STAFF NOTES LEGEND

Incorporated into Code Update

Not incorporated into Code Update

MEMORANDUM

To: Town of Vienna

From: Nelson\Nygaard

Date: May 9, 2023

Subject: Review of Proposed Parking Standards and Recommendations

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 Outdated or little-known parking provisions of a county or city's municipal or zoning code can often inhibit desired developments and infrastructure, hinder equitable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. Parking policy changes can be difficult to discuss, engage, and act on, as parking provision and management can seem both esoteric and challenging to some bystanders because of the longstanding assumption that people in Vienna drive to every destination.

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.

The following provides a review of the proposed parking standards through the Code Create study in conjunction with the on-going Town of Vienna Parking Study as well as recommendations and comments relating to policy and programs, tailored to meet Town goals and objectives.

PROPOSED CHANGES TO PARKING REGULATIONS

Article 4A – Section 18-404: Residential Single Unit Detached

Minimum Off-Street Parking Required

Single-Unit Detached Residential Units are proposed to have the following minimum off-street parking requirements:

- 2 spaces for up to 3 bedrooms
- 3 spaces for 4 bedrooms
- 4 spaces for 4 bedrooms or more

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Article 4B – Section 18-461: Multi-United Attached Residential

Minimum Off-Street Parking Required

Multi-Unit Attached Residential Use are proposed to have the following minimum off-street parking requirements:

- Two-Unit Attached Dwellings incl. Duplexes/Townhomes/Cottage Courts
  - 2 spaces per dwelling unit
  - Plus 1 space per 5 dwelling units for visitor parking
- Multi-family Dwellings:
  - Efficiency - 1 space per dwelling unit
  - One bedroom – 1.5 spaces per dwelling unit
  - Two or more bedrooms – 2 spaces per dwelling unit

Nelson\Nygaard Comment: Multi-family dwellings should also require visitor parking to replicate that of two-unit attached dwellings.

Loading Areas Requirement

Multi-Unit Attached Residential Use are proposed to have the following loading area standards:

- One loading space per 50 dwelling units is required for multi-unit residential developments. Loading spaces are not required for duplex, townhouse or cottage court developments.
- Required dimensions of loading space:
  - Min. 25 ft in depth
  - Min. 15 ft in width
  - Min 15 ft in height, if located in a building
- All required off-street loading spaces must be located on the same lot as the use served.
- When an existing structure or use is expanded, accessory off-street loading must be provided in accordance with the minimum requirements for the entire structure or use, as expanded or enlarged.
- Loading spaces may not be located in a required front setback.
- Required off-street loading areas may not be used to satisfy the space requirement for any off-street parking facilities.
- Loading areas must not interfere with the free circulation of vehicles in any off-street parking area.

Bicycle Parking

See note below

- Minimum bicycle parking required for multi-unit developments is 3 racks (6 spaces) for every 2.5 dwelling units for residents plus 3 racks (6 spaces) per 50 dwelling units for short-term visitor parking.
- Both short-term and long-term bicycle parking shall be located in visible, well-illuminated areas that do not impede or conflict with automobile, pedestrian, or bicycle traffic.
- **Short-term bicycle racks shall comply with the following:**
  - Short-term racks shall be inverted "U" bicycle racks or circular bicycle racks.
  - Bicycle racks that are located parallel to each other shall be at least 3 feet apart and shall allow bicycles to be locked on both sides without conflict.
  - Bicycle racks that are located in a linear configuration shall be at least 5 feet apart.
  - Bicycle racks shall be securely anchored and shall be easily usable with u-locks and cables.
  - Bicycle racks shall be spaced at least 2 feet from walls, curbs, pavement edges, or other structures.
- **Long-term bicycle racks shall comply with the following:**
  - Long-term bicycle racks shall be covered and weather resistant.
  - Long-term bicycle racks may include, but are not limited to, covered bicycle racks that meet the standards of short-term bicycle racks; or bicycle lockers or bicycle racks that meet the standards of short term bicycle racks and are located within a parking structure or other enclosed structure.
  - Bicycle lockers shall be anchored in place and have an opening clearance of at least 5 feet.
  - Long-term bicycle racks must be located no more than 100 feet from the building entrance that the bicycle rack is intended to serve.

