



Appendix F

Local SDC System Formulas and General Fee Schedule

City of Eugene
System Development Charge
~~Methodologies~~Methodology

November 21, 2019 Draft

Appendix F

Local System Formulas & General Fee Schedule

1.0 Local System Formulas, Calculation Details, and Rates

1.1 General Rate Setting, Cost of Service Formula

$$\frac{\text{SDC Eligible Costs}}{\text{Impact Measurement}} = \text{SDC per Unit of Service}$$

1.2 Transportation System Cost and Rates

1.2.1 Transportation System Cost of Service

General Formula

$$\text{Cost Basis} / \text{Growth Trips} = \text{Cost per Trip}$$

Calculation

Initial cost per trip calculations at the time of the *Transportation System Development Charge Methodology* adoption (shown in the box below) employ a cost per trip calculation that has been rounded to the nearest whole number (or dollar) and was based upon 2014 project costs.

Cost per Trip Calculation Using Original Cost Basis Amounts in Tables B-2 and B-3, Appendix B, Based upon 2014 Project Costs

Reimbursement:

$$\$7,675,471 / 40,972 = \$187 \text{ per Trip}$$

Improvement:

$$\$113,721,290 / 40,972 = \$2,776 \text{ per Trip}$$

$$\text{Total Allocated Cost per Trip} = \$187 + \$2,776 = \$2,963 \text{ per Trip}$$

As part of the adoption of the *Transportation System Development Charge Methodology* in 2018, the calculated “total allocated cost per trip” shown in the box above was adjusted for inflation using the 20-city national average construction cost index (CCI), as published by Engineering News-Record (ENR), to reflect then current day costs at the time of adoption. This adjusted amount, as shown in the box below, was rounded to the nearest whole number (or dollar) and was included in Section 2.0 of this Appendix F.

Inflationary Adjustment to 2014 Calculations, Prior to Methodology Adoption

2014 Cost per Trip X (1 + Increase in ENR CCI (Between Dec 2014 and April 2018)) = Current Cost per Trip

➤ Increase in ENR CCI (Between Dec 2014 and April 2018) = 10.42%

\$2,963 X (1.1042) = \$3,272 Cost per Trip

Subsequent adjustments to the cost per trip (i.e., fee changes adopted per Section 2.4 of the *General Methodology*) shall round to the nearest hundredth (or penny). See Section 2.0 of this Appendix F for current rates.

1.2.2 Transportation SDC Rates

Except when the City Engineer has approved an applicant’s election to use the Alternate Trip Generation Calculation method or an alternative pass-by adjustment, the City Engineer shall apply rates included in the Transportation Trip Rates table, Table B-9, located below. Descriptions for the land use categories included in Table B-9 are included in Appendix A and are based upon ITE land use categories.

