Proposed Zoning Text Amendment (ZTA), Bicycle Parking – Requirements & Design Standards

Description

The proposed Zoning Text Amendment (ZTA) would amend the bicycle parking requirements; amend the bicycle parking design standards; and generally amend the provisions concerning bicycle parking and parking design.

Summary

Staff recommends approval to transmit the proposed Zoning Text Amendment to the County Council requesting Introduction. Once the County Council introduces the text amendment the Planning Board and its staff will have another opportunity to review the text, prior to the Council conducting a public hearing.

Background/Analysis

Bicycle Master Plan

As approved on November 27, 2018 by the Montgomery County Council, the Bicycle Master Plan sets forth a vision for Montgomery County as a world-class bicycling community, where people in all areas of the County have access to a comfortable, safe and connected bicycle network, and where bicycling is a viable transportation option that improves our quality of life.

Under Policy Recommendation 2.19 of the Plan, it was recommended that the Montgomery County Zoning Ordinance be amended to improve the bicycle parking and end-of-trip bicycle facility requirements. While the Zoning Code revisions in 2014 introduced major improvements for the provision of bicycle parking, showers and changing rooms, additional updates are needed to clarify existing requirements and to meet industry best practices, including requirements to:
• Incentivize bicycle rooms as the preferred form of long-term bicycle parking in residential and commercial buildings.
• Disallow bicycle lockers and bicycle racks as long-term bicycle parking in residential and commercial buildings.
• Identify performance standards for stacked bike racks.
• Establish certain requirements for providing and locating bicycle repair stations.
• Provide a portion of long-term bicycle parking to accommodate larger bicycles, including tandems, bicycles with trailers and cargo bikes.

ZTA Provisions

The proposed ZTA amends the bicycle parking requirements and amends the bicycle parking design standards as follows:

• **Section 6.2.3.I.7.D. (Changing Facilities - Showers and Lockers):** Eliminates the separate gender reference for showers and lockers associated with a changing facility. *(Lines 19-20)*

  **Rationale:** See Rationale for Lines 157-177.

• **Section 6.2.4.C. (Bicycle Parking Space Requirements)** *(Lines 32-36)*
  
  o Multi-Unit Living metric changes from a requirement of at least 20 Dwelling units to at least 10 dwelling units. Also, maximum bicycle parking spaces changes from 100 to 100 per building.

    **Rationale:** Reducing threshold from 20 to 10 increases access to long-term bicycle parking. The “per building” specification was added since some development projects include multiple buildings.

  o Establishes a separate metric (change from dwelling units to total number of employees), minimum/maximum bicycle parking space and long-term space percentage requirement for Residential Care Facility associated with an Assisted Living/Memory Care Facility.

    **Rationale:** Assisted Living/Memory Care Facilities (a type of Residential Care Facility) technically do not have dwelling units because these facilities do not have kitchens. Since parking will most likely be used by employees, this use case has been separated and assigned a metric of “total employees”.

  o Excludes home-based group day care from bicycle parking space requirement.

    **Rationale:** Waivers are often granted in these use cases since bicycle parking is generally not needed.

  o Changes the metric (from gross floor area to total number of students and total number of employees), for an Educational Institution (Private).
Rationale: Metric changed for consistency with the Association of Pedestrian and Bicycle Professionals’ recommendations.

- Establishes a category for Religious Institution, with a metric based on 2,000 square feet of gross floor area.

   Rationale: It is common to require parking for religious institutions in other jurisdictions. The recommended minimum / maximum number of bicycle parking spaces are based on religious institution parking requirements in Portland, OR and Cambridge, MA.

- **Section 6.2.6. Bicycle Parking Design Standards**
  - Provides definitions for Bicycle Locker, Inverted-U Rack and Secure Parking Area (Lines 38-47)
    
    Rationale: These terms are frequently used throughout the zoning code and their meanings are not standardized nor commonly known.
  
  - Parking Space and Aisle Dimensions have been clarified and updated. (Lines 50-65)
    
    Rationale: This change ensures consistency and clarity regarding the typical dimensions of bicycle parking spaces, the provision of space for longer bicycles (such as tandems and cargo bikes) and aisle widths and ensures that people of varying heights will be able to comfortably store their bicycles. Expands the aisle width requirement from 48 inches to 72 inches for ease of maneuvering bicycles, as the typical length of a bicycle is 60 inches. Clarifies that an aisle only needs to be provided on one side of a row of parking.
  
  - Establishes a standard bicycle rack as an inverted-U rack unless another design is approved by the Planning Director (or their designee) as performing as well as an inverted-u rack. (Lines 66-78)
    
    Rationale: This ensures all installed bicycle racks function as intended.
  
