TRANSIT-SUPPORTIVE DEVELOPMENT STRATEGIES MEMORANDUM

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To: Cascades East Transit Development Plan Project Management Team

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Subject: Transit-Supportive Development Strategies Memorandum

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INTRODUCTION

This memorandum describes potential transit-supportive communities within CET's service area that correlates with the Travel Demand and Land Use Analysis and recommends transit-supportive development strategies specific to Bend and other communities in the CET service area. The proposed strategies are informed by the local and regional plans review, existing conditions analysis, and short-term implementation strategies from Memorandum #1 (Existing Conditions), Memorandum #2 (Planning Precedent), and Memorandum #3 (Short-Term Implementation Strategy), as well as public feedback resulting from project outreach efforts.

Following Project Management Team (PMT), Technical Advisory Committee (TAC), and Project Steering Committee review, the strategies recommended in this memorandum will be refined and specific "adoption ready" implementation language will be developed for inclusion in the 2040 CET Transit Master Plan (TMP).

TRANSIT-SUPPORTIVE COMMUNITIES

An objective of the TMP planning process is to identify locations within each community that are, or have the potential to be, more transit-supportive. The plan will identify the high-priority locations, communities, and policies that support both the existing and future planned transit system. This memorandum identifies where land use can have the greatest impact on transit ridership and explores how communities can plan for transit-oriented and transit-supportive

development. Future service area planning conducted as part of this planning process will consider population density and locations expected over the 20-year planning horizon. For example, moderate or higher residential density is an indicator of an adequate concentration of population to support reasonably frequent fixed-route transit service. Job locations and densities are equally important to informing transit service priorities, particularly in the larger communities of Bend and Redmond.¹

AREAS OUTSIDE OF BEND

Only the City of Bend has fixed-route transit currently, which distinguishes this jurisdiction from others in the CET service area and warrants distinct planning considerations and strategies, as explained in the next section. Future service area planning is currently being explored for CET jurisdictions, listed in Table 2, which CET's Community Connector serves but do not have a fixed-route transit system. Planning for transit-oriented and transit supportive development in these communities will focus on the planned transit network – the transit corridors, transit stops, and transit hubs currently in the process of being identified – and potential land use and regulatory solutions that may be appropriate to support ridership. To the extent that planned service is limited to Community Connector stops, the recommendations to better align future land use with a successful transit system may focus narrowly on future development requirements at these existing and planned stops. For the City of Redmond, which has an existing mobility hub and attributes that support a fixed-route transit system, additional land use-related strategies and a broader area of applicability may be appropriate to bolster the success of new routes.

BEND AREA

Figure illustrates recommended Primary Transit Network corridor designations for Bend, based on thresholds for density of population and employment required to support frequent transit service (see Figure 1 of the Existing Conditions Supplement Memo – Bend Employment Centers), as well as system considerations for the transit network in Bend. Corridor segments are classified as follows:

- Definite corridors with the highest land use density and ridership potential can support relatively frequent service based on current or near-term conditions. These include the following corridors or areas:
 - Downtown Bend, including Newport Avenue, Franklin Avenue, and Wall/Bond Streets.
 - ▶ The OSU Cascades campus and adjacent employment areas.
 - The Central Oregon Community College (COCC) campus, including Newport Avenue
 - ▶ Greenwood Avenue, NE 27th Street, and the St. Charles Medical Center area.
 - > 3rd Ave, between Cascade Village and Walmart.

¹ The future service area planning is being informed by the Bend-Redmond travel demand model. The Bend Metropolitan Planning Organization (BMPO) maintains this model, which is used to forecast transportation needs throughout the region. The model includes forecasted population and employment based on county- and city-level forecasts prepared by the State of Oregon and Portland State University's (PSU) Population Research Center. The forecasts are based on historical data from the State and the U.S. Census Bureau and are updated annually. The current model years are 2010 (base year) and 2040 (horizon year).

