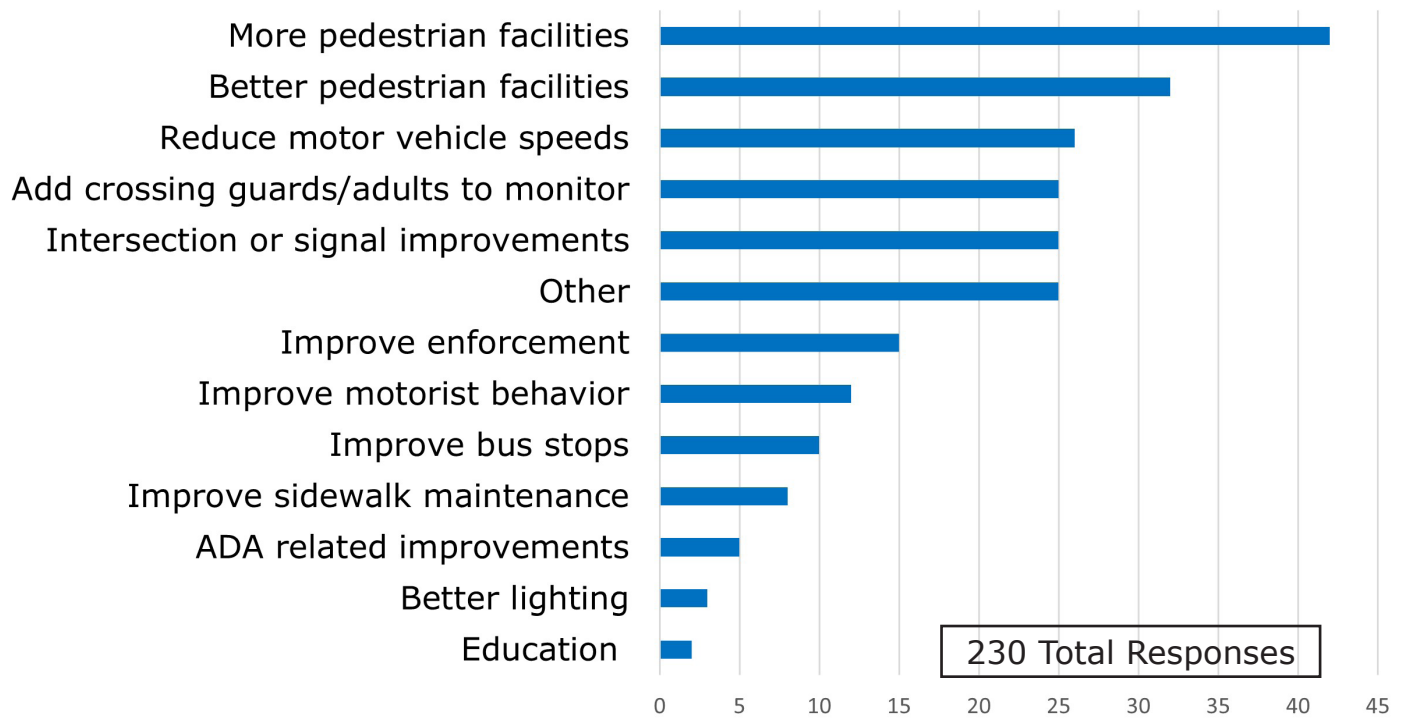
Pedestrian travel concerns related to motor vehicle traffic is prevalent because there is often a direct connection between motor vehicles and a pedestrian's sense of their own safety and comfort. Both traffic speed and the offset distance influence perceived safety of pedestrians. While it can be difficult to accurately gauge the speed at which motorists are traveling from the sidewalk, their presence clearly impacts the perceived safety of people walking and rolling, which is just as important when designing and creating multimodal streets and encouraging people to walk and roll. Additionally, motorist behavior can often impact pedestrian safety without recognizing their impact. For instance, when turning right, motorists often look to the left to ensure there is a sufficient gap in traffic to complete the turn. However, motorists may not also look to the right when making a right turn, which can result in a pedestrian crash if people are walking and rolling from the motorist's right hand side. If people do not feel safe or comfortable walking and rolling in their neighborhoods, it is more likely that people will choose to drive or take an alternative mode of travel.

Moreover, it is important to note that the second most common concern is related to accessibility. Damaged and missing sidewalks, circuitous and indirect routes, and taking more time to reach destinations are all factors that contribute to people choosing another mode. Direct and well-maintained pedestrian routes will lead to shorter trip times and increase the likelihood that people will walk and roll.

Two of the survey questions prompted respondents to provide open-ended comments. The first question was, "What one thing could be done to make it safer or more convenient for students in your neighborhood to walk/roll to school or to the school bus

Chart E: Online Survey - Student Walking/Rolling trips

How would you make it safer/more convenient for students to walk/roll ?



stop?” The second question was, “Is there anything that you wish to add?” Many of the responses overlap and have been grouped into different categories.

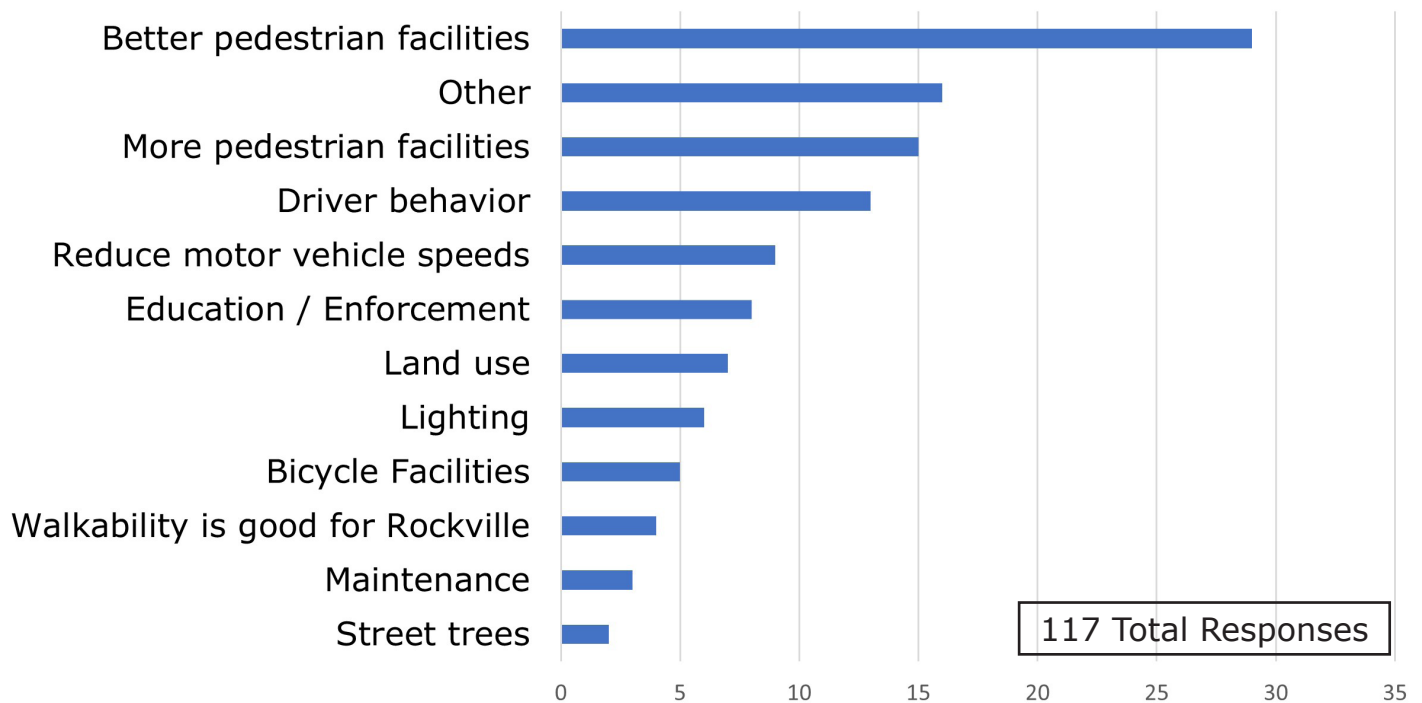
For the first question, the most common categories of responses are related to better or additional facilities to help people walk and roll, this includes adding sidewalks on both sides of the street, providing wider sidewalks, ensuring sidewalks and ramps are ADA compliant, adding marked crosswalks in neighborhoods, adding better lighting, increasing crossing times at intersections, etc.

The second most common response categories are related to interactions with motorists. Many people commented that motorists travel too fast for the neighborhood, do not come to complete stops at stop signs, and do not yield to pedestrians using a crosswalk. This is consistent with the findings from general concerns about walking and rolling, in which crossing busy intersections and proximity to motor vehicles were top concerns.

The third most common response categories are related to increased enforcement presence, responses including having more crossing guards, using speed cameras, and additional police presence to encourage motorists to follow traffic laws and keep pedestrians safe. The other category included a variety of responses such as more consistent school bus scheduling, providing bicycle parking at bus stops, and changing land use patterns to make destinations closer together.

The last survey question was opened ended and solicited for any type of comment from survey respondents. Similar to the previous open-ended question, the most

Chart F: Online Survey - Free Response

Is there anything you wish to add?

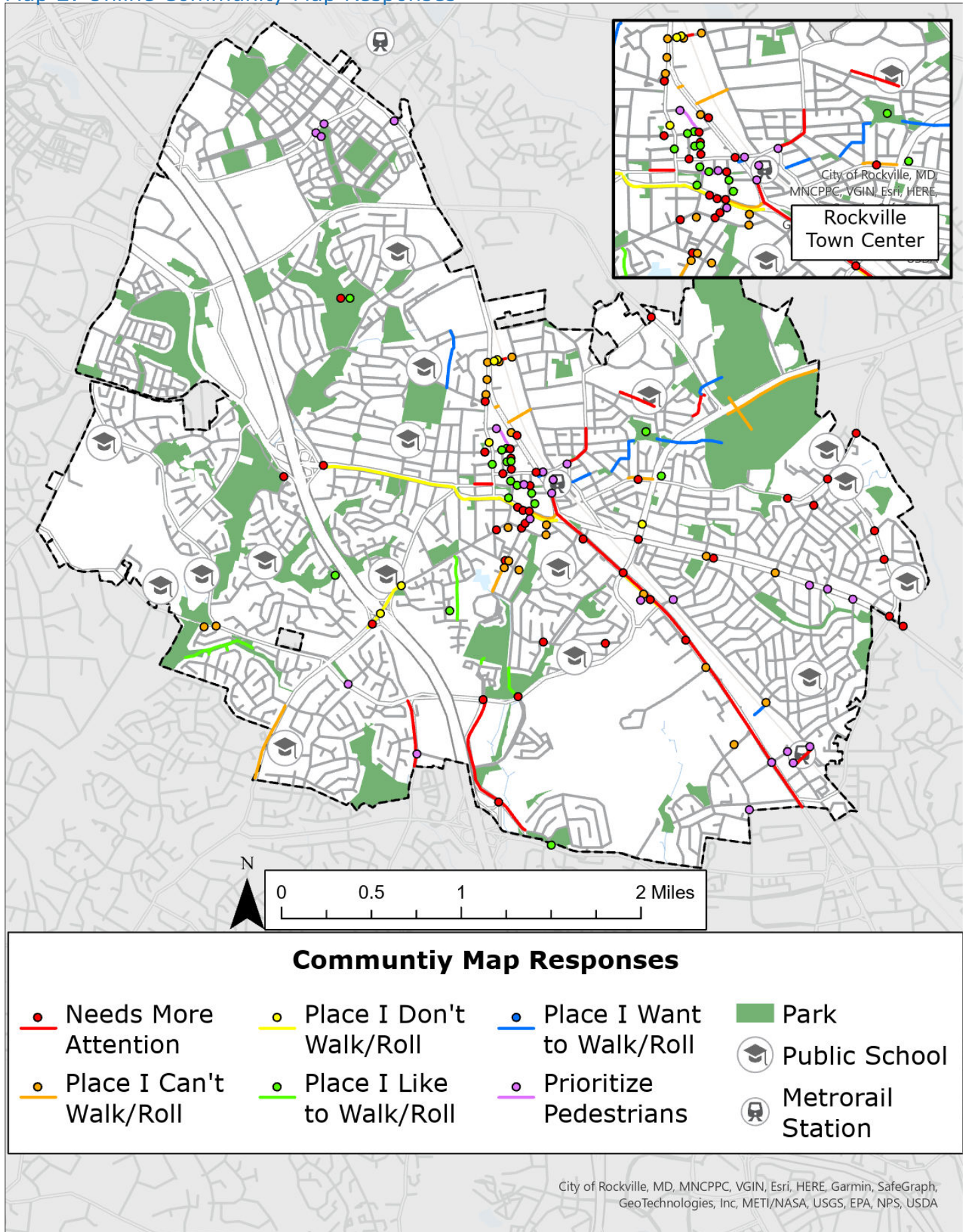
common response categories were related to better and more facilities for walking and rolling. This also included more sidewalks, more crosswalks, extending the walk-time at signalized intersections, not requiring a button to activate the signal, making sidewalks wider, adding street trees, and even adding new and improving existing bicycle lanes. Also similar to the previous question, many respondents indicated the speed of motor vehicles is a concern and that motorists need to follow traffic laws and yield to people walking and rolling. Some respondents also indicated that changes in land use would help make the city more walkable by increasing density and reducing distance between destinations. Lastly, the other category included responses such as opening more streets to pedestrians only, providing 'art stops,' and adding more seating at parks.

Section 2.3 – Geographic Areas Of Concern

The public survey, the online community map, correspondence and comments from stakeholder groups resulted in many recommendations for improvements at specific points in the city. In Map 2, Online Community Map Responses, residents and stakeholders identified places where more attention was needed to address pedestrian issues, where they couldn't or wouldn't walk or roll, where they wanted to walk or roll, and areas that should prioritize pedestrians. These locations include particular intersections where pedestrian safety is a concern, stretches of road where sidewalks are missing or in poor quality, and areas where additional pedestrian connections would benefit the community.

Many of the areas of concern are along roadways that are owned and maintained by MDOT SHA. While these roadways are within city limits, the city does not have the authority to update the infrastructure. The city has coordinated improvements along

Map 2: Online Community Map Responses



state-maintained roadways as well as advocated for additional safety improvements and pedestrian facilities and continues to do so. This includes recommending MDOT SHA conduct intersection safety audits for Vision Zero implementation, reducing the posted speed limit on Rockville Pike (MD 355), and installing curb extensions and other improvements at Veirs Mill Road (MD 586) and Atlantic Avenue. While MDOT SHA has reduced the speed limit on portions of Norbeck Road (MD 28), staff encourage further reduction of the speed limit on portions in Rockville to 35 MPH.

Additionally, many respondents identified specific locations where there are obstacles to pedestrian travel. These include intersections where motorists drive fast or may not be yielding, areas where crosswalks or sidewalks are missing, and maintenance needs (either reconstruction for broken pavement or eliminating vegetation overgrowth or debris). The Community Map includes different categories for public comment: Places that I Like to Walk/Roll, Places that Need More Attention, Places that I Don't Walk/Roll, Places that I Can't Walk/Roll, and Places that Should Prioritize Pedestrian Travel.

