CLIMATE-FRIENDLY AND EQUITABLE COMMUNITIES (CFEC) WALKABLE DESIGN STANDARDS (OAR 660-0120 0330)

City of Tualatin Code Audit | FINAL 2/5/2025

Introduction

The City of Tualatin is updating its Development Code to comply with recent state rules related to walkable design. The division of Oregon Administrative Rules (OAR) 660-012 are the Transportation Planning Rules. OAR 660-12-0330 establishes land use requirements which are intended to improve walkability. The overall requirement of these rules is stated in section (1). [1]

> **660-012-0330(1)** *Cities and counties shall implement plans and land use regulations to support compact, pedestrian-friendly, mixed-use land use development patterns in urban areas. Land use development patterns must support access by people using pedestrian, bicycle, and public transportation networks.*

These requirements apply to all areas of a jurisdiction within the urban growth boundary – both within and outside of climate-friendly areas (CFAs). This includes all commercial and residential zone districts. However, cities are not required to update site design regulations in zones with a predominantly industrial or rural character.

As an initial step in this update, the MIG consultant team has developed the following Code Audit that identifies:

- The requirements of OAR 660-12-0330,
- Model Code and Other Approaches (concepts in **bold** are from DLCD's Climate-Friendly and Equitable Communities Walkable Design Standards Guidebook, Final Draft); those noted as "(BP)" are suggested best practices, and
- MIG's initial assessment of the City's current regulations (with recommendations noted in blue text) and potential Code Concepts to address any gaps in walkable design standards.

The Code Audit report includes the following sections:

[1] These requirements apply to regions with populations over 50,000 people (Tualatin, Bend, Corvallis, Eugene/Springfield, Grants Pass, Medford/Ashland, Portland Metro, and Salem/Keizer).

Acronyms and Zoning Districts

Acronym	Meaning
TDC	Tualatin Development Code
CFEC	Climate-Friendly and Equitable Communities
OAR	Oregon Administrative Rule

Zoning Districts

Residential Districts	Mixed-use Districts	Commercial Districts
○ RL – Low Density Residential ○ RML – Medium Low Density Residential ○ RMH – Medium High Density Residential ○ RH – High Density Residential ○ RH-HR – High Density High Rise	○ MUC – Mixed Use Commercial ○ Central Tualatin Overlay Zone	○ CO – Office Commercial ○ CN – Neighborhood Commercial ○ CR – Recreational Commercial ○ CC – Central Commercial ○ CG – General Commercial ○ CO/MR – Mid-Rise/Office Commercial

Part 1: Neighborhood Connectivity

APPLICABILITY: At a minimum these requirements apply to neighborhood-scale development (land divisions which include new streets) in all land use districts.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(3) Cities and counties shall have land use regulations that provide for pedestrian-friendly and connected neighborhoods. Land use regulations must meet the following requirements for neighborhood design and access:		
a) Neighborhoods shall be designed with connected networks of streets, paths, accessways, and other facilities to provide circulation within the neighborhood and pedestrian and bicycle system connectivity to adjacent districts. A connected street network is desirable for motor vehicle traffic but may be discontinuous where necessary to limit excessive through-travel, or to protect a safe environment for walking, using mobility devices, and bicycling in the neighborhood.	○ **Max. block length of 350' (up to 500' with midblock path).** ○ **Midblock path (accessway) design standards.** ○ **Prohibit cul-de-sac and dead-end streets (unless future street is planned).** ○ **Optional: Require rectilinear street grid system (with exceptions).** ○ **Require new internal streets to connect to all existing or planned stubbed streets that abut the site.** ○ **Require street connections identified in the TSP.** ○ See Part 5 for exception to street connectivity.	**Relevant Code Sections:** ○ TDC Chapter 74 provides public improvement requirements. ○ TDC 74.410 Future Street Connections: ▪ Requires streets to be extended to the proposed development site boundary and to provide access to adjoining land. ▪ Subsection (1)(d) requires street extension to "eliminate the use of culs-de-sac, except where topography, barriers such as railroads or freeways, existing development, or environmental constraints such as major streams and rivers prevent street extension." ▪ For new residential or mixed residential/commercial developments, subsection (2) provides block length limits of 530 feet between street connections, except where prevented by barriers. Bicycle and pedestrian accessways may be provided where full street connections are not possible, with spacing of no more than 330 feet, except where prevented by barriers. Other development types must provide streets in accordance with the Comprehensive Plan street plan maps. ▪ Subsection (2)(iii) limits cul-de-sacs and other closed-end street systems to situations where barriers prevent full street extensions. Cul-de-sacs are limited to 200 feet or 25 dwelling units, except for stubbed streets.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		▪ Subsection (3) requires streets in a subdivision to either provide for the continuation of existing streets into surrounding areas or to conform to an approved street plan that accounts for topography or other situations that make street continuation impractical. ○ TDC 74.420 Street Improvements requires construction of streets, sidewalks, and bikeways (where designated) in new development. Subsection (18) states that "proposed multi-family residential, commercial, or institutional uses that are adjacent to a major transit stop will be required to comply with the City's Mid-Block Crossing Policy." (However, this policy is not addressed elsewhere.) ○ TDC 74.450 requires bikeways and bike/ped pathway construction when identified the Transportation System Plan (TSP). ○ TDC 74.460(1-13) requires accessways to be constructed and dedicated to the city with final residential, commercial, and industrial subdivision plats. Accessways must connect to: ▪ Public use land including schools and parks. ▪ Arterial or Collector streets with transit stops or bike lanes. ▪ Adjoining undeveloped residential, commercial, or industrial property. ▪ Planned accessways. ○ Land division criteria in TDC Chapter 36 cross-reference the road and bike/ped connectivity standards in TDC Chapter 74. ○ The Public Works Construction Code (PWCC) contains requirements for street design standards, including intersections, cul-de-sacs, and stub streets. The PWCC also addresses design requirements for bicycle and pedestrian paths and accessways.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		Assessment and Recommendations: ○ TDC Chapter 74 contains many standards to require a connected network of streets, accessways, and other facilities to provide circulation within new development. ○ See section -0330(3)(c) for a specific assessment of block length standards. ○ TDC 74.420(18) refers to a "Mid-Block Crossing Policy," but there are no other references to this policy. If a mid-block crossing is required with development, that should be clarified. ○ Also, many of the standards in Chapter 74 are not clear and objective, using discretionary terms such as "where impractical." These standards should be made clear and objective, when applied to residential applications.[2]
b) Neighborhoods shall be designed with direct pedestrian access to key destinations identified in OAR 660-012-0360[3] via pedestrian facilities.	○ **Require access to abutting sites: residential developments, undeveloped property, transit stations, parks or schools, neighborhood activity centers.** ○ **Require on-site walkways to connect to walkways on abutting property.**	**Relevant Code Sections:** ○ The land division approval criteria in TDC 36.110 through 36.125 require partitions and subdivisions to provide for pedestrian, bicycle and transit circulation to adjacent and nearby residential areas, transit stops, neighborhood activity centers, office parks, and industrial parks. In the clear and objective criteria, "nearby" is defined as "within ¼ mile that can reasonably be expected to be used by pedestrians, and uses within two miles that can reasonably be expected to be used by bicyclists." ○ TDC 74.450(1) When a development abuts or contains a bikeway, pedestrian path, or multi-use path, the City may

[2] The City of Tualatin and MIG will be addressing clear and objective code amendments as part of a separate project, expected to begin in early 2025. However, any amendments that are proposed as part of the Walkable Design Standards project should be clear and objective if required for residential development.

