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MEMORANDUM (DRAFT)

DATE: October 9, 2019
TO: Steve Koper, City of Tualatin
FROM: Garth Appanaitis, PE
SUBJECT: Bridgeport Village Transportation Planning Rule Analysis

The purpose of this memorandum is to address Oregon Administrative Rule (OAR) 660-012-0060, Transportation Planning Rule (TPR), requirements for a planned text amendment that includes five parcels in Tualatin, Oregon. The planned text amendment would include the parcels (8.18 total acres) in the Mixed Use Commercial Overlay District (MUCOD) and would allow for an increased building height up to 100 feet for residential or commercial lodging uses.

TPR OVERVIEW

The TPR provides a means for ensuring that future land use and traffic growth is consistent with transportation system planning. The TPR requires that a change of allowable land uses do not create a significant impact on the transportation system beyond currently allowed (planned) uses. The TPR can be addressed through a variety of means, but typically compares the change in trip potential (simply trip generation or traffic impacts) between the allowed use (existing zoning) and proposed use (proposed zoning). In many cases the reasonable worst-case use (for either the existing or propose zoning) will not reflect the actual existing use for a site or the specific use that may ultimately be developed on a site. Rather, the reasonable worst case considers the allowed trip potential for either zoning condition and is rarely development specific (e.g., no site plan, nor intent to use the site for that purpose). In some cases, a “trip cap” or limit to the maximum trips generated by a site will be imposed with a change in zoning in order to limit the future trip potential while still allowing for the intended development.

SITE TRAFFIC POTENTIAL

The subject parcels¹ are in the southeast quadrant of SW Bridgeport Road/ SW Upper Boones Ferry Road in the Bridgeport Village area, shown in Figure 1. The area is the location of a former gravel quarry pit that was backfilled until around 2002². The site is currently zoned as General Commercial (CG) which allows for a maximum structure height of 45 feet (generally up to 4 stories)³.

For purposes of the TPR analysis, the existing uses on the site are ignored and redevelopment options reasonably allowed within zoning designations are considered. The amount of square footage evaluated is dependent on the uses assumed throughout trip generation calculations, the floor to area ratio (FAR) applicable to each use, and the number of stories assumed for the subject area in question.

¹ <https://www.tualatinoregon.gov/planning/zoning-map-interactive-viewer>

² <https://www.deq.state.or.us/lq/ECSI/ecsidetail.asp?segnbr=3791>

³ <https://www.tualatinoregon.gov/developmentcode/tdc-chapter-54-general-commercial-zone-cg>