  - Provides a new illustration for a bicycle room with appropriate parking space/aisle dimensions. (Lines 79-80)
    
    Rationale: This visual aid provides clarity for those using the code and reflects the proposed amendments to the code.
  
  - Establishes that a long-term bicycle parking space can be provided within a secure parking area (defined as a weather-protected, standalone bicycle parking structure or building extension with shared racks and access control) and that a bicycle locker does not satisfy the requirements for long-term bicycle parking. (Lines 84-88)
    
    Rationale: Secure parking areas expand the possibilities for long-term parking; particularly, their separate/standalone nature is useful when providing long-term parking to users outside
of one specific building or to users of multiple facilities. Lockers are no longer recommended because they are not an efficient use of space.

- Establishes what are considered acceptable facilities for long-term bicycle parking including: bicycle rooms on the ground floor of a residential/commercial building, bicycle rooms in a parking garage, bicycle cages in a parking garage, and secure parking areas. \( \text{(Lines 89-92)} \)

\textbf{Rationale:} Acceptable facilities are listed for clarity.

- Establishes proportionality requirements for parking when multiple buildings are part of a development and establishes requirements for proximity to the multiple buildings for long term bicycle parking. \( \text{(Lines 93-99)} \)

\textbf{Rationale:} Ensures parking spaces are well-distributed throughout a development containing more than one building, and that they are located within reasonable walking distance of an entrance.

- Requires that a long-term bicycle parking space in a garage be outfitted with a rack on to which a bicycle may be locked. \( \text{(Lines 115-116)} \)

\textbf{Rationale:} Ensures the parking space is secure.

- Establishes automation requirements when a bicycle storage area requires the use of doors or when bicycle racks are stacked, or racks are provided that increase parking capacity by providing more than one tier. \( \text{(Lines 122-132)} \)

\textbf{Rationale:} Ensures ease of maneuvering a bicycle into a facility with doors. “Automatic” is the official term for a door that does not require the use of hands (in ADA Compliance code).

- Establishes new requirements for all gender changing facilities (showers and lockers). \( \text{(Lines 157-177)} \)

\textbf{Rationale:} Where showers are required, at least two single-stall, combined shower/changing rooms marked “All-Gender” (the standard term in the U.S.) should be provided for the comfort of all users, regardless of gender identity. Similarly, lockers should not be allotted solely to gender-specific locker rooms; some lockers should be available in a location that all users may comfortably access.

- Establishes a requirement for providing bicycle repair stations for multi-unit residential buildings with a minimum of 10 units and for all commercial buildings. The repair station must be co-located with any long-term bicycle parking included in the development. \( \text{(Lines 191-202)} \)

\textbf{Rationale:} Provision of repair stations (which include air pumps) in higher-parking-count facilities encourages bicycle usage.
o Establishes a requirement that all long-term bicycle parking facilities be equipped with at least one outlet per every five spaces for charging electric bicycle batteries. (Lines 203-207)

**Rationale:** As electric bicycles become more popular, long-term parking facilities should include charging outlets. Currently, electric bicycles make up 10% of bicycle sales. The requirement of 1 outlet/5 spaces accounts for growth in the share of electric bicycles.

o Requires that each short-term bicycle parking space be outfitted with a rack on to which a bicycle may be locked. (Lines 224-225)

**Rationale:** Ensures the parking space is secure.

o Updates requirements for positioning of sidewalk racks and provides illustrations for further clarity. (Lines 228-247)

**Rationale:** Ensures sufficient clearance of the curb and/or building face, depending on rack location/orientation.

**Conclusions**

Staff recommends that the Planning Board transmit the proposed ZTA to the County Council for introduction. The proposed zoning text amendment amends the bicycle parking requirements and amends the bicycle parking design standards consistent with policy recommendations outlined in the adopted Bicycle Master Plan.

**Attachments**

1. Proposed ZTA to amend the bicycle parking and design requirements
ATTACHMENT 1

Zoning Text Amendment No.: 19-**
Concerning: Bicycle Parking – Requirements & Design Standards
Draft No. & Date: 1-5/3/2019
Introduced: Public Hearing: Adopted: Effective: Ordinance No.:  

COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Co-sponsor:

AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- amend the bicycle parking requirements;
- amend the bicycle parking design standards; and
- generally amend the provisions concerning bicycle parking and parking design

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

Division 6.2. “Parking, Queuing, and Loading”
Section 6.2.3. “Calculation of Required Parking”
Section 6.2.4. “Parking Requirements”
Section 6.2.6. “Bicycle Parking Design Standards”

