TRANSPORTATION

Vision

The Town of Vienna envisions a safe, efficient, and resilient transportation system that supports residents, employees, and visitors by ensuring broad access to streets, sidewalks, trails, and transit options. A sustainable multimodal approach promotes livability, supports local businesses, protects neighborhood character, and prepares for future mobility needs.

Goals

1. Prioritize safety for all users of the transportation system.
2. Ensure efficient and reliable movement for all transportation modes integrated with land use.
3. Encourage walking, biking, and micro-mobility.
4. Reduce traffic congestion and support environmental sustainability.
5. Coordinate with regional agencies to manage the impacts of growth and improve connectivity.
6. Encourage public input and transparency on transportation decisions.
7. Improve parking and curbside management.

Introduction

This chapter provides a framework for planning and managing Vienna's transportation system to meet current and future needs. It reflects the community's priorities, by continuing a design approach that aims to create a sense of community, intimacy, and local character by supporting walkability, improving safety, and offering more ways to get around town and to connect with nearby locations

The transportation network in Vienna includes streets, sidewalks, trails, transit, and facilities for bikes and pedestrians. It also plays a broader role in how the town grows, provides access to land uses, connects to the region, and supports daily life. As the town changes and regional pressure continues, it is important to plan for a system that supports community members of all ages and abilities, improves access, and aligns with land use and environmental goals.

The plan encourages investment in a well-connected, multimodal network that provides safe and reliable options—whether driving, walking, biking, or taking transit. It also supports regional coordination with Fairfax County agencies, Virginia Department of Transportation (VDOT), Northern Virginia Transportation Authority (NVTA), NOVA Parks, and other partners to ensure that Vienna's system works as part of the larger Northern Virginia network.

The vision, goals, policies, and strategies in this chapter are intended to help guide decision-making around transportation infrastructure, programs, and policy.

Organization of this Chapter

The Transportation Plan describes the existing conditions, usage, and trends of each part of Vienna's transportation system. This chapter is organized by topic area, with each section describing current conditions, needs, and policies for the following components of the transportation system in Vienna

- Streets
- Pedestrian and Bicycle Mobility
- Transit
- Parking and Curbside Management
- Demand and System Management
- Regional Context and Future Mobility Trends

Streets

Streets are essential infrastructure that support all modes of transportation, including personal vehicles, public transit, rideshare services, freight and deliveries, bicycles, and walking. In Vienna, the public right-of-way serves not only as a transportation network but also shapes the community's character and daily life. Streets foster civic pride, provide space for parades and special events, contribute to a unified streetscape, and accommodate green infrastructure and stormwater management.

Vienna's transportation network includes the major arterials Maple Avenue and Nutley Street, minor arterials, a grid of local and neighborhood streets, transit access, local and regional trails, and a network of sidewalks and bicycle routes. As travel behavior and transportation demand evolve, the Town must meet the needs of aging residents, remote workers, commuters, and young families using a growing variety of transportation options—including electric scooters, personal e-bikes, and walking. In addition, continued development in Tysons and the nearby region will influence travel patterns, congestion, and infrastructure needs in Vienna.

This section provides a framework for balancing the many demands placed on the street network. It addresses street classification, traffic congestion, traffic safety, and traffic calming, while supporting a multimodal and context-sensitive approach to street design and management.

Street Typology

VDOT has a classification system based on the character of service the Town's streets provide, i.e., traffic that passes through Vienna or local traffic. The functional classification categories relevant to Vienna include Interstate, Principal Arterial, Minor Arterial, Collector, and Local (See map 5.1).

In addition, to achieve a greater balance among modes and make stronger connections to adjacent properties, the Town has developed a Community Street Typology to better balance modes of travel and strengthen connections to adjacent land uses. This approach considers land use context and multimodal design alongside functional service.

Arterial Streets

- **Retail/Mixed-Use Arterials:** Primary streets serving commercial areas predominantly ground-level retail and consumer services with pedestrian-scale design, public amenities, and transit stops. These streets are important for both regional and local travel, and in providing access to land uses by walking, transit, private motor vehicles, trucks, and bicycles.
- **Residential Arterials:** Primary streets traversing and serving primarily residential neighborhoods with homes, parks, and institutional properties. These streets balance vehicle movement with pedestrian and bicycle safety near neighborhoods and institutions.

What are "Transportation Modes"?

Transportation modes refer to the different ways people and goods travel from place to place. These include:

- Walking
- Bicycling and Micromobility (e.g., scooters, e-bikes)
- Personal Vehicles (cars, motorcycles)
- Public Transit (buses, Metrorail)
- Freight and Delivery Vehicles
- Rideshare and Carpool Services

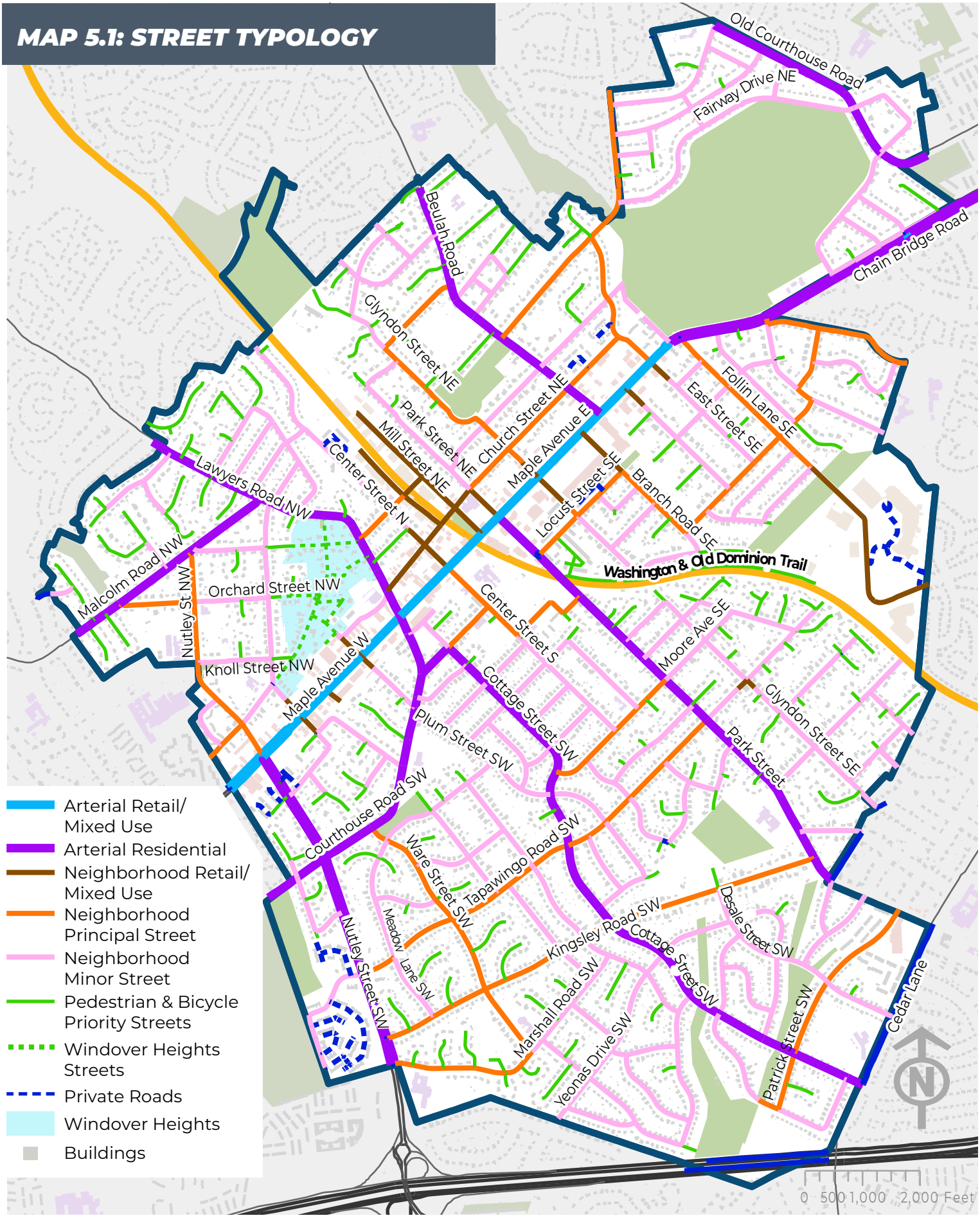
A well-designed transportation system provides safe and convenient access for all modes.

Neighborhood Streets (Non-Arterial)

- **Neighborhood Retail/Mixed Use Streets:** Local streets in smaller-scale commercial areas with parking, loading, and transit access, and pedestrian-and bicycle-friendly streetscapes.
- **Neighborhood Principal Streets:** Local streets for travel to and from homes, connections to local resources, parking, and a shared space in the neighborhood for walking and biking.
- **Neighborhood Minor Streets:** Narrow local street with, low traffic volume and low design speed prioritizing safety for nearly exclusive focus on providing access to residences oriented to neighborhood everyday activities.
- **Pedestrian and Bicycle Priority Streets:** Shared-use streets with very low volume and low design speed, with safety-focused traffic calming where vehicle traffic is secondary to pedestrians and bicyclists.
- **Windover Heights Streets:** Historic district streets with context-sensitive preservation design standards for neighborhood focus activities.
- **Private Streets**: Maintained privately but open to public use; should match public street design requirements.

These typologies guide the design, maintenance, and investment strategies, and support the Town's multimodal goals.

MAP 5.1: STREET TYPOLOGY



Complete Streets and Complete Networks

To support a vibrant, inclusive, and accessible community, the Town should consider adopting a Complete Streets policy, which would direct staff to design and operate public rights-of-way to enable safe access for all users, regardless of age, ability, or mode of travel. Alternatively, due to existing right-of-way limitations and the built environment, it may be more appropriate to apply Complete Network principles rather than Complete Street. A Complete Network approach would ensure that the overall transportation system, provides safe, efficient, and connected routes for walking, bicycling, transit, and driving. This approach would allow Vienna to focus on low-stress, multimodal connections across the network, while respecting context and feasibility at the street level.