[3] Key Destinations per OAR 660-012-0360 are locations expected to attract a higher than average rate of pedestrian, bicycle, and transit trips. These include but are not limited to climate-friendly areas, transit stations, child care facilities, schools, retail and service establishments, major employers, parks, and more.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		require a connecting path to be constructed and an easement or dedication be provided. ○ TDC 74.460 Accessways – See -0330(3)(a) above. **Assessment and Recommendations:** ○ The TDC standards ensure that land divisions provide pedestrian connections to some of the key destinations listed in OAR 660-012-0360. However, some of the listed destinations (climate-friendly areas, child care facilities, schools, retail and service establishments, and parks) are not addressed in the TDC. Some of these destinations may be included in "neighborhood activity centers," however, that term is not defined in the code. The standards should be updated to address all the destinations listed in -0360. **Code Concept:** ○ Update the criteria in TDC 36.110-.125 to require connections to all the destinations listed in -0360. Make sure all terms, including "neighborhood activity centers" are defined consistent with the OAR (see Part 6, below).
c) Cities and counties shall set block length and block perimeter standards at distances that will provide for pedestrian network connectivity. Cities and counties may allow alleys or public pedestrian facilities through a block to be used to meet a block length or perimeter standard.	○ **Max. block length of 350' (up to 500' with midblock path).** ○ Max. block perimeter standard. ○ **Optional: Require blocks to include alleys (code should include design standards for alleys).**	**Relevant Code Sections:** ○ TDC 74.410(2) provides block length limits for new residential or mixed residential/commercial developments of 530 feet between street connections, except where prevented by barriers. Bicycle and pedestrian accessways may be provided where full street connections are not possible, with spacing of no more than 330 feet, except where prevented by barriers. ○ Bike/ped accessways are subject to the design standards in TDC 74.460 and Public Works Construction Code Section 203.2.11C. They must be located and improved within a right-of-way or tract of no less than eight feet, and dedicated to the City, per the Public Works standards. ○ The TDC does not address alleys to break up block length.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		Assessment and Recommendation: ○ The TDC sets block length standards for residential/mixed-use subdivisions and other large developments, and allows accessways to provide bike/ped connectivity when street connections are not possible. However, block length maximums exceed those in the Model Code (530 ft vs. 350 ft). Also, the TDC does not provide standards for block perimeter, which appears to be inconsistent with the OAR. It is recommended to add a block perimeter standard and reduce block length maximums to further support pedestrian connectivity. The block length measurement should also be clearly defined (see Part 6: Definitions for recommendations). ○ It is also recommended to revise design standards for accessways to account for adequate width, lighting, and accessibility. ○ While the Model Code includes an optional requirement for alleys with new blocks, this is not required by the OAR. No changes recommended.

Code Concepts:

- Block length/perimeter: Vary the standards based on the zoning district and/or based on the street classification.

  Option 1 – Vary by zones, apply to all street and development types (except industrial).
  - Residential zones: Maximum length of 400 to 500 feet; maximum perimeter of 1,400 feet.
  - Mixed-Use zones: Maximum length of 350 feet; maximum perimeter of 1,200 feet.
  - Commercial zones: Maximum length of 600 feet; maximum perimeter of 1,600 feet.

  Option 2 – Vary by street type, apply to all zones and development types (except industrial).
  - Local streets: Maximum length of 400 feet.
  - Collector or arterial streets: Maximum length of 600 feet; maximum perimeter of 1,600 feet.
- Accessways:
  - Retain existing accessway option for connectivity and spacing standard of 330 feet.
  - Potential design standards (Model Code and Hillsboro CDC provide example standards):

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
• Minimum 15-foot total width. • 8-foot asphalt or concrete path with a maximum slope of 5 percent. • Landscape plantings between the path and edge of the accessway, subject to landscaping standards in TDC 73B. • Maximum length of 300 feet between streets. • Minimum and maximum lighting standards (e.g., 2-4 foot-candles). ▪ Consider allowing the accessway to be privately owned, but with a public access easement (currently must be dedicated to the City). ○ Redevelopment: Consider standards to require a midblock accessway or street with redevelopment, with consideration for proportionality. ▪ For redevelopment of a site over [2 acres] that does not meet the block length or connectivity standards in TDC 74.410, require construction of a street or midblock accessway, provided the City of Tualatin makes findings that the improvements have a clear nexus with, and are roughly proportional to, the development's impacts. ○ Private Alleys: ▪ Consider adding an option to include private alleys in a development to meet connectivity and access standards. ▪ Typical width: 20 foot roadway; 24 foot total width. ▪ 6 inch curbs on both sides. ▪ Must meet minimum fire access requirements. ▪ If alley is provided, vehicle access must be from the alley.		
d) Cities and counties shall set standards to reduce out-of-direction travel for people using the pedestrian or bicycle networks.	○ **Require relatively straight accessways.**	**Relevant Code Sections:** ○ TDC 74.410(1)(e) requires street extensions to "eliminate circuitous routes." ○ TDC 74.460(4) and (5) require accessways to be as short and straight as possible (but no more 600 feet), and constructed in accordance with Public Works Construction Code. **Assessment and Recommendation:** ○ The TDC provides standards for street connections and accessways in new subdivisions and developments that reduce out-of-direction travel. However, it is recommended to reduce the maximum length of accessways for safety and maintenance purposes. The standards in TDC 74.400 should also be updated to be clear and objective.

Part 2: Residential Neighborhoods

APPLICABILITY: In Tualatin these requirements would apply to new construction in the following Residential and Mixed-Use zones:

Residential Zones ○ RL – Low Density Residential ○ RML – Medium Low Density Residential ○ RMH – Medium High Density Residential ○ RH – High Density Residential ○ RH-HR – High Density High Rise	Mixed-use Residential Zones ○ MUC – Mixed Use Commercial ○ Central Tualatin Overlay Zone – Within this overlay, the base zones that allow housing are: ▪ CC – Central Commercial ▪ CO – Office Commercial ▪ RH ▪ RH-HR
The requirements would apply to these development types: ○ Detached single-dwelling ○ Middle housing ○ Multiple unit dwellings ○ Residential portions of mixed-use	

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(5) Cities and counties shall have land use regulations in residential neighborhoods that provide for slow neighborhood streets comfortable for families, efficient and sociable development patterns, and provide for connectivity within the neighborhood and to adjacent districts. Cities and counties must adopt land use regulations to meet these objectives, including but not limited to those related to:		
○ Setbacks	○ **Maximum setbacks (20' or less depending on the district).** ○ **Garage entrance (less than 5' or more than 18').** ○ **Require the garage entrance to be setback behind the front building frontage.**	**Relevant Code Sections:** ○ TDC Chapter 41 – 44 lists the residential zone development standards by zoning district. Minimum front setbacks are: ▪ RL: 15 feet (Can be reduced to 12 ft with an unenclosed porch) ▪ RML: • Single-family and middle housing: 10 feet

