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WHAT TRANSPORTATION CAN BE.

MEMORANDUM

Date:	October 2, 2026	**TG:**	1.25486.00
To:	Hearings Examiner		
From:	Dan McKinney Jr. and Kassi Leingang, PE – Transpo Group		
cc:	Amy Lavin – SJCC Jessica Clawson – McCullough Hill PLLC		
Subject:	3801 E Mercer Way Rezone - Trip Generation for Maximum Development Capacity		

The following memorandum provides a trip generation comparison for Maximum Development Capacity of land uses allowed in the requested rezone to Commercial Office (CO) Zone at 3801 E Mercer Way, Mercer Island, WA 98040 (*see location in Figure 1*). This is providing trip generation estimates based on ITE Land Use categories assuming building sizes that would maximize the buildable area for comparison of worst case conditions. This is not evaluating any specific proposal and building sizes should be considered conservatively high given many factors outside of buildable area will impact the size of a development.

Mercer Island Zoning Map

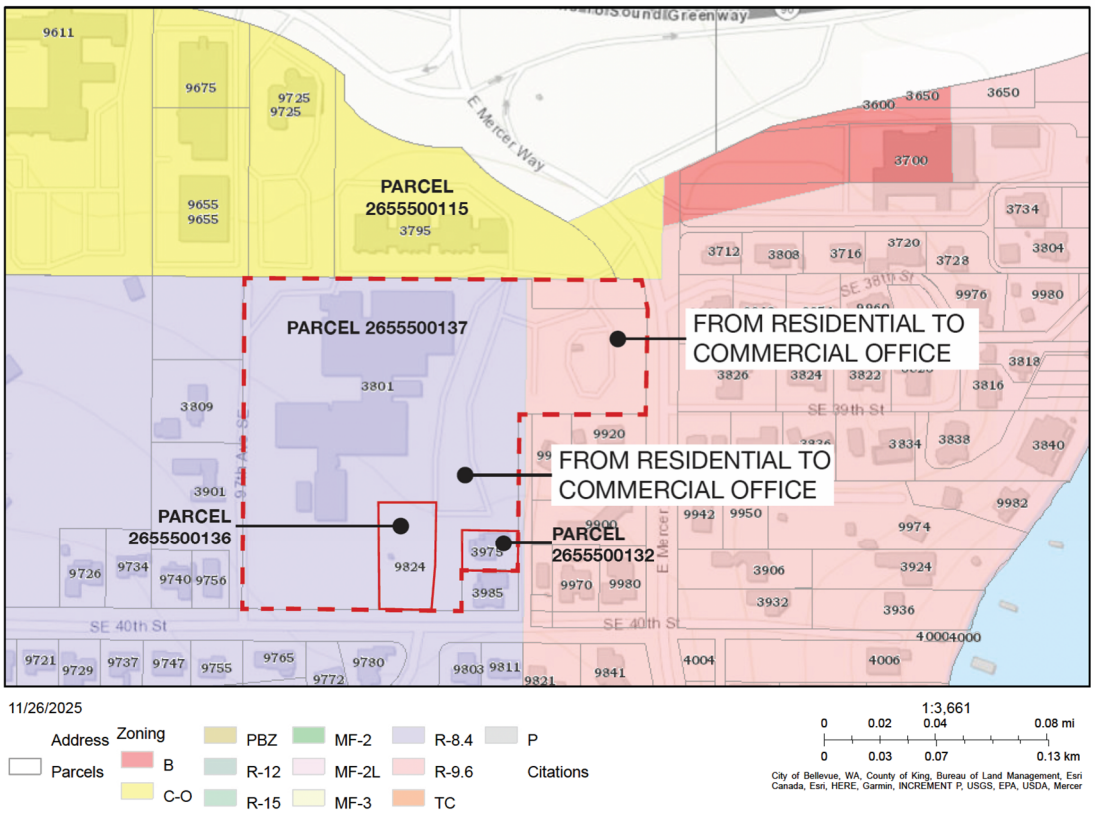


Figure 1: Requested Rezone

Trip Generation Comparison

Trip generation estimates for the land uses allowed in the CO zone (area as illustrated in Figure 1) were estimated based on trip rates using the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (12th Edition, 2025). The ITE land use categories evaluated and allowed in the Commercial Office (CO) zone are summarized below:

- Recreational Community Center (495)
- Church (560)
- Hospital (610)
- General Office Building (710)
- Medical-Dental Office Building - Stand-Alone (720)
- Government Office Building (730)
- Research and Development Center (760)
- Private School (K-12) (532)

These allowed land uses are not necessarily proposed land uses and are only provided to disclose potential maximum development capacity scenarios. It is anticipated that an actual proposal would be less than these scenarios.

To estimate the buildable area in the CO zone the maximum footprint and height limits were taken into consideration. For the CO zone, it was assumed that a 35 percent lot coverage (134,087 gross square feet [gsf]) could be built 3 stories high. This equates to a total of 402,261 gsf. This is a conservative estimate only based on lot coverage and any proposal would likely have to account for other development factors that would likely reduce the total buildable square footage. The Private School (K-12) land use estimates trip generation using the independent variable of students, which were estimated assuming 100 sf per student. This equates to 4,023 students, and would represent a maximum development capacity.