- Candidate corridors with more moderate land use density and current or future potential for moderately frequent service (possibly only in the peak periods). In some areas and corridors, the ability to support more frequent transit service depends on how land use and urban form actually develop in the near- to longer-term. These include corridors with:
 - Existing fixed-route service
 - Potential for new fixed-route service
- Future service areas may be considered for either fixed-route or other service models.

Figure illustrates potential mobility hub locations in Bend. The locations are conceptual. Mobility hubs are places (typically but not necessarily public spaces) where multimodal mobility services like public transportation are designed to facilitate convenient, safe, and accessible travel options and transfers between modes. The following types of mobility hubs are illustrated in Figure 2:

- ▶ Transit Centers are the primary locations where bus routes converge, and buses can layover between trips. In Bend, Hawthorne Station is the primary transit center and provides shelters and an indoor waiting area with restrooms. It facilitates transfers to/from Community Connector routes as well as longer-distance intercity services.
- Secondary Transit Hubs may function as secondary hubs that provide additional transfer and layover locations outside of the main transit center.
- Major transit stops provide a higher level of amenities at major stop locations.
- Park and ride facilities may be co-located with transit centers and secondary hubs and allow passengers to access transit by motor vehicle, be dropped off, or access shared rides (carpools or vanpools) to local or regional worksites. Park and rides may be located at public facilities or may be established through a cooperative agreement with a private landowner.

Mobility hubs can include a variety of infrastructure and mobility service elements and are adaptable to a range of transit facilities existing or planned in Bend.

Figure 1: Recommended Primary Transit Network in Bend

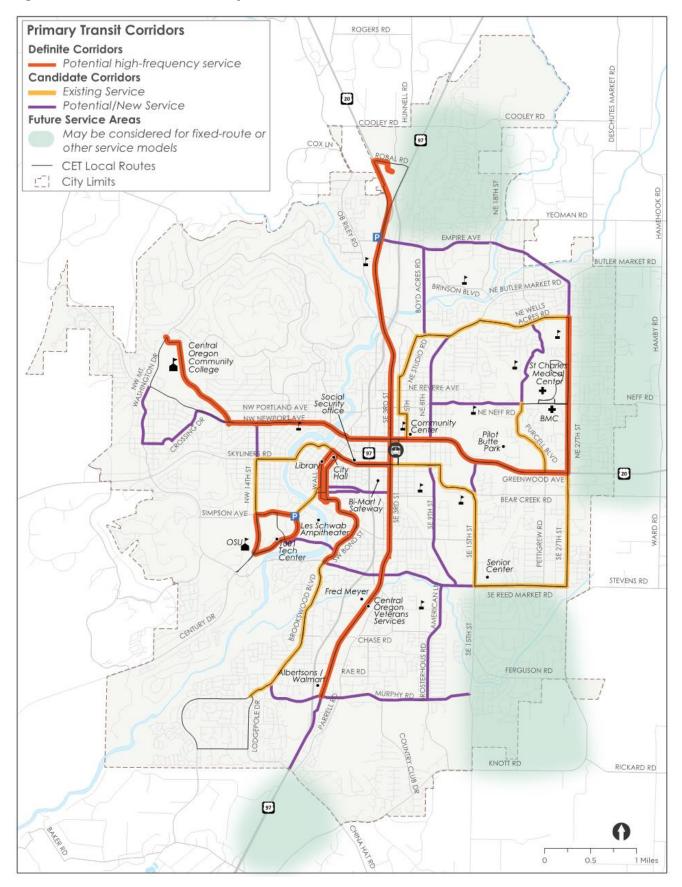
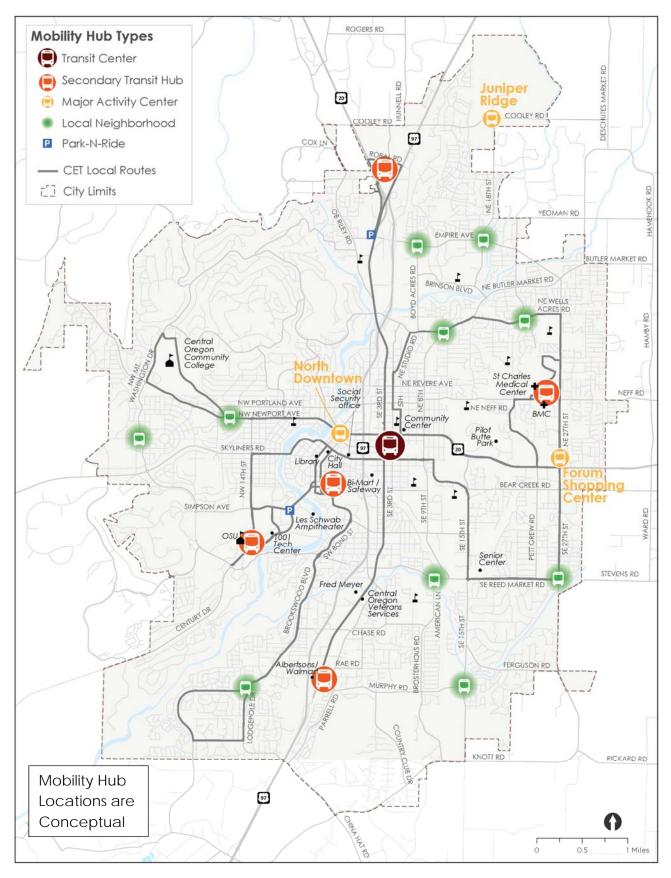