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		• Multi-family: 20-35 feet depending on height (20 ft setback for 1-story structure, up to 35 ft setback for 2.5-story structure). ▪ RMH: 20-35 feet depending on height (similar to RML). Townhomes have a 0-20 foot setback based on architectural review. ▪ RH: Same as RMH. RH-HR: 20-35 feet depending on height. For buildings greater than 2.5 stories, front setbacks are determined through architectural review. ○ In all residential zones, the minimum setback to garage doors is 20 feet. ○ Maximum setbacks are not required in residential zoning districts. ○ TDC Chapters 57 and 58 list the mixed-use development standards. Minimum front setbacks are: ▪ MUC: No minimum front setback. Maximum setback is 20 feet for residential uses. ▪ Central Tualatin Overlay: • CC: Same as base zone – 0-20 feet, determined through Architectural Review Process. No maximum setback. • CO: Same as base zone – 20 feet. No maximum setback. • RH: No minimum or maximum front setback. When mixed with commercial, setbacks are determined by architectural review. • RH-HR: Same as base zone (see above). **Assessment and Recommendations:** ○ The TDC requires relatively large minimum front setbacks throughout residential zones. Structures with taller building heights are subject to stricter setbacks. Townhomes and high-rise structures are subject to architectural review to determine setbacks. Consider reducing front setback requirements to further promote walkable design. Also consider whether maximum setbacks would be appropriate in certain higher-density residential zones. ○ Maximum setbacks in the MUC zone support pedestrian oriented development. No changes recommended.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation

		○ Consider reducing minimum setbacks in the Central Tualatin Overlay Zone and establishing maximum setback standards.
		
		Code Concepts:
		○ Maximum setbacks of 15-20 feet for residential development in higher density zones.
		○ Require a minimum percentage of the street frontage to be occupied by a building within the maximum setback.
		  ○ On sites with 100 feet or more of street frontage, at least 50 percent of the site width must be occupied by a building(s)
		  ○ On sites with less than 100 feet of frontage, at least 40 percent of the site width must be occupied by a building(s).
		  ○ Allow publicly-accessible plazas or other pedestrian amenity spaces to meet a portion (e.g., up to 20 percent) of the frontage requirements. The Model Code provides specific standard for improvements that could be incorporated.
		○ Reduce minimum setbacks to no more than 15 or 20 feet in most residential zones.

○ Lot size and coverage	○ Standards should not overly limit lot coverage and frontage.
	○ **Do not require a minimum lot size or maximum lot coverage, particularly in more urban areas or those with a high number of potential infill lots. (BP)**
		Relevant Code Sections:
		○ TDC Chapters 41 – 44 contains minimum lot size and coverage requirements in Residential districts.
		○ Minimum lot size standards:
		  ▪ Townhouses in all residential zones where permitted: 1,400 square feet.
		  ▪ RL: Generally 6,500 square feet. 6,000 square feet for multi-family (conditional use).
		  ▪ RML: 3,000 for single-family. 4,500 square feet for plexes and cottage clusters. 1,400 square feet for townhouses. 20,000 square feet for multi-family.
		  ▪ RMH: Multi-family and duplex require 10,000 square feet on less than one acre and 2,904 square feet per unit on more than one acre. 20,000 square feet for multi-family condominiums. 10,000 square feet for other uses.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		▪ RH: Multi-family and duplex require 10,000 square feet on less than one acre and 1,742 square feet per unit on more than one acre. 20,000 square feet for multi-family condominiums. 10,000 square feet for other uses. ▪ RH-HR: Multi-family requires 10,000 square feet, plus an additional 1,198 square feet for each unit exceeding two on lots less than one acre. On lots greater than one-acre, minimum lot size is 1,452 square feet per unit. 20,000 square feet for multi-family condominiums. o Maximum lot coverage standards: ▪ RL: 45% for single-family and duplex. 60% for triplex and quadplex. 75% for townhouse and cottage cluster. ▪ RML: 60% for duplex, triplex, and quadplex. 75% for townhouse and cottage cluster. 40% for all other permitted uses (including single-family). ▪ RMH: 90% for townhouses. 40% for all other permitted uses. ▪ RH: 90% for townhouses. 45% for all other permitted uses. ▪ RH-HR: 45% for all uses. o TDC 57.300 provides development standards for the MUC zone. No minimum lot size standards apply. Maximum lot coverage is 90%. **Assessment and Recommendation:** o Lot size: City staff notes that lot sizes are tied directly to maximum density standards. Staff also indicated that changes to lot sizes and density should not be considered with this project, as that would require a larger community conversation. No changes recommended. o Lot coverage: The restrictions in the higher-density zones could also be a barrier, especially for multi-family development in the RMH, RH, and RH-HR zones. Consider increasing maximum lot coverage in these zones. **Code Concepts:** o In higher-density zones, increase maximum lot coverage for multi-family housing to 60% or 70%.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
○ Building orientation	○ **Require main entrance to face the street (or within 45 degrees) or face a courtyard.** ○ **For multi-unit housing, require at least [25-50%] of ground-floor units to have a main entrance that meets the standards.** ○ **Entrance within 25' of transit street.**	**Relevant Code Sections:** ○ TDC 73A.030 provides clear and objective design standards for single-family and middle housing. The front face of a residential building is required to incorporate design elements to create visual and aesthetic interest. The standards do not address building or entry orientation. ○ TDC 73A.100 contains design standards for multi-family developments in all zones except the MUC zone and Central Design District. The standards address design of entry areas, but do not require orientation to the street. ○ TDC 73A.130(8)(b) provides standards for residential and mixed-use residential development in the MUC zone. All primary ground-floor entries must be oriented to the street. Primary structures must be oriented with their main entrance facing the street upon which the project fronts. **Assessment and Recommendation:** ○ The residential design standards (except in the MUC zone) do not meet the OAR requirements to provide building orientation standards that promote sociable development patterns. It is recommended to update the site design standards for single-family, middle housing, and multi-family housing to address building orientation, similar to the Model Code. ○ It is also recommended to require entries to be located close to transit streets, similar to the Model Code. **Code Concepts:** ○ Applicability. ▪ Require at least one main entry for each plex, townhouse, or multi-family building to meet the entry orientation standards. ▪ For multi-family developments with frontage on a local street, require at least [25%] of ground floor dwelling units with individual entries to have at least one main entrance that meets the standards.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		○ Entry orientation (from Model Code). All buildings within 40 feet of a street lot line must have at least one main entrance that meets one of the following standards: ▪ The entrance must be within 8 feet of the longest street-facing façade of the building and must either face the street; be at an angle of up to 45 degrees from the street; or open onto a covered porch that must be at least 25 square feet in area. ▪ The entrance must face a courtyard that abuts the street and must be no less than 15 feet in width. ○ Require multi-family buildings adjacent to designated transit streets to have at least one main entrance that is within [25] feet of transit street.
○ Access	○ **Ground floor entries.** ○ **Require connections from the main building entrance to the adjacent street.** ○ **Driveway separation on local streets.** ○ **Max driveway width.** ○ **Max garage width (50%; up to 75% if recessed).**	**Relevant Code Sections:** ○ TDC 73A.030(4) requires that walkways be provided for townhomes. ○ TDC 73A.070 (5) requires pedestrian paths for cottage clusters that connect the main entrance of each cottage to the public right-of-way. ○ TDC 73A.100(7) requires walkways for multi-family development that "provide pedestrian connections between the main building entrances and other on- site buildings, accessways, and sidewalks along the public right-of-way." ○ TDC 73A.100(8) requires accessways to be constructed in multi-family developments when adjacent to other residential or commercial property, schools, parks, and collector or arterial streets where transit stops or bike lanes are provided or designated. The accessways must connect the pedestrian and bike circulation systems. ○ TDC 73C.090 provides minimum and maximum driveway widths for residential uses. ▪ Min. for single-family and duplexes is 10 feet. Max. is 26 feet for 1 and 2 car garages, and 37 feet for 3+ car garages. ▪ Min. for multi-family is 16-32 feet, depending on the number of driveways and whether they are one-way or two-way. ○ TDC 73C.090 also requires pedestrian walkways along multi-family driveways. Must be 6-feet wide and curbed.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		○ TDC 75.040 describes driveway approach requirements. ▪ (7) requires sidewalks to be constructed on all street frontages prior to use or occupancy of the building. ▪ (10) requires a minimum separation of 40 feet between driveways on the same property. (Note: TDC 73C.090(6) provides a similar driveway separation standard of 40 feet.) ▪ (11) contains separation requirements between driveways and intersections based on street classifications for single-family and middle housing. **Assessment and Recommendations:** ○ The TDC contains some standards to promote pedestrian access and walkability for residential uses. However, gaps in the standards include: ▪ Walkways for single-family dwellings, duplexes, triplexes, and quadplexes that connect main entries to the street. ▪ Minimum and maximum driveway widths for middle housing other than duplexes. ○ It is recommended to address these gaps in the standards using standards adapted from the Model Code. **Code Concepts:** ○ For sites with frontage on an alley, driveway access is only permitted via the alley, if the alley is improved. ○ For sites with more than one frontage, access must be taken from the lower classification street. ○ Driveway Width. ▪ Reduce the maximum driveway width for all single-family and middle housing driveways to 24 feet, regardless of the garage size. • Clarify that maximum widths apply only to new development, not to modification of an existing driveway. ▪ Add a minimum driveway width standard for middle housing (to correct an inadvertent gap in the code).