Challenges

Managing increased traffic on neighborhood streets remains a key concern for many residents. As regional growth continues and navigation technology directs drivers away from main corridors, many vehicles without a local origin or destination are using Vienna's residential streets. At the same time, walking and biking activity is growing throughout Town, raising safety concerns and increasing calls for traffic calming and enforcement.

While many residents are concerned about increasing traffic, there is also a strong desire to maintain convenient access for drivers, particularly in and around commercial areas. In this context, "accessible" means not only maintaining direct access to businesses but also ensuring that traffic can continue to flow efficiently along Vienna's primary corridors, such as Maple Avenue and Nutley Street, which carry significant volumes of commuter and local traffic. These routes are critical to supporting commerce, daily travel, and the overall functionality of the street network. Businesses rely on reliable customer access, and residents expect reasonable, predictable, travel times.

Moving forward, the Town must strike a careful balance: preserving neighborhood safety and character while ensuring that commercial corridors remain accessible. Achieving this balance will require context-sensitive solutions that manage traffic volumes and speeds in residential areas without creating unintended barriers to mobility elsewhere. These concerns underscore the importance of prioritizing safety improvements throughout the Town's street network.

Street Design and Safety

Traffic volumes, travel speeds, and safety continue to be concerns throughout the Town—particularly along Vienna's principal arterial corridors. Safety challenges affect drivers, pedestrians, bicyclists, and transit users alike. Maple Avenue, in particular, experiences a high percentage of crashes and remains a top priority for safety improvements. The Town will continue to use a combination of engineering, enforcement, and education strategies to reduce crashes and enhance safety across all modes.

Fairfax County's transportation strategy identifies high-injury networks and promotes a Safe Systems Approach. Vienna can adapt this model locally by targeting safety interventions on corridors with the highest crash rates, implementing lower speed zones, and coordinating enforcement with design improvements. Coordination with the County and VDOT can also help expand data sharing on crash patterns and systemic risks.

Safe and efficient mobility begins with well-designed streets. Context-sensitive design approach ensures that street elements, such as lane widths, intersections, and crossings, are tailored to the surrounding land use and desired travel speeds. This approach improves visibility, reduces conflicts between users, and enhances overall safety. The Town prioritizes multimodal design features that support pedestrians, cyclists, transit users, and motorists. Key strategies include narrowing travel lanes, enhancing crosswalk visibility, modifying curb radii, and adding raised crossings or pedestrian refuge islands where appropriate.

Fairfax County's emphasis on Vision Zero principles and human-centered design supports Vienna's efforts to reduce crashes, especially on arterials like Maple Avenue, by using narrower lanes, better visibility at crossings, and slower target speeds.

Traffic Control and Enforcement

Traffic control devices—including signage, pavement markings, and traffic signals—are essential for informing and guiding all roadway users. While these tools play a critical role, they are not substitutes for traffic calming design features (discussed below) and are most effective when paired with community education and targeted enforcement. The Town of Vienna Police Department plays a vital role in promoting safety by monitoring traffic behavior, enforcing speed limits, and analyzing crash and violation data to support safety priorities. Their efforts are particularly focused on high-volume corridors and intersections during peak periods.

To improve traffic flow and reduce delays, the Town is implementing adaptive signal control technology along Maple Avenue and Nutley Street. This upgrade, which will cost over $3 million, is funded (including design and construction phases) through a combination of funds from VDOT SmartScale, CMAQ (Congestion Mitigation and Air Quality) NVTA, as well as developer proffers. The system includes real-time signal monitoring and control using detection with Autoscope Vision

video cameras and McCain Transparity traffic management software. Once fully operational, the system will allow staff to optimize signal timing remotely, improve traffic flow, and reduce delays—particularly during peak hours.

Traffic Calming

In 2002, the Transportation Safety Commission (TSC) released The Citizen's Guide to Traffic Calming in Vienna, which was updated in 2011 and formally replaced by the Town of Vienna Guide to Improving Street Safety in 2022. The current guide outlines the Town's process for reviewing and implementing traffic calming measures, such as speed cushions, mini-roundabouts, curb extensions, signs, pavement markings and other measures. The guide emphasizes engineering thresholds (such as the 85th percentile speed and vehicle volumes) and includes a formal petition-based process for community input. The TSC reviews recommendations and provides comments to the Town Council, which makes the final decisions.

Given evolving approaches to speed management and the recent release of the 11th Edition of the Federal Manual on Uniform Traffic Control Devices (MUTCD), the Town may wish to consider updating its guide after VDOT adopts the new MUTCD standards to ensure alignment with statewide practices.

In commercial areas, traffic management focuses on improving circulation, safety, and keeping intersections clear. Strategies include signal retiming, appropriate use of rumble strips, and increased police presence.

Traffic Congestion

Vienna's location within the busy Washington D.C. metropolitan area, and near its proximity to large regional employment centers such as Tysons, contributes to significant commuter traffic within the Town, particularly along Maple Avenue and Nutley Street. These corridors serve as key links for drivers accessing I-66, the Vienna-Fairfax-GMU Metrorail Station, and the broader Dulles technology corridor. Residents have consistently expressed concern over the volume and pace of traffic, particularly during peak periods.

Despite these challenges, the community places high value on maintaining reasonable automobile access, particularly to and through commercial areas. Maple Avenue serves the dual role of regional corridor and local main street, which creates ongoing tension between mobility and livability. Congestion on Maple Avenue and Nutley Street can result in long delays on cross streets, such as Tapawingo Road SW and Marshall Road SW, where multiple signal cycles may be needed to make left turns or cross traffic.

Recurring rush hour congestion has been documented at several key intersections, including:

- Courthouse Road SW/Lawyers Road NW at Maple Avenue W
- Park Street at Maple Avenue E
- East Street at Maple Avenue E
- Beulah Road at Maple Avenue E
- Maple Avenue W at Nutley Street

In addition to these corridors, the Town has identified several challenging local intersections that experience safety, operational, or design concerns. These locations have been raised during public engagement and Planning Commission discussions, including in review of recent development applications. While this Plan does not prescribe specific improvements, it acknowledges the need to evaluate and improve these locations over time:

- Lawyers Road NW and Church Street NW
- Park Street NE and Church Street NE
- Nutley Street NW and Windover Avenue NW
- Delano Drive SE and Alma Street SE
- Glyndon Street SE and Locust Street SE
- Malcolm Road NW and Orchard Street NW
- Malcolm Road NW and West Street NW
- Ayr Hill Avenue NW and Center Street N
- Malcolm Road NW and Lawyers Road NW
- Kingsley Road SW & Nutley Street SW

The Transportation Safety Commission and Town staff should continue to monitor and prioritize improvements at these intersections based on crash data, travel volumes, and community input.

When these corridors become congested, drivers often use residential streets as alternate routes, raising safety and livability concerns on roads not designed for high traffic volumes. In response, the Town has implemented targeted traffic solutions, such as traffic calming measures, mini-roundabouts, and curb extensions, to reduce speeds and discourage non-local traffic in residential areas.

The Town does not support major road expansions that would alter the character of Vienna or divert traffic through established residential neighborhoods. Instead, congestion management will focus on system- and demand-management strategies, such as adaptive traffic signals, pedestrian enhancements, and better coordination with regional partners.

As part of the implementation of the new traffic signal system, new timing plans are being implemented and additional adjustments using automated traffic signal performance measures may offer additional gains in traffic flow and system efficiency.

Maple Avenue Alternatives

Maple Avenue is Vienna's primary commercial corridor and a key connector through the region (State Route 123). It accommodates a high volume of vehicle traffic, supports access to hundreds of local businesses, and also serves pedestrians, bicyclists, and transit riders. To improve mobility, safety, and placemaking along this corridor, the Town continues to evaluate potential alternatives to its current configuration.

In 2019, the Town completed the Maple Avenue Corridor Multimodal Transportation and Land Use Study. The study assessed travel conditions along Maple Avenue between James Madison Drive and Follin Lane; as well as portions of Church Street, Courthouse Road, and Locust Street. Through extensive public engagement, the study identified key challenges and recommended a set of near- and mid-term improvements aimed at enhancing the corridor for all users.

Recommendations included:

- Redesigning W&OD Trail crossings
- Implementing leading pedestrian intervals at traffic signals
- Filling sidewalk gaps
- Developing a streetscape master plan and design guidelines
- Enhancing the bicycle network and bus stops
- Exploring a local circulator or microtransit system
- Improving intersection safety, particularly at Church Street and Lawyers Road

Progress has been made on some of these recommendations, but others remain unaddressed while still being relevant in that they align with the community's desire for a safer, more walkable, and vibrant Maple Avenue.

Moving forward, the Town should continue studying and testing potential roadway configurations and design strategies that balance traffic flow with multimodal access and placemaking. Concepts for future consideration include:

- **Advanced Traffic Control Technologies:** Transit signal priority, pedestrian/bike-responsive signal timing phases, next generation emergency vehicle preemption, and performance measures should continue to be explored in coordination with VDOT and regional efforts such as the Northern Virginia East-West Integrated Corridor Management Study.
- **Landscaped Medians:** Raised, planted medians can improve safety by separating traffic, providing pedestrian refuge, and supporting stormwater management. However, they may reduce mid-block turning access and should be evaluated carefully based on parcel access needs.
- **Reversible Center Lanes:** These have been used in other urban corridors to accommodate peak-direction volumes but introduce complex design, safety, and operational trade-offs—especially for turning movements and pedestrian visibility.
- **Intersection Reconfiguration:** Evaluate opportunities to redesign complex or non-standard intersections (such as the split intersection at Maple Avenue, Branch Road, and Beulah Road) to improve safety, simplify operations, and enhance multimodal access.

As Vienna explores options for Maple Avenue, future projects should be guided by the principles in the Town of Vienna Guide to Improving Street Safety, the 2019 corridor study, and other relevant or updated plans. Design efforts should also reflect evolving national transportation engineering practices, such as the Safe System Approach. Any modifications to Maple Avenue should support a Complete Streets and Complete Network approach—prioritizing safety, efficiency, and a high-quality experience for all users, regardless of mode or ability.

The Town's strategies for Maple Avenue should also align with regional plans for integrated corridor management and travel demand reduction. Collaboration with Fairfax County and VDOT on multimodal solutions—including microtransit, curb management, and multimodal signal prioritization—can help Vienna balance local quality of life with regional travel needs.