Section 2.4 – Public Comment Summary

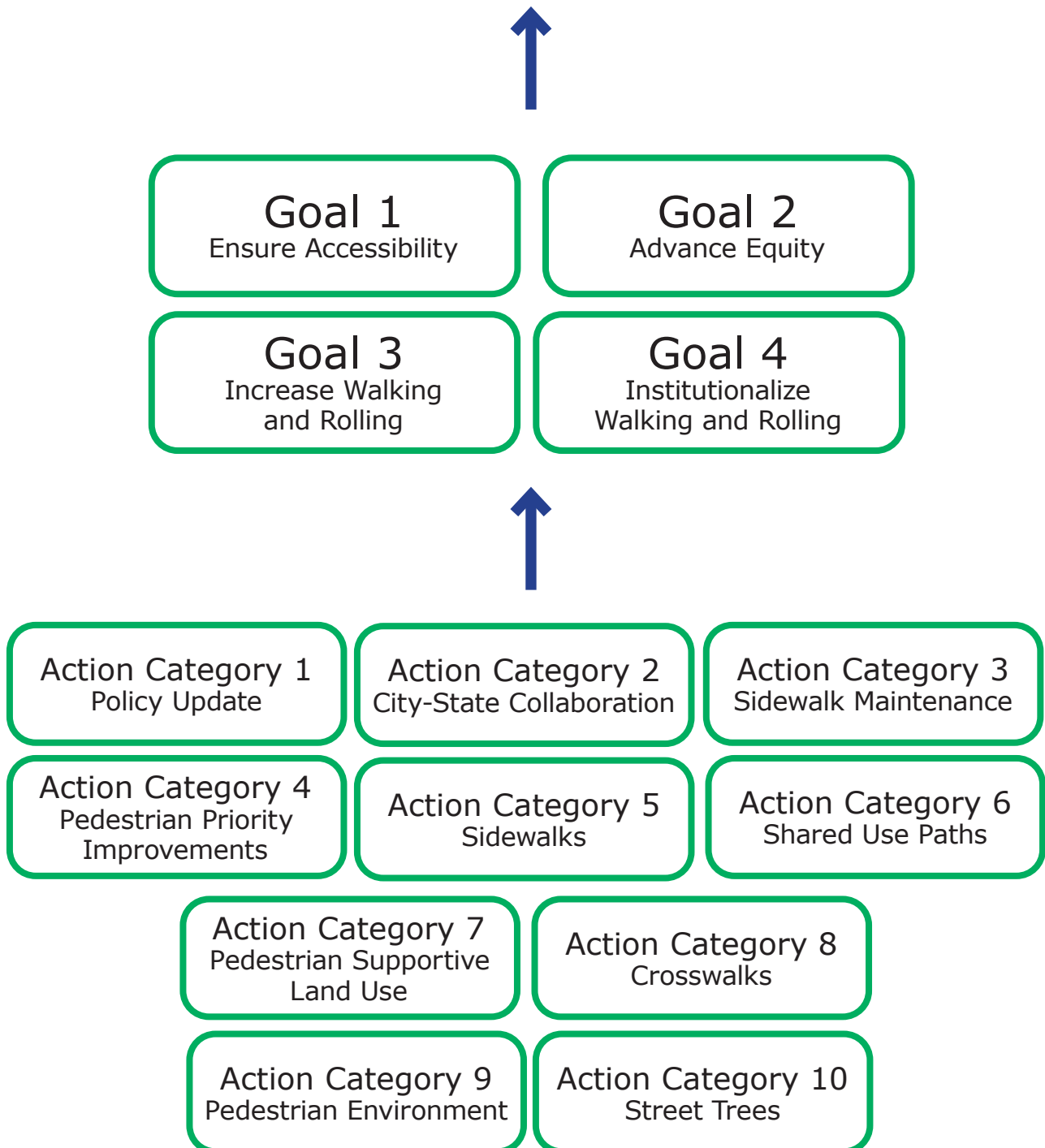
The key takeaways from the survey respondents, comments from RPAC, RBAC, and the TMC Commission, and submitted comments to the Department of Public Works suggests two related obstacles and opportunities to achieve the vision set forth in this Plan.

First, there is a desire to improve the baseline pedestrian experience by providing additional pedestrian facilities. The city should continue to recognize that city policies support pedestrian travel, and supporting walking and rolling helps the city achieve other stated goals. Second, the city shall acknowledge that pedestrians are influenced more by the built environment and other roadway users, and are more vulnerable than other road users. This makes their perceptions of safety and decisions to choose to walk and roll more affected by the actions of motorists or other users.

These takeaways are also consistent with the Plan Goals. Increasing the quantity and enhancing the quality of pedestrian facilities, and contributing to improving the baseline pedestrian experience will help to increase the amount of walking and rolling in the city and will ensure accessibility. The city has the opportunity to address these joint concerns by enhancing and expanding a transportation network that provides better facilities for people walking and rolling while simultaneously helping motorists and bicyclists adhere to traffic laws. The action items listed in the next chapter are designed to address the concerns and opportunities raised in the survey and in the community map and help inform the efforts needed to achieve the Plan goals.

Pedestrian Master Plan Vision for Rockville

All residents and visitors to Rockville can choose to safely, comfortably, and conveniently walk or roll throughout the city, because the transportation network and built environment support pedestrian travel and anticipate the needs and abilities of everyone walking and rolling.





Construction workers widen the sidewalk along E. Middle Lane in Rockville Town Center.

Photo Credit: City of Rockville

Chapter 3:

Action Items

Action Items are the individual tasks or policy positions that the city will undertake or adopt to implement this Plan and achieve the Vision. Together, these action items will help direct and develop a work plan that can be used to create a long-term implementation schedule as well as help inform budget decisions. Action items in this Plan are the result of comments and suggestions from the public and key stakeholder groups, reviews of existing transportation goals envisioned in the Comprehensive, Bikeway Master, and Vision Zero Plans, and best practices for encouraging more walking and rolling that is safer, more comfortable and more convenient.

Section 3.1 – Action Categories

There are 45 distinct Action Items proposed in this Plan. To help organize the Action Items, there are ten Action Categories. Additionally, city staff has compiled a list of shared use path projects by collecting information from stakeholder groups and comments provided by residents and visitors to the Pedestrian Master Plan website.

The Action Item Categories include:

1. Policy Update

The city shall update its policies that impact pedestrian transportation to better reflect the needs and concerns of people walking and rolling and encourage more walking and rolling in Rockville.

2. City-State Collaboration

The city shall continue to coordinate with the State as it relates to maintaining and improving pedestrian access and safety on state roadways in Rockville.

3. Sidewalk Maintenance

The city shall improve and continue to carry out its sidewalk maintenance program to ensure access for all pedestrians.

4. Pedestrian Priority Improvements

The city should continue to carry out ongoing pedestrian priority improvements throughout the city to help make walking and rolling a safer, more convenient, and more desirable mode of transportation.

5. Sidewalks

Sidewalks and pedestrian transportation facilities shall be designed to accommodate all people, encourage safe walking and rolling, and provide access throughout the city. The city's standard details for roadways, which include sidewalks, meet the standards for compliance with the Americans with Disabilities Act and Guidelines for Pedestrian Facilities in the Public Right-of-Way.

6. Shared Use Paths

Shared use paths shall be built throughout the city to supplement the sidewalk network to provide additional safe and convenient pedestrian routes.

7. Pedestrian Supportive Land Use

The city shall strive to improve convenient, comfortable and safe pedestrian access and mobility by updating land use policies, creating new development regulations, and increasing opportunities for pedestrian connections in the built environment.

8. Crosswalks

The city should provide marked crosswalks proactively and equitably throughout Rockville, as appropriate.

9. Pedestrian Environment

The city shall balance the use of public space between the curb and building front to benefit pedestrian travel and activity in the community.

10. Street Trees

Street trees shall be included as components of a comprehensive pedestrian network.

While the action items in this plan cover a wide variety of topics, each item contributes to achieving at least one of the Plan's goals. Updating standards, maintaining existing facilities and improving facilities for walking and rolling generally contribute to ensuring accessibility (Goal 1); including multimodal facilities or modifying facilities for all roadway users contribute to recognizing and enhancing equity (Goal 2); building new

walking and rolling facilities supports increasing walking and rolling (Goal 3); and updating policies and practices help institutionalize walking and rolling (Goal 4). A summary list of each Action Item and the goals to which they contribute, is shown at the end of this Plan.

Section 3.2 – Action Items

The 45 Action Items are organized by their respective Action Category and can be identified by their number. Each Action Item has a short title, the specific action or task, shown in bold text, a brief discussion of the action item, and the Plan Goals to which each Action Item contributes. Additionally, a general cost estimate for the action items are listed. These estimates are relative and it is expected that they will be refined as the city implements the Plan.



What makes a street complete?

Complete Streets are a roadway design philosophy that streets are for everyone and facilities should be provided for people who drive, walk, roll, bicycle, and use transit. It is an approach to ensure safe access for everyone, regardless of their travel mode or their ability. Most Complete Streets have dedicated sidewalks, bicycle facilities, motor vehicle lanes, and designated places for transit, such as a bus stop.

Complete Streets respond to the surrounding community and built environment and may include sidewalks, bicycle lanes, comfortable transit stops, frequent crosswalks, and traffic calming features. Roadways with areas designated for people walking, rolling, bicycling, using transit, and driving are more likely to reduce the conflict between those modes and to keep the different speeds of travel separate. For instance, many bicyclists travel at a speed that is too quick to mix with pedestrians, but is too slow to mix with motorists. Complete Streets address this issue to help everyone travel at a comfortable and safe speed. These streets recognize that a successful street is one that can be used by everyone to access adjoining destinations or to travel through a community.

Action Item 1a: Synthesis of Pedestrian Policies

Action Category: Policy Update

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

✓

Institutionalize Walking and Rolling

✓

The specific policies and guidance provided in the 2008 Synthesis of Pedestrian Policies shall be updated and incorporated into the relevant approved documents or City Code, if not already included.

The Synthesis of Pedestrian Policies is a 1994 document updated in 2008 and outlines a series of guidelines for the city to reference when evaluating pedestrian capital improvement projects, maintenance responsibilities, and compliance for development applications. While this document provides valuable guidance for incorporating pedestrian facilities into capital improvement and development projects, it was developed by the TMC (known then as the Traffic and Transportation Commission) and does not have approval from the Mayor and Council or the authority to enforce its guidance. Updating the individual policies in the synthesis and incorporating them into approved documents will better achieve the goals and vision of this Plan.

This is an opportunity to refine these policies to better serve pedestrian needs and streamline their implementation by incorporating them into existing documents to guide the city's work program. While it will require additional review and approvals from the Mayor and Council and Director of Public Works, relevant approved documents include the City Code, Complete Streets Policy, the Sidewalk Prioritization Policy, the City's Construction Standards and Details, and the Comprehensive Transportation Review, among others. The policy categories from this synthesis include: Sidewalks, Pedestrian paths, Accessibility, Development Design, Crosswalks, Traffic signals and Signs, Enforcement and security, Education and Physical fitness and Health.

Enhancing these policies will help better meet ADA guidelines, improve connectivity and accessibility between destinations, and evaluate impacts to pedestrian travel. While amending these policies to other approved documents will replace the synthesis, it provides more authority for the city to implement the policies, whether part of development or redevelopment application, a maintenance project, or a capital improvement project.

Action Item 1b: Complete Streets

Action Category: Policy Update

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

✓

Institutionalize Walking and Rolling

✓

The Complete Streets Policy shall be updated to reflect contemporary multimodal practice to advance walking, rolling, bicycling, and driving on all city streets.

The city's Complete Streets Policy was approved and adopted by the Mayor and Council in 2009 and provides guidance for residents, visitors, decision makers, planners, engineers, designers, and developers to ensure that all transportation modes – walking and rolling, driving, bicycling, and riding transit – are incorporated into transportation improvement projects.

This policy also provides recommendations that prioritize implementation on specific streets, bicycle routes from the since updated 2004 Bikeway Master Plan, streets that are adjacent to schools or within comprehensive planned developments, and those connecting to parks, among other criteria. This policy also provides design guidance based on the level of separation or roadway sharing that can occur.

While not all public rights-of-way have sufficient width to include fully separated facilities for all travel modes, Complete Streets facilities should be provided on all streets in the city, regardless of their location or classification, to the extent possible that safe accommodations can be provided for all roadway users. Additionally, the design guidance section should be updated to reflect best practices and roadway designs proven to increase multimodal safety. This guidance can include roadway volume and speed thresholds, desired percentages of people walking, bicycling, and driving, and alternatives to help allocate sufficient space to create a Complete Street.

While the Complete Streets Policy document is an important tool to guide the city's design and construction of multimodal streets, including a reference to this policy in the approved roadway standards will ensure that Complete Streets facilities are taken into consideration during design and construction.

Action Item 1c: Sidewalk Prioritization Policy

Action Category: Policy Update

Expected Cost: \$

Ensure Accessibility



Advance Equity



Increase Walking and Rolling



Institutionalize Walking and Rolling



The Sidewalk Prioritization Policy shall be updated to include more pedestrian trip generators and better reflect pedestrian needs in neighborhoods in Rockville.

The City of Rockville developed a prioritization policy in 2009 to help identify the order in which missing sidewalk segments (or sidewalk gaps) should be evaluated and built. There are over 400 sidewalk gaps in the city, making up 51 miles.

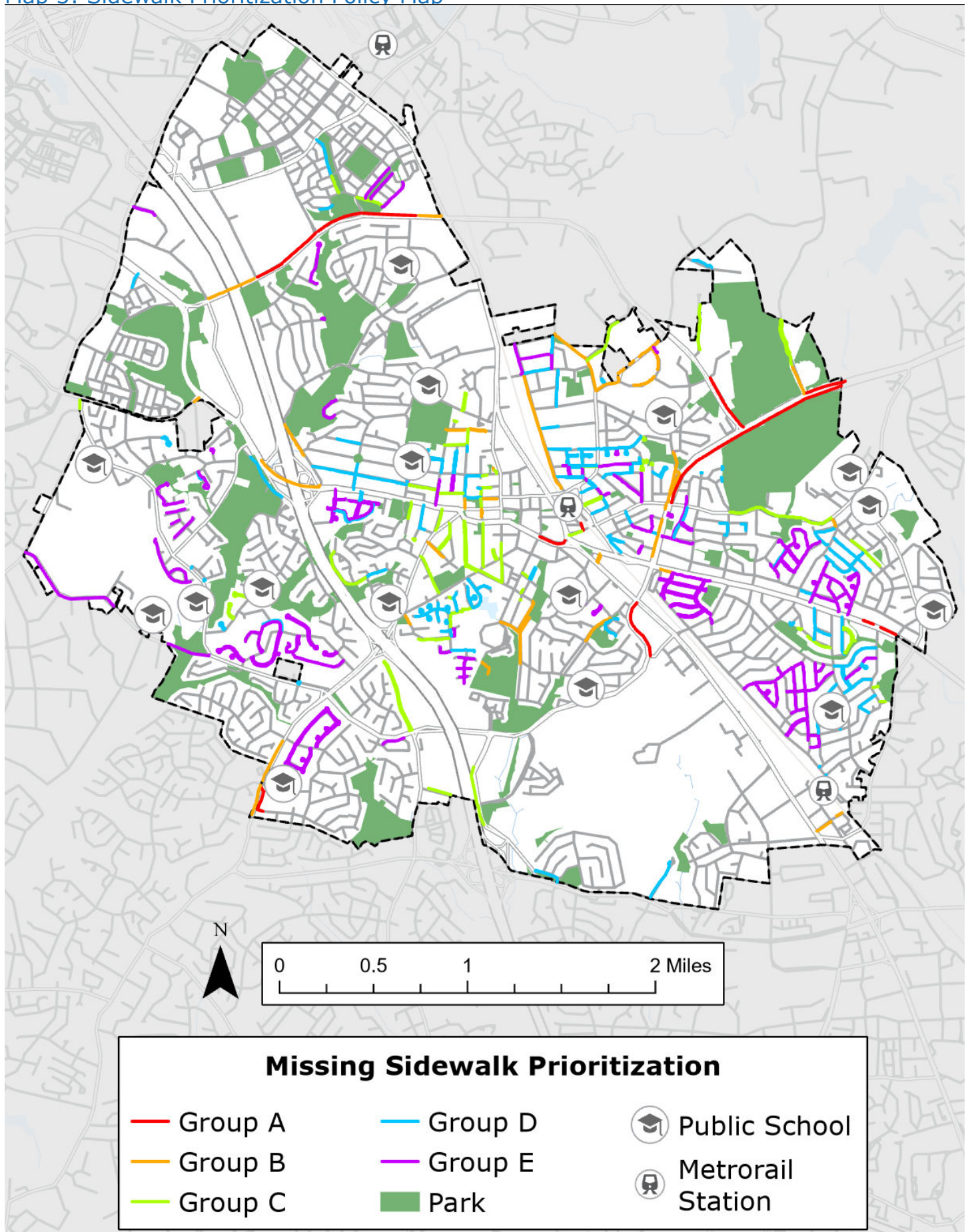
The current policy uses two scores to evaluate a sidewalk gap. The first score is the Utility Score, which is related to the number of amenities and destinations nearby. The second score is the Traffic Conditions Score, related to posted speed limit and the street classification of the street adjacent the sidewalk gap. These rankings result in a prioritization that favors high-volume, arterial streets over neighborhood streets. While it is important to ensure sidewalks are built along larger roadways, the speed and volume of the street should not be given precedence over destinations that generate pedestrian activity. It is necessary to balance access and proximity to destinations alongside the volume and speed characteristics of a street.