Figure 2: Conceptual Mobility Hub Locations in Bend



TRANSIT-SUPPORTIVE STRATEGIES

This section identifies potential transit-supportive land use implementation strategies for jurisdictions in the CET service area including, where appropriate, the areas listed in the previous section that have the potential to develop in a more transit-supportive manner. These transit-supportive strategies reflect findings and recommendations from planning documents reviewed in Memorandum #2 (Planning Precedent).

Developing effective strategies for implementation of transit-supportive land use involves the following steps:

- 1. Propose potential strategies in this memorandum.
- 2. Assess these strategies through Project Management Team (PMT), TAC, and Steering Committee review.
- 3. As needed following team and committee review, consult existing jurisdictions' development codes to assess the need for potential strategies.
- 4. Refine the strategies into draft and then final adoption-ready code language as part of the 2040 CET TMP draft and final documents.

The preliminary transit-supportive strategies recommended in this memorandum build on land use strategies identified in the 2013 Bend Metropolitan Planning Organization Public Transit Plan ("PTP")² and subsequent planning documents. The 2013 PTP catalogues regulatory elements that support transit.³ Land uses, development density, transportation system connectivity and access, parking requirements, and urban form (e.g., building setbacks) are all regulatory elements and code strategies related to development that impact how supportive an area is for transit service.

The 2016 Bend Integrated Land Use and Transportation Plan (ILUTP), developed as part of the Urban Growth Boundary (UGB) Remand planning project, incorporated transit-supportive code strategies from the 2013 PTP into its own implementation measures as well as recommendations for future implementation. ILUTP implementation measures included the creation of new mixed-use zones and adoption of "efficiency measures" – such as reduced lot size, lot coverage, and setback requirements – into several existing residential, commercial, and mixed-use zones.

The ILUTP recommended development and adoption of design standards for pedestrian areas and transit corridors and designation of additional mixed-use areas as future implementation measures. Establishment of pedestrian-oriented design standards and mixed uses are consistent with transit-supportive strategies recommended in the 2013 PTP. These recommendations are reflected in strategies proposed in this memorandum and are also being pursued through planning work that is in progress for the Bend Core Area Project.⁴

² Land use strategies are discussed in the "Future Opportunities" element of the 2013 PTP.

³ See Figure 24 in the 2013 PTP Future Opportunities document for a complete list of regulatory elements.

⁴ As of October 2019, code language is in the process of being developed for the Core Area Project. Adoption-ready code language that is to be developed for Bend as part of the CET TMP process will be coordinated with new code for the Core Area.

