

Council Communication

December 6, 2016, Business Meeting

Public Hearing: - Resolutions for New Water, Wastewater and Transportation System Development Charges

FROM:

Michael R. Faught, Public Works Director, michael.faught@ashland.or.us

SUMMARY

This is an update on the System Development Charge (SDC) Committee recommended SDC adjustments based on the updated Water, Sewer and Transportation Master Plans. System Development Charges are paid by developers to reimburse the City for the cost of capital improvements necessary to expand infrastructure to accommodate new growth and development.

If approved, the capital improvement projects in all three SDC's will be effective immediately and the new Transportation SDC methodology and SDC rates would be effective July 1, 2017.

A summary of the proposed SDC impacts are as follows:

- Residential and commercial wastewater SDC increases by approximately 150%;
- Residential water SDC increases by .30% and commercial and industrial water SDC is reduced by 1.2% to 1.5% depending on water meter size; and
- Single family residential transportation SDC increases by 5% and all other transportation SDCs increase or decrease based on the number of PM peak hour trips as shown in table 5.

BACKGROUND AND POLICY IMPLICATIONS:

The City Council adopted the Water and Sewer Master Plan updates on April 17, 2012 and the Transportation System Plan on March 19, 2013. The updated master plans include a multitude of capital improvement projects needed to maintain service for current and future developments. Only those capital improvements that meet the needs of future developments are included in these SDC updates. (Examples include: a new water treatment plant; the TAP line for water; a new wastewater oxidation ditch and wastewater outfall for wastewater; and multi-modal transportation projects.

On February 4, 2014, a System Development Committee was established to work with City staff and to develop the following System Development Charge updates based on the Water, Wastewater and Transportation Master Plans.



The members of the committee are as follows:

- Troy Brown, Jr.
- Allen Douma
- Dan Jovick
- Jac Nickels
- Carlos Reichenshammer (Chair)
- Russ Silbiger
- Rich Rosenthal - Council Liaison

The Committee met eight times from March 4, 2014 to February 17, 2015 (see attached minutes). The Committee recommended some adjustments to the consultant’s recommendations, which are included into proposed SDC updates.

The details of the proposed SDC adjustments are included in the attached consultant’s report. A summary of the recommendations is as follows:

Wastewater SDC

Residential Wastewater SDCs for residential development would increase from \$.81 per square foot to \$2.028 per square foot of livable area. Similarly, the commercial wastewater SDC is based on the number of fixture units and that also increases from \$124.18 to \$187.74, a 151% increase.

Table 1 Updated Wastewater System Development Charges

Measurement		Current SDC			Proposed SDC			Change	
		Reimburse- ment	Improve- ment	Total	Reimburse- ment	Improve- ment	Total	\$	% Δ
Residential	\$/Square feet	\$0.40	\$0.41	\$0.81	\$0.195	\$1.833	\$2.028	\$1.22	150%
Average Residential SDC [^]		\$800	\$820	\$1,620	\$389	\$3,665	\$4,054	\$2,435	150%
Commercial [†]	\$/Plumbing fixture	\$60.79	\$63.39	\$124.18	\$29.92	\$282.00	\$311.92	\$187.74	151%

[^]Assumes 2,000 square feet and thirteen plumbing fixture units.

[†]Commercial SDC = \$/fixture unit.

Water

Residential Water SDCs would increase by .30% while commercial SDCs would decrease 1.20% to 1.50% depending upon the meter size. This variance in decreases results because the meter capacities are updated to new standards.

Table 2 Current and updated Water SDC (displacement meters)

Current	2014 2012 Master Plan Update with TAP & Crowson II
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	SDC	Reimbursement	Improvement	Total SDC	% Δ
Residential					
\$/habitable sf	\$2.60	\$0.93	\$1.68	\$2.61	0.30%
Commercial and Industrial (by displacement meter size)^					
5/8 x 3/4	\$4,940	\$1,793	\$3,084	\$4,877	-1.30%
3/4	\$8,250	\$2,989	\$5,140	\$8,129	-1.50%
1	\$16,452	\$5,976	\$10,281	\$16,257	-1.20%
1 1/2	\$26,332	\$9,561	\$16,449	\$26,010	-1.20%
2	\$57,654	\$20,918	\$35,983	\$56,901	-1.30%
3	\$98,808	\$35,858	\$61,685	\$97,543	-1.30%
4	\$205,866	\$74,704	\$128,509	\$203,213	-1.30%
6	\$296,424	\$107,573	\$185,054	\$292,627	-1.30%

Transportation

The Single family residential Transpiration SDCs would increase from \$2,044 to \$2,154, however the consultant is recommending that the methodology of determining and assessing the SDC be changed from average daily trips (ADT) to PM peak-hour trips. This change will have minimal impact to residential units however some of the commercial SDC will be increased substantially based on the number of PM peak-hour trips each development is expected to create. Table 5 compares the current and updated trip measures (ADT and PM peak-hour) and SDC for which data have been published by the Institute of Transportation Engineers (ITE).

Table 3 Updated Transportation System Development Charges

ITE Land Use	ITE Land Use Code	Unit^	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$/ADT \$214	PM Peak-Hour trip Rate	\$/PM Peak-Hour trip \$2,112	\$	%
RESIDENTIAL								
Single Family Multi-Family	210	DU	9.55	2,043.70	1.02	\$2,154.35	\$110.65	5%
Multi-Family Residential Condominium	220	DU	6.28	1,343.04	0.67	\$1,415.11	\$72.07	5%
Manufactured Recreational Home/Condo	230	DU	5.68	1,216.42	0.52	\$1,098.30	(\$118.12)	-10%
	240	Occupied DU	4.67	998.46	0.60	\$1,267.27	\$268.81	27%
	260	DU	3.16	676.24	0.31	\$654.75	(\$21.49)	-3%



CITY OF ASHLAND

ITE Land Use	ITE Land Use Code	Unit^	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$ /ADT	PM Peak-Hour trip Rate	\$ /PM Peak-Hour trip	\$	%
				\$214		\$2,112		
INSTITUTIONAL								
Truck Terminals	30	1,000 sf GFA	11.03	2360.85	0.83	\$1,753.05	(\$607.80)	-26%
Bus Depot		1,000 sf GFA	25.00	5350	NA			
Park	411	Acres	2.01	429.5	4.50	\$9,504.50	\$9,075.00	2113%
City		Acres	45.00	9630	4.50	\$9,504.50	(\$125.50)	-1%
Neighborhood		Acres	4.50	963	4.50	\$9,504.50	\$8,541.50	887%
Amusement		Acres	72.00	15,408	4.50	\$9,504.50	(\$5,903.50)	-38%
Golf Course	430	Holes	34.21	7,320.28	3.56	\$7,519.11	\$198.83	3%
Movie Theatre	443	Seats	0.81	173.25	0.32	\$675.88	\$502.63	290%
Racquet Club	492	1,000 sf GFA	8.74	1,870.66	0.84	\$1,774.17	(\$96.49)	-5%
Military Base	501	Employee	1.78	380.92	0.30	\$633.63	\$252.71	66%
Elementary School	520	Student	1.18	252.08	0.28	\$591.39	\$339.31	135%
Junior High School		Student	1.30	277.34	0.30	\$633.63	\$356.29	128%
High School	530	Student	1.49	318.95	0.29	\$612.51	\$293.56	92%
Junior/Community College	540	Student	1.44	307.39	0.12	\$253.45	(\$53.94)	-18%
Church	560	1,000 sf GFA	10.07	2151.04	0.94	\$1,985.38	(\$165.66)	-8%
Day Care Center/Preschool	565	Student	1.06	229.00	0.84	\$1,774.17	\$1,545.17	675%
Library	590	1,000 sf GFA	22.30	4,763.00	7.20	\$15,207.19	\$10,444.19	219%
Hospital	610	1,000 sf GFA	15.94	3,406.00	1.16	\$2,450.05	(\$955.95)	-28%
Nursing Home	620	Occupied Bed	2.47	528.58	0.37	\$781.48	\$252.90	48%
BUSINESS & COMMERCIAL								
Hotel/Motel Building	310	Occupied Room	4.50	963.48	0.74	\$1,562.96	\$599.48	62%
Materials/Lumber	812	1,000 sf GFA	11.23	2,403.39	5.56	\$11,743.33	\$9,339.94	389%
Specialty Retail Center	814	1,000 sf GFA	14.95	3,198.49	5.02	\$10,602.79	\$7,404.30	231%



CITY OF ASHLAND

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			Adjusted Avg. Weekday Trip Rate	\$ /ADT	PM Peak-Hour trip Rate	\$ /PM Peak-Hour trip		
			Rate	\$214	Rate	\$2,112	\$	%
Discount Stores	815	1,000 sf GFA	25.77	5,515.37	5.57	\$11,764.45	\$6,249.08	113%
Hardware/Paint Stores	816	1,000 sf GFA	18.85	4,033.70	4.74	\$10,011.40	\$5,977.70	148%
Nursery-Retail	817	1,000 sf GFA	13.26	2,837.51	9.04	\$19,093.47	\$16,255.96	573%
Shopping Center (under 50,000 sf GFA)	820							
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	14.55	3,113.02	3.90	\$8,237.23	\$5,124.21	165%
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	15.12	3,236.16	3.90	\$8,237.23	\$5,001.07	155%
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	17.24	3,690.10	3.90	\$8,237.23	\$4,547.13	123%
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	17.89	3,828.96	3.90	\$8,237.23	\$4,408.27	115%
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	16.29	3,485.03	3.90	\$8,237.23	\$4,752.20	136%
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	15.03	3,216.54	3.90	\$8,237.23	\$5,020.69	156%
High Turnover Sit-Down Restaurant	820	1,000 sf GFA	15.15	3,242.27	3.90	\$8,237.23	\$4,994.96	154%
Fast Food Restaurant	832	1,000 sf GFA	29.26	6,262.45	18.49	\$39,052.91	\$32,790.46	524%
New Car Sales	833	1,000 sf GFA	36.09	7,722.72	47.30	\$99,902.80	\$92,180.08	1194%
Service Station	841	1,000 sf GFA	21.56	4,613.73	2.80	\$5,913.91	\$1,300.18	28%
Supermarket	844	Gasoline Pump	7.68	1,644.14	15.65	\$33,054.52	\$31,410.38	1910%
Convenience Market	850	Employee	5.66	1,210.30	8.37	\$17,678.36	\$16,468.06	1361%
Convenience Market w/ Gas Pump	851	1,000 sf GFA	20.66	4,422.04	36.22	\$76,500.62	\$72,078.58	1630%
Apparel Store	853	Gasoline Pump	13.68	2,927.85	19.98	\$42,199.96	\$39,272.11	1341%
Furniture Store	870	1,000 sf GFA	11.49	2,459.23	4.20	\$8,870.86	\$6,411.63	261%
Bank/Savings: Walk-in	890	1,000 sf GFA	1.59	341.32	0.53	\$1,119.42	\$778.10	228%
Bank/Savings: Drive-in	911	1,000 sf GFA	17.93	3,836.54	NA			
	912	1,000 sf GFA	24.80	5,306.59	26.69	\$56,372.22	\$51,065.63	962%
OFFICE								
Clinic	630	1,000 sf GFA	12.61	2,698.26	NA			
General Office (Under 100,000 sf GFA)	710	1,000 sf GFA	10.78	2,306.28	1.49	\$3,147.04	\$840.76	36%



CITY OF ASHLAND

ITE Land Use	ITE Land Use Code	Unit^	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$ /ADT	PM Peak-Hour trip Rate	\$ /PM Peak-Hour trip		
				\$214	Rate	\$2,112	\$	%
(100,000-199,999 sf GFA)	710	1,000 sf GFA	9.12	1,951.57	1.49	\$3,147.04	\$1,195.47	61%
(200,000 sf GFA and over)	710	1,000 sf GFA	7.70	1,648.34	1.49	\$3,147.04	\$1,498.70	91%
Medical Office Building	720	1,000 sf GFA	18.11	3,875.56	4.27	\$9,018.71	\$5,143.15	133%
Government Office Bldg.	730	1,000 sf GFA	66.17	14,160.98	1.49	\$3,147.04	(\$11,013.94)	-78%
State Motor Vehicles Dept	731	1,000 sf GFA	159.38	34,107.15	19.93	\$42,094.35	\$7,987.20	23%
U.S. Post Office	732	1,000 sf GFA	83.64	17,897.93	14.67	\$30,984.65	\$13,086.72	73%
Research Center	760	1,000 sf GFA	5.16	1,104.03	1.07	\$2,259.96	\$1,155.93	105%
Business Park	770	1,000 sf GFA	9.63	2,060.37	1.26	\$2,661.26	\$600.89	29%
INDUSTRIAL								
General Light Industrial	110	1,000 sf GFA	7.81	1,670.57	1.08	\$2,281.08	\$610.51	37%
General Heavy Industrial	120	1,000 sf GFA	1.68	359.52	0.68	\$1,436.23	\$1,076.71	299%
Industrial Park	130	1,000 sf GFA	7.81	1,670.57	0.84	\$1,774.17	\$103.60	6%
Manufacturing	140	1,000 sf GFA	4.31	922.77	0.75	\$1,584.08	\$661.31	72%
Warehouse	150	1,000 sf GFA	5.47	1,169.64	0.45	\$950.45	(\$219.19)	-19%
Mini-Warehouse	151	1,000 sf GFA	1.23	262.51	0.22	\$464.66	\$202.15	77%
Utilities	170	Employees	1.06	226.84	NA			
Wholesale	860	1,000 sf GFA	3.30	705.71	0.52	\$1,098.30	\$392.59	56%

^DU = Dwelling Unit; GFA = Gross Floor Area; sf = Square Feet.

FISCAL IMPLICATIONS:

If approved, the new capital improvement projects in all three SDC's will be effective immediately and the new Transportation SDC methodology and SDC rates would be effective July 1, 2017.

COUNCIL GOALS:

N/A

STAFF RECOMMENDATION AND REQUESTED ACTION:

Staff recommends approval of three Resolutions for new Wastewater, Water and Transportation SDC.



SUGGESTED MOTIONS:

- (1) I move approval of a resolution titled, “A Resolution Adopting New Transportation Systems Development Charges, Pursuant To Section 4.20 Of The Ashland Municipal Code, And Repealing Resolution 1999-42;
- (2) I move approval of a resolution titles, “A Resolution Adopting New Wastewater Systems Development Charges, Pursuant To Section 4.20 Of The Ashland Municipal Code, And Repealing Resolution 2006-27;
- (3) I move approval of a resolution titles, “A Resolution Adopting New Water Systems Development Charges, Pursuant To Section 4.20 Of The Ashland Municipal Code, And Repealing Resolution 2006-27.

ATTACHMENTS:

1. Economic & Financial Analysis Summary
2. Wastewater Resolution
3. Water SDC Resolution
4. Transportation Resolution
5. SDC Committee Minutes



City of Ashland, Oregon

DEPARTMENT: PUBLIC WORKS

SUMMARY OF

WASTEWATER, WATER & TRANSPORTATION SYSTEM DEVELOPMENT CHARGE UPDATES

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

Vancouver, WA

July 2016



ECONOMIC & FINANCIAL ANALYSIS

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ATTACHMENTS

Wastewater SDC Update

Water SDC Update

Transportation SDC Update

SUMMARY OF SYSTEM DEVELOPMENT CHARGE UPDATES

Over the past few years, the City’s System Development Charge (SDC) Task Force and Transportation Advisory Board have worked with the City’s staff and consultants to update the Wastewater, Water, And Transportation System Development Charges. All three updates are based on recently completed master plans. Table 1 compares the current and updated SDCs for selected land uses.

- The current and updated Water SDC are measured according to the livable square footage of residences and by meter size for non-residential developments.
- The current and updated Wastewater SDC is based on livable square footage for residential developments and on the number of fixture units for commercial developments.
- The updated Transportation SDC is based on PM Peak-Hour Trips rather than the current Average Daily Trips.

The examples in Table 1 are typical but not unique examples of SDCs by development type and size. The following sections show the current and proposed schedules of the three systems development charges. Attached to this summary are the detailed findings for the Wastewater, Water, And Transportation SDC updates.

Table 1. Impact of Updated SDCs on Selected Developments

Development	Wastewater^	Water	Transportation	Total
2,000 square foot single family home				
Average daily trips (ADT)			9.55	
PM peak-hour trips			1.02	
Current	\$1,620	\$5,200	\$2,044	\$8,864
Update	\$4,056	\$5,214	\$2,154	\$11,424
\$ change	\$2,436	\$14	\$111	\$2,560
% change	150%	0.3%	5.4%	28.9%
60-unit apartment (1,000 sf/unit)				
Meter size, inches of diameter		4		
Average daily trips (ADT)			6.28	
PM peak-hour trips			0.67	
Current	\$48,600	\$156,000	\$80,635	\$285,235
Update	\$121,680	\$156,408	\$84,902	\$362,990
\$ change	\$73,080	\$408	\$4,267	\$77,755
% change	150%	0.3%	5.3%	27.3%
100,000 square foot retail business with 50 plumbing fixtures				
Meter size, inches of diameter		2		
Average daily trips (ADT)			17.24	
PM peak-hour trips			3.9	
Current	\$6,209	\$57,654	\$368,936	\$432,799
Update	\$15,596	\$56,901	\$823,680	\$896,177
\$ change	\$9,387	(\$753)	\$454,744	\$463,378
% change	151%	-1.3%	123%	107%

WASTEWATER

The Wastewater SDC for residential developments increases from \$0.81/square foot to \$2.028/square foot. The current and updated Wastewater SDC for commercial developments is based on the number of plumbing fixtures. It increases from \$124 per plumbing fixtures currently to \$312 per plumbing fixture— a 151% increase.

Table 2. Updated Wastewater System Development Charges

Measurement	Current SDC			Proposed SDC			Change	
	Reimburse- ment	Improve- ment	Total	Reimburse- ment	Improve- ment	Total	\$	% Δ
Residential \$/Square feet	\$0.40	\$0.41	\$0.81	\$0.195	\$1.833	\$2.028	\$1.22	150%
Average Residential SDC [^]	\$800	\$820	\$1,620	\$389	\$3,665	\$4,054	\$2,435	150%
Commercial [†] \$/Plumbing fixture	\$60.79	\$63.39	\$124.18	\$29.92	\$282.00	\$311.92	\$187.74	151%

[^]Assumes 2,000 square feet and thirteen plumbing fixture units.

[†]Commercial SDC = \$/fixture unit.

WATER

The current and updated Water SDC for residential developments is assessed based on square footage of livable area. The Water SDC for residential developments increases from \$2.60/square foot to \$2.6069/square foot—a 0.3% increase. The SDC by displacement meter size decreases about 1.3%.

Table 3 shows the current and updated Water SDCs by meter technologies and capacities. Turbine meters are a recent technology and have a higher capacity than displacement meters as shown in Table 4. All but a few meters currently installed in the City are displacement and most new single-family residences will likely continue to use displacement meters. Non-residential developments are more likely in the future to choose turbine meters because they can deliver more water per minute than the same size displacement meters.

Table 3 Current and updated Water SDC (displacement meters)

	Current SDC	2014 2012 Master Plan Update with TAP & Crowson II			
		Reimbursement	Improvement	Total SDC	% Δ
Residential					
\$/habitable sf	\$2.60	\$0.93	\$1.68	\$2.61	0.30%
Commercial and Industrial (by displacement meter size)^					
5/8 x 3/4	\$4,940	\$1,793	\$3,084	\$4,877	-1.30%
3/4	\$8,250	\$2,989	\$5,140	\$8,129	-1.50%
1	\$16,452	\$5,976	\$10,281	\$16,257	-1.20%
1½	\$26,332	\$9,561	\$16,449	\$26,010	-1.20%
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4	\$205,866	\$74,704	\$128,509	\$203,213	-1.30%
6	\$296,424	\$107,573	\$185,054	\$292,627	-1.30%

Table 4. Updated Non-Residential Water SDC Based on Meter Capacities

Meter Size (inches)	Turbine			Displacement		
	Reimbursement	Improvement	Total	Reimbursement	Improvement	Total
5/8 x 3/4	\$1,793	\$3,084	\$4,877	\$1,793	\$3,084	\$4,877
3/4	3,586	6,168	9,754	2,994	5,151	8,145
1	5,970	10,270	16,240	4,787	8,235	13,022
1½	11,959	20,572	32,531	5,970	10,270	16,240
2	19,130	32,909	52,039	11,959	20,572	32,531
3	41,828	71,955	113,783	17,929	30,842	48,771
4	71,716	123,369	195,085	23,899	41,113	65,012
6	149,402	257,008	406,410	59,757	102,797	162,554
8	215,147	370,106	585,253	-	-	-

TRANSPORTATION

Table 5 shows the current and updated Transportation SDC. Since the method for determining and assessing this SDC has been changed from Average Daily Trips (ADT) to PM Peak-Hour Trips, the impact on most non-residential uses is significantly different than for residential developments. The Transportation SDC for a single-family residence increases from \$2,044 to \$2,154—a 5% increase.

Table 5. Updated Transportation System Development Charges

ITE Land Use	ITE Land Use Code	Unit^	Current		Update		Difference		
			Adjusted Avg. Weekday Trip Rate	\$ /ADT	PM Peak-Hour trip Rate	\$ /PM Peak-Hour trip	\$	%	
			Rate	\$214	Rate	\$2,112			
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Residential Condominium	230	DU	5.68	1,216.42	0.52	\$1,098.30	(\$118.12)	-10%	
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Bus Depot		1,000 sf GFA	25.00	5350	NA				
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City		Acres	45.00	9630	4.50	\$9,504.50	(\$125.50)	-1%	
Neighborhood		Acres	4.50	963	4.50	\$9,504.50	\$8,541.50	887%	
Amusement		Acres	72.00	15,408	4.50	\$9,504.50	(\$5,903.50)	-38%	
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			Day Care Center/Preschool	565	Student	1.06	229.00	0.84
Library	590	1,000 sf GFA	22.30	4,763.00	7.20	\$15,207.19	\$10,444.19	219%
Hospital	610	1,000 sf GFA	15.94	3,406.00	1.16	\$2,450.05	(\$955.95)	-28%
Nursing Home	620	Occupied Bed	2.47	528.58	0.37	\$781.48	\$252.90	48%
BUSINESS & COMMERCIAL								
Hotel/Motel	310	Occupied Room	4.50	963.48	0.74	\$1,562.96	\$599.48	62%
Building Materials/Lumber	812	1,000 sf GFA	11.23	2,403.39	5.56	\$11,743.33	\$9,339.94	389%
Specialty Retail Center	814	1,000 sf GFA	14.95	3,198.49	5.02	\$10,602.79	\$7,404.30	231%
Discount Stores	815	1,000 sf GFA	25.77	5,515.37	5.57	\$11,764.45	\$6,249.08	113%
Hardware/Paint Stores	816	1,000 sf GFA	18.85	4,033.70	4.74	\$10,011.40	\$5,977.70	148%
Nursery-Retail	817	1,000 sf GFA	13.26	2,837.51	9.04	\$19,093.47	\$16,255.96	573%
Shopping Center	820							
(under 50,000 sf GFA)	820	1,000 sf GFA	14.55	3,113.02	3.90	\$8,237.23	\$5,124.21	165%
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	15.12	3,236.16	3.90	\$8,237.23	\$5,001.07	155%
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	17.24	3,690.10	3.90	\$8,237.23	\$4,547.13	123%
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	17.89	3,828.96	3.90	\$8,237.23	\$4,408.27	115%
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	16.29	3,485.03	3.90	\$8,237.23	\$4,752.20	136%
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	15.03	3,216.54	3.90	\$8,237.23	\$5,020.69	156%
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	15.15	3,242.27	3.90	\$8,237.23	\$4,994.96	154%
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	29.26	6,262.45	18.49	\$39,052.91	\$32,790.46	524%
Fast Food Restaurant	833	1,000 sf GFA	36.09	7,722.72	47.30	\$99,902.80	\$92,180.08	1194%
New Car Sales	841	1,000 sf GFA	21.56	4,613.73	2.80	\$5,913.91	\$1,300.18	28%
		Gasoline						
Service Station	844	Pump	7.68	1,644.14	15.65	\$33,054.52	\$31,410.38	1910%
Supermarket	850	Employee	5.66	1,210.30	8.37	\$17,678.36	\$16,468.06	1361%

ITE Land Use	ITE Land Use Code	Unit^	Current		Update		Difference		
			Adjusted Avg. Weekday Trip Rate	\$ /ADT \$214	PM Peak-Hour trip Rate	\$ /PM Peak-Hour trip \$2,112	\$	%	
			Convenience Market	851	1,000 sf GFA	20.66	4,422.04	36.22	\$76,500.62
Convenience Market w/ Gas Pump	853	Gasoline Pump	13.68	2,927.85	19.98	\$42,199.96	\$39,272.11	1341%	
Apparel Store	870	1,000 sf GFA	11.49	2,459.23	4.20	\$8,870.86	\$6,411.63	261%	
Furniture Store	890	1,000 sf GFA	1.59	341.32	0.53	\$1,119.42	\$778.10	228%	
Bank/Savings: Walk-in	911	1,000 sf GFA	17.93	3,836.54	NA				
Bank/Savings: Drive-in	912	1,000 sf GFA	24.80	5,306.59	26.69	\$56,372.22	\$51,065.63	962%	
OFFICE									
Clinic	630	1,000 sf GFA	12.61	2,698.26	NA				
General Office									
(Under 100,000 sf GFA)	710	1,000 sf GFA	10.78	2,306.28	1.49	\$3,147.04	\$840.76	36%	
(100,000-199,999 sf GFA)	710	1,000 sf GFA	9.12	1,951.57	1.49	\$3,147.04	\$1,195.47	61%	
(200,000 sf GFA and over)	710	1,000 sf GFA	7.70	1,648.34	1.49	\$3,147.04	\$1,498.70	91%	
Medical Office Building	720	1,000 sf GFA	18.11	3,875.56	4.27	\$9,018.71	\$5,143.15	133%	
Government Office Bldg.	730	1,000 sf GFA	66.17	14,160.98	1.49	\$3,147.04	(\$11,013.94)	-78%	
State Motor Vehicles Dept	731	1,000 sf GFA	159.38	34,107.15	19.93	\$42,094.35	\$7,987.20	23%	
U.S. Post Office	732	1,000 sf GFA	83.64	17,897.93	14.67	\$30,984.65	\$13,086.72	73%	
Research Center	760	1,000 sf GFA	5.16	1,104.03	1.07	\$2,259.96	\$1,155.93	105%	
Business Park	770	1,000 sf GFA	9.63	2,060.37	1.26	\$2,661.26	\$600.89	29%	
INDUSTRIAL									
General Light Industrial	110	1,000 sf GFA	7.81	1,670.57	1.08	\$2,281.08	\$610.51	37%	
General Heavy Industrial	120	1,000 sf GFA	1.68	359.52	0.68	\$1,436.23	\$1,076.71	299%	
Industrial Park	130	1,000 sf GFA	7.81	1,670.57	0.84	\$1,774.17	\$103.60	6%	
Manufacturing	140	1,000 sf GFA	4.31	922.77	0.75	\$1,584.08	\$661.31	72%	

ITE Land Use	ITE Land Use Code	Unit^	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$ /ADT	PM Peak-Hour trip Rate	\$ /PM Peak-Hour trip	\$	%
				\$214		\$2,112		
Warehouse	150	1,000 sf GFA	5.47	1,169.64	0.45	\$950.45	(\$219.19)	-19%
Mini-Warehouse	151	1,000 sf GFA	1.23	262.51	0.22	\$464.66	\$202.15	77%
Utilities	170	Employees	1.06	226.84	NA			
Wholesale	860	1,000 sf GFA	3.30	705.71	0.52	\$1,098.30	\$392.59	56%

^DU = Dwelling Unit; GFA = Gross Floor Area; sf = Square Feet.

ITE Land Use	Code	Unit^	Current SDC		Updated SDC		Change	
			Rate	\$214	Rate	\$2,112	\$	%
OFFICE								
Clinic	630	1,000 sf GFA	12.61	\$,698.26	NA			
General Office								
(Under 100,000 sf GFA)	710	1,000 sf GFA	10.78	\$,306.28	1.49	\$3,147.04	\$840.76	36%
(100,000-199,999 sf GFA)	710	1,000 sf GFA	9.12	\$,951.57	1.49	\$3,147.04	\$1,195.47	61%
(200,000 sf GFA and over)	710	1,000 sf GFA	7.70	\$,648.34	1.49	\$3,147.04	\$1,498.70	91%
Medical Office Building	720	1,000 sf GFA	18.11	\$,875.56	4.27	\$9,018.71	\$5,143.15	133%
Government Office Bldg.	730	1,000 sf GFA	66.17	\$4,160.98	1.49	\$3,147.04	(\$11,013.94)	-78%
State Motor Vehicles Dept	731	1,000 sf GFA	159.38	\$4,107.15	19.93	\$42,094.35	\$7,987.20	23%
U.S. Post Office	732	1,000 sf GFA	83.64	\$7,897.93	14.67	\$30,984.65	\$13,086.72	73%
Research Center	760	1,000 sf GFA	5.16	\$,104.03	1.07	\$2,259.96	\$1,155.93	105%
Business Park	770	1,000 sf GFA	9.63	\$2,060.37	1.26	\$2,661.26	\$600.89	29%
INDUSTRIAL								
General Light Industrial	110	1,000 sf GFA	7.81	\$1,670.57	1.08	\$2,281.08	\$610.51	37%
General Heavy Industrial	120	1,000 sf GFA	1.68	\$359.52	0.68	\$1,436.23	\$1,076.71	299%
Industrial Park	130	1,000 sf GFA	7.81	\$1,670.57	0.84	\$1,774.17	\$103.60	6%
Manufacturing	140	1,000 sf GFA	4.31	\$922.77	0.75	\$1,584.08	\$661.31	72%
Warehouse	150	1,000 sf GFA	5.47	\$1,169.64	0.45	\$950.45	(\$219.19)	-19%
Mini-Warehouse	151	1,000 sf GFA	1.23	\$262.51	0.22	\$464.66	\$202.15	77%
Utilities	170	Employees	1.06	\$226.84	NA			
Wholesale	860	1,000 sf GFA	3.30	\$705.71	0.52	\$1,098.30	\$392.59	56%

^ DU = Dwelling Unit; GFA = Gross Floor Area; sf = Square Feet

RESOLUTION NO. 2016-

**A RESOLUTION ADOPTING NEW WASTEWATER SYSTEMS
DEVELOPMENT CHARGES, PURSUANT TO SECTION 4.20 OF THE
ASHLAND MUNICIPAL CODE, AND REPEALING RESOLUTION
2006-27.**

RECITALS:

- A. The current Wastewater System Development Charge was approved on 18 October 2006.
- B. The City adopted a new Comprehensive Sewer Master Plan April 17, 2012 that updates the previous master plan with new capital improvements and updated construction costs.

THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. The Wastewater System Development Charges report update and project list marked as Exhibit C, is adopted effective immediately.

SECTION 2. The methodology for Wastewater System Development charges, marked as exhibit B, is adopted, effective immediately.

SECTION 3. The System Development Charges Summary per exhibit A, is effective July 1, 2017.

SECTION 4. The existing System Development Charges project list & fee schedule for Wastewater adopted by Resolution 2006-27 is repealed, effective July 1, 2017.

This resolution was duly PASSED and ADOPTED this _____ day of _____, 2016, and takes effect upon signing by the Mayor.

Barbara Christensen, City Recorder

SIGNED and APPROVED this ____ day of _____, 2016.

John Stromberg, Mayor

Reviewed as to form:

David H. Lohman, City Attorney

EXHIBIT A

	Measurement	Reimbursement	Improvement	Total
Residential	\$/Square feet	\$0.195	\$1.833	\$2.028
Commercial†	\$/Plumbing fixture	\$29.92	\$282.00	\$311.92

Source: City of Ashland, *Wastewater System Development Charge Update* [Economic & Financial Analysis, July 2016], Table 1.

City of Ashland

**Wastewater and Water - System Development Charge Update
Methodology Summary
August 14, 2006**

Exhibit 'B'

**Prepared by
Shaun Pigott Associates, LLC**

**CITY OF ASHLAND
WASTEWATER AND WATER
SYSTEM DEVELOPMENT CHARGE UPDATE**

Process

This update of Ashland's system development charges (SDC) for wastewater and water was done in order to revise the SDCs based on recently completed facility plans for both utility systems. Also, as part of this update process; issues related to the current SDC structure were addressed through Ashland's SDC Committee. The Committee includes Darrel Boldt, Jac Nickels, Greg Williams, Larry Medinger, Russ Silbiger, Kerry KenCairn, and Connie Saldana. The SDC Committee has worked directly with staff and the City's consultant over the course of 6 meetings held between April 2005 through July 2006. The proposed revisions to the wastewater and water SDCs reflect the Committee's unanimous recommendations to the Ashland City Council.

For this update, the City and Committee had a number of objectives:

- Review the basis for the SDCs to ensure a consistent methodology;
- Develop a rationale and documentation for the reimbursement element of the SDC;
- Consider possible revisions to the structure or basis of the charge that might improve equity or proportionality to demand; and
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that City staff can, by reference, respond to questions or concerns from the public

Background

The City's SDC Ordinance No. 4.20 was originally adopted in 1992 and amended in 1996. The ordinance was designed for compliance with ORS 223.297-.314 (Oregon SDC statute) which mandates that all jurisdictions having SDCs adopt ordinances consistent with this Oregon law.

Actual SDC calculations have been adopted through a series of resolutions including Resolution No. 2000-29 "A Resolution Adopting New Water, Wastewater and Parks System Development Charge Schedules." This also served to repeal the SDCs set in 1996. For water and wastewater, the 1996 SDCs were based on fixture counts with a single-family home (17 fixtures) paying \$2,716 for water and \$2,255 for wastewater.

In 2000, this methodology was reviewed by the City through the SDC Committee for purposes of simplifying the calculation and eliminating the perceived or real inequity of a 1200 sq ft home paying the same SDC as a 3000 sq ft home. The objective was to simplify and make the calculation more predictable, easier to administer and to ensure that larger homes paid a proportionately larger SDC over smaller homes. The staff recommendation was to replace, for single family and multi family properties, the use of fixture counts with "habitable square footage" which equals the heated square footage of a house. This figure would be submitted as part of the plan review process and would be clear, easy to administer and charge larger houses proportionately more for their SDC. In order to achieve this last objective, the City developed a series of SDC brackets based on ranges of habitable square footage and assigned to these brackets a specific cost per square foot, with the cost per square foot within each bracket going up as the overall square footage increased. This calculation and the resulting brackets were designed to be "revenue neutral" in terms of the overall SDC revenue generated with this calculation vs. the 1996 fixture count approach. Under this 2000 revised approach, a "typical" average sized home would be charged a water SDC of \$3,362 (\$2,716 under old SDC) and a wastewater SDC of \$2,482 (\$2,255 under old SDC).

The City's revenue status for its water and wastewater SDC accounts, of which there are 5, is as follows:

- Overall SDC revenues for water in 2005 are budgeted at \$525,000; wastewater SDC revenues are budgeted in 2005 at \$438,000.
- Water SDCs are collected and tracked under distribution, treatment and supply. '05 fund balances are (\$1,442,000) for supply, \$776,000 for treatment and \$2,643,000 for distribution.
- Wastewater SDCs are collected and tracked under two categories; collection and treatment. The adopted 2005 budget shows a fund balance of \$1,439,000 for collection and (\$77,000) for treatment.

Specific SDC Committee Recommendations

- The City's use of "habitable square footage" for wastewater and water SDC calculation differs from the generally accepted approach used in Oregon which is either meter size and/or fixture counts. However, ORS 223 does not mandate any specific calculation approach so long as the allocation methodology selected "promotes that future system users contribute no more than an equitable share to the cost of existing facilities" AND "the cost of projected capital improvements needed to increase the capacity of the systems" is the basis for the charge. The SDC Committee did feel the use of habitable square footage was consistent with the City's objectives for promoting smaller home construction in the City and recommended that it be continued. However, the use of numerous brackets in applying habitable square footage was considered counterproductive and the Committee recommended a uniform cost per habitable square foot.

-
- The City has funded the construction of its new wastewater treatment plant through food and beverage tax receipts. This source of funding is not affected by existing wastewater customers nor can an SDC designed to reimburse the utility (and its customers) for its costs in providing capacity be applied when the treatment facilities are paid through a food and beverage tax. Accordingly, the reimbursement portion of the wastewater SDC does not include the treatment costs paid through the food and beverage tax.
 - The City currently maintains 5 distinct SDC funds for wastewater and water. Under wastewater there are SDC funds for treatment and collection. Under water, there are separate SDC funds for distribution, treatment and supply. The Committee recommends that these 5 funds be reduced to 2, one for wastewater and one for water. Any concerns about loss of accountability by reducing the number of funds can be offset by annually reconvening the SDC Committee to review the City's year-end report on SDC receipts, expenditures and capital project list. The SDC Committee did volunteer their time for these annual meetings.
 - Ashland's 2000 water and wastewater SDCs are based on projects that were updated from the 1996 SDC study. The City now has updated facility plans and CIPs for both utilities. For this SDC update, each of these projects has been reviewed in terms of purpose, cost, and allocation between existing ratepayers and SDC eligibility. The SDC Committee spent the majority of its time reviewing the capital project lists and capacity allocations for each of the wastewater and water projects. These individual projects and their allocation to growth are now part of the City's SDC methodology.

SDC Methodology and Calculation

The City's uses distinct allocators for future commercial water and wastewater connections to the systems. These allocators are meter equivalents and fixture counts respectively. The capital costs determined to be SDC eligible were divided between the commercial and single family residential users based on the total current meter equivalents in service for water; 78.4% are single family residential (SFR) and 21.6% are commercial. For wastewater, the basis for allocation was the average dry weather flow from these two customer groups; 73.64% is SFR and 26.36% is commercial.

Under ORS 223, there are two elements to an SDC:

The **reimbursement fee** considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is that "future system users contribute no more than an equitable share to the cost of existing facilities." The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.

City of Ashland, Oregon
 Calculation of Water System Development Charges
Reimbursement Fee Derivation

	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
Current Equivalent 3/4" Meters in Service	7,114	1,960	9,074
Percentages	78.40%	21.60%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Original Cost	25,859,286.21	7,124,571.41	32,983,857.62
less: Accumulated Depreciation	(7,398,192.23)	(2,038,298.68)	(9,436,490.91)
less: Book Value of the Hosler Dam	(59,779.87)	(16,470.13)	(76,250.00)
less: Grants	-	-	-
less: Developer Contributions	-	-	-
less: Principal Outstanding on Long Term Debt			
Series 1977 Water General Obligation Bonds	(78,399.82)	(21,600.18)	(100,000.00)
Series 1997 Flood and Refunding Bonds	(944,717.88)	(260,282.12)	(1,205,000.00)
Series 2003 Water Revenue Bonds	(4,139,510.69)	(1,140,489.31)	(5,280,000.00)
Net Rate Payer Investment in Capacity Available to Serve Growth	13,238,685.73	3,647,430.98	16,886,116.71
Calculation of Future Demand:			
20 Year Forecast...Residential Habitable Area (Square Feet)	18,167,889		
20 Year Forecast...Commercial Equivalent Meters		2640	
Calculated Water Reimbursement Fee:			
Residential - \$/square foot of habitable area	\$ 0.7287		
Commercial/Institutional - \$ Equivalent 3/4" meter		\$ 1.362	

City of Ashland, Oregon
 Calculation of Wastewater System Development Charges
Reimbursement Fee Derivation

	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
20-Year Plan (Year 2023) Average Dry Weather Wastewater Flow (MGD)*	1.90	0.68	2.58
Average Dry Weather Flow Percentages	74%	26%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Original Cost	\$ 36,643,246	\$ 13,114,425	\$ 49,757,671
less: Accumulated Depreciation	(4,050,653)	(1,449,707)	(5,500,360)
less: Grants	-	-	-
less: Contributed Capital (City food and beverage tax receipts)	(8,785,659)	(3,144,341)	(11,930,000)
less: Principal Outstanding on Long Term Debt:			
EPA/DEQ State Revolving Loan Program (fed. CFDA No. 66.458)	(16,632,189)	(5,952,573)	(22,584,762)
Net Rate Payer Investment in Capacity Available to Serve Growth	\$ 7,174,745	\$ 2,567,804	\$ 9,742,549
Calculation of Future Demand:			
20 Year Forecast...Residential Habitable Area (Square Feet)	18,167,889		
20 Year Forecast...Commercial Fixture Counts		42,237	
Calculated Sanitary Sewer Reimbursement Fee:			
Residential - \$/square foot of habitable area	\$ 0.3849		
Non-residential - \$/fixture unit		\$ 60.79	

The **improvement fee** portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the City's capital improvement plan was reviewed to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. The improvement SDC is calculated as a function of the estimated number of additional units to be served by the City's facilities over the planning period.

