

Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Complete Streets	Number 026-25
Originating Department Department of Transportation	Effective Date

Department of Transportation Montgomery County Regulation on:

COMPLETE STREETS

Issued by: County Executive
COMCOR No. 49.28.01
Authority: Code Section 49-28
Supersedes: Executive Regulation 31-08AM
Council Review Method (2) Under Code Section 2A-15

Register Vol. 42_, No. 10_
Comment Deadline: October 1, 2025
Effective Date:
Sunset Date: N/A

SUMMARY: The regulation replaces the repealed language of COMCOR Section 49.28.01.

ADDRESS: Director, Department of Transportation

Executive Office Building, 10th Floor

101 Monroe Street

Rockville, Maryland 20850

STAFF CONTACTS: Andrew Bossi, Office of the Director, 240-777-7200

BACKGROUND: The Complete Streets Design Guide was originally published in February 2021,

updating the County's design principles for roads, walkways, and bikeways by embracing principles focused on safety, sustainability, and vitality. The Guide led to a substantial rewrite of Chapter 49 of the County Code via Bill 24-22, which became effective in February 2023. Expedited Bill 34-22 revised several Town

Center area classifications and also went into effect in February 2023.

The Complete Streets Design Guide was updated to version 1.2 in May 2024. In addition to minor revisions, this update added material that was included in Council's approval of Bills 24-22 and 34-22 (see p. 318-319 of the Complete Streets

Design Guide Version 1.2 for a list of edits).

The Curbless & Shared Streets Design Guide was published in June 2024, reflecting a deeper dive into a topic only briefly mentioned in the original Complete Streets Design Guide.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

While these guides provide direction to engineers as they design new transportation infrastructure in Montgomery County, they do not carry the weight of the law to affect their realization.

COMCOR 49.28.01 Complete Streets

The purpose of this regulation is to update Chapter 49 regulations to reflect the 2023 updates to the County Code. This includes a substantial rewrite of most of the existing regulations by establishing definitions, the prioritization of different road elements, and design parameters for each road element.

COMCOR 49.28.01.01 Applicability

- (a) This regulation applies to all projects except:
 - (1) All capital projects already included in the Adopted CIP FY 26-31, except those projects listed in Facility Planning Transportation.
 - Projects listed in Facility Planning Transportation which have completed Facility Planning Phase I by the Effective Date (as defined in COMCOR 49.28.01.27), including review of the project prospectus by the Council Transportation and Environment Committee, except for compliance with COMCOR 49.28.01.25, Stormwater Management.
 - All development projects that have received preliminary plan or site plan approval by the Effective Date (as defined in COMCOR 49.28.01.27). This exemption is not applicable if the project submits a major amendment (see Sections 50.4.2.F.2, 59.7.3.4.J.1, and 59.7.3.3.I) after the Effective Date (as defined in COMCOR 49.28.01.27).
- (b) Approved master plans, sector plans, functional plans, streetscaping standards, and design guidelines may:
 - (1) <u>assign different default widths for street elements. Default widths must not be less</u> than the minimum width;
 - (2) increase the minimum width of street elements;
 - (3) assign different priorities for street elements; and



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

- (4) other modifications as identified elsewhere within these regulations.
- (c) All facilities must comply with the Americans with Disabilities Act (ADA) guidance for achieving compliance as included in the Public Right-of-Way Accessibility Guidelines (PROWAG) published by the U.S. Access Board.

COMCOR 49.28.01.02 Definitions

<u>Active Zone</u> – the area focused on non-auto users and located outside the road's curb lines or edge of pavement, as shown in "Figure 2-8. Zones Defined" in the Guide, which includes the Maintenance Buffer, Frontage Zone, Clear Zone, and Street Buffer. It may also include Bikeways and the Pedestrian / Bicycle Buffer in accordance with COMCOR 49.28.01.17(b).

<u>Advisory Bike Lane</u> – dashed lanes within a Travelway Zone that create lanes similar to Conventional Bike Lanes and visually reduces the Travelway Zone to a narrower width, but allows motor vehicles to enter into the bike lanes for purposes of navigating past opposing traffic.

Alley – a road classification defined in Section 49-31(c)(16) of the Montgomery County Code.

<u>Area Connector</u> – a road classification defined in Section 49-31(c)(9) of the Montgomery County Code.

<u>Bikeable Shoulder</u> – a Curbside Zone that accommodates bicycles, scooters, and stopped or parked vehicles all in the same space, and pedestrians in cases where sidewalks are not provided.

Bikeway – as defined in Section 49-26 of the Montgomery County Code.

<u>Bikeshare Station</u> – a docking structure where individuals can pick up and return bicycles affiliated with the County's official bicycle rental program(s).

Boulevard – a road classification defined by Section 49-31(c)(6) in the Montgomery County Code.

<u>Breezeway</u> – higher quality bikeways intended for a large volume of users, featuring construction, surface materials, and maintenance practices that maximize surface smoothness and pavement life, minimizing potential for pavement cracking and buckling.

<u>Buffered Bike Lane</u> – a Conventional Bike Lane that is separated from the adjacent motor vehicle travel lane by striped buffer space.

Bump-Out – extensions of the Street Buffer into the Curbside Zone.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

<u>Bus Bulb</u> – extensions of the curb which extend the Street Buffer into the Curbside Zone, expanding the space available for passenger use at a transit stop.

Bus Boarding Island – transit stops that are disconnected from the walkway by separated bike lanes.

<u>Chicane</u> – horizontal shifts along a travelway to the left and right, typically used for speed management purposes.

<u>Clear Zone</u> – the portion of the Active Zone where the Sidewalk and Sidepath are provided, as shown in "Figure 2-8. Zones Defined" in the Guide, which includes paths between the Sidewalk / Sidepath and pedestrian ramps, transit facilities, and fire escape routes.

<u>Climbing Bike Lane – a Conventional Bike Lane provided only along an upslope.</u>

<u>Closed Section</u> – an edge of a road's Street Zone that is demarcated with a curb.

<u>Comfort Zone</u> – a pedestrian-only area along a Curbless Street or Shared Street, as shown in "Figure 2-108 Shared Street zones" in the Guide, intended for users who may not feel comfortable in the Shared Zone and for accessible guidance along the street.

Commercial Alley – an Alley serving any non-residential zone.

<u>Contraflow Bike Lane</u> – a Conventional Bike Lane adjacent to an opposite-direction motor vehicle <u>travel lane</u>.

<u>Controlled Major Highway</u> – a road classification defined by Section 49-31(c)(2) of the <u>Montgomery County Code.</u>

<u>Conventional Bike Lane</u> – a portion of the Street Zone reserved for one-way bicycle and scooter use, located immediately adjacent to motor vehicle travel lanes.

Country Area – is a County classification defined in Section 49-31(a)(3) of the Montgomery County Code. Maps of Country Areas as of the Effective Date (as defined in COMCOR 49.28.01.27) are attached as Appendix A, which may be modified by approved master plans, sector plans or functional plans. See the approved and adopted master plan for the current version.

<u>Country Connector</u> – a road classification defined in Section 49-31(c)(14) of the Montgomery County Code.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Complete Streets	Number 026-25
Originating Department	Effective Date
Department of Transportation	

<u>Country Road</u> – a road classification defined by Section 49-31(c)(15) of the Montgomery County Code.

<u>Curbless Street</u> – a type of street that lacks a vertical curb and gutter, is designed for bicyclists to comfortably ride in the roadway and to accommodate limited motor vehicle traffic, allows pedestrian crossings at nearly any point along the roadway, with the primary purpose to support community activity rather than focusing on mobility or access.

<u>Curbside Zone</u> – the portion of the Street Zone nearest to the Active Zone, as shown in "Figure 2-8. Zones Defined" in the Guide, for the following uses: parking, transit stops, pickup / drop-off, loading, shoulders or bikeable shoulders, space for turn radii or along horizontal curves, recovery areas, and emergency areas; and may host Active Zone oriented features including parklets, Micromobility Corrals, café seating, Bus Bulbs and Bus Boarding Islands, or extending the Street Buffer.

<u>Dedicated Transitway Zone</u> – an area of a road reserved for transit use which can include Transit Lanes, Transit Buffers, and Station Areas.

<u>Designer</u> – the person or entity responsible for the design of a project and may include the project manager of a public capital project or someone from the applicant's team for a private development.

<u>Design Exception</u> – an exception from design requirements in COMCOR 49.28.01 or corresponding standards and guidelines, which must document the reason for departing from requirements and provide adequate justification from a professional engineer licensed in Maryland that modifications can occur without compromising safety and accessibility, as determined and approved by the Director of the Department of Transportation.

<u>Downtown Area</u> – as defined in Section 49-31(a)(1) of the Montgomery County Code. Maps of Downtown Areas as of the Effective Date (as defined in COMCOR 49.28.01.27) are attached as Appendix B, which may be modified by approved master plans, sector plans or functional plans. See the approved and adopted master plan for the current version.

<u>Downtown Boulevard</u> – a road classification defined in Section 49-31(c)(4) of the Montgomery County Code.

<u>Downtown Street</u> – a road classification defined by Section 49-31(c)(5) of the Montgomery County Code.

<u>Frontage Zone</u> – the portion of the Active Zone between the Maintenance Buffer or property line and the Clear Zone, as shown in "Figure 2-8. Zones Defined" in the Guide.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

<u>Functional Intersection Area</u> – the area necessary for drivers to perceive the intersection and extends both upstream and downstream from the physical intersection area as defined by the American Association of State Highway and Transportation Officials (AASHTO).

<u>Furniture Zone</u> – an area along a Curbless Street or Shared Street approximately synonymous with the Street Buffer of a street, as shown in "Figure 2-108 Shared Street zones" in the Guide, that is intended to allow pedestrian access while discouraging motor vehicles from entering the zone.

<u>Guide</u> – the Montgomery County Complete Streets Design Guide prepared by MCDOT and approved by the Maryland-National Capital Park and Planning Commission, as periodically updated, published and adopted for agency use by MCDOT. The current version is available on the Maryland-National Capital Park and Planning Commission's website, which, as of the Effective Date (as defined in COMCOR 49.28.01.27), is Version 1.2 (May 2024).

<u>Inside Travel Lanes</u> – any additional travel lanes that are not Outside Travel Lanes, Left-Turn Lanes, or Two-Way Left-Turn Lanes.

<u>Industrial Area</u> – as defined in Section 49-31(a)(4) of the Montgomery County Code. Maps of Industrial areas as of the Effective Date (as defined in COMCOR 49.28.01.27) are attached as Appendix C, which may be modified by approved master plans, sector plans or functional plans. See the approved and adopted master plan for the current version.

<u>Industrial Street</u> – a road classification defined in Section 49-31(c)(13) of the Montgomery County Code.

<u>Left-Turn Lanes</u> – the area located near the center of the roadway and provide space for motorists to perform left- or U-turns

<u>Maintenance Buffer</u> – the portion of the Active Zone between the property line and either the Frontage Zone or the Clear Zone and is used for ensuring adequate space for maintenance of the public right-of-way.

<u>Median Zone</u> – the area located at the approximate middle of the Street Zone and separates each direction of travel, as shown in "Figure 2-8. Zones Defined" in the Guide as "Median"; is used for landscaping, may include stormwater management and drainage facilities; and the width of which in design may be presumed to include Left-Turn Lanes as set forth in COMCOR 49.28.01.12(d).

<u>Micromobility Corral</u> – the area designated for parking bicycles, scooters, and other similar devices, serving a greater variety of vehicles than Bikeshare Stations and does not include docking infrastructure.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

<u>Neighborhood Connector</u> – a road classification defined in Section 49-31(c)(10) of the Montgomery County Code.

<u>Neighborhood Greenway</u> – a designation assigned to a road with low motor vehicle traffic volumes and speeds, where bicycle / scooter traffic is intended to comfortably ride within the Travelway Zone.

<u>Neighborhood Street</u> – a road classification defined in Section 49-31(c)(11) of the Montgomery County Code.

<u>Neighborhood Yield Street</u> – a road classification defined in Section 49-31(c)(12) of the Montgomery County Code.

<u>Parking Lane</u> – a Curbside Zone being used for parking.

<u>Parking Zone</u> – the area along a Curbless Street or Shared Street reserved for on-street parking and pickup / drop-off / loading activities.

<u>Parkway</u> – a road classification defined in Section 49-31(c)(3) of the Montgomery County Code.

<u>Pedestrian / Bicycle Buffer</u> – the area that functions as amenity space for pedestrians and bicyclists while also providing separation between both modes, as shown in "Figure 2-8. Zones Defined" in the Guide, the Pedestrian / Bicycle Buffer.

<u>Planning Board</u> – the five member board for the Maryland-National Capital Park and Planning Commission for Montgomery County, Maryland responsible for considering plans for new development; providing guidelines for the pattern and pace of growth and density; managing Montgomery County's park system; and recommending properties worthy of historic designations.

<u>Priority Shared Lane</u> – on-street markings within the Travelway Zone shared by motor vehicles, bicyclists, and scooters which communicates that bicyclists have priority and that motorists should expect bicyclists within the areas designated by the markings.

Off-Street Trail – as defined in Section 49-26(b) of the Montgomery County Code.

<u>One-Way Separated Bike Lane</u> – a bikeway reserved for one-way bicycle and scooter use that are physically separated from both motor vehicle and pedestrian spaces.

<u>Open Section</u> – an edge of a road's Street Zone without a curb, not including Curbless Streets, <u>Shared Streets</u>, and <u>Alleys</u>.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

<u>Outside Travel Lane</u> – the area abutting the Curbside Zone, or if no Curbside Zone is provided, they may abut directly to the edge of the Street Zone and alongside the Street Buffer.

<u>Residential Alley – an Alley serving only residential zones.</u>

Rural Area - as defined in Section 49-26 of the Montgomery County Code.

