



CET 2040 TRANSIT MASTER PLAN (TMP) LOCAL AGENCY OVERVIEW AND IMPLEMENTATION PLAN

Date: June 28, 2020 Project #: 22857
 To: Cascades East Transit Master Plan Project Management Team
 Cc: City of Bend
 From: Susan Wright and Miranda Barrus, Kittelson & Associates, Inc.
 Darci Rudzinski and Shayna Rehberg, Angelo Planning Group
 Subject: City of Bend Overview and Implementation Plan for the 2040 TMP

TABLE OF CONTENTS

Introduction 1
 Current Transportation Services 1
 Transit needs 2
 Transit Service and Capital Plans 2
 Implementation Plan 3
 Attachment A – Bend Policy and Code Recommendations A-1

INTRODUCTION

This memorandum serves as a guide to CET’s 2040 Transit Master Plan (TMP) for the City of Bend. In this document, the City will find the section references and page numbers within the TMP that pertain to the City for ease of review and implementation. For implementation in the near term, it is recommended that Bend adopt a policy statement expressing support for the Cascades East Transit (CET) Transit Master Plan, which includes service and capital recommendations specific to Bend identified in this memo. It is recommended that subsequent implementation actions address adoption of transit-supportive policies and development requirements presented in Attachment A.

CURRENT TRANSPORTATION SERVICES

Today, Bend is served by CET’s fixed-route service local to bend, including nine routes all intersecting in the center of town at Hawthorne Station; Community Connector routes 24, 29, and 30, which connect Bend to Redmond, Sisters, and La Pine, respectively; and a local paratransit demand-response service (for disabled individuals and low-income senior citizens).

Information on these existing services (e.g. key destinations, service boundaries, hours of service, ridership, and travel patterns) can be found in **Chapter 4, Section 2 on pages 23-29 and 33-35**.

TRANSIT NEEDS

Transit service needs were identified through analysis and stakeholder engagement, including a project advisory committee made up of local community members and multiple outreach efforts including in-person open houses, online virtual workshops, and operator and rider surveys. A summary of the current needs for Bend include general services such as more frequent routes, more service coverage, early evening service, and limited Sunday service to the fixed-route system; increasing frequency of weekday trips (especially between Bend and Redmond) and adding Saturday service to the Community Connector routes; interlining Routes 24 and 26; allowing more paratransit rides per hour (through improved scheduling technology) to increase ridership and productivity; and additional local fixed-routes to underserved areas of Bend. More information on these current needs, as well as transit capital and transit program needs and needs based on population and employment densities, can be found in **Chapter 5, Section 1 on pages 55-61**.

Future transit needs were also identified for Bend including more direct connections to Old Mill and improved bus on-time arrival/reliability for the fixed-route system; early morning and afternoon service to the airport and a new Prineville-Redmond-Bend route for the Community Connector system; expanding Dial-A-Ride coverage to the County boundary; new Route 24 stops at the airport; a new transit hub in the Korpine area of Bend; infill of pedestrian and bicycle gaps to transit; mobility hubs of varying size and function scattered throughout Bend; transitioning from a hub-and-spoke fixed route system to a multi-centric system, including adding new fixed-routes, microtransit, and micromobility; and identifying which City streets should be planned as primary transit corridors to support existing and future transit service and infrastructure. Information on these future transit needs can be found in **Chapter 5, Section 2 on pages 62-64**.

TRANSIT SERVICE AND CAPITAL PLANS

Transit services and capital investments for Bend were identified based on the needs assessment and alternatives analysis. Services include elements such as re-routing Community Connector Route 24 within Bend to provide more direct service, increasing service frequency along high-capacity corridors, adding evening trips to Community Connector routes, a new Route 29 stop at Cascade Village, service to Deschutes River Woods, Sunriver, RDM, and COCC, and a shopper/medical shuttle between Bend and Sisters and La Pine; routing modifications to the local fixed-route system (e.g. increased frequency, providing direct connections to downtown and the eastside, extending routes, etc.), new fixed-routes to northeast and southeast bend, and extended evening hours on fixed-routes. Information on these planned services can be found in **Chapter 8, Section 1 on pages 82-97**. Capital investments include up to four large mobility hubs (and sixteen smaller sites); enhanced transit

stops on existing routes; improved walking and bike routes along and crossing roadways around bus stops; a facility for vehicle storage and maintenance operations, and transit signal priority for 3rd Street, US 97 BUS, Greenwood/Highway 20, Downtown, and 27th Street (when more services are introduced) through Bend. Information on these planned capital investments can be found in **Chapter 8, Section 2 on pages 101-105**.