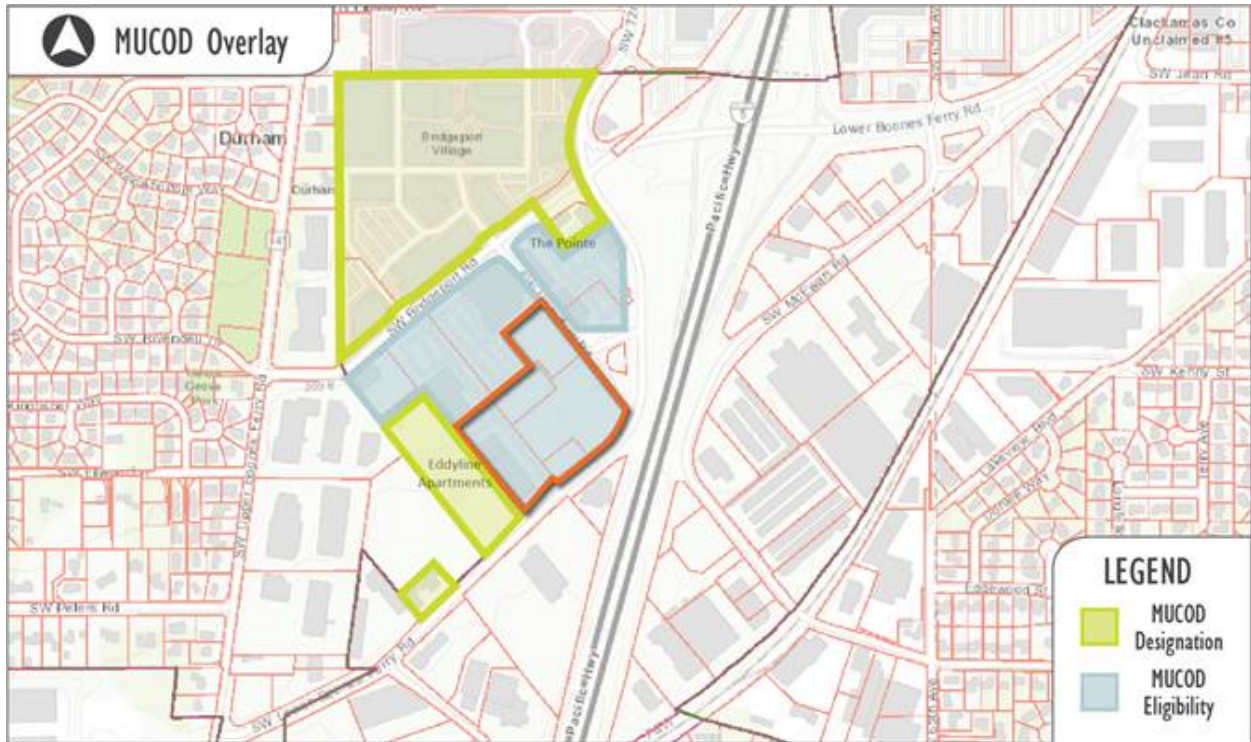


Figure 1: MUCOD Designation and Parcel Locations

Existing Zoning (CG) Traffic Potential

The existing CG zoning allows several uses, including commercial, industrial, institutional, and infrastructure and utilities use³. The designation’s stated purpose in the Development Code is to “...provide areas in the City that are suitable for the widest range of commercial uses and retail businesses. This district is particularly suitable for automobile-related businesses and businesses needing direct freeway access...” Within the Tualatin development code, there is a condition that all retail sales and services are subject to TDC 54.210(1) which states that if located on land designated employment area, corridor, or industrial on Map 9-4, uses in the following categories must not be greater 60,000 square feet of gross floor area per building⁴. As shown in Figure 2, the parcels are located within Employment Area design type and therefore subject to the 60 ksf maximum for retail uses for each use/building. Therefore, a gross floor area of 178 ksf is assumed, which would account for approximately three retail structures (up to 60 ksf each), or approximately a two-story coverage on a 25 percent building footprint⁵.

⁴ https://www.tualatinoregon.gov/sites/default/files/fileattachments/developmentcode/3513/map_9-4_design_type_boundaries.pdf

⁵ 8.18 acres * 43,560 ft/acre * 25% footprint coverage * 2 stories = 178 ksf

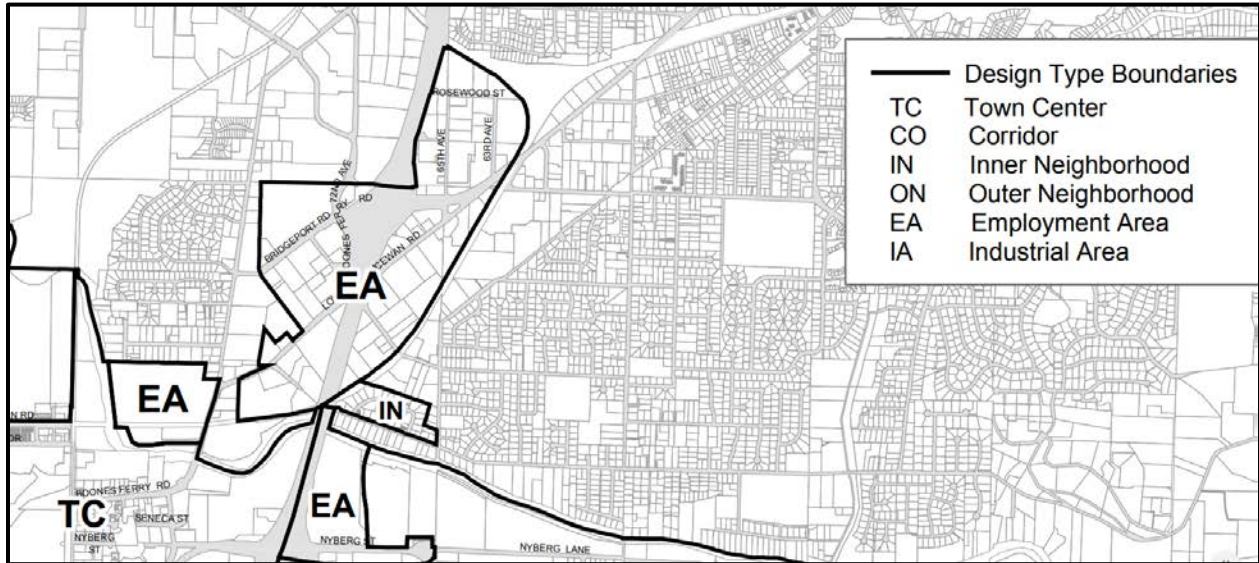


Figure 2: Tualatin Development Code Map 9-4 Designates the Subject Area Location as Employment Area

ITE Trip Generation, 10th Edition was used to estimate traffic potential for allowed uses. Under the existing CG zoning, a mix of retail uses would likely occur, and ITE Code 820 Shopping Center was used to approximately retail vehicle trips. The 178 ksf would generate approximately 3.81 trips/ksf during the weekday p.m. peak hour, or approximately 448 net new trips⁶.