<u>Rustic Road or Exceptional Rustic Road</u> – as defined in Section 49-31(c)(17) of the Montgomery County Code.

Separated Bike Lane – as defined in Section 49-26(c) of the Montgomery County Code.

<u>Shared Bus/Bike Platform</u> – platforms less than 2 feet in width that function as combined bus stops and bike lanes, with the bike lane rising up to sidewalk level as it passes through the bus boarding area.

<u>Shared Street</u> – a type of street that lacks a vertical curb and gutter and is designed for all users to comfortably travel within the same shared space; its primary purpose is to support community activity rather than focus on mobility or access.

<u>Shared Zone</u> – an area along a Curbless Street or Shared Street where pedestrians, bicyclists, and motor vehicles may all mix together in the same space, as shown in "Figure 2-108 Shared Street zones" in the Guide, which, along Curbless Streets, is expected to typically consist of pedestrian crossing behavior at any point along its length; and along Shared Streets, is expected to consist of pedestrian activity traveling along and within the Shared Zone.

<u>Sidepath</u> – as defined in Section 49-26(e) of the Montgomery County Code.

<u>Sidewalk</u> – as defined in Section 49-26 of the Montgomery County Code.

Sidewalk Café – outdoor dining areas within the public space.

<u>Station Area</u> – an area that replaces Transit Buffers at locations with bus stations or may be located as a median between Transit Lanes.

<u>Step-Out Platform</u> – platforms between 2 to 8 feet in width that function as combined bus stops and bike lanes, with the bike lane rising up to sidewalk level as it passes through the bus boarding area.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

<u>Street Buffer</u> – the portion of the Active Zone abutting the Street Zone as shown in "Figure 2-8. Zones Defined" in the Guide. When a Bikeway is located in the Street Zone, the Street Buffer can also be located in the Street Zone.

Street Zone – the area focused on motorized vehicles and located between the road's curb lines or edges of pavement, as shown in "Figure 2-8. Zones Defined" in the Guide, and includes the Curbside Zone, Travelway Zone, Median Zone, Dedicated Transitway Zones, and in accordance with COMCOR 49.28.01.17(b), Bikeways, and Street Buffers.

Suburban Area – as defined in Section 49-31(a)(5) of the Montgomery County Code.

<u>Town Center Area</u> – as defined in Section 49-31(a)(2) of the Montgomery County Code. Maps of Town Center areas are attached as Appendix D, which may be modified by approved master plans, sector plans or functional plans. See the approved and adopted master plan for the current version as of the Effective Date (as defined in COMCOR 49.28.01.27).

<u>Town Center Boulevard</u> – a road classification defined in Section 49-31(c)(7) of the Montgomery County Code.

<u>Town Center Street</u> – a road classification defined in Section 49-31(c)(8) of the Montgomery County Code.

<u>Transit Buffer</u> – an area separating the Transit Lanes from other elements in the Street Zone.

Transit Lane – a travel lane dedicated primarily for transit vehicle use.

Transitway – as defined in Section 49-26 of the Montgomery County Code.

<u>Travelway Zone</u> – the portion of the Street Zone between the Curbside Zones, as shown in "Figure 2-8. Zones Defined" in the Guide, that may be bisected by a median or dedicated transitway, and used primarily for motor vehicle travel, and includes Outside Travel Lanes, Inside Travel Lanes, Left-Turn Lanes, and Two-Way Left-Turn Lanes.

<u>Two-Way Separated Bike Lane</u> – a bikeway reserved for bidirectional bicycle and scooter use that is physically separated from both motor vehicle and pedestrian spaces.

<u>Two-Way Left-Turn Lanes</u> – a variant of Left-Turn Lanes whereby traffic traveling in either direction may use the same lane for left-turns; and are permitted only where already existing or as part of retrofitting 4-lane roads into 3-lane roads.

COMCOR 49.28.01.03 Road Classifications



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (a) All roads not classified by a master plan, sector plan, or functional plan that are:
 - (1) <u>adjacent to Agriculture or Rural Cluster Zones are classified as Country Roads, unless designated by the Director of Transportation as a Neighborhood Street.</u>
 - (2) not adjacent to Agriculture or Rural Cluster Zones are classified as Neighborhood Streets.
- (b) The Director of Transportation may designate a Neighborhood Street as a Neighborhood Yield Street where:
 - (1) available or planned rights-of-way are less than 52 feet, or curb-to-curb widths along a bidirectional street are less than 28 feet; and
 - where gaps of at least 30 feet in length exist at intervals of 250 feet or less which are navigable by motor vehicles to enable opposing traffic to navigate around each other.

COMCOR 49.28.01.04 Constrained Rights-of-Way & Prioritization

- (a) The minimum rights-of-way are defined by Section 49-32(c) of the Montgomery County Code.
- (b) Default widths must be used except where constraints are present, in which case the prioritization methodology set forth in COMCOR 49.28.01.04(c) must be used for reducing features toward their minimum widths.
- (c) The prioritization of street elements is included in the following table, denoting high (H), medium (M), and low (L) priorities, as well as those where prioritization is not applicable (N/A), with the following exceptions:
 - (1) along Bikeways designated as Breezeways, the following are high priority:
 - (A) Street Buffer;
 - (B) Bikeway;
 - (C) Pedestrian / Bicycle Buffer; and



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (D) any medians serving as a crossing island / refuge area per COMCOR 49.28.01.21(d)
- (2) where the Street Buffer, Bikeway, or Pedestrian / Bicycle Buffer are equal in priority, the following hierarchy applies from greatest to lowest:
 - (A) Street Buffer (highest relative priority)
 - (B) Bikeway
 - (C) Pedestrian / Bicycle Buffer (lowest relative priority)
- (3) Medians provided along roads with 6 or more total through travel lanes must be considered high priority at pedestrian crossings for purposes of providing at least a 6-foot refuge area along the crossing.

Street Element	<u>Median</u>	<u>Dedicated</u> Transitway	<u>Left-Turn</u> Lane	2-Way Center Turn Lane	<u>Travelway</u> Zone	Curbside Zone	Street Buffer	<u>Bikeway</u>	Pedestrian / Bicvcle Buffer	<u>Clear Zone</u>	Frontage Zone	<u>Maintenance</u> Buffer
Downtown Boulevard	<u>M</u>	<u>M</u>	<u>M</u>	N/A	N/A	<u>L</u>	<u>H</u>	<u>H</u>	<u>M</u>	<u>H</u>	<u>M</u>	N/A
Downtown Street	<u>L</u>	<u>M</u>	<u>M</u>	N/A	N/A	<u>M</u>	<u>H</u>	<u>H</u>	<u>M</u>	<u>H</u>	<u>M</u>	<u>N/A</u>
Town Center Boulevard	<u>M</u>	<u>M</u>	N/A	N/A	<u>N/A</u>	<u>M</u>	<u>H</u>	<u>H</u>	<u>M</u>	<u>H</u>	<u>M</u>	<u>N/A</u>
Town Center Street	<u>L</u>	<u>M</u>	N/A	<u>N/A</u>	<u>N/A</u>	<u>L</u>	<u>H</u>	<u>H</u>	<u>M</u>	<u>H</u>	<u>M</u>	<u>N/A</u>
<u>Boulevard</u>	<u>M</u>	<u>M</u>	N/A	N/A	N/A	<u>L</u>	<u>H</u>	<u>H</u>	<u>M</u>	<u>H</u>	<u>L</u>	<u>L</u>
Area Connector	<u>L</u>	N/A	N/A	N/A	N/A	<u>L</u>	<u>H</u>	<u>M</u>	<u>M</u>	<u>H</u>	N/A	<u>L</u>
Neighborhood Connector	<u>L</u>	N/A	N/A	N/A	N/A	<u>L</u>	<u>H</u>	<u>M</u>	<u>M</u>	<u>H</u>	N/A	<u>L</u>
Neighborhood Street	<u>L</u>	N/A	N/A	N/A	N/A	<u>L</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>H</u>	N/A	L
Neighborhood Yield Street	N/A	N/A	N/A	N/A	N/A	<u>H</u>	<u>M</u>	N/A	N/A	<u>H</u>	N/A	L



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Industrial Street	<u>L</u>	<u>M</u>	N/A	N/A	<u>N/A</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>M</u>	<u>H</u>	<u>L</u>	<u>L</u>
Country Connector	<u>L</u>	N/A	N/A	N/A	N/A	<u>M</u>	<u>H</u>	<u>M</u>	<u>M</u>	<u>H</u>	N/A	<u>L</u>
Country Road	<u>L</u>	N/A	N/A	N/A	N/A	<u>H</u>	<u>M</u>	<u>M</u>	N/A	<u>H</u>	N/A	<u>L</u>
<u>Parkway</u>	<u>M</u>	<u>M</u>	N/A	<u>L</u>	N/A	<u>L</u>	<u>H</u>	<u>H</u>	<u>H</u>	<u>H</u>	<u>L</u>	<u>L</u>
<u>Controlled Major</u> <u>Highway</u>	<u>H</u>	<u>M</u>	N/A	N/A	N/A	<u>H</u>	<u>H</u>	<u>M</u>	<u>H</u>	<u>M</u>	N/A	N/A

- (d) If constructing all master-planned and otherwise required elements at their default widths would exceed the available rights-of-way, unless additional right-of-way is obtained, designers must use the prioritization for each street element as defined in COMCOR 49.28.01.04(c) to reduce the width of elements toward their minimum widths:
 - (1) <u>designers must initially reduce the width of low priority elements toward their minimums;</u>
 - (2) <u>if all low priority elements have been reduced to their minimums and additional reductions are necessary, designers must next consider:</u>
 - (A) reducing medium priority elements toward their minimums; or
 - (B) omitting low priority elements that are not required for safety or accessibility, meeting Council-approved operational metrics, or recommended by functional, master, or sector plans.
 - (3) <u>if additional reductions remain necessary after taking the actions under COMCOR</u> 49.28.01.04(d)(1) and (2), designers must next consider:
 - (A) reducing high priority elements toward their minimums; or
 - (B) omitting medium priority elements that are not required for safety, accessibility, meeting Council-approved operational metrics, or recommended by master plan, sector plan, or functional plan.
 - dditional rights-of-way beyond those defined in COMCOR 49.28.01.04(a) may be necessary if additional space is required upon completion of COMCOR 49.28.01.04(d)(1) through (3), or if a designer wishes to have additional elements included.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- with the approval of the Director of Transportation and the Planning Board, property owners may volunteer additional rights-of-way or easements to add additional infrastructure without regard of the prioritization established by this section.
- (e) Design Exceptions are required when:
 - (1) street elements are reduced beneath their minimum dimensions;
 - street elements are reduced or omitted in a manner that does not conform with the prioritization and actions under COMCOR 49.28.01.04(d); or
 - street elements recommended by functional, master, or sector plans are omitted.

 Such omissions are considered an interim condition, and the omission of such elements must not preclude future implementation.

COMCOR 49.28.01.05 Active Zone – Street Buffer

(a) Default and Minimum dimensions of Street Buffers for each road classification are shown in the table below. For this section, "Open" refers to an open section edge of the road, and "Closed" refers to a closed section edge of the road.

Street Classification	Cross-Section	Default Width (ft)	Minimum Width (ft)
Downtown Boulevard	Closed	<u>8</u>	<u>6</u>
<u>Downtown Street</u>	Closed	<u>6</u>	<u>6</u>
Town Center Boulevard	Closed	<u>8</u>	<u>6</u>
Town Center Street	Closed	<u>6</u>	<u>6</u>
<u>Boulevard</u>	Closed	<u>8</u>	<u>6</u>
<u>Boulevard</u>	<u>Open</u>	see (f)	<u>9</u>
Area Connector	Closed	<u>6</u>	<u>6</u>
Area Connector	<u>Open</u>	see (f)	<u>9</u>



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

Neighborhood Connector	Closed	<u>6</u>	<u>6</u>
Neighborhood Connector	<u>Open</u>	see (f)	9
Neighborhood Street	Closed	<u>6</u>	<u>6</u>
Neighborhood Street	<u>Open</u>	see (f)	9
Neighborhood Yield Street	Closed	<u>6</u>	<u>6</u>
Neighborhood Yield Street	<u>Open</u>	see (f)	9
Industrial Street	Closed	<u>6</u>	<u>6</u>
Industrial Street	<u>Open</u>	see (f)	<u>9</u>
Country Connector	Closed	<u>10</u>	<u>10</u>
Country Connector	<u>Open</u>	see (f)	<u>10</u>
Country Road	Closed	<u>8</u>	<u>6</u>
Country Road	<u>Open</u>	see (f)	<u>9</u>
<u>Parkway</u>	Closed	<u>8</u>	<u>6</u>
<u>Parkway</u>	<u>Open</u>	see (f)	<u>9</u>
Controlled Major Highway	Open and Closed	see (c)	<u>10</u>
Residential Alley	Open and Closed	<u>0</u>	<u>0</u>
Commercial Alley	Open and Closed	<u>0</u>	0

- (b) Dimensions include the width of the curb and do not include the width of the gutter pan.
- (c) The default Street Buffer width along Controlled Major Highways is as wide as available within the rights-of-way, as determined in accordance with the prioritization established by COMCOR 49.28.01.04.
- (d) Street Buffers must include paved landing areas when located adjacent to a parking space complying with PROWAG R310 (an "accessible parking space") and there is no other accessible path available for pedestrians using that space.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

- (1) paved landing areas must be 3-feet minimum in width, comply with the ADA, and provide periodic connectivity to the Clear Zone.
- (2) the remaining Street Buffer must provide adequate soil volume for any trees included in the Street Buffer, as determined by standards detailing soil volume requirements.
- (e) Street Buffers and Parking Lanes may share the same space along Downtown Streets and Town Center Streets. The width for such a combined area must be 11 feet minimum, representing the 8-foot Parking Lane plus a 3-foot door swing / landing area at sidewalk level. This combined area must be enclosed by bump-outs at each end. Application of this combined area may only be done when reductions are necessary to fit within available rights-of-way, in accordance with the prioritization established by COMCOR 49.28.01.04, using the priority assigned for the Street Buffer.
- (f) Dimensions for Street Buffers along open section roadways are determined by stormwater management and drainage needs and must not be reduced beneath the minimum width. Stormwater management and drainage needs must be met irrespective of the Street Buffer's assigned priority under COMCOR 49.28.01.04.
- (g) The width of the Street Buffer may be widened as needed for conformance with Appendix E, Street Tree Placement Standard.
- (h) The Street Buffer can be located in the Street Zone in situations where a Bikeway is located in the Street Zone. Where space within the Street Zone is converted to a street-level separated bike lane, the Street Buffer, now also located in-street, may be reduced to a minimum width of 3 feet. If the Street Buffer in this situation is reduced to less than the minimum width shown in the table in COMCOR 49.28.01.05(a): the Pedestrian / Bicycle Buffer must instead use the Street Buffer's corresponding Default and Minimum dimensions. The priority for the Pedestrian / Bicycle Buffer remains unchanged.