Pedestrian and Bicycle Mobility

Walking and biking are fundamental modes of transportation that directly support the Town of Vienna's goals for health, sustainability, safety, and community connectivity. In a compact, walkable town like Vienna, active transportation reduces traffic congestion, fosters a vibrant public realm, encourages recreation and environmental stewardship, and strengthens the local economy.

Sidewalks, shared-use paths, trails, and safe street crossings form the backbone of the Town's pedestrian and bicycle network. These facilities allow people to walk or bike to school, transit, parks, businesses, and other everyday destinations. When infrastructure is missing or unsafe, residents may be forced to drive short distances or take risks navigating busy streets—diminishing quality of life and increasing vehicular demand.

Cycling continues to grow in popularity across Vienna as a healthy, economical, and environmentally friendly travel option. The Town's relatively small footprint, interconnected street grid, low speed limits, and generally low-volume residential streets create a favorable environment for everyday biking. The Town's Pedestrian Master Plan and related studies identify Vienna as well-positioned to expand its active transportation network through strategic investments and cross-agency coordination.

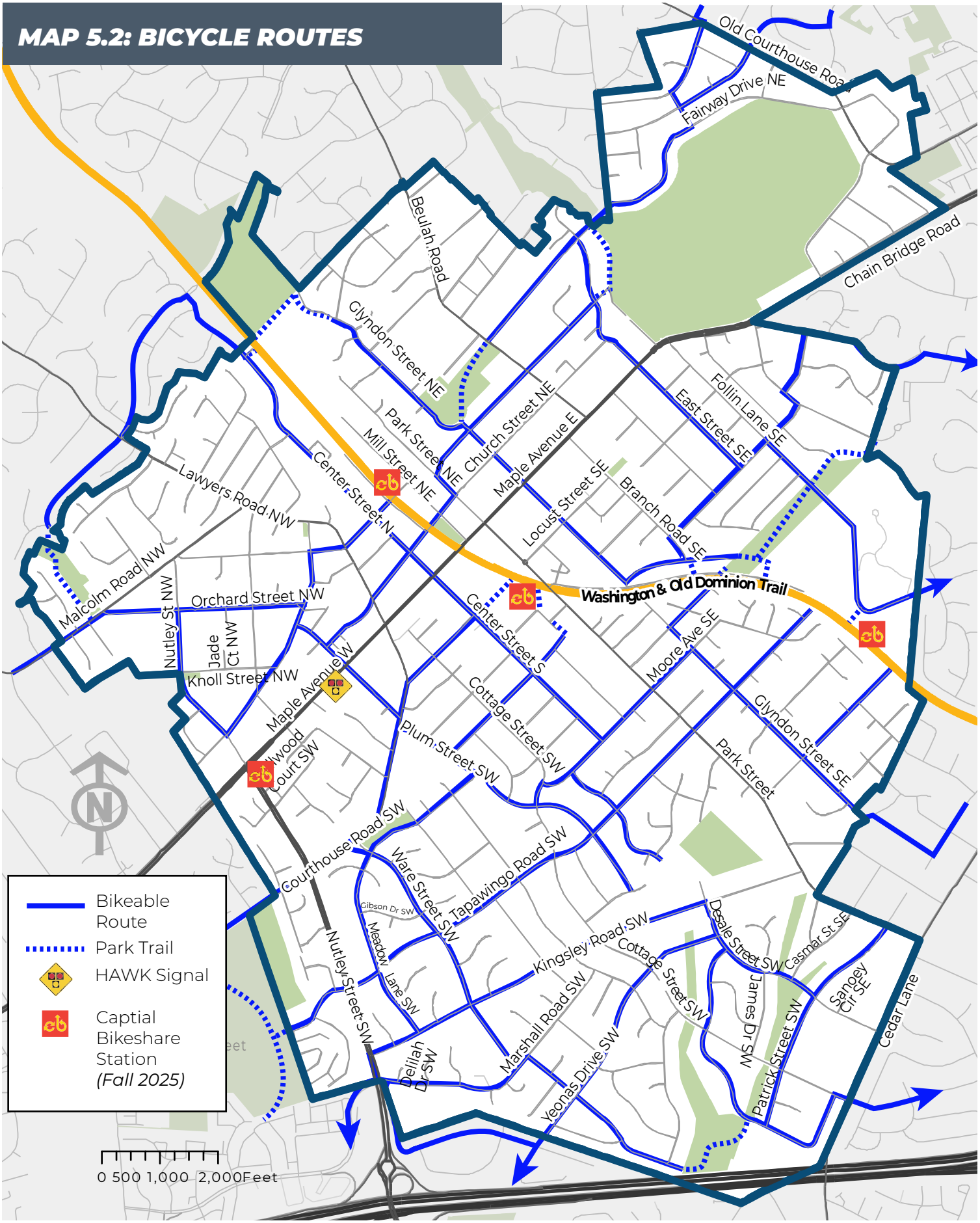
According to the 2023 Townwide survey (Vienna results from the National Community Survey), community support for walking and biking remains strong. Sixty-nine percent of respondents rated the ease of bicycle travel in Vienna as excellent or good, and an impressive 83 percent reported that they had walked or biked instead of driving at least once in the past year—well above national benchmarks. These results demonstrate both the demand and community support for additional investment in active transportation, reinforcing recommendations from the 2017 Urban Land Institute Technical Assistance Panel (TAP) study of the W&OD trail (see Washington & Old Dominion Trail (W&OD) section of this chapter for more description) and the 2019 Maple Avenue Multimodal Corridor Study.

The COVID-19 pandemic brought about major shifts in transportation behavior beginning in 2020. While vehicle traffic has largely returned to pre-pandemic levels, the increase in walking and biking—especially for recreation and local errands—has persisted. With more residents increasing their frequency of walking or bicycling, there is heightened demand for high-quality infrastructure that supports short local trips and improves neighborhood access.

To meet this demand, the Town of Vienna must continue building a more connected and accessible pedestrian and bicycle network. Closing sidewalk and trail gaps, improving crossings, adding bicycle lanes and wayfinding, and enhancing safe connections between neighborhoods, schools, parks, and commercial areas are all high-priority actions identified in the Town's planning documents. The Town will also evaluate opportunities to improve the bikeability of other key roadways that provide important connections to community facilities and destinations, including Park Street, which functions as a primary residential bicycle corridor and future Capital Bikeshare location at the Community Center. In particular, expanding bicycle access between the Vienna-Fairfax-GMU and Spring Hill Metrorail Stations, the Washington & Old Dominion Trail, and the Maple Avenue corridor remains a top priority. Strengthening these multimodal connections will enhance both local and regional mobility and reinforce the Town's commitment to equitable, healthy, and sustainable transportation choices.

Map 5.2 showing existing and proposed bicycle routes is provided on page 95.

MAP 5.2: BICYCLE ROUTES



Existing Facilities and Usage

Vienna's pedestrian network includes approximately 85 miles of walkways, not including trails such as the W&OD Trail. "Walkways" include both concrete and asphalt sidewalks. The Town Code requires developers to construct sidewalks and curb and gutter along frontages of new residential subdivisions. Infill development is also required to match adjacent sidewalk conditions to maintain connectivity.

The Town's compact size (4.2 square miles), semi-grid street layout, low speed limits, and relatively low traffic volumes create a supportive environment for bicycling. As regional interest in cycling continues to grow, Vienna has seen increased demand for improved bicycle infrastructure and safer routes to destinations like the Vienna-Fairfax-GMU and Spring Hill Metrorail Stations, and the W&OD Trail. Interest in walking and biking surged during the COVID-19 pandemic and remains elevated even as traffic volumes return to pre-pandemic levels.

Bikeshare and Micromobility

Bikeshare

The Town of Vienna is preparing to join the Capital Bikeshare network, further expanding regional access to sustainable, short-trip mobility options. Bikeshare enhances transportation flexibility by providing a convenient option for short-distance travel, first/last-mile transit connections, and recreational use—particularly for residents and visitors who do not own bicycles or prefer not to take them to every destination.

Following a 2019 regional feasibility study conducted in partnership with Fairfax City, Fairfax County, and George Mason University, Vienna identified more than 30 potential bikeshare station locations based on demand, land use patterns, and proximity to destinations like the W&OD Trail and Maple Avenue commercial corridor. Initial implementation was delayed due to the need for inter-agency coordination and state-level funding requirements.

In 2021, the Town secured a VDOT grant to support construction of five Capital Bikeshare stations, with planning and design completed in 2024. Installation of concrete pads is anticipated by the end of summer 2025, with full installation of the docking stations by early 2026. The first stations will be located at:

- Vienna Community Center (120 Cherry St SE)
- Navy Federal Credit Union headquarters (801 Follin Ln SE)
- W&OD Trail at Ayr Hill Ave NE (in place of the originally proposed Town Green site)
- 444 Maple Avenue W (as part of an approved mixed-use development)

These stations will link Vienna to the growing regional bikeshare network, which already includes installations in Tysons, Merrifield, Fairfax City, and the Vienna-Fairfax-GMU Metro station. As implementation progresses, the Town should explore additional locations based on usage data, connectivity gaps, and equity considerations.

The introduction of Capital Bikeshare in Vienna reflects the community's commitment to multimodal transportation and its continued investment in safe, active, and environmentally friendly alternatives to driving. The Town should monitor the performance of these initial stations and assess opportunities for future expansion, including potential integration with e-bike and e-scooter fleets to accommodate a range of micromobility options. While Capital Bikeshare operates under a public–regional framework, privately operated shared mobility devices, such as dockless e-scooters and e-bikes, are governed separately under state law, as discussed below.

Shared Mobility Devices (SMDs) and E-Scooters

Beginning in 2021, the Town of Vienna participated in a Shared Mobility Device (SMD) pilot program, allowing e-scooters to operate locally as part of a regional shift toward more flexible, low-emission mobility options. The pilot program has since concluded.

Following the passage of Virginia legislation in 2019 (§ 46.2-1315), which requires localities to enact their own ordinances to regulate these services, the pilot served as a way to evaluate impacts prior to establishing permanent code provisions. Operated by Bird Global, Inc., the pilot generated over 5,000 trips and 9,000 miles traveled between 2022 and 2023, with strong seasonal ridership and consistent use for short, local trips under 1.5 miles. Peak usage occurred in the afternoon and evening hours, especially along corridors such as the W&OD Trail, Church Street, and near the Vienna Metro Station. This pattern indicates that many riders used e-scooters as first/last-mile connections to transit and commercial destinations.

