

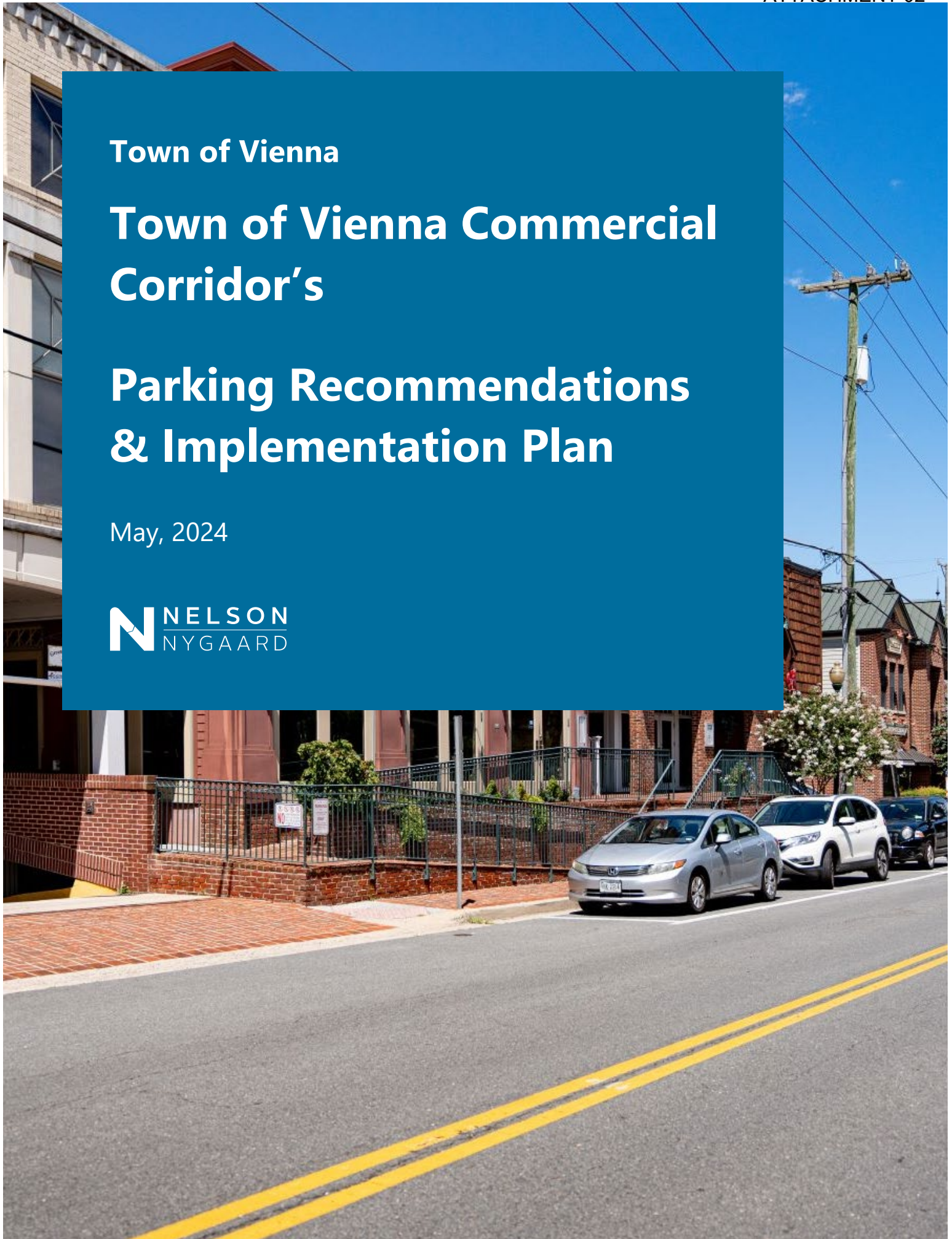
Town of Vienna

Town of Vienna Commercial Corridor's

Parking Recommendations & Implementation Plan

May, 2024

N NELSON
NYGAARD



Town of Vienna Commercial Corridors – Parking Recommendations and Implementation Plan

Town of Vienna, VA

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EXECUTIVE SUMMARY

In response to the 2019 Strategic Plan, the Multimodal Transportation and Land Use Study (2019), the Economic Development Strategy, and the recently completed Zoning Code update process (Code Create Vienna), the time is right to evaluate the effectiveness of the existing parking program and identify opportunities to better manage current and future demand. The Parking Study purpose is to help the Town understand the nature of parking in light of emerging trends and plan for the Town's needs of the next ten years while also informing the Town's treatment of parking within the Zoning Code.

Project Approach

The study team, working closely with town staff, took a comprehensive approach to the parking analysis and recommendations to support the long-term success of the Commercial Corridor's. The analysis includes:

- Current and expected future parking utilization patterns
- Concerns of current business owners, stakeholders, and the public
- Current and future development and land use
- Need and potential for additional parking management systems

Study recommendations and findings recognize that not only are these diverse characteristics and development trends equally important, they are also interrelated.

Ultimately, parking is about economic development, and Vienna's business, property owners, residents, employees and visitors stand to gain by managing parking demand and supply in manner that reinforces the unity of their Commercial Corridor's.

Key Findings

Key findings from parking data collection include:

- **Off-Street Spaces:** There are 5,221 spaces in the study area. 5,127 of those parking spaces are off-street. 94 spaces are on-street. Of the study area's 5,127 off-street spaces, 5,033 spaces are privately owned by commercial enterprises and public agencies. 1% of off-street spaces, are owned by the Town of Vienna and are publicly

available for any Town visitor or customer to use. 47 spaces, less than 1%, of off-street parking, are reserved for ADA parking.

- **On-Street Spaces:** 94 parking spaces are on-street. All are publicly owned, and there are no on-street ADA spaces.

Weekday Parking Utilization Key Findings

- **Off-Street Spaces (5,127 spaces):** Off-street parking utilization peaked during the lunch period (12 p.m.-2 p.m.) on the studied days with just less than half of all spaces utilized (45%). Following the peak period, the number of off-street occupied spaces began to steadily decline throughout the rest of the day. Parking activity was the lowest during the period studied in the 6 p.m.-7 p.m. hour, with 29% of all spaces occupied.
- **On-Street Spaces (94 spaces):** On-street parking activity was the lowest in the 10 a.m.-11 a.m. hour, with 36% of spaces occupied. Weekday on-street parking space utilization peaked during the 12 p.m.-1 p.m. hour with 65% spaces occupied (leaving over a third of all on-street spaces vacant).

Saturday Utilization Key Findings

- **Off-Street Spaces:** On Saturdays, off-street parking utilization peaked at the 12 p.m.-2 p.m. period, at 39% utilization, and then began to gradually decline to the 6 p.m.-7 p.m. hour, where there was a 27% utilization of spaces.
- **On-Street Spaces:** On-street parking activity during Saturdays was generally higher than on weekdays, peaking at 78% occupancy at 2 p.m.-3 p.m. The lowest utilization was in the 5 p.m.-6 p.m. hour, with 51% utilization.

Public Parking Survey Key Findings

- The majority of survey respondents come to the Town's commercial corridors to eat or drink (84.60%).
- Maple Avenue and Church Street are the most common destinations for respondents.
- Over 90% of survey respondents travel to the study area in a private automobile, whether driving alone or driving with others
- Most respondents park on-site or on the same block as their destination. If not on the same block, they likely park about one block away.
- Respondents were asked to select the most important factors when determining where to park. Location and proximity to destination (91%) and ease of finding a space (85%) were selected as the top factors in determining where to park..

Parking Challenges & Opportunities

The following summarizes the key challenges and opportunities as identified through the study process, existing conditions analysis (see Appendix A), field observations and public survey.

Key Challenges

- Private Ownership of Parking and Lack of Public Parking
- Localized Hotspots
- Knowledge of Existing Public Parking

Key Opportunities

- Underutilized Parking
- Shared Parking
- Wayfinding, Signage, and Education
- Parking Regulations

Recommendations

The identification of the key parking challenges and opportunities within the Town's Commercial Corridors provides the opportunity to address those challenges with short-term, high priority strategies. There is also an opportunity to identify long-term strategies that while not ready for implementation by the Town of Vienna right now may be options for the future.

Strategies discussed include:

- Update zoning ordinance to allow adjustments to site parking
- Update zoning ordinance to allow for reduced parking
- Shared parking
- Improve and coordinate wayfinding and branding
- Coordinate programs and event management
- Create a "Park Once" District
- Augment shared parking with microtransit
- Better manage delivery and drop-off activity
- Provide adequate and accessible ADA parking
- Incentivize use of public transit
- Improve and expand bicycle parking and repair facilities
- Prioritize pedestrian crossing safety

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- Create a transportation demand management program
- Identify and allocate an on-going funding and/or revenue stream to support transportation and mobility investments throughout the commercial corridors

1 PROJECT APPROACH

For a small-town community in the bustling Northern Virginia/National Capital region, the Town of Vienna is a distinctive place with traditional and charming neighborhoods. The Maple Avenue corridor includes major retail, specialty shops, restaurants and cafés, and other local businesses. Visitors and residents alike can walk along historic Church Street or enjoy Windover Heights and other historic areas. To support and improve these diverse places, the Town’s 2019 Strategic Plan emphasizes the importance of enhancing traffic safety, promoting multimodal transportation options, and supporting economic vitality through transportation improvements.

In response to the 2019 Strategic Plan, the Multimodal Transportation and Land Use Study (2019), the Economic Development Strategy, and the recently completed Zoning Code update process (Code Create Vienna), the time is right to evaluate the effectiveness of the existing parking program and identify opportunities to better manage current and future demand. This includes achieving better alignment between the demand for parking and the supply of parking spaces, while keeping parking availability at desirable levels among the most convenient, high-demand spaces.