IMPLEMENTATION PLAN

A phased implementation plan of the planned transit services and capital investments was developed by community based on available and potential funding. Information on the transit service and capital implementation plans for the City can be found in **Chapter 9, Section 1 on pages 108-116**. The estimated costs and potential funding to implement the services planned for Bend can be found on **page 119**. To further assist in the TMP implementation, the recommendations for Bend to incorporate policies and development requirements supportive of transit and CET's 2040 Transit Master Plan into their comprehensive plan and development code can be found in **Chapter 9, Section 2 on pages 128-129**. Detailed recommendations on how the City can help implement the TMP through their comprehensive plan and development code are included in **Attachment A**.

ATTACHMENT A – BEND POLICY AND CODE RECOMMENDATIONS

RECOMMENDATIONS OVERVIEW

The following summarizes recommendations for the City of Bend to assist the City in implementing the Cascades East Transit (CET) Master Plan, including incorporating transit-supportive policy and development provisions in its Comprehensive Plan and Development Code.

To implement the CET Master Plan, it is recommended that the City consider the following adoption actions:

1. **Comprehensive Plan** – The City should have policies in its adopted plans that support Master Plan recommendations. **Recommended transit-supportive policy statements** are addressed in the *Comprehensive Plan Integration* section. It is recommended that the City adopt new or updated transit policies as part of the transportation element of the Comprehensive Plan. This can be accomplished as an amendment to the adopted Comprehensive Plan document or through the Transportation System Plan update, as the transportation element of the Comprehensive Plan.
2. **Development Code** – Transit-supportive development requirements help further regional and local transit policy objectives and implement Master Plan recommendations. To assist Bend in implementing the CET Master Plan, the *Development Code Implementation* section summarizes **code amendment recommendations** for the City. Based on these recommendations and input from the City, specific development code language has been produced and is included in this memorandum.

The following sections provide more detail – including jurisdiction-specific guidance – related to transit-supportive policy and development code recommendations.

COMPREHENSIVE PLAN INTEGRATION

Recommended transit-supportive policy statements should be reflected in the Bend Comprehensive Plan or Transportation System Plan, serving as part of an updated transit plan. Policy statements recommended for Bend echo the vision, goals, and objectives developed for CET early in this planning process. The Master Plan vision and

proposed policy language for the city is presented below. It is recommended that Bend review its existing plan policies to assess if the vision and transit policies below are reflected or if policy enhancements could be made, using the language below as a guide.

VISION: Provide transit for all users that is safe, accessible, and efficient and that supports a balanced transportation network in our community, which is needed for mobility, equity, and economic growth.

1. *The City will facilitate provision of transit service to its community members, with particular attention to members who may be “transit-dependent” due to factors such as age, income, or disabilities.*
2. *The Cascades East Transit (CET) Master Plan provides policy and implementation direction for transit planning in jurisdictions within the district’s service area, including route development, financing, and physical improvements necessary to maintain and improve public transit service for jurisdiction residents, businesses, institutions, and visitors.*
3. *The City will continue to engage in long-range planning and implementation efforts led by CET.*
4. *The City will invite transit service providers to participate in the development of long-range plans and review of land use applications that may have implications for transit service.*
5. *The City will require development or will facilitate coordination between development and the transit service provider to provide transit-related improvements such as shelters and lighting to complement transit service and encourage higher levels of transit use. Transit stop improvements will be coordinated with the transit service provider and must be consistent with adopted transportation and transit plans.*
6. *The City will support higher-density and mixed land use around transit stops and in transit corridors to make transit service more feasible and effective.*
7. *The City will provide or will acquire through future development adopted transportation system-related improvements such as pedestrian and bicycle connections to transit stops, including ADA-accessible improvements, given nexus and proportionality can be demonstrated for private development.*
8. *The City will support connections between transit and other transportation services and options.*
9. *The City will support improved transit access to benefit public health, including providing access to active transportation options and health-supporting destinations such as health care, groceries, and recreation.*
10. *The City will support strategies to reduce single-occupancy vehicle trips, greenhouse gas emissions, and other pollution.*

DEVELOPMENT CODE IMPLEMENTATION

The implementing development code recommendations reflect recommendations made in the Transit-Supportive Development Strategies Memorandum, found in the Transit Master Plan Technical Appendix. Transit-supportive development, or transit-oriented development (“TOD”), strategies focus on code language that institutionalizes coordination between transit agencies and developers and supports transit- and pedestrian-oriented density and design. The TOD Memorandum code strategy recommendations were tailored to each jurisdiction based on jurisdiction size and preliminary transit service plan and transit capital plan recommendations.

Table 1 includes the list of code strategies and indicates whether they were considered recommended or optional for Bend and if the strategy is reflected in existing code requirements (“yes,” “no,” or “partial”). Implementing code recommendations initially made for Bend in the TOD Memorandum were refined after meeting with the City and reviewing the Bend Development Code (BDC).