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
Other standards supporting pedestrian-friendly / sociable development patterns	○ **No parking between building and street; limit percentage of parking/ circulation along street frontage (50%).** ○ **Require pedestrian amenities on transit streets / more urban areas.** ○ **Screening of surface parking areas.** ○ **Minimum transparency.** ○ **Transitions to residential entrances.**	**Relevant Code Sections:** ○ TDC 73A.030(1)(a) requires minimum window coverage of 12% for the front face of a single-family dwelling, duplex, triplex, quadplex, or townhouse. 73A.070(6) (cottage clusters) requires 20% window coverage for cottages within 20 feet of a street property line. ○ TDC 73A.030(1)(b) and (c) requires roof design and wall design elements to provide visual interest on the façade. ○ TDC 73A.100(3) requires entry areas for multi-family units to: ▪ Be separated from on-site parking areas and public streets with landscaping, change of grade, low fences, or walls; ▪ Be a minimum of 24 square feet in area for each dwelling unit. ○ TDC 73C.210(3) requires perimeter landscaping around all parking areas, including plantings that reach a mature height of 30 inches in 3 years which provide screening of vehicular headlights year round. **Assessment and Recommendations:** ○ The standards listed above support pedestrian-friendly / sociable development patterns consistent with -0330(5). In addition, the TDC provides additional standards that regulate frontage design and articulation to create a more pedestrian-friendly development pattern. The TDC complies with this rule. No changes are recommended.

Part 3: Site Design Standards for Commercial and Mixed-use Districts

APPLICABILITY: In Tualatin these requirements apply to the following Commercial and Mixed-use zoning districts:

Commercial Districts	Mixed-use Districts
○ CO – Office Commercial ○ CN – Neighborhood Commercial ○ CR – Recreational Commercial ○ CC – Central Commercial ○ CG – General Commercial	○ MUC – Mixed Use Commercial ○ Central Tualatin Overlay Zone

○ CO/MR – Mid-Rise/Office Commercial	
Development Types: All development types in Commercial and Mixed-Use Districts.	

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(4) Cities and counties shall have land use regulations in commercial and mixed-use districts that provide for a compact development pattern, easy ability to walk or use mobility devices, and allow direct access on the pedestrian, bicycle, and public transportation networks. Commercial or mixed-use site design land use regulations must meet the following requirements:		
a) Primary pedestrian entrances to buildings must be oriented to a public pedestrian facility and be accessible to people with mobility disabilities. An uninterrupted accessway, courtyard, plaza, or other pedestrian-oriented space must be provided between primary pedestrian entrances and the public pedestrian facility, except where the entrance opens directly to the pedestrian facility. All pedestrian entrances must be designed to be barrier-free.	○ **Maximum setback (0'-10' depending on district / use type).** ○ **Require main entrance to face the street (or within 45 degrees) or face a courtyard.** ○ **Entrance within 25' of transit street.** ○ **Require pedestrian connections to adjacent properties where there is an existing or planned walkway.** ○ Require all pedestrian entrances to be barrier free. ○ Incentivize accessible entrances and universal design amenities.	**Relevant Code Sections:** <u>Setbacks and frontage occupancy:</u> ○ Maximum setbacks are not required in any of the commercial zones. ○ The MUC zone (TDC 57.300) requires maximum setbacks as follows: ▪ Commercial uses: 10 feet ▪ Residential uses: 20 feet ○ MUC design standards in TDC 73A.130(7) require buildings to occupy a minimum of 50% of arterial and collector street frontages. Buildings must be located at public street intersections on arterials and collectors. ○ Utility easement standards are provided in TDC 74.330(5), which requires a 6-foot easement adjacent to streets for land divisions. Other developments are subject to the Public Works Construction Code standards. <u>Building Orientation:</u> ○ TDC 73A.130(8) provides standards for residential and mixed-use residential development in the MUC zone. All primary ground-floor entries must be oriented to the street. Primary structures must be oriented with their main entrance facing the street upon which the project fronts.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		○ Entry orientation is not required for nonresidential development, either in the MUC zone (73A.130) or in other zones (73A.110). <u>Pedestrian Access:</u> ○ TDC 73A.110 contains design requirements for nonresidential development except in the MUC zone. Walkways and accessways are required to connect the primary entrance with on-site accessways, plazas, and other pedestrian facilities. ○ TDC 73A.130(3) requires all new buildings in the MUC zone to provide walkways at least 6 feet wide that connect directly to the public ROW. **Assessment and Recommendations:** ○ The TDC mostly complies with -0330(4)(a) by providing standards to ensure primary pedestrian entrances are oriented to the street and connected to pedestrian facilities. However, gaps in the standards include: ▪ Maximum setbacks are not required in commercial zones (though this is not strictly required). Consider establishing max. setbacks in these zones. ▪ Entry orientation is not required for nonresidential development, either in the MUC zone (73A.130) or in other zones (73A.110). Add requirements for nonresidential development that require main entrances to be oriented to the street. **Code Concepts:** ○ Require maximum setbacks in commercial zones of 10-20 feet. ○ Similar to the recommended residential standards (Part 2), require a minimum percentage of the street frontage to be occupied by a building within the maximum setback.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		▪ On sites with 100 feet or more of street frontage, at least 50 percent of the site width must be occupied by a building(s) ▪ On sites with less than 100 feet of frontage, at least 40 percent of the site width must be occupied by a building(s). ▪ Allow publicly-accessible plazas or other pedestrian amenity spaces to meet a portion (e.g., up to 20 percent) of the frontage requirements. The Model Code provides specific standard for improvements that could be incorporated. ○ Amend the General Design Standards and MUC standards to require nonresidential development to have primary ground-floor entries oriented to the street. ▪ Consider a flexible standard that requires primary structures to have their main entrance placed close to the streets, with a direct pedestrian connection to the sidewalk. ▪ Require the entrance to be emphasized with architectural features to distinguish it as the main entrance. ▪ Provide exceptions for situations that make street orientation impractical, such as site dimensions, topographic constraints, etc.
b) Motor vehicle parking, circulation, access, and loading may be located on site beside or behind buildings. Motor vehicle parking, circulation, access, and loading must not be located on site between buildings and public pedestrian facilities on or along the primary facing street.	○ **Prohibit vehicle parking areas between the front façade and the public street.** ○ **Limit percentage of parking/ circulation along street frontage (50%).**	**Relevant Code Sections:** ○ TDC 73A.130(4) requires parking areas in the MUC zone to be to the side or rear of a new development, limited to 50% of the street frontage, and setback a minimum of 50 feet from the front property line. **Assessment and Recommendations:** ○ The TDC limits parking location in the MUC zone in compliance with this rule. However, in other commercial