Nelson\Nygaard Comment: Short-term and long-term bicycle space requirements should be differentiated with the following requirements.

- Minimum bicycle parking required for multi-unit developments is **1 space for every 2 dwelling units** for **long-term uses** (residents) plus **1 space per 10 dwelling units** for **short-term** visitor parking.

Article 5A – Section 18-509: Commercial, Industrial, and Mixed Uses

Minimum Off-Street Parking Requirements

Use	Minimum Required Off-Street Parking Spaces	Notes/Additional Requirements
Adult Business	1 space per 200 sq.ft	
Adult Day Support Center	1 space per 4 adults, based on the maximum number of adults licensed to attend the center	
Animal Care Facility	Grooming or Commercial boarding: 1 space per 200 sq. ft. of gross fl oor area • Veterinary: 10 spaces plus additional spaces required to accommodate employees and visitors anticipated to be on-site at any one time.	
Bed and Breakfast	1 space per guest room	
Brewpub	1 space per 200 sq.ft	
Carwash	Space for 30 cars waiting for service	
Child Care Center	1 space per room used for care facility plus 1 space per 500 gross floor area of building	
College or Technical School		
Continuing Care Facility		
Entertainment	Theater: 2 spaces per 5 seats • Skating arena: 1 space per 100 sq. ft. • Video arcade: 1 space per 2 mechanical or electronic amusement devices in addition to required parking for primary use of building	
Event Space		
Financial Institution	1 space per 200 sq. ft. of floor area plus sufficient space for 10 stacking spaces for first drive-through window and 5 spaces for each additional window	

Use	Minimum Required Off-Street Parking Spaces	Notes/Additional Requirements
Funeral Home or Mortuary	1 space per 4 seats in the main chapel or parlor, plus 1 space per 2 employees on major shift, plus 1 space for each vehicle used in connection with the business	
Grocery		
Hotel	1 space per rental room	
Indoor Recreational Use, Private	3 spaces per alley or lane • 2 spaces per court • Skating arena: 1 space per 100 square feet • Swimming pool: 1 space per 6 persons legally allowed in pool at one time	Plus one space per employee on maximum shift
Massage Therapy	1 space per 200 sq. ft.	
Medical Care Facility	• Hospital: 2.9 spaces per bed licensed by the State, plus additional or fewer spaces as deemed necessary based on specific analysis for each site. • Institution providing intensive special medical or mental care: 1 space per 2 patients, based on the occupancy load, plus 1 space per employee or staff member on major shift	
Office	1 space per 200 sq. ft.	
Restaurant	1 space per 4 seats	
Retail	• Generally: 1 space per 200 square feet • Furniture: 1 space per 500 square feet of floor area plus 1 space per employee on maximum shift	
Services, General	1 space per 200 sq. ft.	
Services, Personal	1 space per 200 sq. ft.	
Shared Kitchen		