Code language is provided following Table 1.

- ▶ For some strategies noted as recommended in the table and not reflected or only partially reflected in adopted code, proposed language is shown as “adoption-ready;” text that is recommended to be added is underlined and text that is recommended to be deleted is ~~struck through~~.
- ▶ In some cases, consultation with City staff indicated that a recommended strategy has not had sufficient community discussion to be ready for implementation. For these cases, specific code amendments are not suggested, but model code language¹ or other guidance is provided to assist the community in further policy conversations. Model code language is provided in *italics* as an example of how the transit-supportive strategy could be implemented. Suggestions are also provided indicating where this model language could be integrated in the BDC.
- ▶ For each of the code strategies there are “notes” to provide further explanation and implementation guidance.

¹ Model code language has been derived from a combination of State of Oregon Transportation & Growth Management Model Development Code for Small Cities, 3rd Edition; Oregon Transportation Planning Rule (OAR 660-012-0045(4)); local code examples; and code language developed for other transit plans in the state.

Table 1. Transit-Supportive Code Implementation Recommendations: Bend

	Transit-Supportive Code Strategies	Recommendation	Existing Code	Adoption-Ready Code Language Provided	Model Code Language and/or Other Guidance * Provided
1	Coordination with Transit Provider	Recommended	Partial	✓	
2	Transit Stop Access and Improvements	Recommended	Partial	✓	
3	Accessory Dwelling Units	Recommended	Yes		
4	Mixed Use	Recommended	Yes		
5	Major Trip Generator Uses	Recommended	Yes		
6	Limit Auto-Oriented and Auto-Dependent Uses	Recommended	Partial		✓
7	Limit Drive-Throughs				
8	Residential Density	Recommended	Yes		
9	Min. FAR or Lot Coverage	Recommended	Partial	-	-
10	Max. Front Yard Setbacks	Recommended	Yes		
11	Pedestrian Space in Front Setback				
12	Pedestrian Orientation (Basic)				
13	Pedestrian Orientation (Enhanced)				
14	Additional Height for Housing	Recommended	Partial		✓
15	Block Length	Recommended	Yes		
16	Accessways Through Long Blocks	Recommended	Yes		
17	No Vehicle Parking/Circulation in Front Setback	Recommended	Partial	✓	
18	Parking Maximums	Recommended	Yes		
19	Parking Reductions for Transit	Recommended	Yes		
20	Landscaping and Walkways in Parking Lots	Recommended	Partial		✓
21	Preferential Parking for Ridesharing	Recommended	Partial	✓	
22	Transit-Related Uses in Parking Lots	Recommended	Partial		✓
23	Bicycle Parking	Recommended	Partial		✓
24	Definitions of Transit-Related Terms	Recommended	Partial		✓

** Guidance, at a minimum, consists of narrative direction and suggestions. In some cases, it also includes model language and direction about how model language could be implemented.*

1. COORDINATION WITH TRANSIT PROVIDER

Notes: Existing code language partially reflects this recommended code strategy. Section 4.1.245 (Notice to Public Agencies) specifies that notice of applications be provided to agencies such as Oregon Parks and Recreation Department but does not specify transportation and transit agencies. Therefore, it is recommended that these provisions be amended to, at a minimum, include a reference to CET.

Recommended code amendment:

4.1.245 Notice to Public Agencies.

In addition to any notice required by this code, written notice shall be provided to public agencies as prescribed below.

[...]

C. Parks and Recreation Department. The City shall notify the Oregon Parks and Recreation Department (OPRD) in writing of any application for a proposed change, improvement, or activity within the one-fourth-mile boundary of either the Upper Deschutes Scenic Waterway or the Middle Deschutes Scenic Waterway. A landowner proposing a change, improvement, or activity within a State Scenic Waterway shall notify OPRD using the form provided by OPRD. The proposed change, improvement, or activity shall not be approved by the City unless either OPRD has given its written approval, or OPRD has not responded within one year from the date of notification. (See OAR 736-40)

D. Cascades East Transit. The City shall notify Cascades East Transit (CET) in writing of any application for proposed development that is served by or adjacent to an existing or planned transit route, according to the most recent data and mapping provided to the City by CET.

~~D.E.~~ Other Agencies. The City shall notify other public agencies, as appropriate, that have statutory or administrative rule authority to review or issue State permits associated with local development applications.

2. TRANSIT STOP ACCESS AND IMPROVEMENTS

Notes: Adopted code partially reflects this recommended transit-supportive code strategy in a number of provisions.

- ▶ Chapter 4.5 (Master Planning) requires that transit routes and facilities be shown in the conceptual site plan.