City of Ashland, Oregon Calculation of Water System Development Charges Improvement Fee Derivation			
	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
Current Equivalent 3/4" Meters in Service	7,114	1,960	9,074
Percentages	78.40%	21.60%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Future Project Costs Attributable to Growth:			
TAP beyond Talent	\$ 3,189,893	\$ 878,857	\$ 4,068,750
Transmission Line (Reeder to Plant)	771,216	212,480	983,696
Hosler Dam Stability Analysis	-	-	-
Lost Creek Water Rights (additional)	391,999	108,001	500,000
Hosler Dam Security and Telemetry	29,400	8,100	37,500
Sludge Lagoon Improvements	9,408	2,592	12,000
Water Treatment Plant Filter Improvements	47,040	12,960	60,000
Review Chlorine-Hypochloride	58,800	16,200	75,000
Plant and Process Improvements	188,160	51,840	240,000
Filters 7 and 8 New	343,979	94,771	438,750
Waterline Replacement - Granite	108,388	29,862	138,250
Fire Flow Distribution Reservoir	194,040	53,460	247,500
Crowson-Airport-E. Main Loop	38,416	10,584	49,000
Replace Steel Line Terrace; Irrigation Ditch to Lowe	27,440	7,560	35,000
Upsize Lines at Maple, Scenic & Chestnut	49,000	13,500	62,500
Replace Line Strawberry to Grandview	19,600	5,400	25,000
Upsize Mains on Wimer-Sunnyview	49,000	13,500	62,500
New Line Benson Loop	38,416	10,584	49,000
Upsize Lines - Euclid, Prospect, Fern, Roca	53,900	14,850	68,750
Upsize Mains on Tolman Creek	73,500	20,250	93,750
Replace Steel Line on Siskiyou	31,360	8,640	40,000
Internal 4" Line Upsizing	137,200	37,800	175,000
Other Line Upsizing	147,000	40,500	187,500
Engineering Cost	1,045,187	287,963	1,333,150
Construction Mgmt Contingency	1,352,757	372,702	1,725,459
Total Growth Related Costs	\$ 8,395,096	\$ 2,312,959	\$ 10,708,055
Calculation of Future Demand:			
20 Year Forecasted Growth in Residential Habitable Area (Square Feet)	4,476,432		
20 Year Forecasted Growth in Equivalent Meters		650	
Calculated Water Improvement Fee:			
Residential - \$/square foot of habitable area	\$ 1.8754		
Non-residential - \$/equivalent 3/4" meter		\$ 3,558.40	

City of Ashland, Oregon
 Calculation of Wastewater System Development Charges
 Improvement Fee Derivation

	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
20-Year Plan (Year 2023) Average Dry Weather Wastewater Flow (MGD)*	1.90	0.68	2.58
Average Dry Weather Flow Percentages	73.64%	26.36%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Future Project Costs Attributable to Growth:			
New Membrane Sections	\$ 32,219	\$ 11,531	\$ 43,750
Process Improvements	36,822	13,178	50,000
Thermal Improvements	92,054	32,946	125,000
North Mountain Park	231,977	83,023	315,000
Wightman to Tolman	187,791	67,209	255,000
Collection System Master Plan Update	84,690	30,310	115,000
Granite Street	12,151	4,349	16,500
North Main Pump Station Replacement	24,855	8,895	33,750
Walnut: Grant - Wimer	17,453	6,247	23,700
Street Line Upsize/Replacement	100,523	35,977	136,500
Oak Street Lithia to A	30,930	11,070	42,000
Mountain Ave. Upsize	42,345	15,155	57,500
Willow Street Upsize and Replace	19,147	6,853	26,000
Hersey Street Upsize and Replace	16,938	6,062	23,000
In-House Line Replace and Upsize	88,372	31,628	120,000
Collection System Improvements	110,465	39,535	150,000
Engineering Cost	317,403	113,597	431,000
Construction Mgmt & Contingency	397,251	142,174	539,425
Total Growth Related Costs	\$ 1,843,387	\$ 659,738	\$ 2,503,125
Calculation of Future Demand:			
20 Year Forecasted Growth in Residential Habitable Area (Square Feet)	4,476,432		
20 Year Forecasted Growth in Commercial Fixture Counts		10,407	
Calculated Sanitary Sewer Improvement Fee:			
Residential - \$/square foot of habitable area	\$ 0.4118		
Non-residential - \$/fixture unit		\$ 63.39	

* Source: City of Ashland, Sanitary Sewer Collection System Master Plan, Final Report, January, 2005, Table 2.5 - Summary of Population and Flow Projections

Based on the SDC Committee's review of the water and wastewater project lists and the allocation methods felt to be most consistent with the City's policy objectives, the following are the Committee's SDC recommendations:

Wastewater SDC

Current - SDC is \$2,707 for a "typical" 2,000 habitable square foot home

Proposed - SDC would be \$1,613 for a "typical" 2,000 habitable square foot home

This reduction of the SDC for wastewater is due to a significantly downsized allocation of capital facility costs to growth and the removal of the treatment plant funded through food and beverage tax receipts from the reimbursement element of the SDC. It should be highlighted that the food and beverage tax is due to sunset in 2010. If these tax revenues are no longer available to fund the wastewater treatment plant, the debt service for this facility would need to be paid through a combination of increased wastewater rates and increased SDCs.

The SDC for commercial properties will be based on fixture counts (number of toilets, sinks, etc) at a rate of \$124 per fixture. A commercial property having, as an example, 16 fixtures would pay a wastewater SDC of \$1,984.

Water SDC

Current - SDC is \$3,667 for a "typical" 2,000 habitable square foot home

Proposed - SDC would be \$5,208 for a "typical" 2,000 habitable square foot home

This increase in the SDC results from evaluation of each project identified in City's water CIP and a more accurate allocation of these project costs between growth and current water utility customers.

The SDC for commercial properties will be based on meter size and flow factor/meter equivalence as established by the American Water Works Association (AWWA) standard for cold water meters - displacement type. As an example a ¾" meter will pay \$4,940; 1" meter \$8,250; 1.5" meter; 1.5" meter \$16,450.

RESOLUTION NO. 2006- 11

A RESOLUTION ADOPTING THE ANNUAL BUDGET AND MAKING APPROPRIATIONS

The City of Ashland resolves that the 2006-2007 Fiscal Year Budget, now on file in the office of the City Recorder is adopted. The amounts for the fiscal year beginning July 1, 2006, and for the purposes shown below are hereby appropriated as follows:

SECTION 1.

GENERAL FUND	
Administration Department	\$ 253,780
Administrative Services - Municipal Court	395,035
Administrative Services - Social Services Grants	115,360
Administrative Services - Economic & Cultural Grants	504,650
Administrative Services - Miscellaneous	7,000
Administrative Services - Band	61,554
Police Department	5,325,774
Fire and Rescue Department	5,262,372
Public Works - Cemetery Division	355,375
Community Development - Planning Division	2,313,591
Community Development - Building Division	801,756
Transfers	500
Contingency	400,000
TOTAL GENERAL FUND	15,796,747
COMMUNITY DEVELOPMENT BLOCK GRANT FUND	
Personal Services	35,485
Materials and Services	385,765
Other Financing Uses (Interfund Loans)	215,000
TOTAL CDBG FUND	636,250
STREET FUND	
Public Works - Street Operations	4,060,268
Public Works - Storm Water Operations	739,870
Public Works - Transportation SDC's	274,850
Public Works - Storm Water SDC's	47,500
Public Works - Local Improvement Districts	343,498
Contingency	153,000
TOTAL STREET FUND	5,618,986
AIRPORT FUND	
Materials and Services	111,532
Debt Service	35,173
Contingency	5,000
TOTAL AIRPORT FUND	151,705
CAPITAL IMPROVEMENTS FUND	
Personal Services	152,407
Materials and Services	394,750
Capital Outlay	3,058,000
Transfers	905,434
Other Financing Uses (Interfund Loans)	530,000
Contingency	50,000
TOTAL CAPITAL IMPROVEMENTS	5,088,591
DEBT SERVICE FUND	
Debt Service	1,656,170
TOTAL DEBT SERVICE FUND	1,656,170

WATER FUND

Electric - Conservation Division	172,005
Public Works - Forest Lands Management Division	198,000
Public Works - Water Supply	3,020,879
Public Works - Water Treatment	1,400,354
Public Works - Water Distribution	3,264,112
Public Works - Reimbursement SDC's	467,670
Public Works - Improvement SDC's	702,580
Public Works - Debt SDC's	123,932
Debt Services	544,457
Contingency	152,000
TOTAL WATER FUND	10,043,989

WASTEWATER FUND

Public Works - Wastewater Collection	2,240,657
Public Works - Wastewater Treatment	2,022,260
Public Works - Reimbursement SDC's	192,160
Public Works - Improvement SDC's	108,090
Debt Services	1,793,196
Contingency	149,000
TOTAL WASTEWATER FUND	6,505,363

ELECTRIC FUND

Electric - Conservation Division	976,645
Electric - Supply	6,557,504
Electric - Distribution	5,189,851
Electric - Transmission	1,048,600
Contingency	381,000
TOTAL ELECTRIC FUND	14,153,600

TELECOMMUNICATIONS FUND

IT - Customer Relations\Promotions	223,608
IT - Cable Television	478,746
IT - Internet	776,310
IT - High Speed	301,179
Contingency	100,000
TOTAL TELECOMMUNICATIONS FUND	1,879,843

CENTRAL SERVICES FUND

Administration Department	998,925
Administrative Services Department	1,919,524
IT - Computer Services Division	982,388
City Recorder Division	269,768
Public Works - Administration and Engineering	1,488,463
Contingency	171,000
TOTAL CENTRAL SERVICES FUND	5,830,068

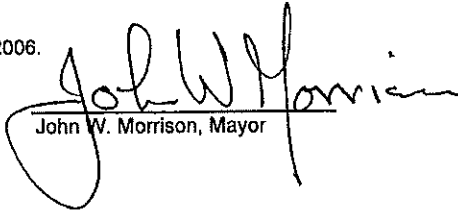
INSURANCE SERVICES FUND	
Personal Services	400,000
Materials and Services	661,291
Contingency	32,000
TOTAL INSURANCE SERVICES FUND	<u>1,093,291</u>
EQUIPMENT FUND	
Personal Services	266,476
Materials and Services	519,955
Capital Outlay	1,415,000
Contingency	42,000
TOTAL EQUIPMENT FUND	<u>2,243,431</u>
CEMETERY TRUST FUND	
Transfers	19,000
TOTAL CEMETERY TRUST FUND	<u>19,000</u>
PARKS AND RECREATION FUND	
Parks Division	3,868,250
Recreation Division	962,200
Golf Division	416,000
Transfers	110,000
Contingency	35,000
TOTAL PARKS AND RECREATION FUND	<u>5,391,450</u>
YOUTH ACTIVITIES LEVY FUND	
Personal Services	96,000
Materials and Services	2,335,361
TOTAL YOUTH ACTIVITIES LEVY FUND	<u>2,431,361</u>
PARKS CAPITAL IMPROVEMENTS FUND	
Capital Outlay	331,000
TOTAL PARKS CAPITAL IMP. FUND	<u>331,000</u>
TOTAL APPROPRIATIONS	<u><u>\$ 78,870,845</u></u>

SECTION 2. This Resolution takes effect upon signing by the Mayor.

This resolution was read by title only in accordance with Ashland Municipal Code § 2.04.090 and duly PASSED and ADOPTED this 6 day of June, 2006.


Barbara Christensen, City Recorder

Signed and Approved on this 7 day of June, 2006.


John W. Morrison, Mayor

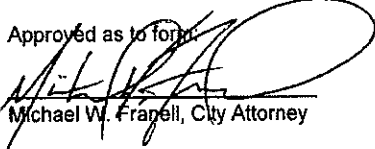
Approved as to form:

Michael W. Frapell, City Attorney

EXHIBIT C

City of Ashland, Oregon

WASTEWATER:

SYSTEM DEVELOPMENT CHARGE UPDATE

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

Vancouver, WA

July 2016

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INTRODUCTION

The City of Ashland contracted with Keller & Associates, Inc. to develop a comprehensive master plan for the wastewater utility. As part of that planning effort, Keller & Associates retained Economic & Financial Analysis (EFA) to update the City’s wastewater system development charge (SDC). Keller’s final *Comprehensive Sanitary Sewer Master Plan* for the City was adopted by City Council on May 15, 2012.¹

The City’s current wastewater SDC consists of both a reimbursement fee and an improvement fee as allowed by Oregon state law (ORS 223.297–223.314, as amended). This SDC update relies on Keller’s *2012 Master Plan* to update both fees.

SUMMARY

In this report, EFA provides two options for updating the wastewater SDC: one based on the current methodology and an alternative based on the capacity of the water meter installed. Both methodologies use the SDC for an average single-family residence as the basis for the SDC—i.e., all developments are assessed an SDC proportionate to the SDC for a single-family residence, which is the same for both methodologies. The SDC Task Force recommended updating the current methodology and *not* changing to the meter-size methodology. Table 1 shows the current and updated Wastewater SDC which increases 150% for residential developments and 151% for commercial developments.

Table 1 Current and updated Wastewater SDC

Measurement	Current SDC			updated SDC			Change	
	Reimburse-ment	Improve-ment	Total	Reimburse-ment	Improve-ment	Total	\$	% Δ
Residential \$/Square feet	\$0.40	\$0.41	\$0.81	\$0.195	\$1.833	\$2.028	\$1.22	150%
Average Residential SDC [^]	\$800	\$820	\$1,620	\$389	\$3,665	\$4,054	\$2,435	150%
Commercial [†] \$/Plumbing fixture	\$60.79	\$63.39	\$124.18	\$29.92	\$282.00	\$311.92	\$187.74	151%

CURRENT WASTEWATER SDC

The current schedule of SDCs was last updated in 2006. The current methodology relies on separate forecasts of wastewater flows for residential and commercial uses, and it assumes the following:

- (a) For residential development, a relationship between sewage flow and the size of the residence as measured by square feet of habitable (heated) area.

¹ Further references to the Keller master plan appear in this report as the *2012 Master Plan*.

- (b) For commercial developments, the number and type of plumbing fixture units² bear a direct relationship to the amount of sewage flow.

The current residential SDC is based on the assumption that new residences have an average of 2,000 square feet of habitable space and thirteen plumbing fixtures. As shown in table 3, this average is maintained proportionately throughout the schedule of SDCs. This method does not distinguish between single-family and multifamily residences. For example, a 1,000-square-foot apartment pays the same SDC as a 1,000-square-foot single-family residence, and both pay one-half as much as a 2,000-square-foot residence.

Table 2. Current Wastewater SDC

	Current SDC		
	Reimbursement	Improvement	Total SDC
Residential			
\$/square foot	\$0.40	\$0.41	\$0.81
square feet [^]			
1,000	\$400	\$410	\$810
1,500	600	615	\$1,215
2,000†	800	820	\$1,620
2,500	1,000	1,025	\$2,025
3,000	1,200	1,230	\$2,430
3,500	1,400	1,435	\$2,835
Commercial			
\$/fixture unit	\$61	\$63	\$124

[^] Residential SDCs are assessed in increments of 1 square foot. This schedule includes only a few examples of residential SDCs based on a range of dwelling sizes.

[†] Average single-family residence.

This method of assessing SDCs raises several issues:

1. The *2012 Master Plan* provides a forecast of sewage flows and determines the capacity of the wastewater system. It does not provide a forecast of habitable square feet or separate capacity by residential and commercial use—both of which are key components of the current methodology.
2. Although a rough correlation likely exists between housing size and the number of fixture units, an exact correlation has not been established.
3. As we show later in the report, apartments produce significantly less sewage flow than single-family residences; however, the SDC per size of residence is the same for all types of residences.

² The international, national, and state plumbing codes establish an average discharge of wastewater from various types of plumbing fixtures. For example, a bathroom sink is rated as one fixture unit, while a modern flush toilet in a residence is rated as two fixture units.

4. SDCs are assessed when a property owner or developer applies for a building permit. Permits are taken for new construction and major remodels. This may not capture the change in fixture types and numbers for commercial uses and may miss some residential remodels that increase the square footage of habitable area (e.g., converting a garage or storage space to living space).
5. It is difficult to track installation of additional fixture units and livable square footage, and changes in the type of development—e.g., residential to commercial, or mixed residential/commercial developments.

These issues are acceptable limitations on the City’s ability to equitably assess the SDC. Using fixture units is a common method used by Oregon municipalities. Size of residences is also commonly used. However, we present an alternative that is easier to apply and maintains a similar degree of equity among customer classes by using the capacity of the water meter to be installed at the development.

UPDATED WASTEWATER SDC

The City’s sewer system is comprised of two primary components: a collection system and a treatment system. The collection system was built in part by private land developers and contributed to the City and in part by the City and financed with sewer rate revenues. The City’s fixed asset records (see appendix B) show that the wastewater treatment plant (WWTP) comprises nearly 76% of the total book value of the sewer system. The remaining 24% is composed of the land the WWTP occupies and portions of the collection system that were publicly financed. Most of the public’s investment in the sewer system is in the WWTP, and about 83% of the cost of the projects listed in the *2012 Master Plan* are for the WWTP. The measure of sewage service capacity we use to develop this update of the SDC is based on capacities at the WWTP.

Table 4 shows the five major components of the WWTP, their current (2012) and future (2030) capacities, and current and future sewage flows. Each of these components is designed to meet one of four flow conditions: peak hour, maximum month, peak day, and maximum dry month flows. Together these five components will meet the forecast sewage flows in all seasons of the year for a forecast population of 24,716 in 2030. The flows and capacities are measured in millions of gallons per day (mgd).

The sewer system is fundamentally designed to carry the sewage load from customers’ plumbing systems, which is most accurately measured by the maximum dry month flow. The maximum dry month capacities are therefore used as the basis for calculating the SDC. Peak flows correlate with peak periods of precipitation (inflow) and high ground water (infiltration) that usually occur in winter during periods of heavy rain or runoff caused by snowmelt.³ These flows are at a low during the maximum dry month period.

Table 3. 2012 and 2030 Design Capacities and Sewage Flows

Plant process	Design Condition	Flow (mgd)		Capacity (mgd)			
		2012	2030	2012		2030	
		Current Flow	Future Flow	Current Capacity	Excess Capacity	Future Capacity	Increased Capacity

³ *2012 Master Plan*, pp. 4–6.

Headworks	Peak Hour	10.5	11.81	13.50	3.00	13.50	-
Oxidation ditch	Max Month	3.6	4.24	3.76	0.16	5.64	1.88
Clarifiers	Peak Day	7.1	8.03	11.87	4.77	11.87	-
UV disinfection	Peak Day	7.1	8.03	11.00	3.90	11.00	-
Membranes	Max Dry Month	2.7	3.18	2.87	0.17	3.18	0.31

In the next two sections, we describe the two-step process used to update the SDC.

- (1) In step one, we calculate the base reimbursement fee and base improvement fee. Both fees are expressed in dollars per gallon (\$/gallon) of sewage treatment capacity.
- (2) In step two, we assess the SDC using two methodologies: the current methodology, which is based on the type of development, and an alternative methodology that is based on water meter size and average residential usage.

Reimbursement Fee

The intent of the reimbursement fee is to charge new developments the cost of using the existing assets. The value of these assets is derived from two factors: the value of the fixed asset and a measure of the asset’s excess capacity. The base reimbursement fee is derived from the current book value of the sewer system and the current maximum dry weather capacity of the WWTP.

Value of Existing Assets

We use the City’s current methodology to value the existing fixed assets summarized in table 5. This method uses the depreciated the original cost of the assets (book value), which is used as the cost basis for calculating the reimbursement fee. This is the most conservative method used by Oregon municipalities to determine a cost basis.

In 2002 and 2003, the City made major improvements to the WWTP. These assets are not included in the reimbursement fee, because the City borrowed money to construct these assets and elected to repay the loan with revenues from its food and beverage tax rather than sewer rate revenues.

The balance of the existing assets was financed by the City’s rate payers prior to 2002 and after 2003. These assets provide the basis for the reimbursement fee. As shown in table 5, the original cost basis of these assets is approximately \$15.18 million. The depreciated book value of approximately \$8.87 million is used as the cost basis to calculate the reimbursement fee.

Excess Capacity of Existing Assets

Engineers design the sewage collection system to carry the maximum flow of sewage for each sub-basin the system serves. The capacity of the WWTP is the upper limit on how much sewage can flow through the collection system. The *2012 Master Plan* lists this capacity as 2.87 mgd, while sewage flows are about 2.7 mgd on average (a net reduction over the five-year study period).⁴ The excess capacity of the existing system is therefore 0.17 mgd or about 6% of the total capacity.

As shown in table 5, the base reimbursement fee is calculated by dividing the book value of the existing assets (\$8.87 million) by the capacity of the assets (2.87 mgd). The result is a base reimbursement fee of

⁴ *2012 Master Plan*, Table 4.3, pp. 4–3.

\$3.09/gallon. This will be applied to all future development based on the development's expected sewage flow, which we discuss following the discussion of the base improvement fee.

Table 4. Cost Basis for Reimbursement Fee

Depreciated Original Cost ⁵	Original Cost Basis	As of June 30, 2011	
		Accumulated Depreciation	Book Value
Total Existing Fixed Assets [^]	\$49,410,520	(\$12,911,740)	\$36,498,781
less 2002–2003 WWTP assets [†]	\$34,231,375	(\$6,604,878)	\$27,626,497
Balance of Assets (Cost Basis for Reimbursement Fee)	\$15,179,145	(\$6,306,862)	\$8,872,284
Average Dry Weather Flow (gpd)			2,870,000
Base Reimbursement Fee (\$/gallon)			\$3.09

Source: City of Ashland fixed assets records (see appendix B).

[^] Assets placed in service before 1970 were discounted to zero. Land values are at their original purchase price.

[†] The 2002–2003 improvements to the wastewater treatment plant were financed by the City's food and beverage tax. These assets are not included in the reimbursement fee.

Improvement Fee

The base improvement fee is derived from the schedule of capital improvements listed in the *2012 Master Plan*⁶ and the resulting increase in capacity. For purposes of this update, the fee is based on projects that will be needed over the next twenty years (see table 6), assuming a growth rate of 0.7% per year. Priority 3 projects that are scheduled for completion after 2030 are deemed too speculative to include in this SDC update.

In the *2012 Master Plan*, the engineer allocated the cost of capital improvements to growth and to the current City's sewer customers. Of the \$23.369 million of planned improvements (2012 dollars),

⁵ In addition to depreciated original cost, the cost basis for the reimbursement fee can also be determined using the current estimated replacement cost or the current replacement cost adjusted for depreciation. These alternatives would increase the cost basis from \$8.87 million to \$27.96 million or to \$14.87 million, respectively.

Alternative Cost Basis for Reimbursement Fee	2011 Cost basis	2011 \$	
		Inflated Accum. Depreciation	Net Inflated Book Value
Depreciated Replacement Cost			
Value of existing fixed assets	\$75,388,238	(\$22,242,700)	\$53,145,538
less 2002–2003 WWTP assets	\$47,427,300	(\$9,150,500)	\$38,276,800
Balance of assets (Cost Basis for Reimbursement Fee)	\$27,960,938	(\$13,092,200)	\$14,868,738
Average dry weather flow (gpd)	2,870,000		2,870,000
Cost per gallon	\$9.74		\$5.18

[†]The 2002–2003 improvements to the wastewater treatment plant were financed by the City's food and beverage tax. These assets are not included in the reimbursement fee.

⁶ *2012 Master Plan*, table 14.1, pp. 14-4.

approximately \$9.017 million is to expand capacity for future residential and commercial growth, which is the cost basis for the improvement fee. The remaining approximately \$14.352 million is to repair and replace existing components of the treatment and collection systems that are expected to fail during the twenty-year forecast period or to be necessary to meet compliance with federal and state water quality standards. These improvements will be paid from sewer rates and taxes.

Once all the improvements are completed over the forecast period, the wastewater system will have a total capacity of 3.18 mgd—an increase of 310,000 mgd. The base improvement fee is the cost of this new capacity or \$29.09 per gallon (see table 7).

Table 5. Allocation of Future Capital Improvements to Growth

Project Description	Primary Purpose	Total Estimated Cost	Growth Apportionment		City's Est. Portion	
			%	Cost		
Priority 1 Improvements (2012–2020)						
Wastewater Treatment						
1	Outfall relocation/fish screen	Compliance	\$856,000	15%	\$128,400	\$727,600
2	Shading—capital cost + first Six years of O&M	Compliance	\$1,646,000	15%	\$246,900	\$1,399,100
3	UVT Monitor	Compliance	Completed	0%	\$0	\$0
4	Backup (portable) pump	Capacity	\$60,000	0%	\$0	\$60,000
5	Membrane replacement (two trains)	Replacement	\$1,248,000	0%	\$0	\$1,248,000
6	Oxidation ditch shell	Capacity	\$4,000,000	39%	\$1,560,000	\$2,440,000
7	RAS pump replacement	Capacity	\$90,000	20%	\$18,000	\$72,000
8	Wastewater master plan update	Update	\$125,000	100%	\$125,000	\$0
Wastewater Collection System						
1A	18" and 24" parallel trunkline along creek	Capacity	\$1,248,000	70%	\$873,600	\$374,400
1B	15" main along Mountain Ave.	Capacity	\$118,000	25%	\$29,500	\$88,500
1C	Oak St. 24" trunkline	Capacity	\$40,000	15%	\$6,000	\$34,000
1D	A St. 15" main	Capacity	\$522,000	10%	\$52,200	\$469,800
1E	12" main along railroad	Capacity	\$275,000	57%	\$156,750	\$118,250
1F	12" Siskiyou Blvd. main	Capacity	\$73,000	46%	\$33,580	\$39,420
1G	Miscellaneous upgrades	Various	\$335,000	10%	\$33,500	\$301,500
1H	Portable flow meters	Operations	\$60,000	0%	\$0	\$60,000
1J	Storm water inflow study (2012–2013)	Capacity	\$60,000	0%	\$0	\$60,000
Total Priority 1 Improvements			\$10,756,000		\$3,263,430	\$7,492,570
Priority 2 Improvements (2020–2030)						
Wastewater Treatment						
1	Membrane replacement (larger membranes)	Capacity/ replacement	\$4,659,000	40%	\$1,863,600	\$2,795,400
2	Membrane feed pumps and piping replacement	Capacity	\$507,000	80%	\$405,600	\$101,400
3	Additional UV reactors and Upgrade control panels	Capacity	\$351,000	100%	\$351,000	\$0
4	Mechanical bar screen replacement	Replacement	\$496,000	20%	\$99,200	\$396,800

Project Description	Primary Purpose	Total Estimated Cost	Growth Apportionment		City's Est. Portion
			%	Cost	
5 Grit removal system replacement	Replacement	\$801,000	20%	\$160,200	\$640,800
6 Oxidation ditch internals	Capacity	\$2,150,000	100%	\$2,150,000	\$0
7 Existing oxidation ditch Equipment replacement	Replacement	\$1,551,000	0%	\$0	\$1,551,000
8 Clarifier mechanism replacement	Replacement	\$324,000	0%	\$0	\$324,000
9 Replace Ashland creek lift station Pumps with larger pumps	Capacity	\$353,000	80%	\$282,400	\$70,600
8 Wastewater master plan update	Update	\$125,000	100%	\$125,000	\$0
Wastewater Collection System					
2A 12" pipeline on Nevada St.	Capacity	\$217,000	38%	\$82,460	\$134,540
2B 8" slope correction on Walker Ave.	Operations	\$168,000	28%	\$47,040	\$120,960
2C 12" pipeline on Wightman St.	Capacity	\$172,000	66%	\$113,520	\$58,480
2D Miscellaneous upgrades	Various	\$739,000	10%	\$73,900	\$665,100
Total Priority 2 Improvements		\$12,613,000		\$5,753,920	\$6,859,080
Total All Wastewater Improvements		\$23,369,000		\$9,017,350	\$14,351,650

Source: 2012 Master Plan, table 14.1. Priority 3 projects are not included in this update of the SDC and are therefore omitted from this table.

Table 6. Cost Basis for Improvement Fee

Cost Basis	
Cost Basis, Priority 1 and 2 projects	\$9,017,350
Average Dry Weather Flow (gpd)	
Current	2,870,000
Growth	310,000
Future Design, Priority 1 and 2 Projects	3,180,000
Base Improvement Fee (\$/gallon)	<u>\$29.09</u>

Together, the base reimbursement and improvement fees total \$32.18/gallon.

Next, we discuss how the base fee can be applied to a specific residential or commercial development using the current methodology or the alternative methodology.

Calculation of SDC Schedules

Current Methodology

The current SDC for both residential and commercial development is based on an average residence, which the City defines as having 2,000 square feet of habitable area and thirteen plumbing fixture units. The cost basis for residential development is \$/square foot, while the commercial cost basis is \$/fixture unit. This equates to a cost of \$2.02 per square foot (\$4,054 divided by 2,000) and \$312/fixture unit (\$4,054 divided by thirteen).

According to the City's 2011 wastewater utility billing records, the average winter usage for a single-family household on a 5/8" x 3/4" meter is 3,780 gallons per month. At an average of 2.1 persons per household (2010 US Census), sewage production is approximately 60 gallons per capita per day.

The current methodology uses this residential average to calculate both the residential base fee (per square foot) and the commercial base fee (per plumbing fixture unit).

Residential Base Fee (\$/Square Foot)

The SDC of \$4,054 divided by 2,000 square feet results in a fee of \$2.028 per square foot of habitable residential area—\$0.195/square foot for reimbursement and \$1.832/square foot for improvement.

Commercial Base Fee (\$/Plumbing Fixture Unit)

The SDC of \$4,054 divided by thirteen plumbing fixtures per 2,000-square-foot residence is used to calculate the base fee per plumbing fixture. The result is \$312/fixture: \$30/fixture for the reimbursement fee and \$282/fixture for the improvement fee.

Table 8 shows the schedule of SDCs for the current methodology and applies it to a sampling of residence sizes. For residential uses, the SDC varies proportionately to the size of the residence: e.g., a 1,000-square-

foot residence pays half as much as a 2,000-square-foot residence. For commercial uses, the SDC varies with the number and type of fixture units installed in the development.

Table 7. Proposed SDC—Current Methodology

	Reimbursement	Improvement	Total SDC
Residential SDC			
\$/square foot	\$0.195	\$1.832	\$2.027
# square feet			
1,000	\$195	\$1,833	\$2,027
1,500	\$292	\$2,749	\$3,041
2,000[^]	\$389	\$3,665	\$4,054
3,000	\$584	\$5,498	\$6,081
3,500	\$681	\$6,414	\$7,095
Commercial			
\$/fixture unit	\$30	\$282	\$312

[^] Average single-family residence.

Alternative Methodology

The alternative methodology uses meter size (which determines a user's access to the City's water and sewer systems) as the basis for calculating the SDC, and residential usage is adjusted by type of residence: single- or multifamily. Housing type is distinguished by the number of residences on a meter—e.g., one residence per meter (single family, condominium) versus multifamily residences with a shared meter.

This method of assessing SDCs is based on the equivalent a single-family resident's average water usage and sewage production) served by the smallest size water meter, 5/8" x 3/4". The equivalent number of 5/8" x 3/4" meters for larger size meters is used to determine the SDC for larger size meters. Before we develop the SDC based on meter size, we discuss the capacities of various types and sizes of water meters and the relationship between single and multifamily housing and meter sizes.

Water Meter Size and Type

The City currently installs a combination of positive displacement and turbine type meters. In general, meters 1" and less in diameter are displacement meters, while those larger than 1" are turbine meters. All 5/8" x 3/4" meters are positive displacement meters.

Table 9 shows the capacity of each meter size in gpm and the equivalent number of 5/8" x 3/4" meters. For example, a 1" displacement meter has 2.67 times the capacity of an equivalent 5/8" x 3/4" displacement meter. The 1" turbine meter has even more capacity—3.33 times that of a 5/8" x 3/4" displacement meter. These meter equivalencies are used to determine the SDC by meter size.

Table 8. Meter Capacities and Equivalencies

Meter Size	Safe Maximum Operating Capacity (gpm)			
	Displacement		Turbine	
	Safe Maximum Operating Capacity	Equivalent $\frac{5}{8}$ " x $\frac{3}{4}$ " meters	Safe Maximum Operating Capacity	Equivalent $\frac{5}{8}$ " x $\frac{3}{4}$ " meters†
$\frac{5}{8}$ x $\frac{3}{4}$	15	1.00	N/A	1.00
$\frac{3}{4}$	25	1.67	30	2.00
1	40	2.67	50	3.33
1½	50	3.33	100	6.67
2	100	6.67	160	10.67
3	150	10.00	350	23.33
4	200	13.33	600	40.00
6	500	33.33	1,250	83.33
8	-	-	1,800	120.00

Source: American Water Works Association, *Table 5-3: Test Requirements for New, Rebuilt, and Repaired Cold-Water, Water Meters-Selection, Installation, Testing, and Maintenance* (AWWA, 4th ed., 1999). The basic residential meter (the smallest and most commonly installed) is a $\frac{5}{8}$ " x $\frac{3}{4}$ " diameter meter (i.e., $\frac{5}{8}$ " inlet from the main water line and $\frac{3}{4}$ " outlet to the building).

About 90% of the City’s installed meters are $\frac{5}{8}$ " x $\frac{3}{4}$ " displacement meters,⁷ and at present, the most frequently installed residential meter is a $\frac{5}{8}$ " x $\frac{3}{4}$ " displacement meter. The next available size is a 1" displacement meter. On average, residential customers with larger meters use more water and produce more sewage than those with smaller meters. These larger meters demand a higher level of service from both the water and sewer utilities than customers with $\frac{5}{8}$ " x $\frac{3}{4}$ " meters.

The City does not currently offer a $\frac{3}{4}$ " displacement or turbine meter. It may be an appropriate option, however, for customers who need more capacity than a $\frac{5}{8}$ " x $\frac{3}{4}$ " meter but less than a 1" meter. For this reason, we include the $\frac{3}{4}$ " meter size in this SDC analysis and update.

The sewer system is designed to carry and treat periods of peak flow. The quantity of water used and discharged as sewage drives the demand for capital improvements—greater collection and treatment capacity. By basing the SDC on meter size, the City is signaling to future developers the true cost of supplying sewer service. This schedule of SDCs gives developers the incentive to select the smallest size

⁷ According to the City’s 2011 billing records, only one residential customer has a 2" meter, and only two commercial customers have 4" meters. In all cases, the average monthly usage of these customers is far below the capacity of smaller meters.

Customer class	Number of Customers by Meter Size						Total Meters
	$\frac{5}{8}$ x $\frac{3}{4}$	1"	1 ½"	2"	3"	4"	
Residential (single-family)	2,917	138	6	1	0	0	3,062
Commercial	299	96	59	48	6	2	510
Total Customers	3,216	234	65	49	6	2	3,572
% of total	90%	7%	2%	1%	0%	0%	100%

meter that will serve the development. For the City, it means minimizing future capital improvements to increase capacity.

Residential Water Usage

Multifamily residences on a single meter present a special problem because the selection of water meter size can overcharge or undercharge the development for sewer service. We therefore develop a hybrid SDC for multifamily developments.

Table 10 and figure 1 compare single-family and multifamily usage in winter. For residential uses, we are most concerned with average winter usage. In summer, water usage by single-family residences nearly doubles due to outdoor usage, and that water does not enter the sewer system.⁸ On average, a multifamily residence uses about 70% of the water used by a single-family residence (or 2,330 gallons/month versus 3,330 gallons/month).

Table 9. Average Winter Water Usage—Single Family vs. Multifamily Residence

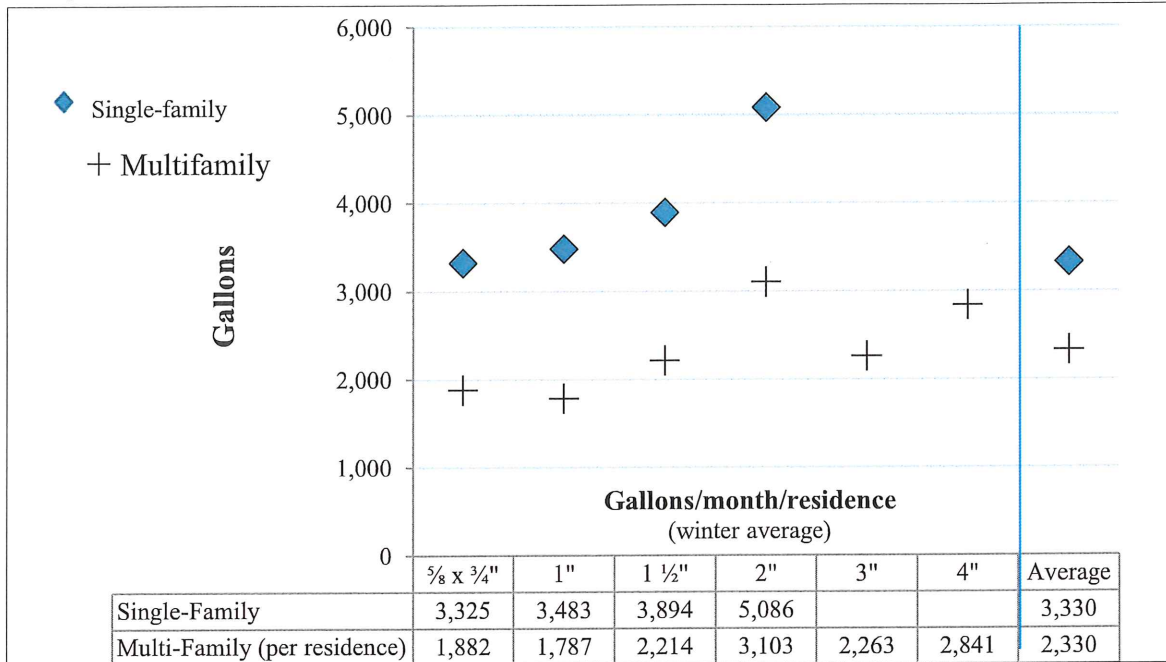
	Water Usage by Meter Size (winter average)						Average [^]
	5/8 x 3/4"	1"	1 1/2"	2"	3"	4"	
Single-Family Residence							
Gal/mo per Residence	3,325	3,483	3,894	5,086			3,330
Avg gal/day per Capita	53	56	62	81			60
Multi-Family Residence							
Gal/mo per Residence	1,882	1,787	2,214	3,103	2,263	2,841	2,330
% of Single-Family	57%	51%	57%	61%			70%

Source: City of Ashland, 2011 billing records

[^]Weighted by number of residences per meter size.

⁸ 5,746 gallons/month in summer vs. 3,330 in winter.

Figure 1. Average single-family and multifamily water usage per residence, gallons/winter month



Source: City of Ashland, 2011 billing records for January, February, and March.

SDC by Meter Size

To apply the SDC by meter size, we begin by presenting the methodology used to establish the average usage per single-family residence on a 5/8" x 3/4" meter. As shown in table 10, the average winter water consumption for a single-family residence, assuming 2.1 persons per household (2010 US Census), is 60 gallons per capita per day (gcpd). The proposed SDC for a single-family residence on a 5/8" x 3/4" meter is therefore equal to 60 gpcd x 2.1 persons/residence x the base fee of \$32.18/gallon or \$4,054.

This is then applied to larger meters and multifamily residential developments. Table 11 shows the schedule of SDCs by meter size and meter type, and for multifamily residences. The SDC for multifamily residences is assessed based on meter size or equivalent number of residences. .