**Table B-9
Transportation Trip Rates**

Eugene Trans Use Code	Description	Unit of Measure	Trip Rate	% Pass-by	Adjusted Trip Rate
30	TRUCK TERMINAL	PER TGSF	0.83	0%	0.83
90	PARK & RIDE LOT WITH BUS SERVICE	PER PARKING SPACE	0.62	0%	0.62
110	GENERAL LIGHT INDUSTRIAL	PER TGSF	0.97	0%	0.97
130	INDUSTRIAL PARK	PER TGSF	0.85	0%	0.85
140	MANUFACTURING / HEAVY INDUSTRY (120&140)	PER TGSF	0.73	0%	0.73
150	WAREHOUSING	PER TGSF	0.32	0%	0.32
151	MINI WAREHOUSE	PER TGSF	0.26	0%	0.26
160	DATA CENTER	PER TGSF	0.09	0%	0.09
170	UTILITIES	PER TGSF	0.76	0%	0.76
210	SINGLE FAMILY DWELLING / DUPLEX	PER DU	1.00	0%	1.00
211	ACCESSORY DWELLING UNIT	PER DU	0.52	0%	0.52
220	APARTMENTS	PER DU	0.62	0%	0.62
230	CONDO/TOWNHOME	PER DU	0.52	0%	0.52
251	SENIOR HOUSING DEVELOPMENT	PER DU	0.27	0%	0.27
253	CONGREGATE CARE FACILITY / CONTINUING CARE RETIREMENT COMMUNITY	PER DU	0.17	0%	0.17
254	ASSISTED LIVING / NURSING HOME (254 & 620)	PER DU	0.22	0%	0.22
310	HOTEL/MOTEL	PER ROOM	0.60	0%	0.60
411	CITY PARK	PER ACRE	3.50	0%	3.50
430	GOLF COURSE	PER ACRE	0.30	0%	0.30
437	BOWLING ALLEY	PER TGSF	1.71	0%	1.71
444	MOVIE THEATRE	PER TGSF	3.80	0%	3.80
491	RACQUET/TENNIS/HANDBALL FACILITIES (490 & 491)	PER COURT	3.35	0%	3.35
492	HEALTH/FITNESS/ATHLETIC CLUB (492 & 493)	PER TGSF	3.53	0%	3.53
495	RECREATIONAL COMMUNITY CENTER / MULTIPURPOSE RECREATIONAL FACILITY (435&495)	PER TGSF	2.74	0%	2.74
520	ELEMENTARY SCHOOL	PER TGSF	1.21	0%	1.21
522	MIDDLE SCHOOL / JUNIOR HIGH SCHOOL	PER TGSF	1.19	0%	1.19
530	HIGH SCHOOL	PER TGSF	0.97	0%	0.97
536	PRIVATE SCHOOL (K-12)	PER TGSF	5.50	0%	5.50
540	JUNIOR/COMMUNITY COLLEGE	PER STUDENT*	0.12	0%	0.12
550	UNIVERSITY/COLLEGE	PER STUDENT*	0.17	0%	0.17
560	WORSHIP FACILITIES (560, 561, & 562)	PER TGSF	0.55	0%	0.55
565A	CHILD DAY CARE CENTER	PER TGSF	6.01	0%	6.01
565B	ADULT DAY CARE CENTER	PER TGSF	2.64	0%	2.64
566	CEMETERY	PER ACRE	0.84	0%	0.84
590	LIBRARY	PER TGSF	7.30	0%	7.30
591	LODGE/FRATERNAL ORDER	PER MEMBER	0.03	0%	0.03
610	HOSPITAL	PER TGSF	0.93	0%	0.93
640	ANIMAL HOSPITAL/VETERINARY CLINIC	PER TGSF	4.72	0%	4.72
710	GENERAL OFFICE BUILDING (710, 714, 715, 733, & 750)	PER TGSF	1.49	0%	1.49
720	MEDICAL/DENTAL OFFICE (720 & 630)	PER TGSF	3.57	0%	3.57
731	DEPARTMENT OF MOTOR VEHICLES	PER TGSF	17.09	0%	17.09
760	RESEARCH & DEVELOPMENT CENTER	PER TGSF	1.07	0%	1.07
770	BUSINESS PARK	PER TGSF	1.26	0%	1.26
811	CONSTRUCTION EQUIPMENT & RENTAL STORE	PER TGSF	0.99	0%	0.99
812	BUILDING MATERIALS & LUMBER STORE	PER TGSF	4.49	0%	4.49
813	FREE-STANDING DISCOUNT SUPERSTORE (813 & 815)	PER TGSF	4.35	27%	3.18
814	VARIETY/DOLLAR STORE	PER TGSF	6.82	34%	4.50
816	HARDWARE/PAINT STORE	PER TGSF	4.84	0%	4.84
817	NURSERY (GARDEN CENTER)	PER TGSF	6.94	0%	6.94
NOTE:	TGSF = Thousand Gross Square Feet				
	TSFGLA = Thousand Square Feet Gross Leasable Area				
	DU = Dwelling Unit				
	* For school-based academic, administration, support, and classroom uses only; for uses that are also used by the community for non-school uses (e.g., large athletic facilities, museums, or performing arts centers), choose the use code that best fits the proposed development type.				