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
Bicycle parking may be permitted.		zones, parking location is not limited. The TDC should be amended to comply with -0330(4)(b). **Code Concepts:** ○ In commercial zones, limit vehicle parking similar to the MUC zone, or the Model Code. ○ MUC standards: ▪ Parking and loading areas are prohibited between the public street and proposed building(s); ▪ Parking is allowed on the side or rear of proposed building(s). If located on the side, the parking area may not exceed 50 percent of the total frontage of the site; and ▪ Parking must be setback a minimum of 50 feet from the front property line. ▪ Provide exceptions for situations that make locating parking to the side/rear impractical, such as site dimensions, topographic constraints, etc. ○ Model Code: ▪ Vehicle parking and circulation areas within [20 feet] of the street lot line must be limited to no more than 50 percent of the length of the street lot line. ▪ Any areas within [20 feet] of the street lot line that are not occupied by a building or vehicle area must be landscaped or hardscaped for pedestrian use. ▪ No area between the portion of a building that meets the maximum setback standard and the street lot line can be used for vehicle parking or circulation.
c) On-site accessways must be provided to directly connect key pedestrian entrances to public pedestrian facilities, to any on-site parking, and to adjacent properties, as applicable.	○ **Require all primary buildings within 40' feet of a street to have a walkway connecting one main entrance to the street. Connections cannot**	**Relevant Code Sections:** ○ TDC 73A.100(7-8) See -0330(3)(d) above regarding multi-family walkways and accessways. ○ TDC 73A.110(1) provides walkway standards for nonresidential development except in the MUC zone. Walkways are required to connect main building entrances

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
	exceed 120% of straight-line distance. ○ **Require on-site walkways to connect to walkways on abutting property.**	with other on-site buildings, accessways, and sidewalks along the public right-of-way. ○ TDC 73A.130(3) provides walkway standards for all development in the MUC zone. "Walkways must be continuous and connect all building entrances within the development to one another and to: all public streets or private access abutting the site: all parking areas, storage areas, recreational facilities and common areas associated with the development; and adjacent development, transit stops, and public greenways and parks; and walkways must provide connection to an abutting street every 200 linear feet of frontage." **Assessment and Recommendations:** ○ The TDC complies with -0330(4)(c) by providing design standards that promote pedestrian connectivity by requiring accessways and walkways connecting to key areas on the site, public pedestrian facilities, and adjacent properties. No changes recommended.
d) Any pedestrian entrances facing an on-site parking lot must be secondary to primary pedestrian entrances as required in this section. Primary pedestrian entrances for uses open to the public must be open during business hours.	○ **At least one main entrance must meet the standards.** ○ **Primary entrance unlocked during business hours.**	**Relevant Code Sections:** ○ See Building Orientation summary in -0330(4)(a), above. **Assessment and Recommendation:** ○ The MUC zone (73A.130) requires the main entrance of residential and mixed-use developments to face the street. Secondary entrances are not addressed directly, but the effect of the standards is that secondary entrances would be allowed to face the parking lot. No changes recommended. ○ Entry orientation is not required for nonresidential development, either in the MUC zone (73A.130) or in other zones (73A.110). See recommendation in -0330(4)(a), above.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		○ No standards in the TDC require the primary pedestrian entrance to be open during business hours. This does not comply with the OAR. Amend the MUC and non-MUC standards for nonresidential development to require primary pedestrian entrances to remain open during business hours. Note, however, that these types of operational requirements can be very challenging to enforce through zoning. **Code Concepts:** ○ For nonresidential or mixed-use buildings. At least one main entrance must meet the standards. For buildings with multiple tenant spaces or multiple entrances, only one entrance must meet the standard. ○ (If appropriate:) Unlocked during business hours. Each main entrance to a nonresidential and mixed-use building that meets the standard must be unlocked during regular business hours.
e) Large sites must be designed with a connected network of public pedestrian facilities to meet the requirements of this section.	○ **Require walkway network to connect all main entrances >20' from the street, and provide connections to parking areas, bicycle parking, recreational areas, common outdoor areas, and pedestrian amenities.** ○ **Require walkways through large parking lots (>21,780 SF). Require connections to the street every 250-300'.** ○ **Walkway material and width standards. Require differentiation for walkways**	**Relevant Code Sections:** ○ TDC 73A.100(7-8) See -0330(3)(d) above regarding multi-family walkways and accessways. ○ TDC 73A.110(1) See -0330(4)(c) above for walkway and accessway standards for nonresidential development except for the MUC zone. Also, walkways through parking areas must be visibly raised and of a different appearance than the adjacent paved vehicular areas. ○ TDC 73A.130(3) See -0330(4)(c) above for walkway standards for all development in the MUC zone. **Assessment and Recommendation:** ○ The TDC contains several standards to require an internal pedestrian network in commercial and mixed-use zones that connects the buildings to adjacent uses and destinations.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
	crossing or parallel to vehicle areas. ○ **Optional lighting and sustainability standards for walkways.**	○ Standards for walkway and accessway design and construction are provided to ensure convenient and barrier-free design. ○ No changes recommended for compliance with this rule.
f) Development on sites adjacent to a transit stop or station on a priority transit corridor must be oriented to the transit stop or station. The site design must provide a high level of pedestrian connectivity and amenities adjacent to the stop or station. If there is inadequate space in the existing right of way for transit infrastructure, then the infrastructure must be accommodated on site.	○ **Orient at least one main entrance within 25 feet of the highest transit classification street.** ○ **Require pedestrian amenity spaces where max building setback not met.** ○ **Require additional transit facilities where evidence of projected transit ridership or other transit impacts is presented.**	**Relevant Code Sections:** ○ TDC 73A.100(8) requires multi-family accessways to connect to transit stops on collector or arterial streets. ○ TDC 73A.110(6) (nonresidential development outside of MUC) and 73A.130(6) (all development in MUC) provide standards for development adjacent to transit. Development on a designated transit street must "provide either a transit stop pad on-site, or an on-site or public sidewalk connection to a transit stop along the subject property's frontage on the transit street." Development abutting a major transit stop must locate buildings within 20 feet of a stop or provide a pedestrian plaza, provide pedestrian connections to the transit stop, and provide transit amenities. **Assessment and Recommendations:** ○ The TDC contains standards that require new commercial, mixed-use, and multi-family developments to provide pedestrian connectivity to transit stops. ○ In the MUC zone and for nonresidential development, new buildings are required to provide improvements for transit stops that abut a site. ○ No changes recommended for compliance with this rule.
g) Development standards must be consistent with bicycle parking requirements in OAR 660-012-0630.[4]	○ Apply in all zones. While OAR 660-012-0330 requires bicycle parking in Commercial and Mixed-use districts, OAR 660-	**Relevant Code Sections** ○ TDC 73C.040 contains bicycle parking quantity requirements based on land use.