The Town of Vienna hired Nelson/Nygard to initiate a parking analysis of the Town of Vienna’s Commercial Corridors, which includes businesses, restaurants, stores, and other commercial activity along Maple Avenue, Cedar Lane, Church Street, Park Street, Mill Street, Dominion Road, and Center Street. The study area is shown in Figure 2. The Parking Study purpose is to help the Town understand the nature of parking in light of emerging trends and plan for the Town’s needs of the next ten years while also informing the Town’s treatment of parking within the Zoning Code.

Town Vision and Goals

Through plans and policy documents, the Town of Vienna has created a vision of the community that it envisions itself to be in the future. This vision is best stated in the Town Council’s 2019 vision for Vienna: “The Town of Vienna aspires to build on its strong hometown culture and treasured traditions while enhancing its reputation as a premier destination for connected and healthy living as well as notable economic development within

a safe and inviting setting.” The Town’s 2019 Strategic Plan outlines additional goals for the Town of Vienna, including:

- Vienna will ensure a safe community by improving traffic and pedestrian/bicycle safety as well as reducing crime through community engagement and education, investing in public safety technology and facilities, and emphasizing cybersecurity and emergency management.
- A strategically located community, the Town of Vienna will ensure safe, efficient, accessible, and reliable multimodal transportation networks within the Town that link Vienna to the region through use of innovative technology and initiatives.
- The Town of Vienna will be a distinctive, dynamic, and vibrant 21st century community and location of choice for unique, independent businesses that add to the Town’s charm, attract visitors as well as residents, and, collectively, serve to establish the Town as a destination. We will strive to create a healthy balance of businesses in order to enhance citizens’ quality of life and increase the Town’s nonresidential tax base.
- The Town of Vienna values and protects its natural and manmade resources. We embrace our obligation to current and future generations to foster a healthy, safe, and attractive community.
- The Town of Vienna will embrace its independent, active, and welcoming character as a unique place to live-work-play-dine-shop in Northern Virginia. Our traditional events and year-round activities enrich the Town's vibrant, caring, and inclusive community identity and spirit.

While parking is not an explicit town goal, parking strategies and management can help the town achieve its goals and move towards its vision. Managing expensive and land-consuming off-street parking can facilitate more green space, active transportation (biking, walking, and rolling), increased economic growth, and a safer, less congested Town.

Project Goals

In addition to the Town’s overall goals and vision, the Town has identified the following specific goals and objectives for this parking study:

1. Capacity: A quantitative assessment of the parking spaces supply and demand for study area parking, to include a determination on the current and future parking demand and capacity in both the short-term and future development scenarios.

2. Maintenance & Management: Strategies to improve the maintenance and management of publicly¹ and privately owned² surface parking lots, garages, and on-street parking spaces to include an evaluation of shared parking systems.
3. Operations: An evaluation of the days and hours of parking enforcement, current parking restrictions, and associated wayfinding signage effectiveness.
4. Safety & Convenience: Ways to provide safe and convenient parking for all who wish to park in Vienna, including residents, employees and visitors as well as accommodations for special events.
5. Pricing: A determination of the need and feasibility for demand-based pricing or incorporation of parking user fees for garages, surface lots, and on-street parking.
6. Design: Recommended design improvements to increase the efficiency of parking facilities, to include improvements to parking-related signs and other wayfinding, and/or new parking facilities.
7. Regulations: Review, analyze and recommend updates to the off-street parking regulations in the Town's Zoning Ordinance.

Study Process

This plan was completed through a series of analytical phases, documenting conditions, identifying and exploring key issues and opportunities, and developing strategic recommendations. Throughout the process, coordination with municipal project leaders, key stakeholders, and the public was integral.

As part of the process to develop this study, the project team developed an existing conditions and analysis report and held public outreach activities to gather feedback on their initial recommendations. A public survey was launched in February 2023, which collected over 700 responses. Following the public survey, the project team held public meetings with business owners and tenants in May 2023. After the engagement meetings, the project team and Town of Vienna staff refined project recommendations to help resolve both immediate parking needs and better plan for future parking challenges. Figure 1 provides an overview of this process. In addition to process steps, the study team presented findings and recommendations from the Assessment of Existing Conditions and the Recommendations and Implementation Plan to the Town Council on February 12, 2024.

¹ Public parking: Any parking available to the public that is not reserved for a specific business. An example of public parking would be on-street parking on Church Street.

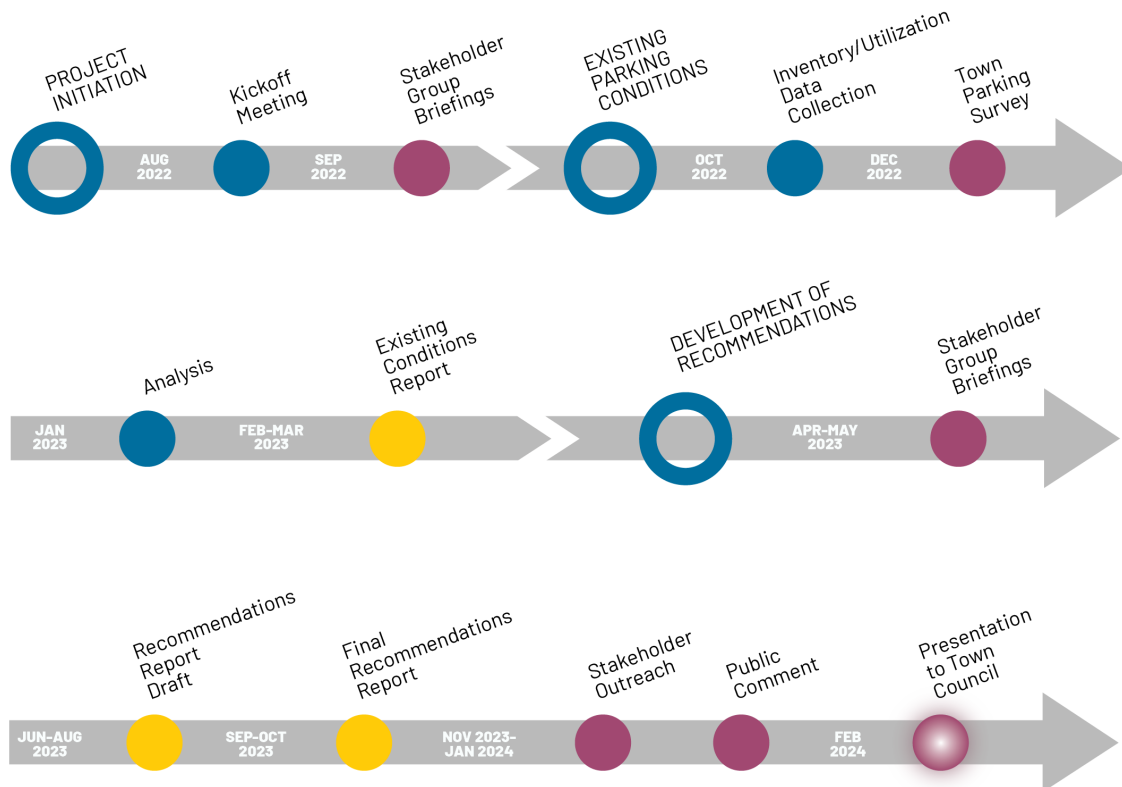
² Private parking: Any parking owned by a specific business or reserved for the customers of a specific business.

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The following sections describe the existing conditions and the team’s proposed project and policy recommendations for the Town of Vienna.

Figure 1: Study Process



2 EXISTING CONDITIONS SUMMARY

The study is focused along the Virginia State Route 123 (Maple Avenue) that runs through the study area. The study area, shown in Figure 2, includes areas along the section of Maple Ave, which runs southwest to northeast, from James Madison Dr to Beulah Rd NE. Also in the study area are the neighboring streets that run either parallel to or intersect with Maple Ave, including Church St NE (SW to NE), Dominion Rd NE (NW to SE), and Mill St NE (NW to SE). The study area was selected through discussions and feedback from Town Council, residents, businesses and Town staff.

Figure 2: Study Area



Along both Maple Avenue and Church Street, commercial property land uses predominate in varied degrees of intensity, scale, and mix. Townhouse and multi-family zones create a transition between the much lower-density commercial and single-family detached home sections that make up the majority of the land use in the Town in regions that are adjacent to Maple Avenue. This transitional sector acts as a barrier between single-family residential areas and commercial areas.

Church Street

Church Street is a historic street running parallel to Maple Avenue. Compared to the strip-mall style of development along Maple Avenue, Church Street is home to smaller shops. Until the 1950s, Church Street was the main commercial corridor for Vienna. In the 1950s, many of the businesses in the Town began to move from Church Street to Maple Avenue, where shopping centers were being developed.

In 1999, the Vienna Town Council adopted an ordinance to enhance the appearance and economic vitality of businesses in the historic Church Street commercial corridor. The plan introduced an innovative concept in commercial development - an incentive-based development program called the Church Street Vision Plan to preserve the unique character of what was once Vienna's main street.

Under the plan, property owners in the C-1B Pedestrian Commercial Zone (now retitled "CS-O Church Street Vision Incentive Overlay in the newly adopted code) are encouraged to renovate and develop properties in accordance with adopted guidelines that reflect the main street urban architecture reminiscent of late 19th century, small-town America streetscapes. In exchange, owners may receive additional building square footage, a reduction in parking requirements, and an expedited review process. In total, five projects have been approved under the Church Street Vision project.