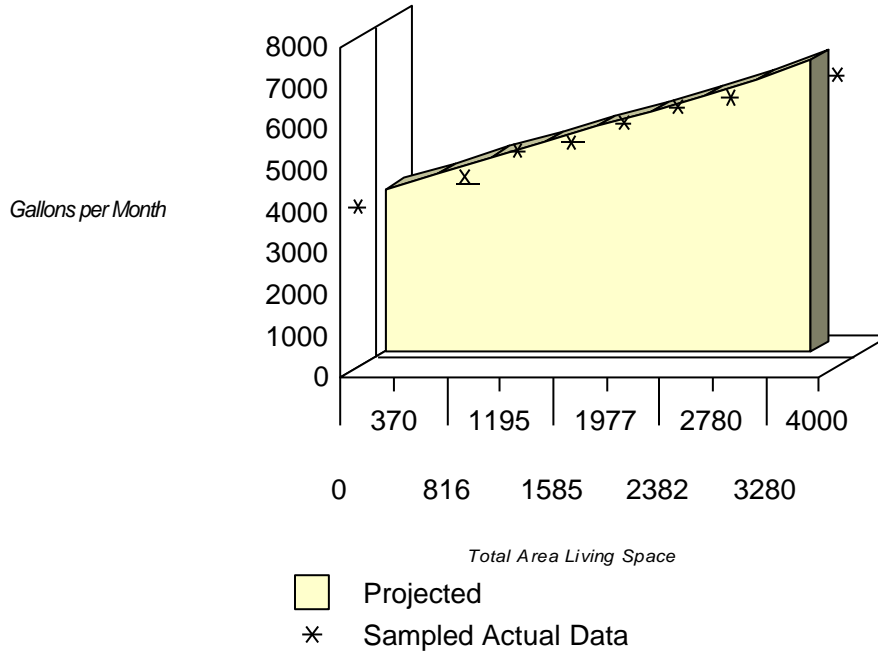
Table B-9 -- Transportation Trip Rates					
Eugene Trans Use Code	Description	Unit of Measure	Trip Rate	% Pass-by	Adjusted Trip Rate
820	SHOPPING CENTER	PER TSFGLA	3.71	34%	2.45
823	FACTORY OUTLET CENTER	PER TGSF	2.29	0%	2.29
826	SPECIALTY RETAIL CENTER & OTHER	PER TSFGLA	2.71	34%	1.79
841	AUTOMOBILE SALES	PER TGSF	2.62	0%	2.62
843	AUTOMOBILE PARTS SALES	PER TGSF	5.98	43%	3.41
848	TIRE STORE	PER TGSF	4.15	28%	2.99
850	SUPERMARKET	PER TGSF	9.48	36%	6.07
851	CONVENIENCE MARKET (open 24 hours)	PER TGSF	52.41	51%	25.68
852	CONVENIENCE MARKET (open ~ 15-16 hours)	PER TGSF	34.57	63%	12.79
854	DISCOUNT SUPERMARKET	PER TGSF	8.34	21%	6.59
857	DISCOUNT CLUB	PER TGSF	4.18	37%	2.63
862	HOME IMPROVEMENT SUPERSTORE	PER TGSF	2.33	42%	1.35
863	ELECTRONICS SUPERSTORE	PER TGSF	4.50	40%	2.70
864	TOY/CHILDREN'S SUPERSTORE	PER TGSF	4.99	34%	3.29
875	DEPARTMENT STORE	PER TGSF	1.87	0%	1.87
876	APPAREL STORE	PER TGSF	3.83	0%	3.83
879	ARTS AND CRAFTS STORE	PER TGSF	6.21	34%	4.10
880	PHARMACY/DRUGSTORE W/OUT DRIVE-THROUGH WINDOW	PER TGSF	8.40	53%	3.95
881	PHARMACY/DRUGSTORE WITH DRIVE-THROUGH WINDOW	PER TGSF	9.91	49%	5.05
890	FURNITURE STORE	PER TGSF	0.45	53%	0.21
911	WALK-IN BANK	PER TGSF	12.13	0%	12.13
912	DRIVE-IN BANK	PER TGSF	24.30	26%	17.98
918	HAIR SALON	PER TGSF	1.45	0%	1.45
931	QUALITY RESTAURANT	PER TGSF	7.49	44%	4.19
932	HIGHER TURNOVER REST, INCL TAVERN/BAR (925 & 932)	PER TGSF	9.85	43%	5.61
934	FAST FOOD RESTAURANT WITH OR WITHOUT DRIVE-THROUGH	PER TGSF	32.65	50%	16.33
937	COFFEE/DONUT SHOP / COFFEE ESTABLISHMENT (936, 937, & 938)	PER TGSF	42.80	89%	4.71
941	QUICK LUBRICATION VEHICLE STOP	PER SERV.POS.	5.19	0%	5.19
942	AUTO CARE CENTER	PER TSFGLA	3.11	0%	3.11
944	GASOLINE/SERVICE STATION	PER VEH.FUEL.POS.	13.87	42%	8.04
945	GASOLINE/SERVICE STATION W/CONVENIENCE MARKET (W/ OR W/OUT CAR WASH)	PER VEH.FUEL.POS.	13.51	56%	5.94
947	SELF-SERVICE CAR WASH	PER STALL	5.54	0%	5.54
948	AUTOMATED CAR WASH	PER TGSF	12.12	0%	12.12
950	TRUCK STOP	PER TGSF	13.63	0%	13.63
NOTE:	TGSF = Thousand Gross Square Feet				
	TSFGLA = Thousand Square Feet Gross Leasable Area				
	DU = Dwelling Unit				
	SERV. POS. = Service Position				
	VEH. FUEL. POS. = Vehicle Fueling Position				

1.3 Wastewater System Cost of Service:

1.3.1 Local Wastewater System Cost of Service

Determination of Flow Estimation Formula for Residential Development

Graphical comparison of water consumption per month to square foot of living area results in a slope of 0.951 gallons per month per square foot and a base flow per dwelling unit of 3,946 gallons per month.