COMCOR 49.28.01.06 Active Zone – Clear Zone

- (a) The Clear Zone must be kept clear of obstructions and tripping hazards, fully accessible to pedestrians in compliance with the ADA, and include a maximum cross-slope of two percent.
- (b) Default and Minimum dimensions of the Clear Zone for each road classification are shown in the table below:



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Street Classification	Cross-Section	<u>Default</u> <u>Width (ft)</u>	Minimum Width (ft)
Downtown Boulevard	Sidewalk / Sidepath	<u>15</u>	<u>10</u>
Downtown Street	Sidewalk / Sidepath	<u>10</u>	<u>8</u>
Town Center Boulevard	Sidewalk / Sidepath	<u>10</u>	<u>8</u>
Town Center Street	Sidewalk / Sidepath	<u>10</u>	<u>8</u>
<u>Boulevard</u>	Sidewalk / Sidepath	<u>11</u>	<u>8</u>
Area Connector	Sidewalk	<u>6</u>	<u>6</u>
Area Connector	<u>Sidepath</u>	<u>10</u>	<u>8</u>
Neighborhood Connector	<u>Sidewalk</u>	<u>6</u>	<u>6</u>
Neighborhood Connector	<u>Sidepath</u>	<u>10</u>	<u>8</u>
Neighborhood Street	<u>Sidewalk</u>	<u>6</u>	<u>6</u>
Neighborhood Street	<u>Sidepath</u>	<u>10</u>	<u>8</u>
Neighborhood Yield Street	<u>Sidewalk</u>	<u>6</u>	<u>6</u>
Neighborhood Yield Street	<u>Sidepath</u>	<u>10</u>	8
Industrial Street	<u>Sidewalk</u>	<u>6</u>	<u>6</u>
Industrial Street	<u>Sidepath</u>	<u>10</u>	<u>8</u>
Country Connector	<u>Sidewalk</u>	<u>6</u>	<u>6</u>
Country Connector	<u>Sidepath</u>	<u>10</u>	<u>8</u>
Country Road	Sidewalk	<u>6</u>	<u>6</u>
Country Road	Sidepath	<u>10</u>	8
<u>Parkway</u>	Sidewalk / Sidepath	<u>11</u>	8
Controlled Major Highway	Sidewalk / Sidepath	<u>11</u>	8
Residential Alley	Sidewalk	<u>5</u>	<u>0</u>
Commercial Alley	<u>Sidewalk</u>	<u>5</u>	<u>0</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (c) Materials must be approved for use by the Director of Permitting Services, unless maintenance and liability agreements state otherwise and the material complies with the ADA. If the Clear Zone material uses the same material as in the Frontage Zone, Pedestrian / Bicycle Buffer, and / or Street Buffer, then the design must include a detectable strip of differing material located in the adjacent buffer / zone and along the edge of the Clear Zone.
- (d) An additional 2 feet of width must be provided along each side of the Clear Zone that is directly adjacent to a continuous vertical obstruction of at least 2 feet in height and spanning along the Clear Zone for 6 feet or more longitudinal length.
- (e) The Clear Zone must provide an 8-foot vertical clearance for overhead elements.

COMCOR 49.28.01.07 Active Zone – Frontage Zone

(a) <u>Default and Minimum dimensions of the Frontage Zone for each road classification are shown in the table below:</u>

Street Classification	Default Width (ft)	Minimum Width (ft)
Downtown Boulevard	<u>10</u>	<u>0</u>
Downtown Street	<u>10</u>	<u>0</u>
Town Center Boulevard	<u>7</u>	<u>0</u>
Town Center Street	<u>7</u>	<u>0</u>
Boulevard	<u>7</u>	<u>0</u>
Area Connector	<u>0</u>	<u>0</u>
Neighborhood Connector	<u>0</u>	<u>0</u>
Neighborhood Street	<u>0</u>	<u>0</u>
Neighborhood Yield Street	<u>0</u>	<u>0</u>
<u>Industrial Street</u>	<u>6</u>	<u>0</u>
Country Connector	<u>0</u>	0



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject Complete Streets	Number 026-25
Originating Department	Effective Date
Department of Transportation	

Country Road	<u>0</u>	<u>0</u>
<u>Parkway</u>	<u>7</u>	<u>0</u>
<u>Controlled Major</u> <u>Highway</u>	N/A	<u>N/A</u>
Residential Alley	<u>0</u>	<u>0</u>
Commercial Alley	<u>0</u>	<u>0</u>

- (b) Any required Maintenance Buffers are in addition to Frontage Zones.
- (c) The width of the Frontage Zone may be widened as needed for conformance with Appendix E, Street Tree Placement Standard.

COMCOR 49.28.01.08 Active Zone – Maintenance Buffer

- (a) Any required Maintenance Buffers are in addition to Frontage Zones.
- (b) Default and minimum dimensions of Maintenance Buffers are the same, and for each road classification are shown in the table below:

Street Classification	Width (ft)
Downtown Boulevard	<u>0</u>
Downtown Street	<u>0</u>
Town Center Boulevard	<u>0</u>
Town Center Street	<u>0</u>
<u>Boulevard</u>	<u>2</u>
Area Connector	<u>2</u>
Neighborhood Connector	<u>2</u>
Neighborhood Street	<u>2</u>
Neighborhood Yield Street	<u>2</u>



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Industrial Street	<u>2</u>
Country Connector	<u>2</u>
Country Road	<u>2</u>
<u>Parkway</u>	<u>2</u>
<u>Controlled Major</u> <u>Highway</u>	N/A
Residential Alley	<u>2</u>
Commercial Alley	<u>0</u>

- (c) Except as exempted by COMCOR 49.28.01.08(e), a 2-foot Maintenance Buffer is required regardless of road classification if there is a structure within 2 feet of the right-of-way line.
- (d) The width of the Maintenance Buffer may be widened as needed for conformance with Appendix E, Street Tree Placement Standard.
- (e) The Maintenance Buffer may be omitted under any of the following conditions:
 - if the abutting zone along the side of the roadway allows zero setbacks, as defined in the Zoning Ordinance of the Montgomery County Code;
 - (2) if there is no Sidewalk or Bikeway and the nearest zone to the property line is the Street Buffer, provided the Street Buffer can serve the purpose of the Maintenance Buffer;
 - (3) if there is a perpetual agreement approved by the Director of Transportation for either:
 - (A) public access onto private property for purposes of maintenance of the public right-of-way, or
 - (B) private maintenance of areas within the public right-of-way abutting the right-of-way line.
 - if the street is privately owned and maintained. This does not reduce the owner's continued obligation to adequately maintain private streets.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	025-25
Originating Department Department of Transportation	Effective Date

COMCOR 49.28.01.09 Active Zone – Signs

- (a) Signs must follow all federal and state requirements, including requirements by the American Association of State Transportation and Highway Officials (AASHTO) and the Maryland Manual on Uniform Traffic Control Devices (MD-MUTCD).
- (b) Signs must define the use of curb space and may be supplemented by paint or other treatments.
- (c) For all signs intended for use by motor vehicles the unobstructed sight distance is required as follows:
 - (1) sign sight distance must be located in accordance with requirements of AASHTO for signs controlling rights-of-way or requiring immediate directional / maneuvering decisions.
 - (2) for all other signs the following applies:

Speed Limit (mph)	Sight Distance (ft)
<u>5</u>	<u>25</u>
<u>10</u>	<u>50</u>
<u>15</u>	<u>75</u>
<u>20</u>	<u>100</u>
<u>25</u>	<u>100</u>
<u>30</u>	<u>125</u>
<u>35</u>	<u>125</u>
<u>40</u>	<u>150</u>
<u>45</u>	<u>175</u>
<u>50</u>	<u>200</u>
<u>55</u>	<u>225</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (d) Signs must be installed high enough from the ground to provide pedestrian clearance and to ensure visibility while sitting in a vehicle, as determined by vehicle specifications provided by AASHTO. In Rural Areas, the bottom of the lowest sign on a signpost must be a minimum of 5 feet above the ground. In areas with pedestrian facilities, or in business or commercial areas, the bottom of the lowest sign on a signpost must be a minimum of 8 feet above any areas designated for pedestrian use.
- (e) No portion of a sign may be in the Clear Zone except under the following conditions:
 - (1) a sign placed outside of the Clear Zone may overhang above the Clear Zone provided an 8-foot vertical clearance is met;
 - (2) there is no Street Buffer nor Pedestrian / Bicycle Buffer for a sign to otherwise be located;
 - (3) <u>a sign required by an approved Traffic Control Plan which has no alternative</u> location;
 - (4) the sign is for pedestrian wayfinding and its location within the Clear Zone is deliberate to encourage detection by pedestrians; or
 - signs in the Clear Zone must allow horizontal clearance around the sign on Sidewalk (default clearance of 5 feet / minimum clearance of 4 feet) and Sidepath (default and minimum clearances both 8 feet), except where the sign is explicitly intended for detection by pedestrians, such as with pedestrian detours associated with an approved Traffic Control Plan.

COMCOR 49.28.01.10 Active Zone – Transit Stops and Stations

- (a) Design General
 - (1) standard lengths of transit stops are as follows:
 - (A) <u>far-side stops must be at minimum 90 feet long for a 40-foot bus (100 feet if served by 60-foot articulated buses);</u>
 - (B) near-side stops must be at minimum 100 feet long for a 40-foot bus (100 feet if served by 60-foot articulated buses);



, , , , , , , , , , , , , , , , , , ,	Number 026-25
- 1	Effective Date
Department of Transportation	

- (C) mid-block stops must be at minimum 120 feet long for a 40-foot bus (145 feet if served by 60-foot articulated buses);
- (D) <u>far-side stops, after right turn must be at minimum 140 feet long for a 40-foot bus (160 feet if served by 60-foot articulated bus); or</u>
- (E) <u>high-frequency routes or stops serving multiple transit routes may require</u> additional space for transit stops.
- Transit stops for median-running transit are located in the Station Area. Transit stops for side-running transit are located in the Street Buffer. They may also be located in the Curbside Zone as a Bus Bulb or Bus Boarding Island per COMCOR 49.28.01.10(b) and (c), respectively.
 - (A) Where the Street Buffer does not provide adequate width for necessary transit stop amenities, transit stops may also span across the Clear Zone with amenities also in the Frontage Zone.
 - (B) If space remains limited, amenities may be located in the Clear Zone provided a minimum of 6 feet of accessible space is available around any blockages.
- (3) All transit stops must comply with the ADA, including landing pads and curb heights that allow for the loading and unloading of passengers in wheelchairs with vehicles serving the stop.
 - (A) Landing pads are to be a minimum 5 feet long (parallel to the curb) by 8 feet deep (from the curb).
 - (B) Landing pads must be provided for each door of transit vehicles expected to serve the stop, which may vary depending on door spacings for vehicles serving the transit stop.
 - (C) Landing pads must be clear of all non-traversable obstructions, except for the transit stop signpost at the forwardmost point as specified in COMCOR 49.28.01.10(a)(5).



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- Transit stop locations must be coordinated with the Montgomery County Division of Transit Services. If the transit stop serves Washington Metropolitan Area Transit Authority (WMATA) services, then locations must also be coordinated with WMATA and designs must also follow WMATA's Guidelines for the Design and Placement of Transit Stops. A Design Exception may be required where WMATA Guidelines conflict with County regulations.
- (5) Signs indicating the transit stop must be installed 2 feet behind the curb and comply with COMCOR 49.28.01.09. The signpost is the basis for other transit stop dimensions. Signs must be visible to pedestrians and bicyclists from all approaching walkways and bikeways, as well as from the direction of approaching buses.
- (6) Street trees must be selectively located and sized to minimize conflict with vehicles and door access, as well as to allow a direct sight line for approaching buses.
- (7) Transit stops must be well lit and highly visible.
- Each transit stop with a transit shelter must provide a minimum of one bike rack.

 The rack must allow a bicycle to be parked on each side. Bicycle racks must not impede access to or from transit stops, including transit vehicle doors, nor impede pedestrian flow in the Clear Zone or crosswalk.

(b) Design – Bus Bulbs

- (1) The location of a bus bulb and its final design must be approved by the Director of Transportation.
- (2) Bus bulbs must not be installed along roads with speed limits of 40 MPH or greater.
- (3) Bus bulbs may extend to no less than 1 foot from the edge of any travel lanes.

(c) Design – Bus Boarding Islands

- (1) Crosswalks must be used across the separated bike lanes to provide pedestrian connectivity between the walkway and the Bus Boarding Island.
- (2) The separated bike lanes must be routed behind the transit stop.