A key finding of the program was its productivity: Vienna outperformed peer programs on trips per day per 1,000 residents, even with a relatively small fleet size. Riders showed strong preference for downtown Vienna, the Town Green, and the Metro station as trip origins and destinations. These trends highlight e-scooters' potential to expand local mobility and reduce short car trips—especially for younger and transit-dependent residents.

As the Town considers adopting a permanent SMD ordinance, staff should pursue strategies such as:

- Requiring fleet data sharing to inform future planning and oversight.
- Aligning fleet size and deployment patterns with seasonal and geographic demand.
- Exploring idle-time restrictions in residential areas to reduce visual clutter and complaints.
- Identifying designated SMD parking zones in high-use areas like the Town Green and nearby Metro Stations to maintain sidewalk access and safety.

SMDs are a promising addition to Vienna's transportation ecosystem and align with community goals for sustainability, congestion reduction, and transportation equity.

Washington & Old Dominion Trail (W&OD)

The Washington & Old Dominion Railroad Regional Park, commonly known as the W&OD Trail, is a defining feature of Vienna's active transportation network. Owned and operated by NOVA Parks, the 45-mile rail-trail spans from Arlington to Purcellville and serves as a key recreational and transportation corridor through the heart of Town. Within Vienna, the trail crosses Maple Avenue East, Park Street SE, Church Street NE, and Ayr Hill Avenue NE—providing vital connections for pedestrians, cyclists, and other non-motorized users.

The W&OD Trail is more than a recreational amenity—it plays a critical role in regional mobility, local commerce, and community identity. Its popularity, however, presents safety challenges, particularly at such high-volume intersections as where the trail meets Maple Avenue, Park Street, and Church Street. A user-activated signal was installed at the Maple Avenue crossing in 1996, and upcoming adaptive signal upgrades are expected to further improve safety and traffic flow for all users.

A 2017 Technical Assistance Panel (TAP) organized by the Urban Land Institute (ULI) provided recommendations for long-term improvements along the W&OD corridor within Vienna. The TAP evaluated the two-mile segment of the W&OD Trail within Vienna and proposed a vision to transform it into a fully integrated linear park. Their recommendations included creating separate lanes for pedestrians and cyclists, improving signage and wayfinding, upgrading crossing safety at key intersections, and enhancing the trail with public art, interpretive displays, and environmental features. The panel also recommended zoning and parking strategies to support trail-oriented development and encouraged use of nearby commercial areas while minimizing conflicts with industrial and legacy land uses.

In 2025, NOVA Parks and the Town of Vienna announced a partnership to enhance both W&OD Trail and the surrounding land uses. A central element of this collaboration is NOVA Parks' long-term goal to establish a visitor center in Vienna, serving as a midpoint hub for the entire 45-mile W&OD Trail. This center would serve as a welcoming hub for trail users and a platform to share the trail's history and regional significance.

For Vienna, the visitor center presents a unique opportunity to attract more trail users into the Town's historic and commercial districts, supporting local businesses and activating public spaces. It also offers a path to revitalizing a key site at the intersection of Church Street and the Trail, adjacent to the Town Green.

In parallel,NOVA Parks is pursuing a "dual trails" design in Vienna,separating pedestrian and bicycle lanes to improve safety and accessibility. This approach has already been implemented in in Falls Church City and the Town of Herndon and is particularly effective in dense, high-traffic areas like downtown Vienna. This vision aligns with the recommendations of the 2017 ULI TAP study for Vienna, which emphasized the need for enhanced connectivity, placemaking, and trail-oriented development in this part of Town.

The Town should continue to work closely with NOVA Parks to implement these and other improvements and explore opportunities for grant funding, federal support, and public engagement. As part of the County's updated trail network priorities, Vienna should advocate for regional trail integration, funding coordination, and safety improvements, especially at high-volume crossings. Enhanced signage and lighting can maximize the W&OD Trail's utility and align with broader countywide greenway goals. With thoughtful design and strategic investment, the W&OD Trail will remain a central part of Vienna's identity—supporting active transportation, economic vitality, recreation opportunities, and a high quality of life.

Planning and Policy Framework

Pedestrian and bicycle infrastructure planning is guided by the Town's Pedestrian Master Plan and the Guide to Improving Street Safety. These documents outline strategies for filling sidewalk and trail gaps, improving crossing safety, and calming traffic in areas where pedestrians and cyclists are vulnerable.

Pedestrian issues are also reviewed by the Pedestrian Advisory Committee, which provides input to the Transportation Safety Commission (TSC). Similarly, the Bicycle Advisory Committee (BAC) advises the TSC on bicycle policy, infrastructure, and safety improvements. The Town should continue to update these plans and support the work of both advisory bodies.

Infrastructure Needs and Priorities

While Vienna has a strong foundation of active transportation infrastructure, opportunities remain to improve safety, connectivity, and comfort. Key priorities include:

- Filling sidewalk and trail gaps, especially in areas near schools, parks, and transit
- Providing secure bicycle parking at commercial areas, schools, public buildings, and transit stops
- Linking the W&OD Trail and commercial areas to nearby Metrorail stations via safe, continuous bike routes
- Upgrading major crossings like Maple Avenue at the W&OD Trail with enhanced signal timing and design treatments
- Increasing access to micro-mobility options like personal e-bikes and scooters through supportive infrastructure and regulation

The Town should continue investing in walking and biking infrastructure through dedicated capital funding for sidewalks, trails, signage, and public education.

Community Support and Education

Community participation, education, and outreach are essential to fostering a culture of safe and enjoyable walking and biking in the Town of Vienna. While infrastructure plays a foundational role, it is also important to cultivate public awareness, encourage behavioral changes, and generate enthusiasm for active transportation.

The Town supports a variety of successful programs and events that promote pedestrian and bicycle safety and engagement. These include Safe Routes to School, Bike to Work Day, community bike rides, bike rodeos, school bike trains, and Walk-Bike-Shop Vienna. These initiatives engage a broad cross-section of residents—from young children and families to commuters and local businesses—and help build confidence among new riders while reinforcing the benefits of walking and biking as viable transportation choices.

Education is a critical complement to these events. The Town should continue offering and promoting training opportunities for new and prospective cyclists; and it should expand outreach through Town newsletters, social media, public schools, and partnerships with local businesses. Regular communication about safety tips—for both drivers and cyclists—can reinforce Vienna's commitment to safe streets for all users.

The Pedestrian Advisory Committee (PAC) and Bicycle Advisory Committee (BAC) play important roles in supporting these efforts. As advisory bodies to the Transportation Safety Commission (TSC), the PAC and BAC provide citizen input and help guide pedestrian and bicycle planning and infrastructure improvements. Continued support for the PAC's and BAC's work is vital in sustaining momentum and building a more connected, pedestrian and bike-friendly community.

Together, these programs, events, and advisory efforts help foster a safer, more informed, and engaged public—and are essential components of Vienna's broader goals for mobility, health, and sustainability.

Transit

Vienna is served by several regional transit providers, including Metrorail, Metrobus, and Fairfax Connector. While the Town does not operate its own transit system, frequent bus service in Vienna and access to rail stations just outside of Town connect residents to jobs, schools, and destinations throughout the region.

Map 5.3 showing existing transit in the region is provided on page 100.

Metrorail

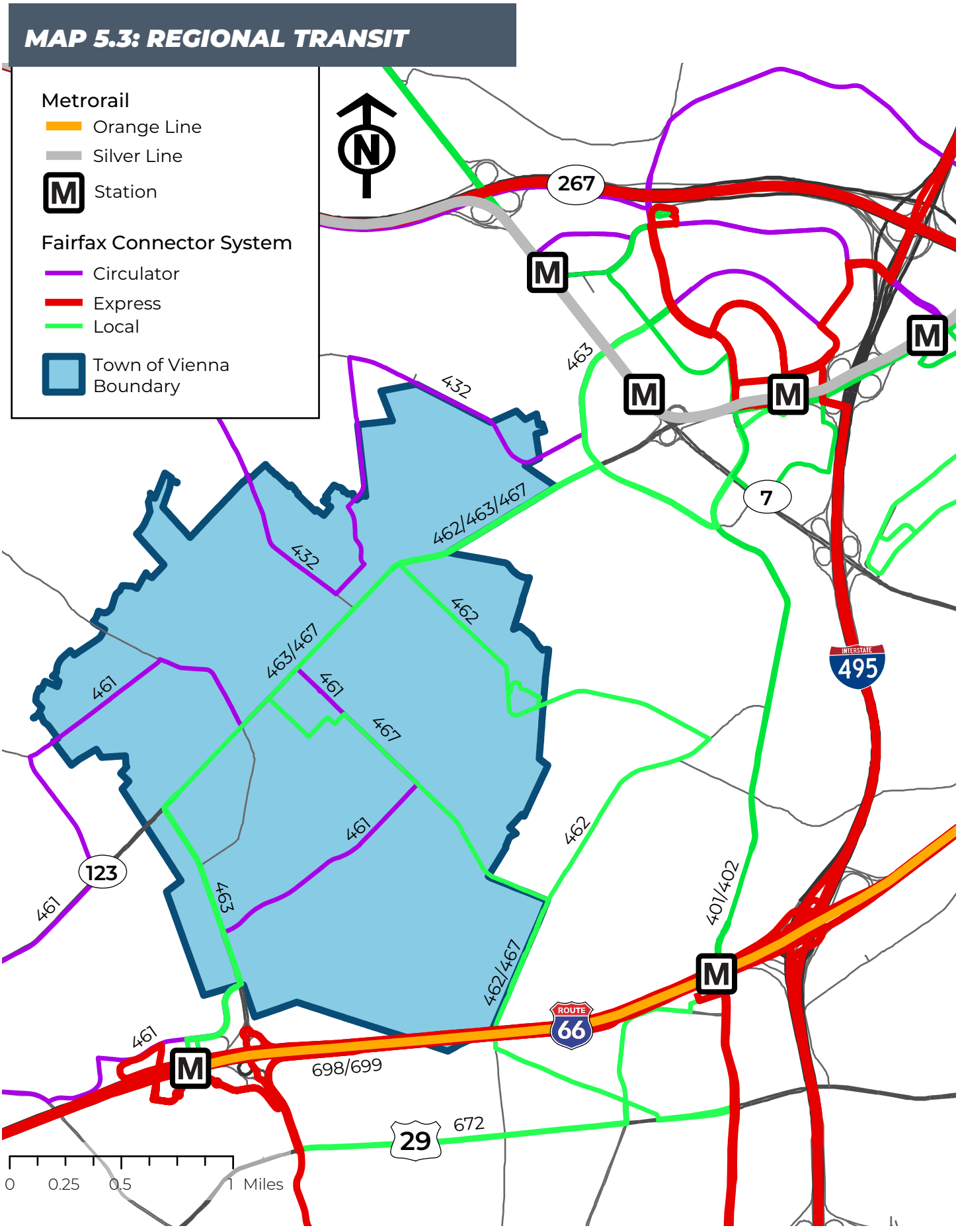
The Washington Metropolitan Area Transit Authority (WMATA) operates the Metrorail system serving the greater Washington, D.C. region. The Vienna-Fairfax-GMU Metrorail Station, located just southwest of the Town boundary, is the western terminus of the Orange Line and a major commuter hub with extensive park-and-ride capacity. This station also serves as a key transfer point for local and regional bus routes.