Key Existing Condition Findings

Appendix A includes the full Existing Conditions report that, along with the user survey and stakeholder discussions, informed the study's recommendations. The existing conditions analysis revealed two key takeaways: the Town of Vienna has both a general excess of parking capacity and localized hotspots of parking demand. In general, people can find parking and there are areas that often see few cars throughout the day, like the Conte's Bike Shop parking lot by the Caboose; but there are some areas, like Bear Branch Tavern, Whole Foods, or Hawk & Griffin, where it can be difficult to find parking at peak periods. A high-level overview of the existing conditions analysis is included below.

Inventory

Key findings from parking data collection include:

- **Off-Street Spaces:** There are 5,221 spaces in the study area. 5,127 of those parking spaces are off-street. 94 spaces are on-street. Approximately 99% of parking in the study area is off-street. Of the study area's 5,127 off-street spaces, 5,033 spaces are privately owned by commercial enterprises and public agencies. These spaces can only be used by patrons of the specific commercial enterprise or for specific public uses (i.e., W & OD Trail use). 60 spaces off-street spaces, 1% of off-street spaces, are owned by the Town of Vienna and are publicly available for any Town visitor or customer to use. 47 spaces, less than 1%, of off-street parking, are reserved for ADA parking.
- **On-Street Spaces:** 94 parking spaces are on-street. All are publicly owned, and there are no on-street ADA spaces.

Figure 3 Existing Off-Street Parking Inventory and Ownership

Regulation	Parking Spaces	Ownership	% of Total
Private Parking	5,033	Various Owners	99%
Public Parking	60	Town of Vienna	1%
ADA Specific	47*	Various Owners	<1%*
Total	5,127	-	100%

Figure 4 Existing On-Street Parking Inventory and Ownership

Regulation	Parking Spaces	Ownership	% of Total
Private Parking	-	-	-
Public Parking	94	Town of Vienna	100%
ADA Specific	-	-	-
Total	94	-	100%

Utilization

The parking utilization methodology is detailed in Appendix A – Existing Conditions report. The Nelson\Nygaard survey team conducted parking utilization counts on two weekdays (Wednesday, October 19th, and November 9th, 2022) and weekend days (Saturday, October 22nd, and Saturday November 12th, 2022) during each day. On both Wednesdays and Saturdays, data collection began at 10AM with the last survey beginning at 6PM. Within the study area, on-street and off-street parking spaces noted by Town staff as potential high demand spaces (focused) were recorded every hour while the remaining spaces were recorded every 2 hours.

The study team considered the following in selecting dates to complete utilization counts:

- Capturing demand from typical study area activity.
- Weather.
- Construction schedules which may significantly impact roadways and/or parking supply.
- Day of the week - Nelson\Nygaard has found that mid-weekdays such as Tuesday, Wednesday, and Thursday represent a typically busier day than Mondays or Fridays.

Weekday Parking Utilization Key Findings

- **Off-Street Spaces (5,127 spaces):** Off-street parking utilization peaked during the lunch period (12 p.m.-2 p.m.) on the studied days with just less than half of all spaces utilized (45%). 3,184 off-street spaces remained empty throughout the study area during this peak period. Following the peak period, the number of off-street occupied spaces began to steadily decline throughout the rest of the day. Parking activity was the lowest during the period studied in the 6 p.m.-7 p.m. hour, with 29% of all spaces occupied.
- **On-Street Spaces (94 spaces):** On-street parking activity was the lowest in the 10 a.m.-11 a.m. hour, with 36% of spaces occupied. Weekday on-street parking space utilization peaked during the 12 p.m.-1 p.m. hour with 65% spaces occupied (leaving over a third of all on-street spaces vacant).
- **On-Street Versus Off-Street:** Average weekday utilization (as a percentage occupied) for on-street parking was 20% higher than off-street average weekday utilization.

Saturday Utilization Key Findings

- **Off-Street Spaces:** On Saturdays, off-street parking utilization peaked at the 12 p.m.-2 p.m. period, at 39% utilization, and then began to gradually decline to the 6 p.m.-7 p.m. hour, where there was a 27% utilization of spaces.
- **On-Street Spaces:** On-street parking activity during Saturdays was generally higher than on weekdays, peaking at 78% occupancy at 2 p.m.-3 p.m. The lowest utilization was in the 5 p.m.-6 p.m. hour, with 51% utilization.
- **On-Street Versus Off-Street:** The average Saturday utilization for on-street parking is 31% higher (as a percentage of spaces occupied) than the off-street average utilization on Saturday, consistent with studied weekday's on- and off-street average utilization differences.

Public Parking Survey

A public survey was launched in February 2023, which collected over 700 responses. The survey asked residents which commercial corridors they most often visit, the purpose of their visits, how often they park in commercial corridors, how long they typically park, and what factors into their parking decisions. Residents were also able to share feedback for improvements to parking.

Public Parking Survey Key Findings

- The majority of survey respondents come to the Town's commercial corridors to eat or drink (84.60%).
- Maple Avenue and Church Street are the most common destinations for respondents.
- Ninety percent of survey respondents visit the Town of Vienna at least once per week.
- Over 90% of survey respondents travel to the study area in a private automobile, whether driving alone or driving with others
- Most survey respondents typically park in a free parking lot or garage when coming to Vienna.
- Most respondents park on-site or on the same block as their destination. If not on the same block, they likely park about one block away.
- Approximately 36% of respondents park for one to two hours when visiting the study area and 33% park for 30 minutes to one hour. Very few respondents park for more than three hours.
- Respondents were asked to select the most important factors when determining where to park. Location and proximity to destination (91%) and ease of finding a space (85%) were selected as the top factors in determining where to park. Other

common responses were cost or price of parking (38%), type of parking facility (32%) and familiarity with location and the facility (22%).

- Respondents would rather walk further to their destination for free or cheaper parking, rather than paying more to be closer to their final destination. Respondents also prefer to drive to and park at each destination, rather than parking once and walking, biking, or taking transit between destinations in Vienna.
- Respondents shared that Vienna’s free parking, parking locations, and walkability of the Town work well. However, lack of available parking, residential spillover parking (i.e., vehicles parking in residential areas when visiting commercial destinations), and a lack of shared parking (i.e., parking spaces are shared by more than one user) make parking difficult. Respondents would like improvements to be made to parking by creating additional free parking, a parking garage, shared parking agreements, improving active transportation and public transit infrastructure and traffic flow on Maple Avenue, and increased parking requirements for new developments.

3 KEY CHALLENGES AND OPPORTUNITIES

The following is a summary of key challenges and opportunities as identified through the study process, existing conditions analysis (see Appendix A), field observations and public survey. Capturing the most pressing challenges, and potential solutions, these provided a basis for the development of recommendations.

Key Challenges

Private Ownership of Parking and Lack of Public Parking

Many parking lots are privately-owned and are regulated to allow only customers of the business to park in those spaces. This does not allow drivers to park once and walk to multiple destinations within the Town, making people drive and park in multiple locations if needing to visit more than one business. Examples include Jades Shopping Center & Vienna Plaza, and 107-171 Maple Ave. W.

Localized Hotspots

Despite general underutilization within the study area, certain areas and uses, such as the Mill Street District and the western portion of Maple Avenue, see high utilization rates at peak times. Examples include Whole Foods Market, Windover Square, Hawk & Griffin, 305-311 Maple Ave. Professional/Medical Center, and commercial auto repair uses along Mill Street and Dominion Road.

While not an immediate issue, the businesses along Dominion Road lease their parking spaces from NOVA Parks. Due to the primary auto-use nature (i.e., repair shops) these spaces are often full and at capacity. Insufficient capacity could be a potential issue if NOVA Parks ever terminated those leases.

Knowledge of Existing Public Parking

Where there is existing public parking, such as parking at the Patrick Henry library after hours and parking at the Town Hall, residents and visitors have indicated that they are unaware of this parking, or do not know where the parking is located.

Key Opportunities

Underutilized Parking

Overall, most parking in the areas studied within the Commercial Corridor's in the Town are underutilized. "Underutilized" parking is typically recognized as being less than 60% occupied. Example areas include the Danor Plaza, Glyndon Plaza and Maple Avenue Shopping Center. When a parking facility is underutilized, especially during peak periods, it is viewed as having excess capacity and strategies for encouraging its use or reducing the number of parking spaces should be considered.

Shared Parking

If the Town of Vienna has underutilized private parking and lacks public parking, a shared parking program or shared parking agreements are a better option for the Town than the cost of building a public parking garage. Parking capacity exists in Vienna – it's just not available for all visitors to the Town at their immediate end destination. A shared parking district/program could alleviate many of these issues.

Wayfinding, Signage, and Education

While there are far more privately-owned spaces, the Town of Vienna does have on-street, publicly available parking and off-street parking available to the public during non-business hours. Improved wayfinding and signage can provide direction to public parking and publicly available parking (if privately owned).

Parking Regulations

Parking is an effective tool for supporting the community goals articulated in Vienna's comprehensive plan. Outdated or little-known parking provisions of a county or city's municipal or zoning code can often inhibit desired developments and infrastructure, hinder equitable growth, and increase vehicle miles traveled and traffic. The general underutilization of existing parking in commercial areas highlights the oversupply of parking required through the current zoning code. This project presents an opportunity to consider revising the current parking requirements for commercial development in the Town's Zoning Code to enable lower parking minimums and/or to increase other zoning regulations to allow for increased development.

4 RECOMMENDED STRATEGIES

The identification of the key parking challenges and opportunities within the Town's Commercial Corridors provides the opportunity to address those challenges with short-term, high priority strategies. There is also an opportunity to identify long-term strategies that while not ready for implementation by the Town of Vienna right now may be options for the future.