While communities outside of Bend are not subject to the PTP, ILUTP, and other Bend-specific planning documents, the process to establish transit-supportive code strategies in all communities within the CET service area relies on the PTP and other applicable planning documents reviewed in Memorandum #2 as a basis and advances that work in the following ways:

- ► Considers transit-supportive code strategies that were raised in the 2013 PTP but were not specifically addressed in the code evaluation conducted for that plan.
- ▶ Expands pedestrian-oriented design strategies from the 2013 PTP with ideas from sample pedestrian district language included in the 2016 ILUTP.
- Adds transit-related requirements from the Oregon Transportation Planning Rule (TPR Section 0045(4)).5

The resulting set of transit-supportive code strategies is presented in Table 1. The categories under which these strategies are organized are listed below with general descriptions on how they benefit and support transit.

- Coordination Coordination between jurisdictions and transit service providers (e.g., CET) regarding proposed development is critical to ensuring transit-supportive development occurs. The periods during which an applicant is preparing a development application and when that application is under review by the jurisdiction present key opportunities for this coordination.
- Uses The general idea behind use-related transit-supportive strategies is: (a) to encourage uses that support a high number and density of potential transit riders; and (b) discourage uses that do not provide many riders or that do not promote a pedestrian-oriented environment that supports safe, accessible, and attractive to access transit. Therefore, use regulations that are proposed in Table 1 promote a variety of uses and high trip generation as well as limit auto-oriented uses that detract from a pedestrian-oriented environment.
- Development Standards Development standards address the intensity and form that development takes. Like use regulations, development standards can be used to promote higher densities of riders in close proximity to transit, establish a pedestrian-friendly environment, and, support transit. Particular transit-supportive development standards that are recommended in Table 1 include those that: require minimum levels of residential and employment density; bring buildings closer to transit streets and connect them to transit stops; and create visual interest and pedestrian amenities along transit street-facing building fronts.
- Access Providing safe and convenient access to transit is critical to its robust usage. In addition to requiring access directly from buildings on a site to an existing or planned transit stop, transit-supportive access also consists of ensuring that transportation network connectivity is high enough to easily reach transit stops by walking and rolling (e.g., biking, scooting, mobility devices). Strategies proposed in Table 1 promote this connectivity through maximum block length standards and required non-motorized access through long blocks.⁶

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⁵ Oregon Administrative Rules (OAR) Chapter 660, Division 12: https://secure.sos.state.or.us/oard/displayDivisionRules.action:JSESSIONID_OARD=EaC0gCDuJwzTLeuY8oe PdgemMhtql859-7Ajt9hfRMqlWOcTiQrt!-348175955?selectedDivision=3062

⁶ Projects that improve pedestrian and bicycling infrastructure and connections to transit streets are also vital to supporting transit. These types of projects fall within the purview of transportation system planning. Jurisdictions within the CET service area vary as to how recently their Transportation System Plans (TSPs) have been updated and when they next expect to conduct an update.

Parking – Parking affects the transit orientation of development in several ways. Capping the amount of vehicle parking permitted can help make alternatives to driving more attractive. Providing sufficient and well-designed bicycle parking supports connections from transit to destinations by bike. The location and design of parking lots – e.g., restricting parking between buildings and the street and requiring landscaping and walkways – play a significant role in making pedestrian access to transit attractive and convenient. Parking areas also provide potential locations for transit stops, park-and-rides, and ridesharing.