Base Flow Intercept, Gal. / Month	3,946
Gal. / Day (GPD) --30 day month--	132
Cost per Gal/Day	\$3.5030
Base Charge = GPD x Cost per Gal.	\$462.40

Slope	0.951 gal/mo/sq ft
Days per Month	30
Slope / 30 Days	0.032
Cost per Gal/Day	\$3.5030
Cost per sq ft = Daily usage factor x Cost per Gal.	\$0.1121

The implementation of this rate structure results in each new single family dwelling being charged a local wastewater SDC that is comprised of a base rate of \$462.40 plus an additional charge of \$0.1121 applied to the total proposed living space area of the dwelling.

Formulas for Non-Residential Development

$$\frac{\text{Non-Assessable System Valuation} \\ (\text{Value of Existing} + \text{Value of Planned})}{\text{Build-out Capacity (mgd)}} = \text{Cost per Unit of Capacity}$$

$$\text{Per Unit of Capacity} \times \text{Flow per PFU for Development Type} \times \\ \text{Number of PFUs for Development} = \text{SDC for Development}$$

Calculations for Non-Residential Development

$$\frac{\$156.249662 + \$15.324095\text{M}}{49.0 \text{ mgd}} = \$3.5030 \text{ per Gallon per Day}$$

$$\$3.5030 \times \text{Gallon per PFU (varies by development type)} \times \\ \text{Number of PFUs} = \text{SDC for Development}$$

1.4 Stormwater System Cost of Service:

General Formulas

$$\frac{\text{SDC eligible costs}}{\text{Total additional impervious} \\ \text{surface area using capacity (sq. ft)}} = \text{Unit cost per square foot of} \\ \text{impervious surface area}$$

Reimbursement:

$$\frac{\$17,073,927}{155,770,560 \text{ sq. ft.}} = \$0.1096 \text{ per sq. ft.} \\ \text{impervious surface area}$$

Improvement:

General System Capacity

$$\frac{\$18,800,662}{155,770,560 \text{ sq. ft.}} = \$0.1207 \text{ per sq. ft. impervious surface area}$$

LID System Capacity

$$\frac{\$8,513,629}{4,650,000 \text{ sq. ft.}} = \$1.8309 \text{ per sq. ft. impervious surface area}$$

General System Capacity Total Unit Cost per Sq. Ft. Impervious Surface Area = (Reimbursement + Improvement) = \$0.1096 + \$0.1207 = \$0.2303

Total Unit Cost per Sq. Ft. Impervious Surface Area with LID System Capacity = (Reimbursement + Improvement + LID) = \$0.1096 + \$0.1207 + \$1.8309 = \$2.0612

1.5 Parks and Recreation System

Cost of Service: 1.5.1 General

Formulas:

Residential – costs and equivalent population densities persons per dwelling unit type vary by type and size

$$\text{Residential Cost per person} \times \text{Persons per Dwelling Unit Type} = \text{Cost per DU}$$

Nonresidential – costs and equivalent population densities persons per unit vary by development category type vary

Cost per <u>Employee</u>	X <u>Employees</u> Persons per TGSF	=	Cost per TGSF
Cost per <u>Person</u> <u>Visitor</u>	X <u>Persons</u> <u>Visitors</u> per Room	=	Cost per Room

TGSF = Thousand Gross Square Feet of floor area

1.5.2 Parks and Recreation System Unit Occupancies

The City Engineer shall apply the costs per unit and unit occupancies included in the Parks and Recreation SDC unit assumptions table, Table F-1 below. Land use descriptions and assignment of nonresidential categories are included in Appendix A.