- ▶ Transportation Facilities Report requirements in Chapter 4.7 (Transportation Analysis) include an evaluation of existing and planned transit facilities.
- ▶ Transportation Impact Analysis criteria (Section 4.7.500) include safe and accessible connections to transit facilities.
- ▶ Parking reductions for industrial, commercial, or office uses that are not part of a Transportation and Parking Demand Management (TPDM) plan are allowed when a transit stop and related amenities, approved by the local transit authority, are provided (Section 3.3.300(D)(1)(b)).
- ▶ Pedestrian access and circulation standards in Section 3.1.300 require connections between primary building entrances and the abutting street.

It is recommended that a new code section be added to clearly establish requirements for the provision of transit stops and access to them, thereby building on existing code provisions cited above.

Recommended code amendment:

Chapter 3.5 (Other Design Standards)

3.5.100 Density Transfers.

3.5.200 Outdoor Lighting Standards.

3.5.400 Solar Standards.

3.5.500 Solar Access Permits.

3.5.600 Transit Access and Transit Stop Improvements

Proposed retail, office, industrial, and institutional developments located on the same site as, or adjacent to, an existing or planned transit stop (as designated in an adopted transportation or transit plan) shall provide the following transit access and supportive improvements in coordination with the transit service provider:

1. Reasonably direct pedestrian connections between the transit stop and primary entrances of the buildings on site. For the purpose of this Section, "reasonably direct" means a route that does not deviate unnecessarily from a straight line or a route that does not involve a significant amount of out-of-direction travel for users.
2. The primary entrance of the building that is closest to the street where the transit stop is located is oriented to that street.
3. A transit passenger landing pad that is ADA-accessible.
4. An easement or dedication for a passenger shelter or bench if such an improvement is identified in an adopted plan.

5. Lighting at the transit stop.

6. Other improvements identified in an adopted plan.

3. ACCESSORY DWELLING UNITS

Notes: Existing code reflects this recommended strategy. Accessory Dwelling Units (ADUs) are already widely permitted in residential zones (Section 2.1.200). Chapter 3.6 includes ADU-specific standards. Therefore, no additional code language is needed or recommended.

4. MIXED USES

Notes: Existing zoning reflects this recommended transit-supportive strategy. Mixed-use zoning districts are established along significant parts of the Primary Transit Corridors in Bend. Therefore, no additional code language is needed or recommended.

5. MAJOR TRIP GENERATOR USES

Notes: Existing zoning reflects this recommended strategy. Through the Transit Master Plan process, transit corridors and hubs have been located so as to serve existing and planned major trip-generating uses. No additional provisions for major trip generators were identified as needed.

6. LIMIT AUTO-ORIENTED AND AUTO-DEPENDENT USES

7. LIMIT DRIVE-THROUGHS

Notes: Adopted code partially reflects this recommended strategy. Where auto-oriented and auto-dependent uses are permitted, additional standards apply “in order to control the scale and compatibility of those uses” pursuant to Sections 3.6.300(A) and (B). The mixed-use zoning districts located along Primary Transit Corridors shown in the Transit Master Plan generally limit auto-oriented and auto-dependent uses (Section 2.3.200). However, commercial parking lots are permitted outright or conditionally in mixed-use zoning districts, which does not support the desired pedestrian orientation along Primary Transit Corridors, particularly adjacent to transit stops. It is recommended that restrictions of stand-alone parking lots adjacent to existing or planned transit service be explored consistent with the guidance below.

Guidance and model code language:

Consider restricting stand-alone parking lots along the lines of the following model language:

In the MU, MN, ME, and PO Zones, stand-alone commercial or public parking lots that provide required parking for an adjacent lot are prohibited in Primary Transit Corridors.

This language, or a modified version of it, could be added to Subsection (C)(3) following Table 2.3.200, which addresses commercial and public parking lots in mixed-use zones. Given feedback from City staff, it is understood that this potential code amendment warrants further community discussion before being formally proposed.

To the extent that the code amendment above is carried forward, the City should also consider corresponding language regarding restrictions of stand-alone parking lots in mixed-use zones in Primary Transit Corridors. This addition would be appropriate in the off-site parking provisions in Section 3.3.300(C)(3).

8. MINIMUM RESIDENTIAL DENSITY

Notes: The City currently has acceptable and flexible residential density requirements, notable particularly in recent code work done to address HB 3450 (Section 2.1.600). Density requirements in Section 2.3.300(C)(1), applicable to the mixed-use ME and PO zones, are tied to a development's proximity to transit (660 feet). Therefore, new or amended code language is not needed or recommended.