Table 1. Transit-Supportive Code Strategies

Transit-Supportive Code Strategy	Notes			
Coordination				
Coordination with Transit Provider	Require involvement of transit provider in pre-application conference and/or application review for development applications. Require notice of development application hearings be sent to transit provider			
Transit Stop Improvements/Amenities	Work with transit provider to provide seating, lighting, etc. at stops Improvements to be provided consistent with guidelines in 2040 TMP or plan document(s) otherwise indicated			
Uses				
Accessory Dwelling Units Mixed Use	Allow a minimum of one accessory dwelling unit (ADU) Allow or require mixed uses			
 Major Trip Generator: Institutional Uses for the Public Neighborhood Commercial Uses Major Employment Generating Uses Major User-Generating Uses 	Allow uses that offer goods or services that attract large numbers of employees or members of the public			
Non-Transit-Supportive: Auto-Oriented Uses	Restrict or prohibit auto-oriented uses, including uses that provide goods and services for vehicles and uses (e.g., distribution facilities) where vehicles are a primary and integral part of operations			
Non-Transit-Supportive: Drive-Throughs	Restrict or prohibit drive-throughs			
Development Standards				
Residential Density	Establish minimum density consistent with local transit service guidelines in Existing Conditions Supplement Memo (Fig. 1) and, in Bend, with existing City mixed use and central land use districts			
Minimum Floor Area Ration (FAR) or Lot Coverage	Establish, e.g., a FAR of 1:1 - 2:1 or no min. lot coverage			
Max. Front Yard Setbacks Pedestrian Amenities in Front Setback	Establish, e.g., no min. setback and max. 10' setback Allow for greater front setback when pedestrian space (seating, etc.) provided E.g., up to 20' setback for up to 50% of building face			
Pedestrian Orientation (Basic)	Require primary entrance oriented to street and pedestrian connection from building(s) to street (transit stop) Encourage pedestrian amenities (in front setback)			
Pedestrian Orientation (Enhanced)	Require building articulation, min. ground floor windows, and weather protection			
	E.g., windows for min. 50% of length and min. 60% of area of street-facing wall; weather protection for min. 50% of length of street-facing wall and over street-facing entries			
	Require integration of two or more other pedestrian-oriented design features including human-scale building lighting, signs, and horizontal/vertical elements (e.g., cornice, columns, transoms)			
Additional Height for Housing	Allow for additional building height (up to an alternative max.) when housing provided, possibly with design requirements such as			

Transit-Supportive Code Strategy	Notes		
	stepbacks		
Access			
Block Length	Establish max. block length standards consistent with 2013 PTP (Fig. 24) and Sate of Oregon Transportation & Growth Management Model Development Code for Small Cities ("Model Code")		
Accessways Through Long Blocks	Require non-motorized accessways consistent with 2013 PTP (Fig. 24), Model Code, and TPR		
Parking			
No Vehicle Parking/Circulation in Front Setback	Prohibit parking and circulation in front setback Related to max. front setback		
Parking Maximums	Potential reduction of existing max. that is (e.g., set at 50% of min. required parking in Bend)		
Parking Reductions for Transit	Establish reductions (inc. max. % reduction) for locations within specified distance of transit		
Parking Management Strategy	Consider developing a Parking Management Strategy to evaluate parking needs and manage supply (for integration into future code requirements and/or policy adopted related to the TMP)		
Landscaping and Walkways in Parking Lots	Set min. standards for perimeter landscaping, landscaping islands, and walkways through parking lots		
Transit-Related Uses in Parking Lots	Allow for redevelopment of existing parking lots to accommodate transit-related uses (e.g., stops, park-and-rides, transit-oriented buildings), granted other min. parking standards can be met and the location of the use is appropriate and safe		
Preferential Parking for Ridesharing	Require location of rideshare (carpool) parking required to be closest to primary entrance, aside from Americans with Disabilities Act (ADA)-accessible parking		
Bicycle Parking	Establish min. bicycle parking space and design requirements consistent with 2013 PTP (Fig. 24), TPR, and Model Code		

The following sections present the recommended transit-supportive code strategies by jurisdiction and identify the direction that is being sought in reviewing these code strategies.

RECOMMENDATIONS

TRANSIT-SUPPORTIVE DEVELOPMENT CODE RECOMMENDATIONS - OUTSIDE OF BEND

Strategies recommended for jurisdictions in the CET service area, other than the City of Bend, are included in Table 2. The strategies are indicated as "recommended" or "optional" largely based on community size and level of urban development and assumptions that some strategies may be more or less applicable or appropriate in a given community. Table 2 recommendations are a proposed starting point for discussion; all strategies may be considered for any of the jurisdictions in the service area.

These strategies are intended to be incorporated into existing sections of local development codes, including areas that govern land use procedure, land use districts, supplementary development standards, and off-street parking standards. Adaptation of these strategies into local development code language is intended to be accomplished as part of TMP implementation. Local adoption of proposed code language may follow CET's adoption of the TMP.