Calculations: Vary; see Table 17

Table F-1

	<u>\$/Unit</u>	<u>Unit Occupancy</u>
	<u>\$/Person</u>	<u>Persons/ Dwelling Unit</u>
<u>Single-Family Residential (Living Area Category)</u>		
<u>800 SQ FT or less</u>	<u>\$2,421.70</u>	<u>1.25</u>
<u>801 SQ FT -1500 SQ FT</u>	<u>\$2,421.70</u>	<u>1.96</u>
<u>1501 SQ FT -3000 SQ FT</u>	<u>\$2,421.70</u>	<u>2.71</u>
<u>Over 3000 SQ FT</u>	<u>\$2,421.70</u>	<u>3.37</u>
<u>Accessory Dwelling Unit</u>	<u>\$2,421.70</u>	<u>1.25</u>
<u>Multifamily (Bedroom Category)</u>		
<u>0 Bedrooms</u>	<u>\$2,421.70</u>	<u>1.09</u>
<u>1 Bedroom</u>	<u>\$2,421.70</u>	<u>1.20</u>
<u>2 Bedrooms</u>	<u>\$2,421.70</u>	<u>1.99</u>
<u>3+ Bedrooms</u>	<u>\$2,421.70</u>	<u>2.51</u>
<u>Mobile Home</u>	<u>\$2,421.70</u>	<u>1.76</u>
<u>Nonresidential Category</u>	<u>\$/Visitor</u>	<u>Visitors/Room</u>
<u>A</u>	<u>\$1,065.55</u>	<u>2.30</u>
	<u>\$/Employee</u>	<u>Employees/ TGSF</u>
<u>B</u>	<u>\$478.12</u>	<u>3.34</u>
<u>C</u>	<u>\$478.12</u>	<u>2.06</u>
<u>D</u>	<u>\$478.12</u>	<u>1.21</u>
<u>E</u>	<u>\$478.12</u>	<u>0.49</u>

2.0 Adopted SDC Fee Schedule: Current Rates

2.1 Transportation System:	
Cost per trip	\$3,272.00
2.2 Local Wastewater System:	
Residential dwelling unit base fee	\$462.40
Residential dwelling unit total living area multiplication factor	\$0.1121
Non-Residential rate per gal/day per land use type per PFU	Varies
2.3 Regional (MWMC) Wastewater System:	
Residential dwelling unit	\$1709.67
Non-Residential rate per gal/day per land use type per FEU	Varies
2.4 Stormwater System:	
General System Capacity	
Small Residential (building footprint ≤ 1,000 sq. ft.)	\$414.54
Medium Residential (building footprint > 1,000 sq.ft. and < 3,000 sq. ft.)	\$667.87

Small Duplex	(unit building footprints \leq 1,000 sq. ft.)	\$829.08
Medium Duplex	(unit building footprints >1,000 sq. ft. and < 3,000 sq. ft.)	\$1,335.74
Manufactured Home Park		
Per space	(assumes 1,684 sq. ft. per space)	\$387.83
plus		
Per sq. ft. actual impervious surface area, add'l common areas		\$0.2303
All Other Development		
Per sq.ft. actual impervious surface area and/or equivalent		\$0.2303
LID System Capacity		
Small Residential	(building footprint \leq 1,000 sq. ft.)	\$3,710.16
Medium Residential	(building footprint > 1,000 sq.ft. and < 3,000 sq. ft.)	\$5,977.48
Small Duplex	(unit building footprints \leq 1,000 sq. ft.)	\$7,420.32
Medium Duplex	(unit building footprints >1,000 sq. ft. and < 3,000 sq. ft.)	\$11,954.96
Manufactured Home Park		
Per space	(assumes 1,684 sq. ft. per space)	\$3,471.06
plus		
Per sq. ft. actual impervious surface area, add'l common areas		\$2.0612
All Other Development		
Per sq.ft. actual impervious surface area and/or equivalent		\$2.0612

~~Continuation of Current Rates on next page.~~

2.5	Parks and Recreation System:	
	Residential (per Dwelling Unit <u>by Category</u>)	
	Single Family (<u>Living Area Category</u>)	\$4,246.00
	800 SQFT or less	\$3,035.00
	801-1500 SQFT	\$4,740.00
	1501-3000 SQFT	\$6,561.00
	>3,000 SQFT	\$8,162.00
	Duplex/Town Home/Mobile Home/Accessory DU	\$3,442.035.
	00	
	Mobile Home	\$4,262.00
	Multifamily (<u>Bedroom Category</u>)	
	0 bedroom	\$2,640.00
	1 bedroom	\$2,906.00
	2 bedrooms	\$4,819.00
	3 or more bedrooms	\$6,078.00
		\$2,686.00
	Nonresidential (unit varies – see Table 19 for Class description)	
	Class A (per Room)	\$12,697.451.00
	Class B (per thousand gross square feet or TGFSF)	\$1,134.599.00
	Class C (per TGFSF)	\$986.694.00
	Class D (per TGFSF)	\$413.578.00
	Class E (per TGFSF)	\$167.235.00

2.6 Administration Charges:

City of Eugene if based on percentage	9.0%
City of Eugene if based on flat rate	\$80.00

2.7 Appeal Fee: City of Eugene per SDC appeal \$100.00