Strategies discussed include:

- Update zoning ordinance to allow adjustments to site parking
- Update zoning ordinance to allow for reduced parking
- Shared parking
- Improve and coordinate wayfinding and branding
- Coordinate programs and event management
- Create a "Park Once" District
- Augment shared parking with microtransit
- Better manage delivery and drop-off activity
- Provide adequate and accessible ADA parking
- Incentivize use of public transit
- Improve and expand bicycle parking and repair facilities
- Prioritize pedestrian crossing safety
- Create a transportation demand management program
- Identify and allocate an on-going funding and/or revenue stream to support transportation and mobility investments throughout the commercial corridors

HIGH PRIORITY STRATEGIES

High priority strategies include:

Update Zoning Ordinance to Allow Adjustments to Site Parking

Fairfax County recently updated their zoning code. As part of this update, the County created a provision to address adverse off-site impacts from parking adjustments (i.e., a business was provided a parking zoning reduction but now creates spill over parking into residential neighborhoods or use of non-shared private parking by adjacent businesses who received a

parking zoning reduction). The Town of Vienna could recommend something similar. Language could be similar to the Fairfax language:

"If it is determined by the Director or Board that a parking adjustment has resulted in inadequate site parking and has created adverse off-site impacts to public health and safety, a parking utilization study must be conducted by the property owner/business and submitted at the request of Director or Board. The parking utilization study must be based on applicable requirements of The Code of the County of Fairfax, Virginia, and the Zoning Ordinance in effect at the time of the study's submission. Following review of that study, or if a study is not submitted within 90 days after its request, the Director or Board may require alternative measures to satisfy the on-site parking needs of the property. Such measures may include, but are not limited to, compliance with the parking requirements for the site."

Update Zoning Ordinance to Allow for Reduced Parking

Under the Town's current zoning ordinance, development in Vienna's commercial corridors is required to provide a minimum number of off-street parking spaces. Much of the parking in Vienna is underutilized, meaning that in general, there is more parking capacity than needed by specific developments. To address the gap between capacity and demand, Vienna could address underutilized and oversupplied parking by reducing minimum parking requirements, right-sizing retail and service-based land uses, incorporating a new shopping center off-street parking requirement, and allowing parking reductions through shared parking calculations. These strategies could be key priorities if developers wanted to redevelop some of Vienna's older shopping centers, like the Danor Plaza or Glyndon Plaza on Maple Avenue.

Sub Strategy 1: Update Commercial Off-Street Parking Requirements

Momentum to rethink parking is growing across the country and in Vienna. While better management of on-street parking became more widely adopted within the last decade, changes to off-street parking policy (arguably most critical for climate and affordability goals) have lagged. However, an uptick in parking policy changes across the country and region has occurred in recent years.

Appendix B provides a review of the approved and proposed parking standards through the Town's recent Zoning Code update process 'Code Create', in conjunction with the analysis undertaken within this Parking Study as well as recommendations and comments relating to policy and programs, tailored to meet Town goals and objectives.

Many changes to the off-street parking requirements have already been incorporated into the recent Zoning Code update, but those specifically addressing commercial parking

requirements have been awaiting the analyses of this study. The key recommendations include the following:

1. Right sizing of retail and services-based land-uses

Current utilization of parking supply within the Commercial Corridors area of the Town shows that there is a need to right size the off-street parking requirements for retail and service-based land uses. The utilization data as well as recent peer jurisdiction zoning changes, (see Appendix C), shows that 4 spaces per 1,000 sq. ft would right size the supply/demand ratio.

The following uses with currently 1 space per 200 sq. ft. requirements can be amended to 4 spaces per 1,000 sq. ft.

- Adult Business
- Animal Care Facility
- Financial Institution
- Massage Therapy
- Office
- Retail (General)
- Grocery (to be consistent with retail)
- Services (General and Personal)

The following uses with currently 1 space per 300 sq. ft. could be amended to 3 spaces per 1,000 sq. ft.

- Club or Service Organization
- Cultural Facility or Museum

Government parking is also currently required to provide 1 space per 300 square feet of gross floor area. The recommendation for this use is the following.

"Determined by the Zoning Administrator based on the number of spaces required to accommodate employees, public use vehicles anticipated to be on-site at any one time, visitor parking, and the availability of areas on-site that can be used for auxiliary parking in times of peak demand. The number of spaces required for government office use may not be less than that required for office."

2. Incorporation of a new Shopping Center off-street parking requirement

In accordance with the Zoning Code definition of a “Shopping Center” a separate off-street parking requirement should be established to accommodate the current conditions within the Town and as recognized in peer jurisdictions.

Figure 5 Proposed Shopping Center Off-Street Parking Requirements

Shopping Center Size (GFA)	Minimum Required Off-Street Parking Spaces
<100,000 gfa	4 spaces per 1,000 sq. ft.
>100,000 gfa	3 spaces per 1,000 sq. ft.

The shopping center land-use designation enables the development to meet the off-street parking requirements at build-out and all subsequent change of individual tenants do not have to show parking adequacy since the development as a whole is already in compliance. For the Town of Vienna it eliminates potential barriers for small and locally owned businesses to open in the Town within existing (and future shopping centers) and not have to prove they specifically meet off-street parking requirements.

3. Parking reductions through shared parking calculations

Recognizing that providing parking can be a significant burden to redevelopment consistent with Town goals, the Town can allow shared parking on one site or for two or more properties to meet parking requirements. The Town Council could be authorized to approve a reduction in the number of required spaces provided on-site up to 66% for two uses that share the same parking area, whether on the same lot or abutting lots. Approval could be subject to conditions such as the following:

- A shared parking agreement (for two or more uses), contract, lease, or licensing agreement is recorded on file at Town Hall, and updated annually.
- Some portion of the shared parking facility lies within 1,000 feet from a regularly used entrance to each building served by the arrangement.
- Sufficient space is set aside for the remainder of the required spaces.
- The calculation of required spaces follows a specified formula to ensure that only non-overlapping demand is accommodated in shared spaces:
 - a. For each use, calculate the minimum parking requirement as normal: the minimum parking ratio for that use, multiplied by the size of the

use

(measured appropriately as square footage, number of units, etc.).

- b. For each time period, multiply the results of a. above by the appropriate time-of-day factor from Figure 6.
 - c. For each time period, sum the results of b. above across all uses.
 - d. The time period with the highest overall sum represents peak demand and therefore is the minimum required number of shared spaces.
- Note that the specified percentages could be adjusted over time and in response to specific experiences and new data.

Figure 5 Shared-Parking Calculations: Percent of Peak Demand by Use by Time of Day

Use	Weekday 8am – 6pm	Weekday 6pm - Midnight	Weekday Midnight – 8 am	Weekend 6am – 6pm	Weekend 6pm - Midnight
Residential	60%	100%	100%	80%	100%
Office/Industrial	100%	10%	5%	5%	5%
Commercial/Retail	90%	80%	5%	100%	60%
Restaurant	70%	100%	70%	80%	100%
Entertainment	30%	100%	5%	80%	100%
Institutional (non-religious)	100%	40%	5%	10%	10%
Religious Institution	20%	40%	5%	100%	50%

Sub Strategy 2: Ensure Supportive Parking Design

To achieve a vibrant streetscape with safe and attractive walking conditions, Vienna should consider adopting code provisions that directly address the design of parking facilities. As described in previous memo's, Saugus, Massachusetts, leverages its zoning code to do so, with the following language:

"Projects shall enhance the pedestrian environment and bicycle circulation by providing safe and convenient pedestrian access into plans for existing buildings as well as new construction and parking areas and should be designed in concert with

landscaping plans so as to minimize the number and size of curb cuts and provide sidewalks along roads where possible

- 1. There shall be clear grade separated pedestrian connections between all parking areas and all buildings. A raised, landscaped sidewalk will be constructed through the main parking lot to facilitate safe pedestrian travel through the site. The sidewalks required within planting strips may be used to meet this requirement.*
- 2. Continuous internal pedestrian walkways, no less than 5 feet in width, shall provide a direct link from the public sidewalk or street right-of-way to the principal customer entrance of all principal retail establishments on the site. Walkways shall also connect focal points of pedestrian activity such as, but not limited to, transit stops, street crossings, and building and store entry points. The sidewalks required within planting strips may be used to meet this requirement.*
- 3. Unobstructed sidewalks, no less than 6 feet in width, shall be provided along the full length of the building along any façade featuring a customer entrance, and along any façade abutting public parking areas. Along facades with building entrances, the required 6-foot-wide sidewalk area shall be set back from the façade by a 3-foot area that either contains planting beds or additional sidewalk width.*
- 4. All internal pedestrian walkways and crosswalks shall be distinguished from driving surfaces through the use of durable, low maintenance surface materials such as pavers, bricks or scored concrete to enhance pedestrian safety and comfort.*
- 5. Buildings and sidewalks shall be handicapped accessible."*

At a minimum, Vienna should adopt language that ensures connectivity between parking lots and minimizes future curb-cuts and driveway connections directly from parking lots onto Maple Avenue. Jenkintown, Pennsylvania, achieves this via a code requirement:

*"Interconnected **parking** areas. New **parking** areas on abutting nonresidential lots should be interconnected by access driveways. Each nonresidential lot shall provide cross-access easements for its **parking** areas and access driveways, guaranteeing access to adjacent lots for future **connections**. Interconnections shall be logically placed and easily identifiable to ensure convenient traffic flow."*

Shared Parking

Shared parking is the co-location of off-street parking in a single location that serves the parking demand for multiple land uses in a mixed-use context. Shared parking is particularly valuable in walkable, mixed-use centers, like Vienna aims to be, in which small, private lots tend to have demand when their associated land uses are busy, and significantly under-

utilized much of the rest of the time. Fortunately, such districts also present two distinct, cross-supportive shared-parking opportunities that can reduce parking supply needs while providing more destinations with “overflow” parking resources.