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

- (3) Within the passenger boarding area: channelizing railings, planters, or other treatments must be used to direct pedestrians, particularly those with vision disabilities, from the passenger / parcel area to the designated crossing locations.
- On the walkway side of the separated bike lane, the bike lane and the walkway must be separated either by landscaping, vertically with curb, or other devices must be used to guide visually impaired pedestrians to the crosswalks.
- (5) A minimum 5-foot wide by 8-foot clear boarding and alighting area must be provided within a Bus Boarding Island that connects to a pedestrian access route. This area can include the crosswalk that extends across the separated bike lane.
- (6) Stop markings must be placed along the bike lane prior to crosswalks to give clear direction to bicyclists to stop for pedestrians.
- (7) The bike lane must be at street-level or intermediate-level except at uncontrolled crosswalks, where the bike lane must be elevated to sidewalk level to facilitate movement to and from the transit stop. Clear sight lines must be provided between pedestrians and bicyclists at expected crossing locations.
- (8) Where space is constrained, the bike lane width may be reduced (down to 5 feet for one-way bike lanes and 8 feet for two-way) through the Bus Boarding Island area.
- (9) If transit shelters are provided, the shelter structure or shelter advertising must not limit sight lines.
- (10) To provide visual contrast for people with low vision, the surface of the bike lane must not be made of the same material as the bus boarding island or sidewalk.
- (11) Bus boarding islands must be at least 10 feet wide as measured from the roadway curb to the bikeway.
- (d) <u>Design Step-Out Platforms and Shared Bus / Bike Platforms</u>
 - (1) In locations where there is less than 8 feet of width available for a bus boarding island, a Step-Out or Shared Bus / Bike Platform may be installed when separated bike lanes are present along a street with transit service.



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (2) Bicyclists must stop for buses at Step-Out Platforms and Shared Bus/Bike Platforms, as there is insufficient room for alighting passengers to step out of the bus without being in the path of cyclists.
- At Step-Out and Shared Bus / Bike Platforms, the waiting area remains in the Street Buffer, Clear Zone, or Frontage Zone. Transit shelters, benches, signs, and other elements must remain on the Active Zone side of the bike lane.
- (4) Delineation must be provided between the walkway and the bike lane as follows:
 - (A) horizontal separation via a non-traversable surface as the default design at locations other than the designated crossing areas given the bike lane must be at sidewalk elevation; or
 - (B) where (A) cannot be met, provide a railing not to exceed 36 inches above the surface of the bike lane and placed only on the walkway side of the bike lane.

 This railing does not necessitate a wider bikeway as per COMCOR 49.28.01.17(e); or
 - (C) where (A) and (B) cannot be met, a detectable warning surface must run the length of the boarding area on the sidewalk side to provide a warning to pedestrians with vision disabilities that they are about to enter an area with traffic.
- Any openings in the vertical or horizontal separation between the sidewalk and the boarding area must have detectable warning surfaces 24 inches in depth. At Step-Out Platforms, detectable warning surfaces must run the length of the boarding area on the curb side of the bike lane. At Shared Bus / Bike Platforms, detectable warning surfaces must only be placed on the sidewalk side of the bike lane.
- (6) At both ends of the boarding area, a strip of detectable guidance surfaces 12 inches in width must cross the bike lane perpendicular to the curb to prevent pedestrians with vision disabilities from mistaking the bike lane for the sidewalk.
- (7) Signage and markings must be installed along and within the bike lane on the approach to the boarding area indicating a requirement to stop for pedestrians.
- (8) Signage must be erected at the crossing locations facing pedestrians entering the boarding area from the sidewalk indicating that they must remain on the sidewalk until the bus arrives.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

(9) Crosswalk markings must be installed across the bike lane at locations that roughly correspond to the locations of the bus doors when the vehicle is stopped.

(e) Transit Shelters

- (1) Shelters must adhere to the County's standard shelter design and specifications.
- (2) Shelter placement must allow for unobstructed transit boarding and alighting.
- (3) Shelters must not impede pedestrian flow on the Sidewalk or Sidepath.
- (4) The following minimum clear widths for shelter placement must be maintained:
 - (A) 1 foot from a blank building face;
 - (B) 8 feet from the back of curb;
 - (C) 15 feet from crosswalks;
 - (D) 1 foot from any ground obstruction (i.e., manhole, tree pit, signpost, etc.);
 - (E) 10 feet from fire hydrants; and
 - (F) Clear of the transit landing zone.
- (5) The location of transit shelters must minimize obstruction of sight lines and should be near protected crossings for pedestrians.
- (6) Shelters must be located to facilitate maintenance (e.g., glass and other elements of the shelter must be easy to replace as necessary).
- (7) Shelters must provide their own light source

COMCOR 49.28.01.11 Street Zone - Curbside Zone

(a) Default and minimum dimensions of Curbside Zones are the same, and for each road classification are shown in the table below:



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Street Classification	Width (ft)
<u>Downtown Boulevard</u>	<u>8</u>
Downtown Street	<u>8</u>
Town Center Boulevard	<u>8</u>
Town Center Street	<u>8</u>
Boulevard	<u>8</u>
Area Connector	<u>8</u>
Neighborhood Connector	<u>8</u>
Neighborhood Street	<u>8</u>
<u>Neighborhood Yield</u> <u>Street</u>	<u>8</u>
Industrial Street	<u>8</u>
Country Connector	<u>6</u>
Country Road	<u>5</u>
<u>Parkway</u>	8
<u>Controlled Major</u> <u>Highway</u>	<u>8</u>
Residential Alley	<u>0</u>
Commercial Alley	<u>0</u>

- (b) Dimensions include the width of the gutter pan and do not include the width of the curb.
- (c) For Curbside Zones used for parking:
 - (1) parallel parking is the default parking type. The length of a parallel on-street parking space is 21 feet. Shorter spaces may be permitted by Design Exception in cases where a motorist can pull into a space without maneuvering, or for spaces reserved for specific vehicles capable of maneuvering into and out of a smaller space; and



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

head-in or angled parking, including 90° perpendicular parking, is permitted only where it is already in place prior to the Effective Date (as defined in COMCOR 49.28.01.27). The minimum stall width is 9 feet, and other dimensions for angled parking depend on the angle with the direction of travel are shown in the table below:

Angle (degrees)	Stall Depth (perpendicula r to curb) (ft/in)	Minimum Width of Adjacent Travel Lane (ft/in)	Back-In Curb Overhang Clearance (encroachment onto curb) (ft/in)	Head-In Curb Overhang Clearance (encroachment onto curb) (ft/in)
<u>45°</u>	17' 8"	12' 8"	0' 9"	1' 9"
<u>50°</u>	18' 3"	13' 3"	<u>0' 11"</u>	<u>1' 11"</u>
<u>55°</u>	18' 8"	13' 8"	1' 1"	<u>2' 1"</u>
<u>60°</u>	<u>19' 0"</u>	14' 6"	1' 2"	<u>2' 2"</u>
<u>65°</u>	<u>19' 2"</u>	15' 5"	1' 3"	<u>2' 3"</u>
<u>70°</u>	<u>19' 3"</u>	16' 6"	1' 4"	<u>2' 4"</u>
<u>90°</u>	<u>18' 0''</u>	24' 0"	1' 6"	2' 6"

- (3) Street Buffers and Parking Lanes may share the same space. The width for such a combined area must be 11 feet minimum, representing the 8 foot Parking Lane plus a 3 foot door swing / landing area at sidewalk level. This combined area must be enclosed by bump-outs at each end. Bump-outs are extensions of the Street Buffer into the Curbside Zone. Application of this combined area may only be done when reductions are necessary to fit within available rights-of-way, in accordance with the prioritization established by COMCOR 49.28.01.04, using the priority assigned for the Street Buffer.
- (4) On-street parking spaces must be designed in accordance with current guidelines and standards, including access between accessible parking spaces and walkways.
- (5) Electric vehicle charging ports may be installed in the Street Buffer to serve electric vehicle parking spaces provided they obtain proper permits from the Department of Permitting Services. Charger cables must not conflict with areas intended for pedestrian or bicycle use.



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (6) Areas designated for passenger pickup/drop-off (also known as a "PUDO" and including Kiss & Rides, ride hailing areas, and taxi stands) or parcel loading / unloading must be:
 - (A) accessible under the ADA. Areas focused exclusively on parcel loading / unloading are not required to be accessible.
 - (B) have a minimum width of 8 feet, and minimum length of 21 feet.
 - (i) Areas focused exclusively on parcel loading/unloading must use minimum widths equal to the width of the Design Vehicle as defined by COMCOR 49.28.01.20(a)(4).
 - (ii) Areas designed explicitly for use by users with disabilities must provide maneuvering areas and use larger dimensions as defined by the current PROWAG.
 - (C) When separated bike lanes are provided:
 - (i) Bike lanes must be routed toward the Clear Zone side of the passenger / parcel area.
 - (ii) At least one defined pedestrian crossing must be provided to guide passengers across bike lanes at clearly marked locations. At parcelonly areas these crossings may be located toward the leading side of the area, nearer to where the back of a truck would be located.
 - (iii) Within the passenger / parcel area: channelizing railings, planters, or other treatments must be used to direct pedestrians, particularly those with vision disabilities, from the passenger / parcel area to the designated crossing locations.
 - (iv) On the walkway side of a bike lane, the bike lane and the sidewalk area must be separated either by landscaping, vertically with curb, or other devices must be used to guide visually impaired pedestrians to crossings.
 - (v) Stop markings must be placed along bike lanes prior to crosswalks to give clear direction to bicyclists to stop for pedestrians.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (vi) Bike lanes must be at street-level or intermediate-level except at uncontrolled crosswalks, where bike lanes must be elevated to sidewalk level to facilitate movement to and from the passenger / parcel area. Clear sight lines must be provided between pedestrians and bicyclists at expected crossing locations.
- (vii) Where space is constrained, bike lane widths can be reduced (down to 5 feet for one-way bike lanes and 8 feet for two-way) through the pickup / drop-off / loading area.
- (d) The combined width of the travel lane and Curbside Zone must be at least 16 feet along Country Connectors and Country Roads with one lane in a given direction.
- (e) <u>User-accessible areas of parklets and café seating within the Curbside Zone must be 1 foot less than the width of the Curbside Zone it occupies and have 4 feet of clearance from each nearest parking space.</u>
- (f) Curbside Zones may be used for chicanes by varying the width of the Curbside Zone or temporarily omitting the Curbside Zone as the Travelway Zone shifts horizontally. Omitting the Curbside Zone in this manner is permitted without regard of the prioritization established by COMCOR 49.28.01.04.

COMCOR 49.28.01.12 Street Zone – Travelway Zone

- (a) The total width of all contiguous Travelway Zones and Curbside Zones must be no less than 20 feet except:
 - (1) the minimum total pavement width for Residential Alleys is 16 feet; and
 - Shared Streets and Curbless Streets' minimum total pavement width is 12 feet, and they must provide periodic clear areas providing 20-foot wide spaces usable for fire access and staging in accordance with the design guide published by the Montgomery County Fire and Rescue Service, which, as of the Effective Date, is titled Fire Department Access Performance-Based Design Guide.
- (b) Outside Travel Lanes include in each direction:



, , , , , , , , , , , , , , , , , , ,	Number 026-25
- 1	Effective Date
Department of Transportation	

- (1) the outermost through-travel lane furthest from the centerline, even if it is not alongside a curb or edge of pavement (e.g., if a right-turn lane is present);
- (2) any lanes abutting a curb or edge of pavement along the side of the road furthest from the centerline, including right-turn lanes;
- (3) where there is only one lane in a given direction;
- the lane along the left side of the divider on roads with a divider between multiple same-direction through-running lanes, except if typical volumes of large vehicles in the lane are expected to be less than 2% of traffic volumes in that lane; and
- (5) along the leftmost through-travel lane of one-way roads, except if typical volumes of large vehicles in the left lane are expected to be less than 2% of traffic volumes in that lane.
- (c) Outside Travel Lanes exclude:
 - (1) a travel lane alongside a median or divider that does not meet the criteria given by COMCOR 49.28.01.12(b)(1) (see, COMCOR 49.28.01.12(c));
 - (1) Left-Turn Lanes (see, COMCOR 49.28.01.12(d)); and
 - (2) Two-Way Left-Turn Lanes (see, COMCOR 49.28.01.12(e)).
- (d) When adjacent to a curb: Outside Travel Lanes dimensions include the gutter pan and do not include the width of the curb.
- (e) <u>Default and minimum dimensions of Outside Travel Lanes for each road classification are shown in the table below:</u>

Street Classification	Default and Minimum Width (ft)
Downtown Boulevard	<u>11</u>
Downtown Street	10.5



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

Town Center Boulevard	<u>11</u>
Town Center Street	<u>11</u>
Boulevard	<u>11</u>
Area Connector	<u>10.5</u>
Neighborhood Connector	<u>10.5</u>
Neighborhood Street	<u>10.5</u>
Neighborhood Yield Street	<u>12</u>
Industrial Street	<u>11</u>
Country Connector	<u>11</u>
Country Road	<u>11</u>
<u>Parkway</u>	<u>11</u>
<u>Controlled Major</u> <u>Highway</u>	<u>12</u>
Residential Alley	8
Commercial Alley	<u>10</u>

- (f) <u>If adjacent to a Conventional Bike Lane: the combined width of the Outside Travel Lane</u> and the Conventional Bike Lane must be no less than 16 feet.
- (g) The combined width of the travel lane and Travelway Zone must be at least 16 feet along Country Connectors and Country Roads with one lane in a given direction.
- (h) The Outer Travel Lane has a 10-foot Minimum value provided there is at least a 1-foot unobstructed recoverable slope beyond the edge of pavement along open section Neighborhood Connectors and Neighborhood Streets.
- (i) <u>Default and minimum dimensions of Inside Travel lanes for each road classification are</u> shown in the table below:



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Street Classification	<u>Default and</u> <u>Minimum Width</u> (ft)
Downtown Boulevard	<u>10</u>
Downtown Street	<u>10</u>
Town Center Boulevard	<u>10</u>
Town Center Street	<u>10</u>
Boulevard	<u>10</u>
Area Connector	<u>10</u>
Neighborhood Connector	<u>10</u>
Neighborhood Street	<u>10</u>
Neighborhood Yield Street	<u>N/A</u>
Industrial Street	<u>11</u>
Country Connector	<u>11</u>
Country Road	<u>11</u>
<u>Parkway</u>	<u>11</u>
Controlled Major <u>Highway</u>	<u>11</u>
Residential Alley	<u>N/A</u>
Commercial Alley	<u>N/A</u>

(j) <u>Default and minimum dimensions of Left-Turn Lanes for each road classification are shown in the table below:</u>

Street Classification	Default Width (ft)	<u>Minimum Width</u> <u>(ft</u>
Downtown Boulevard	<u>10</u>	<u>9</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

<u>Downtown Street</u>	<u>10</u>	9	
Town Center Boulevard	<u>10</u>	<u>10</u>	
Town Center Street	<u>10</u>	<u>10</u>	
Boulevard	<u>10</u>	<u>10</u>	
Area Connector	<u>10</u>	<u>10</u>	
Neighborhood Connector	<u>10</u>	<u>10</u>	
Neighborhood Street	<u>10</u>	<u>10</u>	
Neighborhood Yield Street	Not Permitted Not Permit		
Industrial Street	<u>11</u>	<u>11</u>	
Country Connector	<u>11</u> <u>11</u>		
Country Road	<u>10</u>	<u>10</u>	
<u>Parkway</u>	<u>11</u>	<u>11</u>	
<u>Controlled Major</u> <u>Highway</u>	<u>10</u>	<u>10</u>	
Residential Alley	<u>N/A</u> <u>N/A</u>		
Commercial Alley	<u>N/A</u>	<u>N/A</u>	

(k) Default and minimum dimensions of Two-Way Left-Turn Lanes for each road classification are shown in the table below:

Street Classification	Default & Minimum Width (ft)
Downtown Boulevard	Not Permitted
Downtown Street	<u>10</u>
Town Center Boulevard	Not Permitted
Town Center Street	<u>10</u>
Boulevard	Not Permitted



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

Area Connector	<u>10</u>
Neighborhood Connector	<u>10</u>
Neighborhood Street	Not Permitted
Neighborhood Yield Street	Not Applicable
Industrial Street	<u>11</u>
Country Connector	Not Permitted
Country Road	Not Permitted
<u>Parkway</u>	11 default, 10 minimum
<u>Controlled Major</u> <u>Highway</u>	Not Permitted
Residential Alley	<u>N/A</u>
Commercial Alley	<u>N/A</u>

(l) All lane widths are for typical tangent (straight) sections. Segments with horizontal curvature must provide wider widths as needed to ensure the turn envelope of the design vehicle remains within the travel lane at all times.

COMCOR 49.28.01.13 Street Zone - Median Zone

(a) The minimum widths for the Median Zone for each road classification are shown in the table below:

Street Classification	Minimu m Width (ft)	
Downtown Boulevard	<u>6</u>	
Downtown Street	<u>6</u>	
Town Center Boulevard	<u>6</u>	



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
iginating Department Effective Date	
Department of Transportation	

Town Center Street	<u>6</u>
Boulevard	<u>6</u>
Area Connector	<u>6</u>
Neighborhood Connector	<u>6</u>
Neighborhood Street	<u>6</u>
<u>Neighborhood Yield</u> <u>Street</u>	<u>N/A</u>
Industrial Street	<u>6</u>
Country Connector	<u>6</u>
Country Road	<u>6</u>
<u>Parkway</u>	<u>6</u>
<u>Controlled Major</u> <u>Highway</u>	<u>6</u>
Residential Alley	<u>N/A</u>
Commercial Alley	N/A

- (b) Medians are required along Controlled Major Highways.
- (c) <u>Medians are not permitted along Neighborhood Yield Streets, Residential Alleys, and Commercial Alleys.</u>

COMCOR 49.28.01.14 Street Zone - Dedicated Transitway Zone

(a) Dedicated Transitway Lanes, Buffers, and Station Areas dimensions are shown in the table below:

Street Classification	<u>Lane</u> <u>Default</u> <u>Width (ft)</u>	Lane Minimu m Width (ft)	Buffer Default Width (ft)	Buffer Minimum Width (ft)	Station Area <u>Default</u> <u>Width (ft)</u>	Station Area Minimum Width (ft)
All Classifications	<u>13</u>	<u>12</u>	<u>6</u>	<u>2</u>	<u>14</u>	<u>12</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (b) Dedicated Transit Buffer widths do not account for space needed for turn lanes.
- (c) Along transit-exclusive roads: the Street Zone / Shared Zone (as applicable) and Transit Buffers are omitted and the Transit Lanes function as the Street Zone / Shared Zone. Active Zone elements remain unchanged from other requirements.

COMCOR 49.28.01.15 Curbless and Shared Streets

- (a) Target speed
 - (1) The target speed for Curbless Streets is 10 MPH.
 - (2) The target speed for Shared Streets is 5 MPH.
- (b) Default and minimum dimensions for each zone are shown in the table below:

	<u>Curbless Street</u>		<u>Shared</u>	l Street	
<u>Item</u>	Default Width (ft)	Minimum Width (ft)	<u>Default</u> <u>Width (ft)</u>	Minimum Width (ft)	
Total Right-of-Way	<u>66</u>	<u>30</u>	<u>60</u>	<u>30</u>	
Frontage Zone (each side)	<u>7</u>	<u>0</u>	<u>7</u>	<u>0</u>	
Comfort Zone (each side)	<u>10</u>	<u>6</u>	<u>8</u>	<u>6</u>	
Furniture Zone (each side)	<u>6</u>	<u>3</u>	<u>6</u>	<u>3</u>	
Shared Zone (bidirectional)	<u>20</u>	<u>18</u>	<u>18</u>	<u>16</u>	
Shared Zone (one-way)	<u>12</u>	<u>12</u>	<u>12</u>	<u>12</u>	
Parking (default space)	<u>7</u>	<u>7</u>	<u>7</u>	<u>7</u>	
Parking (accessible space)	<u>13</u>	<u>13</u>	<u>13</u>	<u>13</u>	

(1) Frontage Zones may be reduced below the default width where existing right-of-way is limited, or with consent from fronting property owners.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (2) The Comfort Zones minimum width is 8 feet along any portions where an adjacent fixed object greater than 2 feet in height spans along the Comfort Zone for 6 feet or more longitudinal length.
- (3) Shared Zones include drains within their dimensions. Shared Zones may only be reduced below the default width if no large vehicles are expected to use the street other than emergency vehicles.
- (4) A width navigable by emergency vehicles of 20 feet must be maintained between fixed objects for lengths of at least 50 feet along the road, provided periodically as determined by the Director of the Department of Permitting Services.

(c) Parking & Loading

- (1) Where on-street parking and loading are provided it is permitted on only one side at a time. The side is to be alternated as to form chicanes along the Shared Zone, with parking on each side in groupings of between 2 to 5 spaces at a time.
- (2) The road must not be designed to have peak hour motor vehicle volumes greater than 180 vehicles per peak hour along Curbless Streets. Parking and loading activities are permitted.
- (3) The road must not be designed to have peak hour motor vehicle volumes greater than 100 vehicles per peak hour along Shared Streets.

(d) Intersections

- Where Curbless Streets intersect with other streets, the Curbless Street design will be interrupted through the intersection and the design of the other road will be applied through the intersection.
- Where a Shared Street intersection includes any Downtown Boulevard, Town Center Boulevard, Boulevard, Area Connector, Country Connector, or Controlled Major Highway, the Shared Street design will be interrupted through the intersection and the design of the other road will be applied through the intersection.
- (3) Where Shared Streets intersect only with Downtown Streets, Town Center Streets, Neighborhood Connectors, Neighborhood Streets, Neighborhood Yield Streets, Industrial Streets, Country Roads, Parkways, Commercial Alleys, Residential



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Alleys, or Curbless Streets, the Shared Street design is extended through the intersection.

(e) Accessibility

- (1) The Comfort Zone must provide accessible navigation along both Curbless and Shared Streets, and periodic crossing points must be provided along both street types to provide defined navigable crossing points for users who may otherwise have difficulty navigating the Furniture and Shared Zones.
- (2) The Furniture and Shared Zone outside of defined accessible crossing points does not need to meet accessibility requirements.

COMCOR 49.28.01.16 Open Section Roadways

- (a) Open section roads require drainage on each side designed as determined by the Department of Transportation.
- (b) At driveways, transit stops, crosswalks, and anywhere else a pedestrian or bicyclist would need to cross the swale, a pipe or culvert is required beneath an accessible walkway to allow for pedestrian and bicycle activity to be uninterrupted by the drainage infrastructure.

COMCOR 49.28.01.17 Bikeways

- (a) Bikeways may be designated as Breezeways by master plan, sector plan, or functional plan.
- (b) Bikeways are located in the Active Zone except they may be located in the Street Zone under any of the following conditions:
 - (1) The Bikeway is an approved Design Exception;
 - (2) The Bikeway is a Conventional Bike Lane, Bikeable Shoulder, Advisory Bike Lane, Shared Lane, Neighborhood Greenway, or is otherwise master planned as an onstreet Bikeway;
 - (3) The Bikeway is part of a retrofit project; or
 - (4) The Bikeway is part of interim conditions eventually planned to proceed toward an ultimate final cross-section where the Bikeway is in the Active Zone.



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (c) Pedestrian / Bicycle Buffers are located between Separated Bike Lanes and the Clear Zone.
- (d) Default and minimum dimensions of Bikeways and Pedestrian / Bicycle Buffers are shown in the tables below. If curb or gutter are present: Bikeway dimensions do not include the gutter pan nor the top width of the curb, except Bikeable Shoulders do include the width of the gutter pan. Pedestrian / Bicycle Buffers include the top width of the curb and do not include the gutter pan.

TWO-WAY SEPARATED BIKE LANES	Breez	<u>Non-Breezeway</u>		Breezeway Non-Breezeway Pedestrian / Bicy Buffer		
Street Classification	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)
Downtown Boulevard	<u>11</u>	<u>11</u>	<u>11</u>	8	<u>6</u>	<u>2</u>
Downtown Street	<u>11</u>	<u>11</u>	<u>10</u>	8	<u>6</u>	<u>2</u>
Town Center Boulevard	<u>11</u>	<u>11</u>	<u>11</u>	8	<u>6</u>	2
Town Center Street	<u>11</u>	<u>11</u>	<u>10</u>	8	<u>6</u>	<u>2</u>
Boulevard	<u>11</u>	<u>11</u>	<u>11</u>	8	<u>6</u>	<u>2</u>
Area Connector	<u>11</u>	<u>11</u>	<u>10</u>	8	<u>6</u>	<u>2</u>
Neighborhood Connector	<u>11</u>	<u>11</u>	<u>10</u>	<u>8</u>	<u>6</u>	<u>2</u>
Neighborhood Street	<u>11</u>	<u>11</u>	<u>10</u>	8	<u>6</u>	<u>2</u>
Neighborhood Yield Street	N/A	N/A	N/A	N/A	<u>N/A</u>	<u>N/A</u>
Industrial Street	<u>11</u>	<u>11</u>	<u>10</u>	<u>8</u>	<u>6</u>	<u>2</u>
Country Connector	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Country Road	<u>N/A</u>	N/A	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Parkway</u>	<u>11</u>	<u>11</u>	<u>11</u>	<u>8</u>	<u>6</u>	2



Subject Complete Streets	Number 026-25
Originating Department	Effective Date
Department of Transportation	

2 11 136		Г	<u> </u>	T		T
<u>Controlled Major</u> <u>Highway</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
ONE-WAY SEPARATED BIKE LANES	<u>Breezeway</u>		Non-Breezeway		<u>Pedestrian / Bicycle</u> <u>Buffer</u>	
Street Classification	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)
Downtown Boulevard	<u>8</u>	8	<u>6.5</u>	<u>5</u>	<u>6</u>	<u>2</u>
Downtown Street	<u>8</u>	<u>8</u>	<u>6.5</u>	<u>5</u>	<u>6</u>	<u>2</u>
Town Center Boulevard	<u>8</u>	8	6.5	<u>5</u>	<u>6</u>	2
Town Center Street	<u>8</u>	<u>8</u>	<u>6.5</u>	<u>5</u>	<u>6</u>	<u>2</u>
Boulevard	<u>8</u>	8	6.5	<u>5</u>	<u>6</u>	2
Area Connector	<u>8</u>	<u>8</u>	6.5	<u>5</u>	<u>6</u>	2
Neighborhood Connector	<u>8</u>	<u>8</u>	<u>6.5</u>	<u>5</u>	<u>6</u>	2
Neighborhood Street	<u>8</u>	<u>8</u>	<u>6.5</u>	<u>5</u>	<u>6</u>	<u>2</u>
Neighborhood Yield Street	N/A	N/A	N/A	N/A	N/A	N/A
Industrial Street	<u>8</u>	<u>8</u>	<u>6.5</u>	<u>5</u>	<u>6</u>	<u>2</u>
Country Connector	N/A	N/A	N/A	N/A	N/A	N/A
Country Road	N/A	N/A	N/A	N/A	N/A	N/A
<u>Parkway</u>	<u>8</u>	<u>8</u>	6.5	<u>5</u>	<u>6</u>	<u>2</u>
<u>Controlled Major</u> <u>Highway</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
BUFFERED BIKE LANES	<u>Breez</u>	eway	Non-Bre	ezewa <u>y</u>	On-Stree	et Buffer