9. MINIMUM FLOOR AREA RATIO (FAR) OR LOT COVERAGE

Notes: Adopted code requirements partially reflect this recommended strategy. There are no maximum lot coverage restrictions for the mixed-use MU, MN, MR, and ME zones (Table 2.3.300) and a minimum 2:1 FAR is required in the Central Business (CB) Zone (Section 2.2.800(H)). Existing code language does not otherwise include requirements for minimum densities for non-residential development; however, staff do not see how these additional requirements would be appropriate or of significant benefit for development in the city. Therefore, new or amended code language is not recommended.

10. MAXIMUM FRONT YARD SETBACKS**11. PEDESTRIAN SPACE IN FRONT SETBACK**

12. PEDESTRIAN ORIENTATION (BASIC)

13. PEDESTRIAN ORIENTATION (ENHANCED)

Notes: Adopted code reflects these recommended strategies. Existing mixed-use zoning districts that are located along proposed primary transit corridors already include pedestrian-oriented requirements appropriate for Bend. In particular:

- ▶ Section 2.3.400 addresses pedestrian-oriented site layout and building orientation for mixed-use districts.
- ▶ Section 2.3.500 sets architectural standards for the MU and MN zones and apply to development in those zones in addition to commercial design review standards in Section 2.2.600(C).
- ▶ Also see Strategy #17 for a discussion of parking in front of buildings in the mixed-use ME and PO zones.

In addition to standards that apply to commercial development and mixed-use zones, there are pedestrian-oriented standards also established in the following code sections:

- ▶ The Central Business zone presents highly pedestrian-oriented design review standards in Section 2.2.800.
- ▶ Specific pedestrian amenities are required for commercial development over 10,000 square feet (Section 2.2.700).
- ▶ Robust on-site pedestrian facilities are required for all development (except single-family dwellings, duplex dwellings on their own lot or parcel, and shared courts) pursuant to Section 3.1.300(B).

Given these existing provisions, new or amended code language is not recommended.

14. ADDITIONAL HEIGHT FOR HOUSING

Notes: Adopted code language partially reflects this recommended strategy and the City staff expressed interest in more incentives for additional building height for housing in transit corridors. Code provisions in Section 2.3.300(B) allow height bonuses (10 feet) for vertical mixed use and affordable housing in mixed-use zones.

Guidance:

Where housing is permitted in mixed-use zones, consider extending existing height bonuses to attached townhomes, 2-and 3-family homes, and multi-family housing in or within 660' of Primary Transit Corridors.

15. BLOCK LENGTH

Notes: Adopted code addresses this recommended transit-supportive strategy. Existing maximum block length standards in Section 3.1.200(D) are not excessive and are consistent with the State’s Model Development Code for Small Cities (“Model Code”).² Therefore, new or amended code language is not needed or recommended.

16. ACCESSWAYS THROUGH LONG BLOCKS

Notes: Adopted code reflects this recommended strategy. Pedestrian and bicycle connections are currently required through blocks that exceed maximum standards, pursuant to Section 3.1.300(C). Therefore, new or amended code language is not needed or recommended.

17. NO VEHICLE PARKING/CIRCULATION IN FRONT SETBACK

Notes: Existing requirements partially reflect this recommended code strategy. In some mixed-use zoning districts (the ME and PO zones), development is subject to a maximum front setback of 10 feet, where there is on-street parking along the frontage (Section 2.3.300(A)(1)(e)). However, up to an 80-foot maximum front setback is allowed when there is no on-street parking along the frontage. Similarly, parking and maneuvering areas are prohibited in between the building and the street in the ME and PO zones only where on-street parking exists or is permitted along the frontage (Section 2.3.400(B)(2)). It is recommended that a 10-foot maximum setback apply in transit corridors in all cases, which will also effectively prohibit parking and circulation between the building and the street in transit corridors.

Recommended code amendment:

2.3.300 Development Standards.

A. Setbacks.

1. Front Yard Setbacks.

e. Exceptions to Front Yard Setbacks.

i. In the ME and PO Zones, when the street fronting the development

² State of Oregon Transportation and Growth Management Model Development Code for Small Cities, 3rd Edition: <https://www.oregon.gov/lcd/TGM/Pages/Model-Code.aspx>

does not allow on-street parking, the maximum front yard setback of 80 feet applies. When on-street parking is permitted on the street fronting the development, the maximum front yard setback is 10 feet. In Primary Transit Corridors, the maximum front yard setback is 10 feet. The setback does not vary based on whether on-street parking is permitted.

18. PARKING MAXIMUMS

Notes: Existing code establishes recommended parking maximums (Section 3.3.300(E)). Therefore, new or amended code language is not needed or recommended.

19. PARKING REDUCTIONS FOR TRANSIT

Notes: Adopted code reflects this recommended strategy. Section 3.3.300(D)(1) offers vehicle parking reductions based on the proximity to transit service (within 660 feet) or by providing transit stop improvements. For institutional and employment development that is subject to master planning and TPDM plan requirements, parking reductions are also available based on transit (Section 4.8.500(I)). Therefore, new or amended code language is not needed or recommended.