Multifamily residences that are served by a single meter vary in their use of water. Some developers install larger meters than building codes or engineering estimates require in order to provide better water service to each residence during peak hours—usually the morning peak when people are preparing to leave home for work or school and the afternoon when they return. For this reason, we recommend the City charge multifamily developments the higher of (a) the SDC by meter size or (b) the rate per multifamily residence (\$2,838) multiplied by the number of residences in the development.

For example, an eight-residence apartment on a 1 1/2" turbine meter would be charged for the 1 1/2" turbine meter because the SDC by meter size (\$27,041) is greater than the SDC for eight residences multiplied by \$2,838 (\$22,704). If the developer would have selected a 1 1/2" displacement meter, the opposite would be charged—i.e., eight residences x \$2,838 is greater than \$13,499 for the 1 1/2" displacement meter. The difference in cost is proportionate to the difference in service between the two meter types.

Those on the 1½" displacement meter likely will suffer from lower water pressure during peak morning and afternoon usage than had they installed a turbine meter.

Table 10. Proposed SDC—Alternative Methodology

Meter Size†	Displacement			Turbine		
	Reimbursement	Improvement	Total	Reimbursement	Improvement	Total
5/8 x 3/4	\$389	\$3,665	\$4,054	N/A	N/A	N/A
3/4	650	6,121	6,771	N/A	N/A	N/A
1	1,039	9,786	10,825	1,295	12,204	13,499
1 ½	1,295	12,204	13,499	2,595	24,446	27,041
2	2,595	24,446	27,041	4,151	39,106	43,257
3	3,890	36,650	40,540	9,075	85,504	94,579
4	5,185	48,854	54,039	15,560	146,600	162,160
6	12,965	122,154	135,119	32,415	305,404	337,819
8	-	-	-	46,680	439,800	486,480
Average SFR	\$389	\$3,665	\$4,054			
Multifamily^	\$272	\$2,566	\$2,838	\$272	\$2,566	\$2,838

^ The SDC per multifamily development is either the amount per residence (\$2,432) multiplied by the number of residences or the SDC for the size meter installed.

ANNUAL ADJUSTMENT FOR INFLATION

As provided in ORS 223.304(8)(b), the City may adjust the SDC periodically using the Construction Cost Index (CCI) published by McGraw-Hill, Inc. in its weekly periodical, *Engineering News-Record (ENR)*. This publisher’s construction (and building) cost index is widely accepted in the engineering and construction industry. *ENR* updates the CCI monthly and provides annual summaries in the July edition.

EFA recommends the City update the SDC annually, effective July 1 of each year to correspond with the City’s fiscal year.

The formula for updating the SDC is as follows:

$$SDC_{current\ year} = SDC_{last\ year} \times (CCI_{current\ year} / CCI_{last\ year})$$

where:

- $CCI_{current\ year}$ = CCI for the current year
- $CCI_{last\ year}$ = CCI for the last year the SDCs were updated
- $SDC_{current\ year}$ = the SDC updated by the CCI
- $SDC_{last\ year}$ = the SDC to be updated

The construction costs listed in table 6 are based on January 2012 costs. These costs equate to *ENR*’s CCI of 9,176, the index for January 2012. The next adjustment for inflation will use this value as the $CCI_{last\ year}$.

APPENDICES

Appendix A: Comparison of Ashland’s Wastewater SDCs with Select Oregon Municipalities

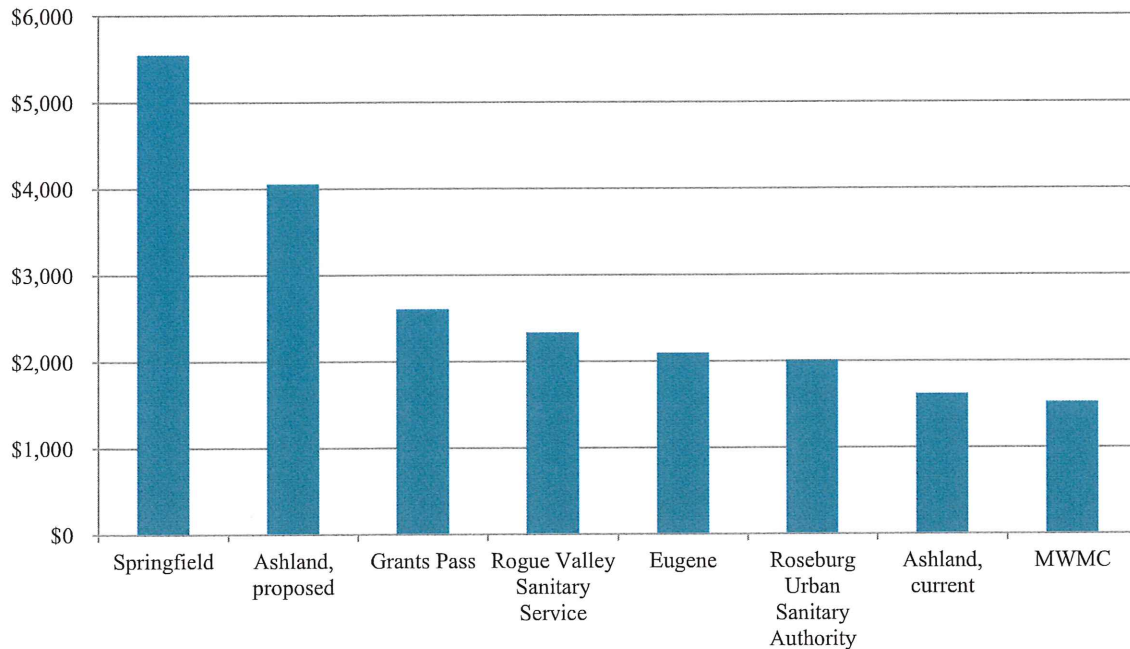
SDC per single-family residence, rounded to the nearest dollar.

Jurisdiction	SDC/DU	Rank
Ashland, current	\$1,620	7
Ashland, proposed	\$4,054	2
Eugene [^]	\$2,099	5
Grants Pass	\$2,605	3
Metropolitan Wastewater Management Commission (MWMC)	\$1,523	8
Rogue Valley Sanitary Service (RVSS) [†]	\$2,337	4
Roseburg Urban Sanitary Authority (RUSA)	\$2,007	6
Springfield [^]	\$5,553	1
Average	\$2,883	

Source: *Economic & Financial Analysis, 2011–12 Survey*

[^] City plus Regional SDC (MWMC).

[†] RVSS serves the following communities: Central Point, Eagle Point, Jacksonville, N. Ashland, N. Medford, N. Phoenix, NW Medford, Phoenix, Talent, W. Medford, Whetstone, and White City.



Appendix B: Fixed Assets of the Wastewater System

WWTP	Asset #	Description	Depreciation date	Original cost		Book value	Replacement cost (2011)				
				Basis	June 30, 2011 Accumulated depreciation		ENR 1913=100	Appreciated basis	2011 Accm. depreciation	2011 book value	
											June 30, 2011
		(Nondepreciable assets)									
	00031964	IMPERATRICE PROPERTY	Apr-96	950,338.00		950,338			0		950,338
		Total Land		950,338.00		950,338					
		Buildings									
	00025720	AEROBIC PROCESSOR	Jun-74	36,974.00	(28,080)	8,894					93,300
	00025728	AERATION BASIN #2	Jun-74	86,272.00	(65,523)	20,749					0
	00025729	SECONDARY CLARIFIER #1(40)	Jun-64	30,458.00	(28,986)	1,472					206,000
	00031608	SECONDARY CLARIFIER #2(60)	Jun-74	190,620.00	(144,777)	45,843					319,200
	00033040	ROOF ANAEROBIC DIGESTER	Jan-94	347,374.00	(159,813)	187,561					1,068,100
	00033041	RAS/WAS BUILDING	Jun-02	950,927.35	(182,602)	768,325					2,278,500
	00033042	PUMP STATION	Jun-02	2,028,645.02	(389,551)	1,639,094					3,967,700
	00033043	UV BUILDING	Jun-02	3,532,649.08	(678,358)	2,854,291					12,379,900
	00033310	MEMBRANE FILTER BUILDING	Jun-02	10,955,874.93	(2,049,966)	8,905,909					3,758,000
		DE WATERING BUILDING	May-03	3,312,643.36	(563,663)	2,748,981					
		Total Buildings		21,472,437.74	(4,291,320)	17,181,117					
		Equipment									
	00025715	AROBIC MIXER (30 hp)	Jun-74	6,162.00	(6,162)	0					0
	00025716	AROBIC MIXER (30 hp)	Jun-74	6,162.00	(6,162)	0					0
	00025717	AROBIC MIXER (30 hp)	Jun-74	6,162.00	(6,162)	0					0
	00025718	AROBIC MIXER (30 hp)	Jun-74	6,162.00	(6,162)	0					0
	00040066	CLORINATOR (MANDAL)	Jun-90	81,802.00	(81,802)	0					0
	00040068	CLORINATOR (ELECTRONIC)	Jun-90	96,238.00	(96,238)	0					0
	00025747	FLOW CONTROL TELEMETRY SY	Jun-74	14,379.00	(14,379)	0					0
	00031751	TRANSPORT VEHICLE	Feb-95	7,860.00	(7,860)	0					0
	00031752	DEISEL GENERATOR	Apr-95	16,830.00	(16,830)	0					0
	00032911	CAMERA equip	Nov-00	28,991.80	(28,992)	0					0
	00033035	EASY CAN DATA SYSTEM & OMNII 2 CAMERA	May-02	20,738.00	(20,738)	0					0
	00040077	ITRON Field Collector Computer w/ docking	Oct-06	11,927.50	(5,533)	6,394					7,300
	00040080	T130 Infrared Imager	Sep-06	7,430.48	(3,481)	3,949					4,600
	00041928	Wastewater Sewage Pump (2010)	Jun-10	33,787.16	(3,379)	30,408					31,300
	00041957	Wastewater Bareshaft Pump (2011)	Jun-11	43,385.00	(1,446)	41,939					42,000
		Total Equipment		388,016.94	(305,326)	82,691					
		Improvements									
	00025562	SEWER MAINS	Jul-45	228,081.00	(228,081)	0					0



WWTP	Asset #	Description	Depreciation date	Original cost		Replacement cost (2011)				
				Basis	Accumulated depreciation	Book value	ENR 1913=100	Appreciated basis	2011 Accm. depreciation	2011 book value
	00025579	SEWER MAINS	Jul-45	43,397.00	(43,397)	0	N/A	0	0	0
	00025601	SEWER MAINS	Jul-45	38,272.00	(38,272)	0	N/A	0	0	0
	00025607	SEWER MAINS	Jul-45	15,840.00	(15,840)	0	N/A	0	0	0
	00025619	SEWER MAINS	Jul-45	16,516.00	(16,516)	0	N/A	0	0	0
	00025555	PUMP STATION	Jun-50	8,646.00	(8,646)	0	N/A	0	0	0
	00025557	PUMP STATION	Jun-50	8,646.00	(8,646)	0	N/A	0	0	0
	00025621	SEWER LIFT STATION	Jun-50	8,646.00	(8,646)	0	N/A	0	0	0
	00025623	SEWER LIFT STATION	Jun-50	8,646.00	(8,646)	0	N/A	0	0	0
	00025563	SEWER MAINS	Jun-68	18,814.00	(16,257)	2,557	N/A	0	0	0
	00025753	YARD PIPING	Jun-68	314,530.00	(271,801)	42,729	N/A	0	0	0
	00025664	SEWER MAINS	Jun-69	9,401.00	(7,932)	1,469	N/A	0	0	0
	00025581	SEWER MAINS	Jun-69	10,073.00	(8,498)	1,575	N/A	0	0	0
	00025602	SEWER MAINS	Jun-69	7,594.00	(6,408)	1,186	N/A	0	0	0
	00025565	SEWER MAINS	Jun-70	10,794.00	(8,889)	1,905	1,381	71,000	(58,400)	12,600
	00025582	SEWER MAINS	Jun-70	11,565.00	(9,522)	2,043	1,381	76,000	(62,600)	13,400
	00025566	SEWER MAINS	Jun-71	9,746.00	(7,828)	1,918	1,581	56,000	(45,000)	11,000
	00025583	SEWER MAINS	Jun-71	10,442.00	(8,388)	2,054	1,581	60,000	(48,200)	11,800
	00025584	SEWER MAINS	Jun-71	10,442.00	(8,388)	2,054	1,581	60,000	(48,200)	11,800
	00025559	PUMP STATION	Jun-72	54,889.00	(42,979)	11,910	1,753	284,300	(222,600)	61,700
	00025585	SEWER MAINS	Jun-72	16,434.00	(12,869)	3,565	1,753	85,100	(66,700)	18,400
	00025625	SEWER LIFT STATION	Jun-72	54,889.00	(42,979)	11,910	1,753	284,300	(222,600)	61,700
	00025489	SUB. BRIGGS #2	Jun-73	13,607.00	(10,379)	3,228	1,895	65,200	(49,700)	15,500
	00025558	PUMP STATION	Jun-73	37,500.00	(28,605)	8,895	1,895	179,700	(137,100)	42,600
	00025586	SEWER MAINS	Jun-73	17,632.00	(13,452)	4,180	1,895	84,500	(64,500)	20,000
	00025624	SEWER LIFT STATION	Jun-73	37,500.00	(28,605)	8,895	1,895	179,700	(137,100)	42,600
	00025490	SUB. BLACK OAK TERRACE	Jun-74	23,924.00	(17,764)	6,160	2,020	107,500	(79,900)	27,600
	00025491	SUB. BLACK OAK TERRACE	Jun-74	83,162.00	(61,757)	21,405	2,020	373,800	(277,600)	96,200
	00025492	SUB. BRIGGS #3	Jun-74	41,898.00	(31,115)	10,783	2,020	188,300	(139,900)	48,400
	00025493	SUB. THUNDERBIRD HEIGHTS	Jun-74	98,819.00	(73,383)	25,436	2,020	444,200	(329,900)	114,300
	00025702	CONCRETE HEADWORKS	Jun-74	20,541.00	(15,255)	5,286	2,020	92,300	(68,600)	23,700
	00025494	SUB. MANN	Jun-75	46,615.00	(33,677)	12,938	2,212	191,300	(138,200)	53,100
	00025603	SEWER MAINS	Jun-75	9,537.00	(6,892)	2,645	2,212	39,100	(28,300)	10,800
	00025495	SUB. MAIDSON	Jun-76	59,676.00	(41,916)	17,760	2,401	225,700	(158,500)	67,200
	00025496	SUB. MOUNTAIN RANCH	Jun-76	26,449.00	(18,576)	7,873	2,401	100,000	(70,300)	29,700
	00025497	SUB. MOUNTAIN RANCH	Jun-76	113,150.00	(79,470)	33,680	2,401	427,900	(300,500)	127,400
	00025589	SEWER MAINS	Jun-76	12,012.00	(8,435)	3,577	2,401	45,400	(31,900)	13,500
	00025498	SUB. GRIZZLY INDUSTRIAL PARK	Jun-77	82,734.00	(56,445)	26,289	2,576	291,600	(199,000)	92,600
	00025590	SEWER MAINS	Jun-77	67,237.00	(45,872)	21,365	2,576	237,000	(161,700)	75,300
	00025499	SUB. BENNER	Jun-78	33,707.00	(22,317)	11,390	2,776	110,300	(73,000)	37,300
	00025500	SUB. OLD HELLMAN RANCH	Jun-78	34,281.00	(22,700)	11,581	2,776	112,100	(74,200)	37,900
	00025501	SUB. OLD HELLMAN RANCH	Jun-78	66,047.00	(43,731)	22,316	2,776	216,000	(143,000)	73,000

WWTP	Asset #	Description	Depreciation date	Original cost		Replacement cost (2011)				
				Basis	Accumulated depreciation	Book value	ENR 1913=100	Appreciated basis	2011 Accm. depreciation	2011 book value
	00025502	SUB. SLEEPY HALLOW	Jun-78	36,386.00	(24,093)	12,293	2,776	119,000	(78,800)	40,200
	00025591	SEWER MAINS	Jun-78	49,414.00	(49,414)	0	2,776	161,600	(161,600)	0
	00025503	SUB. AGAPE	Jun-79	21,821.00	(14,007)	7,814	3,003	66,000	(42,400)	23,600
	00025504	SUB. AGAPE	Jun-79	68,451.00	(43,946)	24,505	3,003	207,000	(132,900)	74,100
	00025505	SUB. DEER RIDGE TERRACE	Jun-79	44,197.00	(28,375)	15,822	3,003	133,600	(85,800)	47,800
	00025506	SUB. MEADOWBROOK	Jun-79	15,107.00	(9,698)	5,409	3,003	45,700	(29,300)	16,400
	00025507	SUB. MEADOWBROOK	Jun-79	36,651.00	(23,530)	13,121	3,003	110,800	(71,100)	39,700
	00025508	SUB. SUNNYVIEW HEIGHTS	Jun-79	22,660.00	(14,547)	8,113	3,003	68,500	(44,000)	24,500
	00025509	SUB. SUNNYVIEW HEIGHTS	Jun-79	38,484.00	(24,709)	13,775	3,003	116,400	(74,700)	41,700
	00025510	SUB. C & C	Jun-80	18,528.00	(11,526)	7,003	3,237	52,000	(32,300)	19,700
	00025511	SUB. GROSS HEIGHTS	Jun-80	25,354.00	(15,768)	9,586	3,237	71,100	(44,200)	26,900
	00025512	SUB. CEDAR WAY	Jun-81	29,074.00	(17,495)	11,579	3,535	74,700	(44,900)	29,800
	00025513	SUB. CEDAR WAY	Jun-81	55,269.00	(33,261)	22,008	3,535	142,000	(85,400)	56,600
	00025593	SEWER MAINS	Jun-81	37,205.00	(22,391)	14,814	3,535	95,600	(57,500)	38,100
	00025514	SUB. JESSICA LANE	Jun-82	139,036.00	(80,888)	58,148	3,825	330,100	(192,000)	138,100
	00025595	SEWER MAINS	Jun-83	37,981.00	(21,336)	16,645	4,066	84,800	(47,600)	37,200
	00025617	SEWER MAINS	Jun-83	25,560.00	(14,356)	11,204	4,066	57,100	(32,100)	25,000
	00025515	SUB. APPLEWOOD	Jun-84	99,982.00	(54,155)	45,827	4,146	219,000	(118,600)	100,400
	00025516	SUB. APPLEWOOD	Jun-84	114,027.00	(61,764)	52,263	4,146	249,700	(135,300)	114,400
	00025575	SEWER MAINS	Jun-84	18,805.00	(10,185)	8,620	4,146	41,200	(22,300)	18,900
	00025596	SEWER MAINS	Jun-84	23,234.00	(12,586)	10,648	4,146	59,900	(27,600)	23,300
	00025618	SEWER MAINS	Jun-84	31,740.00	(17,193)	14,547	4,146	69,500	(37,700)	31,800
	00025597	SEWER MAINS	Jun-85	54,261.00	(28,299)	25,962	4,195	117,400	(61,300)	56,100
	00025598	SEWER MAINS	Jun-86	23,833.00	(11,955)	11,878	4,295	50,400	(25,300)	25,100
	00025611	SEWER MAINS	Jun-86	27,044.00	(12,928)	14,116	4,295	57,200	(27,300)	29,900
	00025517	SUB. Y.M.C.A. P.U.D.	Jun-87	100,711.00	(48,488)	52,223	4,406	207,500	(99,900)	107,600
	00025599	SEWER MAINS	Jun-87	14,705.00	(7,079)	7,626	4,406	30,300	(14,600)	15,700
	00025612	SEWER MAINS	Jul-87	11,774.00	(5,665)	6,109	4,406	24,300	(11,700)	12,600
	00025518	SUB. HALMA VILLAGE	Jun-88	34,209.00	(15,784)	18,425	4,519	68,700	(31,700)	37,000
	00025519	SUB. ROYAL OAKS ESTATES	Jun-88	209,445.00	(96,643)	112,802	4,519	420,800	(194,200)	226,600
	00025520	SUB. TOLMAN CRBEK MEADOWS	Jun-88	331,743.00	(153,074)	178,669	4,519	666,600	(307,600)	359,000
	00025521	SUB. VANDERLIND HOMES	Jun-88	55,114.00	(25,429)	29,685	4,519	110,700	(51,100)	59,600
	00025522	SUB. VANDERLIND HOMES	Jun-88	100,817.00	(46,517)	54,300	4,519	202,600	(93,500)	109,100
	00025523	SUB. WELLER LANE	Jun-88	292,106.00	(134,782)	157,324	4,519	586,900	(270,800)	316,100
	00025524	SUB. WELLER LANE	Jun-88	63,468.00	(29,283)	34,185	4,519	127,500	(58,800)	68,700
	00025525	SUB. CANYON PARK PUD PHASE	Jun-89	44,597.00	(19,684)	24,913	4,615	87,700	(38,700)	49,000
	00025526	SUB. CANYON PARK PUD PHASE	Jun-89	117,111.00	(51,688)	65,423	4,615	230,400	(101,700)	128,700
	00025527	SUB. GLENNVISTA ESTATES PUD	Jun-89	75,518.00	(33,329)	42,189	4,615	148,600	(65,600)	83,000
	00025528	SUB. GLENNVISTA ESTATES PUD	Jun-89	91,398.00	(40,341)	51,057	4,615	179,800	(79,400)	100,400
	00025529	SUB. GRIZZLY MEADOWS PUD	Jun-89	36,074.00	(16,234)	19,840	4,615	71,000	(31,900)	39,100
	00025530	SUB. GRIZZLY MEADOWS PUD	Jun-89	93,944.00	(41,465)	52,479	4,615	184,800	(81,600)	103,200

WWTP	Asset #	Description	Depreciation date	Original cost		Book value	ENR 1913=100	Replacement cost (2011)		
				Basis	Accumulated depreciation			Appreciated basis	2011 Accm. depreciation	2011 book value
	00025531	SUB. MEADOWHAWK	Jun-89	154,281.00	(68,098)	86,183	4,615	303,500	(134,000)	169,500
	00025532	SUB. MILL POND (PHASE 1-5)	Jun-89	191,128.00	(84,362)	106,766	4,615	376,000	(166,000)	210,000
	00025533	SUB. MILL POND (PHASE 1-5)	Jun-89	645,548.00	(284,928)	360,620	4,615	1,270,100	(560,600)	709,500
	00025534	SUB. VIEWPOINTE TERRACE	Jun-89	45,588.00	(20,123)	25,465	4,615	89,700	(39,600)	50,100
	00025535	SUB. VIEWPOINTE TERRACE	Jun-89	99,290.00	(43,826)	55,464	4,615	195,400	(86,200)	109,200
	00025536	SUB. WOODSIDE PUD	Jun-89	87,411.00	(38,579)	48,832	4,615	172,000	(75,900)	96,100
	00025537	SUB. WOODSIDE PUD	Jun-89	134,933.00	(59,558)	75,375	4,615	265,500	(117,200)	148,300
	00025538	SUB. LAUREL STREET	Jun-90	129,548.00	(54,583)	74,965	4,732	248,600	(104,700)	143,900
	00025539	SUB. OAK KNOLL MEADOWS	Jun-90	229,226.00	(96,584)	132,642	4,732	439,900	(185,300)	254,600
	00025541	SUB. PARK ESTATES	Jun-90	279,239.00	(117,654)	161,585	4,732	535,800	(225,800)	310,000
	00025543	SUB. PATTERSON ST	Jun-90	45,012.00	(18,963)	26,049	4,732	86,400	(36,400)	50,000
	00025544	SUB. PATTERSON ST	Jun-90	70,663.00	(29,771)	40,892	4,732	135,600	(57,100)	78,500
	00025556	PUMP STATION	Jun-90	37,000.00	(15,589)	21,411	4,732	71,000	(29,900)	41,100
	00025622	SEWER LIFT STATION	Jun-90	37,000.00	(15,589)	21,411	4,732	71,000	(29,900)	41,100
	00025545	SUB. ASHLAND MEADOWS VILLAGE	Jun-91	214,331.00	(86,012)	128,319	4,818	403,900	(162,100)	241,800
	00025546	SUB. CLAY CREEK ESTATES	Jun-91	104,645.00	(46,060)	58,585	4,818	197,200	(86,800)	110,400
	00025547	SUB. CLAY CREEK ESTATES	Jun-91	109,261.00	(43,844)	65,417	4,818	205,900	(82,600)	123,300
	00025548	SUB. OAK CREEK P.C.	Jun-91	142,515.00	(57,188)	85,327	4,818	268,600	(107,800)	160,800
	00025549	SUB. THOMAS P.C.	Jun-91	114,291.00	(45,865)	68,426	4,818	215,400	(86,400)	129,000
	00025487	PROJECT 90-15	Aug-91	80,811.00	(30,872)	49,939	4,892	150,000	(57,300)	92,700
	00025484	PEACHEY/PARADISE	Jun-92	33,083.00	(12,615)	20,468	4,973	60,400	(23,000)	37,400
	00025485	PEACHEY/PARADISE	Jun-92	8,838.00	(3,371)	5,467	4,973	16,100	(6,200)	9,900
	00025486	PEACHEY/PARADISE	Jun-92	8,316.00	(3,169)	5,147	4,973	15,200	(5,800)	9,400
	00025550	SUB. BARRINGTON PLACE	Jun-92	72,828.00	(27,769)	45,059	4,973	133,000	(50,700)	82,300
	00025551	SUB. CLAY CREEK PHASE II	Jun-92	158,083.00	(60,272)	97,811	4,973	288,600	(110,000)	178,600
	00025552	SUB. GREENSPRINGS PHASE III	Jun-92	60,690.00	(23,140)	37,551	4,973	110,800	(42,200)	68,600
	00025553	SUB. MILL POND PHASE VI	Jun-92	53,775.00	(20,505)	33,270	4,973	98,200	(37,400)	60,800
	00025554	SUB. OAK CREEK	Jun-92	146,812.00	(55,971)	90,841	4,973	268,100	(102,200)	165,900
	00031585	SUB. CLEAR CREEK	Jun-94	15,915.00	(5,429)	10,486	5,408	26,700	(9,100)	17,600
	00031586	SUB. SOUTH VALLEY BUS. PARK	Jun-94	26,895.00	(9,177)	17,718	5,408	45,200	(15,400)	29,800
	00031617	14" SERVICES	Jun-94	7,966.00	(7,966)	0	5,408	13,400	(13,400)	0
	00031744	PROJECT 93-20	Aug-94	198,038.00	(79,839)	118,199	5,424	331,500	(133,700)	197,800
	00031746	NORTH MOUNTAIN SEWER LID	Apr-95	33,556.00	(13,497)	20,059	5,432	56,100	(22,600)	33,500
	00031747	NORTH MOUNTAIN SEWER LID	Apr-95	16,394.00	(6,594)	9,800	5,432	27,400	(11,000)	16,400
	00031748	NORTH MOUNTAIN SEWER LID	Apr-95	9,122.00	(3,669)	5,453	5,432	15,200	(6,100)	9,100
	00031749	NORTH MOUNTAIN SEWER LID	Apr-95	155,560.00	(100,726)	54,834	5,432	260,000	(168,400)	91,600
	00031745	NORTH MOUNTAIN SEWER LID	Apr-95	107,114.00	(43,082)	64,032	5,432	179,000	(72,000)	107,000
	00031750	PROJECT 95-01A	Jun-95	57,690.00	(23,189)	34,501	5,432	96,400	(38,800)	57,600
	00031738	SUB-ASHLAND AUDUBON	Jun-95	14,295.00	(5,745)	8,550	5,432	23,900	(9,600)	14,300
	00031739	SUB-ASHLAND PARKVIEW	Jun-95	13,425.00	(5,398)	8,027	5,432	22,400	(9,000)	13,400

WWTP	Asset #	Description	Original cost			Replacement cost (2011)				
			Depreciation date	Basis	Accumulated depreciation	Book value	ENR 1913=100	Appreciated basis	2011 Accm. depreciation	2011 book value
	00032049	LID - STRAWBERRY \ WESTWOOD	Sep-95	87,800.00	(26,496)	61,304	5,491	145,200	(43,800)	101,400
	00031989	N. MAIN TO WALNUT	Feb-96	38,153.00	(11,500)	26,653	5,532	62,600	(18,900)	43,700
	00031990	SEVENTH TO MORTON	Apr-96	49,320.00	(14,857)	34,463	5,550	80,700	(24,300)	56,400
	00031889	SUB-ASHLAND AUDOBON PH II	Jun-96	14,170.00	(5,340)	8,830	5,597	23,000	(8,700)	14,300
	00031891	SUB-MOUNTAIN MEADOWS PH I	Jun-96	30,342.00	(11,437)	18,905	5,597	49,200	(18,600)	30,600
	00031892	SUB-OAK KNOLL MEADOWS PH IV	Jun-96	9,683.00	(3,649)	6,034	5,597	15,700	(5,900)	9,800
	00031893	SUB-SCENIC HEIGHTS	Jun-96	11,076.00	(4,175)	6,901	5,597	18,000	(6,800)	11,200
	00031895	SUB-WEST BELLVIEW	Jun-96	8,554.00	(3,224)	5,330	5,597	13,900	(5,200)	8,700
	00032234	SUB-MTN. MEADOWS PH. II	Jul-96	42,458.00	(12,643)	29,815	5,617	68,600	(20,400)	48,200
	00032236	SUB-SKYCREST HILLS PH. I	Jul-96	14,964.00	(4,456)	10,508	5,617	24,200	(7,200)	17,000
	00032233	SUB-ASHLAND VILLAGE	Dec-96	52,858.00	(15,731)	37,127	5,744	83,600	(24,900)	58,700
	00032235	SUB-MTN. MEADOWS PH III	Jun-97	32,916.00	(9,789)	23,128	5,860	51,000	(15,200)	35,800
	00032248	N. MTN LIFT STATION - FLOOD	Jun-97	106,560.00	(52,461)	54,099	5,860	165,100	(81,300)	83,800
	00032475	SUB - MOUNTAIN CREEK ESTATES	Sep-97	57,668.00	(15,060)	42,608	5,851	89,500	(23,400)	66,100
	00032470	SUB - ASHLAND WILLOWS	Sep-97	13,078.00	(3,416)	9,662	5,851	20,300	(5,300)	15,000
	00032474	SUB - EAGLE CREEK	Nov-97	10,660.00	(2,783)	7,877	5,838	16,600	(4,300)	12,300
	00032473	SUB - CHATAQUA TRACE PH I	Mar-98	70,044.00	(18,278)	51,766	5,875	108,300	(28,200)	80,100
	00032472	SUB - BLOSSOM VIEW ESTATES	May-98	59,566.00	(15,539)	44,027	5,881	92,000	(24,000)	68,000
	00032469	SUB - ASHLAND MEADOWS VILLAGE	Jun-98	5,888.00	(1,536)	4,352	5,895	9,100	(2,400)	6,700
	00032476	SUB-LITHIA PARK VILLAGE PUD	Jun-98	47,034.00	(12,269)	34,765	5,895	72,400	(18,900)	53,500
	00032477	SUB-LITHAI PARK VILLAGE PUD	Jun-98	10,695.00	(2,790)	7,905	5,895	16,500	(4,300)	12,200
	00032625	SUB - GREAT OAKS	Aug-98	22,655.00	(5,921)	16,734	5,929	34,700	(9,100)	25,600
	00032627	SUB - SISKIYOU SOUTH	Oct-98	19,021.00	(4,961)	14,060	5,986	28,900	(7,500)	21,400
	00032628	SUB - SKYCREST HILLS PH II	Oct-98	23,140.00	(6,036)	17,104	5,986	35,100	(9,200)	25,900
	00032754	ROCK WALL - WATERLINE ROAD	Feb-99	21,400.00	(2,993)	18,407	5,992	32,400	(4,500)	27,900
	00032626	SUB - PINEVIEW ESTATES	Feb-99	9,828.00	(2,554)	7,274	5,992	14,900	(3,900)	11,000
	00032695	UNION ST. - SISKIYOU TO AUBURN	Apr-99	58,404.00	(15,147)	43,257	6,008	88,300	(22,900)	65,400
	00032740	BERM WALL	Apr-99	6,480.00	(1,288)	5,192	6,008	9,800	(1,900)	7,900
	00032865	SUB- BIRCHWOOD	Jul-99	11,224.00	(2,881)	8,343	6,076	16,800	(4,300)	12,500
	00032867	SUB-PARK RIDGE	Jul-99	11,822.00	(2,826)	8,996	6,076	17,700	(4,200)	13,500
	00032851	AIRPORT SANITARY SEWER LINE	Nov-99	133,080.00	(31,689)	101,391	6,127	197,200	(47,000)	150,200
	00032812	WINBURN PUMP STATION	Mar-00	18,740.00	(18,740)	0	6,202	27,400	(27,400)	0
	00032866	SUB- CLAY CREEK GARDENS	Jun-00	38,142.00	(9,020)	29,122	6,238	55,500	(13,100)	42,400
	00032942	SUBDIVISION - PLUM RIDGE	Jul-00	7,912.00	(1,869)	6,043	6,225	11,500	(2,700)	8,800

WWTP	Asset #	Description	Depreciation date	Original cost		Replacement cost (2011)				
				Basis	Accumulated depreciation	Book value	ENR 1913=100	Appreciated basis	2011 Accm. depreciation	2011 book value
	00032941	SUBDIVISION - HALMILTON CREEK	Aug-00	8,740.00	(2,063)	6,677	6,233	12,700	(3,000)	9,700
	00032943	SUBDIVISION - ROCA PONDS	Sep-00	8,280.00	(1,952)	6,328	6,224	12,100	(2,800)	9,300
	00032972	SISKIYOU BV PROJECT #99-23	Oct-00	102,532.73	(24,152)	78,380	6,259	148,700	(35,000)	113,700
	00032940	SUBDIVISION - EASTFIELD	Dec-00	9,152.00	(2,152)	7,000	6,283	13,200	(3,100)	10,100
	00032931	WIGHTMAN - LEE TO IOWA	Feb-01	32,089.98	(6,904)	25,186	6,272	46,500	(10,000)	36,500
	00032939	SUBDIVISION - ASHLAND MEADOWS	Mar-01	30,544.00	(6,008)	24,536	6,279	44,200	(8,700)	35,500
	00032930	SERVICE INSTALLATIONS	Jun-01	35,537.62	(7,619)	27,919	6,318	51,100	(10,900)	40,200
	00032973	BEAR CREEK TRUNK LINE	Jun-01	107,665.57	(23,062)	84,604	6,318	154,700	(33,100)	121,600
	00033062	SUB - OAK LAWN PHASE V	Sep-01	7,751.00	(1,655)	6,096	6,391	11,000	(2,400)	8,600
	00033021	SOUTH MOUNTAIN TO SISKIYOU	Sep-01	24,959.21	(5,330)	19,630	6,391	35,500	(7,600)	27,900
	00033060	SUB - CLAY CREEK GARDENS PH II	Nov-01	29,348.00	(6,254)	23,094	6,410	41,600	(8,900)	32,700
	00033061	SUB - THE OAKS OF ASHLAND	Jan-02	67,652.00	(13,064)	54,588	6,462	95,100	(18,400)	76,700
	00033017	7 SANITARY SEWER SERVICES	Jun-02	15,488.30	(8,506)	6,982	6,532	21,500	(11,800)	9,700
WWTP	00033038	HEADWORKS	Jun-02	127,765.33	(24,534)	103,231	6,532	177,600	(34,100)	143,500
WWTP	00033039	OXIDATION DITCHES	Jun-02	3,233,153.00	(620,848)	2,612,305	6,532	4,494,300	(863,000)	3,631,300
WWTP	00033044	YARD PIPING & MISC CONSTRUCTION	Jun-02	7,836,835.24	(1,457,741)	6,379,094	6,532	10,893,800	(2,026,400)	8,867,400
WWTP	00033122	BELT PRESS	Aug-02	241,484.56	(76,272)	165,213	6,592	332,600	(105,100)	227,500
	00033296	STRAWBERRY LANE	Dec-02	428.19	(61)	367	6,563	600	(100)	500
	00033315	GRANITE STREET SEWER LINE	Dec-02	162,721.55	(31,041)	131,680	6,563	225,100	(42,900)	182,200
	00033316	BEAR CREEK TRUNK PHASE IV	Dec-02	88,458.00	(16,875)	71,583	6,563	122,400	(23,300)	99,100
	00033302	VISTA ST. STORM DRAIN	Apr-03	0	0	0	6,635	0	0	0
WWTP	00033311	OXIDATION DITCH #2	May-03	1,792,979.91	(533,806)	1,259,174	6,642	2,451,100	(729,700)	1,721,400
	00033297	8 MANHOLE INSTALLATIONS	Jun-03	25,947.37	(12,407)	13,540	6,694	35,200	(16,800)	18,400
	00033298	20 SERVICE INSTALLATIONS	Jun-03	36,837.40	(7,960)	28,877	6,694	50,000	(10,800)	39,200
	00034236	SUB - QUINN	Oct-03	13,754.00	(2,326)	11,428	6,771	18,400	(3,100)	15,300
	00034239	SUB - STRAWBERRY MEADOWS	Nov-03	19,838.00	(3,351)	16,487	6,794	26,500	(4,500)	22,000
	00034215	BEACH STREET	Apr-04	18,378.28	(2,550)	15,828	7,017	23,800	(3,300)	20,500
	00034234	SUB - BILLINGS RANCH	Apr-04	145,756.00	(20,225)	125,531	7,017	188,600	(26,200)	162,400
	00034237	SUB - RIVERWALK	Jun-04	72,420.00	(10,020)	62,400	7,109	92,500	(12,800)	79,700
	00034238	SUB - RIVERWALK	Jun-04	38,974.00	(5,393)	33,581	7,109	49,800	(6,900)	42,900
	00034235	SUB - BUD'S DAIRY	Jun-04	35,620.00	(4,929)	30,691	7,109	45,500	(6,300)	39,200
	00034216	20 SERVICE INSTALLATIONS	Jun-04	19,289.72	(2,669)	16,621	7,109	24,600	(3,400)	21,200
	00034217	9 MANHOLE INSTALLATIONS	Jun-04	19,880.09	(2,751)	17,129	7,109	25,400	(3,500)	21,900
	00034342	SUBDIVISION - HAMILTON PLACE	Dec-04	8,671.00	(1,189)	7,482	7,308	10,800	(1,500)	9,300
	00034343	SUBDIVISION - HAMILTON PLACE	Dec-04	7,669.26	(1,052)	6,617	7,308	9,500	(1,300)	8,200
	00034349	ESTATES	Apr-05	12,896.00	(1,632)	11,264	7,355	15,900	(2,000)	13,900
	35008	Wetlands	Jul-05	466,903.00	(58,863)	408,040	7,422	571,200	(72,000)	499,200



WWTP	Asset #	Description	Depreciation date	Original cost		Replacement cost (2011)				
				Basis	Accumulated depreciation	Book value	ENR 1913=100	Appreciated basis	2011 Accm. depreciation	2011 book value
	35009	Capitalized interest	Jul-05	419,359.00		366,490	7,422	513,000	(64,700)	448,300
	35010	2002 sewer project	Jul-05	218,417.00	(52,869)	190,881	7,422	267,200	(33,700)	233,500
	40045	2005 utility construction project 04-07 constr.	Oct-06	192,501.15	(27,536)	132,459	7,883	221,700	(69,200)	152,500
	40036	Zee weed membrane filters	Mar-07	261,435.00	(60,042)	185,079	7,856	302,200	(88,300)	213,900
	40049	Bear Creek sanitary sewer 2003-05	Dec-06	269,395.08	(76,356)	185,079	7,888	310,100	(28,400)	281,700
	41880	Ashland Creek sanitary sewer support repair	Jun-08	7,337.50	(24,658)	244,737	8,185	8,100	(1,900)	6,200
	41879	N. Main St. pump station	Jun-08	390,750.25	(1,712)	5,625	8,185	433,500	(30,300)	403,200
	41930	Geotechnical study Hosler Dam stability	Jun-10	5,634.25	(27,353)	363,398	8,805	5,800	(300)	5,500
	41931	Grand View Drive sewer pump station	Jun-10	13,878.20	(338)	5,296	8,805	14,300	(900)	13,400
		Total Improvements		26,599,728	(8,315,093)	18,284,635		43,041,500	(15,021,100)	28,020,400
		Total Wastewater System		49,410,520	(12,911,740)	36,498,781		75,388,238	(22,242,700)	53,145,538
WWTP Balance		WWTP (2002-03 assets)		34,231,375	(6,604,878)	27,626,497		47,427,300	(9,150,500)	38,276,800
		Balance of system (collection)		15,179,146	(6,306,862)	8,872,284		27,960,938	(13,092,200)	14,868,738
		Total Wastewater System		49,410,520	(12,911,740)	36,498,781		75,388,238	(22,242,700)	53,145,538

RESOLUTION NO. 2016-

A RESOLUTION ADOPTING NEW WATER SYSTEMS DEVELOPMENT CHARGES, PURSUANT TO SECTION 4.20 OF THE ASHLAND MUNICIPAL CODE, AND REPEALING RESOLUTION 2006-27.