Subject Complete Streets	Number 026-25
Originating Department	Effective Date
Department of Transportation	

Street Classification	<u>Default</u> <u>Width</u> <u>(ft)</u>	Minimu m Width (ft)	Default Width (ft)	Minimum Width (ft)	Default Width (ft)	Minimum Width (ft)
Downtown Boulevard	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Downtown Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Town Center Boulevard	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Town Center Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Boulevard	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Area Connector	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Neighborhood Connector	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Neighborhood Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Neighborhood Yield Street	N/A	N/A	N/A	N/A	N/A	N/A
Industrial Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Country Connector	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Country Road	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
<u>Parkway</u>	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>2</u>
Controlled Major <u>Highway</u>	N/A	N/A	N/A	N/A	N/A	N/A

CONVENTIONAL BIKE LANES	Breez	zeway	Non-Br	<u>eezeway</u>		n / Bicycle ffer
Street Classification	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)
Downtown Boulevard	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Downtown Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

Town Center Boulevard	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Town Center Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Boulevard	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Area Connector	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Neighborhood Connector	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Neighborhood Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Neighborhood Yield Street	N/A	N/A	N/A	N/A	N/A	N/A
Industrial Street	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Country Connector	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Country Road	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
<u>Parkway</u>	<u>6</u>	<u>5</u>	<u>6</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
Controlled Major Highway	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>

CHDEDATH	<u>Breezeway</u>							Non-Breezeway	
<u>SIDEPATH</u>	<u>Bike</u>	eway	<u>Pedestrian /</u> <u>Bicycle Buffer</u>		<u>Walkway</u>				
Street Classification	Default Width (ft)	Minim um Width (ft)	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	
Downtown Boulevard	<u>8</u>	<u>8</u>	<u>3</u>	3	<u>8</u>	<u>8</u>	<u>11</u>	<u>10</u>	
<u>Downtown</u> <u>Street</u>	<u>8</u>	<u>8</u>	<u>3</u>	<u>3</u>	<u>8</u>	<u>8</u>	<u>10</u>	<u>8</u>	
Town Center Boulevard	<u>8</u>	<u>8</u>	<u>3</u>	<u>3</u>	<u>8</u>	<u>8</u>	<u>11</u>	8	



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject
Complete Streets
Originating Department
Department of Transportation

Number
026-25

Effective Date

Town Center Street	<u>8</u>	<u>8</u>	<u>3</u>	<u>3</u>	<u>8</u>	<u>8</u>	<u>10</u>	8
Boulevard	<u>8</u>	<u>8</u>	<u>2</u>	<u>2</u>	<u>6</u>	<u>6</u>	<u>11</u>	<u>8</u>
Area Connector	<u>8</u>	8	2	<u>2</u>	<u>6</u>	<u>6</u>	<u>10</u>	8
Neighborhood Connector	<u>8</u>	8	<u>2</u>	<u>2</u>	<u>6</u>	<u>6</u>	<u>10</u>	8
Neighborhood Street	<u>8</u>	8	2	<u>2</u>	<u>6</u>	<u>6</u>	<u>10</u>	8
Neighborhood Yield Street	<u>N/A</u>	N/A	N/A	<u>N/A</u>	N/A	N/A	N/A	<u>N/A</u>
Industrial Street	<u>8</u>	8	2	<u>2</u>	<u>6</u>	<u>6</u>	<u>10</u>	8
Country Connector	8	8	<u>2</u>	<u>2</u>	<u>6</u>	<u>6</u>	<u>10</u>	8
Country Road	<u>8</u>	8	<u>2</u>	<u>2</u>	<u>6</u>	<u>6</u>	<u>10</u>	8
<u>Parkway</u>	<u>8</u>	8	<u>3</u>	<u>3</u>	<u>8</u>	<u>8</u>	<u>11</u>	8
Controlled <u>Major</u> <u>Highway</u>	<u>8</u>	<u>8</u>	<u>2</u>	<u>2</u>	<u>6</u>	<u>6</u>	<u>11</u>	8

BIKEABLE			Pedestrian / Bicycle
SHOULDERS	<u>Breezeway</u>	Non-Breezeway	<u>Buffer</u>



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

Street Classification	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	<u>Default</u> <u>Width</u> (ft)	Minimu m Width (ft)
Downtown Boulevard	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Downtown Street</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Town Center Boulevard	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Town Center Street	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Boulevard</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Area Connector	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Neighborhood Connector	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Neighborhood Street	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Neighborhood Yield Street	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
<u>Industrial Street</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>	<u>N/A</u>
Country Connector	<u>10</u>	<u>5</u>	<u>10</u>	<u>6</u>	<u>N/A</u>	<u>N/A</u>
Country Road	<u>8</u>	<u>5</u>	8	<u>6</u>	<u>N/A</u>	<u>N/A</u>
<u>Parkway</u>	<u>8</u>	<u>5</u>	<u>6</u>	<u>6</u>	<u>N/A</u>	<u>N/A</u>
Controlled Major <u>Highway</u>	N/A	N/A	N/A	N/A	<u>N/A</u>	N/A

ADVISORY BIKE LANES	<u>Breezeway</u>		Non-Breezeway		<u>Pedestrian / Bicycle</u> <u>Buffer</u>	
Street Classification	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)	Default Width (ft)	Minimu m Width (ft)
All Road Classifications (if adjacent to curb)	<u>6</u>	4.5	<u>6</u>	<u>4.5</u>	<u>N/A</u>	<u>N/A</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

All Road						
Classifications (if	<u>6</u>	<u>5</u>	<u>5</u>	<u>5</u>	<u>N/A</u>	<u>N/A</u>
adjacent to parking)						

- (e) Bicycle facilities alongside a vertical obstruction greater than 2 feet in height and spanning along the bikeway 20 feet or more longitudinal length must provide an additional 2 feet horizontal width along that side of the bikeway as a buffer against the obstruction.
- (f) Buffered Bike Lanes may be reduced to 4 feet if alongside a buffer that is adjacent to parking.
- (g) If maintenance, service, or emergency vehicles will need to access a bikeway, the facility must be designed to accommodate these vehicles.
- (h) For Priority Shared Lanes and Neighborhood Greenways consult the Department of Transportation.
- (i) For details regarding crossing driveways consult the Department of Transportation.

COMCOR 49.28.01.18 Uses in the Curbside Zone, Street Buffer, and Frontage Zone

- (a) The following clear widths must be maintained when installing or placing benches or other seating:
 - (1) 3 feet minimum from walkable / paved surfaces on either side of the seating;
 - (2) 5 feet minimum from fire hydrants;
 - (3) 2 feet clearance from all above ground utilities and utility appurtenances;
 - (4) 2 feet minimum between the seating and the Clear Zone;
 - seating must be affixed in such a manner that it is not easily damaged or removed, unless it is intended to be movable by design;
 - (6) seating must not block paths to entrances to buildings, loading zones, parked vehicles, fire escape routes, transit accessibility, and other potential conflicts; and
 - (7) seating at transit stops must face the street or face approaching transit vehicles.



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (b) Bicycle racks may be placed in the Street Buffer Zone or the Frontage Zone, or also in the Curbside Zone as part of an in-street Micromobility Corral. The amount and design of bicycle parking is regulated by Article 59-6, Section 6.2.6 of the Montgomery County Zoning Ordinance (2014).
- (c) The standard Bikeshare Station is located in the Street Buffer and provides 11 bicycle docking spaces with a standard station footprint of 6 feet by 45 feet and must:
 - (1) not infringe on the Clear Zone;
 - (2) receive adequate sunlight for the solar apparatus;
 - (3) provide at least 6 feet of clearance from the back of a docked bicycle to provide room for pedestrian movement. This clearance may overlap with the Clear Zone;
 - (4) be placed at least 18 inches from the curb where on-street parking is present in order to allow access to vehicles;
 - (5) be at least 2 feet from curb cuts or crosswalks and at least 5 feet from fire hydrants;
 - (6) be placed in visible, well-lit locations, in order to make them easy for users to find, discourage vandalism, and maximize safety for people getting or returning bikes; and
 - (7) only be placed in the Street Zone with approval of the Director of Transportation if adequate spacing, sight distances, and protection are available.
- (d) All shared mobility programs operating in public right-of-way, including dockless scooters and dockless bicycles, require the approval of the Director of Transportation. The design of dockless parking zones must adhere to the following:
 - (1) the minimum parking zone size is 6 feet by 10 feet to accommodate at least 10 shared mobility devices; however, larger sizes are encouraged depending on the anticipated volume of users;
 - (2) <u>if a Bikeshare Station is within 300 feet, the dockless parking zones must be colocated immediately by the Bikeshare Station as to increase the number of transportation options available within one location; and</u>



Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- dockless parking zones must be demarcated with pavement markings. Sidewalk dockless parking zones must be designed with white corner outlines to demarcate the space, and bike and scooter symbols must be placed within the zone. All markings must be made from durable, slip-resistant paint. If the dockless parking zone is located within the street, it must apply the same clearances as Micromobility Corrals.
- (e) Dockless bicycles and dockless scooters must be parked in the Street Buffer, in the Frontage Zone (if provided), or the Curbside Zone (if designed for such use), parked in such a manner as to not overlap with the Clear Zone, transit accessibility, pickup / drop-off and loading zones, fire escape routes, and other potential conflicts.
- (f) Sidewalk Cafés may be located in the Street Buffer (including within curb extensions), Frontage Zone, or Curbside Zone with approval by the Department of Permitting Services and must:
 - (1) not intrude into the Clear Zone, restrict sight distance, nor block paths to crosswalks, loading areas, transit stops, designated accessible parking spaces, or micromobility operations such bicycles, Bikeshare, or designated dockless mobility zones;
 - (2) comply with the ADA;
 - (3) be enclosed in a clearly delineated area with a controlled point of ingress and egress and surrounded by a continuous barrier between 36-38 inches high, with the lowest point consisting of a continuous rail 2-6 inches from the Sidewalk surface;
 - (4) be a minimum of 18 inches from the back of curb for outdoor seating areas;
 - when placed in the Street Buffer Zone or Curbside Zone, be located on the same side of the street as the venue it serves and cannot extend beyond the width of the site's frontage; and
 - (6) be subject to a maintenance agreement.
- (g) Recycling and garbage receptacles, if provided, must be located in the Street Buffer or Frontage Zone. Receptacles may be located in the Clear Zone if no space is available in the Street Buffer or Frontage Zone, provided a minimum 5 feet of Clear Zone around the receptacle is available. Receptacles must be permanently mounted as to prevent them from



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

being moved out of place. Where bins connect to underground storage maintenance access must be available to service the underground facility.

COMCOR 49.28.01.19 Driveway and Alleys

(a) Spacing

- (1) Spacing of driveways and alleys must follow the current Montgomery County Maryland Driveway Construction Policy and Montgomery County Zoning Standards.
- (2) Driveways and alleys are not permitted in the Functional Intersection Area, which consists of Upstream and Downstream areas, both defined and calculated by AASHTO, except driveways may be located in a Functional Intersection Area if no other allowable access locations exist. During redevelopment, it may be necessary to close non-conforming driveways & alleys if they do not meet these requirements.

(b) Design

- (1) <u>Driveways and alleys must be designed to be at-grade with any walkways or bikeways in the Active Zone, using the Street Buffer and/or Curbside Zone to transition between street-level and sidewalk-level.</u>
 - (A) Where the width of the Street Buffer and Curbside Zone are inadequate for such a transition, the Clear Zone may shift horizontally as needed to allow for the transition to occur, maintaining a maximum 2 percent cross-slope along the Clear Zone.
- (2) Vehicles entering the right-of-way are required to yield to all cross traffic, and stop for pedestrians, bicycles and other micromobility users.
- Where a Sidewalk or Sidepath crosses a driveway or alley the Clear Zone must be clearly delineated across the driveway or alley, maintaining the width, grade, and slope of the adjacent Sidewalk or Sidepath through the driveway. The design must meet current ADA standards.
- (4) Driveways and alleys must provide tactile warning strips for crossings across driveway and alleys only if the crossing is controlled by a traffic signal.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

(5) Driveways that cross a drainage swale require a pipe, culvert, or similar structure to carry stormwater.

COMCOR 49.28.01.20 Intersections – Turning Radii

(a) <u>Definitions</u>

- (1) <u>Control Vehicle</u> is an infrequent but necessary user of the road. This is a standard 47-foot fire truck as defined in Section 6.4 of the Guide. A different vehicle may be used with the direction or approval of the Director of Transportation or the Chief of the Montgomery County Fire and Rescue Service.
- (2) <u>Corner Radius</u> is the radial distance of a circular curve between the Point of Curvature and the Point of Tangent along a curb line or edge of pavement.
- (3) <u>Design Speed</u> of turning vehicles is 10 MPH for passenger vehicles and 5 MPH for all other vehicles, unless otherwise directed by the Department of Transportation.
- (4) <u>Design Vehicle</u> is the least maneuverable vehicle that routinely uses the road. This is a 30-foot single unit truck (SU-30) with a 42-foot turning radius. A different vehicle may be used with the direction or approval of the Director of Transportation.
- (5) <u>Effective Turning Radius</u> is the turning radius that makes use of additional space formed by uses such as parking lanes and bike lanes.
- (6) Encroachment is the allowance of a vehicle to cross beyond its designated travel lane when performing a turn, including doing so along the approaching leg of an intersection or along the receiving end of an intersection. It does not include, and vehicles must not intrude into, areas designated exclusively for pedestrians or bicyclists, nor mounting any curbs not explicitly designed to be mountable for purposes of encroachment.
- (7) Full Encroachment means a vehicle encroaches along both the approaching and receiving legs of an intersection.
- (8) Passenger Vehicles and their associated design parameters are defined by AASHTO.
- (9) Point of Curvature is the point where a curve begins.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

, , , , , , , , , , , , , , , , , , ,	Number 026-25
- 1	Effective Date
Department of Transportation	

- (10) Point of Tangent is the point where a curve ends.
- (11) Receiving Lane Encroachment means a vehicle encroaches only along the receiving leg of an intersection.
- (12) <u>Type A Streets</u> include Neighborhood Connectors, Neighborhood Streets, Neighborhood Yield Streets, Country Connectors, Country Roads, Rustic Roads, Exceptional Rustic Roads, Curbless Streets, Shared Streets, and Alleys.
- (13) Type B Streets include Downtown Boulevards, Downtown Streets, Boulevards, Town Center Boulevards, Town Center Streets, Area Connectors, and Industrial Streets.