The trip generation of the allowable uses in the CO zone were calculated and summarized below in Table 1.

Table 1. Weekday PM Peak Hour Trip Generation Comparison

	Land Uses Allowed in CO Zone[1]	Size	Weekday PM Peak Hour Trips In	Out	Total
1	Recreational Community Center (495)	402,261 gsf	558	605	1,163
2	Church (560)	402,261 gsf	62	89	151
3	Hospital (610)	402,261 gsf	118	228	346
4	General Office Building (710)	402,261 gsf	69	360	429
5	Medical-Dental Office Building – Stand Alone (720)	402,261 gsf	413	963	1,376
6	Government Office Building (730)	402,261 gsf	156	469	625
7	Research and Development Center (760)	402,261 gsf	45	136	181
8	Private School (K-12) (532)	4023 students	481	556	1,046

Note: gsf = gross square-feet
1. Trips rates from ITE *Trip Generation Manual*, 12th Edition.

As shown in the table, the Medical-Dental Office Building – Stand Alone (720) ITE land use generates the highest level of PM peak hour traffic with 1,376 trips. The detailed trip generation calculations for the allowed uses are provided in Attachment A and includes Daily and AM peak hour conditions in addition to the PM peak hour summarized above.

Attachment A: Detailed Trip Generation

Potential Use

	Land Use	Setting	Size	Units	Model	Equation	Rate	Units	Inbound %	Primary Trips Inbound	Primary Trips Outbound	Primary Trips Total
1	**Recreational Community Center (495)**		**402,261**	sf								
	Daily	General Urban/Suburban			Rate	-	28.82	per ksf	50%	5,797	5,797	11,594
	AM Peak Hour	General Urban/Suburban			Rate	-	2.02	per ksf	66%	537	276	813
	PM Peak Hour	General Urban/Suburban			Rate	-	2.89	per ksf	48%	558	605	1,163
2	**Church (560)**		**402,261**	sf								
	Daily	General Urban/Suburban			Rate	-	6.78	per ksf	50%	1,364	1,364	2,728
	AM Peak Hour	General Urban/Suburban			Rate	-	0.37	per ksf	62%	92	57	149
	PM Peak Hour	General Urban/Suburban			Equation (lin)	T = 0.37(X) + 2.59	-	-	41%	62	89	151
3	**Hospital (610)**		**402,261**	sf								
	Daily	General Urban/Suburban			Rate	-	10.70	per ksf	50%	2,152	2,152	4,304
	AM Peak Hour	General Urban/Suburban			Rate	-	0.79	per ksf	68%	216	102	318
	PM Peak Hour	General Urban/Suburban			Rate	-	0.86	per ksf	34%	118	228	346
4	**General Office Building (710)**		**402,261**	sf								
	Daily	General Urban/Suburban			Equation (lin)	T = 6.18(X) + 207.96	-	-	50%	1,347	1,347	2,694
	AM Peak Hour	General Urban/Suburban			Equation (lin)	T = 1.12(X) + 19.95	-	-	88%	414	56	470
	PM Peak Hour	General Urban/Suburban			Equation (lin)	T = 0.99(X) + 31.14	-	-	16%	69	360	429
5	**Medical-Dental Office Building - Stand-Alone (720)**		**402,261**	sf								
	Daily	General Urban/Suburban			Equation (lin)	T = 40.60(X) - 75.15	-	-	50%	8,129	8,129	16,258
	AM Peak Hour	General Urban/Suburban			Equation (log)	Ln(T) = 0.90 Ln(X) + 1.33	-	-	78%	651	184	835
	PM Peak Hour	General Urban/Suburban			Rate	-	3.42	per ksf	30%	413	963	1,376
6	**Government Office Building (730)**		**402,261**	sf								
	Daily	General Urban/Suburban			Rate	-	22.59	per ksf	50%	4,544	4,544	9,088
	AM Peak Hour	General Urban/Suburban			Rate	-	3.34	per ksf	75%	1,008	336	1,344
	PM Peak Hour	General Urban/Suburban			Equation (log)	Ln(T) = 0.97 Ln(X) + 0.62	-	-	25%	156	469	625
7	**Research and Development Center (760)**		**402,261**	sf								
	Daily	General Urban/Suburban			Rate	-	9.47	per ksf	50%	1,905	1,905	3,810
	AM Peak Hour	General Urban/Suburban			Rate	-	0.48	per ksf	78%	151	42	193
	PM Peak Hour	General Urban/Suburban			Rate	-	0.45	per ksf	25%	45	136	181
8	**Private School (K-8) (530)**		**4,023**	attendees								
	Daily	General Urban/Suburban			Rate	-	4.11	per attendee	50%	8,267	8,267	16,534
	AM Peak Hour	General Urban/Suburban			Rate	-	1.01	per attendee	56%	2,275	1,788	4,063
	PM Peak Hour	General Urban/Suburban			Rate	-	0.26	per attendee	46%	481	565	1,046

Notes:

1. Trip rates based on Institute of Transportation Engineers' (ITE) *Trip Generation Manual (*12th Edition) equation and average trip rates as shown above.