EXPLANATION: **Boldface** indicates a Heading or a defined term. **Underlining** indicates text that is added to existing law by the original text amendment. **[Single boldface brackets]** indicate text that is deleted from existing law by original text amendment. **Double underlining** indicates text that is added to the text amendment by amendment. **[[Double boldface brackets]]** indicate text that is deleted from the text amendment by amendment. * * * indicates existing law unaffected by the text amendment.
ORDINANCE

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:
Sec. 1. DIVISION 59-6.2 is amended as follows:

Section 6.2.3. Calculation of Required Parking

I. Adjustments to Vehicle Parking

7. Adjustments Allowed Only in Commercial/Residential and Employment Zones

   c. Bike-Share Facility

   A bike-share facility with a minimum of 10 spaces may be substituted for 3 vehicle parking spaces if the bike-share facility is accepted by the Department of Transportation as part of an approved comprehensive plan of bike-sharing stations.

   d. Changing Facilities - Showers and Lockers

   The deciding body may reduce the required number of vehicle parking spaces by 3 spaces for each additional changing facility provided above the minimum required under Section 6.2.6.B.3. [A.4.] A changing facility must include a shower and lockers [provided separately for each gender.]

Section 6.2.4. Parking Requirements

A. Using the Parking Tables

   Uses on the parking table match the allowed uses and use groups in Article 59-3. The number of required spaces is based on a metric specific to each use. If the proposed intensity of the use is less than the metric in the tables in subsection B and C, the baseline minimum is calculated using a fraction
of that metric. The number of vehicle parking spaces required also depends upon whether the property is located in or outside of a Parking Lot District or Reduced Parking Area.

C. Bicycle Parking Spaces

To view the Bicycle Parking Spaces table in PDF format, click Table 6.2.4C

<table>
<thead>
<tr>
<th>USE or USE GROUP</th>
<th>Metric</th>
<th>Agricultural, Rural Residential, Residential, and Industrial Zones</th>
<th>Commercial/Residential and Employment Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Minimum (Maximum)</td>
<td>% Long-Term</td>
</tr>
<tr>
<td>RESIDENTIAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Household Living</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multi-Unit Living</td>
<td></td>
<td>0.35 (100 max per building)</td>
<td>95%</td>
</tr>
<tr>
<td>Group Living</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dormitory</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residential Care Facility (Assisted Living/Memory Care Facility)</td>
<td>0.25 (50 max)</td>
<td>95%</td>
<td>0.25 (50 max)</td>
</tr>
<tr>
<td>Residential Care Facility (excluding home-based Day Care)</td>
<td>0.10 (25 max)</td>
<td>95%</td>
<td>0.10 (25 max)</td>
</tr>
<tr>
<td>CIVIC AND INSTITUTIONAL</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day Care Facility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Day Care Center</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group Day Care [Day Care Center] (excluding home-based Day Care)</td>
<td>5,000 SF of GFA</td>
<td>1.00 (5 max)</td>
<td>85%</td>
</tr>
<tr>
<td>Educational Institution (Private)</td>
<td>[5,000 SF of GFA] Total Students</td>
<td>[1.00 (50 max)] 0.05 (50 max)</td>
<td>[15%] 0%</td>
</tr>
<tr>
<td>Total Employees</td>
<td></td>
<td>0.10 (15 max)</td>
<td>100%</td>
</tr>
</tbody>
</table>
Zoning Text Amendment No.: 19-**

<table>
<thead>
<tr>
<th>* * *</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Swimming Pool (Community)</strong></td>
</tr>
<tr>
<td>5,000 SF of GFA</td>
</tr>
<tr>
<td>1.00 (25 max)</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td>0.50 (25 max)</td>
</tr>
<tr>
<td>15%</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>* * *</th>
</tr>
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<tbody>
<tr>
<td><strong>Religious Institution</strong></td>
</tr>
<tr>
<td>2,000 SF of GFA</td>
</tr>
<tr>
<td>1.00 (25 max)</td>
</tr>
<tr>
<td>15%</td>
</tr>
<tr>
<td>1.00 (25 max)</td>
</tr>
<tr>
<td>15%</td>
</tr>
</tbody>
</table>

* * *

Section 6.2.6. Bicycle Parking Design Standards

Definitions.

In this section except where specified otherwise, the following words and phrases have the meanings indicated:

**Bicycle Locker**: A space intended to store one bicycle that is locked from the outside, rather than securing the bicycle itself.

**Inverted-U Rack**: In the shape of an upside-down “U”, staple, or loop, this rack provides two points of ground contact and two points of contact for supporting a bicycle.