Use	Minimum Required Off-Street Parking Spaces	Notes/Additional Requirements
Specialized Instruction	2 spaces per each 3 employees on major shift, plus a sufficient number of spaces to accommodate all persons anticipated to be on-site at any one time under normal operating conditions.	
Upper Story Residential	• Efficiency: 1 space per dwelling unit • One bedroom: 1.5 spaces per dwelling unit • Two or more bedrooms: 2 spaces per dwelling unit	
Vehicle Fueling Station	2 spaces per service bay, plus 6.5 spaces per 1,000 square feet of gross floor area devoted to the retail use, but never less than 5 spaces	
Vehicle Repair and Maintenance	1 space per 200 sq. ft. of net floor area, plus 2 spaces per service bay	Plus one space per employee on maximum shift
Vehicle Sales and Rental	1 space per 500 sq. ft. of enclosed sales and rental floor area,plus 1 space per 2,500 sq. ft. of open salesand rental display lot area,plus 2 spaces per service bay	Plus one space per employee on maximum shift. Never less than 5 spaces
Building Materials Storage and Sales	1 space per 1.5 employees on major shift plus 1 space per company vehicle, plus sufficient space to accommodate the largest number of visitors anticipated to be on-site at any one time, but with a minimum of 1 space per 1,000 square feet of gross floor area	
Composting Drop-off Facility		
Craft Beverage Production Establishment	1 space per 4 seats where seating is at tables, plus 1 space per 2 seats where seating is at a counter, plus 1 space per 2 employees. This rate applies to outdoor seating in excess of 20 outdoor seats for an establishment with a gross floor area of less than 5,000 square feet, or to outdoor seating in excess of 32 outdoor seats for an establishment with a gross floor area of 5,000 square feet or more	

Use	Minimum Required Off-Street Parking Spaces	Notes/Additional Requirements
Manufacturing, Artisan		
Manufacturing, Light	1 space per 3 employees on maximum shift	
Production or Processing	1 space per employee on major shift, plus 1 space per company vehicle and piece of mobile equipment	
Recycling Drop-off Facility	1 space per 1 employee on major shift, plus 1 space per company vehicle	
Self-storage	0.3 spaces per 1,000 square feet of gross floor area of office space associated with the use plus 1 space per employee on major shift, and 2 spaces for a resident manager	
Storage Yard	1 space per 1.5 employees on major shift, plus 1 space per company vehicle, plus sufficient space to accommodate the largest number of visitors anticipated to be on-site at any one time, but with a minimum of 1 space per 1,000 square feet of gross floor area	
Warehouse	1 space per 1.5 employees on major shift,plus 1 space per company vehicle, plus sufficient space to accommodate thelargest number of visitors anticipated to be on-site at any one time, but with aminimum of 1 space per 1,000 square feet of gross floor area	
Wholesale	1 space per 1.5 employees on major shift, plus 1 space per company vehicle, but with a minimum of 1 space per 1,000 square feet of gross floor area	

3 spaces per 1,000 was used in the code

Nelson\Nygaard Comment/Recommendation:

Parking Standards

Overall comment: All uses with 1 space per 200 sq. ft. could be amended to 4 spaces per 1,000 sq. ft.

College or Technical School: Applicable office rate for classroom and office facilities; all other facilities associated with the use are subject to the requirements for the most similar use.

Car Wash: As determined by the Planning Dept/Town Council. Typically, there is no parking of customer vehicles at these uses

Catering: 1 space per 1,000 square feet of gross floor area or 1 space per employee on major shift, whichever is less

Continuing Care Facility: 0.75 spaces per separate unit or bed approved on the development plan

Event Space: As determined by the Planning Dept/Town Council.

Grocery: 1 space per 200 sq. ft to be consistent with Retail land-use (or to 4 spaces to 1,000 sq.ft)

Manufacturing, Artisan: Replicate Manufacturing, Light at 1 space per 3 employees

Self-Storage: Recommend 3 spaces per 1,000 square feet of gross floor area of office space associated with the use*

* plus 1 space per employee on major shift and 2 spaces for a resident manager

Where the minimum required parking is not identified for a particular use, and there is no similar general type of use listed, the Director in consultation with the Zoning Administrator, will determine the number of spaces required based on the minimum requirement for the most similar general type of use

Reduce Parking Requirements via Shared Parking

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 Table 2.

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 experience and new data.

Table 1 Shared-Parking Calculations: Percent of Peak Demand by Use by Time of Day

Use	Weekday 8am – 6pm	Weekday 6pm - Midnight	Weekday Midnight – 8am	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%

Loading

Loading areas shall meet the following standards:

A. All required off-street loading spaces must be located on the same lot as the use served.

B. When an existing structure or use is expanded, accessory off-street loading spaces must be provided in accordance with the minimum requirements for the entire structure or use, as expanded or enlarged.