(b) Default Radii

- (1) Where all intersecting roads are Neighborhood Connectors, Neighborhood Streets, Neighborhood Yield Streets, Curbless Streets, Shared Streets, or Alleys, the default Corner Radius is 10 feet.
- (2) When at least one intersecting road is an Industrial Street the default Corner Radius is 25 feet.
- (3) For all other intersecting roads the default Corner Radius is 15 feet.
- A larger Corner Radius may be used where necessary to accommodate passenger cars, the Design Vehicle, and the Control Vehicle within the allowances of encroachment set forth in COMCOR 49.28.01.20(c).

(c) Encroachment

- (1) Full Encroachment is permitted along 2-lane roads for Design Vehicles where all intersecting streets are Type A Streets.
- (2) Receiving Lane Encroachment is permitted along 2-lane roads for Design Vehicles where the approaching leg is a Type B Street and the receiving leg is a Type A Street.
- (3) No encroachment is acceptable for Design Vehicles where all four legs of an intersection are Type B.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (4) Exception to COMCOR 49.28.01.20(c)(1) through (3): along roads with 2 or more lanes in a single direction encroachment is allowable for Design Vehicles into adjacent lanes in the same direction along both the approaching and receiving legs. Encroachment into opposite-direction travel lanes is prohibited.
- (5) Passenger Vehicles must have no encroachment, including into other lanes in the same direction.
- (6) Control Vehicles are allowed Full Encroachment along all lanes regardless of the number and directionality of travel lanes.

COMCOR 49.28.01.21 Intersections – Crosswalks and Curb Ramps

(a) Pedestrian Crosswalks

- (1) A ladder crosswalk is the standard crosswalk along Montgomery County facilities.

 This pattern consists of a series of wide stripes approximately parallel to the curb for the length of the crossing, bounded by transverse lines on each side.
- (2) The *transverse pattern* crosswalk consists of two parallel lines along the length of the crossing. Transverse patterns may be used where all intersecting roads are Neighborhood Streets or Neighborhood Yield Streets.
- (3) Crosswalks must be at least as wide as the largest Sidewalk or Sidepath leading to it, must include the associated pedestrian ramps, and may not be less than 10 feet in width.
- (4) Crosswalks must comply with Section 31-20(b)(2) of the Montgomery County Code requiring parking and standing to be restricted within 20 feet of a crosswalk. Further restrictions may be necessary to ensure adequate sight distance at the crosswalk.
- (5) Artistic crosswalks and artistic intersections may only be installed with approval from the Director of Transportation.
 - (A) per COMCOR 49.28.01.21(a)(1) and (2), the design must clearly include the crosswalk markings typical of the street using retroreflective markings, with the non-reflective artistic elements filling the areas in between these markings.



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

- (B) The design must comply with the MD-MUTCD.
- (C) Approval may require enactment of maintenance agreements.
- (b) Uncontrolled Crossings include both marked and unmarked crossings.
 - (1) Crossings must be provided at all legs of an intersection with approaching Sidewalk or Bikeways, as well as where Sidewalks and Bikeways approach a street at a midblock point.
 - (2) A Design Exception is required if a crossing is not provided at what should be a crossing, detailing why it is not feasible to accommodate a crossing and providing an estimate of the travel times to alternative crossing locations based on a walking speed of 3.5 feet per second.
 - (3) <u>Instructions for uncontrolled crossing requirements under various conditions are shown in the table below:</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

	Posted Speed Limit and AADT																										
		Ve	ehic	de A	AD	T <	9,00	0		Vehicle AADT 9,000-15,000								00	Vehicle AADT >15,000								
Roadway Configuration	≤3	0 m	ph	35	5 m	ph	≥4	0 m	nph	≤3	0 m	nph	35	m	ph	≥4	0 m	ph	≤3	0 m	nph	35	mp	oh	≥40	0 m	ρh
2 lanes	0	2		0			①			0			0			①			0			①			①		
(1 lane in each direction)	4	5	6	7	5	6 9	0	5	6 0	4	5	6	7	5	6	0	5	6 0	7	5	6 9	7	5	6		5	6 0
O long a suith main all moralisms	0	2	3	0		6	_		8	1		3	1		8	_		8	1		8	-		8	1		0
3 lanes with raised median (1 lane in each direction)	4	5		_	5			5	_	4	5			5	_		5	_	4	5			5			5	
<u> </u>				7		9	0		0	7		9	0		0	0		0	7		9	0		0			Ø
3 lanes w/o raised median	0	2	3	0		8	1		8	1		3	①		8	0		8	0		8	①		8	①		0
(1 lane in each direction with a	4	5	6		5	6		5	6	4	5	6		5	6		5	6	4	5	6		5	6	5	6	
two-way left-turn lane)	7		9	7		9			0	7		9	0		0			0	7		9			0			0
A long a suith onit of or alim	0		8	0		8	1		8	1		8	①		8	1		8	1		8	①		8	①		0
4+ lanes with raised median (2 or more lanes in each direction)		5			5			5			5			5			5			5			5			5	
(2 of more fulles in each direction)	7	8	9	7	8	9		8	0	7	8	9	0	8	0		8	0	0	8	0		8	0		8	0
	0		8	0		8	①		8	0		8	0		8	0		8	0		8	①		8	①		0
4+ lanes w/o raised median		5	6		5	0		5	0		5	0		5	0		5	0		5	0		5	0		5	0
(2 or more lanes in each direction)	7	8	9	7	8	9		8	0	7	8	9	0	8	0		8	0	0	8	0		8	0		8	0

Given the set of conditions in a cell,

- # Signifies that the countermeasure is a candidate treatment at a marked uncontrolled crossing location.
- Signifies that the countermeasure should always be considered, but not mandated or required, based upon engineering judgment at a marked uncontrolled crossing location.
- O Signifies that crosswalk visibility enhancements should always occur in conjunction with other identified countermeasures.*

The absence of a number signifies that the countermeasure is generally not an appropriate treatment, but exceptions may be considered following engineering judgment.

- High-visibility crosswalk markings, parking restrictions on crosswalk approach, adequate nighttime lighting levels, and crossing warning signs
- 2 Raised crosswalk
- 3 Advance Yield Here To (Stop Here For) Pedestrians sign and yield (stop) line
- 4 In-Street Pedestrian Crossing sign
- 5 Curb extension
- 6 Pedestrian refuge island
- 7 Rectangular Rapid-Flashing Beacon (RRFB)**
- 8 Road Diet
- 9 Pedestrian Hybrid Beacon (PHB)**

(c) Controlled Crossings

(1) For purposes of meeting warrants for the traffic control devices in the MD-MUTCD, bicyclists may be counted as either vehicles or pedestrians, and modeled pedestrian and bicycle demand may be used in lieu of traffic counts.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (d) Crossing Islands create a place of refuge for pedestrians crossing a street. If provided:
 - (1) the default width is 10 feet and the minimum width is 6 feet, measured as part of a road's cross-section;
 - (2) the priority is the same as medians under COMCOR 49.28.01.04, except if the island serves a Breezeway (see COMCOR 49.28.01.17(a)) in which case the priority is high; and
 - (3) crossing islands must be designed with an at-grade pass-through for pedestrians and physical, raised barriers on any sides with approaching traffic.
- (e) Parking is prohibited in the area between a crosswalk and its corresponding stop lines.

COMCOR 49.28.01.22 Intersections – Roundabouts & Mini-Roundabouts

- (a) Roundabouts and Mini-Roundabouts have yield-controlled entry on all legs. Roundabouts have an inscribed diameter less than 200 feet. Mini-Roundabouts are smaller variants that may be used on low-speed neighborhood-type roads, with central islands formed either by pavement markings or raised mountable areas.
- (b) Roundabouts and Mini-Roundabouts must be designed to facilitate pedestrian and bicyclist safety, using guidance from the *Guide for the Development of Bicycle Facilities* from AASHTO and guidance from the Montgomery County Department of Transportation. Where pedestrian crossings are present, motor vehicle speeds must be reduced to 15 miles per hour or less at entry and exit points.

COMCOR 49.28.01.23 Roadway and Intersection Lighting

- (a) <u>Lighting is regulated by the Montgomery County Zoning Ordinance, Article 59, Division 6.4, the Montgomery County Department of Transportation Streetlighting Design Requirements, Installation Procedures, and Specifications, and by the Montgomery County Department of Transportation Luminary and Streetlight Pole specifications.</u>
- (b) <u>Lighting of the Active Zone is required on Downtown Boulevards, Downtown Streets, Town Center Boulevards, Town Center Streets, Boulevards, Area Connectors, Neighborhood Connectors, Curbless Streets, and Shared Streets. Active Zone lighting is also required along Transitways, Sidepaths, and Separated Bike Lanes.</u>



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (c) <u>Lighting along the Street Zone is required along Downtown Boulevards, Downtown Streets, Town Center Boulevards, Town Center Streets, Controlled Major Highways, Curbless Streets, Shared Streets, and along Transitways.</u>
- Lighting of the Street Zone at intersections is required at all intersections except for those with Country Roads, Alleys, Rustic Roads, and Exceptional Rustic Roads. Intersection lighting is also required at crossings with Off-Street Trails, Sidepaths, Separated Bike Lanes, any on-street bikeway, and along Transitways.

COMCOR 49.28.01.24 Street Tree Placement

The Street Tree Placement Standard attached as Appendix E establishes appropriate locations for placement of street trees on County roads that safely attain the environmental, aesthetic, character, and place-making objectives for developed areas in the County.

COMCOR 49.28.01.25 Stormwater Management

The Stormwater Management Standard attached as Appendix F addresses stormwater runoff from the public right-of-way.

COMCOR 49.28.01.26 Severability

If a provision of this regulation is held invalid or inapplicable, the remainder of the regulation remains in effect.

COMCOR 49.28.01.27 Effective Date

This regulation becomes effective when the Council adopts a resolution approving the Regulation or on a later date specified in the Regulation. If the Council does not approve or disapprove the proposed Regulation within 60 days after receiving it, or by any subsequent deadline set by resolution, the Regulation is automatically approved.

COMCOR 49.28.01.28 Attachments and Index of Standards

- (a) Appendix A Maps of Country areas.
- (b) Appendix B Maps of Downtown areas.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- (c) Appendix C Maps of the Industrial areas.
- (d) Appendix D Maps of Town Center areas.
- (e) Appendix E Street Tree Placement Standard.
- (f) Appendix F Stormwater Management Standard.
- (g) Appendix G Road Design Standards and Guidelines.

Appendix A – Maps of Country Areas

Reserved.

Appendix B – Maps of Downtown Areas

Reserved.

Appendix C – Maps of Industrial Areas

Reserved.

Appendix D – Maps of Town Center Areas

Reserved.

Appendix E – Street Tree Placement Standard

The following Street Tree Placement Standard consists of three parts: Intent; Standards for Close Section and Open Section; and General Standards for All Roadway Types.

INTENT

To establish appropriate locations for placement of street trees on County roads that provide safe facilities for all users and attain the environmental, aesthetic, character, and place-making objectives for developed areas in the County. Street trees may provide a number of valuable functions including enhancing community character, defining the roadway edge, providing a visual buffer for abutting properties, contributing stormwater and air quality benefits, shading the roadway and sidewalk, and in some cases, encouraging lower operating speeds. Improperly sited trees, however, may pose a safety hazard and may obstruct sightlines to intersections, important traffic control devices and inhibit restoration of utilities.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

<u>Improper locations of trees may also result in poor tree health. The following standard is intended to achieve</u> the desired benefits of trees and to avoid the unintended hazards described above.

STANDARD:

Closed Section

- On closed section roadway segments where the target speed is less than or equal to 35 MPH, trees should be placed in the buffer panel between the curb and the sidewalk.
- On closed section roadway segments where the target speed is 40 MPH, tree species from the approved "Small Street-Tree" list may be placed in the buffer panel between the curb and the sidewalk.
- On URBAN and SUBURBAN closed section roadways segments where the target speed is equal to 40 MPH, a 10 feet minimum clear zone should be provided when placing trees. Widths of the gutter pan, parking lane and / or bike lane may be measured as clear zone width. When the distance between the edge of the right-most motor vehicle travel lane and sidewalk is less than 13 feet, trees must be placed outside of the sidewalk.
- On SUBURBAN closed section roadway segments where the target speed is greater than 40 MPH, apply the clear zone dimensions from Table 3.1, pages 3-6 of AASHTO's 2002 Roadside Design Guide (or the latest edition thereof) based on the design speed and estimated average daily traffic ("ADT's").
- on RURAL closed section roadway segments where the target speed is greater than or equal to 40 MPH, apply the clear zone dimensions from Table 3.1, pages 3-6 of AASHTO's *Roadside Design Guide* based on the design speed and estimated ADT's.
- On closed section roadway segments where trees may be located between the curb and sidewalk as noted above, the following guidelines apply:
 - A six (6) foot buffer panel is encouraged for placement of a tree which should be centered in the buffer panel. In retrofit situations or for species that can tolerate a narrower buffer, a four (4) foot minimum buffer is required with the tree centered in the buffer panel.
 - When the distance between the sidewalk and the back of curb is greater than 6 feet and less than or equal to 10 feet, the tree must be located at the midpoint between the nearest edge of the sidewalk and the back of the curb.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- When the distance between the sidewalk and the back of curb is between 10 and 14 feet, the tree must be located 7 feet from the back of the curb.
- <u>When the distance between the sidewalk and the back of curb is greater than 14 feet, the tree must be centered in the landscape buffer.</u>
- When the cross-section elements permit, the designer must place trees to achieve the clear zone dimensions from Table 3.1, pages 3-6 of AASHTO's *Roadside Design Guide* through modification of the placement guidelines listed above.