The Silver Line extension enhances regional connectivity, offering Vienna residents convenient transit options to key employment and travel destinations, with the Tysons and Spring Hill Metrorail Stations providing access to Tysons, Reston, and Dulles International Airport. Additional stations along both the Orange and Silver Lines offer transit options within a short drive, bus ride, or bike ride from Town.

Bus Service

The Town of Vienna is currently served by Fairfax Connector, which is a public bus service operated by Fairfax County. Prior to July 2021, Metrobus routes 2T and 15M provided transit service through Vienna. Route 2T connected Tysons and Dunn Loring via central Vienna and Maple Avenue East, while Route 15M linked Tysons, Vienna Metro, downtown Fairfax City, and George Mason University along Maple Avenue. Both routes were discontinued as part of a service transition that replaced several Metrobus lines in Fairfax County with Fairfax Connector routes.

MAP 5.3: REGIONAL TRANSIT



Currently, Fairfax Connector operates several routes through Vienna, providing essential links to nearby Metrorail stations, employment centers, and key destinations. These include:

- Route 432: Operates during weekday rush hours, connecting the Spring Hill Metro Station to the Farm Credit Administration via Old Courthouse Road and Beulah Road.
- Route 461: Provides weekday service connecting the Vienna Metro Station to the Flint Hill area, serving Tapawingo Road and Park Street.
- Route 462: Offers rush hour service between Dunn Loring and Tysons, with stops including Park Street and the Navy Federal Credit Union headquarters.
- Route 463: Runs throughout the day along Maple Avenue, linking the Vienna Metro Station to Tysons Corner Metro Station.
- Route 467: Provides weekday midday and Saturday service between Dunn Loring and Tysons, with stops at the Vienna Community Center and Town Hall.

These routes enhance local and regional connectivity, offering residents and visitors alternatives to personal vehicle use, particularly during peak commuting periods. The Town should continue to support efforts to increase service frequency and reliability, especially during off-peak hours, to further improve accessibility and support local businesses.

Current & Future Needs

Many Town residents rely on public transit to access employment and shopping, both locally and within the region. As such, it remains important for the Town to advocate for increases in frequency and reliability of transit service, including both bus and rail. Furthermore, transit provides an opportunity to reduce automobile travel, reducing the number of vehicles on Town streets and improving traffic on major corridors.

The Silver Line extension of the Metrorail system provides access to Tysons, Reston and ultimately Dulles International Airport on the west side of the line, and through Washington, D.C. to Largo, Maryland to the east. The existing Orange Line serves as a major commuter line to downtown Washington, D.C. The Town should continue to promote enhanced bus service to the surrounding Metrorail stations, during rush hour and throughout the day. Enhanced daytime service can provide an opportunity for local businesses to attract patronage from Tysons and Dunn Loring/Merrifield, and for their employees. Enhanced service can also help increase mobility for seniors and those with disabilities.

The 2019 Multimodal Study identified transit access gaps along the Maple Avenue corridor, particularly during off-peak hours and weekends. It recommends improving first- and last-mile connectivity between Fairfax Connector routes, pedestrian infrastructure, and key destinations. These improvements could be supported through coordinated transit service expansions, sidewalk enhancements, and shared bike and scooter facilities to extend access to nearby Metrorail stations and employment centers.

Finally, the Town should continue to evaluate plans for transit service on the I-66 corridor. Any plans for expansion or reconfiguration of I-66 should promote transit to reduce the number of single-occupancy trips.

Parking and Curb Space Management

The Town of Vienna faces several challenges in managing both public and private parking within its commercial corridors and adjacent neighborhoods. These include mismatches between parking supply and demand, inefficient site layouts, seasonal or event-driven demand spikes, and the absence of modern curb management policies that respond to emerging mobility trends. As Vienna continues to grow and travel preferences evolve, it is essential to manage parking resources efficiently while supporting a vibrant and accessible commercial environment.

Key issues include:

- **Localized parking shortages** near high-demand destinations, particularly along Maple Avenue and Church Street, where successful dining and retail businesses draw more customers than nearby lots can accommodate during peak times. In many cases, customers spill over into parking lots of neighboring businesses.
- **Limited parking flexibility** for customers, who expect to "park once" and walk to multiple destinations without concern for towing or time limits. Business owners also provide parking options to support their customers, but are often reluctant to provide more parking than necessary due to cost or site constraints.
- **Special events and festivals**, which are a cherished part of Vienna's community life, create periodic spikes in demand that exceed regular parking capacity in nearby areas.
- **Overflow parking in nearby residential neighborhoods**, especially those adjacent to commercial centers, schools, and multifamily developments. This raises concerns about traffic safety, access, and neighborhood character.
- **Large surface parking lots** — particularly those along Maple Avenue— that remain underutilized much of the day and disrupt pedestrian experience, diminishing the corridor's visual appeal and walkability.
- **Lack of safe, secure, and conveniently located bicycle parking**, which limits opportunities for residents and visitors to choose cycling as a transportation option for local trips. Addressing these issues will require a coordinated parking management strategy that emphasizes shared resources, better signage and wayfinding, active curb space management, and support for alternative travel modes such as biking, walking, and transit.

Private Facilities and Shared Parking

The majority of private parking in Vienna consists of surface parking lots. Many of these lots are separated from each other by strips of landscaping or concrete curbs, with few lots having inter-parcel connections, shared parking agreements, or shared entrances.

In 2024, the Town, with consultant support, completed the Commercial Corridors Parking Study. The study focused only on parking within the Maple Avenue corridor, Church Street, and the Mill/Dominion area. It did not include parking in the Corporate Park, at churches in residential neighborhoods, at schools, or at private residences.

Within the study area, the analysis found more than 5,000 off-street parking spaces,most of which are privately owned and generally restricted to patrons of the businesses or services on those properties. Only 60 spaces are publicly owned and accessible, not including spaces owned by NOVA Parks along the W&OD Trail and parking spaces that will become available with the construction of a parking garage connected to the new library building (see discussion, in Public Parking section.).

The study concluded that, overall, there is more than sufficient parking in the study area. In fact, the vast majority of the private spaces remain unused for much of the day. However, parking supply is not evenly distributed relative to the demand. The study identified several high-demand "hot spots" where parking demand consistently exceeded the supply of parking spaces. Those specific locations were associated with highly successful individual businesses along Mill Street, Church Street, and Maple Avenue.

Key recommendations included:

- Promoting establishment of shared parking agreements with private property owners;
- Enhancing public wayfinding signage and visibility of public parking;
- Creating "park once" zones that encourage walking between multiple destinations;
- Evaluating zoning regulations to "right-size" parking requirements; and
- Conducting ongoing monitoring to assess evolving parking needs before investing in additional public structures.

As the Vienna-Carter Library garage is opened to the public and the Town evaluates future public-private partnerships, these recommendations will guide efforts to expand parking access without overbuilding underutilized infrastructure.

Fairfax County's shift toward "right-sizing" parking in new development presents an opportunity for Vienna to modernize its zoning standards and reduce minimum parking requirements where walkability and shared

mobility options are strong. This approach can reduce impervious surfaces and better match actual parking demand.

In addition to recommendations from the 2024 Commercial Corridors Parking Study, the 2019 Maple Avenue Multimodal Transportation and Land Use Study emphasizes the importance of coordinated site design and walkability to support shared parking. Reducing physical and ownership barriers between parcels allows visitors to park once and access multiple destinations, helping to balance demand and reduce the perception of parking shortages. Shared access and walkable streetscapes work in tandem with shared parking agreements to increase overall parking efficiency, especially during special events or peak business hours.

Inter-Parcel Connections and Shared Entrances

The 2019 Multimodal Study of the Maple Avenue Corridor documented over 111 commercial entrances along the corridor—each presenting a potential conflict point for vehicles, pedestrians, and cyclists. The study recommends reducing curb cuts through inter-parcel connections and shared driveways to improve safety, circulation, and walkability.

Shared entrances, where adjacent properties utilize a single access point, play a crucial role in this strategy. By consolidating access points, shared entrances minimize turning conflicts, reduce crash risks, and support more predictable traffic flow. Additionally, they can facilitate improved access to signalized intersections, enhancing navigation and safety for all road users.

Promoting inter-parcel access and shared entrances not only reduces pressure on main corridors like Maple Avenue but also enables a more connected and pedestrian-friendly commercial environment. These strategies align with the Town's goals of improving site design, reducing vehicle conflicts, and encouraging compact, walkable redevelopment. Where feasible, the Town should require or incentivize inter-parcel connections and shared entrances as part of the development review process.