[4] 660-012-0630 Bicycle Parking

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
	012-0630 requires it for a range of uses in all zones.	○ TDC 73C.050 Contains bicycle parking design requirements for long-term and short-term parking and their relation to the building and street. **Assessment and Recommendation:** ○ The TDC applies bicycle parking to all commercial and mixed-use districts and appear to be consistent with OAR 660-012-0630. No changes recommended for compliance with this rule.
h) These site design land use regulations need not apply to districts with a predominantly industrial or agricultural character.	○ Do not apply these standards to industrial or agricultural land.	○ The TDC does not apply these standards to industrial or agricultural land and complies with this requirement.
Other standards supporting pedestrian-friendly / sociable development patterns	**Ground floor of nonresidential and mixed-use buildings:** ○ **Min transparency (50-75%).** ○ **Weather protection along 50-75% of façade within 5' of ROW.** ○ **Driveway separation on local streets.**	**Relevant Code Sections:** ○ TDC 73A.130(8) contains requirements for building design in the MUC zone that support pedestrian-friendly design elements including: ▪ Ground-floor windows ▪ Building façade standards ▪ Weather-protection (awnings, canopies and arcades).

(1) Cities and counties shall require and plan for adequate parking to meet the increasing need for travel by bicycle and other small-scale mobility devices.
(2) Cities and counties shall require bicycle parking for the following uses: (a) All new multi-unit development or mixed-use development of five residential units or more as provided in section (3); (b) All new retail development; (c) All new office and institutional developments; (d) All major transit stops, and any park-and-ride lots that require land use approval; and (e) Any land use where off-street motor vehicle parking is mandated.
(3) Cities and counties shall require a minimum of one-half of a covered bicycle parking space per unit for multi-unit and mixed-use residential uses. Cities and counties may: (a) Allow for reductions or exemptions to the minimum parking requirement based on development-specific considerations; and (b) Exempt or reduce the minimum parking requirement for certain types of residential uses that are likely to have less future demand for bicycle parking.
(4) Cities and counties shall adopt development regulations requiring all required bicycle parking provided must: (a) Either allow ways to lock at least two points on a bicycle, or be within a lockable space only available to authorized users; (b) Be installed in a manner to allow space for the bicycle to be maneuvered to a position where it may be secured without conflicts from stairs, other parked bicycles, walls, or other obstructions; (c) Be in a location that is convenient and well-lit; and (d) Include bicycle parking spaces to accommodate large bicycles, including family and cargo bicycles.
(5) Cities and counties shall provide for public bicycle parking and allow and provide for parking and ancillary facilities for shared bicycles or other small-scale mobility devices in climate-friendly areas, Metro Region 2040 centers, and near key destinations identified as provided in OAR 660-012-0360.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
	○ **Max driveway width and max garage width.** ○ **Screening of surface parking areas.**	○ TDC 73C.969 Allows any portion of existing off-street parking areas to be redeveloped as bicycle-oriented or transit-oriented facility. **Assessment and Recommendations:** ○ While not required by -0330(4), the TDC standards listed above further promote pedestrian oriented design in commercial and mixed-use districts. No changes recommended for compliance with this rule.

Part 4: Auto Oriented Land Uses

APPLICABILITY: These standards apply in all land use districts, although these uses are primarily found in commercial districts.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(6) Cities and counties shall have land use regulations that ensure auto-oriented land uses are compatible with a community where it is easy to walk or use a mobility device. Auto-oriented land uses include uses related to the operation, sale, maintenance, or fueling of motor vehicles, and uses where the use of a motor vehicle is accessory to the primary use, including drive-through uses. Land use regulations must meet the following requirements:		
a) Auto-oriented land uses must provide safe and convenient access opportunities for people walking, using a mobility device, or riding a bicycle. Ease of access to goods and services must be equivalent to or better than access for people driving a motor vehicle.	○ **Require drive-through facilities to provide one walk-up service area or window.** ○ **Prohibit service areas and stacking lanes between the building and a street lot line. (Note: Vehicle Service Uses are exempt, as stated in the Guidebook)**	**Relevant Code Sections:** ○ TDC 73A.110(3) (outside MUC) sets standards for "drive-up" uses, which includes drive-through uses except fueling stations. Standards address minimum stacking lane length, preclude interference with access to parking areas, and require a minimum distance of 50 feet from residential zones. The width and turning radius of drive-up aisles must be approved by the City. ○ TDC 73A.130(5) provides the same standards for drive-up uses within the MUC zone. ○ TDC 57.210(4) Automotive Service Stations in the MUC zoning district require conditional use permits and are subject to

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
	○ **Stacking lanes designed so that they do not prevent access to parking stalls.** ○ **Require driveway entrances and stacking lane entrances to be at least 50 feet from any street intersection.**	additional development standards including frontage, setbacks, and access standards. **Assessment and Recommendations:** ○ The TDC contains standards to regulate the size and design of drive-through facilities where they are allowed. ○ Drive-through uses are not required to provide equivalent or better access for people not driving a motor vehicle. However, a new drive-through use would be required to meet the General Design Standards (TDC 73A.110) which contains pedestrian connection requirements. ○ The TDC should be updated to improve pedestrian access to drive-up uses. This should include standards similar to the Model Code, addressing walk-up service and location of service areas and stacking lanes. It could also include spacing of drive-through entrances from street intersections. **Code Concepts:** ○ Require walk-up service windows where drive-up service windows are proposed and provide standards for walk-up windows. ○ Require pathways that cross drive-up lanes to be raised, marked, or otherwise differentiated from the drive-up stacking area. ○ Require driveway entrances, including stacking lane entrances, to be at least 50 feet from any street intersection.
b) Outside of climate-friendly areas, cities and counties may provide for exemptions to this rule in cases where an auto-oriented land use cannot reasonably meet the standards of this rule.	○ Provide exemptions outside of CFAs, provided pedestrian facilities are protected.	**Relevant Code Sections:** ○ N/A **Assessment and Recommendations:** ○ The TDC does not contain exemptions for drive-up uses. ○ If the suggested code concepts above are implemented, consider exempting drive-up facilities in non-pedestrian oriented zones.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
Standards developed in cases of an exemption must protect pedestrian facilities.		
Other Standards.	○ **Prohibit drive-through facilities in downtown and main street districts.**	**Relevant Code Sections:** ○ Drive-up uses are not permitted in the MC or BCE zones. ○ TDC 58.200, Table 58-1: Within the Central Design District, drive-up restaurants and photo service uses are prohibited; bank drive-up uses and other drive-up uses are permitted only as a conditional use. **Assessment and Recommendations:** ○ The rule does not require cities to prohibit drive-through uses. However, the City could consider further restricting drive-up uses within the MUC zone, Central Tualatin Overlay Zone, or specifically within the Central Design District.