20. LANDSCAPING AND WALKWAYS IN PARKING LOTS

Notes: Adopted code largely reflects these recommended strategies.

Landscaping

Standards in Section 3.2.300(E)(2) and (3) establish minimum requirements for landscaping in and around the perimeter of parking lots. City staff requested an evaluation of the existing landscaping code. Using the State's Model Code, it was found to be largely consistent with those best practices, with small exceptions related to landscape island size and heights of perimeter hedges or walls.

Walkways

Section 3.1.300(B)(1) requires pedestrian connections between parking areas and building entrances. However, it is not specific about continued connections through parking areas to the sidewalk and street, effectively linking entrances to those places for pedestrians.

Guidance and model code language:

Landscaping

To balance objectives for parking lots, including enhancing existing landscaping standards (e.g., having sufficient trees for shade) and avoiding significant reductions in a site's amount of buildable land, the following guidance is offered:

- ▶ Consider increasing minimum parking lot landscaping island requirements. Existing requirements in Section 3.2.300(E)(2) are 4 feet by 4 feet; the State's Model Code calls for a minimum 48 square feet of area and minimum 6-foot length and width dimensions. These numbers can be used as a starting point for further discussion with the community and decisions makers.
- ▶ Consider adding height parameters to screening required between parking lots and the street (Section 3.2.300(E)(3)). The State's Model Code suggests a range of 3-feet to 4-feet high to serve both screening and visibility purposes. This added parameter could be applied citywide or just in Primary Transit Corridors according to what staff, the community, and decisions makers find appropriate.
- ▶ For trees in parking lot landscaping, existing code requires 1 tree per 8 parking spaces as well as trees in landscaping islands (Section 3.2.300(E)). Those requirements exceed the State's Model Code guidance. Therefore, additional or amended code language is not recommended.

Walkways

Consider adding requirements for walkways through parking lots of a minimum size (minimum number of parking spaces) that connect buildings to sidewalks and streets, including transit streets. The model language provided below could be modified as needed and added to either the multi-modal access and circulation provisions (Section 3.3.300(D)(2)) or parking lot design standards (Section 3.1.300(B)).

Pedestrian Access. A walkway shall be provided through a parking area, connecting building entrances to adjacent sidewalks and streets, in parking lots that have more than 20 parking spaces.

Where a walkway crosses a parking area or driveway, it shall be clearly marked with contrasting paving materials (e.g., pavers, light-color concrete inlay between asphalt, or similar contrast). The crossing may be part of a speed table to improve driver visibility of pedestrians. If crossings involve grade changes, the crossing shall include ADA-accessible ramps. Painted striping, thermo-plastic striping, and similar types of non-permanent applications are discouraged, but may be approved for lower-volume crossings of 24 feet or less.

21. PREFERENTIAL PARKING FOR RIDESHARING

Notes: Adopted code partially addresses this recommended code strategy. Submittal criteria for TPDM plans require that land for carpool/ vanpool/rideshare parking be shown on an institutional or employment master plan site plan (Section 4.8.500). Existing parking standards allow parking reductions for designating at least 10% of employee parking as carpool/vanpool parking and locating that parking closest to the building (Section 3.3.300(D)(1)(b)).

It is recommended – and the Oregon Transportation Planning Rule dictates – that where employee parking is provided, parking for carpool/vanpool and any other type of ridesharing be required to be preferentially located.

Recommended code amendment:

3.3.300 Vehicle Parking Standards for On-Site Requirements.

C. Parking Location and Shared Parking.

[...]

7. Parking areas that have designated employee parking and more than 20 vehicle parking spaces shall provide at least 10% of the employee parking spaces (minimum two spaces) as preferential carpool, vanpool, or other rideshare parking spaces. These preferential parking spaces shall be closer to the employee entrance of the building than other parking spaces, with the exception of ADA-accessible parking spaces.

Table 4.8.500 – Trip and Parking Reduction Measures

Project reserves a minimum of 10% of vehicle parking spaces with designated signage for carpool, vanpool and car share vehicles, with a minimum of one space required. The carpool, vanpool and car share parking spaces must be provided free of charge and located ~~at the most desirable on-site location~~ closer to the employee entrance of the building than other parking spaces, with the exception of ADA-accessible parking spaces.

22. TRANSIT-RELATED USES IN PARKING LOTS

Notes: Adopted requirements partially reflect this recommended code strategy. Land for dedicated, planned, or existing transit facilities must be shown on an institutional or employment site plan, pursuant to TPDM submittal requirements in Section 4.8.500. For industrial, commercial, or office uses that are not part of a TPDM plan, parking

reductions are available for development that provides a transit facility (e.g., bus stop) and related amenities, as approved by the transit service provider (Section 3.3.300(D)(1)).