While there are many sidewalk gaps in the city, the number of gaps or the total mileage does not necessarily reflect the total amount of buildable sidewalks. Using the prioritization policy, DPW staff evaluates sidewalk gaps for feasibility and removes gaps from the prioritization policy deemed infeasible, due to topography, right-of-way availability, stormwater, or other reasons. Sidewalk gaps that are deemed infeasible will be tracked by staff so that they may be reevaluated at a future time.

Map 3, Sidewalk Prioritization Policy Map, on the following page shows the results of the city's current Sidewalk Prioritization Policy. The city uses an approved criteria to rank all the missing sidewalk segments, which are then evaluated for feasibility, and constructed if feasible.

The prioritization groups missing sidewalk segments into five categories, Priority Group A are the highest priority and should be evaluated first. Group E are the lowest priority and will be evaluated after other groups. However, there are instances where lower priority sidewalks are evaluated, such as segments with public support or in response to a crash.

Map 3: Sidewalk Prioritization Policy Map



Sidewalks On One Or Both Sides?

There is often a question of whether a gap should be prioritized if there is a sidewalk on the opposite side of the street. In many cases, it's suggested a sidewalk isn't necessary because people can use the other side or walk on the grass or on the street. However, for many people, such as those using wheelchairs or traveling with children, walking and rolling on grass or in the street is not safe or feasible, especially for busier streets. A single sidewalk forces people to travel indirectly and to cross the street two more times that they would otherwise. Reducing the number or times a person needs to cross makes walking and rolling a safer and more direct mode of transportation. Conversely, there are many streets in the City of Rockville where it is not feasible to build sidewalks on both sides. These include instances where environmental features exist, or the public right-of-way is not wide enough to accommodate an additional sidewalk. This is more often the case for older and narrower residential streets.

Larger roadways that provide greater connectivity in the pedestrian network, or act as central streets in a neighborhood should be prioritized to have sidewalks on both sides of the street. Meanwhile, smaller roadways, with low volumes of traffic and limited connectivity should not be prioritized for sidewalk construction if there is already an existing sidewalk on one side of the street.

A joint criteria in the Sidewalk Prioritization Policy could address the issue. Roads that have a functional classification of Residential Primary or above should be prioritized regardless of there being a sidewalk on the other side of the street. For streets classified lower than Primary Residential, the gaps are prioritized if neither side of the street has a sidewalk. This results in prioritizing sidewalks on both sides for larger roadways and sidewalks on one side for smaller roadways.



Action Item 1d: Guidelines for Neighborhood Traffic Management

Action Category: Policy Update

Expected Cost: \$

Ensure Accessibility

Advance Equity

✓

Increase Walking and Rolling

✓

Institutionalize Walking and Rolling

✓

The Guidelines for Neighborhood Traffic Management should be revised so that the thresholds necessary to justify a traffic management plan are more reflective of the concerns raised by the community and can be applied to more streets in Rockville.

The Guidelines for Neighborhood Traffic Management is used to evaluate and mitigate the detrimental impacts caused by motor vehicles in residential neighborhoods, such as noise, emissions, and safety. These guidelines were developed by city staff and reviewed by the TMC (then known as the Traffic and Transportation Commission).

There are two types of traffic management that can be addressed through this practice. The first addresses neighborhood streets with more traffic than expected, and the second addresses neighborhood streets with motor vehicles traveling at speeds exceeding the posted limit. While these guidelines are used to mitigate motor vehicle traffic impacts, they are significant for pedestrian travel as the negative effects of motor vehicles are often directly experienced by people walking and rolling.

These guidelines are an important tool for residents and communities to use and collaborate with DPW to identify obstacles and improve neighborhood streets. Although the guidelines provide a valuable approach to address traffic related issues, the criteria necessary to initiate improvements are often too stringent, resulting in few changes. Additionally, only residential streets are currently eligible for this program, however residents can live on other types of streets and traffic management could also benefit other communities, not only those along residential streets.

Revising these guidelines would permit more traffic calming and reduce speeding in the city than currently permitted. It would also be consistent with the city's Vision Zero Action Plan, in that it would help to proactively address roadway safety concerns and encourage motorists to travel within the posted speed limit.

Action Item 1e: Comprehensive Transportation Review

Action Category: Policy Update

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

✓

Institutionalize Walking and Rolling

✓

The Comprehensive Transportation Review shall be updated to better implement the goals of this Plan and to provide better guidance for development applicants to improve pedestrian facilities as part of development projects and mitigation requirements.

The CTR guides development applicants through the transportation elements of the development review process and was most recently updated and adopted by the Mayor and Council in August 2018. The document references the Adequate Public Facilities Ordinance, Bicycle Master Plan, Complete Streets Policy, Comprehensive Master Plan, Neighborhood Plans, Pedestrian Policies, and, Standards and Details for Construction, among others as relevant standards. This review includes pedestrian access into and within a development site, and for developments that produce more than 30 new motor vehicle trips can require a pedestrian and bicycle safety study.

Development applications that produce more motor vehicle trips are required to study and potentially mitigate the development's motor vehicle transportation impacts at more intersections. However, there is no similar mechanism to review and advance pedestrian improvements as part of traffic impact mitigation. Moreover, the CTR can provide additional guidance to comply with this Plan.

Updating the CTR should consider opportunities or metrics to reduce vehicle miles traveled as recommended in the Rockville 2040 Comprehensive Plan. The update should also consider approaches to encourage more walking and rolling or alternative modes of transportation by expanding transit oriented areas and access roads and trip reduction strategies. Lastly, an update to the CTR should also consider inclusion of multimodal crash incident data, consistent with Vision Zero goals.



A pedestrian refuge island can help people cross the street by separating the crossing distance in two and reducing a person's exposure to motor vehicles.

Photo credit: City of Rockville

Action Item 2a: State Roadway Sidewalks

Action Category: City State Collaboration

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

✓

Institutionalize Walking and Rolling

✓

The city should advocate the Maryland Legislature to revise the Maryland Transportation Code to clearly indicate that the state is responsible for maintaining all transportation facilities in the State's right-of-way, including sidewalks.

MD. Transportation Code Ann. § 8-630 (2020) indicates that all sidewalks along state rights-of-way that were constructed or reconstructed subsequent to the legislation shall be maintained by local jurisdictions. It is often not clear which sidewalks are the responsibility for MDOT SHA to maintain and it represents a financial burden for the City of Rockville that cannot be easily addressed, resulting in many sidewalks on state rights-of-way that are in need of repair.

Who Owns the Road?

In the City of Rockville, public roadways are owned and maintained by the City of Rockville or by the Maryland Department of Transportation State Highway Administration (MDOT SHA).^{*} State roadways are identified by a number in addition to their name. For instance, Rockville Pike, Hungerford Drive, and Frederick Road are also known as MD 355. Norbeck Road is also MD 28, and most of Veirs Mill Road is MD 586. City roads have names only, such as Lewis Avenue or Wootton Parkway.

While an individual may not experience much difference when traveling from city road to state road and back, there are significant construction and maintenance implications for each road. The city and state follow different procedures and have different standards for constructing and repairing roadways. When the city receives a resident request to repair or improve state right of way, that request is submitted to MDOT SHA by the city on behalf of the resident.

^{*}There are several roads, or segments of road, in Rockville that are County-owned and maintained, such as Darnestown Road, Glen Mill Road, and Twinbrook Parkway. However, these roadways are just outside of the boundary of Rockville. When DPW staff receives requests to add a crosswalk or repair a pothole on these roads, the requests are forwarded to Montgomery County Department of Transportation."

Action Item 2b: Shared Streets Yielding

Action Category: City State Collaboration

Expected Cost: \$

Ensure Accessibility

Advance Equity

✓

Increase Walking and Rolling

Institutionalize Walking and Rolling

✓

The city should support efforts to revise the Maryland Transportation Code clarifying that motorists, bicyclists, and scooter riders are required to yield the right-of-way to pedestrians on shared streets. Further, motorists should be required to yield to bicyclists and scooter riders as well in shared streets.

The city should support efforts to clarify right-of-way along shared streets. A “shared street” is designed for very low travel speeds and does not have a clear distinction where pedestrians, bicyclists, and motorists are supposed to travel, creating an environment where everyone must share the use of roadway space to travel safely. While there are no fully shared streets in Rockville currently, these streets are generally designed to provide people walking, rolling, and bicycling direct access to shops and residences, while also allowing for limited motor vehicle travel. However, under the current regulations, pedestrians could be considered ‘at-fault’ in the event of a crash on a shared street.



Veirs Mill Road, also known as MD Route 586, is owned and maintained by the Maryland Department of Transportation State Highway Administration.

Photo credit: City of Rockville

Action Item 2c: Vehicle
Registration Fees and
Reciprocity

Action Category: City State
Collaboration

Expected Cost: \$

Ensure Accessibility

Advance Equity

Increase Walking and
Rolling

Institutionalize Walking
and Rolling

✓

✓

The city should encourage the state to better link vehicle registration fees to vehicle types and sizes and to seek a reciprocity agreement with neighboring states related to fines from automated traffic enforcement.

Larger and heavier motor vehicles are generally less fuel efficient and produce more emissions than smaller vehicles. They require more street space for parking, moving and have larger blind spots, higher front ends, and weigh more, which result in more severe injuries or fatalities in the event of a collision, especially pedestrian collisions¹. Tying vehicle registration fees to size and type of the vehicle will better reflect their social, environmental, and safety costs. Additionally, the City should advocate to the state to commit to a reciprocity agreement with neighboring jurisdictions regarding automated enforcement. Maryland should be able to collect fees from citations issued by automated enforcement by out of state drivers. This will help reinforce the rules of the road in Maryland.

¹ Monfort, Samuel. Mueller, Becky. Pedestrian injuries from cars and SUVs: Updated crash outcomes, May 2020. <https://www.iihs.org/news/detail/new-study-suggests-todays-suvs-are-more-lethal-to-pedestrians-than-cars>

Action Item 2d: Comparative Negligence

Action Category: City State Collaboration

Expected Cost: \$

Ensure Accessibility

Advance Equity

✓

Increase Walking and Rolling

Institutionalize Walking and Rolling

✓

The city should support efforts to change the existing contributory negligence regulations at the state level to comparative negligence.

Contributory negligence is a policy indicating that should the participants of a crash have any percentage of being at fault, they are not able to claim any damages. For pedestrians, who are more vulnerable to severe injuries or death in the event of a crash, contributory negligence could result in no ability to receive damages, even if the motorist was 99% at-fault. A comparative negligence policy would allow crash victims to claim damages at the percentage at which they are determined not at fault. In 2022, RPAC and RBAC submitted letters recommending the City assess the State's contributory negligence policy and advocate the state legislature for change.

Action Item 2e: State Roadway Improvements

Action Category: City State Collaboration

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

✓

Institutionalize Walking and Rolling

✓

The city will continue to advocate to the state to improve maintenance, pedestrian accommodation and safety.

MDOT SHA follows a detailed work program to construct, maintain, and improve state maintained roadways and sidewalks. In many cases, MDOT SHA will repair or improve specific roadways with observed safety or accessibility challenges upon request of the city. The State also follows guidelines and policies related to safety and consider the surrounding roadways context. The city recommends MDOT SHA evaluate roadway corridors proactively and revise policies for pedestrian facilities to better align with equitable access and Vision Zero goals. The city should also keep track of all requested improvements to state roadways and their status.

Action Item 2f: County Priority Letter

Action Category: City State Collaboration

Expected Cost: \$

Ensure Accessibility

Advance Equity

Increase Walking and Rolling

Institutionalize Walking and Rolling



The City should work with Montgomery County on a list of specific multimodal improvements to be submitted to the Maryland Department of Transportation.

Every county in Maryland, including Montgomery County, submits an annual "Priority Letter" to MDOT which outlines the transportation priorities for the County which MDOT should consider in developing their own capital and operating budgets. These letters generally include a list of capital projects and are organized by transportation mode and type of project. The City of Rockville can submit recommendations to the County so that City projects are considered by Montgomery County to be included in the Priority Letter to be considered in the MDOT annual budget. The City should submit a list of projects that emphasize multimodal transportation, seek to achieve Vision Zero, and advance pedestrian needs and facilities.



New sidewalk, accessible curb ramps, and crosswalk constructed on North Washington Street.

Photo credit: City of Rockville

Action Item 3a: Comprehensive Sidewalk Maintenance

Action Category: Sidewalk Maintenance

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

Institutionalize Walking and Rolling

✓

The city shall develop a process to better inventory, assess, and repair all city-maintained sidewalks and shared-use paths.

While sidewalk gaps are reviewed as part of the Sidewalk Prioritization Policy, existing sidewalks are reviewed for maintenance alongside the city's asphalt and concrete programs. ADA regulations require that all needed ADA repairs are completed before streets can be repaved. This process follows an approximate 12-year cycle, which is the time scheduled for roadways to be repaved. Additionally, sidewalks are regularly assessed by city staff and required repairs are identified and prioritized as part of the concrete maintenance program. Lastly, sidewalks are repaired in response to resident or visitor service requests.

Safe and convenient pedestrian travel is more sensitive to the quality of sidewalks than motor vehicle travel is sensitive to roadway quality.

This process should coincide with the existing asphalt and concrete programs as well as identify sidewalks that may need repairs, but are not scheduled for an upcoming roadway repavement project. Sidewalk repairs should be based on severity of repair needed and location within the city. Repairs shall then be scheduled according to need, budgeted in annual capital budgets, and carried out at regular intervals.