There are some areas and specific uses in the Commercial Corridors (i.e., Mill Street District and western Maple Avenue) that experience high parking utilization at peak times with associated parking spillover to adjacent parcels. Some of these land-uses were developed and approved with parking waivers due to lot size limitations or other restrictions. Shared parking agreements with adjacent or nearby property owners with under-utilized parking or different peak demands would enable current and new land-uses with demand for more parking spaces to develop without having the cost-burden or land requirement for new parking.

Two types of shared parking arrangements could work in Vienna: business-to-business shared parking agreements and public-private shared parking agreements.

Sub-Strategy 1: Assist Businesses in Creating Business-to-Business Shared Parking Agreements

Business-to-business shared parking is an agreement between adjacent land uses to share their parking. This is often implemented by municipal government policy to allow and encourage it, with sharing arrangements actually made between individual facility developers and managers. Some shared parking occurs naturally – for example, the Vienna Shopping Center has several businesses that share parking because the shopping center owns the parking; and Bear Branch Tavern customers can park at the Patrick Henry Library after library hours. However, there are areas in Vienna that have capacity issues, like Hawk and Griffin and the Wawa, where customers park in the parking lot for the Village Green shopping center. These areas could benefit from additional parking capacity, rather than having customers for one business park illegally in another business’s parking lot.

A Town staff member could be tasked with identifying shared parking opportunities and reaching out to the relevant development owners. The Town could help businesses facilitate shared parking agreements in the commercial core area and could serve as a resource for private-to-private sharing arrangements.

Viable sharing arrangements often fail to materialize due to a lack of initiative among those seeking more capacity, or to liability concerns among those with excess capacity. The Town of Vienna can play a vital role in realizing these potential capacity gains by engaging these parties, actively exploring the following options.

- Liaise between business, property, and lot owners with recognizable opportunities for mutually beneficial arrangements. Currently adjacent lots along Maple Avenue are

prime locations for shared parking opportunities as are non-competing uses within the Mill Street District.

- Initiate negotiations by providing an independent perspective on issues and opportunities, identifying shared-benefit opportunities, and helping to address common concerns.
- Directly negotiate agreements and, include identifying strategic agreement components, as necessary, such as:
 - Compensation in the form of increased lot maintenance, lot improvements, added security, etc. (i.e., Split costs of these improvements amongst the private owners).
 - Restricting access to the shared parking, via permits, to area employees to reduce risk and increase accountability.
 - Defining any added security or enforcement measures necessary to ensure that the primary uses of the lot are prioritized.
 - The Town can step in to remove stubborn barriers to viable arrangement, when feasible. This is not necessary but can serve as an incentive for private property owners to participate in shared parking. This commonly includes assuming added liability-insurance costs related to the sharing agreements. Commercial general liability policies carrying a \$2 million aggregate limit and typical to shared parking agreements cost approximately \$425-\$750 annually.

Sub-Strategy 2: Public-Private Shared Parking

Another important type of shared parking arrangement involves the Town creating shared parking agreements with private owners to increase the supply of public parking for all Town residents and visitors. The Town of Vienna could enter into shared parking agreements with owners of underutilized parking, like the Conte's Bikes lot, rather than property owners entering into shared parking agreements with each other. Agreements between the Town of Vienna and property owners could open up the supply of public parking for off-peak hours, such as weekends or after 5pm at land uses like banks or office uses that are generally closed after 5pm on the weekdays and on the weekends. This parking could be available for:

- Overflow parking for the popular destinations during peak times such as restaurants on Church Street and Maple Avenue like Hawk and Griffin, Bear Branch Tavern, and time-specific uses like group fitness classes.
- Additional parking for users of the W&OD Trail.
- Public-private shared parking arrangements could also supplement the expected future parking at the Patrick Henry library. The Town could provide signage and wayfinding for the shared lots, so Vienna residents and visitors know what parking is publicly available.

Facilitation of future development when parcel sizes and/or proposed land-uses cannot fulfill their parking zoning requirements on-site but would be expected to generate more parking demand than the property can accommodate.

Improve and Coordinate Wayfinding and Branding

Sub-Strategy 1: Improve Wayfinding Options

Although public parking options within the Commercial Corridors study area are limited, there is currently minimal wayfinding to find these options. In order to direct drivers to public parking facilities, and to any future publicly available parking (i.e., shared private parking with public availability) wayfinding and signage should be provided. It is noted that wayfinding and streetscape projects are included in the Town's Capital Improvement Program and on a list of projects to be completed by the Economic Development Division this fiscal year.

Signage should clearly convey directional information and hours, as well as including parking rates if applicable, while also directing drivers' attentions to less obvious public parking options. Wayfinding, signage, and information should be designed and deployed to address three distinct opportunities to inform drivers of their options.

- **Before Arrival:** Making public parking information available for visitors and customers before arriving will allow drivers to plan their trips ahead of time and find parking with ease. Having a single, simple map posted on the town website and posted at other activity centers, will provide a consistent informational guide. Wayfinding signs should include directional arrows towards public lots and should have consistent branding with parking information on the Town of Vienna's website.
- **Upon Arrival:** Signage should be clearly visible, designed consistently, placed in strategic locations, and should provide clear guidance to and from parking locations. Off-street lots should have easy-to-read identification entrance signs and exit signs, including information on regulations.
- **Post Arrival:** Providing clear pedestrian signage helps to create and promote a "park once" district, allowing customers to feel comfortable walking to multiple locations on foot. Signage also allows parkers to easily find their destination and parked vehicle at either end of their trip.

Sub-Strategy 2: Accentuate Branding and Marketing

Parking facilities should function as a positive, marketable asset for Vienna. Parking facilities may incorporate public art, creative lighting, and theming to enhance the parking experience for visitors to the Town.

Parking management should strive to create a clearly identifiable set of public parking facilities. This should be accomplished through the use of easy-to-understand program

branding and marketing, an integrated signage plan, web-based information, and special event parking programs. Parking management may also take on the role of educating the public regarding management strategies and programs in order to promote downtown as a unique and visitor-friendly regional destination. The location of available parking should be well publicized to improve the perception of parking availability as a positive element of the downtown experience.

As parking management carries out facility condition assessments, current signage attached to structures and posted in lots should also be examined to identify and create a plan to replace incorrect, outdated, or unneeded signage and to identify new signage needs. New consistent identification and regulation signage should match the new parking program brand in an effort to enhance the image of the parking system, thereby making parking a more positive and user-friendly experience. This effort should extend to privately-owned lots that are made available to the public. Identification signage as well as interior regulation signage and pavement markings should be standardized.

Strategically Invest in Public Parking Supply in Key Locations

This study has identified that even during existing peak demand, many parking spaces are available. However, drivers can't find them, don't want to use them, are not aware that they exist, or know about them but cannot park once and walk due to private parking arrangements. The study area currently has a parking management problem—adding more parking, especially more “private” spaces that are not accessible to the public, will only exacerbate the Town's current dilemma. All prior recommendations should be prioritized before investment in new parking facilities.

Parking is expensive to build, operate and maintain. For example, a 200-space parking garage would cost the Town at least \$6 million to build (depending on type of garage, land acquisition costs etc.) and \$15 million to maintain over its lifetime. Given these costs, new parking construction should be evaluated relative to the cost-effectiveness of the other recommendations designed to improve overall management, enhance mobility, and reduce demand for parking. Therefore, strategically investing in public parking supply in a key location as new development occurs has to make economic sense as well as providing opportunities to manage the parking supply, consolidate parcels for development or encourage infill development. One such example is the reconstruction of the new Patrick Henry Library, which with Town support will provide 209 parking spaces with shared parking amongst Library users and public parking for the Town. The Town will be able to leverage the additional public parking to facilitate mixed-use development projects within the Commercial

Corridor’s study area. With the pending Library reconstruction due in Fall 2024, the additional public parking supply means that the Town will not need to consider a separate parking investment (i.e., garage) in the short or mid-term future.

Coordinate Programs and Event Management

Parking management should take a lead role in parking program coordination and should act as a centralized resource that coordinates and distributes information related to parking supply, availability, planning, special programs, event activities, and other resources.

This can be done through physical signage, marketing, and a strong web-based information program. As such, the official parking website should be compared to best practice parking department websites for layout, ease of use, and thoroughness of content, then updated accordingly. Content should work hand in hand with facility technology upgrades, ideally displaying real-time parking availability. Any website update should also be considered in the context of developing a new parking department brand.

Event management, particularly daytime events, should be coordinated between public and private parking management agencies. Special events create localized demand ranging from dozens to hundreds of vehicles.

Depending on the event location and the surrounding parking supply, mitigation measures may include the previously discussed use of remote lots, enhanced wayfinding – including to privately owned and managed facilities, expanded valet locations and integrated online information.

Sub-Strategy 1: Valet Parking for Event Management

The enabling of valet parking during periods of high demand allows for expanded access to parking. Within the Commercial Corridors, valet parking could be provided by businesses for special events (i.e., an event at a restaurant or business) or by the Town itself for special events (i.e., Oktoberfest or Summer on the Green Concerts)

An on-street public valet drop-off/pickup station can greatly expand access to on-street parking during high-demand times. These services provide a high level of parking convenience, make effective use of underutilized off-street locations, and promote park-once by allowing the service to be used as an extension of the Town’s parking options. A public valet can also facilitate shared parking arrangements by controlling access to a potential shared lot, and assuming any increased liability. This can open up access to private parking lots that might otherwise remain significantly underutilized during evening and weekend peaks.