Similar to the model language below, the City should consider explicitly allowing transit-related uses in parking areas by adding a new subsection in special parking standards (Section 3.3.300(D)). Note: Strategy #24 addresses definitions for terms such as “transit-related uses.”

Model code language:

Transit-related uses such as transit stops, park-and-ride areas, and rideshare areas may be located in parking spaces and parking areas, provided minimum parking space requirements can still be met.

23. BICYCLE PARKING

Notes: Adopted code largely reflects this recommended strategy. In terms of minimum number of bicycle spaces required and bicycle parking design standards, existing requirements in Section 3.3.600 are generally consistent with the State’s Model Code. There are opportunities to enhance bicycle parking requirements, related to this recommended strategy and consistent with the City’s request to evaluate existing code. The guidance below addresses these opportunities, which can be further vetted amongst staff, community members, and decision makers.

Guidance:

The following guidance is offered in order to strengthen existing standards, consistent with the model code language provided further below. Other resources for bicycle parking guidance are also provided.

- ▶ Remove the exemption of bicycle parking requirements for uses with less than 10 vehicle spaces in Section 3.3.600.
- ▶ Add short-term (uncovered) to bicycle parking required for multi-family residential (e.g., 1 space/20 units) in Table 3.3.600.
- ▶ Add bicycle parking space requirements for transit centers and park-and-rides in Table 3.3.600.
- ▶ Specify distance from primary building entrance (e.g., 50 feet) for location of short-term (uncovered) bicycle parking
- ▶ Add requirements for signage indicating short-term parking location when not immediately visible from primary building entrance or transit stop.

- ▶ Consult model language below for general guidance regarding the number of bicycle parking spaces required and parking design standards, including differentiation between short-term and long-term parking.
- ▶ Other resources to refer to for bicycle parking guidance include the Oregon Department of Transportation (ODOT) Highway Design Manual, bicycle parking code in a similar-sized jurisdiction (e.g., City of Beaverton), and innovations in bicycle parking code recently adopted by the City of Portland.³

Model code language:

Bicycle Parking

A. Standards. Bicycle parking spaces shall be provided with new development and where a change of use occurs, at a minimum, based on the standards in Table _____. Where an application is subject to Conditional Use Permit approval or the applicant has requested a reduction to a vehicle parking standard, consistent with Subsection _____, the [City decision body] may require bicycle parking spaces in addition to those in Table _____.

<i>Table _____ Minimum Required Bicycle Parking Spaces</i>		<i>Long and Short Term Bicycle Parking</i>
<i>Use</i>	<i>Minimum Number of Spaces</i>	<i>(As % of Minimum Required Bicycle Parking Spaces)</i>
<i>Multifamily Residential (required for 4 or more dwelling units)</i>	<i>2 spaces per 4 dwelling units</i>	<i>75% long term 25% short term</i>
<i>Commercial</i>	<i>2 spaces per primary use or 1 per 5 vehicle spaces, whichever is greater</i>	<i>25% long term 75% short term</i>

³ Oregon Department of Transportation Highway Design Manual Appendix L: Bicycle and Pedestrian Design Guide: https://www.oregon.gov/odot/Engineering/Documents/RoadwayEng/HDM_L-Bike-Ped-Guide.pdf

Beaverton Development Code, Section 60.30:
<https://www.beavertonoregon.gov/DocumentCenter/View/4970/Chapter-60---Special-Requirements?bidId=>

Beaverton Engineering Design Manual, Section 340:
<https://www.beavertonoregon.gov/DocumentCenter/View/24670/2018-EDM-Chapter-3>

Portland Title 33 Planning and Zoning, Section 33.266.200 and Section 33.266.210:
<https://www.portlandoregon.gov/bps/article/53320>

<i>Table ___ Minimum Required Bicycle Parking Spaces</i>		<i>Long and Short Term Bicycle Parking</i>
<i>Use</i>	<i>Minimum Number of Spaces</i>	<i>(As % of Minimum Required Bicycle Parking Spaces)</i>
<i>Industrial</i>	<i>2 spaces per primary use or 1 per 10 vehicle spaces, whichever is greater</i>	<i>25% long term 75% short term</i>
<i>Schools (all types)</i>	<i>2 spaces per classroom</i>	<i>50% long term 50% short term</i>
<i>Institutional Uses and Places of Worship</i>	<i>2 spaces per primary use or 1 per 10 vehicle spaces, whichever is greater</i>	<i>50% long term 50% short term</i>
<i>Parks (active recreation areas only)</i>	<i>4 spaces</i>	<i>100% short term</i>
<i>Transit Stops</i>	<i>2 spaces</i>	<i>100% short term</i>
<i>Transit Centers and Park- and-Rides</i>	<i>4 spaces or 1 per 10 vehicle spaces, whichever is greater</i>	<i>50% long term 50% short term</i>
<i>Other Uses</i>	<i>2 bicycle spaces per primary use or 1 per 10 vehicle spaces, whichever is greater</i>	<i>50% long term 50% short term</i>