RECITALS:

- A. The current Water SDC was approved on 18 October 2006.
- B. The City adopted a new water master plan April 17, 2012 that updates the previous master plan with new capital improvements and updated construction costs.

THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. The Water System Development Charges report update and project list marked as Exhibit C, is adopted effective immediately.

SECTION 2. The methodology for Water System Development charges, marked as exhibit B, is adopted, effective immediately.

SECTION 3. The System Development Charges Summary per exhibit A, is effective July 1, 2017.

SECTION 4. The existing System Development Charges project list & fee schedule for Wastewater adopted by Resolution 2006-27 is repealed, effective July 1, 2017.

This resolution was duly PASSED and ADOPTED this _____ day of _____, 2016, and takes effect upon signing by the Mayor.

Barbara Christensen, City Recorder

SIGNED and APPROVED this ____ day of _____, 2016.

John Stromberg, Mayor

Reviewed as to form:

David H. Lohman, City Attorney

EXHIBIT A

	Reimbursement	Improvement	Total SDC
Residential			
\$/habitable sf	\$0.93	\$1.68	\$2.61
Commercial and Industrial (by meter size)			
$\frac{5}{8} \times \frac{3}{4}$	\$1,793	\$3,084	\$4,877
$\frac{3}{4}$	\$2,989	\$5,140	\$8,129
1	\$5,976	\$10,281	\$16,257
$1\frac{1}{2}$	\$9,561	\$16,449	\$26,010
2	\$20,918	\$35,983	\$56,901
3	\$35,858	\$61,685	\$97,543
4	\$74,704	\$128,509	\$203,213
6	\$107,573	\$185,054	\$292,627

Source: City of Ashland, Water System Development Charge Update [Economic & Financial Analysis, July 2016], Table 1.

City of Ashland

**Wastewater and Water - System Development Charge Update
Methodology Summary
August 14, 2006**

Exhibit 'B'

**Prepared by
Shaun Pigott Associates, LLC**

**CITY OF ASHLAND
WASTEWATER AND WATER
SYSTEM DEVELOPMENT CHARGE UPDATE**

Process

This update of Ashland's system development charges (SDC) for wastewater and water was done in order to revise the SDCs based on recently completed facility plans for both utility systems. Also, as part of this update process; issues related to the current SDC structure were addressed through Ashland's SDC Committee. The Committee includes Darrel Boldt, Jac Nickels, Greg Williams, Larry Medinger, Russ Silbiger, Kerry KenCairn, and Connie Saldana. The SDC Committee has worked directly with staff and the City's consultant over the course of 6 meetings held between April 2005 through July 2006. The proposed revisions to the wastewater and water SDCs reflect the Committee's unanimous recommendations to the Ashland City Council.

For this update, the City and Committee had a number of objectives:

- Review the basis for the SDCs to ensure a consistent methodology;
- Develop a rationale and documentation for the reimbursement element of the SDC;
- Consider possible revisions to the structure or basis of the charge that might improve equity or proportionality to demand; and
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that City staff can, by reference, respond to questions or concerns from the public

Background

The City's SDC Ordinance No. 4.20 was originally adopted in 1992 and amended in 1996. The ordinance was designed for compliance with ORS 223.297-.314 (Oregon SDC statute) which mandates that all jurisdictions having SDCs adopt ordinances consistent with this Oregon law.

Actual SDC calculations have been adopted through a series of resolutions including Resolution No. 2000-29 "A Resolution Adopting New Water, Wastewater and Parks System Development Charge Schedules." This also served to repeal the SDCs set in 1996. For water and wastewater, the 1996 SDCs were based on fixture counts with a single-family home (17 fixtures) paying \$2,716 for water and \$2,255 for wastewater.

In 2000, this methodology was reviewed by the City through the SDC Committee for purposes of simplifying the calculation and eliminating the perceived or real inequity of a 1200 sq ft home paying the same SDC as a 3000 sq ft home. The objective was to simplify and make the calculation more predictable, easier to administer and to ensure that larger homes paid a proportionately larger SDC over smaller homes. The staff recommendation was to replace, for single family and multi family properties, the use of fixture counts with “habitable square footage” which equals the heated square footage of a house. This figure would be submitted as part of the plan review process and would be clear, easy to administer and charge larger houses proportionately more for their SDC. In order to achieve this last objective, the City developed a series of SDC brackets based on ranges of habitable square footage and assigned to these brackets a specific cost per square foot, with the cost per square foot within each bracket going up as the overall square footage increased. This calculation and the resulting brackets were designed to be “revenue neutral” in terms of the overall SDC revenue generated with this calculation vs. the 1996 fixture count approach. Under this 2000 revised approach, a “typical” average sized home would be charged a water SDC of \$3,362 (\$2,716 under old SDC) and a wastewater SDC of \$2,482 (\$2,255 under old SDC).

The City’s revenue status for its water and wastewater SDC accounts, of which there are 5, is as follows:

- Overall SDC revenues for water in 2005 are budgeted at \$525,000; wastewater SDC revenues are budgeted in 2005 at \$438,000.
- Water SDCs are collected and tracked under distribution, treatment and supply. ’05 fund balances are (\$1,442,000) for supply, \$776,000 for treatment and \$2,643,000 for distribution.
- Wastewater SDCs are collected and tracked under two categories; collection and treatment. The adopted 2005 budget shows a fund balance of \$1,439,000 for collection and (\$77,000) for treatment.

Specific SDC Committee Recommendations

- The City’s use of “habitable square footage” for wastewater and water SDC calculation differs from the generally accepted approach used in Oregon which is either meter size and/or fixture counts. However, ORS 223 does not mandate any specific calculation approach so long as the allocation methodology selected “promotes that future system users contribute no more than an equitable share to the cost of existing facilities” AND “the cost of projected capital improvements needed to increase the capacity of the systems” is the basis for the charge. The SDC Committee did feel the use of habitable square footage was consistent with the City’s objectives for promoting smaller home construction in the City and recommended that it be continued. However, the use of numerous brackets in applying habitable square footage was considered counterproductive and the Committee recommended a uniform cost per habitable square foot.

-
- The City has funded the construction of its new wastewater treatment plant through food and beverage tax receipts. This source of funding is not affected by existing wastewater customers nor can an SDC designed to reimburse the utility (and its customers) for its costs in providing capacity be applied when the treatment facilities are paid through a food and beverage tax. Accordingly, the reimbursement portion of the wastewater SDC does not include the treatment costs paid through the food and beverage tax.
 - The City currently maintains 5 distinct SDC funds for wastewater and water. Under wastewater there are SDC funds for treatment and collection. Under water, there are separate SDC funds for distribution, treatment and supply. The Committee recommends that these 5 funds be reduced to 2, one for wastewater and one for water. Any concerns about loss of accountability by reducing the number of funds can be offset by annually reconvening the SDC Committee to review the City's year-end report on SDC receipts, expenditures and capital project list. The SDC Committee did volunteer their time for these annual meetings.
 - Ashland's 2000 water and wastewater SDCs are based on projects that were updated from the 1996 SDC study. The City now has updated facility plans and CIPs for both utilities. For this SDC update, each of these projects has been reviewed in terms of purpose, cost, and allocation between existing ratepayers and SDC eligibility. The SDC Committee spent the majority of its time reviewing the capital project lists and capacity allocations for each of the wastewater and water projects. These individual projects and their allocation to growth are now part of the City's SDC methodology.

SDC Methodology and Calculation

The City's uses distinct allocators for future commercial water and wastewater connections to the systems. These allocators are meter equivalents and fixture counts respectively. The capital costs determined to be SDC eligible were divided between the commercial and single family residential users based on the total current meter equivalents in service for water; 78.4% are single family residential (SFR) and 21.6% are commercial. For wastewater, the basis for allocation was the average dry weather flow from these two customer groups; 73.64% is SFR and 26.36% is commercial.

Under ORS 223, there are two elements to an SDC:

The **reimbursement fee** considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is that "future system users contribute no more than an equitable share to the cost of existing facilities." The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.

City of Ashland, Oregon
 Calculation of Water System Development Charges
Reimbursement Fee Derivation

	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
Current Equivalent ¾" Meters in Service	7,114	1,960	9,074
Percentages	78.40%	21.60%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Original Cost	25,859,286.21	7,124,571.41	32,983,857.62
less: Accumulated Depreciation	(7,398,192.23)	(2,038,298.68)	(9,436,490.91)
less: Book Value of the Hosler Dam	(59,779.87)	(16,470.13)	(76,250.00)
less: Grants	-	-	-
less: Developer Contributions	-	-	-
less: Principal Outstanding on Long Term Debt			
Series 1977 Water General Obligation Bonds	(78,399.82)	(21,600.18)	(100,000.00)
Series 1997 Flood and Refunding Bonds	(944,717.88)	(260,282.12)	(1,205,000.00)
Series 2003 Water Revenue Bonds	(4,139,510.69)	(1,140,489.31)	(5,280,000.00)
Net Rate Payer Investment in Capacity Available to Serve Growth	13,238,685.73	3,647,430.98	16,886,116.71
Calculation of Future Demand:			
20 Year Forecast...Residential Habitable Area (Square Feet)	18,167,889		
20 Year Forecast...Commercial Equivalent Meters		2640	
Calculated Water Reimbursement Fee:			
Residential - \$/square foot of habitable area	\$ 0.7287		
Commercial/Institutional - \$ Equivalent ¾" meter	\$ 1.382		

City of Ashland, Oregon
 Calculation of Wastewater System Development Charges
Reimbursement Fee Derivation

	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
20-Year Plan (Year 2023) Average Dry Weather Wastewater Flow (MGD)*	1.90	0.68	2.58
Average Dry Weather Flow Percentages	74%	26%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Original Cost	\$ 36,643,246	\$ 13,114,425	\$ 49,757,671
less: Accumulated Depreciation	(4,050,653)	(1,449,707)	(5,500,360)
less: Grants	-	-	-
less: Contributed Capital (City food and beverage tax receipts)	(8,785,659)	(3,144,341)	(11,930,000)
less: Principal Outstanding on Long Term Debt:			
EPA/DEQ State Revolving Loan Program (fed. CFDA No. 66.458)	(16,632,189)	(5,952,573)	(22,584,762)
Net Rate Payer Investment in Capacity Available to Serve Growth	\$ 7,174,745	\$ 2,567,804	\$ 9,742,549
Calculation of Future Demand:			
20 Year Forecast...Residential Habitable Area (Square Feet)	18,167,889		
20 Year Forecast...Commercial Fixture Counts		42,237	
Calculated Sanitary Sewer Reimbursement Fee:			
Residential - \$/square foot of habitable area	\$ 0.3849		
Non-residential - \$/fixture unit	\$ 60.79		

The **improvement fee** portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee, each project in the City's capital improvement plan was reviewed to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. The improvement SDC is calculated as a function of the estimated number of additional units to be served by the City's facilities over the planning period.

City of Ashland, Oregon Calculation of Water System Development Charges Improvement Fee Derivation			
	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
Current Equivalent 3/4" Meters in Service	7,114	1,960	9,074
Percentages	78.40%	21.60%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Future Project Costs Attributable to Growth:			
TAP beyond Talent	\$ 3,189,893	\$ 878,857	\$ 4,068,750
Transmission Line (Reeder to Plant)	771,216	212,480	983,696
Hosler Dam Stability Analysis	-	-	-
Lost Creek Water Rights (additional)	391,999	108,001	500,000
Hosler Dam Security and Telemetry	29,400	8,100	37,500
Sludge Lagoon Improvements	9,408	2,592	12,000
Water Treatment Plant Filter Improvements	47,040	12,960	60,000
Review Chlorine-Hypochloride	58,800	16,200	75,000
Plant and Process Improvements	188,160	51,840	240,000
Filters 7 and 8 New	343,979	94,771	438,750
Waterline Replacement - Granite	108,388	29,862	138,250
Fire Flow Distribution Reservoir	194,040	53,460	247,500
Crowson-Airport-E. Main Loop	38,416	10,584	49,000
Replace Steel Line Terrace; Irrigation Ditch to Lowe	27,440	7,560	35,000
Upsize Lines at Maple, Scenic & Chestnut	49,000	13,500	62,500
Replace Line Strawberry to Grandview	19,600	5,400	25,000
Upsize Mains on Wimer-Sunnyview	49,000	13,500	62,500
New Line Benson Loop	38,416	10,584	49,000
Upsize Lines - Euclid, Prospect, Fern, Roca	53,900	14,850	68,750
Upsize Mains on Tolman Creek	73,500	20,250	93,750
Replace Steel Line on Siskiyou	31,360	8,640	40,000
Internal 4" Line Upsizing	<u>137,200</u>	<u>37,800</u>	<u>175,000</u>
Other Line Upsizing	<u>147,000</u>	<u>40,500</u>	<u>187,500</u>
Engineering Cost	<u>1,045,187</u>	<u>287,963</u>	<u>1,333,150</u>
Construction Mgmt Contingency	<u>1,352,757</u>	<u>372,702</u>	<u>1,725,459</u>
Total Growth Related Costs	\$ 8,395,096	\$ 2,312,959	\$ 10,708,055
Calculation of Future Demand:			
20 Year Forecasted Growth in Residential Habitable Area (Square Feet)	4,476,432		
20 Year Forecasted Growth in Equivalent Meters		650	
Calculated Water Improvement Fee:			
Residential - \$/square foot of habitable area	\$ 1.8754		
Non-residential - \$/equivalent 3/4" meter		\$ 3,558.40	

City of Ashland, Oregon
 Calculation of Wastewater System Development Charges
 Improvement Fee Derivation

	Residential	Commercial & Institutional	Total
Basis for Allocation To Customer Classes:			
20-Year Plan (Year 2023) Average Dry Weather Wastewater Flow (MGD)*	1.90	0.68	2.58
Average Dry Weather Flow Percentages	73.64%	26.36%	100%
Calculation of the Value of Capacity Available to Serve Growth:			
Future Project Costs Attributable to Growth:			
New Membrane Sections	\$ 32,219	\$ 11,531	\$ 43,750
Process Improvements	36,822	13,178	50,000
Thermal Improvements	92,054	32,946	125,000
North Mountain Park	231,977	83,023	315,000
Wightman to Tolman	187,791	67,209	255,000
Collection System Master Plan Update	84,690	30,310	115,000
Granite Street	12,151	4,349	16,500
North Main Pump Station Replacement	24,855	8,895	33,750
Walnut: Grant - Wimer	17,453	6,247	23,700
Street Line Upsize/Replacement	100,523	35,977	136,500
Oak Street Lithia to A	30,930	11,070	42,000
Mountain Ave. Upsize	42,345	15,155	57,500
Willow Street Upsize and Replace	19,147	6,853	26,000
Hersey Street Upsize and Replace	16,938	6,062	23,000
In-House Line Replace and Upsize	88,372	31,628	120,000
Collection System Improvements	110,465	39,535	150,000
Engineering Cost	317,403	113,597	431,000
Construction Mgmt & Contingency	397,251	142,174	539,425
Total Growth Related Costs	\$ 1,843,387	\$ 659,738	\$ 2,503,125
Calculation of Future Demand:			
20 Year Forecasted Growth in Residential Habitable Area (Square Feet)	4,476,432		
20 Year Forecasted Growth in Commercial Fixture Counts		10,407	
Calculated Sanitary Sewer Improvement Fee:			
Residential - \$/square foot of habitable area	\$ 0.4118		
Non-residential - \$/fixture unit		\$ 63.39	

* Source: City of Ashland, Sanitary Sewer Collection System Master Plan, Final Report, January, 2005, Table 2.5 - Summary of Population and Flow Projections

Based on the SDC Committee's review of the water and wastewater project lists and the allocation methods felt to be most consistent with the City's policy objectives, the following are the Committee's SDC recommendations:

Wastewater SDC

Current - SDC is \$2,707 for a "typical" 2,000 habitable square foot home

Proposed – SDC would be \$1,613 for a "typical" 2,000 habitable square foot home

This reduction of the SDC for wastewater is due to a significantly downsized allocation of capital facility costs to growth and the removal of the treatment plant funded through food and beverage tax receipts from the reimbursement element of the SDC. It should be highlighted that the food and beverage tax is due to sunset in 2010. If these tax revenues are no longer available to fund the wastewater treatment plant, the debt service for this facility would need to be paid through a combination of increased wastewater rates and increased SDCs.

The SDC for commercial properties will be based on fixture counts (number of toilets, sinks, etc) at a rate of \$124 per fixture. A commercial property having, as an example, 16 fixtures would pay a wastewater SDC of \$1,984.

Water SDC

Current - SDC is \$3,667 for a "typical" 2,000 habitable square foot home

Proposed – SDC would be \$5,208 for a "typical" 2,000 habitable square foot home

This increase in the SDC results from evaluation of each project identified in City's water CIP and a more accurate allocation of these project costs between growth and current water utility customers.

The SDC for commercial properties will be based on meter size and flow factor/meter equivalence as established by the American Water Works Association (AWWA) standard for cold water meters – displacement type. As an example a ¾" meter will pay \$4,940; 1" meter \$8,250; 1.5" meter; 1.5" meter \$16,450.

RESOLUTION NO. 2006- 11

A RESOLUTION ADOPTING THE ANNUAL BUDGET AND MAKING APPROPRIATIONS

The City of Ashland resolves that the 2006-2007 Fiscal Year Budget, now on file in the office of the City Recorder is adopted. The amounts for the fiscal year beginning July 1, 2006, and for the purposes shown below are hereby appropriated as follows:

SECTION 1.

GENERAL FUND

Administration Department	\$	253,780
Administrative Services - Municipal Court		395,035
Administrative Services - Social Services Grants		115,360
Administrative Services - Economic & Cultural Grants		504,650
Administrative Services - Miscellaneous		7,000
Administrative Services - Band		61,554
Police Department		5,325,774
Fire and Rescue Department		5,262,372
Public Works - Cemetery Division		355,375
Community Development - Planning Division		2,313,591
Community Development - Building Division		801,756
Transfers		500
Contingency		400,000
TOTAL GENERAL FUND		<u>15,796,747</u>

COMMUNITY DEVELOPMENT BLOCK GRANT FUND

Personal Services		35,485
Materials and Services		385,765
Other Financing Uses (Interfund Loans)		215,000
TOTAL CDBG FUND		<u>636,250</u>

STREET FUND

Public Works - Street Operations		4,060,268
Public Works - Storm Water Operations		739,870
Public Works - Transportation SDC's		274,850
Public Works - Storm Water SDC's		47,500
Public Works - Local Improvement Districts		343,498
Contingency		153,000
TOTAL STREET FUND		<u>5,618,986</u>

AIRPORT FUND

Materials and Services		111,532
Debt Service		35,173
Contingency		5,000
TOTAL AIRPORT FUND		<u>151,705</u>

CAPITAL IMPROVEMENTS FUND

Personal Services		152,407
Materials and Services		394,750
Capital Outlay		3,056,000
Transfers		905,434
Other Financing Uses (Interfund Loans)		530,000
Contingency		50,000
TOTAL CAPITAL IMPROVEMENTS		<u>5,088,591</u>

DEBT SERVICE FUND

Debt Service		1,656,170
TOTAL DEBT SERVICE FUND		<u>1,656,170</u>

WATER FUND

Electric - Conservation Division	172,005
Public Works - Forest Lands Management Division	196,000
Public Works - Water Supply	3,020,879
Public Works - Water Treatment	1,400,354
Public Works - Water Distribution	3,264,112
Public Works - Reimbursement SDC's	467,670
Public Works - Improvement SDC's	702,580
Public Works - Debt SDC's	123,932
Debt Services	544,457
Contingency	152,000
TOTAL WATER FUND	10,043,989

WASTEWATER FUND

Public Works - Wastewater Collection	2,240,657
Public Works - Wastewater Treatment	2,022,260
Public Works - Reimbursement SDC's	192,160
Public Works - Improvement SDC's	108,090
Debt Services	1,793,196
Contingency	149,000
TOTAL WASTEWATER FUND	6,505,363

ELECTRIC FUND

Electric - Conservation Division	976,645
Electric - Supply	6,557,504
Electric - Distribution	5,189,851
Electric - Transmission	1,048,600
Contingency	381,000
TOTAL ELECTRIC FUND	14,153,600

TELECOMMUNICATIONS FUND

IT - Customer Relations\Promotions	223,608
IT - Cable Television	478,746
IT - Internet	776,310
IT - High Speed	301,179
Contingency	100,000
TOTAL TELECOMMUNICATIONS FUND	1,879,843

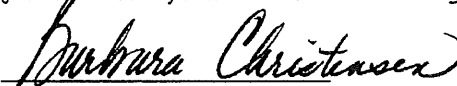
CENTRAL SERVICES FUND

Administration Department	998,925
Administrative Services Department	1,919,524
IT - Computer Services Division	982,388
City Recorder Division	269,768
Public Works - Administration and Engineering	1,488,463
Contingency	171,000
TOTAL CENTRAL SERVICES FUND	5,830,068

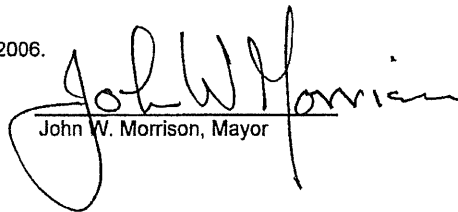
INSURANCE SERVICES FUND	
Personal Services	400,000
Materials and Services	661,291
Contingency	32,000
TOTAL INSURANCE SERVICES FUND	<u>1,093,291</u>
EQUIPMENT FUND	
Personal Services	266,476
Materials and Services	519,955
Capital Outlay	1,415,000
Contingency	42,000
TOTAL EQUIPMENT FUND	<u>2,243,431</u>
CEMETERY TRUST FUND	
Transfers	19,000
TOTAL CEMETERY TRUST FUND	<u>19,000</u>
PARKS AND RECREATION FUND	
Parks Division	3,868,250
Recreation Division	962,200
Golf Division	416,000
Transfers	110,000
Contingency	35,000
TOTAL PARKS AND RECREATION FUND	<u>5,391,450</u>
YOUTH ACTIVITIES LEVY FUND	
Personal Services	96,000
Materials and Services	2,335,361
TOTAL YOUTH ACTIVITIES LEVY FUND	<u>2,431,361</u>
PARKS CAPITAL IMPROVEMENTS FUND	
Capital Outlay	331,000
TOTAL PARKS CAPITAL IMP. FUND	<u>331,000</u>
TOTAL APPROPRIATIONS	<u><u>\$ 78,870,845</u></u>

SECTION 2. This Resolution takes effect upon signing by the Mayor.

This resolution was read by title only in accordance with Ashland Municipal Code § 2.04.090 and duly PASSED and ADOPTED this 6 day of June, 2006.


Barbara Christensen, City Recorder

Signed and Approved on this 7 day of June, 2006.


John W. Morrison, Mayor

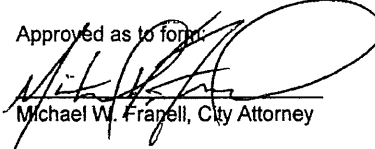
Approved as to form:

Michael W. Franzell, City Attorney

EXHIBIT C

City of Ashland, Oregon

WATER:

SYSTEM DEVELOPMENT CHARGE UPDATE

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

Vancouver, WA

July 2016



ECONOMIC & FINANCIAL ANALYSIS

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INTRODUCTION

An update to the water system development charge was presented in the final *2012 Comprehensive Water Master Plan* (WMP). Since then, the TAP water line project has been completed, which reduced the size of the Crowson II water storage project. An updated schedule of water meter sizes and technologies has also been added. These changes affect the calculations of the reimbursement and improvement fees. The basic SDC methodology remains the same: residential developments are assessed based on square footage of habitable floor area and all others are assessed based on the size water meter serving the development. These adjustments to the *2012 Master Plan* SDC are presented in the following sections of this report. This update relies on the forecasts of water usage and land use development contained in the 2012 WMP.

SUMMARY

Table 1 summarizes these three calculations of the water SDC for residential, commercial, and industrial users. Compared to the current water SDC, the updated water SDC increases 0.3% for the residential land uses and decreases 1.3% for commercial and industrial land uses. The commercial and industrial SDC decreased due to an apparent error in the *2012 Master Plan* calculations which is explained below in Table 5.

Table 1. Summary Water SDC, Displacement Type 3/4-inch Meter

	Current SDC	2014 2012 Master Plan Update with TAP & Crowson II			
		Reimbursement	Improvement	Total SDC	% Δ
Residential					
\$/habitable sf	\$2.60	\$0.93	\$1.68	\$2.61	0.30%
Commercial and Industrial (by meter size)^					
5/8 x 3/4	\$4,940	\$1,793	\$3,084	\$4,877	-1.30%
3/4	\$8,250	\$2,989	\$5,140	\$8,129	-1.50%
1	\$16,452	\$5,976	\$10,281	\$16,257	-1.20%
1½	\$26,332	\$9,561	\$16,449	\$26,010	-1.20%
2	\$57,654	\$20,918	\$35,983	\$56,901	-1.30%
3	\$98,808	\$35,858	\$61,685	\$97,543	-1.30%
4	\$205,866	\$74,704	\$128,509	\$203,213	-1.30%
6	\$296,424	\$107,573	\$185,054	\$292,627	-1.30%

^Rounded to the nearest dollar

CURRENT WATER SDC

Currently the City's water customers use displacement type meters, though more recent technology uses turbine type meters. In general, turbine meters have a higher capacity to pass water than the current displacement meters. Table 2 shows both the capacities and SDCs for the two types of meters by meter size (inches of diameter). Also, the City has been defining the 3/4-inch meter as a 5/8" x 3/4" (i.e., 5/8" from

the water line in the right-of-way by 3/4-inch into the property). A true 3/4" x 3/4" will pass substantially more water than a 5/8" x 3/4" as shown in Table 2.

Table 2. Schedule of Water Meter SDCs by Meter Type and Size

	Safe		Safe		Turbine			Displacement		
	Maximum Operating Capacity (gpm)^	Equivalent Number of 5/8 x 3/4 Meters	Maximum Operating Capacity (gpm)	Equivalent Number of 5/8 x 3/4 Meters	Reimburse-ment	Improve-ment	Total SDC	Reimburse-ment	Improve-ment	Total SDC
5/8 x 3/4	15	1.00	15	1.00	\$1,793	\$3,084	\$4,877	\$1,793	\$3,084	\$4,877
3/4	30	2.00	25	1.67	3,586	6,168	9,754	2,994	5,151	8,145
1	50	3.33	40	2.67	5,970	10,270	16,240	4,787	8,235	13,022
1 1/2	100	6.67	50	3.33	11,959	20,572	32,531	5,970	10,270	16,240
2	160	10.67	100	6.67	19,130	32,909	52,039	11,959	20,572	32,531
3	350	23.33	150	10.00	41,828	71,955	113,783	17,929	30,842	48,771
4	600	40.00	200	13.33	71,716	123,369	195,085	23,899	41,113	65,012
6	1250	83.33	500	33.33	149,402	257,008	406,410	59,757	102,797	162,554
8	1800	120.00	-	-	215,147	370,106	585,253	-	-	-

^gallons per minute

UPDATED WATER SDC

Reimbursement Fee

Table 3 shows the changes in the cost basis of the reimbursement fee. The reimbursement fee is based on the depreciated value of existing fixed assets and the recent addition of the TAP water line.

The proposed SDC in the *2012 Master Plan* was based on the fiscal year 2011 (July 1, 2012 through June 30, 2011) audit. The update is based on the audit ending June 30, 2013, and on the current cost of constructing the TAP water line and the Medford Water Commission SDC for water in 2014 dollars. This project was deleted from the list of capital improvements that was is to calculate the improvement fee. Since this project has been constructed, it can be counted as an existing asset with excess capacity to serve future development. In the *2012 Master Plan*, the project was to serve only emergency water needs and was excluded from the calculation of the improvement fee. Since then, the scope of this project has made it a source of water to Ashland and it will be available to serve future development. In this analysis, 90% of the TAP line cost is included because it will primarily serve growth and 10% is assumed to be used for emergency use by existing development.

Seventy-seven percent of the 3/4-inch meters are in single-family residences; therefore, 77% of the eligible reimbursement fee costs are allocated to residences and 23% to commercial & industrial users.

Table 3. Calculation of Water Reimbursement Fee

	2011	2013	Allocation	% Δ
Original Cost	\$36,180,656	\$36,435,280		0.7%
Accumulated Depreciation	(\$15,228,374)	(\$17,254,657)		13.3%
Book Value of Hosler Dam	(\$55,741)			-100.0%
Book Value	\$20,896,541	\$19,180,623		-8.2%
Series 1997 Flood & Refunding Bonds	(\$175,000)			-100.0%
Series 2003 Water Revenue Bonds	(\$2,940,000)	(\$4,695,862)		59.7%
Series 2009 Water & WW Bonds (FF&C)	(\$633,551)			-100.0%
Principal Outstanding	(\$3,748,551)	(\$4,695,862)		25.3%
Investment in Capacity	\$17,147,990	\$14,484,761		-15.5%
Emergency TAP Pipeline & Pump				
MWC's SDC		\$2,620,084		
Construction		\$4,400,000		
Less: IFA Forgivable Loan		(\$950,000)		
Net Cost of TAP		\$6,070,084		
Allocation to Future Development		\$5,463,076		
% Allocation to Future Development		90%		
Cost Basis for Reimbursement Fee		\$19,947,837		

Current 3/4" Equivalent Meters	#	%	\$
Residential	7,575	77%	\$15,359,834
Commercial & Industrial	2,227	23%	\$4,588,002
Totals	9,802	100%	\$19,947,836

Year 2032 Projections	#	Unit [^]	\$ / Unit
Residential – sf habitable area	16,483,431	SF	\$0.9318
Commercial and Industrial – equivalent 3/4" meters	2,559	EM	\$1,792.89

[^]SF = square feet; EM = equivalent 3/4" meter

Improvement Fee

The following two tables show the lists of capital improvements used to calculate the improvement fee. Since the Water Master Plan was completed the City changed the purpose of the TAP water line from an emergency source to a daily source of water. In so doing the planned capital improvements changed. Also, EFA updated the original project costs to 2014 dollars.

Table 5 is from the *2012 Master Plan* (Table 9-16) and shows that the Emergency TAP line project is deleted. This project is under construction and qualifies as a reimbursement fee. Only 9 projects qualify to

be improvement fee projects; of the \$44 million of capital improvements only \$4.3 million is included in the SDC improvement fee. The majority of the projects have only a local impact and are not eligible for the improvement fee.

The Emergency TAP Pipeline & Pump project has been deleted from the list of capital improvements and added to the list of existing capital improvements. Because of this change in scope the City was able to reduce the amount of storage needed at the Crowson II reservoir which reduced the cost by \$1.3 million (in 2012 \$'s). Table 5 shows these calculations.

Table 4. Original Capital Improvements List and Percent SDC Eligible, 2012 \$'s

Capital Project	Total Cost	SDC Eligible	
		%	\$
Supply			
FERC Dam Security & Telemetry Improvement (50% Electric, 50% Water)	-	25.00%	-
FERC Dam Spillgate Upgrades(50% Electric, 50% Water)	-	25.00%	-
FERC Structural Stability Analysis(50% Electric, 50% Water)	-	25.00%	-
FERC Part 12 Dam Safety Inspection(50% Electric, 50% Water)	160,000	25.00%	40,000
Ashland Creek West Fork Bridge Construction	120,000	75.00%	90,000
Sediment TMDLin Reeder Resv.	600,000	75.00%	450,000
Reeder Resv Study Implementation	30,000	75.00%	22,500
Reeder Resv Access Road TMDL Compliance	100,000	75.00%	75,000
Reeder Resv Variable Depth Intake	100,000	0.00%	-
TID Terrace St Pump Station Improvements	220,000	0.00%	-
TID Canal Piping: Starlite to Terrace Street	1,100,000	100.00%	1,100,000
Test existing high capacity wells	50,000	0.00%	-
Water Conservation Smart Controller Pilot Project	50,000	0.00%	-
Water Conservation Management Plan (due April 2012)	0	100.00%	-
Emergency TAP Pipeline & Pump	2,000,000	0.00%	-
Treatment & Storage			
Raw Water Bypass Measurement	25,000	0.00%	-
SCADA Radio Frequency FCC Compliance	45,000	0.00%	-
Final CT Disinfection Improvements	85,000	0.00%	-
Permanganate Feed Facility Study & Implementation	265,000	0.00%	-
WTP Security Upgrades	50,000	0.00%	-
Existing Plant Mech. Elec. & Scada Upgrades	1,500,000	0.00%	-
Ozone /UV Analysis & Disinfection	1,750,000	0.00%	-
Bear Creek Cu WLA Source Control Study & Implementation	50,000	0.00%	-
2.6-MG Reservoir & Clearwell (“Crowson II”)	6,746,000	10.00%	674,600
2.5 MGD Water Treatment Plant	12,000,000	10.00%	1,200,000
Distribution			
Telemetry Station at Water Warehouse	50,000	0.00%	-
Water Master Plan Updates	700,000	100.00%	700,000
Park Estates Pump Station/Loop Road Reservoir Alternatives	2,000,000	0.00%	-
Lit Way New PRV	341,000	0.00%	-
Tolman Creek Road New PRV	341,000	0.00%	-
Pipe Replacement Program	3,700,000	0.00%	-
Radio Read Meter Program	1,351,000	0.00%	-

Capital Project	Total Cost	SDC Eligible	
		%	\$
Hydrant Replacement	616,000	0.00%	-
Emergency Response Plan Update	20,000	0.00%	-
Cross Connection Control Plan Update	15,000	0.00%	-
Safety Plan Update	20,000	0.00%	-
Granite Reservoir Valving	100,000	0.00%	-
Piping			
Ivy Lane	346,000	0.00%	-
Ivy Lane	94,000	0.00%	-
Normal Ave	517,000	0.00%	-
Walker Ave	784,000	0.00%	-
Parker Street	162,000	0.00%	-
Harmony Lane	65,000	0.00%	-
Lit Way	35,000	0.00%	-
Ray Lane	54,000	0.00%	-
Beach Street	91,000	0.00%	-
AHS Property	90,000	0.00%	-
Vista Street	149,000	0.00%	-
Vista Street	5,000	0.00%	-
Meade Street	235,000	0.00%	-
Elkader Street	72,000	0.00%	-
Ivy Lane	64,000	0.00%	-
South Mountain Ave	6,000	0.00%	-
South Mountain Ave	17,000	0.00%	-
Pinecrest Trail	178,000	0.00%	-
Pinecrest Trail	396,000	0.00%	-
Penny Drive	83,000	0.00%	-
Woodland Drive	52,000	0.00%	-
Hiawatha Place	58,000	0.00%	-
Morton Street	130,000	0.00%	-
Ashland Mine Road	115,000	0.00%	-
Fox Street	54,000	0.00%	-
Almeda Drive	35,000	0.00%	-
Skycrest Drive	162,000	0.00%	-
Crispin Street	131,000	0.00%	-
Oak Lawn Ave	29,000	0.00%	-
Sylvia Street	64,000	0.00%	-
Black Oak Way	85,000	0.00%	-
Oak Knoll Dr	287,000	0.00%	-
Ashland Street	432,000	0.00%	-
I-5 Crossing	794,000	0.00%	-
Ditch Road	225,000	0.00%	-
Lithia	70,000	0.00%	-
Iowa Street	640,000	0.00%	-
Granite Street	300,000	0.00%	-
B Street	250,000	0.00%	-

Capital Project	Total Cost	SDC Eligible	
		%	\$
Terrace Street	350,000	0.00%	-
Totals	44,006,000		4,352,100
	100%		9.89%

Source: *City of Ashland Comprehensive Water Master Plan*, Carollo Engineers, Dec-2012

Table 6 shows the list of qualified improvement fee projects and the adjustments made to the original 2012 *Master Plan* projects as of this year. The Crowson II reservoir can be reduced in size at a cost savings of \$1.3 million. Ten percent of the cost and of the cost reduction are incorporated into the revisions along with an adjustment for inflation. According to the *ENR* Construction Cost Index, construction costs increased 5.45% between June 2012 and June 2014.

Table 5. SDC Eligible Capital Improvements With Modifications, 2014 \$'s

Capital Project	SDC Eligible	10% Adjustment [^]	2012 \$'s	2014 \$'s
Supply				
FERC Part 12 Dam Safety Inspection (50% Electric, 50% Water)	40,000		40,000	\$42,000
Ashland Creek West Fork Bridge Construction	90,000		90,000	\$95,000
Sediment TMDL in Reeder Resv.	450,000		450,000	\$475,000
Reeder Resv Study Implementation	22,500		22,500	\$24,000
Reeder Resv Access Road TMDL Compliance	75,000		75,000	\$79,000
TID Canal Piping: Starlite to Terrace Street	1,100,000		1,100,000	\$1,160,000
Treatment & Storage				
2.6-MG Reservoir & Clearwell (“Crowson II”)	674,600	-\$130,000	544,600	\$574,000
2.5 MGD Water Treatment Plant	1,200,000		1,200,000	\$1,265,000
Distribution				
Telemetry Station at Water Warehouse	-		-	-
Water Master Plan Updates	700,000		700,000	\$738,000
Piping				
Totals	4,352,100		4,222,100	4,452,000

[^]Ten percent of the cost reduction (\$1,300,000) is deducted from the eligible SDC costs.

Table 6 shows the allocation of the eligible improvement fee projects to residential and commercial & industrial users based on the expected number of ¾-inch equivalent meters each customer class is expected to use. The improvement fee is the allocated cost divided by the forecast square footage of habitable space residences are expected to develop; and, the allocated cost divided by the forecast number of ¾-inch equivalent meters commercial & industrial customers are expected to develop.

Table 6. Calculation of Water Improvement Fee

	$\frac{3}{4}$ Inch Meter Equivalents	% Total	\$ Allocation
Total Cost Allocation to Improvement Fee, 2014 \$'s			\$4,452,000
Residential	7,575	77%	\$3,428,040
Commercial & Industrial	2,227	23%	\$1,023,960
Total	9,802	100%	\$4,452,000
Forecast Growth Square Feet of Residential Habitable Area	2,046,408	\$/SF	\$1.6751
Forecast Growth $\frac{3}{4}$ " Equivalent Meters	332	\$/EM	\$3,084.22

Compared to the current SDC, the updated residential SDC (reimbursement plus improvement fees) will increase 0.3%, and the updated commercial & industrial SDC will decrease about 1.3%. The decrease in the commercial & industrial SDC is due to an apparent error in the calculations of the *2012 Master Plan*. The *2012 Master Plan* forecast the number of $\frac{3}{4}$ -inch equivalent meters will increase by 332 (from 2229 in 2012 to 2559 in 2032); however, the 2012 calculation of the SDC was based on only 318 new $\frac{3}{4}$ -inch equivalent meters.¹ Table 6 above is based on 332 new $\frac{3}{4}$ -inch equivalent meters.

The updated SDC uses the same criteria as the *2012 Master Plan* and the current methodology. The current and *2012 Master Plan* methodology divides the cost between single-family residences, and commercial and industrial based on the equivalent numbers of $\frac{3}{4}$ -inch water meters in service currently. A $\frac{3}{4}$ -inch equivalency is based on the amount of water that a certain size meter (e.g., 2-inch meter) can pass instantaneously relative to the amount a $\frac{3}{4}$ -inch meter can pass (e.g., a 2-inch meter can pass 5.33 times more water than a $\frac{3}{4}$ -inch meter). Single-family residences' SDCs are based on square footage of habitable (heated) floor area; and, the commercial and industrial is based on meter size which varies by the meters' abilities to provide water instantaneously—gallons per minute.