C. Loading spaces may not be located in a required front setback.

D. Required off-street loading areas may not be used to satisfy the space requirement for any off-street parking facilities.

E. Loading areas must not interfere with the free circulation of vehicles in any off street parking area.

F. Required dimensions of loading space:

i. Minimum 25 feet in depth;

ii. Minimum 15 feet in width ;

iii. Minimum 15 feet in height, if located within a building.

G. Where a given use or building contains a combination of uses, loading facilities must be provided on the basis of the sum of the required spaces for each use.

H. If there is uncertainty with respect to the amount of loading space required by the provisions of this Ordinance as a result of an indefiniteness as to the proposed use of a building or land, the maximum requirement for the general type of use that is involved governs.

I. Where the required number of loading spaces is not set forth for a particular use, and where there is no similar type of use listed, the Zoning Administrator will determine the basis of the number of spaces to be provided.

Nelson\Nygaard Comment/Recommendation: Loading space requirements for commercial, industrial and mixed-use should consider the following requirements.

A. Minimum off-street loading spaces accessory to the listed use classifications as defined must be provided in accordance with the following table; however, there is no loading space required for a structure with less than 25,000 square feet of gross floor area:

Table 2 Commercial, Industrial and Mixed-Use Loading Requirements

Building Use	Loading Space Requirements	Notes/Additional Requirements
Office/Medical/Service	1 space per 100,000 sq. ft. of gross floor area	
All Other Commercial Uses including Shopping Centers	1 space per 50,000 sq. ft. of gross floor area	No more than 5 loading spaces are required for a structure
Institutional	1 space per 100,000 sq. ft. of gross floor area	No more than 5 loading spaces are required for a structure
Industrial	1 space per 50,000 sq. ft. of gross floor area	No more than 5 loading spaces are required for a structure
Other	1 space per 100,000 sq. ft. of gross floor area	

The Town, as part of a rezoning or special exception, or the Director, as part of a site plan, may adjust the number of loading spaces required by this section when the applicant has demonstrated to the Town's or Director's satisfaction that:

(1) Fewer spaces than those required will adequately serve the use; and

(2) The adjustment will not adversely affect the site or adjacent areas.

Bicycle Parking

A. Both short-term and long-term bicycle parking shall be located in visible, well-illuminated areas that do not impede or conflict with automobile, pedestrian, or bicycle traffic.

B. **Short-term bicycle racks shall comply with the following:**

i. Short-term racks shall be inverted "U" bicycle racks or circular bicycle racks.

ii. Bicycle racks that are located parallel to each other shall be at least 3 feet apart and shall allow bicycles to be locked on both sides without conflict.

iii. Bicycle racks that are located in a linear configuration shall be at least 5 feet apart.

iv. Bicycle racks shall be securely anchored and shall be easily usable with u-locks and cables.

v. Bicycle racks shall be spaced at least 2 feet from walls, curbs, pavement edges, or other structures.

C. **Long-term bicycle racks shall comply with the following:**

i. Long-term bicycle racks shall be covered and weather resistant.

ii. Long-term bicycle racks may include, but are not limited to, covered bicycle racks that meet the standards of short-term bicycle racks; or bicycle lockers or bicycle racks that meet the standards of short-term bicycle racks and are located within a parking structure or other enclosed structure.

iii. Bicycle lockers shall be anchored in place and have an opening clearance of at least 5 feet.

iv. must be located no more than 100 feet from the building entrance that the bicycle rack is intended to serve.

Nelson\Nygaard Comment/Recommendation: Short-term and long-term bicycle space requirements should be differentiated with the following requirements.

Bicycle parking is a safe and convenient space for the storage of a bicycle in the form or a rack, locker, or storage area. Providing bicycle parking encourages people to use their bicycles as an alternative to single-occupancy vehicles.