A pilot program should clearly define valet parking zones, operating hours, and vehicle circulation patterns to and from the final parking location. The program should formalize operator permitting and application procedures in Town code.

LONG-TERM STRATEGIES

Create a “Park Once” District

Even in places where most people drive to their destinations, the most successful commercial corridors will feature sidewalks full of pedestrians walking between their destinations. In Vienna, this could look like someone riding on the W&OD Trail or driving into Vienna, stopping off to look at the Caboose and the Freeman Store and Museum, before walking over to one of the restaurants on Church or Bear Branch Tavern for lunch. This is often known as a “park once” district, because people are encouraged to park in one place and then make stops on foot rather than driving from one destination to another within the district, as you would with a car-oriented strip mall area. In the Town’s goals, it appears apparent that the Town would like to move to a more walkable development pattern within the study area. Creating the type of environment where it is easy for people to walk between destinations involves both good urban design and parking policies. If each destination is required to provide its own off-street parking, and each building may have parking on all sides, dead zones of surface parking lots are created between destinations that make walking distances longer and walking experiences less pleasant, so that people have every incentive to get back in the car to go a few stores down. All of the strategies listed in this document can help Vienna achieve a park-once district, and can help Vienna achieve broader town goals stated earlier in the report.

Augment Shared Parking with Microtransit

If the Town of Vienna entered into several shared parking agreements for public parking throughout the commercial areas, the Town could consider creating a commercial microtransit service to transport visitors between parking lots and destinations, which may not be in the commercial areas, to key commercial destinations like Mill Street, Church Street or Maple Avenue. The key purpose is to enable visitors to park once and visit multiple destinations in the Town of Vienna without having to drive and park at each destination.

Examples such as the Downtowner in the City of Aspen and the City of Annapolis Current, provide free door-to-door services with an electric vehicle throughout their Downtown service area. These services can begin on a small scale with a single low-speed electric vehicle during weekends, special events and peak demand periods and expand as demand dictates.

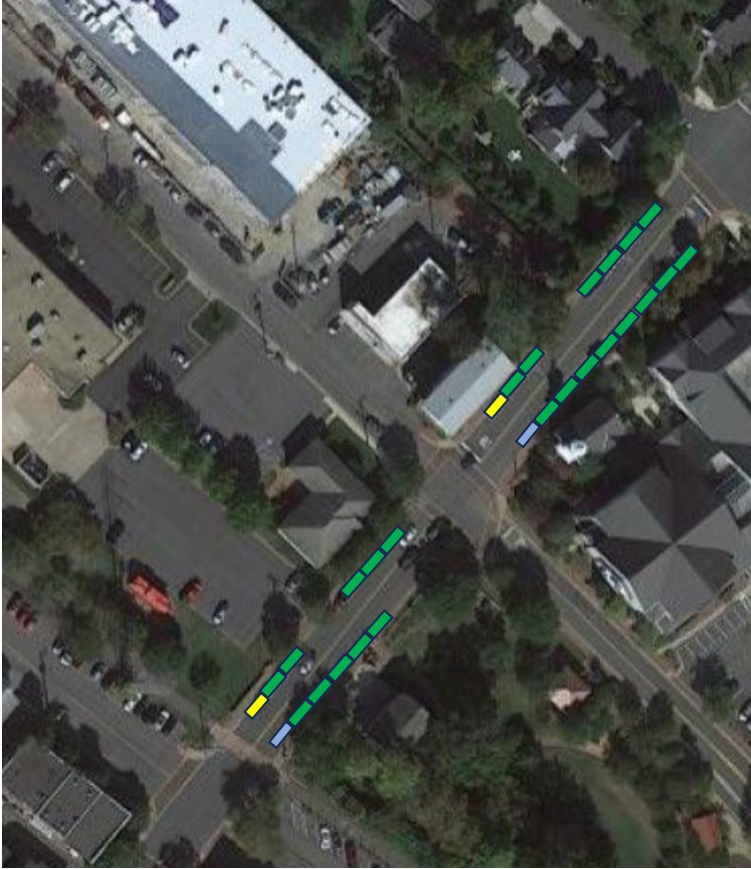
Better Manage Delivery and Drop-Off Activity

As the demand for loading/drop-off areas has increased due to private ride hailing and parcel delivery activity, cities are seeing an imbalance in the amount of curbside space required to properly support these uses. An internet-based ride hailing service behaves differently than traditional quick pick-up taxi service while parcel delivery vehicles behave differently than supply delivery, the traditional designed use for loading zones. In the absence of available curbside space, both rideshare vehicles and delivery trucks are inclined to simply double park, creating impediments to traffic flow and safety.

The Town of Vienna should change the dynamics of a number of on-street parking spaces within the Commercial Corridor study area such as along Church Street between Park Street and Center Street. During certain times of day, identified as the peak hours for both ride hailing activity and parcel delivery, these spaces would not allow private vehicle parking. Outside of these peak hours, these spaces would revert to their original general public parking use. Enforcement of these zones is critical to the success of these spaces including appropriate citation fees which should be comparable to other cities and towns in the Region. The zones should be monitored and enforced by the Town of Vienna Police Department (or their designee) with fines as outlined in the Town Code - Sec. 9-12.6. - Fines and penalties.

Implementation would require an assessment by Town Department of Public Works staff of passenger pick-up/drop-off and parcel delivery activity by time of day of a typical weekday and weekend. Spaces chosen would ideally be located at the beginning or end of the block to allow both types of drivers to easily pull in and out as shown in Figure 5 where an example implementation on Church Street is shown (Regular parking spaces are displayed in green, ADA spaces in light blue, and dynamic multi-use loading areas in yellow.)

Figure 6 Curbside Management on Church Street



Provide Adequate and Accessible ADA Parking

Noting state standards requiring a minimum percentage of accessible on-street parking, the Town should perform periodic observations of ADA on-street space use. If legal utilization of accessible spaces within a two square block area consistently exceeds 80%, nearby locations should be identified for conversion to ADA restricted parking.

Incentivize the Use of Public Transit

Reducing financial barriers to using transit reduces parking demand among local employees and residents of all income levels, while also making local jobs easier to access, and thus to maintain. Providing free or deeply-discounted transit passes to local employees can be an easy means of reducing cost-barriers to transit commuting, and to economic opportunity. Fairfax County currently has a \$50 incentive program that offers eligible employees a free \$50 SmarTrip card to try transit through their Commuter Service team (<https://www.fairfaxcounty.gov/transportation/commuter-services>) and could be replicated by the Town.

The transit network within the Commercial Corridor’s study area consists of the Fairfax Connector bus routes (6 routes) which were reconfigured in conjunction with the opening of the Metrorail Silver Line. Challenges to increasing transit ridership, however, include lower than desired service frequencies during non-peak periods and on weekends. Visitors to Vienna are unlikely to take the bus or to walk to Vienna from Metrorail because of the limited weekend and non-peak transit services. Additionally, the fact that most parcels in Vienna have free vehicle parking for their employees and visitors creates little incentive for employees and visitors to try transit. Vienna should consider providing and promoting financial incentives for transit to private entities while engaging in complementary services such as shuttles that promote mobility affordability, reduction in vehicular traffic, ease of access to regional transit as well as remote parking options.

Improve and Expand Bicycle Parking and Repair Facilities

Adequate bicycle parking, including secure, indoor facilities for commuters, can provide cyclists with reassurance that they can always find appropriate and convenient parking for their bikes when traveling to, or within, Vienna. Many cyclists ride through Vienna on the W&OD Trail, both for recreation and on their commutes and bicycle parking amenities remove barriers to stopping in the Town at local destinations or for undertaking day-to-day activities.

Bicycle repair facilities can also make cycling a more reliable transportation mode for occupants and visitors and reduce barriers to owning and maintaining a bike. They also keep bicycles in circulation, ensuring that people who come and go from the site by bike will continue to do so unimpeded by repair issues.

The Town of Vienna should consider implementation of the following:

- Provide public bicycle parking at public buildings and within public parking lots including replacement of on-street parking with bicycle parking facilities (as provided on Church Street). Observe and record usage for future calibration and expand program as necessary.
- Create a permanent free bicycle repair station in a Town owned parking lot, such as the Community Center that includes a bicycle tire pump.

Prioritize Pedestrian Crossing Safety

Improving the pedestrian environment, particularly street crossings, is a high-impact way to increase safety and walkability. Smaller intersections offer shorter walking distances, a more connected network, and added public spaces. Enhancing the ability to walk within the study area will encourage visitors, employees and residents to park at a single location and walk amongst multiple destinations rather than driving and parking at multiple locations. This

deters the need for each business to have a parking space for each and every customer and enables the Town to lower or eliminate parking space minimum requirements and less space devoted to the parking of vehicles.

Additionally, better lighting and safer crossings make parking assets feel more accessible. Making intersections smaller, particularly with shorter traffic signal cycles, can allow for the same vehicle throughput but in a much safer and walkable environment.