¹ Comprehensive Water Master Plan, page 9-29 Table 9.15 shows the current and forecast numbers of $\frac{3}{4}$ -inch EM for commercial & industrial at 332; page 9-32 shows only 318 EM were included in the calculation of the improvement fee. The reimbursement fee is based on the correct number of $\frac{3}{4}$ -inch EM, 2559 (page 9-29).

**ASHLAND SYSTEM DEVELOPMENT CHARGE REVIEW COMMITTEE
MINUTES
March 4, 2014**

CALL TO ORDER: Mike Faught called the meeting to order at 1:00 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Dan Jovick, Russ Silbiger, Jac Nickels, and Troy Brown Jr.

Committee Members Absent: Carlos Reichenshammer, and Allen Douma

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present: Ray Bartlett (Financial Analyst)

Council Liaison Present: Rich Rosenthal

Mike mentioned that at some point the committee will need to select a Chair/Vice Chair but the Committee would come back to that after introductions. He stated that Ray Bartlett who is the Financial Analyst that did all the work on the SDC recommendations is here to present the information. All of the SDC's that are being presented have been recommended, with the exception of a couple of projects that have been added, out of the Water, Sewer and Transportation master plans so these are all recommendations based on those adopted documents.

INTRODUCTIONS

The Committee did a round table introduction.

Jac/Dan m/s to nominate Carlos as chair. All in favor.

OVERVIEW

Ray stepped through each of the documents which were all drafted in 2012 which now requires changes in all three areas. He pointed out that

WATER SDC

Issues-

*Drafted in 2012

*Update all costs to 2014 dollars

*Add a portion of the TAP project which was originally planned to only be used in the event of an emergency. Since then the project has changed and the cost has gone up by roughly 3 million dollars. At the time it was planned the City hadn't anticipated having to pay the Medford Water Commission's SDC which is fairly large.

Mike pointed out that is a supply option for us in 2060. The facility is going to be constructed as a temporary facility but at some point it will likely become a permanent facility which means we need to start collecting SDC's on that now.

*Reduce the Crowson II Reservoir project which saves about 1.3 million dollars

*Review methods of assessment along with the sewer SDC

Reimbursement Fee (see attachments for the cost basis for reimbursement fee) -

*Value of Existing excess capacity

*Original cost:

Less accumulated depreciation

Balance of outstanding water debts

No change in capacity

The reimbursement fee was based on 2011 dollars. Ray pointed out that SDC's are usually reset annually or at certain trigger points, such as:

*A master plan being updated

*A large increase on a project included in a master plan or

*Inflation

Water Improvement Fee (see attachments for the cost basis for the improvement fee) -

*Only 4.352 million of \$44 million included (2011 \$'s)

*Changes since 2011 -

Medford Water Commission/TAP SDC cost (\$2 million emergency service only to future source & reduces the size of Crowson II).

Cost increased by \$3.7 million now will be used as a mainline supply; provides benefit to future users.

*Reduces cost of Crowson II reservoir by \$1.3 million (2011 \$'s); 10% allocated to improvement fee

Residential SDC, \$/sf

\$ 2.60 Current

\$2.45 2012 Update (not implemented)

\$2.65 Proposed (2% increase to end user)

SEWER SDC

The capital improvement projects fall into two categories; priority one and priority two. The current SDC rate did not include a number of the projects with are now on the capital improvements list. The system itself is fairly expensive to build/operate.

Residential SDC, \$/sf

\$ 0.81 Current

\$2.03 Proposed (150% increase to end user)

(See attachments for the cost basis for reimbursement fee and improvement fee)

ASSESSING WATER/SEWER SDC'S

*Currently:

Residential based on size of house

Commercial based on number of fixture units

*Alternatively:

Residential-

Single family: Meter size

Multi-family: Greater of meter size or number of housing units x Rate

Mike pointed out that SDC's really should be based on the demand on the system. Russ brought to the attention of the committee that he was involved in a big discussion about 10 years or so ago regarding this. The one size fits all method is only theoretically correct. The size of the meter gives you the maximum capacity which is far greater than any household could actually use. Some are forced into having a bigger meter size due to simply having a sprinkler system which has little to do with the actual maximum capacity rather than your theoretical maximum. Meter size is probably the best way of determining. Meter size is simple and convenient; the fixture method gives you a slightly clearer picture of real amount of use. Ray pointed out that it isn't how much you use in the month; it's what you use instantaneously. You also have to consider the long term picture and the amount of owners that the home may go through. Each family will have a different amount of users. At least with the meter size method it practically limits how much can be pulled out of the water system instantaneously. Meter size makes a big difference in demand on the system. With the fixture method you may have a home with three bathrooms but only two people living there which means they are likely to not be using all three bathrooms. Also, on the Commercial side of things it is almost always easier to install fixtures after the building is completed so you may not know if fixtures have been installed. It also incentivizes the contractor to choose the meter size which will best fit the demand of that building. From a conservation standpoint meter size is generally the best way.

Bill explained to the committee that as the department that collects the fees he's had to meet with unhappy customers who were increasing fixtures or making some improvements and their argument was that they were increasing fixtures but they weren't increasing demand.

Russ feels we should orient these towards our capacity problems since that's what we are building out for.

TRANSPORTATION

Additional TSP project-

*East Main Street improvement between Walker and Clay Street

*2014 cost \$2.559 million

*Would add \$258 to SDC at 100% eligible

Transportation improvement fee (see attachments for the cost basis for the improvement fee) –

*Current \$2,043

*Proposed \$2,196

Proposed w/Main Street \$2,454

Mike added that the Normal Avenue railroad crossing is the only crossing through that area and it would also be an East Main connection which is why they had shown it as 50%. Russ feels that the railroad crossing is primarily growth related and should be as close to 100% SDC as possible. Mike said that once the connection is made there will be pass-through traffic created. There is also a nexus to what is required to be paid for by the builders. On a City wide perspective it creates a North/South connection. He pointed out that this initial meeting is really just to bring the information to the committee and then come back and go through these things.

SUMMARY

*Water SDC 2% increase

*Wastewater 150% increase

*Transportation 7.5% increase

Mike asked the committee how they would like to proceed now having all of the background data. The committee decided to go home and go through all of the projects/data and come back and tackle everything, likely starting with Water/Sewer and then Transportation last.

Ray spoke to the credit policy which is a part of the statute.

The Committee agreed to meet every other Tuesday at 1:00 pm. Next meeting March 18th.

Mike/Troy m/s to nominate Jac as Vice Chair. All in favor.

ADJOURNMENT

Meeting adjourned at 2:00 pm

Respectfully submitted,

Tami De Mille-Campos, Administrative Assistant

System Development Charge (SDC) Review Committee

March 18, 2014

Present: Troy Brown, Allen Douma, Dan Jovick, Jac Nickels, (vice-chair) Rich Rosenthal, and Russ Silbiger.
Absent: Carlos Reichenshammer (Chair)

Staff: Mike Faught, Bill Molnar, Mary McClary

Vice-chair Nickels called the meeting to order at 1:10pm.

Introductions

The members introduced their name and affiliations.

Troy Brown Jr.---Planning Commission

Allen Douma---Citizen

Mike Faught---Public Works Director

Jac Nickels (vice-chair)---Architect

Russ Silbiger---Citizen

Rich Rosenthal---Council Liaison

Ray Bartlett---Consultant (by phone)

Jac Nickels announced the Committee would approve two sets of minutes at the next meeting.

Troy Brown requested the agenda be sent as a pdf file.

Minute approval

Set aside.

Public Forum

No one present.

Water System Development Charges (SDC)

Mike Faught introduced the consultant Ray Bartlett on the phone. Mike spoke and presented a PowerPoint presentation regarding the current SDC charges and proposed changes. The water SDC charges were \$2.60. The 2012 update reduced it to \$2.45, then TAP allocation (SDC to Medford) brought the charge to \$2.65.

Ray Bartlett went through the details for the changes of the proposed changes for residential and commercial water and the members discussed the recommendations. Residential SDC is based on the square footage of the residential structure, commercial rates for water would be based on meter size, and commercial sewer would be based on plumbing fixtures. Ray would work on an example for the Committee to review at the next meeting to clearly see the current charges and the proposed charges.

Sewer SDC

The commercial sewer charges would be based on fixture units currently at \$124.18, changing to \$311.19. The current rate for residential is .81 sq ft and would change to 2.03 sq ft, an 150% increase. Ray explained the old methodology left out the value of the capital improvements made. Going forward the improvements would not be funded with tax but user fees which drove up the cost of the user fees. The tax revenue pays for the debt service on the current system until 2024, approximately 1.6 million per year. None of the tax revenues are included in the SDC calculations. After that time Council had already approved the tax monies to be used for Public Works capital projects.

Allen asked for an outline of how the projected costs went up 150% to both residential and commercial and wondered what this would do to an average home (2,000 sq ft).

The food and beverage tax monies used to pay for the treatment plant, would become a revenue stream for the sewer fund to pay debt service for capital projects and the engineers would allocate how much should go to growth in the SDC. Each project has a growth indication and drives the SDCs. SDC funds can only be used for projects identified in the master plan. The increase is needed now to pay for growth. If the SDC's do not cover most of the costs then rates increase. Ashland's growth has been less than 1% for the past 10 years. The master plan projects are based on that growth.

The members discussed capacity versus rates increase, projects coming up in the future, replacement costs, percentage of sewer costs paid by SDC and rates, growth paying for itself, and limitation because of urban growth boundaries.

Ashland was in the middle to low range for SDC charges when compared to similar communities mainly because other communities adjust annually. We do comprehensive master plans every 5 years and the SDC rates are re-evaluated. Water and Sewer growth was calculated by engineers.

The committee asked for a rate impact comparison for several commercial buildings (10,000 sq ft) and an average residential structure (1700 sq ft). The criteria used are based on the American Water Works Association for meter capacity for meter size and manufactures. The committee would like to see the comparisons with the sewer SDC proposals also.

Mike suggested the Committee pick up the Transportation discussion at the next meeting.

Meeting adjourned at 2:30.

Next meeting: April 1, at 1pm in the Siskiyou Room.

Respectfully submitted by:

Mary McClary

*Administrative Assistant for Electric, IT and
Telecommunication Departments*

ASHLAND SYSTEM DEVELOPMENT CHARGE REVIEW COMMITTEE
MINUTES
April 15, 2014

CALL TO ORDER: Carlos Reichenshammer called the meeting to order at 1:09 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Russ Silbiger, Carlos Reichenshammer, Allen Douma and Troy Brown Jr.

Committee Members Absent: Dan Jovick, and Jac Nickels

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present: Ray Bartlett (Financial Analyst)

Council Liaison Absent: Rich Rosenthal

Mike mentioned that at some point the committee will need to select a Chair/Vice Chair but the Committee would come back to that after introductions. He stated that Ray Bartlett who is the Financial Analyst that did all the work on the SDC recommendations is here to present the information. All of the SDC's that are being presented have been recommended, with the exception of a couple of projects that have been added, out of the Water, Sewer and Transportation master plans so these are all recommendations based on those adopted documents.

INTRODUCTIONS

The Committee did a round table introduction.

Minutes approval – March 18th. Unanimous consent

WATER SDC

Ray stated the SDC statutes in Oregon have two portions of the SDC; reimbursement fee & improvement fee. The reimbursement fee is based on the value of excess capacity that is currently in the system, drought notwithstanding. The City in the past has used original cost depreciated for the length of time it's been in use to calculate the cost basis for the reimbursement fee. There are two other commonly used methods in practice; replacement cost or replacement cost depreciated for the length of time it's been in use; both of which produce a much higher SDC than what the City of Ashland has chosen to use. Ray pointed out that you are allowed to include projects that are financed or under construction. One of the issues that will be looked at is whether or not to take the TAP line & add that to the reimbursement fee.

The improvement fee is the value of capacity that hasn't yet been built; they are projects to be built in the future which in the planning process have been identified as necessary to meet population & employment growth that's expected. Although the future can't be precisely forecasted, the master plan is based on a reasonable forecast of population & employment. The current water master plan is designed to go out to the year 2030. The TAP waterline is likely to meet demand to 2060.

Ray pointed out that they are simply updating the figures in the 2012 master plan to 2013 dollars, which is the last year in which there are audited financials for capital values and using the same measurements that they had for capacity for the existing system and the growth.

One of the issues that came up at the previous committee meeting was how the SDC is applied to new development. What the City has been using for sewer & water for residences is to calculate what the SDC would be for a 2,000 square foot house. The City then applies that SDC to the actual square footage of the house that is being built. The theory is the larger the house, the higher the demand for water and is a pretty commonly applied method.

For non-residential uses, the water SDC is applied based on the size of the water meter that is installed. The sewer system is based on the number of fixture units that are installed.

The TAP project was originally left entirely out of the SDC calculation because it was considered to be satisfying only emergency demands of the current population & would only be used on a temporary basis. Based on climate change it is estimated that it would be used every 4 years or during an emergency (flood, fire etc). A discussion was had between Ray and Mike regarding whether or not the TAP project meets the SDC requirements. Mike stated if Council approves the TAP project as proposed then the original SDC proposal is what they would continue to recommend, if it does change they would recalculate it and bring it back to the committee.

SEWER SDC

The sewer SDC hasn't changed since the previous meeting, except for addressing a few of the issues that came up at the last meeting. One of those issues was whether or not sewer projects that are being paid for with food and beverage tax have been included. Those are not being included and they have removed those facilities that are financed and being repaid out of the food and beverage tax. The net is the facilities paid for with user fees and SDC's. There have been major improvements to the wastewater treatment plant since the last master plan was updated and the capital improvements list has had additions made to it related to regulatory requirements.

The engineers evaluate what percentages are due to growth. It is required as part of the master planning process and all of the projects have different growth projections.

Mike pointed out the master plans calculate the estimated population growth, and they then figure out what that impact is to the system. After reviewing the master plans/transportation system plan, the goal for the SDC committee is to make a recommendation which will be forwarded to Council for approval. Once the committee has made their recommendation a required 90-day notice would be sent out to the homebuilders association and after that it would be presented to Council along with a public hearing.

The committee agreed to skip the April 29th meeting in order to have time to go through all of the material. The next meeting will be held on May 13, 2014.

ADJOURNMENT

Meeting adjourned at 2:15 pm

Respectfully submitted,

Tami De Mille-Campos, Administrative Assistant

ASHLAND SYSTEM DEVELOPMENT CHARGE REVIEW COMMITTEE
INFORMATIONAL ONLY **NO QUORUM**
June 10, 2014

Committee Members Present: Russ Silbiger, Jac Nickels, and Troy Brown Jr.

Committee Members Absent: Dan Jovick, Carlos Reichenshammer, and Allen Douma

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present via phone: Ray Bartlett (Financial Analyst)

Council Liaison Absent: Rich Rosenthal

Transportation Commissioner Present: Joseph Graf

Mike pointed out that we did not have a quorum so the committee couldn't take action on anything during the meeting but the meeting could continue due to the scheduling of the conference call with our consultant, Ray Bartlett. Informational notes will be taken for submission to the full committee at its next meeting.

WATER SDC

Ray provided an example of the current sdc and the proposed sdc based on a 2,000 square foot home. Bill asked if the committee wondered where Ashland's SDC's stack up with other cities around Oregon. He said he had remembered seeing an email, possibly from the League of Oregon Cities, which showed that Ashland was sort of in the middle. Bill didn't recall the details of the document. Mike asked Ray if that was something that he could take a look at (as long as it wouldn't exceed 25% of the contract amount). Ray agreed that he could look into that.

Ray then stepped through the "Update - water system development charge" document (see attached). The tables discussed in the document show the changes to the current water system development charge (SDC) and compares the current water SDC to that proposed in the 2012 Comprehensive Water Master Plan (WMP, Final December 2012), and to this proposed SDC based on changes that have occurred since 2012.

Table 1 summarizes these three calculations of the water SDC for residential and for commercial & industrial users on a ¾-inch water meter.

Table 2 shows the entire schedule of changes by meter size for commercial & industrial users.

Table 3 shows the changes in the cost basis of the reimbursement fee.

Table 4 is from the WMP (Table 9-16) and shows that the Emergency TAP line project is deleted.

Table 5 shows the list of qualified improvement fee projects and the adjustments made to the original WMP projects as of this year.

Table 6 shows the allocation of the eligible improvement fee projects to residential and commercial & industrial users based on the expected number of ¾-inch equivalent meters each customer class is expected to use.

SEWER SDC

Ray noted there weren't any new changes to what was proposed at the April 4th, 2014 meeting. It is pretty much the same as what came out of the master plan. The calculations were increased based on the change in asset value from 2011 to 2013. The proposed improvement fee resulted in a slight increase, adjusting for inflation. Ray pointed out when the SDC was put together originally for the current sdc there were pretty large reductions made in the calculation of the sdc, in part because the City was charging a tax on food and beverage, much of which was going towards paying for improvements to the sewer system. Those corrections have still been made but the current sdc was based on an artificially low sdc. The capital projects have increased due mostly to a pretty dramatic increase in sewage treatment requirements.

The committee would like to see a summary of the current and proposed, in addition to the rates. Staff will provide that.

Transportation SDC

Russ questioned how they can determine the Transportation sdc based on a list of capital improvements that may or may not be completed. Faught stated that is something that the committee will have to decide. Ray pointed out the master plan eliminated the low priority and developer driven projects. The question is whether the committee wants to trim back any of the high and medium projects. Transportation is harder to predict. Russ commented that maybe the Transportation sdc is something that the sdc committee needs to revisit more often than every ten years. Mike said he actually recommends that all master plans be updated every five years.

The next meeting will be held at 1:00 pm on July 8th, 2014.

Tami De Mille-Campos, Administrative Assistant

Ashland, Oregon

UPDATE:

WATER SYSTEM DEVELOPMENT CHARGE

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

1409 Franklin Street, Suite 201
Vancouver, WA98660

June 5, 2014

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SUMMARY

The following 5 tables show the changes to the current water system development charge (SDC) and compares the current water SDC to that proposed in the 2012 *Comprehensive Water Master Plan* (WMP, Final December 2012), and to this proposed SDC based on changes that have occurred since 2012.

Table 1 summarizes these three calculations of the water SDC for residential and for commercial & industrial users on a 3/4-inch water meter. Compared to the current water SDC, the 2012 WMP proposed a decrease of about 6%, and with the current changes since 2012, a 0.3% increase for the residential SDC and a 1.3% decrease for commercial & industrial. The commercial & industrial SDC decreased due to an apparent error in the WMP calculations which is explained below in Table 5.

Table 1 Summary Water SDC

	Residential			Commercial & Industrial			% Δ from Current
	Reimbursement	Improvement	Total SDC	Reimbursement	Improvement	Total SDC	
Current							
\$/Square Foot of Habitable Area			\$2.60				
\$/Meter Size						\$4,940.40	
	3/4						
2012 WMP							
\$/Square Foot of Habitable Area	\$0.8040	\$1.6436	\$2.4476				-5.9%
\$/Meter Size							
	3/4			\$1,522.18	\$3,111.76	\$4,633.94	-6.2%
2014 WMP Update with TAP & Crowson II							
\$/Square Foot of Habitable Area	\$0.9318	\$1.6751	\$2.6069				0.3%
\$/Meter Size							
	3/4			\$1,792.89	\$3,084.22	\$4,877.11	-1.3%

Table 2 shows the entire schedule of changes by meter size for commercial & industrial users.

Table 2 Schedule of Current and Proposed Water SDC

	Residential			Commercial & Industrial			% Δ from Current
	Reimbursement	Improvement	Total SDC	Reimbursement	Improvement	Total SDC	
Current							
\$/Square Foot of Habitable Area			\$2.60				
\$/Meter Size							
	3/4					\$4,940.40	
	1					\$8,250.47	
	1 1/2					\$16,451.53	
	2					\$26,332.33	
	3					\$57,654.47	
	4					\$98,808.00	
	6					\$205,866.47	
	8					\$296,424.00	
2012 WMP							
\$/Square Foot of Habitable Area		\$0.8040	\$1.6436				-5.9%
\$/Meter Size							
	3/4			\$1,522.18	\$3,111.76	\$4,633.94	-6.2%
	1			\$2,537.00	\$5,186.00	\$7,723.00	-6.4%
	1 1/2			\$5,074.00	\$10,373.00	\$15,447.00	-6.1%
	2			\$8,118.00	\$16,596.00	\$24,714.00	-6.1%
	3			\$17,759.00	\$36,304.00	\$54,063.00	-6.2%
	4			\$30,444.00	\$62,235.00	\$92,679.00	-6.2%
	6			\$63,424.00	\$129,657.00	\$193,081.00	-6.2%
	8			\$91,331.00	\$186,706.00	\$278,037.00	-6.2%
2014 WMP Update with TAP & Crowson II							
\$/Square Foot of Habitable Area		\$0.9318	\$1.6751				0.3%
\$/Meter Size							
	3/4			\$1,792.89	\$3,084.22	\$4,877.11	-1.3%
	1			\$2,988.75	\$5,140.43	\$8,129.18	-1.5%
	1 1/2			\$5,975.70	\$10,280.87	\$16,256.57	-1.2%
	2			\$9,561.48	\$16,448.58	\$26,010.06	-1.2%
	3			\$20,917.65	\$35,983.04	\$56,900.69	-1.3%
	4			\$35,857.80	\$61,685.21	\$97,543.01	-1.3%
	6			\$74,704.35	\$128,508.83	\$203,213.18	-1.3%
	8			\$107,573.40	\$185,053.61	\$292,627.01	-1.3%

Table 3 shows the changes in the cost basis of the reimbursement fee. The proposed SDC in the WMP was based on the fiscal year 2011 (July 1, 2012 through June 30, 2011) audit. The update is based on the most recently completed audit ending June 30, 2013, and on the current cost of constructing the TAP water line and the Medford Water Commission SDC for water in 2014 dollars. This project was deleted from the list of capital improvements that was used to calculate the improvement fee. Since this project has been financed and is under construction, it can be counted as an existing asset with excess capacity to serve future development. In the 2012 WMP, the project was to serve only emergency water needs and was excluded from the calculation of the improvement fee. Since then, the scope of this project has made it a source of

water to Ashland and it will be available to serve future development. In this analysis, 90% of the TAP line cost is included because it will primarily serve growth and 10% is assumed to be used for emergency use by existing development.

The proposed SDC uses the same criteria as the 2012 WMP and the current methodology. The current and WMP methodology divides the cost between single-family residences and commercial & industrial based on the equivalent numbers of ¾-inch water meters in service currently. A ¾-inch equivalency is based on the amount of water that a certain size meter (e.g., 2-inch meter) can pass instantaneously relative to the amount a ¾-inch meter can pass (e.g., a 2-inch meter can pass 5.33 times more water than a ¾-inch meter). Single-family residences' SDCs are based on square footage of habitable (heated) floor area; and, the commercial & industrial is based on meter size which varies by the meters' abilities to provide water instantaneously—gallons per minute. Seventy-seven percent of the ¾-inch meters are in single-family residences; therefore, 77% of the eligible reimbursement fee costs are allocated to residences and 23% to commercial & industrial users.

Table 3 Calculation of Water Reimbursement Fee

	2011	2013	Allocation	% Δ
Original Cost	\$36,180,656	\$36,435,280		0.7%
Accumulated Depreciation	(\$15,228,374)	(\$17,254,657)		13.3%
Book Value of Hosler Dam	(\$55,741)			-100.0%
Book Value	\$20,896,541	\$19,180,623		-8.2%
Series 1997 Flood & Refunding Bonds	(\$175,000)			-100.0%
Series 2003 Water Revenue Bonds	(\$2,940,000)	(\$4,695,862)		59.7%
Series 2009 Water & WW Bonds (FF&C)	(\$633,551)			-100.0%
Principal Outstanding	(\$3,748,551)	(\$4,695,862)		25.3%
Investment in Capacity	\$17,147,990	\$14,484,761		-15.5%
Emergency TAP Pipeline & Pump				
MWC's SDC		\$2,620,084		
Construction		\$4,400,000		
Less: IFA Forgivable Loan		(\$950,000)		
Net cost of TAP		\$6,070,084		
% Allocation to future development		90.00%		
Allocation to future development		\$5,463,076		
Cost Basis for Reimbursement Fee		\$19,947,837		
Current 3/4" Equivalents Meters (EM)	Number	%		
Residential	7,575	77%	\$15,359,834	
Commercial & Industrial	2,227	23%	\$4,588,002	
Total	9,802	100%	\$19,947,836	
Square Feet (SF) of Residential Habitable Area, 2032	16,483,431	\$/SF	\$0.9318	
3/4" Commercial & Industrial Equivalents Meters (EM), 2032	2,559	\$/EM	\$1,792.89	

Table 4 is from the WMP (Table 9-16) and shows that the Emergency TAP line project is deleted. This project is under construction and qualifies as a reimbursement fee. Only 9 projects qualify to be improvement fee projects; of the \$44 million of capital improvements only \$4.3 million is included in the SDC improvement fee. The Emergency TAP Pipeline & Pump project has been deleted from the list of capital improvements and added to the list of existing capital improvements. Because of this change in scope the City was able to reduce the amount of storage needed at the Crowson II reservoir which reduced the cost by \$1.3 million (in 2012 \$'s). Table 5 shows these calculations.

Table 4 Original List of Capital Improvements & SDC Eligible, 2012 \$'s

Capital Project	Total Cost	SDC Eligible	
		%	\$
Supply			
FERC Dam Security & Telemetry Impr.	-	25.00%	-
FERC Dam Spillgate Upgrades(50% Electric, 50% Water)	-	25.00%	-
FERC Structural Stability Analysis(50% Electric, 50% Water)	-	25.00%	-
FERC Part 12 Dam Safety Inspection(50% Electric, 50% Water)	160,000	25.00%	40,000
Ashland Creek West Fork Bridge Construction	120,000	75.00%	90,000
Sediment TMDLin Reeder Resv.	600,000	75.00%	450,000
Reeder Resv Study Implementation	30,000	75.00%	22,500
Reeder Resv Access Road TMDL Compliance	100,000	75.00%	75,000
Reeder Resv Variable Depth Intake	100,000	0.00%	-
TID Terrace St Pump Station Improvements	220,000	0.00%	-
TID Canal Piping: Starlite to Terrace Street	1,100,000	100.00%	1,100,000
Test existing high capacity wells	50,000	0.00%	-
Water Conservation Smart Controller Pilot Project	50,000	0.00%	-
Water Conservation Management Plan (due April 2012)	0	100.00%	-
Emergency TAP Pipeline & Pump	2,000,000	0.00%	-
Treatment & Storage			
Raw Water Bypass Measurement	25,000	0.00%	-
SCADA Radio Frequency FCC Compliance	45,000	0.00%	-
Final CT Disinfection Improvements	85,000	0.00%	-
Permanganate Feed Facility Study & Implementation	265,000	0.00%	-
WTP Security Upgrades	50,000	0.00%	-
Existing Plant Mech. Elec. & Scada Upgrades	1,500,000	0.00%	-
Ozone /UV Analysis & Disinfection	1,750,000	0.00%	-
Bear Creek Cu WLA Source Control Study & Implementation	50,000	0.00%	-
2.6-MG Reservoir & Clearwell ("Crowson II")	6,746,000	10.00%	674,600
2.5 MGD Water Treatment Plant	12,000,000	10.00%	1,200,000
Distribution			
Telemetry Station at Water Warehouse	50,000	0.00%	-
Water Master Plan Updates	700,000	100.00%	700,000
Park Estates Pump Station/Loop Road Reservoir Alternatives	2,000,000	0.00%	-
Lit Way New PRV	341,000	0.00%	-
Tolman Creek Road New PRV	341,000	0.00%	-

Capital Project	Total Cost	SDC Eligible	
		%	\$
Pipe Replacement Program	3,700,000	0.00%	-
Radio Read Meter Program	1,351,000	0.00%	-
Hydrant Replacement	616,000	0.00%	-
Emergency Response Plan Update	20,000	0.00%	-
Cross Connection Control Plan Update	15,000	0.00%	-
Safety Plan Update	20,000	0.00%	-
Granite Reservoir Valving	100,000	0.00%	-
Piping			
Ivy Lane	346,000	0.00%	-
Ivy Lane	94,000	0.00%	-
Normal Ave	517,000	0.00%	-
Walker Ave	784,000	0.00%	-
Parker Street	162,000	0.00%	-
Harmony Lane	65,000	0.00%	-
Lit Way	35,000	0.00%	-
Ray Lane	54,000	0.00%	-
Beach Street	91,000	0.00%	-
AHS Property	90,000	0.00%	-
Vista Street	149,000	0.00%	-
Vista Street	5,000	0.00%	-
Meade Street	235,000	0.00%	-
Elkader Street	72,000	0.00%	-
Ivy Lane	64,000	0.00%	-
South Mountain Ave	6,000	0.00%	-
South Mountain Ave	17,000	0.00%	-
Pinecrest Trail	178,000	0.00%	-
Pinecrest Trail	396,000	0.00%	-
Penny Drive	83,000	0.00%	-
Woodland Drive	52,000	0.00%	-
Hiawatha Place	58,000	0.00%	-
Morton Street	130,000	0.00%	-
Ashland Mine Road	115,000	0.00%	-
Fox Street	54,000	0.00%	-
Alameda Drive	35,000	0.00%	-
Skycrest Drive	162,000	0.00%	-
Crispin Street	131,000	0.00%	-
Oak Lawn Ave	29,000	0.00%	-
Sylvia Street	64,000	0.00%	-
Black Oak Way	85,000	0.00%	-
Oak Knoll Dr	287,000	0.00%	-
Ashland Street	432,000	0.00%	-
I-5 Crossing	794,000	0.00%	-
Ditch Road	225,000	0.00%	-
Lithia	70,000	0.00%	-
Iowa Street	640,000	0.00%	-
Granite Street	300,000	0.00%	-

Capital Project	Total Cost	SDC Eligible	
		%	\$
B Street	250,000	0.00%	-
Terrace Street	350,000	0.00%	-
Totals	<u>\$44,006,000</u>		<u>\$4,352,100</u>

Table5 shows the list of qualified improvement fee projects and the adjustments made to the original WMP projects as of this year. The Crowson II reservoir can be reduced in size at a cost savings of \$1.3 million. Ten percent of the cost and of the cost reduction are incorporated into the revisions along with an adjustment for inflation. According the *ENR* Construction Cost Index, construction costs increased 5.45% between June 2012 and June 2014.

Table 5 SDC Eligible Capital Improvements with Modifications, 2014 \$'s

Capital Project	Total Cost	SDC Eligible		Adjustments		2012 \$'s	2014 \$'s
		%	\$	% eligible	Cost 2014\$'s		
Supply							105.45%
FERC Part 12 Dam Safety Inspection (50% Electric, 50% Water)	160,000	25.00%	40,000			40,000	\$42,000
Ashland Creek West Fork Bridge Construction	120,000	75.00%	90,000			90,000	\$95,000
Sediment TMDL in Reeder Resv.	600,000	75.00%	450,000			450,000	\$475,000
Reeder Resv Study Implementation	30,000	75.00%	22,500			22,500	\$24,000
Reeder Resv Access Road TMDL Compliance	100,000	75.00%	75,000			75,000	\$79,000
TID Canal Piping: Starlite to Terrace Street	1,100,000	100.00%	1,100,000			1,100,000	\$1,160,000
Treatment & Storage							
2.6-MG Reservoir & Clearwell ("Crowson II")	6,746,000	10.00%	674,600	10%	-\$1,300,000	674,600	\$574,000
2.5 MGD Water Treatment Plant	12,000,000	10.00%	1,200,000			1,200,000	\$1,265,000
Distribution							
Telemetry Station at Water Warehouse	50,000	0.00%	-			-	-
Water Master Plan Updates	700,000	100.00%	700,000			700,000	\$738,000
Piping							
Totals	44,006,000		4,352,100			4,352,100	4,452,000

^ENR Construction Cost Index shows a 5.45% increase in construction costs between 2012 and 2014.

Table 6 shows the allocation of the eligible improvement fee projects to residential and commercial & industrial users based on the expected number of ¾-inch equivalent meters each customer class is expected to use. The improvement fee is the allocated cost divided by the forecast square footage of habitable space residences are expected to develop; and, the allocated cost divided by the forecast number of ¾-inch equivalent meters commercial & industrial customers are expected to develop.

Table 6 Calculation of Water Improvement Fee

Total Cost Allocation to Improvement Fee, 2014 \$'s			\$4,452,000
3/4" Meter Equivalents			
Residential	7,575	77%	\$3,428,040
Commercial & Industrial	2,227	23%	\$1,023,960
Total	9,802	100%	\$4,452,000
Forecast Growth Square Feet of Residential Habitable Area	2,046,408	\$/SF	\$1.6751
Forecast Growth 3/4" equivalent meters	332	\$/EM	\$3,084.22

Compared to the current SDC, the proposed residential SDC (reimbursement plus improvement fees) will increase 0.3%, and the proposed commercial & industrial SDC will decrease about 1.3%. The decrease in the commercial & industrial SDC is due to an apparent error in the calculations of the WMP. The WMP forecast the number of ¾-inch equivalent meters will increase by 332 (from 2229 in 2012 to 2559 in 2032); however, the 2012 calculation of the SDC was based on only 318 new ¾-inch equivalent meters.¹ Table 6 above is based on 332 new ¾-inch equivalent meters.

¹ Comprehensive Water Master Plan, page 9-29 Table 9.15 shows the current and forecast numbers of ¾-inch EM for commercial & industrial at 332; page 9-32 shows only 318 EM were included in the calculation of the improvement fee. The reimbursement fee is based on the correct number of ¾-inch EM, 2559 (page 9-29).

RESOLUTION NO. 2016-

A RESOLUTION ADOPTING NEW TRANSPORTATION SYSTEMS DEVELOPMENT CHARGES, PURSUANT TO SECTION 4.20 OF THE ASHLAND MUNICIPAL CODE, AND REPEALING RESOLUTION 1999-42.

RECITALS:

- A. The current Transportation System Development Charge was approved on July 6, 1999.
- B. The City adopted a new Transportation Systems Plan March 19, 2013 through ordinance that amends the comprehensive plan. The plan updates the previous master plan with new forecasts of trip generation, capital improvements, and updated construction costs.

THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. The Transportation System Development Charges project list marked as Exhibit B, is adopted effective immediately.

SECTION 2. The existing System Development Charges and project list for Transportation adopted by Resolution 1992-42 is repealed, effective July 1, 2017.

SECTION 3. The Transportation System Development Charges Methodology and Fee Schedule marked as Exhibits A and B, are adopted effective July 1, 2017.

This resolution was duly PASSED and ADOPTED this _____ day of _____, 2016, and takes effect upon signing by the Mayor.

Barbara Christensen, City Recorder

SIGNED and APPROVED this ____ day of _____, 2016.

John Stromberg, Mayor

Reviewed as to form:

David H. Lohman, City Attorney

EXHIBIT A

ITE Land Use	ITE Land Use Code	Unit(*)	PM Peak- hour trips per unit	\$/PM Peak-hour trip \$2,112
RESIDENTIAL				
Single Family Multi-Family	210	Dwelling Unit	1.02	\$2,154.35
Multi-Family	220	Dwelling Unit	0.67	\$1,415.11
Residential Condominium	230	Dwelling Unit	0.52	\$1,098.30
Manufactured	240	Dwelling Unit	0.60	\$1,267.27
Recreational Home/Condo	260	Dwelling Unit	0.31	\$654.75
INSTITUTIONAL				
Truck Terminals	30	1,000 sf GFA	0.83	\$1,753.05
Park	411	Acres	4.50	\$9,504.50
City		Acres	4.50	\$9,504.50
Neighborhood		Acres	4.50	\$9,504.50
Amusement		Acres	4.50	\$9,504.50
Golf Course	430	Holes	3.56	\$7,519.11
Movie Theatre	443	Seats	0.32	\$675.88
Racquet Club	492	1,000 sf GFA	0.84	\$1,774.17
Military Base	501	Employee	0.30	\$633.63
Elementary School	520	Student	0.28	\$591.39
Junior High School		Student	0.30	\$633.63
High School	530	Student	0.29	\$612.51
Junior/Community College	540	Student	0.12	\$253.45
Church	560	1,000 sf GFA	0.94	\$1,985.38
Day Care Center/Preschool	565	Student	0.84	\$1,774.17
Library	590	1,000 sf GFA	7.20	\$15,207.19
Hospital	610	1,000 sf GFA	1.16	\$2,450.05
Nursing Home	620	Occupied Bed	0.37	\$781.48
BUSINESS & COMMERCIAL				
Hotel/Motel	310	Occupied Room	0.74	\$1,562.96
Building Materials/Lumber	812	1,000 sf GFA	5.56	\$11,743.33
Specialty Retail Center	814	1,000 sf GFA	5.02	\$10,602.79
Discount Stores	815	1,000 sf GFA	5.57	\$11,764.45
Hardware/Paint Stores	816	1,000 sf GFA	4.74	\$10,011.40
Nursery-Retail	817	1,000 sf GFA	9.04	\$19,093.47
Shopping Center	820			
(under 50,000 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23

ITE Land Use	ITE Land Use Code	Unit(*)	PM Peak-hour trips per unit	\$/PM Peak-hour trip \$2,112
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	18.49	\$39,052.91
Fast Food Restaurant	833	1,000 sf GFA	47.30	\$99,902.80
New Car Sales	841	1,000 sf GFA	2.80	\$5,913.91
Service Station	844	Gasoline Pump	15.65	\$33,054.52
Supermarket	850	Employee	8.37	\$17,678.36
Convenience Market	851	1,000 sf GFA	36.22	\$76,500.62
Convenience Market w/ Gas Pump	853	Gasoline Pump	19.98	\$42,199.96
Apparel Store	870	1,000 sf GFA	4.20	\$8,870.86
Furniture Store	890	1,000 sf GFA	0.53	\$1,119.42
Bank/Savings: Walk-in	911	1,000 sf GFA	NA	
Bank/Savings: Drive-in	912	1,000 sf GFA	26.69	\$56,372.22
OFFICE				
Clinic	630	1,000 sf GFA	NA	
General Office				
(Under 100,000 sf GFA)	710	1,000 sf GFA	1.49	\$3,147.04
(100,000-199,999 sf GFA)	710	1,000 sf GFA	1.49	\$3,147.04
(200,000 sf GFA and over)	710	1,000 sf GFA	1.49	\$3,147.04
Medical Office Building	720	1,000 sf GFA	4.27	\$9,018.71
Government Office Bldg.	730	1,000 sf GFA	1.49	\$3,147.04
State Motor Vehicles Dept	731	1,000 sf GFA	19.93	\$42,094.35
U.S. Post Office	732	1,000 sf GFA	14.67	\$30,984.65
Research Center	760	1,000 sf GFA	1.07	\$2,259.96
Business Park	770	1,000 sf GFA	1.26	\$2,661.26
INDUSTRIAL				
General Light Industrial	110	1,000 sf GFA	1.08	\$2,281.08
General Heavy Industrial	120	1,000 sf GFA	0.68	\$1,436.23
Industrial Park	130	1,000 sf GFA	0.84	\$1,774.17
Manufacturing	140	1,000 sf GFA	0.75	\$1,584.08
Warehouse	150	1,000 sf GFA	0.45	\$950.45
Mini-Warehouse	151	1,000 sf GFA	0.22	\$464.66
Utilities	170	Employees	NA	
Wholesale	860	1,000 sf GFA	0.52	\$1,098.30

Source: City of Ashland, *Transportation System Development Charge Update*, [Economic & Financial Analysis, July 2016] Table 8.

EXHIBIT B

City of Ashland, Oregon

TRANSPORTATION: SYSTEM DEVELOPMENT CHARGE UPDATE

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

Vancouver, WA

July 2016

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INTRODUCTION

The City of Ashland retained Economic & Financial Analysis (EFA) to update the City's Transportation system development charge based on the *Transportation System Plan* (TSP) developed by Kittelson & Associates and adopted by the City in 2011.

This introduction is followed by a summary of the recommended changes to the Transportation SDC, a summary of the current SDC, and three sections that formulate the Transportation SDC update. The Appendix contains a listing of the ITE *Trip Generation Manual* for land uses for which ITE reports the PM Peak-Hour number of trips. We use the PM Peak-hour number of trips to both create the Transportation SDC and to assess the it for specific types of development.