Open Section

- <u>In open section residential roadway classifications, trees may be located on the foreslope with a minimum clear zone of 6 feet for tertiary roads, 9 feet for secondary roads and 12 feet for primary roads.</u>
- For all other open section roadway classification segments with target speeds less than or equal to 40 MPH, trees must be placed at a location above the bottom of a swale on the backslope at least 14 feet from the edge of the right-most vehicle travel lane.
- For all open section roadway segments with target speeds greater than or equal to 45 MPH, the designer must apply the clear zone dimensions from Table 3.1, pages 3-6 of AASHTO's Roadside Design Guide based on the target speed and estimated ADT's. Trees must be placed at a location above the bottom of a swale on the backslope or closer to the edge of the right-of-way.

GENERAL STANDARDS FOR ALL ROADWAY TYPES

- Dimensions are measured to the center of the tree.
- The width of bike lanes, parking lanes, shoulder and gutter pan may be measured as clear zone width.
- Trees may not be planted where the tree placement will impair a driver's cone of vision to intersections, signage, traffic control devices, crosswalks, and other key features along the roadside. As a general guideline, the driver should have clear sightlines to a point 10 feet outside the edge of the travel lane from a distance of 100 feet. When engineering studies verify that driver's line of sight is impaired, trees must be offset from the intersection to improve sight distances. In no instance are trees permitted to be planted within 30 feet of an intersection.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

- Trees may not be planted within 5 feet of a utility appurtenance (manhole, valve, or other structure, except a SWM structure intended to incorporate a tree as part of the design) or 10 feet of a driveway, fire hydrant, or fire service appurtenance.
- When adjacent to a sidewalk, trees must be at least 3 feet from the edge of the sidewalk.
- The longitudinal spacing of the trees must be determined on a project-by-project basis to accommodate emergency service access requirements, stormwater management structures, traffic signs, street lights, transit stops and the three preceding general standards while achieving the desired tree canopy cover and placemaking objectives.
- For reconstruction projects, existing trees may be maintained closer to the edge of the rightmost motor vehicle travel lane if the safety record of the roadway does not include a crash history involving trees and if the reconstruction does not cause the right-most vehicle travel lane to be any closer to the trees than existed prior to the reconstruction.
- Trees planted in a median must meet the appropriate lateral offsets from travel lanes defined in the closed and open section components of this standard based on the area type and target and design speed. Median trees must also satisfy the general requirements enumerated in this section of the standard.

Appendix F – Stormwater Management Standard

The following Stormwater Standard consists of four parts: Intent; Definitions; Standard; and Application Guidance.

INTENT

To establish policies for stormwater treatment within the right-of-way and P.I.E. to offset the water quality impacts and water discharge increases from roadway runoff to the extent practical; V-IMP's as the preferred stormwater treatment method within rights-of-way; and protocols for updating this standard as advances in technology and engineering design allow, subject to County approval. To provide the design community and applicants with clear guidance, standards and updates in order to properly incorporate stormwater treatment within rights-of-way; and concise definitions for known limiting factors such that if stormwater treatment goals cannot be met, it is reasonable to require that applicants clearly identify why not. To assure that all roadway projects and development plans that affect Montgomery County rights-of-way, not to include resurfacing projects per Chapter 49 of the Montgomery County Code, continue to meet the Maryland Department of the Environment (MDE) Stormwater Design Manual requirements.



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

DEFINITIONS

<u>CPv</u> is the channel protection volume of stormwater runoff required by MDE to be detained and slowly released in order to mitigate the increased stormwater discharge from impervious roadway areas.

Filtration Stormwater Measures are measures which require underdrains discharging into piped stormwater systems, or into an open channel discharge point and achieve stormwater quality treatment by filtration through an engineered media. In-situ soil conditions with infiltration rates less than 0.5" per hour require underdrains for V-IMP's.

Infiltration Stormwater Measures do not typically require underdrains because in-situ soil percolation rates are greater than 0.5" per hour.

Non-V-IMP's are structural or non-structural water quality devices that are not listed as V-IMP measures such as Montgomery County sand filters or other proprietary cartridge systems. Non-V-IMP measures may also include conventional ponds and basins.

<u>P.I.E.</u> 's are public improvement easements that are typically linear easements adjacent and contiguous to rights-of-way where impervious areas are publicly maintained.

Stormwater Discharge is the volumetric rate of stormwater runoff required to be controlled so as not to erode and degrade natural channels downstream.

Stormwater Quality is affected by auto emissions, auto leakages, sand, salt and other incidental deposits on the road surface that may be washed away by stormwater runoff.

Stormwater Runoff is liquid rain, and any precipitation that eventually melts and drains from the roadway.

Stormwater Treatment may refer to either stormwater quality or stormwater discharge, or both.

V-IMP's are vegetated integrated management practices such as filtration or infiltration stormwater treatment measures with surface vegetation designed to withstand impacts from roadway runoff and enhance water quality through pollutant uptake and evapotranspiration. Detention basins and ponds that are vegetated only for slope stabilization are not considered to be V-IMP's for the purposes of Context Sensitive Road Design.

<u>WOv</u> is the water quality volume of stormwater runoff required by the Maryland Department of Environment (MDE) or Montgomery County Stormwater Code that must be treated in order to satisfactorily mitigate roadway impacts to stormwater quality.

STANDARDS:



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

(a) Stormwater Quality

- (1) New roadway projects and development plans proposing new roadways must provide water quality volume (WQv) treatment over the entire area of the right-of-way and P.I.E.
- (2) Roadway renovation, widening or roadway improvements associated with development projects must provide WQv treatment over all impervious areas within the limits of disturbance in the right-of-way and P.I.E. of the reconstructed roadway.
- All roadway projects must incorporate V-IMP's; The goal is to treat 25% WQv by V-IMP's to the extent physically possible within right-of-way and P.I.E. buffers and/or medians for the given typical roadway section. For open section residential roads, the goal is to treat 60% WQv by V-IMP's within the right-of-way and P.I.E. to the extent practicable.
- (4) The percentage of WQv managed within a right-of-way and P.I.E. will vary by the road section being applied, and according to the following:
 - (A) V-IMP's that are suitable for meeting WQv must follow Montgomery County
 Department of Permitting Services standards and MDE standards (including
 the Maryland Stormwater Design Manual) where such standards exist, and
 include, but are not limited to:
 - (i) Biofiltration
 - (ii) Bioretention
 - (iii) Bio-Swales
 - (iv) Curb Inlet Biofiltration Structures
 - (v) Enhanced Wetland Facility
 - (vi) Grassed Swales
 - (vii) Open Section Roadways with Bio-Swales
 - (viii) Vegetated Continuous Trench



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

- (B) Vegetated Curb Extensions
- (C) An applicant may, with County approval, request use of a V-IMP not previously implemented in Montgomery County.
- (D) V-IMP's in the right-of-way and P.I.E. must be considered as secondary to roadway safety elements. Such safety elements may include, but not be limited to hydrants, light poles, pedestrian access, signage, emergency access, clear zones, etc. However, placement of safety elements must be coordinated to maximize V-IMP placement within the right-of-way and P.I.E. without compromising safety.
- (E) The spacing of new required street trees, utility poles and signage must be integrated with V-IMP placement within the right-of-way and P.I.E. without excluding required street trees and applicable root zone requirements, utility poles or signage.
- (F) Utility line placement must be optimized according to minimum utility separations in areas not suitable for V-IMP's before reducing V-IMP's in buffers and medians. The intent is to place new utility lines outside V-IMP buffer strips and medians to the extent practical unless that utility line can tolerate periodic wet conditions and run parallel within buffer strips without impeding the size and function and maintenance of V-IMP's. This does not preclude minimized crossings of V-IMP's by utility lines.
- (G) Landscape and planting plans must consider potential impacts of salt and other runoff pollutants on vegetation when making design selections of tree species and planting materials within and adjacent to V-IMP's.
- The balance of WQv required for each project that is not treated by V-INP's within the right-of-way and P.I.E. must be treated, and may be treated in the following manners, listed in order of preference.
 - (A) Additional V-IMP's may be placed outside the right-of-way and P.I.E.
 - (B) Structural, underground or cartridge water quality facilities may be placed within the right-of-way and P.I.E. without displacing V-IMP's.
 - (C) Additional non-V-IMP stormwater treatment may be placed outside the right-of-way and P.I.E.



Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

- (6) Open section design utilizing Bio-Swales must be the preferred option for rural roadway stormwater treatment.
- (7) Should an applicant be unable to achieve the WQv goals for a project stated in Section 1.C. of this Standard, the applicant must quantify the percentage of WQv provided in the right-of-way and P.I.E. and identify the specific constraints limiting achievement of the WQv goal as part of the review and permitting process with Montgomery County. It must be clear and evident in graphic and / or written descriptions and justifications that V- IMP's have been placed inside the right-of-way and P.I.E. to the greatest extent practical. At the onset of this standard, acceptable limitations for V-IMP placement may include, but not be limited to:
 - (A) <u>Intrusion of safety elements into buffers that cannot be placed in any other practical location.</u>
 - (B) Existing underground utility lines that would be dangerous to co-mingle with saturated ground conditions.
 - (C) Subgrade conditions that would become unstable with water intrusion combined with an inability to provide impermeable membranes around water treatment facilities.
 - (D) Impeding locations of existing street trees and root zone requirements that are not otherwise required to be removed for the roadway construction.
 - (E) Impediments from required new street trees and root zone requirements that cannot be accommodated in any other practical manner.
 - (F) Site constraints including slopes, grades, soils, wetlands, environmental protection areas, and others that would result in more detriment than benefit upon installation.
 - (G) Other justifications not listed above that are encountered may be submitted for acceptability to the county and made publicly available to the design community when found acceptable, as stated in Section 4 of this Standard.
- (b) Stormwater Discharge



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department	Effective Date
Department of Transportation	

All new roadway projects, roadway renovation projects and development plans having roadway components must provide channel protection storage volume CPv in accordance with MDE regulations. Additional flexibility and credits apply as stated below.

- (1) CPv for the roadway right-of-way and P.I.E. only may be provided within the right-of-way and P.I.E. subject to County approval. Water quantity devices placed within the right-of-way and P.I.E. are subject to the same spatial limitations stated in Section 1.D of this Standard.
 - (A) New roadways must provide CPv for the entire right-of-way and P.I.E. being improved.
 - (B) Roadway renovation, widening or roadway improvements associated with development projects must provide CPv for the limits of disturbance within the right- of-way and P.I.E.
- (2) <u>CPv credit for all water quality measures must be granted as much as is currently and subsequently quantified and proven valid to MDE.</u>

(c) Maintenance

Montgomery County must maintain stormwater treatment measures installed by permit within the right-of-way and P.I.E.

- (1) Applicants must submit maintenance schedules and life-cycle cost estimates for all water quality and water quantity measures proposed in the right-of-way and P.I.E.
- (2) As part of a coordinated maintenance plan, the maintenance logistics and traffic operations during maintenance activities of stormwater facilities in the right-of-way and P.I.E. must be outlined.

(d) Modifications

This standard is written with the expectation that future innovations in stormwater treatment will develop.

(1) When studies or design plans document innovative vegetated stormwater treatment that fits within rights-of-way and which meets or exceeds MDE and County stormwater regulations, the County may consider such studies and plans to be the



Offices of the County Executive • 101 Monroe Street • Rockville, Maryland 20850

Subject	Number
Complete Streets	026-25
Originating Department Department of Transportation	Effective Date

basis for modifying this standard after such advances have been proven to provide measurable and practical stormwater treatment benefits.

- All newly permitted stormwater treatment facilities in the County not explicitly listed in this standard must be the basis for a modification of this standard. Such newly permitted stormwater treatment facilities must be posted to montgomerycountymd.gov and the plan announced to the design community.
- (3) Such stormwater treatment applications must be aggregated as amendments to Chapter 49 of the Montgomery County Code not less than once every calendar year in years when acceptable modifications have been demonstrated. The County must coordinate additional aggregated guidance and illustrations for the design community to use based on these specific permitted stormwater applications.
- (4) The WQv goal established in Section 1.C of this standard must be reassessed every three (3) years. The goal may be changed if justified by new data or evidence.

APPLICATION GUIDANCE

V-IMP's in the right-of-way and P.I.E. are anticipated to be primarily linear stormwater treatment features in buffers and median strips. Placement of V-IMP's that do not actually receive runoff from impervious areas will not meet the intent of this Standard. V-IMP's must be placed so as to maximize interception of stormwater runoff and pollutant removal from impervious surfaces in the right-of-way and P.I.E.

Appendix G – Road Design Standards and Guidelines

Reserved.		
Approved:		
Marc Elrich, County Executive	Date	
APPROVED AS TO FORM AND LEGALITY		
OFFICE OF THE COUNTY ATTORNEY		
Kindluly Jones	Sep 15, 2025	
Assistant County Attorney	Date	































































































