Table 3 Bicycle Parking Requirements

Building Use	Short-term Bike Parking Spaces	Long-term Bike Parking Spaces
Office/Medical/Service	1 space per 5,000 sq. ft. of gross floor area	1 space per 2,000 sq. ft. of gross floor area
Restaurant/Retail	1 space per 10,000 sq. ft. of gross floor area	1 space per 5,000 sq. ft. of gross floor area
Institutional	1 per 2,500 sq. ft. but no less than 8 spaces	1 per 2,500 sq. ft.
Other	1 per 10,000 sq. ft	1 per 10,000 sq. ft.

Given the rapid increase in the consumer market for electric bicycles, requirements for long-term spaces could also include providing charging infrastructure.

Bicycle parking requirements can also reduce vehicle parking requirements. Typically, this is articulated as a ratio of one vehicle-space reduced per X number of bicycle parking spaces provided above minimum bicycle parking requirements. The maximum reduction in vehicle spaces is typically capped at a certain percentage of minimum vehicle parking requirements.

Article 5B – Section 18-559: Public, Institutional, and Community Uses

Minimum Off-Street Parking Requirements

Use	Minimum Required Off-Street Parking Spaces	Notes/Additional Requirements
Club or Service Organization	1 space per 300 square feet of gross floor area	
Community Center	•1 space per 4 seats in auditoriums and assembly rooms	•1 seat per 15 square feet of gross floor area
	•1 space per 4 recreation participants in game rooms and gymnasiums	•1 participant per 30 square feet of gross floor area
	•1 space per 200 square feet of permanent office space	
Cultural Facility or Museum	1 space per 300 square feet of gross floor area	
Government	1 space per 300 square feet of gross floor area	
Outdoor Parks and Recreational	25 spaces per regulation playing field	Three or more regulation playing fields in one location may reduce to 75% of required number of spaces. May provide shared parking facility plan
Religious Assembly	1 space per 6 seats provided in the main sanctuary	
	•Elementary or Middle:	

Use	Minimum Required Off-Street Parking Spaces	Notes/Additional Requirements
School, Elementary, Middle, or High	1 space per faculty and staff member and other full-time employee on major shift, plus 4 spaces for visitors	
	•High School:	
	0.3 space per student, based on the maximum number of students attending classes at any one time	
Utility Facility	1 space per 1.5 employees on major shift, plus 1 space per company vehicle	

Nelson\Nygaard Comment/Recommendation:

Parking Standards

Overall comment: All uses with 1 space per 300 sq. ft. could be amended to 3 spaces per 1,000 sq. ft.

Government: Determined by the Director 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.

School: 1 space per faculty member and other full-time employee on major shift, plus 5 spaces per 100 students based on total maximum enrollment (currently under consideration by FCPS)

Where the minimum required parking is not identified for a particular use, and there is no similar general type of use listed, the Director in consultation with the Zoning Administrator, will determine the number of spaces required based on the minimum requirement for the most similar general type of use

Loading

Loading areas shall meet the following standards:

A. All required off-street loading spaces must be located on the same lot as the use served.

B. When an existing structure or use is expanded, accessory off-street loading spaces must be provided in accordance with the minimum requirements for the entire structure or use, as expanded or enlarged.

C. Loading spaces may not be located in a required front setback.

D. Required off-street loading areas may not be used to satisfy the space requirement for any off-street parking facilities.

E. Loading areas must not interfere with the free circulation of vehicles in any off street

parking area.

F. Required dimensions of loading space:

i. Minimum 25 feet in depth;

ii. Minimum 15 feet in width ;

iii. Minimum 15 feet in height, if located within a building.

G. Where a given use or building contains a combination of uses, loading facilities must be provided on the basis of the sum of the required spaces for each use.

H. If there is uncertainty with respect to the amount of loading space required by the provisions of this Ordinance as a result of an indefiniteness as to the proposed use of a building or land, the maximum requirement for the general type of use that is involved governs.