For sidewalks that are not included in upcoming projects, a repair prioritization would be similar to the Sidewalk Prioritization Policy used for constructing new sidewalks. The online community map developed for this Plan includes many points related to pedestrian facilities that need more attention. This map can be consulted to identify additional pedestrian maintenance priorities.

Sidewalks and shared-use paths shall be maintained in accordance with the most up-to-date city standards, which may include upgrading curb ramps, changing surfaces to meet ADA design guidelines or the Montgomery County toolkit for "Planning and Designing Streets to be Safer and More Accessible for People with Vision Disabilities."

Action Item 3b: State Roadway
Sidewalk Maintenance

Action Category: Sidewalk
Maintenance

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and
Rolling

Institutionalize Walking
and Rolling

✓

The city should continue to regularly submit and follow up on sidewalk maintenance requests and pedestrian facility improvements with MDOT SHA and help facilitate sidewalk maintenance requests on behalf of residents.

Sidewalks along state-maintained roads also require routine maintenance. However, the city does not have the ability to repair sidewalks that are within the state's right-of-way. While MDOT SHA has indicated that maintenance for sidewalks along state owned and maintained rights-of-way are the responsibility of local jurisdictions, MDOT SHA has repaired sidewalks along state roadways in the City of Rockville and implements a sidewalk reconstruction for pedestrian access program. The city should advocate with elected officials at the state level that state funding should be dedicated to, and MDOT SHA should be responsible for, maintaining the sidewalks within the state owned rights-of-way.

Action Item 3c: Permitting
Pedestrian Detours

Action Category: Sidewalk
Maintenance

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and
Rolling

Institutionalize Walking
and Rolling

✓

Prior to receiving a permit, contractors shall continue to submit and receive approval for temporary traffic control plans including appropriate detour plans that specifically identify how impacts on pedestrian (and bicycle) travel are being minimized.

Construction projects, such as new developments or roadway improvements, often result in closing a sidewalk and providing an alternative detour route, similar to roadways and motor vehicle traffic. While detours can be a slight inconvenience for motorists, they can often severely interrupt a pedestrian trip and in events where pedestrians are instructed to use sidewalks on the other side of the street, can result in unsafe pedestrian behavior.

When a building is under construction and impacts the road, roadways are being rebuilt, or utility and maintenance work is being completed in the public right-of-way, the contractor responsible for the construction provides temporary traffic control plans including pedestrian detour plans in accordance with the latest MD MUTCD.

In many instances, this results in signage indicating closed sidewalks without recourse for people walking. Contractors should minimize obstructions to pedestrians as feasible and where obstructions are unavoidable, should provide temporary sidewalks or covered walkways as alternative routes. Contractors and city crews shall also ensure that detour signage is placed at appropriate distances from the maintenance or construction work so that pedestrians will not be required to back track to an appropriate roadway crossing. Providing covered or alternative sidewalks can help maintain pedestrian travel routes without forcing people to travel along roadways or otherwise indirect routes.

Action Item 3d: Snow Clearance Procedures

Action Category: Sidewalk Maintenance

Expected Cost: \$

Ensure Accessibility

✓

Advance Equity

✓

Increase Walking and Rolling

Institutionalize Walking and Rolling

✓

The city shall analyze the snow clearance procedures for all trails, shared use paths, and sidewalks to ensure that clearance efforts are consistently applied throughout the city and that the necessary actions are taken to ensure cleared sidewalks.

Snow and ice are not common occurrences in Rockville throughout the course of a year. However they can very quickly prevent pedestrians from safely reaching their destinations on the handful of days each year that snow and ice accumulate on sidewalks. This can result in persons using wheelchairs to ride in the roadway, for intersection signal push buttons to be inaccessible, and pedestrians to navigate around snow piles left from plow trucks and other residents in an unsafe manner.

The city is responsible for clearing snow from sidewalks and pathways along and within public parks, city facilities, and sidewalks and bike paths adjacent to city properties. Additionally, the city clears snow from pedestrian medians in the middle of the city-owned roadways, the Carl Henn Millennium Trail, the sidewalks around Veterans Park, and at six locations along Rockville Pike.

For all other sidewalks, the property owner is responsible for clearing sidewalks and curb ramps. The city also hosts a list for individuals to volunteer to help clear snow for neighbors in need or to request assistance for clearing snow from a private property's sidewalks.

Action Item 4a: Pedestrian Intersection Audits

Action Category: Pedestrian Priority Improvements

Expected Cost: \$ - \$\$\$

Ensure Accessibility



Advance Equity



Increase Walking and Rolling



Institutionalize Walking and Rolling



The city shall develop and implement an ongoing pedestrian audit program to identify intersections and roadway sections and construct specific improvements to enhance the pedestrian experience.

Pedestrian needs should not only be accommodated to the minimum standards, but additional efforts shall be made to prioritize pedestrian movements compared to other modes of travel. By prioritizing pedestrian travel in specific places, the city can improve roadway safety for everyone; can further leverage and expand walkable communities and local activity to support businesses; and can increase accessibility to many important social, educational, and cultural destinations in the city. Prioritizing pedestrian travel does not mean prohibiting or preventing other travel modes, it represents a shift in transportation that expressly recognizes the benefits of pedestrian travel for the city. Improving pedestrian accommodations and facilities not only improves transportation and safety for the most vulnerable road users, but also for people driving, bicycling, and using transit. Pedestrian focused improvements increase access to shops, parks, schools, and other destinations; make it easier to live an active lifestyle, and can help reduce environment related impacts from automobiles. While all city-maintained intersections will be evaluated, intersections that are within areas of the city where pedestrian activity is currently, expected to be, or desired to be high, will be prioritized. The following land uses often encourage pedestrian activity and help inform the location of these intersections:

- Elementary, middle, and high schools and colleges
- Older adult, assisted living, and nursing home residential communities
- Transit stations
- Public parks, community centers, and libraries
- Dense, mixed-use neighborhoods
- Shopping centers

Members of the public or community associations may also request specific intersections to be evaluated. A Pedestrian Intersection Audit will be carried out by staff and will assess existing conditions and evaluate opportunities to improve pedestrian travel and accessibility. The pedestrian intersection audit is necessary to identify which

Continued on next page

Action Item 4a: Pedestrian Intersection Audits (continued)

Action Category: Pedestrian Priority Improvements

Expected Cost: \$ - \$\$\$

Ensure Accessibility



Advance Equity



Increase Walking and Rolling



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potential improvements would best serve pedestrian transportation as well as determine whether any traditional traffic control devices, such as stop signs or flashing beacons, would be justified. Potential improvements include signalization modification and geometric improvements to intersections and nearby roadways, traffic calming improvements, and street lighting improvements. These include, but are not limited to:

- Leading pedestrian intervals (LPI)
- Extended pedestrian clearance times
- Pedestrian recall or passive detection
- Maximize pedestrian crossing signal phase
- Modified signal cycle lengths
- Right turn on red restrictions
- Elimination of “free-right turns”
- Pedestrian safety islands
- Hardened center lines
- Raised crosswalks and intersections
- Marked crosswalks crossing all intersection legs
- Reduced curb radii
- Curb extensions
- Roundabouts and mini traffic circles
- Narrow roadway travel lanes
- Reduced number of travel lanes, if justified
- Chicanes
- Benches or other public seating
- Asphalt and pavement art
- Mid-block pedestrian islands
- Speed humps
- Separated bicycle lanes
- Bicycle specific intersection improvements
- Pedestrian directed and scaled street lighting
- Pedestrian signage

These improvements can be considered for intersections or along road segments. Also, other improvements, such as asphalt or pavement art, should only be considered in conjunction with other roadway improvements, not as standalone projects, and should be further evaluated to determine its beneficial impacts.

Action Item 4b: Pedestrian Improvements in Development

Action Category: Pedestrian Priority Improvements

Expected Cost: \$ - \$\$\$

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Development and redevelopment applications located in the transportation-oriented areas shown in the CTR shall consider the pedestrian priority improvements and construct improvements as necessary, especially for intersections near land uses that encourage pedestrian activity.

Development applications often impact the transportation network of the area surrounding the development. While this often results in intersection modifications to increase motor vehicle capacity, pedestrian improvements should also be considered. Transit oriented areas are defined in the CTR and include neighborhoods and properties that are within 0.7 mi of Metrorail Stations and along major travel corridors. In these areas, improving pedestrian facilities is a valuable component to encouraging transit use.



Continental crosswalks, signage, and center medians can improve the pedestrian experience.

Photo credits: City of Rockville



Roadway pinch points physically narrow the roadway, which helps motorists travel at the posted limit.

Photo credits: City of Rockville

Action Item 5a: Sidewalks on Both Sides

Action Category: Sidewalks

Expected Cost: \$ - \$\$\$

Ensure Accessibility

✓

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Sidewalks should be provided on both sides of all streets within the City of Rockville.

Sidewalks are the most important feature in the pedestrian landscape. These facilities are often alongside a roadway but may also cut-through parks or provide connections between neighborhoods and destinations. They provide a clear route along the right-of-way for pedestrians separate from other traffic modes and can provide a direct connection to destinations. Ultimately, it is expected that all streets in the city will provide separated facilities and access for people walking and rolling, consistent with the Complete Streets Policy and similar to facilities for motor vehicle travel. As sidewalk gaps are evaluated, city staff will determine whether it is feasible or not to add sidewalks to both sides of the street.

Action Item 5b: Sidewalk Gap Inventory

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility

✓

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The city shall investigate how many sidewalks gaps are feasible to construct and how many miles that represents in Rockville.

The city's sidewalk prioritization policy will help identify which streets should be reviewed first for new sidewalks. Once sidewalk gaps are prioritized, DPW staff will complete a feasibility study to determine whether a sidewalk can reasonably be built or if a project should be put on hold until additional funding, property acquisition, environmental challenges, or other obstacles can be addressed. It is also understood that costs related to sidewalk construction, or the existing conditions of an area may impact the priority or feasibility of certain sidewalk gaps from being constructed by the city, even in the long term.

Action Item 5c: Sidewalk Standards

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility

✓

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Roadway standards shall be updated to provide minimum five-foot-wide sidewalks on arterial, industrial, and residential streets, and minimum ten-foot-wide sidewalks on business district streets, and a seven-foot-wide minimum buffer to all streets. When a brick or cobblestone sidewalk is replaced, concrete, asphalt or other smooth surfaced material should be considered.

The City of Rockville provides direction to engineers, developers, utility companies, homeowners, and contractors for building roadways or other improvements in the public right-of-way. These standards are approved by the Director of Public Works and depict roadway and sidewalk widths, number of travel lanes, parking lanes, target speed, drainage grades, and buffers for all street types in the city. Consistent with Chapter 21 of the City Code, "Streets, Roads, Rights-of-Way, and Public Improvements," all roadway projects in the city are required to follow these Standards and Details, unless alternate standards are approved.

These widths represent minimum widths and wider sidewalks are encouraged for all roadways. Wider sidewalks better accommodate side-by-side and comfortable walking and rolling, often necessary for parents with children and pushing strollers, small children using bicycles on the sidewalk, and people riding wheelchairs or other mobility devices.

Updating these standards will support pedestrian activity in the surrounding built environment. The city's standards and details for roadways, which include sidewalks, shall meet the standards for compliance with the US Access Board's guidelines for the accessibility of pedestrian facilities in the public right-of-way.

Additionally, brick and paver sidewalks are not preferred because they are often inaccessible for people using wheelchairs or other wheeled mobility devices. When a brick or cobblestone sidewalk is being replaced, the city should consider replacing it with non-slip and smooth surfaces designed to minimize vibration and disturbance for people using wheelchairs or other wheeled mobility devices.

Action Item 5d: Curb Ramp Standards

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility



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The city shall update the standards and details to add a new design standard for perpendicular curb ramps that meet ADA Accessibility guidelines. Furthermore, existing curb ramps that are not perpendicular, and are part of a development or redevelopment, whether internal to the site, or fronting on the public right of way, should be rebuilt as perpendicular curb ramps.

When curb ramps are out of alignment with the crosswalk, people with vision disabilities or using mobility devices have more difficulty orienting themselves safely. Diagonal curb ramps or curb ramps that do not direct people towards the crosswalk increases exposure to motorists and inconveniences people pushing strollers or using other mobility devices.



Perpendicular curb ramps guide pedestrians directly to the crosswalk.

Photo credits: City of Rockville

Action Item 5e: Sidewalk Right-of-Way

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility

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At the time of development or redevelopment, the city shall seek to obtain all necessary right-of-way as recommended in the Rockville 2040 Comprehensive Plan, Bikeway Master Plan, this Pedestrian Master Plan, the applicable Neighborhood Plan, or as necessary to construct roadways that meet the city's standards, with sidewalks, shared use paths, or other recommended facilities, as appropriate and consistent with state and case law.

The availability of right-of-way impacts sidewalk construction; often there is not enough space controlled by the city between the roadway and property line to build a sidewalk. One approach is to build sidewalks as properties redevelop. If an existing sidewalk would connect into the property or be nearby, the sidewalk should be built as part of that development, if there are no nearby sidewalks, the land necessary for a sidewalk shall still be provided, either as a right-of-way dedication or as an easement, so that the city may construct a sidewalk at a future time.

Action Item 5f: Public Streets and Sidewalks

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility

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Sidewalks along public streets shall be public sidewalks.

While most sidewalks and curb ramps in Rockville are built and maintained as public sidewalks, there are some sidewalks in the city that are privately owned and maintained. Private sidewalks are usually owned by community associations, homeowner associations, business owner associations, or private property owners. These sidewalks may not meet the City's Standards and Details and are maintained separately by the private entity. This can lead to inconsistent maintenance, especially for sidewalks constructed of non-traditional materials.

Action Item 5g: Private Streets, Sidewalks, and Easements

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility



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When permitted, private sidewalks on private streets should have a public access easement and should follow the same standards for sidewalks that public sidewalks would follow, consistent with Chapter 21 of the City Code.

When private roadways are permitted, it is important the adjacent private sidewalks are also able to provide accessibility to all pedestrians, regardless of ability. The standards and details related to sidewalks are necessary for ensuring that all residents and visitors, regardless of their ability, are able to safely and conveniently walk and roll on the sidewalk. These standards include attributes such as sidewalk width, construction material, and buffer width from the roadway.

Action Item 5h: Existing Sidewalk Inventory and Improvements

Action Category: Sidewalks

Expected Cost: \$ - \$\$\$

Ensure Accessibility



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The city shall investigate how many existing sidewalks, including driveway aprons, are substandard and develop an approach to track, assess feasibility, and reconstruct these sidewalks to meet current city standards.

While the city has a Sidewalk Prioritization Policy for sidewalk gaps and construction program for new sidewalks, there isn't a similar program to reconstruct existing sidewalks that no longer meet the current sidewalk standards. Many sidewalks were built following out-dated standards. Older sidewalks may be narrower than the five-foot-wide minimum width required today. These sidewalks are repaired as part of the city's maintenance program, but they are not always rebuilt to meet current standards. The city should development a program to identify, prioritize, and update these sidewalks to meet current standards.

Action Item 5i: Sidewalk Lighting

Action Category: Sidewalks

Expected Cost: \$

Ensure Accessibility



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The city shall collaborate with Pepco and the Maryland Public Service Commission to upgrade Pepco owned streetlights to provide better lighting on streets in the city.