Considerations for improving the walking environment include:

- **Bumpouts** – At intersections, extend the curb of the sidewalk into the intersection to slow traffic, decrease crossing times, and increase pedestrian visibility.
- **Raised Crossings** – A raised crossing in an intersection makes pedestrians more visible to vehicles as well as slowing traffic.
- **Enhanced Streetscaping** – Trees, benches, and other street features encourage walkers to linger on the street, creating a more active environment. Moreover, these improvements add to the richness of the streetscape and may slow traffic that has something more to look at than a blank wall or parking lot. Enhanced streetscaping also provides shade, which makes the pedestrian environment more comfortable.
- **Leading Pedestrian Interval** – Allows those who are walking to begin crossing before the vehicular traffic signal changes to allow cars in a compatible configuration. This ensures that walkers are at a visible point in the crosswalk while traffic is active.
- **Minimize/Close Excess Curb Cuts** – Every driveway is a conflict between people walking and people driving. Consolidating curb cuts reduces these conflicts and provides a smoother, simpler, more comfortable walk.
- **Pedestrian Island/Refuge** – Giving pedestrians a place to pause in the middle of a large intersection can make the intersection seem less daunting, as well as narrowing lanes slightly and thus slowing traffic.
- **Foot Traffic** – Encouraging walking to and from parking has the simple benefit of adding to foot traffic, which in turn creates a more comfortable and safer environment.
- **Maintenance** – Regularly re-stripe pedestrian markings like crosswalks with bright, reflective paint.
- **ADA Compliance** – Ensure curb cuts are ADA compliant and traffic signals are utilizing Accessible Pedestrian Signals (APS) which advise pedestrians who are blind, visually impaired, or deaf-blind when they have the right-of-way to cross at a signalized intersection.

These improvements could be completed by the Town of Vienna or could be required as part of zoning and site planning or business license renewal. A business wanting to open a certain location or get a parking reduction could be required to provide streetscape improvements outside their frontage. This could also be set as a requirement of business license renewal in the Town of Vienna.

Create a Transportation Demand Management Program

Transportation demand management (TDM) encompasses a suite of transportation policies and programs that are a critical component of a systematic and equitable transportation strategy. Early TDM programs were designed to influence peak-direction travel away from the peak-congestion times or toward non-driving modes that could ease roadway congestion and deter the need to over supply parking spaces, which is currently occurring within areas of the Commercial Corridors. Over time, TDM has expanded to apply more broadly to policies and programs designed to support and incentivize healthier, more environmentally sustainable transportation behaviors. The key to effective TDM programs is the implementation of specific measures—in the form of policies or actions—that seek to effect specific behavior changes, whether collectively, through a Transportation Management Association (TMA) or at the individual level (individual business or personal level). These include pricing measures, physical measures, programs and policies, and promotional and marketing measures. The Town of Vienna should create a town-specific TDM program or could look to participate in Fairfax County's TDM program.

(<https://www.fairfaxcounty.gov/transportation/commuter-services/transportation-demand-management>). As part of this new Town of Vienna TDM program, the Town should require TDM plans for all new downtown development, including infill, redevelopment, or renovations.



Pricing Measures

These measures focus on attaching a cost to less-efficient and/or higher-emitting forms of mobility, typically resulting in revenues that can be used to fund complementary TDM measures.

- Charging for parking as an optional amenity
- Cash benefit as alternative to parking benefits ("parking cash-out")
- Roadway fees and congestion pricing
- Fees for curbside loading/unloading (commercial or passenger)
- Discounted fees for high-occupancy, and/or low-emission vehicles



Physical Measures

Physical TDM measures seek to improve the functionality, safety, and appeal of non-driving mobility infrastructure and amenities through direct, capital investments.

- Constrained parking supply
- Bike parking and amenities
- Showers and changing facilities to promote active-mode use
- Real-time, multimodal information displays
- Shared-vehicle stations or parking
- Transit stops and stop improvements
- Active-mode network improvements
- Remote-work spaces and amenities



Programs and Policies

These measures focus on expanding mobility options, reducing the cost of non-driving modes, or creating trip-deferment opportunities through policy and/or administered-program commitments.

- Transit-cost subsidies
- Vanpool provisions or cost subsidies
- Shared-vehicle access and/or subsidies
- Carpool/vanpool matching and support services
- Free shuttle service
- Remote and flex-work policies and accommodations



Promotional and Marketing Measures

These measures focus on increasing awareness of and engagement with established TDM policies, programs, and benefits.

- Engaging TMA (or similar) services
- Providing a TDM coordinator position to serve employees, tenants, and/or residents information needs
- Web- and mobile-application-based information resources
- Events, activities, and competitions/challenges

Sub-Strategy 1: Establish Minimum Required Transportation Demand Management Elements for All New Development in Vienna's Commercial Corridors

TDM requirements, supported by ongoing monitoring, can improve mobility choices and reduce parking demand both currently and in the future therefore enabling developments in the Town to provide less parking, which helps deliver more cost-effective development and

deters the overbuilding of parking. Requirements should vary across the Town to account for differences in land use mix, density, and multimodal access. However, a baseline set of requirements can include:

- Establish a **Transportation Management Association** for businesses and property owners to implement programs and market services.
- Require all employers to provide **pre-tax commuter benefits** for employees
- **Unbundle parking** from residential and commercial leases, which separates the cost to rent a parking space from the cost of renting the residential or commercial space. Detaching the cost of the building lease from the parking space allows buyers/renters to pay for parking only if they need it.
- Provide **monitoring, reporting, and enforcement** of parking and employee mobility metrics (i.e., travel mode to work).
- Prioritize additional TDM measures as part of trip and parking mitigation requirements.

If a project will generate significant new vehicle trips or if the development applies for a parking zoning reduction, TDM strategies should be prioritized to mitigate traffic and parking impacts. Additionally, TDM programs should be encouraged for all businesses, new and existing, to improve and provide mobility choices for their employees and customers. In addition to the elements described above, some of the more common and effective TDM programs include:

- **Parking cash-out program**, where employers who pay for employee parking also offer an equivalent cash payment to employees who do not drive.
- Rideshare matching service.
- **Guaranteed ride home** program that provides a “back-up” ride to employees who do not drive alone to work when transit, carpool, or bicycle options are no longer possible on specific days.
- **Subsidized transit pass program.**
- **Bike giveaway** for employees/tenants who commit to biking to work for a minimum number of days per week or month.
- **Shuttle service** as a means to reduce employee driving, provide additional employee benefits, and increase employee productivity by decreasing the time and effort spent on finding parking.

Sub-Strategy 2: Establish a Transportation Management Association for the Town of Vienna

Transportation management associations (TMAs) are typically non-profit, member-controlled organizations that provide transportation services, programs, education, and resources in a particular area, like a commercial district. These are typically non-profit public-private partnerships between governments and area businesses funded by employer membership but also increasingly through federal grants. A TMA provides an institutional framework for TDM programs and services including parking management. TMAs are usually more cost effective than programs managed by individual businesses, since TMAs can split program costs across businesses. TMAs allow small employers to provide TDM services comparable to those offered by large companies. They avoid problems that may be associated with government-run TDM programs, since they are controlled by members. The Town of Vienna could instigate a TMA for the commercial corridors area, or for all the businesses in Vienna, to provide TDM services, commuter transportation and mobility advocacy. In the case of the Town of Vienna, a TMA would facilitate the implementation of TDM services, the identification of shared parking opportunities, valet parking programs and micro-circulator services.

Plan for Long-Term Mobility and Parking Trends

Over the past few decades, the Town of Vienna has seen changes to the surrounding areas, including increased density in Tysons, and within the Town, such as the Maple Avenue Commercial zoning. Like other areas, Town businesses have shifted primarily to personal and professional services (e.g., hair and nail care, specialty fitness, tax preparation, and more) convenience retail (e.g., convenience stores), grocery stores, and eating and drinking places (i.e., restaurants).

Traditional retail stores that do open in Town commercial areas are more likely to be smaller specialty retail, including gift and home goods stores that often appeal to higher-income households. These changes do not only impact property and business owners; they effect the parking system too. For example, parking to serve traditional downtown retail - markets, pharmacies, clothing stores – peaked during the daytime; whereas restaurant dominated downtowns typically peak in the evening. As such, it is important to not only consider what is in each storefront, but when customers are most likely to need parking.

Estimate parking demand from all new developments based on surveying and monitoring program.

To assess potential parking demand throughout the day, all new development should provide estimated parking demand to enable the Town to make appropriate decisions regarding future parking supply and if any parking zoning reduction is merited or impact mitigation required. At the time of this study no future developments outside of the library reconstruction were identified for future parking projection scenarios. Upon implementation of the recommendations within this study, the Town of Vienna and the future TMA can monitor parking demand and supply through periodic data sampling, and annual user surveys. This monitoring program can assist the Town, to understand the demand for parking both public and private, and the success of on-going parking management and TDM services and make changes to the Town's Zoning requirements and TDM ordinances. An example of on-going TDM and parking surveying is provided by Arlington County (<https://arlingtontransportationpartners.com/programs/property-development/tdm-for-site-plans/>).

Identify and allocate an on-going funding and/or revenue stream to support transportation and mobility investments throughout the Commercial Corridors

Sub-Strategy 1: Consider Metered or Enforced On-Street Parking

Vienna has limited on-street parking, but the on-street parking on Church Street is often in high demand compared to the rest of the town. During weekday data collection, on-street parking occupancy on Church Street was 20% higher than off-street parking. During weekend data collection, on-street parking occupancy on Church Street was 31% higher than off-street parking. At the current utilization, Church Street does not have a parking issue that warrants metered parking, but if parking demand continues to rise for the on-street spaces and utilization hits an average of 85% of spaces occupied, Vienna could consider adding metered parking to increase turnover and encourage drivers to use the off-street free spaces. Metered or paid parking is a strategy to make spaces available for short visits in commercial areas and encourage turnover of spaces so more users can be accommodated on the curb. Another way for the Town to increase turnover if it needed to would be to enforce parking time limits. Church Street currently has signs that say two-hour parking and the Town could take a stricter approach to enforcement.