Part 5: Applicability and Exemptions

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(2) Cities and counties may allow exemptions to provisions in this rule when conditions on a site or class of sites would make those provisions prohibitively costly or impossible to implement. Cities or counties may adopt land use regulations that provide for exemptions as provided in this section. Any allowed exemption shall advance the purposes of this rule to the extent practical. Conditions that may provide for an exemption include, but are not limited to:		
a) Topography or natural features; b) Railroads, highways, or other permanent barriers;	○ **Allow exemptions if physical conditions or existing structures make compliance with the standard impractical. Conditions on a site include but are not limited to the conditions listed in OAR 660-012-0330(a-g).**	**Relevant Code Sections:** ○ TDC 73A.120(2) allows exceptions to the MUC Design Standards "if the physical characteristics of the site or existing structure (e.g., steep slopes, wetlands, other bodies of water, trees or other significant natural features of the site, buildings or other existing development, utility lines and easements, etc.) make compliance with the standard impractical."

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
c) Lot or parcel size, orientation, or shape; d) Available access; e) Existing or nonconforming development; f) To provide for accessibility for people with disabilities; or g) Other site constraints.		○ TDC 74.410(1)(d) precludes cul-de-sacs "except where topography, barriers such as railroads or freeways, existing development, or environmental constraints such as major streams and rivers prevent street extension." ○ TDC 74.410(2)(a) allows exceptions to block length standards "where prevented by barriers." Per TDC 31.060, "barriers" is defined as follows: *Barriers. Physical or topographic conditions that make a street or accessway connection impracticable. Such conditions include but are not limited to freeways; railroads; steep slopes; wetlands or other bodies of water where a connection could not reasonably be provided; where buildings or other existing development on adjacent lands physically preclude a connection now or in the future considering the potential for redevelopment; and where streets or accessways would violate provisions of leases, easements, covenants, restrictions or other agreements existing as of May 1, 1995 which preclude a required street or accessway connection, or the requirements of Titles 3 and 13 of the Metro Urban Growth Management Functional Plan (UGMFP).* **Assessment and Recommendations:** ○ The rule allows, but does not require, cities to provide exemptions to the standards. The list of conditions in -0330(2) that could provide for an exemption "are not limited" to those listed in (a) through (g). ○ The exceptions to MUC design standards, cul-de-sac limits, and block length limits are generally consistent with the exceptions allowed by the rule. ○ No changes are recommended.

Part 6: Definitions

Definitions for OAR 660-012 are in 660-012-0005 and by reference in ORS 197.015, 197.303, and 197.627. Those noted in the table below are of particular relevance to the requirements of OAR 660-012-0330.

Except as noted, the TDC definitions listed in the assessment/recommendation column are from TDC 31.060 Definitions.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
660-012-0005 Definitions. For the purposes of this division, the definitions contained in ORS 197.015, 197.303, and 197.627 shall apply unless the context requires otherwise. In addition, the following definitions apply:		
(3) "Accessible" means complying with the applicable standards of ORS 447.210 through 447.280, and where applicable, with ORS 447.310.	[not used in model code]	**TDC Definition:** ○ N/A **Assessment and Recommendations:** ○ Consider adding a definition for "Accessible" in the development code. **Code Concept:** ○ Accessible. Complying with the Americans with Disabilities Act.
(4) "Accessway" means a walkway that provides pedestrian and or bicycle passage either between streets or from a street to a building or other destination such as a school, park, or transit stop. Accessways generally include a walkway and additional land on either side of the walkway, often in the form of an easement or right-of-way, to provide clearance and separation between the walkway and adjacent uses. Accessways through parking lots are generally physically separated from adjacent vehicle parking or parallel vehicle traffic by curbs or similar devices and include	○ **Accessway. Any off-street path or walkway designed and constructed for use by pedestrians and/or bicyclists where such routes are not otherwise provided by the street system.**	**TDC Definition:** ○ *Accessway. A non-vehicular, paved pathway designed for pedestrian and bicycle use and providing convenient linkages between a development and adjacent residential and commercial properties and areas intended for public use, which includes, but is not limited to, schools, parks, and adjacent collector and arterial streets where transit stops or bike lanes are provided or designated. An accessway is not a sidewalk.* **Assessment and Recommendations:** ○ No changes are recommended for compliance with this rule.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
landscaping, trees, and lighting. Where accessways cross driveways, they are generally raised, paved, or marked in a manner that provides convenient access for pedestrians.		
(8) "At or near a major transit stop": [5] "At" means a parcel or ownership that is adjacent to or includes a major transit stop generally including portions of such parcels or ownerships that are within 200 feet of a transit stop. "Near" generally means a parcel or ownership that is within 300 feet of a major transit stop. The term "generally" is intended to allow local governments through their plans and ordinances to adopt more specific definitions of these terms considering local needs and circumstances consistent with the overall objective and requirement to provide convenient pedestrian access to transit.	[not used in Model Code]	**TDC Definition:** ○ *Transit Stop. A location where regularly scheduled transit service stops (includes but is not limited to bus stop) to load and unload passengers. For the purpose of measuring, the transit stop is the location of a sign denoting the transit stop. See also Transit Stop, Major.* ○ *Major Transit Stop. Existing and planned light rail stations, commuter rail stations and transit transfer stations, except for temporary facilities; other planned stops designated as major transit stops in TDC Chapter 11 (Figure 11-5); and existing stops which have or are planned for frequently scheduled fixed-route service.* **Assessment and Recommendations:** ○ TDC 73A.110(6) and 73A.130(6) apply standards for development "abutting major transit stops." This should be updated to apply "near" a major transit stop, as defined in OAR 660-012-0005(8).
(34) "Pedestrian facility" means a continuous, unobstructed, reasonably direct route between two points that is intended and suitable for pedestrian use. Pedestrian facilities include but are not limited to sidewalks, walkways, accessways, stairways and pedestrian bridges. On developed parcels,	[not used in Model Code]	**TDC Definition:** ○ *Pedestrian Facilities. On and off-street improvements and facilities such as sidewalks, walkways, pedestrian paths, trails, outdoor recreation access routes, accessways, and other amenities designed to accommodate pedestrians.*

[5] Note: OAR 660-012-0330(4)(f) uses the phrase "sites adjacent to a transit stop or station," rather than "at or near a major transit stop."

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
pedestrian facilities are generally hard surfaced. In parks and natural areas, pedestrian facilities may be soft-surfaced pathways. On undeveloped parcels and parcels intended for redevelopment, pedestrian facilities may also include rights of way or easements for future pedestrian improvements.		**Assessment and Recommendations:** ○ No changes are recommended for compliance with this rule.
(65) "Walkway" means a hard surfaced area intended and suitable for use by pedestrians, including sidewalks and surfaced portions of accessways.	○ **Pedestrian Connection. A route between two points intended and suitable for pedestrian use. Pedestrian connections include, but are not limited to, accessways, sidewalks, walkways, stairways and pedestrian bridges.** ○ **Walkway. A transportation facility built for use by pedestrians, usually located outside a street right-of-way or tract.**	**TDC Definition:** ○ *Walkway. A pedestrian facility which provides a paved surface for pedestrian circulation within a development. A walkway may be shared with bicycles and may cross vehicle areas.* **Assessment and Recommendations:** ○ No changes are recommended for compliance with this rule.
Other	○ **Alley. A right-of-way through or partially through a block, intended for secondary vehicular access and shared use by bicyclists and pedestrians, located to the rear or side of properties. However, where vehicle access from the street is not permitted or not possible, an alley may provide primary vehicle access.** ○ **Block Length. The distance along a public or private street between intersecting public or private streets, as measured from nearest right of way edge to nearest right of way edge along the primary street's right of way edge, including "T"**	**TDC Definitions:** ○ *Alley. A narrow street through a block, primarily for vehicular service access to the back or side of properties otherwise abutting on another street.* ○ *Bikeway. Any street, road, path or way open to bicycle travel regardless of whether such facilities are designated for the preferential use of bicycles or are to be shared with other transportation modes.* ○ *Drive-Through Facility. A facility or structure that is designed and intended to allow drivers to remain in their vehicles before and during participation in an activity on the site.* ○ *Multi-Use Path (Trail). A path (trail) accommodating multi-modal active transportation. They serve as routes for recreational, commuter and destination-oriented trips.*