The city has an ongoing capital improvement project to update all the existing city-owned and maintained high pressure sodium streetlights with LED lights. The LED lights will greatly improve the look of the lighting in the city and require less maintenance in the long term. Moreover, these lights are more energy efficient, reliable, and can provide better lighting for roadway users, pedestrians as well as motorists. However, not all street lights in the city are owned by the city. Pepco owns roughly half of the streetlights in Rockville. Working with Pepco to help them upgrade their streets lights will help ensure consistent lighting throughout Rockville.

Streetlights are an important component of the right-of-way. They help light the way for pedestrians and help other roadway users see pedestrians.

Photo credit: City of Rockville



Action Item 6a: New Shared Use Paths

Action Category: Shared Use Paths

Expected Cost: \$\$ - \$\$\$

Ensure Accessibility



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The city shall evaluate the feasibility of the Pedestrian Master Plan proposed shared use paths and advance shared use path projects that are deemed feasible.

Shared Use Paths are unique from sidewalks. They are generally wider facilities and provide a route separated from motor vehicles for both pedestrians and bicyclists. While some shared use paths will follow alongside a roadway, shared use paths are not limited to roadway rights-of-way and their ability to provide a more direct route away from motorists can make them desirable paths for pedestrians and bicyclists.

All shared use paths proposed in this Plan are proposed as hard surface, ADA accessible paths. There are other recommended trails in the city which are proposed as natural surface trails. While these trails are important amenities for the City of Rockville, as natural surface, they cannot meet the needs for pedestrian transportation and are not included in this plan.

The proposed shared use paths will be reviewed by the city for their feasibility, which includes constructability, cost, environmental impact, topography, right-of-way needs, and maintenance, among other considerations. Additionally, the design of shared use paths should also consider safety concerns. Shared use paths constructed outside of the public view or without clear lines of sight can be perceived as unsafe by pedestrians.

Similar to the Sidewalk Prioritization Policy, the proposed shared use paths should be evaluated to a similar criteria that measures connectivity, nearby facilities, and access to parks so that communities without neighborhood parks can have better access to city parks and recreation centers.

Should a share use path be deemed feasible, it may be built by the city as part of a future capital improvement project if funding, and right-of-way or easements are available. Additionally, these shared use paths may be required to be constructed as part of a property development or redevelopment through the development review process. In these instances, the complete shared use path may be built in a piecemeal manner over the long term.

Continued on next page

Action Item 6a: New Shared Use Paths (Continued)

Action Category: Shared Use Paths

Expected Cost: \$\$ - \$\$\$

Ensure Accessibility



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The Bikeway Master Plan recommended shared use paths are included in this Plan. Proposed paths have also been recommended by members of the public through public comments, the online survey, community map and at stakeholder meetings.

These shared use paths are in addition to the new sidewalks, which are recommended along all streets in the city. Shared use paths provide a more direct route for people walking and rolling, making their trip shorter and often more comfortable since they are not abutting parallel roadways. Some of the proposed shared use paths are along private property, in these instances, coordination with the property owner is necessary prior to evaluating feasibility.

The Pedestrian Master Plan shared use paths are provided in the table on the following pages. Map 4, Existing and Proposed Shared use Paths, shows the location of existing shared use paths as well as the proposed shared use paths that are listed in the table. All proposed shared use paths will first be evaluated for feasibility. Shared used paths that are deemed feasible will be advanced to design and construction.



Well designed shared use paths can increase the comfort of people walking and rolling.

Photo credit: City of Rockville

Table A: Pedestrian Master Plan Shared Use Paths

Shared Use Path	From	To	Notes
Blandford Street Pedestrian Extension	Blandford Street north terminus	Fleet Street	This informal route is already well used by students from Richard Montgomery High School. It may require additional right-of-way.
Carl Henn Millennium Trail to Glenmore Terrace	Wootton Parkway	Glenmore Terrace	Shared use path that connects to existing pedestrian bridge.
Civic Center Park to Redgate Park	Civic Center	Redgate Park	This shared use path would connect the Civic Center to Redgate Park. The study includes safety considerations, and at-grade, tunnel, and bridge crossings of Norbeck Road (MD 28). The study will also require coordination with MDOT SHA.
Crabb Avenue to Beall Avenue	N. Stonestreet Avenue	Rockville Pike	This is a proposed pedestrian crossing of the railroad at Crabb Avenue and Beall Avenue.
Falls Road	Kersey Lane	City Boundary	This shared use path on the west side (southbound) will require coordination with MDOT SHA as Falls Road (MD 189) is a state roadway.
Fleet Street Path	Maryland Avenue	Park Avenue	This path on the south side of Fleet Street is currently under design.
Maryland 355 Shared Use Path	Shady Grove Road	Twinbrook Parkway	This shared use path on the east side of MD 355 (northbound) includes and extends the proposed shared use path from the Bikeway Master Plan.
Maryvale Elementary School Connection	First street	Pinewood Road	This existing connection needs repairs and lighting to improve accessibility.
Maryvale Elementary School to Redgate Park	Maryvale Elementary School	Redgate Park	This path would go along the east side of First Street and the south side of Taft Street/Court to provide access to the west side of Redgate Park.

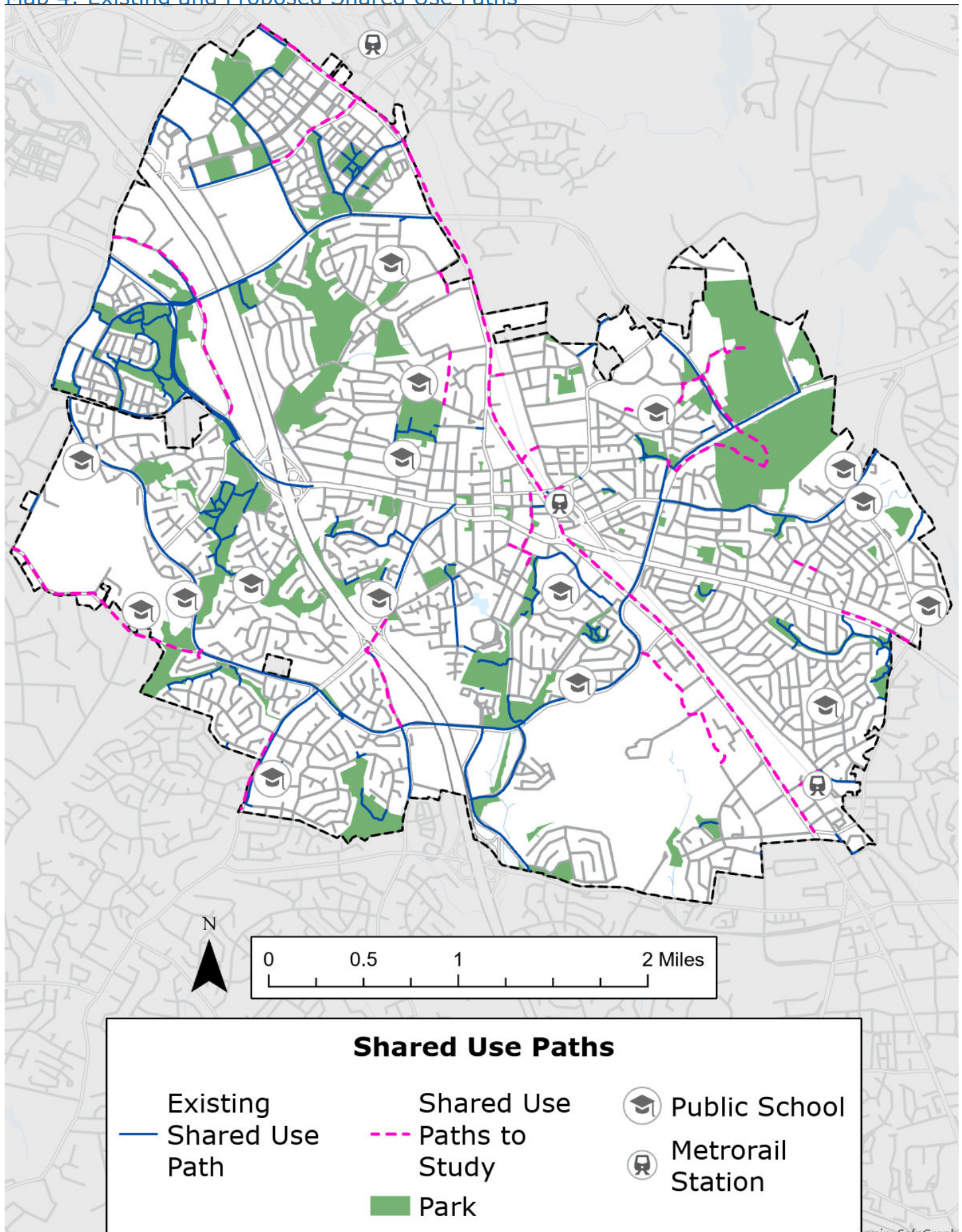
Table A: Pedestrian Master Plan Shared Use Paths, Continued

Shared Use Path	From	To	Notes
Maryvale Park to Civic Center Park Pathway	Maryvale Park	Rockville Civic Center	Shared use path connection crosses and travels along south side of MD 28 (eastbound). This will require coordination MDOT SHA because this route is along a state road. This could also connect to the proposed shared use path connecting to Redgate Park.
Monroe Street Path	Fleet Street	E. Middle Lane	This path along the west side of Monroe Street is currently under design.
Montgomery College to Martins Lane	S. Campus Drive	Martins Lane	This path connects and bisects Montgomery College and Montgomery County Public Schools property and will require coordination with those entities.
Montgomery College to College Gardens Park	N. Campus Drive	College Parkway	The specific location of this shared use path is currently undetermined. A feasibility study to identify potential locations that will not detrimentally impact abutting properties is necessary as is coordination with Montgomery College.
Montgomery College to Rutgers Street	N. Campus Drive	Rutgers Street	This is a shared use path between Montgomery College and Rutgers Street. Coordination with Montgomery College and adjacent property owners is necessary.
Park Road	S. Stonestreet Avenue	N. Stonestreet Avenue	This section is included in the Stonestreet Avenue Complete Streets Project. A shared use path is proposed for the eastbound direction of Park Road.
Redland Boulevard	Gaither Road	Frederick Road (MD 355)	This is a shared use path on the north (westbound) side of the road.
Research Boulevard	Shady Grove Road	W. Montgomery Avenue	This shared use path on the east (northbound) side is included in the Bikeway Master Plan and expanded here.

Table A: Pedestrian Master Plan Shared Use Paths, Continued

Shared Use Path	From	To	Notes
Royal Oak Court to Scott Drive	Royal Oak Court	Scott Drive	This connection would link Royal Oak Court to the proposed shared use path on Scott Drive
Scott Drive to Carl Henn Millennium Trail	Glenn Mill Road	Wootton Parkway	This path is currently under design.
Seven Locks Road to Potomac Valley Road	Wootton Parkway	Potomac Valley Road	A shared use path on the east side (northbound) of Seven Locks Road and crossing over I-270 to Potomac Valley Road will require coordination with Montgomery County and MDOT SHA. The city shall require pedestrian facilities as part of any redevelopment on Seven Locks Road.
Twinbrook Pedestrian Bridge	Lewis Avenue	Chapman Avenue	This is a pedestrian and bicycle bridge crossing the railroad. The city has initiated a study to determine a preferred location.
Unity Bridge	Frederick Avenue	Frederick Avenue	This is an existing pedestrian bridge over the rail tracks that is owned and maintained by WMATA. The city advocates WMATA to evaluate and enhance this crossing for pedestrians.
Veirs Mill Road (MD 586) Shared Use Path	Bradley Avenue	Twinbrook Parkway	This proposed shared use path on the north side (westbound direction) of Veirs Mill Road was initially proposed in the Bikeway Master Plan and is extended here. It will support pedestrian access to the proposed BRT.
Wootton Parkway to E. Jefferson Street Connection	Wootton Parkway	E. Jefferson Street	This path goes through the Woodmont Country Club property and is parallel to Rockville Pike. It requires right-of-way dedication and coordination with the property owner when it redevelops.
Yale Place to Carl Henn Millennium Trail	Yale Place	W. Gude Drive	This is an existing path that requires improvements to clarify its use for only pedestrians and bicyclists. Bollards and other enhancements should be considered.

Map 4: Existing and Proposed Shared Use Paths



Action Item 6b: Shared Use Path Design

Action Category: Shared Use Paths

Expected Cost: \$

Ensure Accessibility



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Shared use paths should be designed following best practices as recommended by AASHTO design guidelines or other recognized manuals.

Shared use path design can vary greatly in terms of materials used, widths, lighting, signage, and pavement markings, among other attributes. Following a consistent approach for design and construction of shared use paths will help guide users who travel along multiple paths and establish expectations for all users. Additionally, shared use paths should also seamlessly connect with adjoining sidewalks, other shared use paths, and bicycle facilities. The AASHTO Guide for the Development of Bicycle Facilities, the NACTO Urban Street Design Guide, and the FHWA Evaluation of Safety, Design, and Operation of Shared-Use Paths, among others should be considered when shared use paths are constructed or repaired.



Shared use paths are designed to accommodate pedestrians as well as other users and are wider than traditional sidewalks. They usually made of asphalt.

Photo Credit: City of Rockville

Action Item 6c: Shared Use Paths along Arterial Roads**Action Category: Shared Use Paths****Expected Cost: \$\$ - \$\$\$**

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Shared use paths shall be considered along all arterial roadways in the city. The land necessary shall be dedicated or the shared use path shall be built, if deemed feasible.

Arterial roadways provide an additional opportunity for the city to expand shared use paths and pedestrian accessibility. Arterial roadways often have wide rights-of-way and include multiple motor vehicle travel lanes and center medians. These roads can also have a capacity that is much greater than the existing demand, which provides an opportunity to modify roadway buffers and medians or even travel lanes to dedicate more space for people walking and rolling.

The city should evaluate arterial roadways as needed to identify opportunities to expand the city's shared use path network.

Action Item 6d: Shared Use Path Lighting**Action Category: Shared Use Paths****Expected Cost: \$**

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The city shall study the feasibility to provide pedestrian scaled lighting along shared use paths and sidewalks.

Shared use paths provide valuable pedestrian and bicycle connections throughout Rockville and can be used for transportation as well as recreational purposes. Providing a convenient commuting route may require that shared use paths be lit for those commuting early in the morning or later at evening when there is no daylight. This is especially important for fall and winter months when nights are longer. Providing lighting not only helps provide direction and wayfinding for shared use path users, but it also helps increase the sense of safety for all users.

Pedestrian Bridges And Tunnels

Roadways like Rockville Pike/Hungerford Drive/Frederick Road (MD 355), Viers Mill Road (MD 586), and E. Jefferson Street/First Street/Norbeck Road (MD 28) are high-speed high-volume roadways in the city and represent real barriers to people walking and rolling. It is often recommended that a pedestrian bridge or tunnel would overcome the barrier and permit safe walking and rolling while not impacting motor vehicle traffic. This may seem like an intuitive solution; however, a bridge or tunnel crossing a street may not be used as much as expected.

First, bridges and tunnels are often perceived as unsafe and can invite unsavory behavior. Both bridges and tunnels can unintentionally isolate pedestrians from the public view, which can result in safety and personal security challenges. In these instances, pedestrians may choose an alternative route which is in open view of the surrounding area instead of using the bridge or tunnel. When evaluating and designing bridges and tunnels, clear sight lines, lighting, and emergency response should be considered to enhance safety and security.