**Secure Parking Area**: A weather-protected, standalone bicycle parking structure or building extension with shared racks and access control.

A. Dimensions and Bicycle Racks

1. Parking Space and Aisle Dimensions

a. Each horizontal parking space (a space provided parallel to the ground) must have a minimum length of 72 inches, minimum width of 18 inches, and minimum height of 84 inches. If an inverted-U or similar rack is provided, one rack may serve two bicycles if it is installed in a manner that provides the minimum parking space dimensions on each side.
b. When a parking space is provided vertically (perpendicular to the ground), the vertical clearance of the space must be a minimum of 75 inches and the depth (measured along the floor from the anchoring wall) must be a minimum of 48 inches. The width of the space must be a minimum of 30 inches.

c. A minimum of 10% of long-term parking spaces must be at least 120 inches long and 30 inches wide to accommodate non-standard bicycles.

d. A bicycle parking facility must have an access aisle, a minimum of 72 inches, on at least one side of a row of parked bicycles.

2. Racks

A standard bicycle rack is an inverted-U rack. A bicycle rack must:

a. permit a bicycle frame and one wheel to be locked to the rack with a high-security lock;

b. permit a bicycle to be securely held with its frame supported in at least 2 places;

c. be durable and securely anchored;

d. have a locking surface thin enough to allow standard u-locks to be used, but thick enough so the rack cannot be cut with bolt cutters; and

e. not include any elements within the interior space.

Any rack that is not an inverted-U rack must be approved by the Planning Director (or their designee) and should perform as well as an inverted-u rack.
[A]B. Long-Term Spaces

1. Location, Access, and Security

a. Each long-term bicycle parking space must be provided within a building, covered parking garage, or [bicycle locker] secure parking area located near the building or structure and the street or other bicycle right-of-way. Bicycle lockers do not satisfy the requirements for long-term bicycle parking.

b. Acceptable facilities for long-term bicycle parking include: bicycle rooms on the ground floor of a residential/commercial building, bicycle rooms in a parking garage, bicycle cages in a parking garage, and secure parking areas.

c. When a development project is composed of multiple buildings, the total number of parking spaces required should be calculated for the entire project and distributed proportionally to each building based on its share of the total...
parking space requirement. When the long-term bicycle parking for multiple buildings is co-located, it must be within 200 feet of an entrance to each of the participating buildings.

[b]d. Each space must be available and accessible for all building tenants during the building’s hours of operations. For residential tenants, each space must be accessible 24 hours a day, 7 days a week.

[c]e. A long-term bicycle parking space in a garage:
   i. must be clearly marked as a long-term bicycle parking space;
   ii. must be located no lower than the first complete parking level below grade, and no higher than the first complete parking level above grade;
   iii. must be in a well-lit, visible location near the main entrance or elevators; [and]
   iv. should be separated from vehicle parking by a barrier that minimizes the possibility of a parked bicycle being hit by a car[…]; and
   v. must be outfitted with a rack to lock the bicycle to, as defined in Section 6.2.6.A.2.

[d]f. If a long-term bicycle parking space is in an enclosed area, the facility must not be accessible to anyone without authorized access.

[e. If a locker is provided, the locker must be securely anchored.]

[f]g. Each facility must be well-maintained and well lit.
h. If the bicycle storage area requires the use of doors, doors must be fully automatic or automatically open with the push of a button.

i. Stacked bicycle racks, or racks that increase parking capacity by providing more than one tier, must:
   i. include a mechanism that lowers upper-level loading trays to increase user access;
   ii. have an aisle with a minimum width of 84 inches to accommodate access to the top rack; and
   iii. be designed so that users can easily lock the bicycle from the aisle.

[2. Space Dimensions]

a. Each long-term bicycle parking space must have:
   i. a minimum vertical clearance of 75 inches for spaces other than lockers;
   ii. a minimum vertical clearance of 48 inches for a locker;
   iii. a minimum length of 72 inches and width of 24 inches if a bicycle is placed horizontally; and
   iv. a minimum length of 40 inches and width of 24 inches if a bicycle is placed vertically.

b. A bicycle parking facility must have an aisle a minimum of 4 feet in width between rows of bicycle parking spaces and the perimeter of the area devoted to bicycle parking.

c. If a room or common locker is not divided into individual spaces, each 12 square feet of floor area is counted as one bicycle parking space.
d. If a bicycle parking facility has a manufactured metal locker or stall, each locker or stall devoted to bicycle parking is counted as one bicycle parking space.]