Shared Parking

To address the hot-spot problem identified in the 2024 Commercial Corridors Parking Study and discussed earlier in this chapter,the Town should explore both business-to-business and public-private shared parking strategies. Shared parking allows different users to occupy the same spaces at different times of day, reducing the need for each site to provide all parking independently. The study recommends that the Town facilitate shared parking agreements through staff outreach, signage, and potential liability support. These strategies would be more cost-effective and environmentally sustainable than building new public parking garages. The Town could offer zoning incentives, such as a reduced amount

of parking required during development, when shared arrangements are implemented. Shared parking aligns with the Town's vision for a walkable, vibrant commercial core while managing demand more efficiently. This plan supports Town efforts in this regard.

Public Parking

Currently, the Town of Vienna has limited publicly accessible parking, relying primarily on on-street spaces and surface parking lots at public facilities. The Town also has shared-use agreements with select private businesses and Fairfax County Public Schools to allow residents and visitors to use parking lots during times when the primary use is not active. In addition, some businesses in the Mill District lease parking spaces from NOVA Parks, alongside of the W&OD Trail. However, these arrangements are not permanent, limited in capacity, and many potential users remain unaware of these options.

In 2025 Fairfax County will break ground on the first structured public parking facility in Vienna. The parking garage is part of a joint project between the Town and the County to redevelop the Vienna-Carter (formerly Patrick Henry) Library. The approved design includes a 209-space, four-level garage that will offer 125 spaces for library users and 84 spaces for general public use. Located at the prominent intersection of Maple Avenue and Center Street, this project addresses both the need for additional library parking and the longstanding demand for public parking in the center of Town near businesses. This garage will serve as a vital amenity for commuters, visitors to the nearby commercial corridors, businesses, and special events. It is expected to open in 2027.

Prior to the current library/parking project, the Town actively pursued opportunities for structured parking through public-private partnerships, including along Mill Street and Church Street. The proposal at 223 Mill Street NE would have placed 127 public parking spaces within a privately constructed mixed-use building, serving businesses on Mill and Dominion as well as users of the nearby W&OD Trail. The Church Street concept would have added 14 public spaces at the intersection with Lawyers Road NW. In both cases, despite significant planning and discussion, the private parties ultimately chose not to proceed.

This plan recognizes the continued need to address parking challenges in the Mill District, along Church Street, and along Maple Avenue.

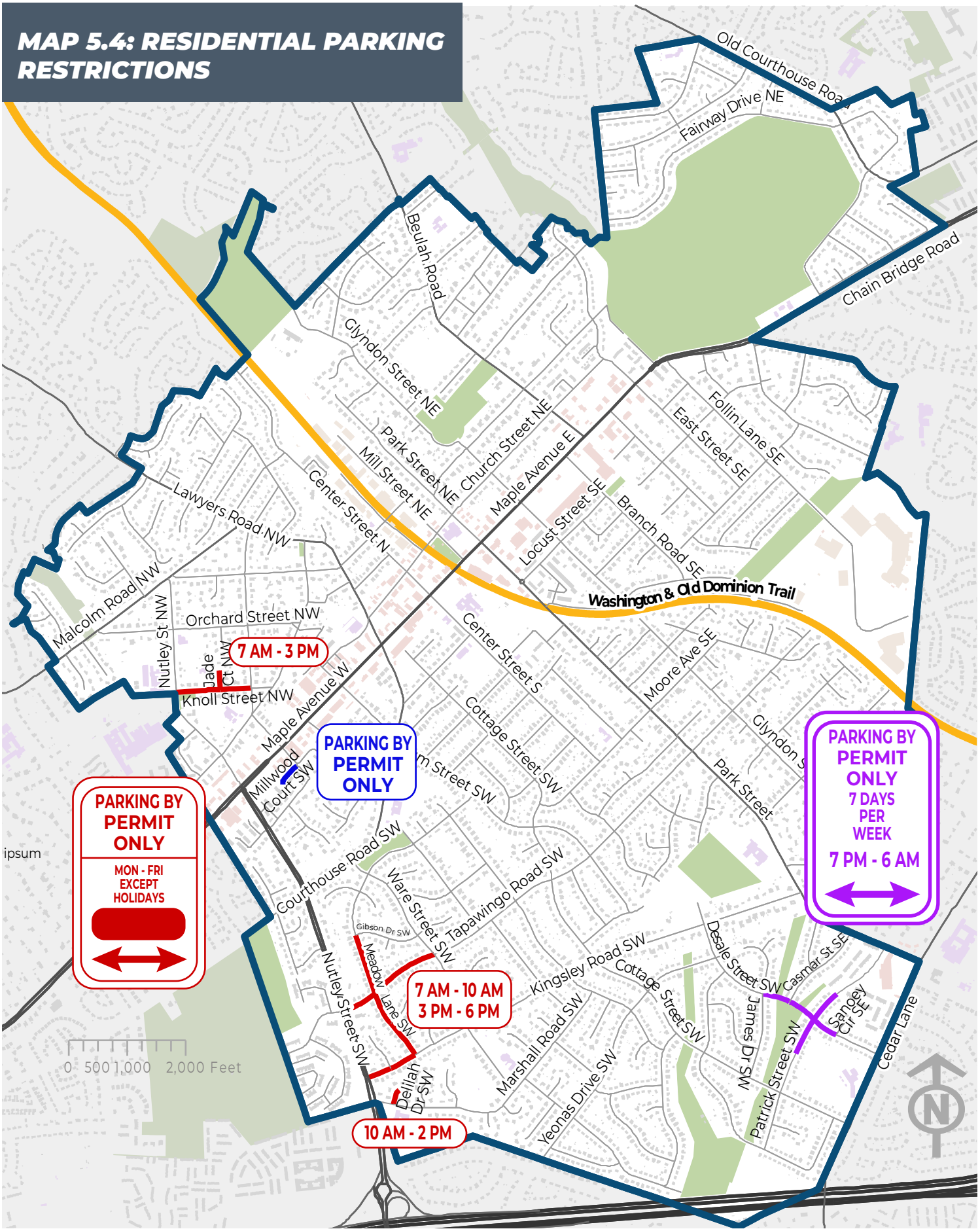
Residential On-Street Parking

In general, the Town's default policy is to allow open parking in residential single-family residential neighborhoods, without a residential permit system. However, the community also recognizes that these neighborhoods can be adversely affected by overflow on-street parking from such higher-intensity nearby uses as schools businesses, and multifamily developments—particularly in areas where on-site parking is insufficient to meet demand. This overflow leads to streets in single-unit neighborhoods being used by non-residents for long-term or daily parking, creating concerns about safety, access, and neighborhood character.

To address these issues, the Town of Vienna has established a framework for implementing residential permit parking in a neighborhood where there is demonstrated need. When these conditions are met, the Town Council may designate the street or nearby streets as permit-required zones. Map 5.4 shows current approved parking restricted areas on page 106.

This program is designed to protect neighborhood streets from becoming default overflow lots for adjacent land uses and temporary situations such as nearby large-scale construction. As land use patterns evolve and infill development continues, the Town will continue to monitor residential parking pressure and adjust permit zone designations as needed — based on data, public input, and community impact.

MAP 5.4: RESIDENTIAL PARKING RESTRICTIONS



Curb Space Management

The 2019 Maple Avenue Multimodal Study calls for enhanced curb space management, recommending clearer lane delineation, curb extensions, and pedestrian-focused designs at key intersections. In coordination with signal timing updates and pedestrian safety measures, the study supports creating a more predictable and user-friendly curb environment for all modes of travel. These strategies should guide future right-of-way improvements, particularly in areas with high turnover or conflicting demands from deliveries, buses, bikes, and passenger drop-offs.

Demand and System Management

In a land-constrained community like Vienna, especially one situated within a growing metropolitan region, transportation planning must look beyond physical expansion to include strategies that manage demand and improve system efficiency. This section addresses how the Town can optimize existing infrastructure while meeting mobility, sustainability, and access goals.

Transportation Demand Management (TDM)

Transportation Demand Management (TDM) refers to strategies that influence how and when people travel, with the goal of shifting trips to non-driving modes, off-peak hours, or eliminating unnecessary travel altogether. TDM can reduce traffic congestion, cut greenhouse gas emissions, and make transportation more equitable and resilient.

While the regional Commuter Connections program, coordinated by the Metropolitan Washington Council of Governments (MWCOG), has been available to residents, the Town is relatively new to the concept of TDM. The now-repealed Maple Avenue Commercial (MAC) zone incorporated some TDM strategies as an incentive and a means to reduce the minimum number of off-street parking spaces required for non-residential or mixed-use development.

In 2024, the Commercial Corridors Parking Study recommended that Vienna develop a formal TDM program to mitigate parking demand, promote shared mobility, and support employee commuting alternatives. Key elements proposed include:

- Requiring TDM plans as part of new development, infill, or major renovation applications;
- Establishing a Transportation Management Association (TMA) to coordinate programs and services for local employers and property owners;
- Promoting commuter incentives such as subsidized transit passes, rideshare matching, and guaranteed ride home programs;
- Unbundling parking from leases to allow tenants to opt out of paying for parking;
- Partnering with Fairfax County's TDM initiatives where appropriate.

Vienna should explore partnerships with large employers, institutions, and event organizers to support travel behavior change. Incentivizing carpooling, flexible commuting, and bike/transit options will support congestion and emissions reduction goals. By integrating these strategies and encouraging ongoing monitoring, Vienna can minimize overbuilt parking, support economic development, and improve travel choices for residents, visitors, and employees.

Transportation System Management (TSM)

Transportation System Management (TSM) refers to operational strategies that improve the efficiency, reliability, and safety of existing transportation systems without major roadway expansion. These measures aim to maximize the use of current infrastructure by optimizing traffic flow, reducing delays, and enhancing multimodal access.

TSM strategies in the Town of Vienna include:

- Roadway facility design treatments (e.g., lane striping, signs)
- Access management
- Traffic incident management response protocols
- Planned special event traffic management
- Targeted traffic enforcement
- Adaptive traffic signal control technology on Maple Avenue and Nutley Street
- Deployment of supplemental intelligent transportation systems (ITS)

The Town of Vienna is actively advancing its TSM capabilities through a comprehensive Maple and Nutley Street Signal Improvements Project, a $2.1 million, three-phase initiative scheduled for completion in 2025. This project will modernize the Town's traffic signal infrastructure to improve real-time traffic management, particularly along key corridors experiencing high congestion volumes.