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
	intersections but excluding cul-de-sacs. ○ **Drive-Through Facility. A facility or structure that is designed to allow drivers to remain in their vehicles before and during an activity on the site. ...** ○ **Main Entrance. A main entrance is the entrance to a building that is designed to facilitate ingress and egress for the highest volume of building users. Generally, each building has one main entrance, but if design features do not make it possible to determine which entrance is the main entrance, all entrances providing the same capacity of ingress and egress shall be treated as main entrances.** ○ **Stacking Lane. The space occupied by vehicles queueing on the development site and behind any public sidewalk for a service to be provided at a drive-through facility.**	**Assessment and Recommendations:** ○ Consider adding definitions for "main entrance" and "stacking lane," similar to the Model Code. ○ Add a definition for "block length" similar to the Model Code that clearly defines how this dimension is measured.

Part 7: Transportation Facilities

Note: The Model Code does not provide implementation concepts for these requirements.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(8) Cities and counties must implement land use regulations to protect transportation facilities, corridors, and sites for their identified functions. These regulations must include, but are not limited to:		
(a) Access control actions consistent with the function of the transportation facility, including but not limited to driveway spacing, median control, and signal spacing;	○ Driveway spacing, median control, and signal spacing standards tied to functional classifications. (These may be in the Engineering Design Standards rather than development code).	**Relevant Code Sections:** ○ TDC Chapter 75 contains access management requirements for new driveway and street connections. These include spacing requirements, provisions for sidewalks, and vision clearance areas. ○ TDC 73C.090 provides minimum requirements for parking lot driveways and walkways for residential uses such as single-family, duplex, and multi-family developments. Parking lot driveways and walkways for other residential uses are detailed under TDC Chapter 73A (Site Design Standards). **Assessment and Recommendations:** ○ The TDC complies with this rule by regulating driveway spacing based on classification of the street, size, and location of the site. No changes recommended.
(b) Standards to protect future construction and operation of streets, transitways, paths, and other transportation facilities;	○ Require consistency with the TSP.	**Relevant Code Sections:** ○ The TDC refers to the TSP in different sections as the Transportation System Plan, Transportation Plan, and TDC Chapter 11. ○ TDC 36.110 through 36.125 requires the street system for tentative partition and subdivision plans to be consistent with the TSP. ○ TDC 74.420(11) Street Improvements: streets abutting a development site must be improved in accordance with TDC Chapter 11. ○ TDC 74.450 indicates that the City may require that a bikeway, pedestrian path, or multi-use path be

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		constructed when a site abuts or contains a planned alignment in TDC Chapter 11. ○ Transit facilities are required when abutting transit streets and stops, as shown in Comprehensive Plan Map 8-5 (Tualatin's Transit Plan). **Assessment and Recommendations:** ○ Consistency with the TSP for streets, transitways, and paths is required with development. No changes recommended.
(c) Standards to protect public use airports as provided in OAR 660-013-0080;	○ Airport overlay district standards.	**Relevant Code Sections:** ○ N/A **Assessment and Recommendations:** ○ N/A
(d) Processes to make a coordinated review of future land use decisions affecting transportation facilities, corridors, or sites;	○ Require Public Works / Engineering approval of plans. ○ Require a TIA if substantial impact to transportation facilities is expected.	**Relevant Code Sections:** ○ TDC 33.020(6) allows for Architectural Review that conditions of approval be applied to ensure adequate public facilities. ○ TDC 33.040(5) requirements for Conditional Use Permit review adequacy of transportation systems. ○ TDC 36.110 through 36.125 requires the street system for tentative partition and subdivision plans to be consistent with the TSP and TDC Chapters 74 (Public Improvement Requirements) and 75 (Access Management). ○ TDC 74.420(13): *The applicant must comply with the requirements of the Oregon Department of Transportation (ODOT), Tri-Met, Washington County and Clackamas County when a proposed development site is adjacent to a roadway under any of their jurisdictions, in addition to the requirements of this chapter.* ○ TDC 74.440(1) states that the City Manager may require a traffic study when necessary to assure that

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
		transportation facilities can accommodate expected traffic and/or assure that internal traffic circulation of the proposed development will not result in conflicts with on-site traffic, parking, or loading or impact traffic on adjacent streets. **Assessment and Recommendations:** ○ The TDC includes various requirements to account for the coordinated review of land use decisions affecting transportation facilities. No changes recommended.
(e) Processes to apply conditions to development proposals in order to minimize impacts and protect transportation facilities, corridors, or sites for all transportation modes;	○ Establish regulations for conditions of approval based on impacts to transportation facilities.	**Relevant Code Sections:** ○ TDC Chapters 32 (Procedures) and 33 (Applications and Approval Criteria) allow the City to establish conditions of approval in development applications. **Assessment and Recommendations:** ○ The TDC allows the City to require conditions of approval to a land use decision (although transportation facilities are not specifically mentioned). No changes recommended.
(f) Regulations to provide notice to public agencies providing transportation facilities and services, railroads, Metropolitan Planning Organizations, the Oregon Department of Transportation, and the Oregon Department of Aviation of: (A) Land use applications that require public hearings; (B) Subdivision and partition applications; (C) Other applications that affect private access to roads; and	○ Require notice to relevant transportation agencies for the applications listed in OAR 660-012-0330(f)(A-D).	**Relevant Code Sections:** ○ TDC 32.220 states that where a project either adjoins or directly affects a state highway, then ODOT shall be notified; where the project site would access a County Road or otherwise be subject to review by the County, then the County. ○ TDC 32.230 for Type III procedures and TDC 32.240 for Type IV procedures – same as above. **Assessment and Recommendations:** ○ The TDC requires the City to contact ODOT or other relevant agencies when a state transportation facility is affected. No changes recommended.

0330 Land Use Requirement	Model Code and Other Approaches	Assessment/Recommendation
(D) Other applications within airport noise corridors and imaginary surfaces that affect airport operations.		
(g) Regulations ensuring that amendments to land use designations, densities, and design standards are consistent with the functions, capacities, and performance standards of facilities identified in the TSP.	○ Require amendments to the Zoning Code, Zoning Map, or Comprehensive Plan to be consistent with the TSP.	**Relevant Code Sections:** ○ TDC 33.070(5) lists the approval criteria for amendments to the TDC and comprehensive plan text or maps. ○ Amendments must be consistent with the comprehensive plan, applicable State of Oregon Planning Goals and applicable Oregon Administrative Rules, including compliance with the Transportation Planning Rule TPR (OAR 660-012-0060). **Assessment and Recommendations:** ○ Development code and map amendments are required to be consistent with the comprehensive plan, which includes the TSP. ○ No changes are required for compliance with this rule.