SUMMARY

The current TSDC was developed in 1997 and last updated in 1999. The updated Transportation SDC is based on a new list of capital improvements, a new forecast of population and employment growth, and the measures of trip generation have been updated from the 5th edition of the Trip Generation Manual to the most currently available 9th edition. Two other key differences are made. First, the current SDC is based on measures of average daily trips (ADT) by land use while the updated TSDC is based on PM peak-hour trips by land use. Second, the current TSDC is applied to a select number of land uses with high-volume trip generation (e.g., fast-food, service stations) that effectively discounts the TSDC charged to them. This update eliminates these discounts which will have a significant impact on the TSDC for these select land uses.

The TSDC increases from \$214 per ADT to \$2,112 per PM peak-hour trip, a 887% increase. These TSDC rates are applied based on the number of trips by a specific land use. A single family residence produces 9.55 ADTs but only 1.02 PM peak-hour trips per day which results in a current TSDC of \$2,043 (\$214 x 9.55 ADT) and an updated TSDC of \$2,154 (\$2,112 x 1.02 PM peak-hour trips), a 5% increase. For high-volume land uses such as service stations, the TSDC will increase from \$1,164 per pump to \$33,054, a 1910% increase. Table 8 below compares the current and updated TSDC for a wide range of land uses.

Discussions with the Systems Development Charge Review Committee and the Transportation Advisory Committee, recommended the final Transportation SDC should be \$2,112 per PM peak-hour trip with the changes noted above. The Transportation SDC is an improvement fee only. The current transportation system lacks sufficient excess capacity to develop a reimbursement fee. The Committee recommended the following changes to the original list and growth allocations by capital projects:

- Projects R41 (Ashland Street at Tolman Creek Road Streetscape) and R44 (Tolman Creek Road at Mistletoe Road Streetscape) are essentially one continuous project and should be allocated 50% to growth based on testimony from the City's Planning Director. The allocation reduces R41 from 100% to 50% and R41 was increased from 0% to 50%. These projects amount to \$250.68 of the total \$2,112 per trip SDC.
- All of the railroad crossing projects (X1 at 4th Street, X2 at Washington Street, and X3 at Normal Avenue) should be allocated 100% to growth. The committee concluded that these projects are

essential to improving access on both sides of the railroad rights of way. Together these projects amount to \$283.62 of the total \$2,112 per trip SDC.

CURRENT TRANSPORTATION SDC

The Current Transportation System Development Charge was adopted in 1997 and updated in 1999, seventeen years ago. The Current SDC has several weaknesses mostly due to its age in a changing environment. These include:

- Update of the capital improvements list and their costs
- Changes in travel patterns
- The primary source of trips per type of development is from the 5th edition of the *Trip Generation Manual* (Institute of Transportation Engineers, 1991), the “Manual”; the 9th edition was released in 2012. The current SDC also uses some unpublished estimates of travel for certain land uses that have since been updated in later editions of the Manual.
- In the current SDC several assumptions were made and categories of trips by land use were consolidated into a “short” list of possible land uses and their travel patterns. Later editions of the Manual provide a broader range of trip generation by land use.
- Also, the current SDC is based on average daily trips as was the original transportation master plan the SDC used as a source. The current transportation master plan is designed around PM peak-hour trip rates that more accurately determines the need for capital improvements.

In the following analysis and update, EFA bases this update to the transportation SDC on the current *Ashland Transportation System Plan* (2012 Kittelson & Associates, Inc.), the most recent *Trip Generation Manual* (Institute of Transportation Engineers, 9th Edition), 2012 land use and population data and forecasts, and recommendations by the Ashland Systems Development Charges Review Committee and the Ashland Transportation Advisory Committee.

The next three sections of this report develop the transportation SDC update:

- Forecast Number of PM Peak-Hour Trips is used to calculate the capital cost per trip of planned capital improvements
- Allocation of CIP List of Development contains the current list of capital improvements and the proportion that will benefit future developments
- Improvement Fee is the calculation of the updated transportation SDC

The current and proposed changes to the Transportation SDC does not include a reimbursement fee. The transportation network does not have sufficient excess capacity to meet the requirements for calculating a reimbursement fee which is based on the value of excess capacity. The current and proposed update the Transportation SDC is an improvement fee only which is based on increases in capacity.

FORECAST NUMBER OF PM PEAK-HOUR TRIPS

Ashland’s TSP contains the following population and employment forecasts to determine the need for capital improvements. The expected growth reflects an aging population with fewer people in the workforce resulting in an increasing population/employment ratio. The planned improvements will accommodate this level of growth in population and employment.

Table 1 Population and Employment Growth

	2009	2034	Growth
Population	21,505	25,464	3,959
% Growth			18.4%
% Growth/Year			0.68%
Employment	13,284	15,496	2,212
% Growth			16.7%
% Growth/Year			0.62%
Population/Employment	1.62	1.64	

Source: Ibid., pp 60, 61.

To determine the numbers of trips now and in the future, we use trip generation data, jobs by type, and the current (2009) and forecast (2034) population and employment shown in Tables 2 and 3.

Table 2 Calculation of Residential and Employment Growth

	2009	2034	Growth
Households by Building Type [^]			
Single Family	9,271	10,535	1,264
Multiple Family	3,813	4,958	1,145
Total	13,084	15,493	2,409
Population	21,505	25,464	3,959
% Growth			18.4%
% Growth/Year			0.68%
Persons/Household	1.64	1.64	1.64
Employment*	13,284	17,220	3,936
% Growth			29.6%
% Growth/Year			1.04%
Population/Employment	1.62	1.48	1.01

[^]Ashland’s utility billing system shows 9,271 single family residences and 3,813 multiple family residences and we assume the SF/MF split will remain constant through 2034.

*Employment growth derived from the TSP, page 59.

The ITE *Trip Generation Manual* (9th ed.) shows single-family residences produce 1.02 PM Peak-Hour trips and multiple family residences produce 0.67 PM Peak-Hour trips. Employees average 2 PM Peak-Hour Trips per employee.¹ The Appendix contains the *Trip Generation Manual* detailed list of the PM Peak-Hour trip rates for various uses.

Table 3 Calculation of PM Peak-Hour Trips

	2009	2034	Growth
PM Peak-Hour Trips			
Residential			
Single Family—1.02 trips	9,456	10,746	1,290
Multiple Family—0.68 trips	2,555	3,322	767
Total Residential PM P-H Trips	12,011	14,068	2,057
Employment	13,284	17,220	3,936
PM P-H Trips/Employee	2.00	2.00	2.00
Total PM P-H Trips	26,568	34,440	7,872
Total PM P-H Trips	38,579	48,508	9,929

Source: Compiled by EFA from City of Ashland Comprehensive Plan.

This update uses *PM peak-hour trips* to both determine the aggregate number of these trips within the boundaries of the TSP and to apply the transportation SDC to specific developments. The current SDC is based on *total average daily trips* and is applied to specific developments based on total average daily trips with adjustments for *equivalent length new daily trips* (ELNDT) for selected land uses.² Table 4 shows the schedule of the current SDC by broad categories of land uses. The list in Table 4 is a subset of land uses in the appendix to this report. The appendix to this report should be used to apply this updated SDC.

The PM Peak-hour trip rates were used to better reflect the demands placed on the roadways. The TSP is based on peak-hour vehicle movements through intersections. The update also drops the use of ELNDT. Since the current SDC was developed in 1999, the ITE Trip Generation Manual has been expanded to more uses and several categories of uses have been updated or changed with newer data.

¹ EFA compiled employment data from the City's utility billing system and business licenses, and from the US Census Bureau's survey of business. We matched trip generation data from the ITE manual with the employment by type of business to calculate the average.

² ITE defines the average weekday trip rate as “. . . the weighted weekday (Monday through Friday) average vehicle trip generation rate during a 24-hour period.” ITE defines the average PM Peak-Hour trip rates as the peak hour of the generator between 4:00 p.m. and 6:00 p.m. [ITE, *Trip Generation Manual* Volume 1 User's Guide and Handbook, 9th ed., page7]. ITE defines trip length and linked trips as measures affecting traffic on streets adjacent to a particular development. Only 22 of the more than 200 land uses in the ITE manual have been statistically measured for trip length and pass-by trips, and for this reason and the poor correlation with trip rates, the ITE cautions analysts in the use of these data [Ibid., page 33].

Table 4 Comparison of Average Weekday Trip and PM Peak-Hour Trips for Selected Land Uses

ITE Land Use	ITE Land Use Code	Unit(*)	Current SDC Trip Rates			Updated SDC	
			Average Weekday Trip Rate	Equivalent Length Daily Trip Adjustments	New Linked Trip	Adjusted Avg. Weekday Trip Rate	PM Peak-Hour Trip Rate
RESIDENTIAL							
Single Family Multi-Family	210	Dwelling Unit	9.55	1.00	1.00	9.55	1.02
Multi-Family	220	Dwelling Unit	6.47	0.97	1.00	6.28	0.67
Residential Condominium	230	Dwelling Unit	5.86	0.97	1.00	5.68	0.52
Manufactured	240	Dwelling Unit	4.81	0.97	1.00	4.67	0.60
Recreational Home/Condo	260	Dwelling Unit	3.16	1.00	1.00	3.16	0.31
INSTITUTIONAL							
Truck Terminals	30	1,000 sf GFA	9.85	1.12	1.00	11.03	0.83
Bus Depot		1,000 sf GFA	25.00	1.00	1.00	25.00	NA
Park							
City		Acres					
Golf Course	430	Holes	50.00	0.90	1.00	45.00	4.50
Movie Theatre	443	Seats	37.59	0.91	1.00	34.21	3.56
Racquet Club	492	1,000 sf GFA	1.76	0.46	1.00	0.81	0.32
Military Base	501	Employee	17.14	0.51	1.00	8.74	0.84
Elementary School	520	Student	1.78	1.00	1.00	1.78	0.30
Junior High School		Student	1.09	1.08	1.00	1.18	0.28
High School		Student	1.20	1.08	1.00	1.30	0.30
Junior/Community College	530	Student	1.38	1.08	1.00	1.49	0.29
Church	540	Student	1.33	1.08	1.00	1.44	0.12
Day Care Center/Preschool	560	1,000 sf GFA	9.32	1.08	1.00	10.07	0.94
Library	565	Student	4.63	0.23	1.00	1.06	0.84
Hospital	590	1,000 sf GFA	45.50	0.49	1.00	22.30	7.20
Nursing Home	610	1,000 sf GFA	16.78	0.95	1.00	15.94	1.16
BUSINESS & COMMERCIAL							
Hotel/Motel	620	Occupied Bed	2.60	0.95	1.00	2.47	0.37
Building Materials/Lumber	310	Occupied Room	8.70	0.69	0.75	4.50	0.74
	812	1,000 sf GFA	30.56	0.49	0.75	11.23	5.56

Table 4

ITE Land Use	ITE Land Use Code	Unit(*)	Current SDC Trip Rates				Updated SDC	
			Average Weekday Trip Rate	Equivalent Length New Daily Trip Adjustments	Adjusted Avg. Weekday Trip Rate	PM Peak-Hour Trip Rate		
Specialty Retail Center	814	1,000 sf GFA	40.67	0.49	0.75	14.95	5.02	
Discount Stores	815	1,000 sf GFA	70.13	0.49	0.75	25.77	5.57	
Hardware/Paint Stores	816	1,000 sf GFA	51.29	0.49	0.75	18.85	4.74	
Nursery-Retail	817	1,000 sf GFA	36.08	0.49	0.75	13.26	9.04	
Shopping Center	820							
(under 50,000 sf GFA)	820	1,000 sf GFA	167.59	0.31	0.28	14.55	3.90	
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	91.65	0.33	0.50	15.12	3.90	
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	70.67	0.40	0.61	17.24	3.90	
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	54.50	0.49	0.67	17.89	3.90	
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	46.81	0.49	0.71	16.29	3.90	
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	42.02	0.49	0.73	15.03	3.90	
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	38.65	0.49	0.80	15.15	3.90	
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	205.36	0.19	0.75	29.26	18.49	
Fast Food Restaurant	833	1,000 sf GFA	786.22	0.09	0.51	36.09	47.30	
New Car Sales	841	1,000 sf GFA	47.91	0.60	0.75	21.56	2.80	
Service Station	844	Gasoline Pump	142.54	0.07	0.77	7.68	15.65	
Supermarket	850	Employee	87.82	0.14	0.46	5.66	8.37	
Convenience Market	851	1,000 sf GFA	737.99	0.08	0.35	20.66	36.22	
Convenience Market w/ Gas Pump	853	Gasoline Pump	194.34	0.32	0.22	13.68	19.98	
Apparel Store	870	1,000 sf GFA	31.27	0.49	0.75	11.49	4.20	
Furniture Store	890	1,000 sf GFA	4.34	0.49	0.75	1.59	0.53	
Bank/Savings: Walk-in	911	1,000 sf GFA	140.61	0.17	0.75	17.93	NA	
Bank/Savings: Drive-in	912	1,000 sf GFA	265.21	0.17	0.55	24.80	26.69	
OFFICE								
Clinic	630	1,000 sf GFA	23.79	0.53	1.00	12.61	NA	
General Office								
(Under 100,000 sf GFA)	710	1,000 sf GFA	16.58	0.65	1.00	10.78	1.49	
(100,000-199,999 sf GFA)	710	1,000 sf GFA	14.03	0.65	1.00	9.12	1.49	
(200,000 sf GFA and over)	710	1,000 sf GFA	11.85	0.65	1.00	7.70	1.49	

Table 4

ITE Land Use	ITE Land Use Code	Unit(*)	Current SDC Trip Rates				Updated SDC	
			Average Weekday Trip Rate	Equivalent Length Daily Trip	New Adjustments Linked Trip	Adjusted Avg. Weekday Trip Rate	PM Peak-Hour Trip Rate	
Medical Office Building	720	1,000 sf GFA	34.17	0.53	1.00	18.11	4.27	
Government Office Bldg.	730	1,000 sf GFA	68.93	0.96	1.00	66.17	1.49	
State Motor Vehicles Dept	731	1,000 sf GFA	166.02	0.96	1.00	159.38	19.93	
U.S. Post Office	732	1,000 sf GFA	87.12	0.96	1.00	83.64	14.67	
Research Center	760	1,000 sf GFA	7.70	0.67	1.00	5.16	1.07	
Business Park	770	1,000 sf GFA	14.37	0.67	1.00	9.63	1.26	
INDUSTRIAL								
General Light Industrial	110	1,000 sf GFA	6.97	1.12	1.00	7.81	1.08	
General Heavy Industrial	120	1,000 sf GFA	1.50	1.12	1.00	1.68	0.68	
Industrial Park	130	1,000 sf GFA	6.97	1.12	1.00	7.81	0.84	
Manufacturing	140	1,000 sf GFA	3.85	1.12	1.00	4.31	0.75	
Warehouse	150	1,000 sf GFA	4.88	1.12	1.00	5.47	0.45	
Mini-Warehouse	151	1,000 sf GFA	2.61	0.47	1.00	1.23	0.22	
Utilities	170	Employees	1.06	1.00	1.00	1.06	NA	
Wholesale	860	1,000 sf GFA	6.73	0.49	1.00	3.30	0.52	

*Abbreviations include: GFA = Gross Floor Area and sf = square feet. The ratio between GFA and gross leasable area (GLA), as cited for shopping center in ITE Trip Generation is 1.5: 1. The ITE Trip Generation rates are factored up by 14% to derive GFA weekday rates.

ALLOCATION OF CIP LIST TO DEVELOPMENT

Table 4 is a summary of capital improvements from the 2012 *Transportation System Plan*. A full list of the projects is included at the end of this chapter. The projects are categorized as: General Policies & Studies, Pedestrian, Bicycle, Transit, Intersection & Roadway, and Railroad Crossing. Each project is identified by its priority. High priority projects are planned for implementation in the next five years; Medium priority in the following ten years, and Low priority for some time after fifteen years. Development Driven projects will be built only if and when private development occurs in the area to be served by these improvements.

Table 5 Summary of TSP Projects

Project Type	Priority (in years)			Development Driven	Total Improvements
	High 0-5	Medium 5-15	Low 15-25		
General Policies & Studies	100,000	30,000	0	0	130,000
Pedestrian	8,550,000	4,050,000	2,975,000	0	15,575,000
Bicycle	3,230,000	1,150,000	570,000	330,000	5,280,000
Transit	1,000,000	2,750,000	3,500,000	0	7,250,000
Intersection & Roadway Improvements	8,948,000	7,078,000	3,725,000	23,555,000	43,306,000
Railroad Crossing	2,816,000	0	0	2,816,253	5,632,253
2012 CIP Totals	\$24,644,000	\$15,058,000	\$10,770,000	\$26,701,253	\$77,173,253

As part of the TSP process, the advisory committee recommended that only High, Medium, and Development Driven projects be included in the calculation of the SDC and to exclude the Low priority projects. As a result, Table 6 shows that \$60.317 million of the \$77.173 million of projects is considered for the SDC improvement fee.

Each project in each category was evaluated for its benefit to growth. As a general rule, projects were considered to provide about 18.4% of benefit to future development which is the expected population growth through 2034. Some projects such as those in the Intersection & Roadway Improvements category and projects in the Development Driven category are either new roadways or roadway improvements that primarily service currently vacant areas of the City and primarily benefit future development.

The City’s Transportation Commission recommended excluding \$3.27 million of improvements from the SDC calculations. Also, the City added an extension of East Main Street between Walker and Clay Streets. These corrections and one addition are shown as ~~strikeouts~~ or **bold** in Table 7 below.

In sum, Table 6 shows only \$20.971 million of the \$77.173 million of project costs are allocated to growth, which is the cost basis for the SDC improvement fee.

Table 6 Cost Allocation to the SDC Improvement Fee

Project Type	Total Improvements	High, Medium Development Driven	% Benefit Growth	Allocation to Growth
General Policies & Studies	130,000	130,000	18.5%	24,000
Pedestrian	15,575,000	11,200,000	18.4%	2,061,000
Bicycle	5,280,000	3,940,000	18.4%	725,000
Transit	7,250,000	3,750,000	18.4%	690,000
Intersection & Roadway Improvements	43,306,000	38,481,000	38.1%	14,655,000
Railroad Crossing	5,632,253	2,816,253	100.0%	2,816,000
2012 CIP Totals	\$77,173,253	\$60,317,253	34.8%	\$20,971,000

IMPROVEMENT FEE

The improvement fee is simply the allocation of cost to growth divided by the number of new PM Peak-Hour trips, $\$20.971 \text{ million} \div 9,929 \text{ PM Peak-Hour trips} = \$2,112/\text{PM Peak-Hour trip}$. The transportation SDC improvement fee for a new single-family house will be \$2,154 ($\$2,112 \times 1.02 \text{ PM Peak-hour trips}$)—\$110.65 (5%) more than the current \$2,043.70.

Table 7 shows each project, its priority, and cost contribution the improvement fee system development charge. Table 8 compares the current and updated SDC for a cross-section of land uses.

Table 8 shows that residential land uses are only modestly impacted by the updated SDC. The updated SDC for commercial land uses increase more, particularly those that have high trip rates such as service stations and fast food restaurants, and convenience markets. These large increases are due to two factors.

First the current SDC relies on total average daily trip rates which are generally greater than PM peak-hour trip rates, but the SDC itself increased from \$214/average daily trips to \$2,112/PM Peak-hour trips.

Second, the current SDC relies on equivalent length new daily trip (ELNDT) adjustments that reduce the number of trips charged by a significant number. For example, Service Stations have an ADT of 142.54 trips per gas pump; however, these are discounted by ELNDT to only 7.68 trips per day which results in an SDC of \$1,644.14/pump. Had ELNDT not been applied the current SDC would have been \$30,503.56 per pump. The updated SDC uses 15.65 PM peak-hour trips per gas pump at \$2,154/PM peak-hour trip or \$31,410.38/pump.

Table 7 Transportation Capital Improvements Plan, 2013 Dollars

Type*	#	Street	Description	Eligible SDC Projects		
				High, Medium Development Driven	SDC Eligible Project Costs	SDC By Project
S	2	NA	Downtown Parking & Multi-Modal Circulation Study	100,000	18,000	1.81
S	1	NA	Funding Sources Feasibility Study	30,000	6,000	0.60
Total Policies & Studies Projects				\$130,000	\$24,000	\$24.41
P	6	Orange Ave	N. Main St to Oak St	250,000	46,000	4.63
P	7	Hersey St	Thornton Way to N. Main St	750,000	138,000	13.90
P	9	Maple St	Chestnut St to 150' E of Rock St	100,000	18,000	1.81
P	10(1)	Scenic Dr	Maple St to Wimer St	250,000	46,000	4.63
P	18	A St	Oak St to 100' W of 6th St	250,000	46,000	4.63
P	22	N. Mountain Ave	100' S of Village Green Way to Iowa St	450,000	83,000	8.36
P	25	Walker Ave	950' N of Iowa St to Ashland St	750,000	138,000	13.90
P	27(1)	Walker Ave	Oregon St to Woodland Dr	200,000	37,000	3.73
P	28(1)	Ashland St	S. Mountain Ave to Morton St	450,000	83,000	8.36
P	38(1)	Clay St	Siskiyou Blvd to Mohawk St	300,000	55,000	5.54
P	57(1)	Tolman Creek Rd	Siskiyou Blvd to west side City Limits	425,000	78,000	7.86
P	58(1)	Helman St	Hersey St to Van Ness Ave	100,000	18,000	1.81
P	1	N. Main St/Hwy 99	N. Main St to Schofield St	50,000	9,000	0.91
O	1	NA	Travel Smart Education, Targeted Marketing Program	45,000	8,000	0.81

Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
P	23	Wightman St	200' N of E. Main St to 625' S of E. Main St	400,000	18.4%	74,000	7.45
P	5	Glenn St/Orange Ave	N. Main St to 175' E of Willow St	200,000	18.4%	37,000	3.73
P	17	Beaver Slide	Water St to Lithia Way	50,000	18.4%	9,000	0.91
P	59	Garfield St	E. Main St to Siskiyou Blvd	750,000	18.4%	138,000	13.90
P	60	Lincoln St	E. Main St to Iowa St	450,000	18.4%	83,000	8.36
P	61	California St	E. Main St to Iowa St	500,000	18.4%	92,000	9.27
P	63	Liberty St	Siskiyou Blvd to Ashland St	650,000	18.4%	120,000	12.09
P	65	Faith Ave	Ashland St to Siskiyou Blvd	350,000	18.4%	64,000	6.45
P	66	Diane St	Clay St to Tolman Creek Rd	20,000	18.4%	4,000	0.40
P	67	Frances Lane	Siskiyou Blvd to Oregon St	10,000	18.4%	2,000	0.20
P	68	Carol St	Patterson St to Hersey St	150,000	18.4%	28,000	2.82
P	70	Park St	Ashland St to Siskiyou Blvd	650,000	18.4%	120,000	12.09
P	4	Laurel St	Nevada St to Orange Ave	500,000	18.4%	92,000	9.27
P	37	Clay St	Faith Ave to Siskiyou Blvd	1,000,000	18.4%	184,000	18.53
P	8	Wimer St	Thornton Way to N. Main St	800,000	18.4%	147,000	14.81
P	62	Quincy St	Garfield St to Wightman St	150,000	18.4%	28,000	-
P	64	Water St	Van Ness Ave to B St	250,000	18.4%	46,000	4.63
P	72	C St	Fourth St to Fifth St	100,000	18.4%	18,000	1.81
P	73	Barbara St	Jaquelyn St to Tolman Creek Rd	100,000	18.4%	18,000	-
P	74	Roca St	Ashland St to Prospect St	250,000	18.4%	46,000	-
P	75	Blaine St	Morton St to Morse Ave	100,000	18.4%	18,000	-
P	78	Patterson St	Crispin St to Carol St	100,000	18.4%	18,000	-
P	79	Harrison St	Iowa St to Holly St	100,000	18.4%	18,000	-
P	80	Spring Creek Dr	Oak Knoll Dr to Road End	350,000	18.4%	64,000	-
P	81	Bellview Ave	Green Meadows Way to Siskiyou Blvd	250,000	18.4%	46,000	-
P	10(2)	Scenic Dr	Wimer St to Grandview Dr	-	18.4%	-	-

Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
P	27(2)	Walker Ave	Woodland Dr to Peachey Rd	-	18.4%	-	-
P	28(2)	Ashland St	Morton St to Guthrie St	-	18.4%	-	-
P	38(2)	Clay St	Mohawk St to Southern Terminus	-	18.4%	-	-
P	42	S. Mountain Ave	Ashland St to Prospect St	-	18.4%	-	-
P	54	Iowa St	Terrace St to Auburn St	-	18.4%	-	-
P	57(2)	Tolman Creek Rd	Siskiyou Blvd to east side City Limits	-	18.4%	-	-
P	58(2)	Helman St	1500' N of Orange Ave to Orange Ave	-	18.4%	-	-
P	40	Hillview Dr	Siskiyou Blvd to Peachey Rd	-	18.4%	-	-
P	71	Orchard St	Sunnyview Dr to Westwood St	-	18.4%	-	-
Total Pedestrian Projects				\$11,200,000	\$0	\$2,061,000	\$207.60
B	2	Wimer St	Scenic Dr to N. Main St	20,000	18.4%	4,000	0.40
B	7	Iowa St	Terrace St to Road Terminus; S. Mountain Ave to Walker Ave	240,000	18.4%	44,000	4.43
B	10	S. Mountain Ave	Ashland St to E. Main St	120,000	18.4%	22,000	2.22
B	11	Wightman St	E. Main St to Siskiyou Blvd	60,000	18.4%	11,000	1.11
B	13	B St	Oak St to N. Mountain Ave	80,000	18.4%	15,000	1.51
B	16	Lithia Way	Oak St to Helman St	110,000	18.4%	20,000	2.01
B	19	Helman St	Nevada St to N. Main St	80,000	18.4%	15,000	1.51
B	26	Normal Ave	E. Main St to Siskiyou Blvd	190,000	18.4%	35,000	3.53
B	29	Walker Ave	Siskiyou Blvd to Peachey Rd	40,000	18.4%	7,000	0.71
B	17	Main St	Helman St to Siskiyou Blvd	50,000	18.4%	9,000	0.91
TR	1	Northside Trail	Orchid Ave to Tolman Creek Rd	2,000,000	18.4%	368,000	37.06
O	4	NA	Retrofit Bicycle Program	50,000	18.4%	9,000	0.91

Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
B	5	Maple/Scenic/Nutley	N. Main St to Winburn Way	110,000	18.4%	20,000	2.01
B	31	Indiana St	Siskiyou Blvd to Oregon St	20,000	18.4%	4,000	0.40
B	33	8th St	A St to E. Main St	20,000	18.4%	4,000	0.40
B	38	Oregon/Clark St	Indiana St to Harmony Lane	40,000	18.4%	7,000	0.71
B	3	Nevada St	Vansant St to N. Mountain Ave	230,000	18.4%	42,000	4.23
B	9	Ashland St	Morton St to University Way	30,000	18.4%	6,000	0.60
B	25	Tolman Creek Rd	Siskiyou Blvd to Green Meadows Way	100,000	18.4%	18,000	1.81
B	37	Clay St	Siskiyou Blvd to Mohawk St	20,000	18.4%	4,000	0.40
B	18	N. Main St	Jackson Rd to Helman St	260,000	18.4%	48,000	4.83
TR	2	New Trail	Clay St to Tolman Creek Rd	400,000	18.4%	74,000	-
B	39	Glenn St/Orange Ave	N. Main St to Proposed Trail	40,000	18.4%	7,000	-
B	40	Laurel St	Orange St to Nevada St	40,000	18.4%	7,000	0.71
B	20	Water St	Hersey St to N. Main St	30,000	18.4%	6,000	0.60
B	14	A St	Oak St to 6th St	-	18.4%	-	-
B	21	Oak St	Nevada St to E. Main St	-	18.4%	-	-
B	22	Clay St	E. Main St to Ashland St	-	18.4%	-	-
B	24	Clover Lane	Ashland St to Proposed Bike Path	-	18.4%	-	-
B	30	Ashland St	I-5 Exit 14 SB to Hwy 66	-	18.4%	-	-
B	35	Railroad Property	Proposed Bike Path to N. Mountain Ave	-	18.4%	-	-
B	4	Glendower St	Bear Creek Greenway to Nevada St	-	18.4%	-	-
B	6	Winburn Way	Calle Guanajuato to Nutley St	-	18.4%	-	-
B	8	Morton St	E. Main St to Ashland St	-	18.4%	-	-
B	12	Wightman St	Road End to E. Main St	-	18.4%	-	-
B	28	Clay St	Rail Line to Siskiyou Blvd	-	18.4%	-	-
B	34	1st St	A St to E. Main St	-	18.4%	-	-
TR	3	New Trail	New Trail to Hersey St	220,000	18.4%	40,000	-

Table 7

Type*	#	Street	Description	Eligible SDC Projects		
				High, Medium Development Driven	SDC Eligible Project Costs	SDC By Project
TR	4	New Trail	A St to Clear Creek Dr Extension	110,000	20,000	-
Total Bicycle Projects				\$3,940,000	\$725,000	\$73.01
L	6	NA	Establish Transit Hubs	1,000,000	184,000	18.53
	7	NA	Support Circulator Svc	2,750,000	506,000	50.96
	8	NA	Support SOU Svc	-	-	-
Total Transit Projects				\$3,750,000	690,000	\$69.49
S	10	Siskiyou Blvd	Highway 66 to Beach St	35,000	6,000	0.60
S	3	N. Main St (OR 99)	Helman St to Sheridan St	75,000	14,000	1.41
S	5	Siskiyou Blvd	Ashland St to Tolman Creek Rd	75,000	14,000	1.41
S	6	Ashland St (OR 66)	Siskiyou Blvd to Tolman Creek Rd	75,000	14,000	1.41
S	9	Ashland St (OR 66)	Clay St to Washington St	20,000	4,000	0.40
S	7	E. Main St	Siskiyou Blvd to Wightman St	-	-	-
Studies Subtotal				\$280,000	52,000	\$5.23
R	17	E. Nevada St Ext	Bear Creek to Kestrel Pkwy	5,481,000	1,009,000	101.62
R	40	Walker Ave Festival St	Walker Ave to Normal St	780,000	144,000	14.50
R	35	N. Main St	N. Main St Temporary Diet	-	-	-
R	5	Siskiyou Blvd (OR 66)	Lithia Way (OR 99 NB) / E. Main St	50,000	9,000	0.91
R	6	Siskiyou Blvd (OR 66)	Tolman Creek Rd	61,000	11,000	1.11
R	8	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (realignment)	706,000	130,000	13.09

Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
R	25	Washington St Ext	Washington St Tolman Creek Rd	1,835,000	100.0%	1,835,000	184.81
R	19	Normal Ave Ext	Normal Ave to E. Main St	2,705,000	18.4%	498,000	50.16
R	36	N. Main St	N. Main St Permanent Diet	200,000	18.4%	37,000	3.73
R	38	Ashland St	Siskiyou Blvd to Walker Ave Streetscape	1,100,000	18.4%	202,000	-
R	2	N. Main St	Wimer St / Hersey St	-	18.4%	-	-
R	9	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (roundabout)	-	18.4%	-	-
R	11	Lithia Way (OR 99 NB)	Oak Street	-	18.4%	-	-
R	45	New Roadway (F)	Washington St to New Roadway (E)	1,199,000	25.0%	300,000	30.21
R	39	Ashland St	Walker Ave to Normal Ave Streetscape	1,300,000	18.4%	239,000	24.07
R	43	New Roadway (E)	Mistletoe Rd to Siskiyou Blvd (OR 99)	4,322,000	75.0%	3,242,000	326.52
R	44	Tolman Creek	Mistletoe Rd Streetscape	3,478,000	50.0%	1,739,000	175.14
R	13	Siskiyou Blvd (OR 99)	Park St	296,000	18.4%	54,000	5.44
R	41	Ashland St	Tolman Creek Rd Streetscape	1,500,000	50.0%	750,000	75.54
R	42	E. Main St	N. Mountain Ave Streetscape	1,500,000	18.4%	276,000	27.80
R	12	Siskiyou Blvd (OR 99)	Sherman St	391,000	18.4%	72,000	7.25
R	14	Siskiyou Blvd (OR 99)	Terra Ave / Faith Ave	216,000	18.4%	40,000	4.03
R	24	Clear Creek Dr Ext	Oak St to N. Mountain Ave	2,505,000	50.0%	1,253,000	126.20
R	26	New Roadway (D)	E. Main St to Ashland St (OR 66)	2,422,000	0.0%	-	-
R	29	Washington St Ext	Washington St to Benson Way	1,301,000	75.0%	976,000	98.30
R	31	Wimer St Ext	Wimer St to Ashland Mine Rd	3,125,000	18.4%	575,000	57.91
R	20	Creek Dr Ext	Meadow Dr to Normal Ave	-	-	-	-
R	22	New Roadway (B)	Clay St to Tolman Creek Rd	-	-	-	-
R	23	New Roadway (C)	McCall Dr to Engle St	-	-	-	-
R	27	Grizzly Dr Ext	Jacquelyn St to Clay St	-	-	-	-
R	28	Mountain View Dr Ext	Parkside Dr to Helman St	-	-	-	-
R	30	Kirk Lane Ext	Kirk Lane to N. Mountain Ave	-	-	-	-

Table 7

Type*	#	Street	Description	Eligible SDC Projects		
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs By Project
R	32	Kestrel Pkwy Ext	Kestrel Pkwy to N. Mountain Ave (at Neperthe Rd)	-	-	-
R	34	Railroad Property	Existing Adjacent Streets to End of Property	-	-	-
R	46	Ivy Lane Ext	Ivy Lane to Waterline Rd	-	-	-
R	47	Mary Jane Ave Ext	Mary Jane Ave to S. UGB then E. to Clay St	-	-	-
R	48	Forest St Ext	Between Existing Segments of Forest St	-	-	-
R	49	Croman Mill District	Croman Mill District Connectivity	-	-	-
R	50	E. Main St	Between Walker & Clay Streets	2,828,000	50.0%	1,414,000
Total Intersection & Roadway Improvements				38,201,000	38.2%	14,603,000
Total Roadway & Intersection Improvements				\$38,481,000	38.1%	\$14,655,000
X	1	4th St	Crossing	500,000	100.0%	500,000
X	2	Washington St	Crossing	1,000,000	100.0%	1,000,000
X	3	Normal Ave	Crossing Upgrade	1,316,253	100.0%	1,316,000
Total Railroad Crossing Projects				\$2,816,253	100.0%	\$2,816,000
Grand Total				\$60,317,253	34.8%	\$20,971,000
						\$2,112

*Type and # correspond to those in the TSP.