Second, bridges and tunnels can have maintenance challenges. Both need proper lighting, accessibility at both entrances, and tunnels have additional maintenance requirements related to stormwater management. If a bridge or tunnel is not perceived as well-maintained, it is likely that pedestrians will chose a different route.

Third, bridges and tunnels often only partially address the issue as people walking and rolling generally weigh the effort and time to reach and climb the bridge or use the tunnel against using the nearest possible crossing. Stairs, elevators, and circuitous ramps can undermine the convenience of using a grade separated crossing.

This does not mean pedestrian bridges or tunnels should not be recommended, however thorough assessment needs to be made when placing or designing a bridge or tunnel. Is the location the natural crossing point? Can the at-grade roadway crossing be improved? Would the effort to climb a bridge outweigh the effort needed to cross at grade, even without a crosswalk? While a bridge or tunnel can often be desirable because it will not impact the existing motor vehicle traffic, it may not address the underlying issues related to safe crossing, instead perpetuating and shifting the issue further down the road.



Action Item 6e: Unity Bridge

Action Category: Shared Use Paths

Expected Cost: \$

Ensure Accessibility



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The city shall advocate to WMATA to evaluate and propose improvements to the existing Unity Bridge over the railroad at Frederick Avenue. All improvements to the existing bridge that provide a more comfortable and better amenity for the surrounding community should be considered.

The Unity Bridge is owned and maintained by WMATA. While this bridge provides a pedestrian route over the railroad tracks and an extension of Frederick Avenue, its design can discourage use. The bridge follows a switchback pattern on both sides. While this meets minimum ADA requirements, it requires pedestrians to walk or roll a much further distance back and forth to cross over the railroad. Additionally, the landings on either side of the bridge require navigating around bollards, curbs, and abutting property entrances.

The city should work with WMATA to identify improvements that could be implemented to improve the crossing experience.



The Unity Bridge is a pedestrian and bicycle bridge over the railroad tracks, built and maintained by WMATA. While it provides an additional pedestrian connection, its switchback design requires additional effort to cross and may influence how often it is used.

Photo credit: City of Rockville.

Action Item 7a: Pedestrian Connections

Action Category: Pedestrian Supportive Land Use

Expected Cost: \$

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The city should update City Code Chapter 25, Zoning Ordinance, so that new development and redevelopment projects shall, where feasible, provide pedestrian connections to adjacent properties. If a complete connection cannot be completed at the time of the new development's construction, the land necessary to build a connection shall be provided as an easement or as public right-of-way.

Pedestrian connections can be shared use paths, sidewalks, or other pathways that increase accessibility and provide more direct routes for people walking and rolling. These connections can be simple in design and are often added as amenities to new development projects to enhance a neighborhood's walk-and-roll-ability. Providing a pedestrian connection through development helps increase access to destinations as well as increase opportunities for pass-by traffic.

This includes connections that may not necessarily follow the public right of way but provide more direct routes for pedestrians. Additionally informal, "social paths," which are walking paths that cut through grass and are marked by the lack of vegetation, should be considered and formally integrated into a development or redevelopment as a formalized and paved pathway. These connections shall be reviewed at the time of development application and be designed to increase convenience and directness for pedestrian travel. Further engagement with adjacent communities shall take place to discuss the benefits of increased pedestrian accessibility.

Action Item 7b: Direct
Pedestrian Route

Action Category: Pedestrian
Supportive Land Use

Expected Cost: \$

Ensure Accessibility



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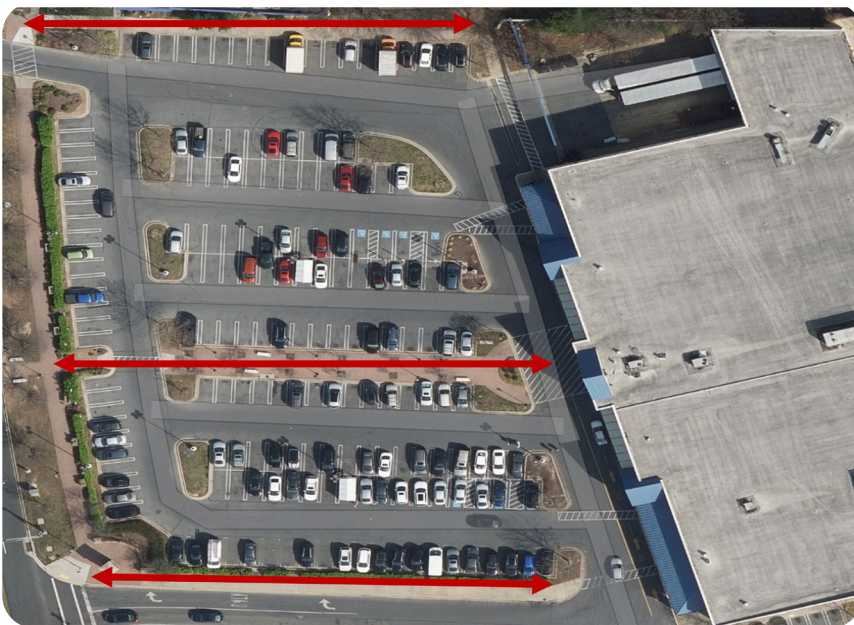
The city should update the Zoning Ordinance so that all developments and redevelopments shall provide a direct and separate pedestrian route from the public right-of-way to the main entrance or entrances of a development.

Many developments are designed with a surface parking lot between the public right-of-way, i.e., the street, and the building entrance. This design discourages pedestrian travel, because it extends the trip length and requires a person to maneuver around or share space with motorists through the parking lot.

Providing a pedestrian route from the right-of-way to the entrance of a building can be placed directly through a surface parking lot or be positioned alongside the surface parking lot, as long as it is still direct to the entrance. Pedestrian routes should be designed to emphasize the pedestrian's presence to motorists, especially at drive aisles, and across driveway aprons. Additionally, developments can be designed so that the building and roadway are not separated by a parking lot.

Many developments choose to provide motor vehicle storage in an underground garage or a parking structure. While parking structures or underground facilities require less space than surface parking lots, all parking facilities introduce

locations where motorists and pedestrians may cross paths. Additional attention is necessary when designing parking garages and parking lot entrances to ensure that motorists can see approaching pedestrian traffic.



A shopping center provides a direct pedestrian route through the parking lot and to the building entrance.

Action Item 7c: Parking
Minimums

Action Category: Pedestrian
Supportive Land Use

Expected Cost: \$

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The city should evaluate opportunities to reduce or eliminate mandated parking provision minimums as part of future zoning ordinance updates or amendments.

Off-street parking minimums mandate the number of parking spaces that a new development must provide in order to receive a development approval. While this regulation is well-intended, seeking to ensure sufficient space is provided for motor vehicle storage, changes in travel behavior and shopping trends have led to mandates that no longer reflect the actual parking needs for many developments and result in larger surface parking lots than would otherwise be provided.

When the city updates or amends its zoning ordinance, it should consider changes in mandated parking minimums to better reflect actual parking and reduce overall size of parking lots. This is currently being considered in the ongoing zoning rewrite.



Large surface parking lots can make it more difficult for pedestrians to access destinations

Photo Credit: City of Rockville

Action Item 7d: Land Use Variety

Action Category: Pedestrian Supportive Land Use

Expected Cost: \$

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As part of Comprehensive Plans, Neighborhood Master Plans, and zoning code updates, the city should evaluate all opportunities to change land uses and zoning regulations to better support walking and rolling for daily transportation needs.

Walk-and-roll-ability is influenced by land use decisions. Land use can encourage or discourage walking and rolling for daily transportation needs, regardless of purpose. Lot sizes, mandated parking, and multiple uses can make a pedestrian trip easier and more likely to occur. Additionally, development regulations, such as building massing and setbacks impact the quality of a pedestrian trip.

The city should evaluate opportunities to change design requirements and land uses so that a variety of uses, including commercial, residential, and recreational uses can be positioned within closer proximity to each other. This will provide more destinations for residents and visitors to walk and roll.

Action Item 7e: County Recommendations

Action Category: Pedestrian Supportive Land Use

Expected Cost: \$

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The city shall defer to pedestrian recommendations in County Master Plans along County or State owned roadways, if the relevant Neighborhood Plan or City Master Plan does not provide a facility recommendation.

There are multiple roadways that abut the City of Rockville, but are owned or maintained by Montgomery County or the State. The City's Neighborhood Plan, Bikeway Master Plan, or other plan may not include facility recommendations for these roadways because they are not within Rockville. However a property that redevelops within Rockville, but on the border of one of these roadways will be required to provide appropriate improvements to the right-of-way. In these instances, if the city does not have a recommendation from an approved master plan, the improvements provided should be consistent with the improvements recommended by the relevant approved county master plan. This will help ensure that pedestrian facilities are provided throughout and prevent a gap or inconsistency in the pedestrian facility at the city boundary.

Action Item 8a: Crosswalk Guidelines

Action Category: Crosswalks

Expected Cost: \$

Ensure Accessibility

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The city shall develop new guidelines for the location and design of marked crosswalks and ancillary improvements.

DPW installs marked crosswalks as part of capital improvement projects, and after responding to resident requests and measuring the pedestrian volumes. Crosswalks are also installed through new development projects at locations where pedestrians are expected to cross. New marked crosswalks should continue to be considered by the city only after an evaluation of the relevant intersection. New guidelines, developed by DPW, should be used to help respond to public requests for new crosswalks as well as those installed proactively by the city.

This guidance shall be used by the city to proactively install marked crosswalks and ancillary improvements in an equitable manner and should account for roadway classification, number of travel lanes, potential nearby destinations and land uses, crash history, distance to nearest crosswalks, and potential/existing pedestrian traffic volumes. In this new guidance, crash history shall only be referenced as a criterion to install a crosswalk. An absence of crashes is not a justification to not install a crosswalk.

This guidance should also recognize that the absence of pedestrian facilities, such as crosswalks, influences people's choices, and that existing pedestrian volumes should not dictate crosswalk placement. Moreover, the installation of ancillary improvements, if necessary, to improve yielding and safety at the crossings should be included. These improvements include lighting, curb extensions, pedestrian activated beacons, raised crossings, and other features.

These guidelines should include default requirements for marked crosswalks at all intersection legs that connect to existing sidewalks. Many intersections exclude crosswalks and accessible pedestrian signals at one or more legs of the intersection to improve traffic flow, but this results in increased travel time, distance, and exposure to motor vehicle traffic. Additionally, this guidance should recognize the unique challenges of crossing multi-lane roadways, where there is more than one lane in each direction.

The ladder and continental crosswalk styles are preferred over the traditional transverse lines-only crosswalk style. The vertical lines are more visible to motorists and can be seen

Continued on next page

Action Item 8a: Crosswalk Guidelines (Continued)

Action Category: Crosswalks

Expected Cost: \$

Ensure Accessibility



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from further away. The ladder style crosswalk is also recommended in MCDOT's recent publication: "Planning and Designing Streets to be Safer and More Accessible for People with Vision Disabilities."

Moreover, the city should replace crosswalks that are made with bricks or pavers with high-visibility crosswalks over time as these crosswalks are repaired. These crosswalks are more difficult to use for people using walkers, riding wheelchairs, or walking with a white cane.



A ladder style crosswalk uses vertical lines within two transverse lines.

Photo Credit: City of Rockville

Action Item 8b: Crosswalk Implementation

Action Category: Crosswalks

Expected Cost: \$ - \$\$\$

Ensure Accessibility



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Development and redevelopment applications, and the city should follow the crosswalk guidance at all intersections that are newly constructed or modified as part of the development process.

Development applicants should also follow the guidance for installing crosswalks. This will increase the number of crosswalks built as part of development projects, and proactively provide crosswalks in advance of the city needing to add them after the development is completed. The city should also follow the crosswalk guidance when installing crosswalks citywide.



A continental style crosswalk uses thick vertical lines to designate the crosswalk area. This design has shown to be more visible to approaching motorists than the traditional two-line pattern.

Photo Credit: City of Rockville

Action Item 9a: Pedestrian Clear Space

Action Category: Pedestrian Environment

Expected Cost: \$

Ensure Accessibility

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✓

The minimum width sidewalk for each roadway section is designated for pedestrian circulation only and shall be clear of any obstructions or encroachments, such as street signs, street lights, trash cans, utility boxes, signs, tree pits, parking meters, or maintenance of traffic or temporary signage.

While the space between the curb and a building front is used for pedestrian travel, there are often other elements in this space that can support pedestrian activity in the area. Everything between the building front and the street curb is the pedestrian environment, however the space in which people can walk and roll freely is the “pedestrian clear space.”

The City’s Roadway Standards and Details provide for sidewalk space and buffer space for each roadway. The minimum width for sidewalks is the pedestrian clear space and should be used for walking and rolling. The buffer and any additional pavement can be used for street furniture, street trees, signs, etc. Both the pedestrian clear space and buffer space are important to create an engaging and safe pedestrian environment.

In residential areas, the pedestrian environment includes the sidewalks and any grass buffers. In urban areas, there may be bus stops, seating and tables, bike racks, or other facilities, however these streets still require a designated clear space so pedestrians have an unobstructed and direct route to walk and roll. Ensuring sufficient pedestrian clear space within the pedestrian area is an important component to providing access to destinations as well as ensuring that property owners or the city can provide desirable amenities for people.



The minimum sidewalk width should be used for pedestrian circulation, other space between the building or property line and curb should be used for street furniture, signs, and other amenities.

Photo Credit: City of Rockville

Action Item 9b: On-street
Parking Corrals

Action Category: Pedestrian
Environment

Expected Cost: \$\$

Ensure Accessibility



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The city shall identify locations for and provide on-street parking corrals for dockless rideshare vehicles such as shared e-scooters and e-bikes.

An on-street parking corral is a parking space previously designated for motor vehicle parking or where parking is prohibited and is retrofitted for parking e-scooters and other dockless rideshare bicycles. Parking specifically for these vehicles will help encourage people to park their ride-share vehicles in a location that does not obstruct the sidewalk or present a tripping hazard.



Rideshare scooter operating companies place scooters in specific staging areas outside of the pedestrian clear space and are regulated by Montgomery County.

Photo Credit: City of Rockville

Action Item 9c: Lock-to and Geofence Requirements

Action Category: Pedestrian Environment

Expected Cost: \$

Ensure Accessibility

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Advance Equity

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The city should encourage MCDOT to adopt a “lock-to” requirement, which requires dockless rideshare vehicles such as shared e-scooters and e-bikes to be locked to bicycle racks or other permanent structures outside the pedestrian clear space, or require that these vehicles be parked in specific geofenced areas.

When scooters are placed on the sidewalk by the scooter operating company, they are left in specific staging areas, which are regulated by Montgomery County. These areas are accessible and outside of the pedestrian clear space. However, residents and visitors often park scooters at a location that is most convenient to their destination and may block the sidewalk, ramps, or other spaces. While it is difficult to regulate where people park rideshare e-scooters, it is possible to better encourage people to leave scooters in place that will not block pedestrian travel.

Requiring e-scooters and other dockless rideshare vehicles to be locked to bicycle racks or parking corrals will help move parked vehicles out of the pedestrian clear space and reduce sidewalk obstructions or tripping hazards caused by parked e-scooters or bicycles.

Another approach to reduce e-scooter or bicycles from being parked in pedestrian pathways is to require that these vehicles be parked in specific geofenced areas. Geofencing is a process where rideshare vehicles use GPS and identify specific areas where they can and cannot be parked. However, this may also reduce their utility by eliminating a user’s ability to stop their rideshare trip at their destination.