Table 2. Proposed Transit-Supportive Code Strategies, by Jurisdiction

Table 2. Proposed Transit-Supportiv		, , <u>,</u>					Crook,	
TOD Strategy	Redmond	Prineville	Madras	Warm Springs	Sisters	La Pine	Deschutes, & Jefferson Counties	
Coordination								
Coordination with Transit Provider		Decommended						
Transit Stop Improvements		Recommended						
Uses								
Accessory Dwelling Units								
Mixed Use		Optional						
Major Trip Generator Uses								
Limit Auto-Oriented Uses	Recommended			Ontic	nnal			
Limit Drive-Throughs	Recommended	Optional Control of the Control of t						
Development Standards								
Residential Density		Optional						
Min. FAR or Lot Coverage		Optional Control of the Control of t						
Max. Front Yard Setbacks		Recommended		Recomi	Recommended [no min setback]			
Pedestrian Space in Front Setback	Recommended	[max. setback or	no min. setback]	Optional				
Pedestrian Orientation (Basic)		Recommended					Optional	
Pedestrian Orientation (Enhanced)	Recommended	Recommended Optional						
Add. Height for Housing		Optional Programme Transport of the Control of the						
Access								
Block Length	Recommended	December 4						
Accessways Through Long Blocks	Recommenueu	Optional Control of the Control of t						
Parking								
No Vehicle Parking/Circulation in Front Setback		Recommended			Орг	Optional		
Parking Maximums		Optional Optional						

TOD Strategy	Redmond	Prineville	Madras	Warm Springs	Sisters	La Pine	Crook, Deschutes, & Jefferson Counties
Parking Reductions for Transit	Docom	mandad	Optional				
Landscaping in Parking Lots	Recommended		Recommended				
Preferential Parking for Ridesharing	Optional Optional					Optional	
Bicycle Parking	Recommended						
Transit-Related Uses in Parking Lots	Recommended						

In order to tailor transit-supportive development code strategies for each jurisdiction, answers to the following questions are needed:

- 1. Are the strategies appropriate for the communities for which they are recommended?
- 2. Are there "optional" strategies that the jurisdiction would like to pursue and include in draft development code language?
- 3. Where examples of strategies are provided (in Table 1), are these suitable? Are there alternate requirements that you would suggest?
- 4. Where alternatives are provided for strategies in Table 2 (e.g., maximum front setback or no minimum front setback), which strategy is preferred?
- 5. Is establishing a new transit overlay district that implements these code strategies preferable to amending existing code sections?
- 6. Are there other specific regulatory tools that could help one or more of the listed jurisdictions be more transit-supportive that are not addressed in this memorandum?

TRANSIT-SUPPORTIVE DEVELOPMENT CODE RECOMMENDATIONS - CITY OF BEND

Strategies recommended for the City of Bend are included in Table 3. Establishing transitsupportive code strategies to implement in Bend advances work from the 2013 PTP, 2016 ILUTP, and other relevant planning documents in the following ways:

- Suggests an approach that will recognize the different transit needs and opportunities in specific geographies and proposes different requirements accordingly.
- The implementation tool currently being considered and proposed is an overlay zone or zones that could include be differentiated by the following levels of geography:
 - ▶ All Corridors These areas could be made up of, at a minimum, properties fronting the roadways where transit service currently exists, is planned, or may be planned, as defined by "Definite Corridors" and "Candidate Corridors" presented in Figure 1.
 - Primary Corridors Primary transit corridors are defined as roadway segments where the highest level of transit service (e.g., most frequency, longest hours) is prioritized. Based on corridors recommended in the Needs Analysis Supplement Memorandum, consider establishing either just "Definite Corridors" or "Definite Corridors" plus "Candidate Corridors" with existing service as Primary Corridors to which code strategies in Table 3 would apply.
 - Nodes/Hubs The 2013 PTP referred to nodes as areas outside of primary corridors that could have the potential to serve as centers of the transit network in the future. Work has been done as part of Bend's current long-range transportation system planning process and this transit planning process to define mobility hubs. Figure 2 illustrates potential mobility hubs around Bend, which are tiered into transit center, secondary transit hub, major activity center, and local neighborhood hub levels.