I. Where the required number of loading spaces is not set forth for a particular use, and where there is no similar type of use listed, the Zoning Administrator will determine the basis of the number of spaces to be provided.

Nelson\Nygaard Comment/Recommendation: Loading space requirements for Public, Institutional, and Community Uses should follow the same requirements as highlighted in Article 5A..

STACKING SPACES

Stacking Spaces should be provided in accordance with the minimum stacking requirement established.

- Stacking spaces must be designed so that they do not impede pedestrian or vehicular circulation on the site or along any abutting street.
- All required stacking spaces must be a minimum of 18 feet in length. (4) The geometric design of the stacking aisle, including but not limited to the radius and width of the travel aisle, is subject to the approval of the Council.

Table 4 Recommended Stacking Requirements

Use	Minimum Stacking Requirement
Car Wash	10 stacking spaces per bay or stall for an automated establishment
Drive Through Financial Institution	4 stacking spaces for each drive-through window
Drive Through Other	4 stacking spaces for each drive-through window
Drive Through Pharmacy	4 stacking spaces for each drive-through window
Restaurant with Drive Through	11 stacking spaces for the drive-through window

REDUCE PARKING REQUIREMENTS FOR SHARED MOBILITY

Reduction in vehicle parking requirements for residential buildings can be given when spaces are provided for shared vehicles and further, by ensuring a car-sharing service has committed to occupying them. Typically, this is articulated as a ratio of vehicle spaces reduced per designated car-share space which a recognized car-share provider has agreed to occupy. Given Vienna's context, an allowance of about 4 spaces reduced per shared vehicle could be considered as part of a shared parking agreement as described above. Alternatively, a set number of carshare spaces can be specified per dwelling unit, attached to a percentage reduction to the overall minimum. In this case, Vienna would specify that, for example, a 20-unit residential building would be encouraged to provide 1 shared vehicle space and allowed a reduction in 4 spaces as a result.

Because this reduction is based on stated commitment to occupy spaces with shared cars, and because the impact of shared-vehicle access on resident vehicle ownership rates has been well established[1], it is not as common to cap how much the parking requirement may be reduced through this option, particularly for residential uses.

Similarly, a reduction in vehicle parking requirements for commercial buildings can be allowed in mixed-use or employment zones if bikeshare stations are provided.

CONSIDER ESTABLISHING PARKING MAXIMUMS

Parking maximums institute a cap on the number of parking spaces that can be built in certain areas. This policy can be used to reduce systemic overbuilding of parking, encouraging more walkable and sustainable multimodal urban design patterns, and can support infill development. A key feature of determining where to apply parking maximums is parking utilization. Areas with consistently low parking utilization may be an indication of excess parking supply where parking maximums could be implemented. If Vienna pursues a coordinated redevelopment plan in any part of the Maple Ave. corridor, it could consider parking maximums along with it.

Parking maximums for redevelopment in Vienna (of, for example, 150% of the minimum requirement) could allow for additional parking to be built on a case-by-case basis through additional special permits or via an in-lieu fee paid per space in excess of the per-site cap to promote flexibility.

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[1] Cervero R., Golub, A., & Nee, B. (2007). City carshare: Longer-term travel demand and car ownership impacts. Transportation Research Record, 1992, 70–80.

ter Schure, J., Napolitan, F., & Hutchinson, R. (2012). Cumulative impacts of carsharing and unbundled parking on vehicle ownership and mode choice. Transportation Research Record, 2319, 96–104.

Parking maximums can also be paired with shared parking programs as an alternative to overbuilding parking. Flexible parking maximums that exclude shared parking spaces can encourage developers to build parking that can meet parking needs in off-peak hours.

In districts where parking is well-utilized, parking maximums are likely not appropriate. Larger redevelopment parcels should rather be incentivized to provide more parking than the minimum, and to share it with nearby uses. This applies to the Church St. district in Vienna.