Key components include:

- Upgrading traffic signal controllers and cabinets to support adaptive signal timing.
- Installing the McCain Transparity™ Traffic Management System software, enabling centralized, remote monitoring and coordination of Vienna's signal network.
- Deploying Autoscope Vision video cameras to capture real-time traffic conditions and enhance data-driven decision-making.

These improvements will allow staff to dynamically adjust signal timings based on traffic volume, reduce vehicle delays, and better accommodate pedestrians and cyclists. The project is funded through a combination of a VDOT SmartScale grant, federal CMAQ funds, NVTA funding, and local development contributions.

This effort builds on regional best practices recommended by FHWA and VDOT and positions Vienna to respond more nimbly to changing traffic patterns—especially those related to seasonal demand, construction, or special events.

Regional Context and Future Mobility Trends

Vienna is situated within a rapidly evolving region, shaped by major transportation corridors and regional development patterns. While the Town prides itself on its small-town character and strong local identity, its transportation system is increasingly affected by external forces—including infrastructure projects, demographic shifts, and the growth of nearby activity centers such as Tysons. Vienna's transportation decisions are shaped by its place within the larger Northern Virginia transportation system.

Changing Demographics and Regional Transportation Dynamics

Transportation planning in Vienna is shaped by both local conditions and the Town's position within the growing Northern Virginia region. Traditionally, planning focused heavily on automobile access; but shifting demographics, commuter behavior, and regional development are driving a transition toward a more multimodal transportation network. Residents increasingly seek flexible, efficient, and sustainable ways to travel—whether by foot, bicycle, transit, or telework.

Vienna's population reflects this evolution. Many residents — particularly older adults and those with mobility limitations — require alternatives to driving for daily needs. At the same time, families, remote workers, and younger residents value the ability to walk or bike to local destinations, avoid congestion, and reduce environmental impact. Vienna's compact size, interconnected street grid, and general approach for lower speed limits position it well to support these needs.

Regionally, major infrastructure investments have reshaped the commuting landscape. The completion of the Transform 66 Outside the Beltway project in 2023 added express lanes, park-and-ride lots, and 11 miles of shared-use paths along I-66. These enhancements, along with the extension of the Metrorail Silver Line and improvements to Route 7, have expanded access and multimodal connectivity for Vienna residents.

Telework has been the most significant shift in recent years. According to the 2022 State of the Commute Survey by Commuter Connections, a program of the National Capital Region Transportation Planning Board at the Metropolitan Washington Council of Governments (COG), nearly half of all commute trips in the region were replaced by teleworking—a fivefold increase since 2019. As the effects of the COVID-19 pandemic recede and return-to-work mandates have been given by the federal government and many private businesses, traffic has been returning towards previous levels. Nonetheless, many employers and employees have learned how to accommodate remote work and find it to be more efficient in some cases. Therefore, it is anticipated that a larger percentage of workers, in Vienna and elsewhere will continue to work remotely than did before 2020. With more residents spending their days in town rather than commuting elsewhere, local walking and bicycling trips are likely to increase, making it even more important to maintain and enhance Vienna's pedestrian and bicycle network and its connections to regional trails and transit hubs.

Alternative transportation modes are gaining traction. The SOC survey found that commuters who walk or bike report the highest satisfaction with their travel modes, citing such benefits as exercise, lower cost, and reduced stress. These findings reinforce Vienna's efforts to expand infrastructure for active transportation and position the Town as a regional model for livability and sustainability.

While Vienna benefits from the key regional assets of Metrorail, I-66, and trail systems, the Town also faces challenges related to commuter congestion and decision-making outside its jurisdiction. Regional growth—particularly in Tysons—continues to place pressure on Vienna's road network. Fairfax County's 2030 projections for Tysons anticipate up to 200,000 jobs and 100,000 residents, which

will significantly impact traffic patterns and intersection performance in and around Town.

To remain resilient and responsive, Vienna must continue strengthening its regional partnerships, investing in multimodal infrastructure, and encouraging policies that align local goals with broader transportation trends. A focus on system efficiency, travel demand management, and neighborhood-scale improvements will help Vienna adapt to the changing needs of its residents while remaining well connected to the region.

Regional Transportation Infrastructure

Vienna is located within a growing region and is surrounded and served by substantial highway and transit infrastructure. This relationship provides opportunities and challenges. The Town is benefited by access to a multi-modal transportation network which links employment and activity centers. However, the Town has limited influence regarding land use and transportation decisions made outside its jurisdictional limits, although they may directly affect the Town. Maple Avenue is subject to significant commuter traffic, as well as service decision-making by several multi-jurisdiction transit agencies.

The Town of Vienna is strategically positioned within Northern Virginia's extensive transportation network and directly influenced by several major corridors and transit systems, including Interstate 66 (i-66), Interstate 495 (Capital Beltway), Dulles Toll Road (Route 267), Leesburg Pike (Route 7), and the Metrorail. Intersecting the southern tip of Vienna, Interstate 66 (I-66) serves as a primary east-west artery connecting Northern Virginia to Washington, D.C. Completed in 2023, the Transform 66 Outside the Beltway Project has expanded this corridor to include two express lanes and three general-purpose lanes in each direction between I-495 and Gainesville. Enhancements also feature new park-and-ride facilities, improved interchanges, and 11 miles of shared-use paths, including the I-66 Parallel Trail, which offers new bicycle and pedestrian connections through Vienna.

Interstate 495, known as the Capital Beltway, is located approximately 1.25 miles east of Vienna. This major highway provides critical regional connectivity, linking the town to other parts of the Washington metropolitan area.

The Dulles Toll Road (VA Route 267) and Leesburg Pike (VA Route 7) are situated near Vienna's northern boundary and facilitate access to Dulles International Airport and the broader region. The Route 7 Corridor Improvements Project has widened the road from four to six lanes between Reston Avenue and Jarrett Valley Drive, incorporating shared-use paths on both sides to enhance bicycle and pedestrian mobility.

Vienna is uniquely positioned between the Orange and Silver Lines of the WMATA. The Vienna/Fairfax-GMU station on the Orange Line serves as a vital transit hub for residents, while proximity to the Silver Line expands access to Tysons, Reston, and Dulles International Airport.

Vienna actively collaborates with regional partners to improve transportation infrastructure. Notably, in 2018 the Town secured funding for the Nutley Street Shared-Use Trail project, aiming to enhance bicycle and pedestrian access between the Vienna Metrorail Station and the new I-66 trail, thereby strengthening multimodal connectivity.

These regional transportation developments underscore Vienna's commitment to integrating local planning with broader initiatives, ensuring that the town remains accessible, sustainable, and well-connected within the dynamic Northern Virginia region.

Impacts of Regional Development

Tysons is the closest high-intensity development area to Vienna, as it is located immediately northeast of Vienna, and is undergoing a major transformation. Fairfax County's long-range vision reimagines Tysons as a high-density, mixed-use urban center with up to 100,000 residents and 200,000 jobs by 2050. This scale of development will have far-reaching transportation impacts—both in and beyond Tysons.

Although the extension of the Silver Line supports transit-oriented development, most travel in and around Tysons still occurs by private vehicle. Improvements to the pedestrian and bicycle network are underway but will take time to fully implement. Fairfax County has studied potential impacts on surrounding communities and analyzed future traffic conditions at key intersections in Vienna. Results indicate increased congestion and degraded levels of service, especially during peak travel periods. While some mitigation strategies have been proposed, implementation remains challenging.

Vienna should continue monitoring regional land use and transportation decisions and advocating for mitigation strategies that protect neighborhood quality of life and maintain access and mobility for residents.

By coordinating closely with Fairfax County, NVTA, VDOT, and WMATA, the Town can ensure that regional capital projects, mode-shift goals, and land use planning efforts benefit Vienna residents. Aligning local planning with countywide initiatives—like the I-66 Parallel Trail, Tysons multimodal improvements, and transit-oriented development near Metro—will strengthen Vienna's resilience and regional relevance.

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Goals, Policies, and Strategies

Goal 1. Prioritize safety for all users of the transportation system.

Policy 1.1: Ensure transportation improvements prioritize user safety across all modes.

Strategy 1.1.1: Use data from crash reports, speed studies, and community feedback to guide traffic calming interventions.

Strategy 1.1.2: Implement recommendations from the Town of Vienna Guide to Improving Street Safety.

Strategy 1.1.3: Address crossing safety at high-volume locations, including the W&OD Trail at Maple Avenue.

Strategy 1.1.4: Regularly review and update traffic enforcement priorities using crash data, school safety needs, and community input.

Strategy 1.1.5: Update Town guidelines and policies to reflect recent updates to Federal, state, and professional practices (e.g., MUTCD, Safe System Approach, etc.)

Policy 1.2: Design streets to accommodate users of all ages and abilities.

Strategy 1.2.1: Implement context-sensitive solutions like mini-roundabouts, curb extensions, and pedestrian refuge islands.

Strategy 1.2.2: Adopt and implement a policy that applies Complete Streets or Complete Network principles to all street projects, based on context, feasibility, and network needs.

Goal 2. Ensure efficient and reliable movement for all transportation modes integrated with land use.

Policy 2.1: Support a multimodal transportation network that accommodates all users.

Strategy 2.1.1: Design and operate streets that safely accommodate vehicles, transit, bicycles, and pedestrians.

Strategy 2.1.2: Prioritize infrastructure improvements that enhance connectivity, efficiency, and comfort for all users across modes.

Strategy 2.1.3: Use the Town's street typology system to guide context-sensitive design, balancing mobility with neighborhood character.

Strategy 2.1.4: Integrate shared mobility services (such as Capital Bikeshare and e-scooters) into the transportation system by ensuring safe access, clear operational rules, and designated parking zones.

Strategy 2.1.5: Maintain and evaluate a list of challenging intersections to guide operational and safety improvements. Identify and regularly update a list of intersections with recurring safety, design, or congestion concerns—based on community input, crash data, and operational analysis. Coordinate with the Transportation Safety Commission to prioritize improvements, pursue grant funding, and advance targeted designs that enhance safety and multimodal access.

Policy 2.2: Improve connectivity within and beyond Town borders.

Strategy 2.2.1: Improve local street and trail connections between neighborhoods, commercial districts, schools, and parks.