Action Item 9d: Pedestrian Comfort

Action Category: Pedestrian Environment

Expected Cost: \$ - \$\$\$

Ensure Accessibility



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The city should provide facilities and amenities and advocate for urban design that improve the comfort of pedestrians walking and rolling for recreation and daily transportation needs by working with development applicants during the development and redevelopment process and as part of city capital improvement projects.

The city is able to increase the number of people walking and rolling by accounting for the elements in the built environment that impact the relative comfort of people. Environments that are more comfortable for people walking and rolling will encourage more people to walk and roll.

Increasing comfort can be achieved in a variety of ways. The city, and development applicants through their respective projects, can directly provide for pedestrians by including benches, pedestrian scaled lighting, water fountains, shade trees, trash cans, and wayfinding, among other amenities.

Additionally, the city and development applicants can consider how the built environment itself may impact pedestrian comfort and modify it accordingly. Elements such as building size and placement, parking lots, drive aisles and roadways all impact comfort. For instance, a sidewalk without a buffer between a high speed roadway and a parking lot is less comfortable than a sidewalk along building frontages with a tree lined buffer separating the sidewalk from the roadway. Pedestrian comfort should be considered as development and construction take place.

Action Item 9e: Wayfinding

Action Category: Pedestrian Environment

Expected Cost: \$ - \$\$

Ensure Accessibility



Advance Equity



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**The city shall adopt a comprehensive wayfinding plan.**

Wayfinding signage is a valuable component of the pedestrian environment. Pedestrian scaled signage provides important directional information for pedestrians who may not be familiar with an area, or for those who may have only visited an area from an automobile.

Since pedestrian wayfinding is designed for people moving at a walking and rolling pace, more information can be provided on each sign such as unique destinations, alternative routes, and the time as well as distance to certain landmarks. Additionally, consistent design or branding on each wayfinding sign can help pedestrians reorient themselves when walking or rolling.

The city has worked on wayfinding plans in the past. By formally adopting a wayfinding plan, the city can begin implementing a comprehensive program citywide.



Pedestrian wayfinding signage is a valuable resource for people walking and rolling and can provide more information than traditional roadway signs.

Photo Credit: City of Rockville

Action Item 10a: Street Tree Standards

Action Category: Street Trees

Expected Cost: \$

Ensure Accessibility

Advance Equity

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✓

The standard for street tree planting shall be updated to add public shared use paths, to ensure that street trees are provided along most pedestrian pathways.

Pedestrian travel and street trees can directly contribute to an improved environment in Rockville. Replacing motor vehicle trips with walking and rolling eliminates the emissions associated with automobile travel and the particulate pollution associated with braking and tire wear and tear. The City of Rockville Climate Action Plan, approved by the Mayor and Council in January 2022, includes action items and goals for reducing vehicle miles traveled as an approach for improving the environment and meeting the city's climate goals.

Street trees should be carefully selected based on the Master Street Tree Plan as well as any recommendations by the City Forester. Additionally, planting and maintaining street trees must comply with the Maryland Department of Natural Resources Roadside Tree Law.

Street trees may also cause obstacles to create a smooth and direct sidewalk as the tree roots often push-up and break apart sidewalks. The city should continue tree maintenance and management efforts to prevent trees from breaking up sidewalks. Residents are encouraged to plant trees on their property outside of the public right of way. Should residents of Rockville want to plant a street tree, they are able to request a street tree directly from the City's Recreation and Parks Department City Forester's Office. The City's Forester's Office is best equipped to not only plant the correct tree species in the correct location, but also do so in a manner to avoid future damage to the sidewalk.

Action Item 10b: Sidewalk and Street Tree Options

Action Category: Street Trees

Expected Cost: \$ - \$\$

Ensure Accessibility



Advance Equity



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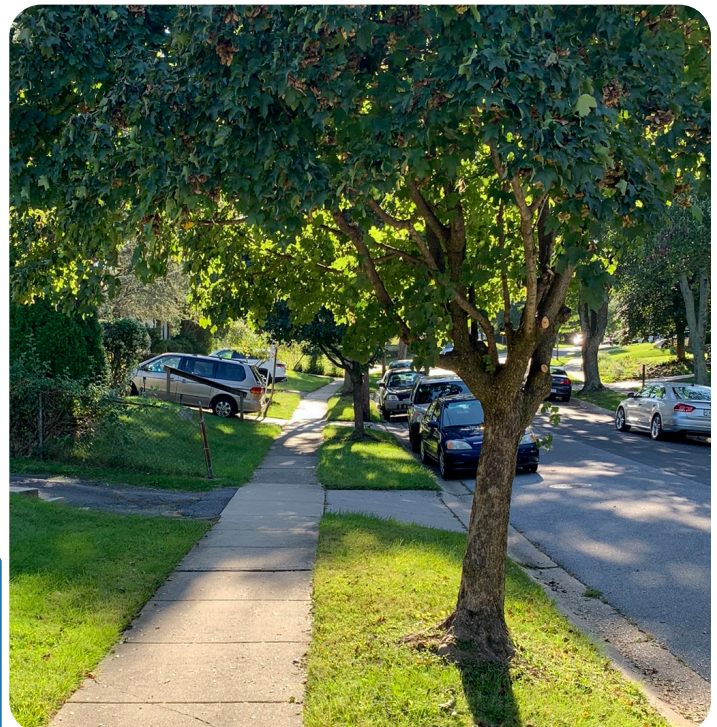


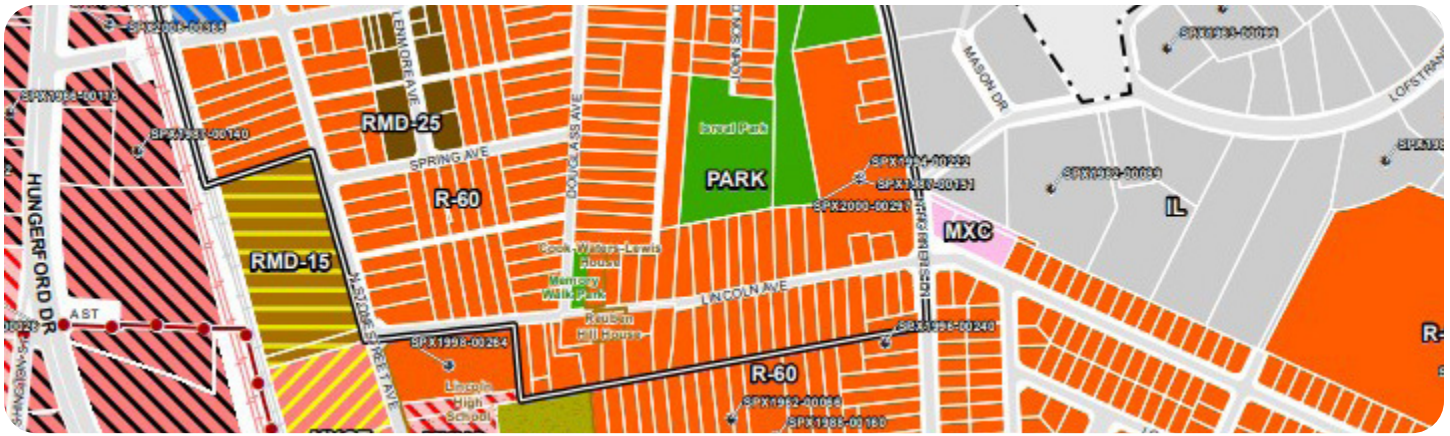
If a street tree prevents a direct sidewalk from being constructed, the city should seek more creative options to save certain trees when sidewalks are proposed, if feasible. The city should also consider replanting a new tree in a nearby location or using materials and engineering practices that will not impact the tree roots at the recommendation of the City Forester.

In some instances, pedestrian infrastructure is rejected because of environmental concerns, such as sidewalk not being built because of existing trees. The city can help address this issue proactively. This may include a sidewalk that is designed to accommodate tree roots, a curb extension that permits stormwater drainage, or reducing motor vehicle lane width so that a wider buffer can be maintained. Pedestrian travel is a key component to reducing vehicle miles traveled and meeting the city's climate goals. For both pedestrian and climate goals, motor vehicle travel is often the variable that prevents progress. Efforts should be made to meet these reinforcing goals, instead of compromising one for the other.

Street Trees are a valuable asset to the pedestrian environment providing shade and a more comfortable pedestrian experience.

Photo credit: City of Rockville





A portion of the Zoning Map for Rockville. Zoning districts and regulations can impact pedestrian travel.

Chapter 4: Enabling Laws and Policies

In addition to the action items laid out in this Plan, the City of Rockville has several other documents that outline policies and practices that complement and will help implement the Pedestrian Master Plan.

Section 4.1 - Enabling Ordinances and Policies

Zoning Ordinance

Chapter 25 of the City Code is the zoning ordinance which functions to regulate land use within Rockville. The most current zoning ordinance was adopted by the Mayor and Council in March 2009. The City of Rockville is currently updating the zoning ordinance and it is expected that the update will be complete after this Plan is adopted and approved. As it relates to transportation, the purpose of the zoning ordinance is to “promote alternative modes of transportation by providing convenient, safe, and connected accessibility to public transportation, pedestrian and bicycle systems, inviting streetscapes, and a mixture of uses.”¹

Chapter 25, Article 17 of the City Code includes discussion of public use space, including sidewalks. It includes the following purposes for sidewalk provisions.²

- Encourage a safe pedestrian-oriented environment;

¹ Rockville City Code of Ordinances, Chapter 25, Zoning Ordinance, Section 01.02.

² Rockville City Code of Ordinances, Chapter 25, Zoning Ordinance, Section 17.05.

- Help create a visually attractive streetscape;
- Provide connectivity among surrounding properties and uses;
- Promote overall commerce; and
- Provide attractive pedestrian connections to transit centers.

The Action Items in this Plan are consistent with these purposes and it is expected that it will continue to be consistent with the updated zoning ordinance.

Specifically related to pedestrian travel in parking lots, the zoning ordinance provides for safe and convenient circulation of pedestrians and bicyclists within parking areas and requires a pedestrian and bicycle circulation plan to and through parking facilities.³ The zoning ordinance may need to be updated to better implement action items and recommendations in this Plan, particularly those that impact property development, such as creating direct pedestrian routes to building entrances and adding sidewalks.

Streets, Roads, Rights-Of-Way, and Public Improvements

Chapter 21 of the Rockville City Code applies to all work on city-owned and maintained roadways within public right-of-way and easements, which includes most sidewalks. Sidewalks are considered a public improvement. There are regulations in this chapter which provide for maintenance of traffic plans when blocking sidewalks,⁴ as well as requirements and waivers to build sidewalks in accordance with established roadway standards for all roadway classifications.⁵ Similar to the city's zoning ordinance, Chapter 21 is also scheduled for revisions. The requirements in these sections are consistent with the recommendations presented in this plan and it is expected that the approved revisions will continue to be consistent with the Plan.

Comprehensive Transportation Review

The Comprehensive Transportation Review (CTR) Policy was adopted by the Mayor and Council and is a component of the development review process. It outlines the methodology and technical guidelines to analyze and report the effects of new development on transportation facilities. Specifically, it is used during the development review process to evaluate how new motor vehicle trips will add to existing traffic in the area surrounding a proposed development and if necessary, will include mitigation requirements for projects to help maintain intersection capacity and roadway safety. The CTR also outlines the required contents of, and steps to complete, a Transportation Report that a developer must submit with a development application. During the CTR process, city staff review the application to ensure that it complies with all city criteria related to pedestrian travel.

The CTR may require an additional pedestrian and bicycle safety study and accessibility study⁶ in addition to the traffic capacity analysis, should it be deemed necessary by city staff as part of the transportation review. The CTR requires a

³ Rockville City Code of Ordinances, Chapter 25, Zoning Ordinance, Section 16.

⁴ Rockville City Code of Ordinances, Chapter 21, Streets, Roads, Rights-of-Way, and Public Improvements, Article 2, Section 18.

⁵ Rockville City Code of Ordinances, Chapter 21, Streets, Roads, Rights-of-Way, and Public Improvements, Article 4.

⁶ Comprehensive Transportation Review, p.11. City of Rockville, 2018.



Residents and stakeholders participate in a public meeting for the Rockville Town Center Master Plan.

Photo credit: City of Rockville

discussion of on-site pedestrian facilities, including sidewalks along all property frontages.⁷

The CTR identifies the Synthesis of Pedestrian Policies, the Complete Streets Policy, and the Sidewalk Prioritization Policy as relevant standards that need to be met in a development application. The CTR should reference the Pedestrian Master Plan as well.

Neighborhood Plans

The Department of Community Planning and Development Services, along with other city departments, work with neighborhoods throughout Rockville to develop neighborhood plans to enhance the city's Comprehensive Plan. These plans outline the unique needs and desires of Rockville's neighborhoods. Within the plans, pedestrian circulation is often mentioned as important livability criteria and most plans recommend building sidewalks for safe and comfortable pedestrian space and as a tool to help

activate spaces and pedestrian activity. This Plan provides more detail and clarifies prior neighborhood plans. There are five neighborhood plans that have been adopted as part of the Comprehensive Plan.

East Rockville Neighborhood Plan (2004) –

Recommends the construction of all missing sidewalk segments in the neighborhood, as well as building wider sidewalks with amenities to enhance the pedestrian experience, improve neighborhood attractiveness, and create a safe pedestrian network.

Lincoln Park Neighborhood Plan (2007) –

Recommends building wide sidewalks along North Stonestreet Avenue with buildings that abut sidewalks, street trees and planting areas.

Rockville Pike Neighborhood Plan (2016) –

Recommends redesigning Rockville Pike (MD 355) as a multimodal boulevard with wide, continuous sidewalks and amenities such as benches, street trees, and bicycle parking. Additionally, this neighborhood plan recommends buildings be placed abutting new sidewalks. The recommendations in this plan contribute to creating a Rockville Pike corridor that is more pleasant and safe for pedestrian and bicycle modes of travel.

Rockville Town Center Master Plan (2001) –

Recommends safe, comfortable, wide sidewalks with primary building entrances at the sidewalk level. The recommendations are designed to encourage pedestrian activity

⁷ Comprehensive Transportation Review, p. 15. City of Rockville, 2018.



with more people walking and rolling, and places to sit, eat, and patron local businesses. There are ongoing efforts by the city's Comprehensive Planning Division to update this plan.

Zoning regulations and roadway standards and details impact the pedestrian experience. Set back requirements, sidewalk width, sidewalk buffers, and street trees can all contribute to a pleasant walk or roll.

Photo credit: City of Rockville

Twinbrook Neighborhood Plan (2009)

—

Recommends the completion of missing sidewalk segments in the neighborhood as a component of increasing safe walking and rolling to and from school.



Residents participate in a 'Walk and Roll the Block' meeting with city staff to evaluate a missing sidewalk segment.

Photo Credit: City of Rockville

Chapter 5: Implementation and Funding

Pedestrian facilities will be added or improved as opportunities arise during road rehabilitation or construction projects, and Vision Zero or other traffic safety related projects.

Pedestrian accommodation and improvements will be routinely considered in the planning phases of new public projects and private developments within the city. City staff should regularly revisit the action items in this plan to schedule near-term projects.