CREDIT OFF-SITE PARKING

The Town of Vienna allows off-site parking credits for commercial and industrial uses by Town approval in code Section 18-131. Spaces no further than 400 feet from the principal building's entrance must be recorded in an agreement with the property owner that includes an illustration of spaces and approved by Town Council.

The Town of Vienna can expand this policy to include crediting off-site parking for residential uses. The off-site parking agreement to reserve access to private or public parking facilities may be restricted to certain hours or be maintained 24/7. If limited to overnight hours for residents, these shared agreements can both help meet parking requirements in new developments and better utilize existing parking assets across the entire town. The maximum distance of 400 feet could also be expanded to 1,000 feet (about a 4-minute walk) or more with the provision of wayfinding signage for drivers and pedestrians.

On-street parking along the frontage of a development and available on-street parking within the same distance radius may also be allowed to count towards overall parking requirements for the building. Available on-street parking can be determined through Town surveys or developer-funded surveys.

PROVIDE FOR ELECTRIC VEHICLE CHARGING

While designating spaces for Electric Vehicle (EV) charging does not help to reduce unnecessary parking spaces, it can ensure that some of the provided spaces are ready for continued growth in the EV market. Parking spaces may be reserved for electric vehicles and/or electric vehicle charging. This can be done through required electric vehicle parking capacity and minimum electric vehicle parking requirements. A typical ordinance includes recommendations or requirements on the proportion of parking spaces that must be designated as electric vehicle charging stations. An ordinance may also require spaces to be made "charger-ready" by having appropriate electrical connections, but not requiring the installation of chargers pending development of the market.

The Town of Vienna should require one energized charger for every 10 parking spaces. This space will count towards minimum parking requirements and is not an additional space.

Code update added language for EV charging as an accessory use and limits it to 10% of required parking

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, as described in Technical Memo #2, 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."*

TRANSPORTATION DEMAND MANAGEMENT POLICY

Vienna has the opportunity to go beyond parking-specific approaches to consider more broadly how to support safe, convenient, sustainable multimodal travel in keeping with Town goals. An integrated approach, termed transportation demand management (TDM), requires new development to go beyond a conventional traffic analysis and reduce impacts on the transportation network by supporting the development and provision of programs, infrastructure, and incentives to reduce driving. TDM programs are designed to make it easier for people to choose to get around by walking, biking, and taking transit. A developer commits to a TDM plan as a condition of approval, often in conjunction with a reduction in minimum parking requirements.

A TDM Policy for Vienna should reach multiple, diffused travel markets. Tailoring a TDM policy to the Town requires making it broadly applicable. Over 93% of employed residents commute to jobs outside of town, and close to 95% of workers in town live outside Vienna.[2] The town's position within the broader, urbanized DC region means that its dispersed pattern of home origins and employment destinations limit Vienna's direct influence. Indeed, the dispersed pattern of origins and destinations, more broadly speaking, is a leading cause of traffic in the town and regionally.

Objectives of a TDM Policy

- Incentivize TDM strategies and programs that are tailored to and best suited to the town's unique corridors, residential neighborhoods, employment centers, and transit access.
- Allow for participation of large and small developers/property managers.
- Be easy to understand and use – especially important for smaller businesses and entities that should participate for full impact.
- Retain flexibility so that programs can match ongoing improvements in transportation infrastructure, such as future transit and bike network improvements.
- Be easy to implement and monitor by Town officials.
- Help residents and employees reduce their transportation costs, to help offset regional increases in housing costs.

TDM Requirement

TDM components most commonly appear in a city's development code and ordinance as part of site plan review or special permit approvals. At minimum, requiring applicants

[2] OnTheMap, US Census Bureau, LEHD Origin-Destination Employment Statistics (2018)

to describe their planned TDM measures as part of traffic impact statements can encourage their implementation, even if not required in and of themselves.

A workable approach balances confidence that the TDM measures work with the flexibility to meet different site contexts. Points-based TDM programs use a credit system where projects of a certain minimum size must meet a target number of points by committing to a combination of TDM measures that reduce the number of driving trips generated by the site. This program is meant to reduce both outbound and inbound trips related to the development project. The target number of points can be tied to parking reductions granted by the Planning Board and dependent on the development land use.