- No cost estimate; assumes improvements will be paid by developer

Table 8 Comparison of the Current and Updated SDCs for Selected Land Uses

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$ / ADT	PM Peak-hour trip Rate	\$ /PM Peak-hour trip	\$	%
RESIDENTIAL								
Single Family Multi-Family	210	Dwelling Unit	9.55	2,043.70	1.02	\$2,154.35	\$110.65	5%
Multi-Family	220	Dwelling Unit	6.28	1,343.04	0.67	\$1,415.11	\$72.07	5%
Residential Condominium	230	Dwelling Unit	5.68	1,216.42	0.52	\$1,098.30	(\$118.12)	-10%
Manufactured	240	Dwelling Unit	4.67	998.46	0.60	\$1,267.27	\$268.81	27%
Recreational Home/Condo	260	Dwelling Unit	3.16	676.24	0.31	\$654.75	(\$21.49)	-3%
INSTITUTIONAL								
Truck Terminals	30	1,000 sf GFA	11.03	2360.85	0.83	\$1,753.05	(\$607.80)	-26%
Bus Depot		1,000 sf GFA	25.00	5350	NA			
Park	411	Acres	2.01	429.5	4.50	\$9,504.50	\$9,075.00	2113%
City		Acres	45.00	9630	4.50	\$9,504.50	(\$125.50)	-1%
Neighborhood		Acres	4.50	963	4.50	\$9,504.50	\$8,541.50	887%
Amusement		Acres	72.00	15408	4.50	\$9,504.50	(\$5,903.50)	-38%
Golf Course	430	Holes	34.21	7,320.28	3.56	\$7,519.11	\$198.83	3%
Movie Theatre	443	Seats	0.81	173.25	0.32	\$675.88	\$502.63	290%
Racquet Club	492	1,000 sf GFA	8.74	1,870.66	0.84	\$1,774.17	(\$96.49)	-5%
Military Base	501	Employee	1.78	380.92	0.30	\$633.63	\$252.71	66%
Elementary School	520	Student	1.18	252.08	0.28	\$591.39	\$339.31	135%
Junior High School		Student	1.30	277.34	0.30	\$633.63	\$356.29	128%
High School	530	Student	1.49	318.95	0.29	\$612.51	\$293.56	92%
Junior/Community College	540	Student	1.44	307.39	0.12	\$253.45	(\$53.94)	-18%

Table 8

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	%
			Adjusted Avg. Weekday Trip	\$ / ADT	PM Peak-hour trip	\$ /PM Peak-hour trip		
			Rate	\$214	Rate	\$2,112		
Church	560	1,000 sf GFA	10.07	2151.04	0.94	\$1,985.38	(\$165.66)	-8%
Day Care Center/Preschool	565	Student	1.06	229.00	0.84	\$1,774.17	\$1,545.17	675%
Library	590	1,000 sf GFA	22.30	4,763.00	7.20	\$15,207.19	\$10,444.19	219%
Hospital	610	1,000 sf GFA	15.94	3,406.00	1.16	\$2,450.05	(\$955.95)	-28%
Nursing Home	620	Occupied Bed	2.47	528.58	0.37	\$781.48	\$252.90	48%
BUSINESS & COMMERCIAL								
Hotel/Motel	310	Occupied Room	4.50	963.48	0.74	\$1,562.96	\$599.48	62%
Building Materials/Lumber	812	1,000 sf GFA	11.23	2,403.39	5.56	\$11,743.33	\$9,339.94	389%
Specialty Retail Center	814	1,000 sf GFA	14.95	3,198.49	5.02	\$10,602.79	\$7,404.30	231%
Discount Stores	815	1,000 sf GFA	25.77	5,515.37	5.57	\$11,764.45	\$6,249.08	113%
Hardware/Paint Stores	816	1,000 sf GFA	18.85	4,033.70	4.74	\$10,011.40	\$5,977.70	148%
Nursery-Retail	817	1,000 sf GFA	13.26	2,837.51	9.04	\$19,093.47	\$16,255.96	573%
Shopping Center	820							
(under 50,000 sf GFA)	820	1,000 sf GFA	14.55	3,113.02	3.90	\$8,237.23	\$5,124.21	165%
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	15.12	3,236.16	3.90	\$8,237.23	\$5,001.07	155%
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	17.24	3,690.10	3.90	\$8,237.23	\$4,547.13	123%
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	17.89	3,828.96	3.90	\$8,237.23	\$4,408.27	115%
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	16.29	3,485.03	3.90	\$8,237.23	\$4,752.20	136%
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	15.03	3,216.54	3.90	\$8,237.23	\$5,020.69	156%
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	15.15	3,242.27	3.90	\$8,237.23	\$4,994.96	154%
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	29.26	6,262.45	18.49	\$39,052.91	\$32,790.46	524%
Fast Food Restaurant	833	1,000 sf GFA	36.09	7,722.72	47.30	\$99,902.80	\$92,180.08	1194%

Table 8

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$ / ADT \$214	PM Peak-hour trip Rate	\$ /PM Peak-hour trip \$2,112	\$	%
New Car Sales	841	1,000 sf GFA	21.56	4,613.73	2.80	\$5,913.91	\$1,300.18	28%
Service Station	844	Gasoline Pump	7.68	1,644.14	15.65	\$33,054.52	\$31,410.38	1910%
Supermarket	850	Employee	5.66	1,210.30	8.37	\$17,678.36	\$16,468.06	1361%
Convenience Market	851	1,000 sf GFA	20.66	4,422.04	36.22	\$76,500.62	\$72,078.58	1630%
Convenience Market w/ Gas Pump	853	Gasoline Pump	13.68	2,927.85	19.98	\$42,199.96	\$39,272.11	1341%
Apparel Store	870	1,000 sf GFA	11.49	2,459.23	4.20	\$8,870.86	\$6,411.63	261%
Furniture Store	890	1,000 sf GFA	1.59	341.32	0.53	\$1,119.42	\$778.10	228%
Bank/Savings: Walk-in	911	1,000 sf GFA	17.93	3,836.54	NA			
Bank/Savings: Drive-in	912	1,000 sf GFA	24.80	5,306.59	26.69	\$56,372.22	\$51,065.63	962%
OFFICE								
Clinic	630	1,000 sf GFA	12.61	2,698.26	NA			
General Office								
(Under 100,000 sf GFA)	710	1,000 sf GFA	10.78	2,306.28	1.49	\$3,147.04	\$840.76	36%
(100,000-199,999 sf GFA)	710	1,000 sf GFA	9.12	1,951.57	1.49	\$3,147.04	\$1,195.47	61%
(200,000 sf GFA and over)	710	1,000 sf GFA	7.70	1,648.34	1.49	\$3,147.04	\$1,498.70	91%
Medical Office Building	720	1,000 sf GFA	18.11	3,875.56	4.27	\$9,018.71	\$5,143.15	133%
Government Office Bldg.	730	1,000 sf GFA	66.17	14,160.98	1.49	\$3,147.04	(\$11,013.94)	-78%
State Motor Vehicles Dept	731	1,000 sf GFA	159.38	34,107.15	19.93	\$42,094.35	\$7,987.20	23%
U.S. Post Office	732	1,000 sf GFA	83.64	17,897.93	14.67	\$30,984.65	\$13,086.72	73%
Research Center	760	1,000 sf GFA	5.16	1,104.03	1.07	\$2,259.96	\$1,155.93	105%
Business Park	770	1,000 sf GFA	9.63	2,060.37	1.26	\$2,661.26	\$600.89	29%
INDUSTRIAL								

Table 8

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$ / ADT	PM Peak-hour trip Rate	\$ /PM Peak-hour trip	\$	%
				\$214		\$2,112		
General Light Industrial	110	1,000 sf GFA	7.81	1,670.57	1.08	\$2,281.08	\$610.51	37%
General Heavy Industrial	120	1,000 sf GFA	1.68	359.52	0.68	\$1,436.23	\$1,076.71	299%
Industrial Park	130	1,000 sf GFA	7.81	1,670.57	0.84	\$1,774.17	\$103.60	6%
Manufacturing	140	1,000 sf GFA	4.31	922.77	0.75	\$1,584.08	\$661.31	72%
Warehouse	150	1,000 sf GFA	5.47	1,169.64	0.45	\$950.45	(\$219.19)	-19%
Mini-Warehouse	151	1,000 sf GFA	1.23	262.51	0.22	\$464.66	\$202.15	77%
Utilities	170	Employees	1.06	226.84	NA			
Wholesale	860	1,000 sf GFA	3.30	705.71	0.52	\$1,098.30	\$392.59	56%

APPENDIX TABLES

ITE Trip Generation, 9th Edition PM Peak-Hour Trip Rates

Appendix Table		PM Peak-hour Trips			
ITE Code	Land Use	Unit ¹	Average	Low	High
30	Intermodal Truck Terminal	1,000 SF GFA	0.83		
110	General Light Industrial	1,000 SF GFA	1.08	0.36	4.50
120	General Heavy Industrial	1,000 SF GFA	0.68	0.49	0.78
130	Industrial Park	1,000 SF GFA	0.84	0.13	2.95
140	Manufacturing	1,000 SF GFA	0.75	0.09	7.85
150	Warehousing	1,000 SF GFA	0.45	0.16	1.65
151	Mini-Warehouse	1,000 SF GFA	0.29	0.13	0.50
152	High-Cube Warehouse	1,000 SF GFA	0.16	0.07	0.27
160	Data Center*	1,000 SF GFA	0.14	0.08	0.19
170	Utilities	1,000 SF GFA			
435	Multipurpose Recreational Facility	1,000 SF GFA	0.25		
437	Bowling Alley	1,000 SF GFA			
440	Adult Cabaret	1,000 SF GFA	38.67		
443	Movie Theater - no Matinee	1,000 SF GFA	14.05		
465	Ice Skating Rink	1,000 SF GFA			
473	Casino/Video Lottey Establishment	1,000 SF GFA			
491	Racquet/Tennis Club	1,000 SF GFA	0.84	0.70	1.06
492	Health/Fitness Club	1,000 SF GFA	4.06	3.27	4.30
493	Athletic Club	1,000 SF GFA	5.84	3.85	6.36
495	Recreational Community Center	1,000 SF GFA	3.35	2.31	5.37
520	Elementary School	1,000 SF GFA	3.11	0.94	6.06
522	Middle School/Junior High School	1,000 SF GFA	2.52	0.68	10.88
530	High School	1,000 SF GFA	2.12	0.98	5.14
534	Private School (K-8)	1,000 SF GFA	6.53	4.17	9.00
536	Private School (K-12)	1,000 SF GFA			
540	Junior/Community College	1,000 SF GFA	2.64	1.06	3.46
560	Church	1,000 SF GFA	0.94	0.38	4.04
561	Synagogue	1,000 SF GFA	1.69		
562	Mosque*	1,000 SF GFA	11.02		
565	Day Care Center	1,000 SF GFA	13.75	3.95	39.17
571	Prison	1,000 SF GFA	11.39		
590	Library	1,000 SF GFA	7.20	4.00	11.75
610	Hospital	1,000 SF GFA	1.16	0.66	7.63
620	Nursing Home	1,000 SF GFA	1.01	0.58	1.20
630	Clinic	1,000 SF GFA			

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
640	Animal Hospital/Veterinary Clinic	1,000 SF GFA			
710	General Office Building	1,000 SF GFA	1.49	0.49	6.39
714	Corporate Headquarters Building	1,000 SF GFA	1.41	0.52	2.67
715	Single Tenant Office Building	1,000 SF GFA	1.74	0.79	5.14
720	Medical-Dental Office Building	1,000 SF GFA	4.27	2.21	7.60
730	Government Office Building	1,000 SF GFA	11.03		
731	State Motor Vehicles Department	1,000 SF GFA	19.93	13.78	31.91
732	United States Post Office	1,000 SF GFA	14.67	3.46	82.89
733	Government Office Complex	1,000 SF GFA	3.59		
750	Office Park	1,000 SF GFA	1.48	0.64	4.50
760	Research & Development Center	1,000 SF GFA	1.07	0.40	4.13
770	Business Park	1,000 SF GFA	1.26	0.55	2.97
810	Tractor Supply Store*	1,000 SF GFA			
811	Construction Equipment Rental Store*	1,000 SF GFA			
812	Building Materials & Lumber Store	1,000 SF GFA	5.56	4.33	7.18
813	Free-Standing Discount Superstore	1,000 SF GFA	4.40	2.05	7.40
814	Variety Store*	1,000 SF GFA	6.99	3.52	13.94
815	Free-Standing Discount Store	1,000 SF GFA	5.57	3.17	9.44
816	Hardware/Paint Store	1,000 SF GFA	4.74	3.98	8.27
817	Nursery (Garden Center)	1,000 SF GFA	9.04	2.46	30.25
818	Nursery (Wholesale)	1,000 SF GFA	5.00	1.05	29.00
823	Factory Outlet Center	1,000 SF GFA	1.94	1.57	3.20
841	Automobile Sales	1,000 SF GFA	2.80	0.89	5.41
842	Recreational Vehicle Sales*	1,000 SF GFA			
843	Automobile Parts Sales	1,000 SF GFA	6.44	4.33	7.60
848	Tire Store	1,000 SF GFA	3.26	1.62	8.14
849	Tire Superstore	1,000 SF GFA	2.58	1.63	3.41
850	Supermarket	1,000 SF GFA	8.37	4.55	18.62
851	Convenience Mart, 24 hour	1,000 SF GFA	53.42	20.83	79.00
852	Convenience Mart, 15-16 hour	1,000 SF GFA	36.22	15.83	56.67
853	Convenience Mart + Gas Pumps	1,000 SF GFA	62.57	19.54	292.89
854	Discount Supermarket	1,000 SF GFA	8.13	5.67	10.85
857	Discount Club	1,000 SF GFA	4.63	2.42	9.67
860	Wholesale Market	1,000 SF GFA	0.52		
861	Sporting Goods Superstore	1,000 SF GFA			
862	Home Improvement Superstore	1,000 SF GFA	3.17	1.96	5.89
863	Electronics Superstore	1,000 SF GFA	4.50	3.45	5.78
864	Toy/Children's Superstore	1,000 SF GFA			
865	Baby Superstore	1,000 SF GFA			
866	Pet Supply Superstore	1,000 SF GFA	2.19		
867	Office Supply Superstore	1,000 SF GFA			
868	Book Superstore	1,000 SF GFA	10.66		
869	Discount Home Furnishing Superstore	1,000 SF GFA			

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
872	Bed & Linen Superstore	1,000 SF GFA			
875	Department Store	1,000 SF GFA	2.81	1.68	4.70
876	Apparel Store	1,000 SF GFA	4.20	1.78	6.80
879	Arts & Crafts Store	1,000 SF GFA	6.85		
880	Pharmacy/Drugstore	1,000 SF GFA	11.07	7.47	24.00
881	Pharmacy/Drugstore + Drive-Thru	1,000 SF GFA	9.72	6.50	13.48
890	Furniture Store	1,000 SF GFA	0.53	0.09	1.70
896	DVD/Video Rental Store	1,000 SF GFA	31.54		
897	Medical Equipment Store*	1,000 SF GFA	1.24		
911	Walk-in Bank	1,000 SF GFA			
912	Drive-in Bank	1,000 SF GFA	26.69	7.14	68.50
918	Hair Salon^	1,000 SF GFA	1.93		
920	Copy, Print & Express Ship Store	1,000 SF GFA	12.27		
925	Drinking Place	1,000 SF GFA	15.49	3.73	29.98
931	Quality Restaurant	1,000 SF GFA	9.02	3.24	15.89
932	High-Turnover Sit-Down Restaurant	1,000 SF GFA	18.49	5.60	69.20
933	Fast-Food Restaurant	1,000 SF GFA	52.40	29.05	112.00
934	Fast-Food Restaurant + Drive-Thru	1,000 SF GFA	47.30	13.33	158.46
935	Fast-Food Restaurant + Drive-Thru (no indoor seating)	1,000 SF GFA			
936	Coffee/Donut Shop	1,000 SF GFA	25.81	18.19	39.10
937	Coffee/Donut Shop + Drive-Thru	1,000 SF GFA	36.16	2.08	60.50
938	Coffee/Donut Shop + Drive-Thru (no indoor seating)	1,000 SF GFA	96.00	50.00	150.00
939	Bread/Donut/Bagel Shop^	1,000 SF GFA			
940	Bread/Donut/Bagel Shop + Drive-Thru	1,000 SF GFA			
943	Automobile Parts & Service Center	1,000 SF GFA			
945	Gasoline/Service Station + Convenience Mart	1,000 SF GFA	97.14	27.86	451.28
948	Automated Car Wash	1,000 SF GFA			
950	Truck Stop*	1,000 SF GFA			
820	Shopping Center	1,000 SF GLA			
826	Specialty Retail Center (formerly Code 814)	1,000 SF GLA	5.02	4.59	6.18
942	Automobile Care Center	1,000 SF GLA (occupied)	3.51	2.75	7.14
151	Mini-Warehouse	1,000 SF Net Rentable Area	0.22	0.14	0.33
10	Waterport/Marine Terminal	Acre			
30	Intermodal Truck Terminal	Acre	7.24	6.27	8.37
90	Park & Ride Lot + Bus Service	Acre			
110	General Light Industrial	Acre	8.77	1.32	31.25
120	General Heavy Industrial	Acre	4.22	1.26	10.67
130	Industrial Park	Acre	8.39	2.07	59.38
140	Manufacturing	Acre	9.21	0.62	148.00
150	Warehousing	Acre	8.77	3.80	30.80
151	Mini-Warehouse	Acre	3.89	1.29	6.94
210	Single-Family Detached Housing	Acre	2.73	0.36	10.39
240	Mobile Home Park	Acre	4.61	1.24	10.00

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
260	Recreational Homes	Acre	0.14	0.08	1.33
270	Residential Planned Unit Development	Acre	4.13	3.44	4.93
411	City Park	Acre	4.50		
412	County Park	Acre	0.59	0.08	5.30
413	State Park	Acre			
415	Beach Park	Acre	0.60	0.23	1.35
417	Regional Park	Acre	0.26	0.11	1.33
418	National Monument	Acre	0.51		
420	Marina	Acre			
430	Golf Course	Acre	0.39	0.30	0.63
435	Multipurpose Recreational Facility	Acre	11.54		
452	Horse Racetrack	Acre	0.22		
460	Arena	Acre			
481	Zoo	Acre			
490	Tennis Courts	Acre	1.79		
566	Cemetery	Acre	1.64		
750	Office Park	Acre	28.28	15.25	88.40
760	Research & Development Center	Acre	15.44	2.42	284.62
770	Business Park	Acre	16.84	2.31	32.54
811	Construction Equipment Rental Store*	Acre			
816	Hardware/Paint Store	Acre	55.64	45.71	101.11
817	Nursery (Garden Center)	Acre	10.49	2.40	41.67
818	Nursery (Wholesale)	Acre	0.53	0.16	2.50
860	Wholesale Market	Acre	9.94		
480	Amusement Park	Acres	4.11		
452	Horse Racetrack	Attendee	0.22		
453	Automobile Racetrack	Attendee			
454	Dog Racetrack	Attendee	0.41		
21	Commercial Airport	Avg Flights / Day	6.96	5.12	7.82
22	General Aviation Airport	Avg Flights / Day	0.30	0.17	0.33
22	General Aviation Airport	Based Aircraft	0.52	0.31	0.67
254	Assisted Living	Bed	0.35	0.16	0.87
610	Hospital	Bed	1.60	0.80	5.74
620	Nursing Home	Bed	0.37	0.21	0.51
420	Marina	Berth	0.21	0.18	0.30
433	Batting Cages	Cage			
21	Commercial Airport	Commercial Flights / Day	8.20	6.93	8.83
490	Tennis Courts	Court	3.67		
491	Racquet/Tennis Club	Court	4.38	1.73	7.21
912	Drive-in Bank	Drive-In Lane	29.05	8.50	68.50
210	Single-Family Detached Housing	Dwelling Unit	1.02	0.42	2.98
220	Apartment	Dwelling Unit	0.67	0.10	1.64
222	High-Rise Apartment	Dwelling Unit	0.40	0.30	0.59

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
223	Mid-Rise Apartment	Dwelling Unit	0.44	0.19	0.60
224	Rental Townhouse	Dwelling Unit	0.73		
230	Condo/Townhouse	Dwelling Unit	0.52	0.18	1.24
231	Low-Rise Residential Condo/Townhouse	Dwelling Unit	0.64	0.46	0.79
232	High-Rise Residential Condo/Townhouse	Dwelling Unit	0.38	0.33	0.50
251	Senior Adult Housing - Detached	Dwelling Unit	0.34	0.20	1.01
252	Senior Adult Housing - Attached	Dwelling Unit	0.35	0.24	0.53
253	Congregate Care Facility	Dwelling Unit	0.20	0.16	0.21
260	Recreational Homes	Dwelling Unit	0.31	0.25	1.33
265	Timeshare	Dwelling Unit			
270	Residential Planned Unit Development	Dwelling Unit	0.72	0.59	1.17
21	Commercial Airport	Employee	1.00	0.90	1.60
22	General Aviation Airport	Employee	1.46	0.99	2.27
30	Intermodal Truck Terminal	Employee	164.00	0.62	0.35
110	General Light Industrial	Employee	0.51	0.36	1.18
120	General Heavy Industrial	Employee	0.40	0.22	1.10
130	Industrial Park	Employee	0.45	0.26	1.36
140	Manufacturing	Employee	0.40	0.24	1.11
150	Warehousing	Employee	0.58	0.37	2.22
152	High-Cube Warehouse	Employee	0.35		
170	Utilities	Employee			
254	Assisted Living	Employee	0.55	0.30	1.09
310	Hotel	Employee	0.90	0.51	1.96
312	Business Hotel	Employee	7.60	6.58	9.50
320	Motel	Employee	1.24	0.48	4.00
330	Resort Hotel	Employee	0.31	0.20	0.82
417	Regional Park	Employee	12.77	7.41	32.00
418	National Monument	Employee	5.58		
430	Golf Course	Employee	2.08	1.92	2.56
432	Golf Driving Range	Employee	6.71		
443	Movie Theater - no Matinee	Employee	9.56		
452	Horse Racetrack	Employee			
460	Arena	Employee			
480	Amusement Park	Employee	0.52		
481	Zoo	Employee			
490	Tennis Courts	Employee	7.33		
491	Racquet/Tennis Club	Employee	3.40	1.65	8.00
493	Athletic Club	Employee	8.33		
495	Recreational Community Center	Employee	3.16		
501	Military Base	Employee	0.37	0.30	0.49
520	Elementary School	Employee	3.41	1.03	6.68
522	Middle School/Junior High School	Employee	2.97	1.23	4.61
530	High School	Employee	3.23	1.13	6.98

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
534	Private School (K-8)	Employee	5.72	1.85	9.69
536	Private School (K-12)	Employee	3.82	3.18	4.56
540	Junior/Community College	Employee	1.49	0.83	3.29
550	University/College	Employee	0.85	0.49	3.08
561	Synagogue	Employee	3.27		
565	Day Care Center	Employee	5.12	1.13	14.00
566	Cemetery	Employee	13.57		
571	Prison	Employee	0.68	0.50	1.88
580	Museum*	Employee	0.58		
590	Library	Employee	6.78	3.13	12.73
591	Lodge/Fraternal Organization	Employee	4.05		
610	Hospital	Employee	0.41	0.21	1.19
620	Nursing Home	Employee	0.47	0.41	0.94
630	Clinic	Employee	0.86	0.78	1.38
710	General Office Building	Employee	0.46	0.16	3.12
714	Corporate Headquarters Building	Employee	0.38	0.20	1.00
715	Single Tenant Office Building	Employee	0.51	0.29	1.14
720	Medical-Dental Office Building	Employee	0.97	0.58	2.06
730	Government Office Building	Employee	1.91		
731	State Motor Vehicles Department	Employee	5.35	3.24	7.58
732	United States Post Office	Employee	3.11	0.97	40.40
733	Government Office Complex	Employee			
750	Office Park	Employee	0.39	0.31	0.51
760	Research & Development Center	Employee	0.41	0.18	1.39
770	Business Park	Employee	0.39	0.24	1.01
812	Building Materials & Lumber Store	Employee	3.83	3.19	5.75
815	Free-Standing Discount Store	Employee	3.52	2.24	6.93
816	Hardware/Paint Store	Employee	5.43	4.83	6.50
817	Nursery (Garden Center)	Employee	2.55	1.03	7.43
818	Nursery (Wholesale)	Employee	0.67	0.47	3.00
826	Specialty Retail Center (formerly Code 814)	Employee			
841	Automobile Sales	Employee	0.96	0.48	1.93
848	Tire Store	Employee			
854	Discount Supermarket	Employee	3.24	2.57	3.86
857	Discount Club	Employee	3.36	2.41	4.98
860	Wholesale Market	Employee	0.64		
890	Furniture Store	Employee	1.27	0.55	3.50
912	Drive-in Bank	Employee	4.71	3.10	6.18
920	Copy, Print & Express Ship Store	Employee	6.63		
942	Automobile Care Center	Employee	1.43		
561	Synagogue	Family Member	0.07		
488	Soccer Complex	Field	18.36	9.71	26.50
853	Convenience Mart + Gas Pumps	Fueling Position	19.98	7.60	75.50

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
944	Gasoline/Service Station	Fueling Position	15.65	6.83	29.33
945	Gasoline/Service Station + Convenience Mart	Fueling Position	13.57	4.25	57.80
946	Gasoline/Service Station + Convenience Mart + Car Wash	Fueling Position	14.62	7.00	26.71
630	Clinic	Full-time Doctor	4.43	4.40	4.44
430	Golf Course	Hole	3.56	3.42	3.83
431	Miniature Golf Course	Hole			
437	Bowling Alley	Lane	4.50		
466	Snow Ski Area*	Lift	32.50		
493	Athletic Club	Member	0.17		
495	Recreational Community Center	Member	0.02		
591	Lodge/Fraternal Organization	Member	0.03		
443	Movie Theater - no Matinee	Movie Screen	37.83		
444	Movie Theater + Matinee	Movie Screen	37.83		
445	Multiplex Movie Theater	Movie Screen	25.84	13.33	69.45
254	Assisted Living	Occupied Bed	0.37	0.28	0.53
571	Prison	Occupied Bed	1.22		
416	Campground/RV Park	Occupied Camp Site	0.41	0.38	0.57
221	Low-Rise Apartment	Occupied Dwelling Unit	0.62	0.38	1.23
233	Luxury Condo/Townhouse	Occupied Dwelling Unit	0.65	0.60	0.72
240	Mobile Home Park	Occupied Dwelling Unit	0.60	0.39	1.07
252	Senior Adult Housing - Attached	Occupied Dwelling Unit	0.31	0.25	0.46
253	Congregate Care Facility	Occupied Dwelling Unit	0.21	0.21	0.21
265	Timeshare	Occupied Dwelling Unit			
90	Park & Ride Lot + Bus Service	Occupied Parking Space			
93	Light Rail Transit Station + Parking	Occupied Parking Space			
310	Hotel	Occupied Room	0.74	0.25	1.23
311	All Suites Hotel	Occupied Room	0.55	0.40	0.87
312	Business Hotel	Occupied Room	0.57	0.41	0.75
320	Motel	Occupied Room	0.69	0.29	1.33
330	Resort Hotel	Occupied Room	0.59	0.36	1.06
151	Mini-Warehouse	Occupied Storage Unit	0.02	0.02	0.03
255	Continuing Care Retirement Community^	Occupied Unit			
90	Park & Ride Lot + Bus Service	Parking Space			
93	Light Rail Transit Station + Parking	Parking Space			
414	Water Slide Park	Parking Space	0.28		
210	Single-Family Detached Housing	Person	0.27	0.12	0.68
220	Apartment	Persons	0.40	0.19	0.77
221	Low-Rise Apartment	Persons	0.33	0.22	0.65
222	High-Rise Apartment	Persons	0.20	0.18	0.26
230	Condo/Townhouse	Persons	0.24	0.15	0.57
240	Mobile Home Park	Persons	0.27	0.14	0.47
411	City Park	Picnic Site			
413	State Park	Picnic Site			

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
417	Regional Park	Picnic Site			
310	Hotel	Room	0.61	0.20	1.23
311	All Suites Hotel	Room	0.40	0.32	0.47
320	Motel	Room	0.56	0.24	1.83
330	Resort Hotel	Room	0.51	0.35	0.69
441	Live Theater	Seat			
443	Movie Theater - no Matinee	Seat	0.32		
445	Multiplex Movie Theater	Seat	0.28		
452	Horse Racetrack	Seat	0.11		
465	Ice Skating Rink	Seat			
560	Church	Seat			
931	Quality Restaurant	Seat	0.30	0.18	0.44
932	High-Turnover Sit-Down Restaurant	Seat	0.72	0.27	2.09
933	Fast-Food Restaurant	Seat	6.59		
934	Fast-Food Restaurant + Drive-Thru	Seat	1.62	0.26	4.79
937	Coffee/Donut Shop + Drive-Thru	Seat	0.90	0.31	1.88
848	Tire Store	Service Bay	5.65	3.33	8.00
849	Tire Superstore	Service Bay	3.87	2.38	6.17
941	Quick Lubrication Vehicle Shop	Service Bay	4.60	3.25	6.00
151	Mini-Warehouse	Storage Unit	0.03	0.02	0.05
520	Elementary School	Student	0.28	0.09	0.50
522	Middle School/Junior High School	Student	0.30	0.12	0.63
530	High School	Student	0.29	0.10	0.74
534	Private School (K-8)	Student	0.60	0.42	0.75
536	Private School (K-12)	Student	0.58	0.46	0.79
540	Junior/Community College	Student	0.12	0.08	0.20
550	University/College	Student	0.15	0.11	0.44
565	Day Care Center	Student	0.84	0.29	1.72
432	Golf Driving Range	Tee/Driving Position	1.65		
30	Intermodal Truck Terminal	Truck Berth	0.57		
255	Continuing Care Retirement Community	Unit	0.25	0.22	0.28
210	Single-Family Detached Housing	Vehicle	0.67	0.24	1.37
220	Apartment	Vehicle	0.61	0.32	1.19
230	Condo/Townhouse	Vehicle	0.31	0.17	0.66
240	Mobile Home Park	Vehicle	0.37	0.28	0.75
501	Military Base	Vehicle			
947	Self-Service Car Wash	Wash Stall	8.00		

			PM PEAK HOUR TRIPS					
ITE Code	Land Use	Unit ¹	#	TRIPS		Standard		
			Studies ²	Avg ³	Low ⁴	High ⁵	Deviation ⁶	
21	Commercial Airport	Employee	2	1.00	0.90	1.60		
22	General Aviation Airport	Employee	5	1.46	0.99	2.27	1.24	
30	Intermodal Truck Terminal	Employee	2	164.0	0	0.62	0.35	4.48
110	General Light Industrial	Employee	21	0.51	0.36	1.18	0.75	
120	General Heavy Industrial	Employee	3	0.40	0.22	1.10	0.69	
130	Industrial Park	Employee	37	0.45	0.26	1.36	0.70	
140	Manufacturing	Employee	51	0.40	0.24	1.11	0.65	
150	Warehousing	Employee	14	0.58	0.37	2.22	0.80	
152	High-Cube Warehouse	Employee	1	0.35				
170	Utilities	Employee						
254	Assisted Living	Employee	17	0.55	0.30	1.09	0.76	
310	Hotel	Employee	13	0.90	0.51	1.96	1.03	
312	Business Hotel	Employee	3	7.60	6.58	9.50	2.99	
320	Motel	Employee	13	1.24	0.48	4.00	1.37	
330	Resort Hotel	Employee	4	0.31	0.20	0.82	0.58	
417	Regional Park	Employee	3	12.77	7.41	32.00	9.07	
418	National Monument	Employee	1	5.58				
430	Golf Course	Employee	3	2.08	1.92	2.56	1.45	
432	Golf Driving Range	Employee	1	6.71				
443	Movie Theater - no Matinee	Employee	1	9.56				
452	Horse Racetrack	Employee						
460	Arena	Employee						
480	Amusement Park	Employee	1	0.52				
481	Zoo	Employee						
490	Tennis Courts	Employee	1	7.33				
491	Racquet/Tennis Club	Employee	6	3.40	1.65	8.00	2.68	
493	Athletic Club	Employee	1	8.33				
495	Recreational Community Center	Employee	1	3.16				
501	Military Base	Employee	8	0.37	0.30	0.49	0.61	
520	Elementary School	Employee	33	3.41	1.03	6.68	2.24	
522	Middle School/Junior High School	Employee	18	2.97	1.23	4.61	2.04	
530	High School	Employee	53	3.23	1.13	6.98	2.08	
534	Private School (K-8)	Employee	6	5.72	1.85	9.69	3.54	
536	Private School (K-12)	Employee	3	3.82	3.18	4.56	2.05	
540	Junior/Community College	Employee	4	1.49	0.83	3.29	1.36	
550	University/College	Employee	7	0.85	0.49	3.08	1.00	
561	Synagogue	Employee	1	3.27				
565	Day Care Center	Employee	60	5.12	1.13	14.00	3.24	

PM PEAK HOUR TRIPS

ITE Code	Land Use	Unit ¹	# Studies ²	TRIPS			Standard Deviation ⁶
				Avg ³	Low ⁴	High ⁵	
566	Cemetery	Employee	1	13.57			
571	Prison	Employee	2	0.68	0.50	1.88	
580	Museum*	Employee	1	0.58			
590	Library	Employee	10	6.78	3.13	12.73	3.82
591	Lodge/Fraternal Organization	Employee	1	4.05			
610	Hospital	Employee	18	0.41	0.21	1.19	0.67
620	Nursing Home	Employee	4	0.47	0.41	0.94	0.70
630	Clinic	Employee	3	0.86	0.78	1.38	0.95
710	General Office Building	Employee	173	0.46	0.16	3.12	0.70
714	Corporate Headquarters Building	Employee	20	0.38	0.20	1.00	0.63
715	Single Tenant Office Building	Employee	39	0.51	0.29	1.14	0.73
720	Medical-Dental Office Building	Employee	16	0.97	0.58	2.06	1.06
730	Government Office Building	Employee	1	1.91			
731	State Motor Vehicles Department	Employee	8	5.35	3.24	7.58	2.55
732	United States Post Office	Employee	11	3.11	0.97	40.40	4.70
733	Government Office Complex	Employee					
750	Office Park	Employee	5	0.39	0.31	0.51	0.63
760	Research & Development Center	Employee	29	0.41	0.18	1.39	0.66
770	Business Park	Employee	13	0.39	0.24	1.01	0.64
812	Building Materials & Lumber Store	Employee	4	3.83	3.19	5.75	2.11
815	Free-Standing Discount Store	Employee	7	3.52	2.24	6.93	2.35
816	Hardware/Paint Store	Employee	3	5.43	4.83	6.50	2.36
817	Nursery (Garden Center)	Employee	11	2.55	1.03	7.43	2.10
818	Nursery (Wholesale)	Employee	8	0.67	0.47	3.00	0.91
826	Specialty Retail Center (formerly Code 814)	Employee					
841	Automobile Sales	Employee	7	0.96	0.48	1.93	1.06
848	Tire Store	Employee					
854	Discount Supermarket	Employee	4	3.24	2.57	3.86	1.87
857	Discount Club	Employee	10	3.36	2.41	4.98	1.94
860	Wholesale Market	Employee	1	0.64			
890	Furniture Store	Employee	8	1.27	0.55	3.50	1.32
912	Drive-in Bank	Employee	2	4.71	3.10	6.18	
920	Copy, Print & Express Ship Store	Employee	1	6.63			
942	Automobile Care Center	Employee	1	1.43			

ASHLAND SYSTEM DEVELOPMENT CHARGE REVIEW COMMITTEE
MINUTES
March 4, 2014

CALL TO ORDER: Mike Faught called the meeting to order at 1:00 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Dan Jovick, Russ Silbiger, Jac Nickels, and Troy Brown Jr.

Committee Members Absent: Carlos Reichenshammer, and Allen Douma

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present: Ray Bartlett (Financial Analyst)

Council Liaison Present: Rich Rosenthal

Mike mentioned that at some point the committee will need to select a Chair/Vice Chair but the Committee would come back to that after introductions. He stated that Ray Bartlett who is the Financial Analyst that did all the work on the SDC recommendations is here to present the information. All of the SDC's that are being presented have been recommended, with the exception of a couple of projects that have been added, out of the Water, Sewer and Transportation master plans so these are all recommendations based on those adopted documents.

INTRODUCTIONS

The Committee did a round table introduction.

Jac/Dan m/s to nominate Carlos as chair. All in favor.

OVERVIEW

Ray stepped through each of the documents which were all drafted in 2012 which now requires changes in all three areas. He pointed out that

WATER SDC

Issues-

*Drafted in 2012

*Update all costs to 2014 dollars

*Add a portion of the TAP project which was originally planned to only be used in the event of an emergency. Since then the project has changed and the cost has gone up by roughly 3 million dollars. At the time it was planned the City hadn't anticipated having to pay the Medford Water Commission's SDC which is fairly large.

Mike pointed out that is a supply option for us in 2060. The facility is going to be constructed as a temporary facility but at some point it will likely become a permanent facility which means we need to start collecting SDC's on that now.

*Reduce the Crowson II Reservoir project which saves about 1.3 million dollars

*Review methods of assessment along with the sewer SDC

Reimbursement Fee (see attachments for the cost basis for reimbursement fee) -

*Value of Existing excess capacity

*Original cost:

Less accumulated depreciation

Balance of outstanding water debts

No change in capacity

The reimbursement fee was based on 2011 dollars. Ray pointed out that SDC's are usually reset annually or at certain trigger points, such as:

*A master plan being updated

- *A large increase on a project included in a master plan or
- *Inflation

Water Improvement Fee (see attachments for the cost basis for the improvement fee) -

*Only 4.352 million of \$44 million included (2011 \$'s)

*Changes since 2011 -

Medford Water Commission/TAP SDC cost (\$2 million emergency service only to future source & reduces the size of Crowson II).

Cost increased by \$3.7 million now will be used as a mainline supply; provides benefit to future users.

*Reduces cost of Crowson II reservoir by \$1.3 million (2011 \$'s); 10% allocated to improvement fee

Residential SDC, \$/sf

\$ 2.60 Current

\$2.45 2012 Update (not implemented)

\$2.65 Proposed (2% increase to end user)

SEWER SDC

The capital improvement projects fall into two categories; priority one and priority two. The current SDC rate did not include a number of the projects with are now on the capital improvements list. The system itself is fairly expensive to build/operate.

Residential SDC, \$/sf

\$ 0.81 Current

\$2.03 Proposed (150% increase to end user)

(See attachments for the cost basis for reimbursement fee and improvement fee)

ASSESSING WATER/SEWER SDC'S

*Currently:

Residential based on size of house

Commercial based on number of fixture units

*Alternatively:

Residential-

Single family: Meter size

Multi-family: Greater of meter size or number of housing units x Rate

Mike pointed out that SDC's really should be based on the demand on the system. Russ brought to the attention of the committee that he was involved in a big discussion about 10 years or so ago regarding this. The one size fits all method is only theoretically correct. The size of the meter gives you the maximum capacity which is far greater than any household could actually use. Some are forced into having a bigger meter size due to simply having a sprinkler system which has little to do with the actual maximum capacity rather than your theoretical maximum. Lawn size is probably the best way of determining. Meter size is simple and convenient; the fixture method gives you a slightly clearer picture of real amount of use. Ray pointed out that it isn't how much you use in the month; it's what you use instantaneously. You also have to consider the long term picture and the amount of owners that the home may go through. Each family will have a different amount of users. At least with the meter size method it practically limits how much can be pulled out of the water system instantaneously. Meter size makes a big difference in demand on the system. With the fixture method you may have a home with three bathrooms but only two people living there which means they are likely to not be using all three bathrooms. Also, on the Commercial side of things it is almost always easier to install fixtures after the building is completed so you may not know if fixtures have been installed. It also incentivizes the contractor to choose the meter size which will best fit the demand of that building. From a conservation standpoint meter size is generally the best way.

Bill explained to the committee that as the department that collects the fees he's had to meet with unhappy customers who were increasing fixtures or making some improvements and their argument was that they were increasing fixtures but they weren't increasing demand.

Russ feels we should orient these towards our capacity problems since that's what we are building out for.

TRANSPORTATION

Additional TSP project-

*East Main Street improvement between Walker and Clay Street

*2014 cost \$2.559 million

*Would add \$258 to SDC at 100% eligible

Transportation improvement fee (see attachments for the cost basis for the improvement fee) –

*Current \$2,043

*Proposed \$2,196

Proposed w/Main Street \$2,454

Mike added that the Normal Avenue railroad crossing is the only crossing through that area and it would also be an East Main connection which is why they had shown it as 50%. Russ feels that the railroad crossing is primarily growth related and should be as close to 100% SDC as possible. Mike said that once the connection is made there will be pass-through traffic created. There is also a nexus to what is required to be paid for by the builders. On a City wide perspective it creates a North/South connection. He pointed out that this initial meeting is really just to bring the information to the committee and then come back and go through these things.

SUMMARY

*Water SDC 2% increase

*Wastewater 150% increase

*Transportation 7.5% increase

Mike asked the committee how they would like to proceed now having all of the background data. The committee decided to go home and go through all of the projects/data and come back and tackle everything, likely starting with Water/Sewer and then Transportation last.

Ray spoke to the credit policy which is a part of the statute.

The Committee agreed to meet every other Tuesday at 1:00 pm. Next meeting March 18th.

Mike/Troy m/s to nominate Jac as Vice Chair. All in favor.

ADJOURNMENT

Meeting adjourned at 2:00 pm

Respectfully submitted,

Tami De Mille-Campos, Administrative Assistant

System Development Charge (SDC) Review Committee

March 18, 2014

Present: Troy Brown, Allen Douma, Dan Jovick, Jac Nickels, (vice-chair) Rich Rosenthal, and Russ Silbiger.
Absent: Carlos Reichenshammer (Chair)

Staff: Mike Faught, Bill Molnar, Mary McClary

Vice-chair Nickels called the meeting to order at 1:10pm.

Introductions

The members introduced their name and affiliations.

Troy Brown Jr.---Planning Commission

Allen Douma---Citizen

Mike Faught---Public Works Director

Jac Nickels (vice-chair)---Architect

Russ Silbiger---Citizen

Rich Rosenthal---Council Liaison

Ray Bartlett---Consultant (by phone)

Jac Nickels announced the Committee would approve two sets of minutes at the next meeting.

Troy Brown requested the agenda be sent as a pdf file.

Minute approval

Set aside.

Public Forum

No one present.

Water System Development Charges (SDC)

Mike Faught introduced the consultant Ray Bartlett on the phone. Mike spoke and presented a PowerPoint presentation regarding the current SDC charges and proposed changes. The water SDC charges were \$2.60. The 2012 update reduced it to \$2.45, then TAP allocation (SDC to Medford) brought the charge to \$2.65.

Ray Bartlett went through the details for the changes of the proposed changes for residential and commercial water and the members discussed the recommendations. Residential SDC is based on the square footage of the residential structure, commercial rates for water would be based on meter size, and commercial sewer would be based on plumbing fixtures. Ray would work on an example for the Committee to review at the next meeting to clearly see the current charges and the proposed charges.

Sewer SDC

The commercial sewer charges would be based on fixture units currently at \$124.18, changing to \$311.19. The current rate for residential is .81 sq ft and would change to 2.03 sq ft, an 150% increase. Ray explained the old methodology left out the value of the capital improvements made. Going forward the improvements would not be funded with tax but user fees which drove up the cost of the user fees. The tax revenue pays for the debt service on the current system until 2024, approximately 1.6 million per year. None of the tax revenues are included in the SDC calculations. After that time Council had already approved the tax monies to be used for Public Works capital projects.

Allen asked for an outline of how the projected costs went up 150% to both residential and commercial and wondered what this would do to an average home (2,000 sq ft).

The food and beverage tax monies used to pay for the treatment plant, would become a revenue stream for the sewer fund to pay debt service for capital projects and the engineers would allocate how much should go to growth in the SDC. Each project has a growth indication and drives the SDCs. SDC funds can only be used for projects identified in the master plan. The increase is needed now to pay for growth. If the SDC's do not cover most of the costs then rates increase. Ashland's growth has been less than 1% for the past 10 years. The master plan projects are based on that growth.

The members discussed capacity versus rates increase, projects coming up in the future, replacement costs, percentage of sewer costs paid by SDC and rates, growth paying for itself, and limitation because of urban growth boundaries.

Ashland was in the middle to low range for SDC charges when compared to similar communities mainly because other communities adjust annually. We do comprehensive master plans every 5 years and the SDC rates are re-evaluated. Water and Sewer growth was calculated by engineers.

The committee asked for a rate impact comparison for several commercial buildings (10,000 sq ft) and an average residential structure (1700 sq ft). The criteria used are based on the American Water Works Association for meter capacity for meter size and manufactures. The committee would like to see the comparisons with the sewer SDC proposals also.

Mike suggested the Committee pick up the Transportation discussion at the next meeting.

Meeting adjourned at 2:30.

Next meeting: April 1, at 1pm in the Siskiyou Room.

Respectfully submitted by:

Mary McClary

Administrative Assistant for Electric, IT and

Telecommunication Departments

ASHLAND SYSTEM DEVELOPMENT CHARGE REVIEW COMMITTEE
MINUTES
April 15, 2014

CALL TO ORDER: Carlos Reichenshammer called the meeting to order at 1:09 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Russ Silbiger, Carlos Reichenshammer, Allen Douma and Troy Brown Jr.