Sub-Strategy 2: Require Businesses to Pay an Impact Fee per Parking Space

For every parking space built and/or utilized by a development, an assessed impact fee would be paid to fund district-level infrastructure including future mobility enhancements, streetscape improvements and public parking facilities (if needed long-term). For developments that enter into agreements for use of public parking facilities they should be time-limited and assessed annually. There are generally two methods in assessing Impact Fees– the first is to calculate a fee per space on a case-by-case basis for each development (i.e., utilizing current land costs), the second is to set a uniform fee per space for all projects to be reviewed on a set timeline (i.e., annually). The goal is to set the impact fee high enough to pay for desired mobility enhancements, but low enough to not disincentivize development activity.

Sub-Strategy 3: Provide an Option for an In-Lieu Fee

Some developers may think their development requires less parking than the zoning code requires or may not have space for all of the parking required. The Town of Vienna could create an in-lieu fee option for developers if alternative parking arrangements could not be found (i.e., shared parking, off-site parking). Developers would be required to pay a fee per parking space or an overall fee. The Town of Vienna could use that fee to fund the construction and provision of public parking, such as a public parking garage, if demand requires it in the future. Many cities in-lieu fees do not cover the full cost of providing a public parking space, often due to the policy of not adjusting the fee to cover the cost of inflation in construction. Examples included Scottsdale, AZ, which focuses on smaller properties to reinvest and develop in its Downtown, Palm Springs, CA with a fee of \$14,733 per space, Palo Alto, CA at \$106,171 per space and State College, PA with a fee of \$26,000 per space.

Sub-Strategy 4: Adopt a formal policy for when pricing may be necessary for on-street and off-street public facilities

The “right regulation” is always the longest time limit or the lowest price that will achieve an availability target. Adjusting regulations over time—stricter where demand is higher and less where demand is lower—will allow the Town to better distribute parking demand across the commercial corridors. Setting a specific availability target for on- and off-street parking, such as 85% for on-street spaces, can help staff identify when to adjust time limits or when to institute paid parking to encourage turnover. Review of occupancy of on-street parking and in public lots should occur at least annually to track utilization. Should on-street parking achieve 85% occupancy for more than 6-hours of a typical day, then paid parking should be considered.

5 ACTION PLAN

Many parking strategies proposed for the Town of Vienna cannot be implemented overnight, nor can they all be implemented concurrently. There are strategies, however, that can be implemented quickly, while others may take longer. Some strategies will work well when implemented together but others are dependent on a series of consecutive steps (highlighted by their time of implementation).

The Action Plan is a roadmap that supports the strategies outlined in Section 3. Each table corresponds to a time frame for implementation. Individual actions are categorized based on the six primary strategies. Implementation considerations and relative cost are indicated for each action while priority is signaled for applicable actions. The Action Plan is a living document to be used by Town staff and partners to help inform decisions.

The Action Plan is organized via the following structure:

- Strategy
 - The nine priority strategies and sub-strategies are identified in the first table.
 - The additional long-term strategies are identified in the second table. “Long-term” does not refer to time frame, as included below. Long-term strategies are strategies that the Town of Vienna should consider when the time is appropriate – not at the present moment.
- Time Frame
 - 10-1 Years = completed within one year
 - 1-3 Years = completed over the course of one to three years

Within this structure, the Action Plan includes the following for each strategy:

- Implementation Considerations
 - Select factors to be evaluated and/or integrated into decision-making and roll out of Actions.
- Relative Cost
 - Level of investment required for implementation.

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- Actions marked with a single \$ symbol represent the lowest cost actions and/or those that can be carried out by current staff.
- Additional \$ symbols represent increases in investment (added manpower or capital improvement) required to carry out those actions. Actions whose relative cost is indicated by \$\$\$\$ are the most expensive and require a high level of capital and operational investment.
- Relative cost key
 - \$ = <\$50,000
 - \$\$ = \$50,000 - \$200,000
 - \$\$\$ = \$200,000 - \$500,000
 - \$\$\$\$ = >\$500,000
- Community Priority
 - A red dot in the right-most column is included if this action was identified as a top priority during our public engagement activities.

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Priority Strategies			
Strategy	Implementation Considerations	Relative Cost	Community Priority
0-1 Years			
Update zoning ordinance to allow for reduced parking	Address underutilized and oversupplied parking by reducing minimum parking requirements. Right-size retail and services-based land uses. Incorporate a new shopping center off-street parking requirement. Allow for parking reductions through shared parking calculations. Adopt design standards for parking facilities to achieve a vibrant streetscape and attractive walking conditions.	\$	●
Shared parking: Assist businesses in creating business-to-business shared parking agreements	Identify and prioritize locations in close proximity to attractions and those with availability in high-demand areas. Assist property managers and owners in introductions and creating agreements. Key considerations: insurance, lease length, rate, maintenance, lighting, security, signage, enforcement.	\$	●
Public-private shared parking	Identify and prioritize locations with underutilized parking in close proximity to attractions and those with availability in high-demand areas. Key considerations: insurance, lease length, rate, maintenance, lighting, security, signage, enforcement.	\$	●
Improve and coordinate wayfinding and branding	Town departments to coordinate with other signage management (VDOT/Fairfax County). Develop maintenance plan. May need to conduct existing signage inventory first. Collaborate with local businesses to map businesses and parking locations. Coordinate branding with other Town departments and standards. Explore expansion of parking branding. Coordinate with other signage management.	\$\$	

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Provide adequate and accessible ADA parking	Requires an assessment of ADA on-street space utilization and an assessment of current on-street ADA spots. This would likely require removing existing on-street parking to use for ADA spaces.	\$	●
Improve and expand bicycle parking repair facilities	Coordinate with improvements at transit stops, off-street parking facilities, and other area improvements. Coordinate with downtown stakeholders.	\$	●
1-3 Years			
Strategically invest in public parking supply in key locations	Strategically invest in public and shared parking supply at the Patrick Henry Library and other vacant lots around the Town as they become available.	\$\$\$\$	●
Coordinate programs and event management	Coordinate parking management for events with event producers and property owners. Consider valet parking for event management.	\$	

Long-Term Strategies			
Strategy	Implementation Considerations	Relative Cost	Community Priority
Create a Park Once district			
Augment shared parking with microtransit	Understand capital costs associated with vehicle fleet, route implications beyond Mill Street, Church Street and Maple Ave. and operating costs associated with vehicles as well as drivers.	\$\$\$	
Better manage delivery and drop-off activity	Perform in conjunction with adjustments to regulations. Determine peak loading and drop-off activity.	\$	

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Incentivize use of public transit	Requires coordination with transit agency, local private employers, and town/county/state social services.	\$\$	
Prioritize pedestrian crossing safety	Select physical improvement location based on walking safety/higher walking demand. Assess feasibility with Engineering. Coordinate with other area improvements (streetscape, repaving, etc.).	\$\$\$	●
Create a Transportation Demand Management program	Led by the Town develop an annual expenditure plan to fund a mix of parking and mobility investments.	\$	
	Prioritize trip reduction duties for an assigned Oversight Committee to develop and administer transportation demand management (TDM) strategies and benefits.		
	Implement district-wide mobility and access strategies. Potential options include: transit passes/financial incentives, carpool matching, marketing and communication, technical assistance, shared parking arrangements with private property owners, and others.		
	Explore partnerships and coordination on TDM implementation with local and regional groups.		
	Lead monitoring and enforcement of TDM program via annual surveys and reporting.		
	Collaborate with Town employers for both sponsorship and employee outreach		
Establish minimum required transportation demand management elements for all new developments in Vienna's commercial corridors	As part of a Transportation Demand Management Program, establish Minimum Required Transportation Demand Management Elements for All New Development in Vienna's Commercial Corridors	\$	
Establish a Transportation Management Association for the Town of Vienna	Explore partnerships and coordination on TDM implementation with local and regional groups.	\$	

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Plan for long-term mobility and parking trends	The Town should fulfill from 2019, the Town's Maple Avenue Corridor Multimodal Transportation and Land Use Study to guide and direct transportation and mobility planning, investment, maintenance, and funding strategies that maintain and enhance Vienna transportation assets while improving quality of life and health for its residents.	\$\$\$	
Identify and allocate an on-going funding and/or revenue stream to support transportation and mobility investments throughout downtown	<p>To support on-going investments in the Downtown area, a continuous and dependable revenue and/or funding stream is required.</p> <p>Reinvest parking revenues into downtown and evaluate allocation of multimodal improvements. Provide funding for a Transportation Management Association.</p>	\$\$	
Estimate parking demand from all new developments based on surveying and monitoring programs	Routinely estimate parking demand from new developments. Review of occupancy of on-street parking and in public lots should occur at least annually to track utilization.	\$	
Consider Metered or Enforced On-Street Parking	If Vienna reaches a time when parking demand is routinely above 85%, consider metered or enforced parking.	\$	
Require businesses to pay an impact fee per parking space	To limit the amount of parking built, require businesses to pay an impact fee per parking space. Add provisions into the zoning code for such a fee. The fee could be reinvested back into other transportation improvements.	\$	
Provide an option for an in-lieu fee	These fees are in-lieu of having or meeting individual off-street parking requirements. Pursuant to an update to Vienna's zoning ordinance with parking in-lieu fees, require new developments to pay a fee into a designated fund. Use the fund to pay for parking improvements like the Patrick Henry Library garage.	\$	

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Adopt a formal policy for when pricing may be necessary for on-street and off-street public facilities	Setting a specific availability target for on- and off-street parking, such as 85% for on-street spaces, can help staff identify when to adjust time limits or when to institute paid parking to encourage turnover. Review of occupancy of on-street parking and in public lots should occur at least annually to track utilization.	\$	
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