Table 3 presents transit-supportive code strategies proposed for potential inclusion in a transit overlay zone for Bend. The table identifies the potential geographic extent of where code elements may apply (e.g., all corridors, primary corridors, nodes). The "notes" column provides suggestions regarding how the code strategies could be implemented, including where they may vary based on the underlying (base) zone.

Table 3. Proposed Bend Transit Overlay Zone Elements and Applicability

Transit-Supportive Code Strategy for Overlay Zone(s)	Potential Extent of Applicability	Notes
Coordination		
Coordination with Transit Provider	All Corridors	Consider application citywide
Transit Stop Improvements	All Corridors	Consider application citywide
Uses		
Accessory Dwelling Units	Primary Corridors	Requirement may vary by underlying zone
Mixed Use	Primary Corridors	Requirement may vary by underlying zone

⁷ As explained in more detail in the Existing Conditions Supplemental Memorandum, mobility hubs are places that provide connections between different types of transportation options, often including transit, micromobility, and on-demand services.

Transit-Supportive Code Strategy for Overlay Zone(s)	Potential Extent of	Notes
	Applicability	
 Major Trip Generator: Institutional Uses for the Public Neighborhood Commercial Uses Major Employment Generating Uses Major User-Generating Uses 	Hubs and Primary Corridors	Requirement may vary by underlying zone
Limit Auto-Oriented Uses	Hubs and Primary Corridors	Requirement may vary by underlying zone
Limit Drive-Throughs	Hubs and Primary Corridors	Requirement may vary by underlying zone
Development Standards		
Residential Density	Primary Corridors	Requirement may vary by underlying zone
Minimum Floor Area Ration (FAR) or Lot Coverage	Hubs	Requirement may vary by underlying zone
Max. Front Yard Setbacks	Primary Corridors	Requirement may vary by underlying zone
Pedestrian Amenities in Front Setback	Primary Corridors	
Pedestrian Orientation (Basic)	All Corridors	
Pedestrian Orientation (Enhanced)	Hubs	
Additional Height for Housing	Hubs	
Access		
Block Length	All Corridors	Requirement may vary by underlying zone
Accessways Through Long Blocks	All Corridors	Consider application citywide
Parking		
No Vehicle Parking/Circulation in Front Setback	Primary Corridors	
Parking Maximums	Hubs	
Parking Reductions for Transit	All Corridors	Consider application citywide
Landscaping in Parking Lots	All Corridors	
Transit-Related Uses in Parking Lots	All Corridors	Consider application citywide
Preferential Parking for Ridesharing	All Corridors	Consider application citywide
Bicycle Parking	All Corridors	Consider application citywide

The PMT and Bend Local TAC will review and provide comment and direction on the content of Table 3 as a next step in this planning process. In order to tailor transit-supportive development code strategies for Bend, answers to the following questions are needed:

1. Do the recommended code strategies seem appropriate overall and individually?

- 2. Does varying the code strategies by geography make sense? If so, are the levels of geography proposed in Table 3 appropriate? Are there modifications or specifications that would be useful? (E.g., what areas should be included in "All Corridors," "Primary Corridors," and "Hubs?")
- 3. Are there specific strategies that you see significantly overlapping with underlying, existing Bend zoning, such as Mixed Use Urban, Central Business District, and Bend Central District?
- 4. Where examples of strategies are provided, are these suitable or are there alternate requirements that you would suggest?
- 5. Are there other specific regulatory tools that could help Bend be more transit-supportive that are not addressed in this memorandum?

NEXT STEPS

The assessment of strategies and recommendations in Table 1, Table 2, and Table 3 will inform jurisdiction-specific recommendations for transit-supportive changes to each jurisdictions' development code. Future work in this planning process will include refining recommended strategies and developing "adoption-ready" (underline and strikeout) code language for each jurisdiction to support and implement the 2040 CET TMP and transit-supportive development.