B. Design and Location.

- 1. All bicycle parking shall be securely anchored to the ground or to a structure.*
- 2. All bicycle parking shall be well-lighted [to specified lighting level].*
- 3. All bicycle parking shall be designed so that bicycles may be secured to them without undue inconvenience, including being accessible without removing another bicycle. [Bicycle parking spaces shall be at least six (6) feet long and two-and-one-half (2 ½) feet wide, and overhead clearance in covered spaces should be a minimum of seven (7) feet. A five (5) foot aisle for bicycle maneuvering should be provided and maintained beside or between each row/rack of bicycle parking.]*
- 4. Bicycle parking racks shall accommodate locking the frame and both wheels using either a cable or U-shaped lock.*
- 5. Direct access from the bicycle parking area to the public right-of-way shall be*

provided at-grade or by ramp access, and pedestrian access shall be provided from the bicycle parking area to the building entrance.

6. *All bicycle parking should be integrated with other elements in the planter strip when in the public right-of-way.*
7. *Short-term bicycle parking.*
 - a. *Short-term bicycle parking shall consist of a stationary rack or other approved structure to which the bicycle can be locked securely.*
 - b. *If more than 10 short-term bicycle parking spaces are required, at least 50% of the spaces must be sheltered. Sheltered short-term parking consists of a minimum 7-foot overhead clearance and sufficient area to completely cover all bicycle parking and bicycles that are parked correctly.*
 - c. *Short-term bicycle parking shall be located within 50 feet of the main building entrance or one of several main entrances, and no further from an entrance than the closest automobile parking space.*
 - d. *Directional signs shall be provided to guide cyclists to short-term parking if it is not directly visible from building entrances or transit stops adjacent to the site. Instructional signs may be required if bicycle parking design is not a standard "staple" rack, such as for art racks.*
8. *Long-term bicycle parking. Long-term bicycle parking shall consist of a lockable enclosure, a secure room in a building on-site, monitored parking, or another form of sheltered and secure parking.*

C. Exemptions. This Section does not apply to single-family and duplex housing, home occupations, and agricultural uses. The [City decision-making body] may exempt other uses upon finding that, due to the nature of the use or its location, it is unlikely to have any patrons or employees arriving by bicycle.

D. Hazards. Bicycle parking shall not impede or create a hazard to pedestrians or vehicles, and shall be located so as to not conflict with the vision clearance standards of Section [___].

24. DEFINITIONS

Notes: Adopted code does not all define key transit-related terms included in recommended code amendment language or model code language. The City can modify the model language below and integrate it into its code definitions (Chapter 1.2) to the extent language recommended in this memorandum is considered for adoption and new terms need to be defined. Terms such as "transit stop

improvements” can be considered as complementary to the existing definition of “transit facility”⁴ or can be removed or otherwise modified as needed.

Model code language:

Definitions

*Access way. A walkway or multi-use path connecting two rights-of-way to one another where no vehicle connection is made. **OR** Access way. Pedestrian and/or bicycle connections between streets, rights-of-way, or a street or right-of-way and a building, school, park, transit stop, or other destination.*

Park-and-ride. A parking area at, adjacent, or near (within 500 feet of) a transit stop where automobiles, bicycles, and other vehicles and mobility devices can be parked by transit and rideshare users. Location and design are guided by the currently adopted transit master plan.

Rideshare. A formal or informal arrangement in which a passenger travels in a private vehicle driven by its owner. The arrangement may be made by means of a website or online app.

Transit center. A type of transit stop where multiple transit lines meet in order to facilitate transfers. A transit center may be developed with amenities including information boards, food and drink vending, water fountains, and/or restrooms.

Transit stop improvements . Transit stop-related improvements including, but not limited to, bus pullouts, shelters, waiting areas, information and directional signs, benches, and lighting. Improvements at transit stops shall be consistent with an adopted transit plan.

Transit-related uses or transit uses. Uses and development including, but not limited to, transit stop improvements, transit centers, and other uses that support transit, such as park-and-ride areas.

Transit stops. An area posted where transit vehicles stop and where transit passengers board or exit. The stop location and improvements at the transit stop shall be consistent with an adopted transit plan.

⁴ “Transit facility means public or private improvements at selected points along existing or future transit routes for passenger pick-up, drop off and waiting. Improvements may include pullouts, shelters, waiting areas, benches, information and directional signs or structures, and lighting.” (BDC Chapter 1.2)