The intention behind the menu of TDM measures is to give developers the flexibility to create a TDM program that best fits their needs. TDM measures may have two or more possible point levels, depending on the aggressiveness of implemented measures. Similarly, projects in the Church Street Vision plan area and other targeted redevelopment areas may be automatically granted points based on their location to incentivize infill development that can take advantage of existing infrastructure.

Property owners must submit ongoing monitoring reports intended to prove results from implemented programs and update the submitted plans if not in compliance.

TDM Policy Eligibility Frameworks

TDM Policy requirements can be applicable to all new developments according to specific eligibility criteria, determined through levers like land uses and project size.

Land use categories, similar to consolidated parking requirement categories, can be used to define the TDM requirements deemed to be most appropriate and effective depending on the project type. The following categories are suitable for this purpose:

- **Residential** – Land uses that are predominantly the origins of commute or discretionary trips
- **Office/School/Medical** – Land uses that are predominantly the destinations of daily commuters and generate long-term parking demand
- **Retail/Restaurant/Visit** – Land uses that predominantly generate short-term discretionary-trips
- **Other**– Land uses that typically generate moderate or minimal parking demand and/or are typically minimally responsive to TDM mitigation efforts, such as:
  - Light industrial buildings
  - Wholesale warehouse or self-storage
  - Research, development, and testing laboratories
  - Utility buildings or public service buildings

With the exception of projects exempt from local zoning and development ordinances, for example federal or state projects, developments or redevelopment projects can be required to prepare and implement a Transportation Demand Management plan, provided they meet an applicability threshold. Types of TDM Plans can be distinguished

by the scale of development, such as a Large Scale project versus a Small Scale project.

A Small Scale TDM Plan can be required for development proposed at a scale that meets or surpasses thresholds such as the following before instead triggering a Large Scale TDM Plan. Any development or redevelopment smaller than those that meet the thresholds would be exempt, except for other requirements specified in the zoning code, such as minimum bike parking spaces.

- ≥10,000 square feet of new construction, or
- ≥10 new or added housing units, or
- ≥20,000 square feet of changed land uses, or
- ≥15 new or additional parking spaces, or
- ≥15 new or additional peak hour trips[3]

A **Large Scale TDM Plan** could be required for development proposed at a scale that meets or surpasses the following thresholds:

- ≥30,000 square feet of new construction, or
- ≥30 new or added housing units, or
- ≥40,000 square feet of changed land uses, or
- ≥30 new or additional parking spaces, or
- ≥30 new or additional peak hour trips[4]

Policy Option Lessons

Key lessons of TDM policies and requirements from municipalities across the country include:

- To achieve Town goals, it is helpful to establish site/project specific goals that hold project owners/developers accountable to their commitments, with flexibility to adjust plans reflective of what has or has not worked to date.
- Penalties for noncompliance serve as a strong incentive for developers or property owners to ensure that they are meeting their vehicle trip reduction targets consistently over time. Effective penalties include a financial penalty, or maintenance of the Certificate of Occupancy.
- While project owners/developers are held accountable with these ambitious TDM policies, flexibility in meeting requirements is key to ensure that developers still want to pursue their projects through construction.

[3] Trip generation shall use standards and methodologies promulgated by the most recent editions of the Institute of Transportation Engineers or Urban Land Institute manuals, or another appropriate source approved by the Town.

[4] Trip generation shall use standards and methodologies promulgated by the most recent editions of the Institute of Transportation Engineers or Urban Land Institute manuals, or another appropriate source approved by the Town.

- Point systems bring transparency to the site plan review process for developers and can incentivize TDM measures with the most benefit to Vienna specifically.
- The need for dedicated staff to monitor and enforce programs on an annual or triannual basis may create difficulty for Vienna if there are many development proposals per year subject to reporting requirements.