Some recommended facilities are complex and may take many years to implement, and some projects, such as sidewalks, may seem simple, but often require thorough review and feasibility assessments even before advancing to a design and construction phase. All projects will be considered as funds are made available and the appropriate assessments carried out. Many of the action items in this plan include multiple projects across the city, such as constructing new sidewalks, new shared use paths, and reconstructing existing sidewalks to meet current standards, among others. These action items will require preliminary prioritizations to help the city organize and develop a work program.

Furthermore, many of the recommended policy and practice updates will require city staff and private development to consider additional pedestrian facilities and improvements to not only prioritize pedestrian travel, but also balance the needs of all roadway users. Comprehensively implementing these recommendations will be an iterative process, addressed one segment at a time while other maintenance or construction takes place.

DPW uses a variety of data sources to help inform and decide roadway projects. This includes other transportation data such as crash data, speed and red light camera data, resident requests, prior transportation projects, as well as other city data such as demographic and economic data. Many projects, such as building new sidewalks and applying for transportation grants include their own existing criteria and prioritization, which is considered when implementing those projects or applying for those grants. Other projects are carried out to meet a specific need, such as a roadway safety project or an ADA accessibility project.

As part of the city work program to carry out this Plan, DPW will continue to use transportation, economic, and demographic data and expand to use safety data, environmental sustainability data, and development proposal data. Furthermore, DPW staff will share transportation data and project plans with other city agencies and departments so that their work programs can also be informed by the city's ongoing transportation investments.

After the approval of this Plan, DPW staff will develop an implementation timeline to provide a general time frame for completing individual action items. This timeline should be flexible enough to respond to increased or changing priorities of the Mayor and Council as well as consider available resources for implementation.

Section 5.1 – Public Involvement

City staff will notify civic associations and residents along the project alignments as Pedestrian Master Plan projects are funded and scheduled for implementation. This notification will include information about the project scope, location, proposed construction schedule, and contact information for responsible staff.

While there is public support for pedestrian facilities and improvements across Rockville, implementation of individual projects will still require engagement with residents and the community. City staff will take certain actions to help guarantee that impacted residents, community associations, and other stakeholders are aware of pedestrian projects and have an opportunity to learn the details of project implementation and provide adequate input. Future projects resulting from this plan should have consistent engagement with the community in a manner that can be quickly understood by residents and stakeholders.

Whenever a proposed project includes one of the following actions, city staff will notify and engage the public:

1. Adding a sidewalk along a street where currently none exist.
2. Assessing the feasibility of a sidewalk that may include eliminating on-street parking or obtaining property easements.
3. Providing an enhanced pedestrian connection along roadways between a community and a destination.

Prior to the implementation of a pedestrian project where one of the triggers is reached, the following actions will be taken:

1. All residents and businesses with frontage along the route, as well as neighborhood or other appropriate civic associations, are notified via direct mailing (which will also be posted on the city's website), and includes:
 - A description and schedule of the proposed project and how it fits into the city pedestrian network;
 - A map of the new facility where the applicable actions are proposed;
 - Name, email address, and phone number for a staff contact;
 - Date, time, and location of any meetings scheduled to discuss the facility; and
 - Estimated closing date of the public comment period.
2. Local citizen association representatives and RPAC are notified and invited to any meetings.
3. A public meeting is held to receive input and answer questions about the project. In addition to being identified in direct mailing, the date and location of the public meeting is published on the city's website.

Sidewalks are valuable amenities and oftentimes a necessity that extends beyond the immediate neighbors. New sidewalks benefit not only residents who live on the street with a sidewalk gap, but also residents and visitors in the surrounding area who will use the new sidewalk. However, residents often have concerns related to new sidewalks and initially oppose their construction. The public engagement process for sidewalk construction should better identify individual concerns and how they can be addressed through the design and construction process. Moreover, an improved engagement process should be re-framed to identify the best approach for how a sidewalk should be built, not if a sidewalk should be built. This shift in perspective will be able to better meet the concerns of residents while also providing safe and comfortable pedestrian facilities.

Section 5.2 – Funding

For capital improvements and maintenance of pedestrian facilities, an adequate amount of funding needs to be available in the city's annual budget. Furthermore, the city works to identify new sources of funding to implement pedestrian projects and programs and seeks to maximize the amount of Federal, State, and private funding that can be leveraged by local dollars. The Capital Improvement Program (CIP) annually outlines important projects for each division within the city. DPW recommends projects each year to use its designated funding, which comes from capital funds, developers, speed cameras, and grants. Funding decisions will be made by the Mayor and Council as part of CIP and operating budgets through the annual budget process.

There are four general types of external funding sources: developer money, grants, county impact tax, and automated enforcement funds. Developer money comes through the Transportation Improvement Program. When development or redevelopment projects result in at least 30 new trips, they are required to provide a Transportation Improvement Fee at the time of obtaining a building permit. These funds are used to improve multimodal facilities throughout the city and can be directed towards pedestrian-related projects.



The Rockville City Police Department uses Speed Monitoring Systems, commonly known as speed cameras, to issue traffic citations to motorists who exceed the posted limit. Fines from these citations can be used for transportation safety projects in the city.

Photo Credit: City of Rockville

A second source of external funding is grants from the State and Federal Government, regional entities, or private sources. Grant money is often highly competitive and securing funds generally requires dedicated time and effort on behalf of the city. Additionally, grant funding is usually directed toward specific types of projects or areas and not all grant opportunities are relevant for improving pedestrian transportation. Also, for many grant opportunities, it is necessary for the city to have completed certain milestones even before applying for the grant, this can include feasibility studies and 30% design of construction projects. It is important that grant opportunities and applicable projects are chosen strategically and consider a benefit-cost analysis, staff capacity for implementing a project if awarded, and ability to complete applications within an existing city work program.

A third source of funding comes from Montgomery County's Transportation Impact Tax. This tax is levied on city developers and is used towards transportation projects within city limits. Those projects have been approved in advance through a memorandum of understanding between Montgomery

County and the City of Rockville and include bus stop shelters, roadway extensions in Town Center, intersection improvements, and pedestrian safety and traffic improvements. The funds are collected and held by Montgomery County until the City of Rockville requests funds for specific projects. Once the request is approved, the city starts the project and submits reimbursement requests to the County.

Lastly, the RCPD has installed multiple traffic enforcement cameras throughout the city. Alongside review by RCPD, these cameras automatically issue citations to drivers who exceed the posted speed limit past a camera. The revenue generated from speed cameras is dedicated to a specific fund in the budget and is only available for CIP projects that support transportation safety. Additionally, red-light cameras are also used to enforce driver behavior and can generate revenue from traffic citations. Funding from red-light cameras is allocated to the city's general fund and these funds can still be targeted to roadway safety projects. While revenue is generated from automated enforcement, their primary function is to enforce traffic laws. Speed cameras and red light cameras serve an important function to enforce traffic speeds and signal compliance, which helps improve transportation safety overall.



A construction crew installs a marked crosswalk and helps direct motorists along North Washington Street.

Photo Credit: City of Rockville

Chapter 6: Maintenance

Maintaining sidewalks, shared use paths, and other pedestrian facilities in a state of good repair ensures that facilities remain safe and accessible for everyone across the city throughout the year. Funding for the sustainable maintenance program is included in the city's operating budget. Funding for all sidewalk and shared use path maintenance needs to be considered alongside other transportation maintenance programs. Repairs or temporary repairs to sidewalks and shared use paths are completed as soon as possible and bring the sidewalk or path back to a state of good repair. In the course of their work, Department of Public Works Operations and Maintenance staff also completes formal inspections to identify problem areas along sidewalks and shared use paths. Additionally, city staff observes and reports maintenance issues and regularly receive requests from residents and community members related to damaged sidewalks and shared use paths. As noted in Action Category 3, Maintenance, and Action Category 5, Sidewalks, staff should take extra care to document these areas and ensure that they are promptly corrected.

Though the city has methods in place for regular maintenance, concerns about maintenance outside of the normal schedule should be reported by the general public. The public should feel empowered to alert the Department of Public Works when they notice problems as well, so city staff can act quickly on a solution. Concerns and questions should be submitted to the Department of Public Works, via the online "Report a Concern Form Center" on the city's website, or in any future system employed by the city that allows the public to directly report concerns. Upon receiving a public request, city staff refer resident requests to the appropriate city department in a timely manner.

In addition to pavement that needs repair, there are often obstructions that can prevent sidewalk access. These include refuse and recycling carts, delivery vehicles, and parked cars blocking the sidewalk along a residential driveway. While the sidewalk blockage may seem temporary, it can block a sidewalk from people who cannot easily navigate around the obstruction and are forced into the street. City departments and agencies such as the Rockville City Police Department, Parking Enforcement, Refuse and Recycling and Code Enforcement work with property owners to instruct and educate the best approaches for keeping the sidewalk clear, enforcing this when necessary. Often, property owners are unaware of accessibility and the impact of a temporary blockage on the sidewalk. Keeping sidewalks clear and accessible is a shared responsibility among city staff, residents, property owners, landlords, and management companies. The city will continue to educate and enforce proper maintenance of landscaping and other items that may encroach upon sidewalks and to encourage and educate residents to report issues.

Also, vegetation that encroaches over the sidewalks and shared use paths creates hazardous conditions for people walking and rolling by limiting sight distance, obstructing the pathway, and damaging the pavement surface. In many instances, if vegetation encroaches upon a sidewalk that is along a private property, it is incumbent upon the property owner to trim the vegetation. If it occurs along a shared use path along a public property, park, or trail, the city will take responsibility for the vegetation maintenance. DPW should continue to work with the city's code enforcement staff to quickly enforce the requirement that vegetation that abuts sidewalks from a private property be adequately maintained by that private property owner.

Vegetation can quickly block a sidewalk if it is not maintained regularly.

Photo Credit: City of Rockville





The sidewalk along Pleasant Drive provides a defined pedestrian clear space and streetscape amenities.

Photo Credit: City of Rockville

Chapter 7: Conclusion and Next Steps

This Pedestrian Master Plan envisions all residents and visitors to Rockville to be able to safely, comfortably, and conveniently walk or roll for any transportation need. It further aspires for a transportation network and built environment that support pedestrian travel and anticipate the needs and abilities of everyone walking and rolling.

The goals of this Plan - Ensure Accessibility, Advance Equity, Increase Walking and Rolling, and Institutionalize Walking and Rolling - helped guide the Action Items. Implementation of these specific Action Items will help the city achieve this vision and meet these goals. In most cases, an action item will contribute to more than one plan goal.

This Pedestrian Master Plan will help advance pedestrian travel in Rockville. It is also necessary for the city to be mindful of other ongoing projects by the city, county, and the state that will impact pedestrian transportation. At the city level, this includes the ongoing zoning ordinance rewrite project, which will directly impact the regulations by which residents and visitors access private developments. At the county level, completion of the Bus Rapid Transit project along Rockville Pike (MD 355) and Veirs Mill Road (MD 586) may introduce additional pedestrian trips along these corridors. The Op Lanes Maryland Project should also be monitored to ensure it enhances and not deters pedestrian travel, especially where an interchange may be proposed. The Pedestrian Master Plan does not prevent these projects and in many cases continuing to enhance the pedestrian environment will help these other projects.

Moving forward, the next step is to develop an implementation strategy that will



A pedestrian activated rapid flashing beacon, in-street sign and marked crosswalks improve the pedestrian environment.

Photo Credit: City of Rockville

outline specific tasks that need to be completed by staff and reflect the priorities of the Mayor and Council and the available resources for implementation. This should include updating policies and practices that are separate from, but recommended in this plan, including the Synthesis of Pedestrian Policies, the Complete Streets Policy, the Sidewalk Prioritization Policy, the Comprehensive Transportation Review, and the Guidelines for Neighborhood Traffic Management. The city should then work to develop new policies related to installing crosswalks, and enhance the sidewalk maintenance program.

Next, the city should continue to identify the next sidewalk gaps and shared use paths that should be included in the annual budget, develop a School Route Map for each of the public schools in Rockville, and reference this document for additional pedestrian improvements as they relate to ongoing and future capital roadway projects and private development related improvements.

Additionally, the city should familiarize itself with the Pedestrian Priority Improvements and ensure that these priorities are considered in the annual budget and as part of private developments.

Lastly, residents, stakeholders, and visitors should continue to engage with and notify staff of potential walking and rolling improvements. RPAC, RBAC, and TMC meet regularly and provide a forum to not only learn about transportation projects and issues in Rockville, but also raise new concerns.

This plan lays the foundation for achieving this vision and the city will continue to improve walking and rolling for everyone in Rockville.

Action Category	Action Item	Goals			
		Ensure Accessibility	Advance Equity	Increase Walking and Rolling	Institutionalize Walking and Rolling
Policy Update	1a Synthesis of Pedestrian Policies	X	X	X	X
	1b Complete Streets	X	X	X	X
	1c Sidewalk Prioritization Policy	X	X	X	X
	1d Guidelines for Neighborhood Traffic Management		X	X	X
	1e Comprehensive Transportation Review	X	X	X	X
City-State Collaboration	2a State Roadway Sidewalks	X	X	X	X
	2b Shared Streets Yielding		X		X
	2c Vehicle Registration Fees and Reciprocity		X		X
	2d Comparative Negligence		X		X
	2e State Roadway Improvements	X	X	X	X
	2f County Priority Letter				X
Sidewalk Maintenance	3a Comprehensive Sidewalk Maintenance	X	X		X
	3b State Roadway Sidewalk Maintenance	X	X		X
	3c Permitting Pedestrian Detours	X	X		X
	3d Snow Clearance	X	X		X

Action Category	Action Item	Goals			
		Ensure Accessibility	Advance Equity	Increase Walking and Rolling	Institutionalize Walking and Rolling
Pedestrian Priority Improvements	4a Pedestrian Intersection Audits	X	X	X	X
	4b Pedestrian Improvements in Development	X	X	X	X
Sidewalks	5a Sidewalks on Both Sides	X	X	X	X
	5b Sidewalk Gap Inventory	X			X
	5c Sidewalk Standards	X	X		X
	5d Curb Ramp Standards	X	X		X
	5e Sidewalk Right-of-Way	X	X		X
	5f Public Streets and Sidewalks	X			X
	5g Private Streets, Sidewalks, and Easements	X			X
	5h Existing Sidewalk Inventory and Improvements	X	X		X
	5i Sidewalk Lighting	X	X	X	
Shared Use Paths	6a New Shared Use Paths	X	X	X	X
	6b Shared Use Path Design	X	X		X
	6c Shared Use Paths Along Arterial Roads		X		X
	6d Shared Use Path Lighting	X	X	X	
	6e Unity Bridge	X	X	X	

Action Category	Action Item	Goals			
		Ensure Accessibility	Advance Equity	Increase Walking and Rolling	Institutionalize Walking and Rolling
Pedestrian Supportive Land Use	7a Pedestrian Connections	X	X		X
	7b Direct Pedestrian Route	X	X		X
	7c Parking Minimums	X			X
	7d Land Use Variety		X	X	X
	7e County Recommendations				X
Crosswalks	8a Crosswalk Guidelines	X			X
	8b Crosswalk Implementation	X	X		X
Pedestrian Environment	9a Pedestrian Clear Space	X	X		X
	9b On-street Parking Corrals	X			
	9c Lock-to and Geofence Requirements	X	X		X
	9d Pedestrian Comfort	X	X	X	X
	9e Wayfinding	X	X		X
Street Trees	10a Street Tree Standards			X	X
	10b Sidewalk and Street Tree Options	X	X	X	X