Proposed Zoning (MUCOD) Traffic Potential

The subject area’s inclusion in the MUCOD via a Planned Text Amendment allows commercial and residential mixed uses. The purpose of the MUCOD is to allow flexibility in uses⁷. According to 57.050(2)(e)(iii) the maximum structure height allowed is 50 feet (assumed 4 stories) due to the subject area’s location within the MUCOD district.

According to 57.050(2)(h)(i) the minimum FAR to be used is 0.5 for non-residential development and mixed-use development that includes a residential component. The 60 ksf maximum for retail uses present under the CG zoning condition would no longer apply. However, the reasonable worst case of 178 ksf retail floor space (2-stories on 25% lot coverage) is not expected to increase.

100-Foot Maximum Building Height for Limited Uses

The MUCOD designation would allow similar uses as the CG designation, with varying limitations on height and floor area, as noted. However, the potential for additional height (up to 100 feet) for these uses, which include commercial lodging and multi-family residential uses was also explored. Residential uses are currently limited to a maximum density of 50 units per acre for residential-only projects.⁸ In order

⁶ 8.18 acres * 0.25 footprint coverage * 2 stories * 3.81 trips/ksf = 679 trips with 34% passby reduction = 448 net new trips

⁷ <https://www.tualatinoregon.gov/developmentcode/tdc-chapter-57-mixed-use-commercial-overlay-district>

⁸ Tualatin Development Code, 57.050.2.h.iii



to allow the benefits of mixed-use development and limit overall density impacts, it is assumed that the maximum density of 50 residential units per acre would also apply for structures that exceed 50 feet. Therefore, the allowed reasonable worst-case use for the MUCOD designation and a 100-foot building height would include:

- 178 ksf retail (ITE 820 Shopping Center)
- 409 apartment units⁹ (ITE 231 Mid-Rise Residential with 1st-Floor Commercial)¹⁰

The 409 apartments would generate approximately 147 total weekday p.m. peak hour vehicle trips. However, the overall additional vehicle trips generated by additional residential use would be limited by the internal trip capture between retail and residential uses. Using ITE data and methodology to account for internal trip reduction would reduce external trips ends to/from the residential and retail uses by approximately 92 trips during the weekday PM peak hour as listed in Table 1.

Table 1: Trip Generation for CG and MUCOD Zoning with Adjusted Height Limitations (Weekday PM Peak Hour)

Use	Units	Trips (Total)	Trips (In)	Trips (Out)
Existing CG Zoning				
Retail (ITE 820)	178 ksf	448	215	233
MUCOD w/ Adjusted Height Limitations				
Retail (ITE 820)	178 ksf	448	215	233
Internal Reduction (Retail)		-46	-14	-32
Residential (ITE 231)	409 units	147	103	44
Internal Reduction (Residential)		-46	-32	-14
MUCOD Subtotal (External Trips)		497	262	235
Net Change (MUCOD Subtotal minus CG)		+49	+47	+2

As listed in Table 1, the proposed text and map changes have the potential to add approximately 49 additional vehicle trips to the external street system during the weekday p.m. peak hour. If built to the full development potential, these trips would likely distribute to the connecting transportation system (Boones

⁹ 8.18 acres * 50 residential units/acre

¹⁰ Commercial lodging (ITE 310 Hotel) would not generate more vehicle trip potential than the allowed residential maximum density unless the total number of rooms exceeded 245. However, a nominal increase in room and trips beyond this total is not likely to trigger a significant effect. For proposed commercial lodging uses that would exceed 300 total rooms in the subject area, a traffic study may be required through the development review process to identify potential impacts to the transportation system.



Ferry Rd, Upper Boones Ferry Road, and Lower Boones Ferry Road) and would not likely increase peak hour vehicle trips for any individual movement by more than 20 vehicles. Therefore, the reasonable likely uses would not create a significant effect on the transportation system.

FINDINGS

A text amendment that includes the subject parcels in the MUCOD and a 100-foot building height¹¹ would increase the highest trip generation potential during the weekday p.m. peak hour by approximately 49 net new vehicle trips¹². Given the site location and accessibility from various existing roads that connect to the broader transportation system (Bridgeport Road, Lower Boones Ferry Road, Upper Boones Ferry Road) and trip distribution to each, as well as the balanced directional flows of retail uses, the change would not likely add more than 20 trips to an individual movement during the weekday p.m. peak hour. Given this potential degree of change, the text amendment is not likely to create a significant effect on the transportation system and TPR requirements are addressed.

¹¹ The 100-foot building height allowance is assumed to include the following restrictions: 1) One floor may be occupied by retail, office, or uses other uses allowed in the MUCOD. Additional floors (or floor area beyond the gross building footprint) are limited to residential and/or commercial lodging uses. 2) Residential uses are subject to the maximum density of 50 units/acre.

¹² 275 trips with MUCOD - 206 trips with CG = 69 trip increase