Committee Members Absent: Dan Jovick, and Jac Nickels

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present: Ray Bartlett (Financial Analyst)

Council Liaison Absent: Rich Rosenthal

Mike mentioned that at some point the committee will need to select a Chair/Vice Chair but the Committee would come back to that after introductions. He stated that Ray Bartlett who is the Financial Analyst that did all the work on the SDC recommendations is here to present the information. All of the SDC's that are being presented have been recommended, with the exception of a couple of projects that have been added, out of the Water, Sewer and Transportation master plans so these are all recommendations based on those adopted documents.

INTRODUCTIONS

The Committee did a round table introduction.

Minutes approval – March 18th. Unanimous consent

WATER SDC

Ray stated the SDC statutes in Oregon have two portions of the SDC; reimbursement fee & improvement fee. The reimbursement fee is based on the value of excess capacity that is currently in the system, drought notwithstanding. The City in the past has used original cost depreciated for the length of time it's been in use to calculate the cost basis for the reimbursement fee. There are two other commonly used methods in practice; replacement cost or replacement cost depreciated for the length of time it's been in use; both of which produce a much higher SDC than what the City of Ashland has chosen to use. Ray pointed out that you are allowed to include projects that are financed or under construction. One of the issues that will be looked at is whether or not to take the TAP line & add that to the reimbursement fee.

The improvement fee is the value of capacity that hasn't yet been built; they are projects to be built in the future which in the planning process have been identified as necessary to meet population & employment growth that's expected. Although the future can't be precisely forecasted, the master plan is based on a reasonable forecast of population & employment. The current water master plan is designed to go out to the year 2030. The TAP waterline is likely to meet demand to 2060.

Ray pointed out that they are simply updating the figures in the 2012 master plan to 2013 dollars, which is the last year in which there are audited financials for capital values and using the same measurements that they had for capacity for the existing system and the growth.

One of the issues that came up at the previous committee meeting was how the SDC is applied to new development. What the City has been using for sewer & water for residences is to calculate what the SDC would be for a 2,000 square foot house. The City then applies that SDC to the actual square footage of the house that is being built. The theory is the larger the house, the higher the demand for water and is a pretty commonly applied method.

For non-residential uses, the water SDC is applied based on the size of the water meter that is installed. The sewer system is based on the number of fixture units that are installed.

The TAP project was originally left entirely out of the SDC calculation because it was considered to be satisfying only emergency demands of the current population & would only be used on a temporary basis. Based on climate change it is estimated that it would be used every 4 years or during an emergency (flood, fire etc). A discussion was had between Ray and Mike regarding whether or not the TAP project meets the SDC requirements. Mike stated if Council approves the TAP project as proposed then the original SDC proposal is what they would continue to recommend, if it does change they would recalculate it and bring it back to the committee.

SEWER SDC

The sewer SDC hasn't changed since the previous meeting, except for addressing a few of the issues that came up at the last meeting. One of those issues was whether or not sewer projects that are being paid for with food and beverage tax have been included. Those are not being included and they have removed those facilities that are financed and being repaid out of the food and beverage tax. The net is the facilities paid for with user fees and SDC's. There have been major improvements to the wastewater treatment plant since the last master plan was updated and the capital improvements list has had additions made to it related to regulatory requirements.

The engineers evaluate what percentages are due to growth. It is required as part of the master planning process and all of the projects have different growth projections.

Mike pointed out the master plans calculate the estimated population growth, and they then figure out what that impact is to the system. After reviewing the master plans/transportation system plan, the goal for the SDC committee is to make a recommendation which will be forwarded to Council for approval. Once the committee has made their recommendation a required 90-day notice would be sent out to the homebuilders association and after that it would be presented to Council along with a public hearing.

The committee agreed to skip the April 29th meeting in order to have time to go through all of the material. The next meeting will be held on May 13, 2014.

ADJOURNMENT

Meeting adjourned at 2:15 pm

Respectfully submitted,

Tami De Mille-Campos, Administrative Assistant

ASHLAND SYSTEM DEVELOPMENT CHARGE REVIEW COMMITTEE
INFORMATIONAL ONLY **NO QUORUM**
June 10, 2014

Committee Members Present: Russ Silbiger, Jac Nickels, and Troy Brown Jr.

Committee Members Absent: Dan Jovick, Carlos Reichenshammer, and Allen Douma

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present via phone: Ray Bartlett (Financial Analyst)

Council Liaison Absent: Rich Rosenthal

Transportation Commissioner Present: Joseph Graf

Mike pointed out that we did not have a quorum so the committee couldn't take action on anything during the meeting but the meeting could continue due to the scheduling of the conference call with our consultant, Ray Bartlett. Informational notes will be taken for submission to the full committee at its next meeting.

WATER SDC

Ray provided an example of the current sdc and the proposed sdc based on a 2,000 square foot home. Bill asked if the committee wondered where Ashland's SDC's stack up with other cities around Oregon. He said he had remembered seeing an email, possibly from the League of Oregon Cities, which showed that Ashland was sort of in the middle. Bill didn't recall the details of the document. Mike asked Ray if that was something that he could take a look at (as long as it wouldn't exceed 25% of the contract amount). Ray agreed that he could look into that.

Ray then stepped through the "Update - water system development charge" document (see attached). The tables discussed in the document show the changes to the current water system development charge (SDC) and compares the current water SDC to that proposed in the 2012 Comprehensive Water Master Plan (WMP, Final December 2012), and to this proposed SDC based on changes that have occurred since 2012.

Table 1 summarizes these three calculations of the water SDC for residential and for commercial & industrial users on a 3/4-inch water meter.

Table 2 shows the entire schedule of changes by meter size for commercial & industrial users.

Table 3 shows the changes in the cost basis of the reimbursement fee.

Table 4 is from the WMP (Table 9-16) and shows that the Emergency TAP line project is deleted.

Table 5 shows the list of qualified improvement fee projects and the adjustments made to the original WMP projects as of this year.

Table 6 shows the allocation of the eligible improvement fee projects to residential and commercial & industrial users based on the expected number of 3/4-inch equivalent meters each customer class is expected to use.

SEWER SDC

Ray noted there weren't any new changes to what was proposed at the April 4th, 2014 meeting. It is pretty much the same as what came out of the master plan. The calculations were increased based on the change in asset value from 2011 to 2013. The proposed improvement fee resulted in a slight increase, adjusting for inflation. Ray pointed out when the SDC was put together originally for the current sdc there were pretty large reductions made in the calculation of the sdc, in part because the City was charging a tax on food and beverage, much of which was going towards paying for improvements to the sewer system. Those corrections have still been made but the current sdc was based on an artificially low sdc. The capital projects have increased due mostly to a pretty dramatic increase in sewage treatment requirements.

The committee would like to see a summary of the current and proposed, in addition to the rates. Staff will provide that.

Transportation SDC

Russ questioned how they can determine the Transportation sdc based on a list of capital improvements that may or may not be completed. Faught stated that is something that the committee will have to decide. Ray pointed out the master plan eliminated the low priority and developer driven projects. The question is whether the committee wants to trim back any of the high and medium projects. Transportation is harder to predict. Russ commented that maybe the Transportation sdc is something that the sdc committee needs to revisit more often than every ten years. Mike said he actually recommends that all master plans be updated every five years.

The next meeting will be held at 1:00 pm on July 8th, 2014.

Tami De Mille-Campos, Administrative Assistant

Ashland, Oregon

UPDATE:

WATER SYSTEM DEVELOPMENT CHARGE

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

1409 Franklin Street, Suite 201
Vancouver, WA98660

June 5, 2014

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SUMMARY

The following 5 tables show the changes to the current water system development charge (SDC) and compares the current water SDC to that proposed in the 2012 *Comprehensive Water Master Plan* (WMP, Final December 2012), and to this proposed SDC based on changes that have occurred since 2012.

Table 1 summarizes these three calculations of the water SDC for residential and for commercial & industrial users on a ¾-inch water meter. Compared to the current water SDC, the 2012 WMP proposed a decrease of about 6%, and with the current changes since 2012, a 0.3% increase for the residential SDC and a 1.3% decrease for commercial & industrial. The commercial & industrial SDC decreased due to an apparent error in the WMP calculations which is explained below in Table 5.

Table 1 Summary Water SDC

	Residential			Commercial & Industrial			% Δ from Current
	Reimbursement	Improvement	Total SDC	Reimbursement	Improvement	Total SDC	
Current							
\$/Square Foot of Habitable Area			\$2.60				
\$/Meter Size						\$4,940.40	
	3/4						
2012 WMP							
\$/Square Foot of Habitable Area		\$0.8040	\$1.6436	\$2.4476			-5.9%
\$/Meter Size							
	3/4			\$1,522.18	\$3,111.76	\$4,633.94	-6.2%
2014 WMP Update with TAP & Crowson II							
\$/Square Foot of Habitable Area		\$0.9318	\$1.6751	\$2.6069			0.3%
\$/Meter Size							
	3/4			\$1,792.89	\$3,084.22	\$4,877.11	-1.3%

Table 2 shows the entire schedule of changes by meter size for commercial & industrial users.

Table 2 Schedule of Current and Proposed Water SDC

	Residential			Commercial & Industrial			% Δ from Current
	Reimbursement	Improvement	Total SDC	Reimbursement	Improvement	Total SDC	
Current							
\$/Square Foot of Habitable Area			\$2.60				
\$/Meter Size							
	3/4					\$4,940.40	
	1					\$8,250.47	
	1 1/2					\$16,451.53	
	2					\$26,332.33	
	3					\$57,654.47	
	4					\$98,808.00	
	6					\$205,866.47	
	8					\$296,424.00	
2012 WMP							
\$/Square Foot of Habitable Area	\$0.8040	\$1.6436	\$2.4476				-5.9%
\$/Meter Size							
	3/4			\$1,522.18	\$3,111.76	\$4,633.94	-6.2%
	1			\$2,537.00	\$5,186.00	\$7,723.00	-6.4%
	1 1/2			\$5,074.00	\$10,373.00	\$15,447.00	-6.1%
	2			\$8,118.00	\$16,596.00	\$24,714.00	-6.1%
	3			\$17,759.00	\$36,304.00	\$54,063.00	-6.2%
	4			\$30,444.00	\$62,235.00	\$92,679.00	-6.2%
	6			\$63,424.00	\$129,657.00	\$193,081.00	-6.2%
	8			\$91,331.00	\$186,706.00	\$278,037.00	-6.2%
2014 WMP Update with TAP & Crowson II							
\$/Square Foot of Habitable Area	\$0.9318	\$1.6751	\$2.6069				0.3%
\$/Meter Size							
	3/4			\$1,792.89	\$3,084.22	\$4,877.11	-1.3%
	1			\$2,988.75	\$5,140.43	\$8,129.18	-1.5%
	1 1/2			\$5,975.70	\$10,280.87	\$16,256.57	-1.2%
	2			\$9,561.48	\$16,448.58	\$26,010.06	-1.2%
	3			\$20,917.65	\$35,983.04	\$56,900.69	-1.3%
	4			\$35,857.80	\$61,685.21	\$97,543.01	-1.3%
	6			\$74,704.35	\$128,508.83	\$203,213.18	-1.3%
	8			\$107,573.40	\$185,053.61	\$292,627.01	-1.3%

Table 3 shows the changes in the cost basis of the reimbursement fee. The proposed SDC in the WMP was based on the fiscal year 2011 (July 1, 2012 through June 30, 2011) audit. The update is based on the most recently completed audit ending June 30, 2013, and on the current cost of constructing the TAP water line and the Medford Water Commission SDC for water in 2014 dollars. This project was deleted from the list of capital improvements that was used to calculate the improvement fee. Since this project has been financed and is under construction, it can be counted as an existing asset with excess capacity to serve future development. In the 2012 WMP, the project was to serve only emergency water needs and was excluded from the calculation of the improvement fee. Since then, the scope of this project has made it a source of

water to Ashland and it will be available to serve future development. In this analysis, 90% of the TAP line cost is included because it will primarily serve growth and 10% is assumed to be used for emergency use by existing development.

The proposed SDC uses the same criteria as the 2012 WMP and the current methodology. The current and WMP methodology divides the cost between single-family residences and commercial & industrial based on the equivalent numbers of ¾-inch water meters in service currently. A ¾-inch equivalency is based on the amount of water that a certain size meter (e.g., 2-inch meter) can pass instantaneously relative to the amount a ¾-inch meter can pass (e.g., a 2-inch meter can pass 5.33 times more water than a ¾-inch meter). Single-family residences' SDCs are based on square footage of habitable (heated) floor area; and, the commercial & industrial is based on meter size which varies by the meters' abilities to provide water instantaneously—gallons per minute. Seventy-seven percent of the ¾-inch meters are in single-family residences; therefore, 77% of the eligible reimbursement fee costs are allocated to residences and 23% to commercial & industrial users.

Table 3 Calculation of Water Reimbursement Fee

	2011	2013	Allocation	% Δ
Original Cost	\$36,180,656	\$36,435,280		0.7%
Accumulated Depreciation	(\$15,228,374)	(\$17,254,657)		13.3%
Book Value of Hosler Dam	(\$55,741)			-100.0%
Book Value	\$20,896,541	\$19,180,623		-8.2%
Series 1997 Flood & Refunding Bonds	(\$175,000)			-100.0%
Series 2003 Water Revenue Bonds	(\$2,940,000)	(\$4,695,862)		59.7%
Series 2009 Water & WW Bonds (FF&C)	(\$633,551)			-100.0%
Principal Outstanding	(\$3,748,551)	(\$4,695,862)		25.3%
Investment in Capacity	\$17,147,990	\$14,484,761		-15.5%
Emergency TAP Pipeline & Pump				
MWC's SDC		\$2,620,084		
Construction		\$4,400,000		
Less: IFA Forgivable Loan		(\$950,000)		
Net cost of TAP		\$6,070,084		
% Allocation to future development		90.00%		
Allocation to future development		\$5,463,076		
Cost Basis for Reimbursement Fee		\$19,947,837		
Current 3/4" Equivalent Meters (EM)	Number	%		
Residential	7,575	77%	\$15,359,834	
Commercial & Industrial	2,227	23%	\$4,588,002	
Total	9,802	100%	\$19,947,836	
Square Feet (SF) of Residential Habitable Area, 2032	16,483,431	\$/SF	\$0.9318	
3/4" Commercial & Industrial Equivalent Meters (EM), 2032	2,559	\$/EM	\$1,792.89	

Table 4 is from the WMP (Table 9-16) and shows that the Emergency TAP line project is deleted. This project is under construction and qualifies as a reimbursement fee. Only 9 projects qualify to be improvement fee projects; of the \$44 million of capital improvements only \$4.3 million is included in the SDC improvement fee. The Emergency TAP Pipeline & Pump project has been deleted from the list of capital improvements and added to the list of existing capital improvements. Because of this change in scope the City was able to reduce the amount of storage needed at the Crowson II reservoir which reduced the cost by \$1.3 million (in 2012 \$'s). Table 5 shows these calculations.

Table 4 Original List of Capital Improvements & SDC Eligible, 2012 \$'s

Capital Project	Total Cost	SDC Eligible	
		%	\$
Supply			
FERC Dam Security & Telemetry Impr.	-	25.00%	-
FERC Dam Spillgate Upgrades(50% Electric, 50% Water)	-	25.00%	-
FERC Structural Stability Analysis(50% Electric, 50% Water)	-	25.00%	-
FERC Part 12 Dam Safety Inspection(50% Electric, 50% Water)	160,000	25.00%	40,000
Ashland Creek West Fork Bridge Construction	120,000	75.00%	90,000
Sediment TMDLin Reeder Resv.	600,000	75.00%	450,000
Reeder Resv Study Implementation	30,000	75.00%	22,500
Reeder Resv Access Road TMDL Compliance	100,000	75.00%	75,000
Reeder Resv Variable Depth Intake	100,000	0.00%	-
TID Terrace St Pump Station Improvements	220,000	0.00%	-
TID Canal Piping: Starlite to Terrace Street	1,100,000	100.00%	1,100,000
Test existing high capacity wells	50,000	0.00%	-
Water Conservation Smart Controller Pilot Project	50,000	0.00%	-
Water Conservation Management Plan (due April 2012)	0	100.00%	-
Emergency TAP Pipeline & Pump	2,000,000	0.00%	-
Treatment & Storage			
Raw Water Bypass Measurement	25,000	0.00%	-
SCADA Radio Frequency FCC Compliance	45,000	0.00%	-
Final CT Disinfection Improvements	85,000	0.00%	-
Permanganate Feed Facility Study & Implementation	265,000	0.00%	-
WTP Security Upgrades	50,000	0.00%	-
Existing Plant Mech. Elec. & Scada Upgrades	1,500,000	0.00%	-
Ozone /UV Analysis & Disinfection	1,750,000	0.00%	-
Bear Creek Cu WLA Source Control Study & Implementation	50,000	0.00%	-
2.6-MG Reservoir & Clearwell ("Crowson II")	6,746,000	10.00%	674,600
2.5 MGD Water Treatment Plant	12,000,000	10.00%	1,200,000
Distribution			
Telemetry Station at Water Warehouse	50,000	0.00%	-
Water Master Plan Updates	700,000	100.00%	700,000
Park Estates Pump Station/Loop Road Reservoir Alternatives	2,000,000	0.00%	-
Lit Way New PRV	341,000	0.00%	-
Tolman Creek Road New PRV	341,000	0.00%	-

Capital Project	Total Cost	SDC Eligible	
		%	\$
Pipe Replacement Program	3,700,000	0.00%	-
Radio Read Meter Program	1,351,000	0.00%	-
Hydrant Replacement	616,000	0.00%	-
Emergency Response Plan Update	20,000	0.00%	-
Cross Connection Control Plan Update	15,000	0.00%	-
Safety Plan Update	20,000	0.00%	-
Granite Reservoir Valving	100,000	0.00%	-
Piping			
Ivy Lane	346,000	0.00%	-
Ivy Lane	94,000	0.00%	-
Normal Ave	517,000	0.00%	-
Walker Ave	784,000	0.00%	-
Parker Street	162,000	0.00%	-
Harmony Lane	65,000	0.00%	-
Lit Way	35,000	0.00%	-
Ray Lane	54,000	0.00%	-
Beach Street	91,000	0.00%	-
AHS Property	90,000	0.00%	-
Vista Street	149,000	0.00%	-
Vista Street	5,000	0.00%	-
Meade Street	235,000	0.00%	-
Elkader Street	72,000	0.00%	-
Ivy Lane	64,000	0.00%	-
South Mountain Ave	6,000	0.00%	-
South Mountain Ave	17,000	0.00%	-
Pincrest Trail	178,000	0.00%	-
Pincrest Trail	396,000	0.00%	-
Penny Drive	83,000	0.00%	-
Woodland Drive	52,000	0.00%	-
Hiawatha Place	58,000	0.00%	-
Morton Street	130,000	0.00%	-
Ashland Mine Road	115,000	0.00%	-
Fox Street	54,000	0.00%	-
Alameda Drive	35,000	0.00%	-
Skycrest Drive	162,000	0.00%	-
Crispin Street	131,000	0.00%	-
Oak Lawn Ave	29,000	0.00%	-
Sylvia Street	64,000	0.00%	-
Black Oak Way	85,000	0.00%	-
Oak Knoll Dr	287,000	0.00%	-
Ashland Street	432,000	0.00%	-
I-5 Crossing	794,000	0.00%	-
Ditch Road	225,000	0.00%	-
Lithia	70,000	0.00%	-
Iowa Street	640,000	0.00%	-
Granite Street	300,000	0.00%	-

Capital Project	Total Cost	SDC Eligible	
		%	\$
B Street	250,000	0.00%	-
Terrace Street	350,000	0.00%	-
Totals	<u>\$44,006,000</u>		<u>\$4,352,100</u>

Table5 shows the list of qualified improvement fee projects and the adjustments made to the original WMP projects as of this year. The Crowson II reservoir can be reduced in size at a cost savings of \$1.3 million. Ten percent of the cost and of the cost reduction are incorporated into the revisions along with an adjustment for inflation. According the *ENR* Construction Cost Index, construction costs increased 5.45% between June 2012 and June 2014.

Table 5 SDC Eligible Capital Improvements with Modifications, 2014 \$'s

Capital Project	Total Cost	SDC Eligible		Adjustments		2012 \$'s	2014 \$'s
		%	\$	% eligible	Cost 2014\$'s		
							105.45%
Supply							
FERC Part 12 Dam Safety Inspection (50% Electric, 50% Water)	160,000	25.00%	40,000			40,000	\$42,000
Ashland Creek West Fork Bridge Construction	120,000	75.00%	90,000			90,000	\$95,000
Sediment TMDL in Reeder Resv.	600,000	75.00%	450,000			450,000	\$475,000
Reeder Resv Study Implementation	30,000	75.00%	22,500			22,500	\$24,000
Reeder Resv Access Road TMDL Compliance	100,000	75.00%	75,000			75,000	\$79,000
TID Canal Piping: Starlite to Terrace Street	1,100,000	100.00%	1,100,000			1,100,000	\$1,160,000
Treatment & Storage			-				-
2.6-MG Reservoir & Clearwell ("Crowson II")	6,746,000	10.00%	674,600	10%	-\$1,300,000	674,600	\$574,000
2.5 MGD Water Treatment Plant	12,000,000	10.00%	1,200,000			1,200,000	\$1,265,000
Distribution							-
Telemetry Station at Water Warehouse	50,000	0.00%	-			-	-
Water Master Plan Updates	700,000	100.00%	700,000			700,000	\$738,000
Piping						-	-
Totals	44,006,000		4,352,100			4,352,100	4,452,000

^ENR Construction Cost Index shows a 5.45% increase in construction costs between 2012 and 2014.

Table 6 shows the allocation of the eligible improvement fee projects to residential and commercial & industrial users based on the expected number of ¾-inch equivalent meters each customer class is expected to use. The improvement fee is the allocated cost divided by the forecast square footage of habitable space residences are expected to develop; and, the allocated cost divided by the forecast number of ¾-inch equivalent meters commercial & industrial customers are expected to develop.

Table 6 Calculation of Water Improvement Fee

Total Cost Allocation to Improvement Fee, 2014 \$'s			\$4,452,000
3/4" Meter Equivalents			
Residential	7,575	77%	\$3,428,040
Commercial & Industrial	2,227	23%	\$1,023,960
Total	9,802	100%	\$4,452,000
Forecast Growth Square Feet of Residential Habitable Area	2,046,408	\$/SF	\$1.6751
Forecast Growth 3/4" equivalent meters	332	\$/EM	\$3,084.22

Compared to the current SDC, the proposed residential SDC (reimbursement plus improvement fees) will increase 0.3%, and the proposed commercial & industrial SDC will decrease about 1.3%. The decrease in the commercial & industrial SDC is due to an apparent error in the calculations of the WMP. The WMP forecast the number of ¾-inch equivalent meters will increase by 332 (from 2229 in 2012 to 2559 in 2032); however, the 2012 calculation of the SDC was based on only 318 new ¾-inch equivalent meters.¹ Table 6 above is based on 332 new ¾-inch equivalent meters.

¹ Comprehensive Water Master Plan, page 9-29 Table 9.15 shows the current and forecast numbers of ¾-inch EM for commercial & industrial at 332; page 9-32 shows only 318 EM were included in the calculation of the improvement fee. The reimbursement fee is based on the correct number of ¾-inch EM, 2559 (page 9-29).

**ASHLAND SYSTEM DEVELOPMENT CHARGE (SDC) REVIEW COMMITTEE
MINUTES
July 8, 2014**

CALL TO ORDER: Carlos Reichenshammer called the meeting to order at 1:07 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Russ Silbiger, Carlos Reichenshammer, Allen Douma (arrived at 1:09), Dan Jovick, Jac Nickels (arrived at 1:08) and Troy Brown Jr.

Committee Members Absent: None

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present via phone: Ray Bartlett (Financial Analyst)

Council Liaison Absent: Rich Rosenthal

WATER SDC

Mike pointed out last month we didn't have a quorum but we did go over some of the documents. At this meeting the plan is to summarize the water SDC and answer any questions the committee has.

Dan asked whether there has been any consideration given to those homes with gray water systems. Mike asked Bill if they have gotten many questions regarding gray water. Bill said they do get the occasional question regarding gray water. One of the issues regarding gray water is how to calculate it, as well as tracking whether the system is in use as it passes from one owner to another.

Ray went over the comparison that was provided by the Community Development department (see attached).

SEWER SDC

Ray went over 3 basic reasons why the wastewater increases 151%. Also, in 2006 the City decreased the SDC from \$2,707 for a typical 2,000 square foot house to \$1,613—a 40% decrease. According to the 2006 "Water and Wastewater – System Development Charge Fee Schedules Summary Exhibit 'A' this was ". . . due to a significant downsized allocation of capital facility costs to growth and the removal of the treatment plant funded through the food and beverage tax receipts . . ." (page 1). In the proposed 2014 update, we also remove those elements of the WWTP that are funded from the food and beverage tax.

- In 2006 the reimbursement fee was based on a Net Asset Value of \$9.7 million. The 2014 update is based on a Net of \$8.9 million—an 8% decrease.
- In 2006 the improvement fee was based on \$2.5 million of SDC qualified capital improvements. The 2012 Wastewater Master Plan (WWMP) has \$9.0 million in SDC qualified capital improvements—a 260% increase.
- In 2006 the WWMP had a design capacity of 2.58 million gallons per day (mgd) while the 2012 WWMP has a design capacity of 3.18 mgd—a 23% increase.

Parameter	Current	Proposed	% Change
	2006 SDC	2014 SDC	
Net Asset Value (millions)	\$9.70	\$8.90	-8%
Capital improvements qualified for SDC (millions)	\$2.50	\$9.00	260%
Design Capacity (million gallons per day)^	2.58	3.18	23%

^Average Daily Dry Weather flow. The 2006 SDC projected 2.58 mgd by 2023; however, the 2012 WWMP shows the current flows exceed this flow at 2.85 mgd.

Mike noted the waste water capital improvements are regulatory driven. Carlos asked about the exclusion of the food and beverage tax against the \$9,017,350 growth apportionment. Ray stated that it excludes all of the capital that is being paid for by the food and beverage tax. None of the capital that is being proposed in the improvement fee is expected to be paid for by the food and beverage tax. At this point the food and beverage tax is paying for capital that has already been constructed so it is kept out of the reimbursement fee. Mike pointed out it could be used for other projects after the debt is paid off in 2022. Mike asked Ray if that was calculated towards future wastewater capital improvements. Russ pointed out there is a nice separation from priority 1 and 2 projects which is pretty close to when the majority of the debt is paid off so the food and beverage tax could be allocated to priority 2 projects at that time. Mike noted the projects have a completion timeline and we need to start collecting the SDC's now otherwise development isn't paying their fair share.

Russ read the ballot measure "Funds generated after 2022 not designated for parks will be used for wastewater treatment capital improvement projects." Allen asked what percentage of the capital sewer costs are because we have to mitigate the problem we have even if there is no growth. Mike stated that some of the projects are directly related to growth and those would be delayed if there was no growth (such as the oxidation ditch listed in priority 2). Jac asked if there is no development but they still want to do these projects would rates be increased. Mike answered that it would be exactly what you do but that would be a tough conversation to have with Council if the project is 100% paid out of SDC's because it is related to growth. Growth related projects really should be paid for with SDC's. Mike pointed out the water master plan is pretty spot on for the growth projections. He feels very comfortable with the schedules based on those growth projections. Ray stated 14.4 million is allocated to rate payers which the master plan calls for significant rate increases over the next 5 years to produce the revenue to pay for that. It is also coupled with 4 additional debts that the City plans to take out to pay for the improvements. The total debt service that as forecast is greater than the food and beverage tax is likely to produce. The food and beverage tax is only paying for the capital that was purchased in 2010 and the small amount of the future debt service which doesn't leave a lot of room to allocate money to reduce the proposed SDC. However, Mike and Ray will take a look at the impact of the food and beverage tax and get the information back to the committee.

APPROVAL OF WATER SDC

Russ/Dan m/s to recommend Council adopt the proposed water SDC increase.

All ayes. Motion passes.

Next meeting scheduled for August 5, 2014 to finish up Sewer.

ADJOURNMENT

Meeting adjourned at 2:00 pm

Respectfully submitted,

Tami De Mille-Campos, Administrative Assistant

Following is a comparison of the current and proposed sewer, water, and transportation SDCs relative to all other development fees for the Meier and McAndrew properties. Assuming all other fees remain constant, the proposed changes will increase the sum of all fees between 13.79% (Meier property) and \$14.75% (McAndrew property). The single largest increase among the 3 is sewer that increases 151%.

Name	Claus Meier				John/Vallery Germaine McAndrew			
	Sq. Ft. House	2,461			3,798			
			Change				Change	
	Current	Proposed	\$	%	Current	Proposed	\$	%
Sewer								
Rate, \$/Sq Ft	\$0.81	\$2.03	\$1.22	151%	\$0.81	\$2.03	\$1.22	151%
Fee	\$1,993.41	\$4,995.83	\$3,002.42	151%	\$3,076.38	\$7,709.94	\$4,633.56	151%
Water								
Rate, \$/Sq Ft	\$2.60	\$2.61	\$0.01	0.38%	\$2.60	\$2.61	\$0.01	0.38%
Fee	\$6,398.60	\$6,423.21	\$24.61	0.38%	\$9,874.80	\$9,912.78	\$37.98	0.38%
Transportation*								
Rate, \$/Sq Ft	\$2,043.00	\$2,196.00	\$153.00	7.49%	\$2,043.00	\$2,196.00	\$153.00	7.49%
Fee	\$2,043.00	\$2,196.00	\$153.00	7.49%	\$2,043.00	\$2,196.00	\$153.00	7.49%
Total 3 SDCs	\$10,435.01	\$13,615.04	\$3,180.03	30.47%	\$14,994.18	\$19,818.72	\$4,824.54	32.18%
Other Fees	\$12,631.69	\$12,631.69	\$0.00	0.00%	\$17,714.94	\$17,714.94	\$0.00	0.00%
Grand Total	\$23,066.70	\$26,246.73	\$3,180.03	13.79%	\$32,709.12	\$37,533.66	\$4,824.54	14.75%
* Without Main Street: \$2,454 with Main Street.								

**ASHLAND SYSTEM DEVELOPMENT CHARGE (SDC) REVIEW COMMITTEE
MINUTES
August 5, 2014**

CALL TO ORDER: Carlos Reichenshammer called the meeting to order at 1:07 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Russ Silbiger, Carlos Reichenshammer, Allen Douma, and Troy Brown Jr.

Committee Members Absent: Dan Jovick, and Jac Nickels

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present via phone: Ray Bartlett (Financial Analyst)

Council Liaison Present: Rich Rosenthal

Faught pointed out to Bartlett that on the water SDC he has it listed at \$700,000 but at Douma's request during the last meeting they looked it up and it is only showing \$300,000 for the Water Master Plan updates (project D2). Bartlett is going to check into that and see why there is a difference.

SEWER SDC

Bartlett explained that the cost basis for the Sewer SDC is primarily the improvement fee portion—\$1.833/sq. ft. The reimbursement fee portion is relatively small at \$0.195/sq. ft.

The improvement fee is based on the Sewer Master Plan that has 3 sets of priority projects:

Priority	Time Line	2012 \$'s	SDC qualified	%	Included in Update	Rate Payers Other	
1	2012 – 2020	\$10,791,000	\$3,263,430	30%	Yes	\$3,263,430	\$7,527,570
2	2020 – 2030	\$16,713,000	\$5,753,920	34%	Yes	\$5,753,920	\$10,959,080
3	Beyond 2030	\$5,799,000	\$5,153,000	89%	No		\$5,799,000
Totals		\$33,303,000	\$14,170,350	43%		\$9,017,350	\$24,285,650
%		100%	43%			27%	73%

Of the \$33.3 million of planned improvements about \$14.2 million (43%) is attributable to expanding capacity to accommodate growth. Because of the uncertainty of growth and the associated Priority 3 capital improvements, these improvements were excluded from the proposed update of the SDC. This reduced the cost basis for the improvement fee from \$14.2 million to \$9.0 million. The remaining \$24.3 million will have to be paid by rate payers and from the Food & Beverage Tax.

In Table 14.1 the annual debt service exceeds the expected amount of revenue from the Food & Beverage Tax in each year of the forecast except the first year, leaving nothing to off-set the amount of the proposed SDC. The current debt of approximately \$11 million will be fully repaid in FY 2023. However, over the next five years, the City plans to issue an additional \$8 million for Priority 1 capital improvements. That leaves approximately \$19.5 million of Priority 1 and 2 projects that will be paid from additional borrowing, or from the accumulation of sewer rates, SDC, and Food & Beverage Tax revenues. Table 14.1 ends in FY 2020 but capital improvements are schedules out beyond 2020. These projects will require more revenue than the Food & Beverage Tax alone will produce.

Faught added if we think the SDC's are too high the only way to adjust that is to have the rate payer pay more. What we have now is the master plan which lines out what should be allocated to growth versus what should go to the rate payer which is how they got to that distribution.

Douma said the allocation percentage is determined by a group of Engineers and he wonders what additional information can they use to analyze whether they were right or wrong. Faught answered; really the only way to do

that would be to hire new Engineers to challenge the premise and that isn't a general rule. The Engineers basically model the system to determine the proper allocations. Douma questions what influence they have on any of this. Faught mentioned he had told everyone to read through the master plans to see if there were any flaws but the big question is whether we need the projects or not and these projects were vetted long before they came before this committee. He thinks it really comes down to what are the strategies for increasing the SDC's to meet the growth side of it.

Faught stated he thinks Sewer is the easiest to figure out because it is primarily regulatory driven. As we grow we are going to have to build the facilities and the proportional share for the developer is outlined in the master plan.

Silbiger/Reichenshammer m/s to recommend Council adopt the proposed sewer SDC increase.

All ayes. Motion passes.

ADJOURNMENT

Meeting adjourned at 2:18 pm

Respectfully submitted,

Tami De Mille-Campos, Administrative Assistant

ASHLAND SYSTEM DEVELOPMENT CHARGE (SDC) REVIEW COMMITTEE
MINUTES
October 7, 2014

CALL TO ORDER: Carlos Reichenshammer called the meeting to order at 1:29 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Russ Silbiger, Carlos Reichenshammer, Allen Douma, Dan Jovick, Jac Nickels (non participating due to having a project on the SDC list)

Committee Members Absent: Troy Brown Jr.

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present via phone: Ray Bartlett (Financial Analyst)

Council Liaison Present: Rich Rosenthal

TRANSPORTATION SDC

Douma asked about the memo dated 10/6/14. He thinks there may be a mistake in the calculations shown. The cost basis on both of the lines is almost equal to each other but the calculated SDC is quite a bit different between the two. It is also missing the current cost basis. Bartlett stated he will go through the calculations and make sure everything is calculating correctly. There were several projects listed at 100% when calculating the \$2,455 SDC. The last time we looked at this list the SDC was actually \$2,196 which is almost the same as the SDC being proposed. He stated he will go back through and verify these numbers.

Faught pointed out that since the committee last visited the SDC list in March he went through the list of projects and asked himself if each of them could arguably be completed within the next 20 years. He proposed eliminating some of the projects and then that list was taken to the Transportation Commission for their approval. The Transportation Commission approved the list at the September meeting. The projects are still active projects in the Transportation System Plan (TSP); they have just been eliminated from the SDC list. Also, project R17 has been updated to reflect the accurate estimated project cost. He then went down the list of excluded projects.

Douma asked what the role of the SDC committee is. Faught stated he is looking for Douma and Silbiger to be representative of those that have to pay the SDC fees and then Reichenshammer and Jovick represent the opposite side. As a developer they get to collect the listed SDC as a reimbursement. The SDC's haven't been adjusted since 2006. Given that, he asked the committee to consider if a 7.2% increase is justifiable. Faught stated you generally update your master plan first and then you update the SDC. Silbiger added staff is to present a set of projects that they think will have a reasonable chance of being built and then their job is to determine if the set of projects and associated percentage allocated to growth is reasonable. Douma said it kind of feels like the numbers are etched in stone before it even comes to the SDC committee. Silbiger answered that isn't really the case because when they first met the numbers were much higher and changes have been made, so the committee effected the change.

Molnar stated the committee could also look at the percentage allocated to growth & recommend changes. He feels there are a few projects that are more developer driven. He is concerned with the projects listed at 100% SDC eligible. The committee went down the list of the 100% projects and Faught/Molnar agreed to meet up after the meeting to further discuss them and recommend any further changes to the SDC list. Ray noted if they make changes, it will lower the total proposed SDC.

Douma asked if they have the total current cost basis available for comparison. It is not immediately available but staff will try to locate the information.

Next meeting date will be determined and emailed to the committee.

ADJOURNMENT

Meeting adjourned at 2:14 pm

Respectfully submitted, Tami De Mille-Campos, Administrative Assistant

ASHLAND SYSTEM DEVELOPMENT CHARGE (SDC) REVIEW COMMITTEE

MINUTES

February 17, 2015

These minutes are pending approval by the Committee.

CALL TO ORDER: Carlos Reichenshammer called the meeting to order at 1:35 p.m. in the Siskiyou Room, 51 Winburn Way.

Committee Members Present: Carlos Reichenshammer, Troy Brown Jr., Allen Douma, Dan Jovick, Joe Graf (non voting member)

Committee Members Absent: Russ Silbiger, and Jac Nickels (non participating due to having a project on the SDC list)

Staff Present: Bill Molnar, Mike Faught, and Tami De Mille-Campos

Consultant Present via phone: Ray Bartlett (Financial Analyst)

TRANSPORTATION SDC

Bill handed out a revised memo to the committee (see attached).

R41/R44 – Bill pointed out he feels projects R41 & R44 are essentially one project. Currently R44 involves realigning Tolman Creek as it comes into Mistletoe. Bill was suggesting reducing that from 100% to 50% because there is some developer benefit & R41 be increased to at least 50%. Each project could be constructed individually but for funding and growth allocation purposes they should be looked at together.

Ray to make the change to 50% on projects R41 & R44.

X2 – Bill said originally he was speaking only to the railroad crossing in which it is listed as 18.4%. He said the only reason he thought it was put into the plan by Council was that it showed a benefit to that are in terms of trying to get some south to north connections. It wasn't so much development driven as it was to make those connections. Mike pointed out that right now it was shown at 18.4% and asked Bill if he was recommending an increase? Bill stated he feels it should be more than 18.4%. Mike added that he though he and Bill had previously discussed making all of the railroads crossings 50% and Bill agreed.

R45 – Bill said this project goes with X2 and is part of the block pattern that is largely development driven. He thinks that could be reduced to 25%.

Troy thought the railroad crossings should be less attributed to development because if the development doesn't happen the City still benefits from the crossings.

The committee agrees all railroads should be at 100%. The current need of the railroad projects is to move the traffic around, not necessarily for development purposes.

Mike reminded the committee that they could wrap this up with a motion or come back for one more meeting to see the final proposal and then vote on it.

Mike informed the committee he would still like to send them a final summary before he presents it to Council. Ray will put that together and get that sent out to the committee electronically.

Troy/Dan m/s to approve the proposed Transportation SDC with recommended changes (see attached) for a total SDC of \$2,112.00. Voice vote. All AYES. Motion passes.

Carlos asked for a reminder of the final Water and Sewer SDC. Ray said he would like to take the time to review everything and put together a final SDC list which can then be distributed to the committee electronically along with the minutes from this meeting.

Mike added that the storm water SDC will be brought back to this committee when that is ready, probably a year or so from now. The committee members stated they were willing to remain on the committee. He also pointed out that he may come back to this committee when the Downtown parking and multi-modal committee is finishes up.

Alan/Troy m/s to approve all previous meeting minutes. Which include: 3/4/14, 3/18/14, 4/15/14, 6/10/14, 7/8/14, 8/5/14 and 10/7/14. Voice Vote. All AYES. Motion passes.

Carlos asked when these SDC's would go into effect. Mike said he probably wouldn't be able to get in front of the Council until mid March or early April and he would like Carlos to attend with him as Chair. Mike said he would need to talk with the Legal department regarding the implementation timeline but he is thinking it would be July 1 so that it would give people advance notice.

ADJOURNMENT

Meeting adjourned at 2:03 pm

Respectfully submitted, Tami De Mille-Campos, Administrative Assistant