[3] Signs

If a long-term bicycle parking facility is not visible from the street or main building entrance, the property owner must post a sign in a lobby or common area indicating the location of the bicycle parking.


a. Any individual tenant space with more than 50,000 square feet of nonresidential gross floor area (excluding retail or uses with less than 50 employees during the largest shift), must have at least [one] two all-gender, single-stall, combined shower/and changing rooms per building. [facility for each gender, unless the] If a development with more than 50,000 square feet of nonresidential gross floor area (excluding retail or uses with less than 50 employees during the largest shift) has shower and changing facilities in a common area that is available to all tenants, at least two all-gender, single-stall, combined shower/changing rooms must be provided per building.

i. Two [One] additional showers and changing facilities [facility per gender] must be installed for every additional 50,000 square feet of nonresidential gross floor area (excluding retail), up to a maximum of [3 for each gender]8 per building. Additional showers beyond the first two all-gender, single-stall facilities
may be co-located into gender-specific, multi-stall facilities evenly distributed between genders.

b. If a long-term bicycle storage facility is required for a nonresidential use, the facility must have a minimum of 0.6 [0.3] clothing lockers for each required long-term storage space [for each gender]. Each clothing locker must be:

i. a minimum of 12 inches wide, 18 inches deep, and 36 inches high;

ii. available for use during all hours that employees are on-site; and

iii. installed adjacent to the showers and changing facilities in a safe and secured area.


4. Repair Stations

A multi-unit dwelling with 10 or more units and all commercial buildings must provide at least one bicycle repair station or equivalent facilities for bicycle repair and maintenance. The repair station should be co-located with long-term bicycle parking and include a repair stand. The repair stand must include a clear area measuring a minimum of 90 inches by 45 inches, with the back of the repair stand placed at least 12 inches from the wall. A basic repair stand should have: (a) a supporting arm to hold a bicycle without causing damage, (b) basic tools attached to the stand with tamper-proof hardware, and (c) an air pump attached to the stand with tamper-proof hardware.
5. Electric Bicycle Charging

All long-term bicycle parking facilities must be equipped with at least one outlet per every five spaces, evenly distributed throughout the long-term bicycle parking facility, for charging electric bicycle batteries.

[B]C. Short-Term Spaces

1. Location, Access, and Security

a. Each short-term bicycle parking space must be:
   i. available to the public;
   ii. located in a convenient, well-lit area that is clearly visible to both a visitor to the building and a person who is on the sidewalk that accesses the building’s main entrance; and
   iii. within 90 feet from:
      (a) the main entrance of any each building within the development, and closer than the nearest non-accessible vehicle parking space; or
      (b) at least one main entrance of a building with more than one main entrance; unless
      (c) the applicable deciding body approves an alternative location during the site plan or conditional use process.
   iv. outfitted with a rack to lock the bicycle to, as defined in Section 6.2.6.A.2.

b. Each parking facility is prohibited from obstructing pedestrian traffic or interfering with the use of the pedestrian area.

c. Any sidewalk rack that is
i. *parallel* to the curb must be located so that the nearest vertical component of the rack is a minimum of 24 inches[feet] from the curb face and 36 inches from the building face[].

ii. [d. Any sidewalk rack aligned perpendicular* perpendicular* to the curb must be located so that the nearest vertical component of the rack is a minimum of 48 inches[ feet] from the curb face and 42 inches from the building face[].]

iii. *diagonal* to the curb must be located so that the nearest vertical component of the rack is a minimum of 48 inches from the curb face, and 42 inches from the building face, measured in a line parallel to the orientation of the rack.

[e]d. Each sidewalk rack must be a minimum of 14 feet from any stand-alone fire hydrant.

[f]e. Each parked bicycle must be accessible without moving another bicycle.

f. Rack placement should not conflict with ADA requirements.

[g. A bicycle parking facility must have an aisle a minimum of 4 feet in width behind all occupied parking racks to allow room for bicycle maneuvering.]


Minimum offset dimensions for short-term bicycle parking.

2. Racks

A bicycle rack must:

a. permit a bicycle frame and one wheel to be locked to the rack with a high security lock;

b. permit a bicycle to be securely held with its frame supported in at least 2 places;

c. be offset a minimum of 30 inches on center;
d. be durable and securely anchored;
e. have a locking surface thin enough to allow standard u-locks to be used, but thick enough so the rack cannot be cut with bolt cutters;
f. have aisles a minimum width of 48 inches between racks;
g. have a minimum depth of 72 inches between each row of parked bicycles; and
h. perform as well as an inverted u-rack.]

Sec. 2. Effective date. This ordinance becomes effective 20 days after the date of Council adoption.

This is a correct copy of Council action.

Megan Davey Limarzi, Esq.
Clerk of the Council