Strategy 2.2.2: Coordinate with VDOT, Fairfax County, and WMATA to improve access between Vienna and nearby destinations including Metro stations, Tysons, and the I-66 Parallel Trail.

Strategy 2.2.3: Identify and pursue opportunities to close sidewalk, trail, and bicycle facility gaps—particularly in regional connection areas like Nutley Street and the W&OD Trail.

Policy 2.3: Leverage smart technologies and data to improve transportation system performance.

Strategy 2.3.1: Use data from shared mobility operators to monitor usage trends, evaluate system performance, and inform infrastructure and enforcement strategies.

Strategy 2.3.2: Expand deployment of intelligent transportation systems (ITS), including adaptive traffic signals and centralized traffic management platforms.

Strategy 2.3.3: Monitor trends in autonomous vehicles, delivery drones, and other emerging technologies for potential regulatory or infrastructure needs.

Policy 2.4: Support efficient and safe management of freight and deliveries, particularly in commercial corridors.

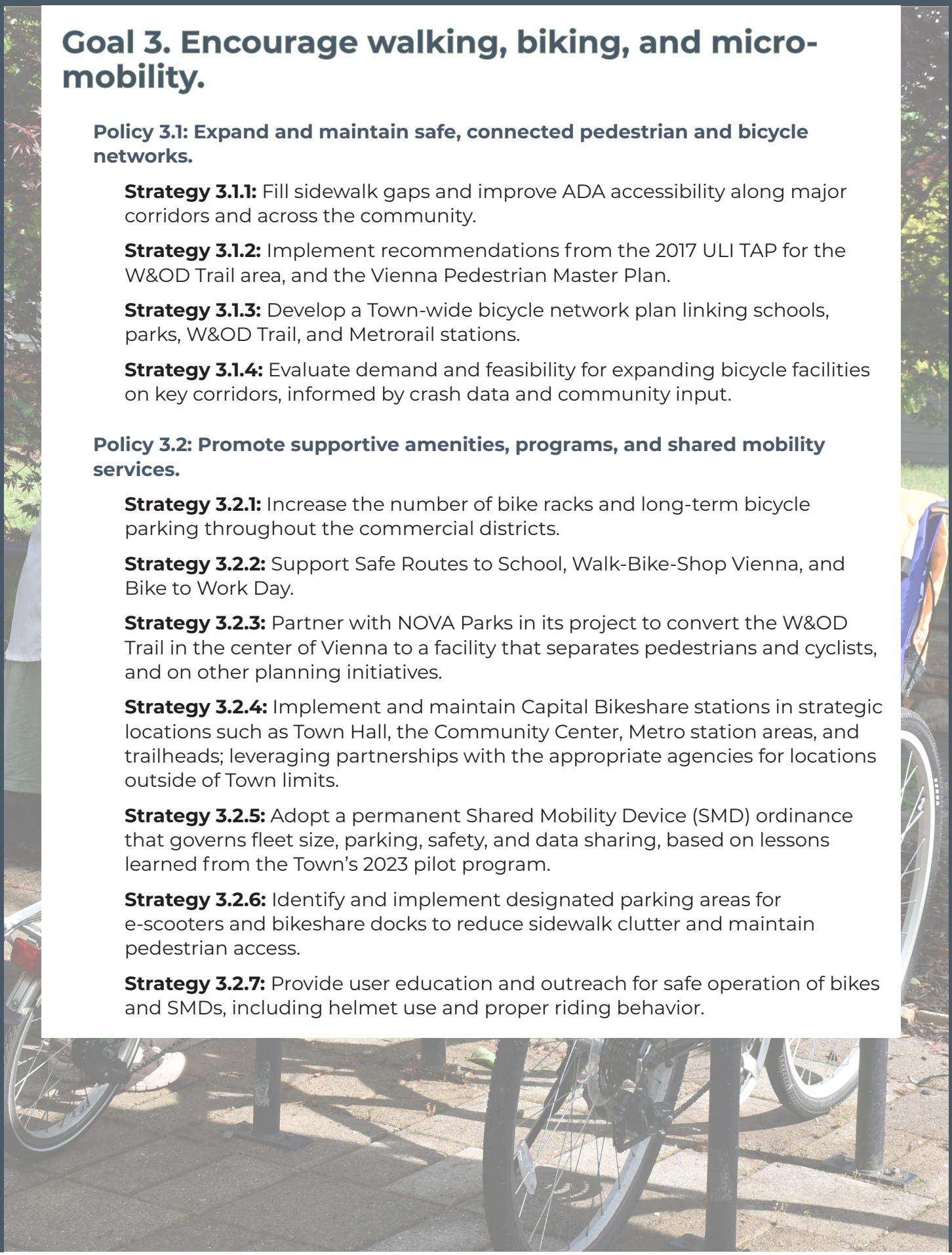
Strategy 2.4.1: Designate delivery zones and loading spaces to reduce double-parking and conflicts with pedestrian or bicycle infrastructure.

Strategy 2.4.2: Explore off-peak delivery incentives or restrictions to reduce traffic conflicts during peak periods.

Policy 2.5: Promote access management and inter-parcel connectivity

Strategy 2.5.1: Reduce curb cuts along major corridors by requiring shared driveways and inter-parcel access in redevelopment projects.

Strategy 2.5.2: Work with VDOT and private property owners to retrofit parcels along Maple Avenue and Church Street for improved vehicle and pedestrian circulation.



Goal 3. Encourage walking, biking, and micro-mobility.

Policy 3.1: Expand and maintain safe, connected pedestrian and bicycle networks.

Strategy 3.1.1: Fill sidewalk gaps and improve ADA accessibility along major corridors and across the community.

Strategy 3.1.2: Implement recommendations from the 2017 ULI TAP for the W&OD Trail area, and the Vienna Pedestrian Master Plan.

Strategy 3.1.3: Develop a Town-wide bicycle network plan linking schools, parks, W&OD Trail, and Metrorail stations.

Strategy 3.1.4: Evaluate demand and feasibility for expanding bicycle facilities on key corridors, informed by crash data and community input.

Policy 3.2: Promote supportive amenities, programs, and shared mobility services.

Strategy 3.2.1: Increase the number of bike racks and long-term bicycle parking throughout the commercial districts.

Strategy 3.2.2: Support Safe Routes to School, Walk-Bike-Shop Vienna, and Bike to Work Day.

Strategy 3.2.3: Partner with NOVA Parks in its project to convert the W&OD Trail in the center of Vienna to a facility that separates pedestrians and cyclists, and on other planning initiatives.

Strategy 3.2.4: Implement and maintain Capital Bikeshare stations in strategic locations such as Town Hall, the Community Center, Metro station areas, and trailheads; leveraging partnerships with the appropriate agencies for locations outside of Town limits.

Strategy 3.2.5: Adopt a permanent Shared Mobility Device (SMD) ordinance that governs fleet size, parking, safety, and data sharing, based on lessons learned from the Town's 2023 pilot program.

Strategy 3.2.6: Identify and implement designated parking areas for e-scooters and bikeshare docks to reduce sidewalk clutter and maintain pedestrian access.

Strategy 3.2.7: Provide user education and outreach for safe operation of bikes and SMDs, including helmet use and proper riding behavior.

Goal 4. Reduce congestion to support environmental sustainability.

Policy 4.1: Support alternatives to single-occupancy vehicle travel.

Strategy 4.1.1: Encourage telework and flexible commuting through educational outreach.

Strategy 4.1.2: Promote local circulator concepts and micro transit feasibility studies.

Strategy 4.1.3: Encourage first/last-mile travel by expanding access to shared micromobility services, including docked bikeshare and e-scooters, in areas near Metro, parks, and commercial centers; leveraging partnerships with the appropriate agencies for locations outside of Town limits.

Policy 4.2: Support the transition to zero- and low-emission vehicles and clean fleets and implementation of electric vehicle (EV) infrastructure.

Strategy 4.2.1: Require EV-ready infrastructure in new public facilities and redevelopment projects.

Strategy 4.2.2: Partner with regional agencies to install public EV charging stations in commercial districts and commuter parking areas.

Strategy 4.2.3: Create incentives or guidance for private developments to install EV charging infrastructure accessible to the public.

Goal 5. Coordinate with regional agencies to manage the impacts of growth and improve connectivity.

Policy 5.1: Integrate regional transportation trends into local planning decisions.

Strategy 5.1.1: Monitor development in Tysons and evaluate impacts on Vienna's transportation network.

Strategy 5.1.2: Support implementation of the Nutley Street Shared-Use Trail connecting to I-66 Parallel Trail.

Policy 5.2: Coordinate with regional agencies on multimodal infrastructure.

Strategy 5.2.1: Participate in planning and funding partnerships with VDOT, NVTC, WMATA, and Fairfax County.

Strategy 5.2.2: Coordinate with Fairfax County, VDOT, and WMATA to align micromobility infrastructure and policies—especially in shared corridors like the W&OD Trail, Nutley Street, and around the Metro station.

Goal 6. Encourage public input and transparency on transportation decisions.

Policy 6.1: Promote inclusive and ongoing community engagement.

Strategy 6.1.1: Engage the Transportation Safety Commission, Bicycle Advisory Committee, Pedestrian Advisory Committee, Conservation and Sustainability Commission, and Tree Advocacy Committee in project development.

Strategy 6.1.2: Use online tools, surveys, and workshops to solicit community feedback.

Strategy 6.1.3: Develop plain-language project summaries and visuals to improve public understanding and participation in transportation projects.

Goal 7. Improve parking and curbside management.

Policy 7.1: Optimize travel demand through parking and system management.

Strategy 7.1.1: Implement key TDM recommendations from the 2024 Commercial Corridors Parking Study.

Strategy 7.1.2: Promote shared parking agreements and enhance wayfinding for public lots.

Strategy 7.1.3: Expand “park once” areas and promote walking between destinations.

Strategy 7.1.4: Develop event-specific traffic and parking management plans to minimize disruption during festivals and major events.

Policy 7.2: Improve curb space management.

Strategy 7.2.1: Develop a curb management plan to allocate curbside zones for pickup/drop-off, delivery, bikeshare/SMDs, and short-term parking in commercial corridors.

Strategy 7.2.2: Implement clear signage and enforcement for loading zones, ADA access, and micromobility parking.