ENGINEERING REPORT

City of Molalla

SYSTEM DEVELOPMENT CHARGE (SDC) METHODOLOGY & CAPITAL IMPROVEMENT PLAN UPDATES

Water System, Sanitary Sewer, Stormwater, Transportation & Parks/Recreation SDCs

Clackamas County, Oregon

1. This Report Contains only the current Methodology for Parks SDC's
2. For Transportation and Wastewater Methodology See 2019 Methodology Update
3. For Water and Sewer Methodology See 2016 Methodology Update

January, 2014

CURRAN-McLEOD, INC., CONSULTING ENGINEERS
6655 SW Hampton Street, Suite 210
Portland, Oregon 97223

FEBRUARY 2014 DRAFT

City of Molalla

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Transportation & Parks/Recreation

January, 2014

TABLE OF CONTENTS

SANITARY SEWER SYSTEM SDC UPDATE (continued)

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INTRODUCTION & BACKGROUND

In November, 2013, the CITY OF MOLALLA contracted with CURRAN-McLEOD, INC. to assist in documenting the City's five public utility Capital Improvement Plans (CIP) and to update the System Development Charge (SDC) methodologies to maintain compliance with state statutes. This effort was completed with assistance from the City Manager, Mr. Dan Huff, the City's Finance Director, Ms. Heather Penni, the Public Works Director, Mr. Marc Howatt and the superintendents of the Water and Wastewater Treatment facilities, Mr. Keith Stiglbauer and Mr. Jon Patrick.

This text is intended to be a single point source document that summarizes all eligible capital improvement projects for each of the five public infrastructure components and the methodologies adopted to equitably allocate the cost to benefitted users. These Capital Improvement Plans are based on the Master Plans for each area of the municipal infrastructure as supplemented by an inventory of projects identified by City staff subsequent to adopting the plans. Although all projects are contained in this SDC document, additional detail on each of the listed projects can be found in the respective planning documents.

The City of Molalla's System Development Charges are divided into five areas of infrastructure in compliance with the requirements of the Oregon Revised Statutes, to include:

1. Water Supply, Treatment, Distribution and Storage system;
2. Wastewater Collection, Treatment and Disposal;
3. Stormwater and Flood Control systems;
4. Transportation Systems; and,
5. Parks & Recreation facilities.

This text identifies the detail of each of the five infrastructure systems, including specific summaries of the value and capacity of existing facilities, an estimate of costs of needed capital improvement for future growth, and an allocation of costs to benefitted users. The goal of this effort is to provide an understandable, equitable and defensible framework of charges that represent the proportionate cost of providing service for each benefitted user.

The SDC fees are intended to include only that portion of the connection charge that is greater than the amount necessary to reimburse the agency for the actual cost of inspecting and/or connecting to each system.

SDC METHODOLOGY OVERVIEW

Oregon Revised Statute 223.297 through 223.314 provides the statutory basis for application of System Development Charges. This statute is intended to provide a uniform framework for development of equitable funding to support orderly growth.

According to the statute, SDCs are composed of:

- Reimbursement Fees to address the value of existing improvements,
- Improvement Fees to address the cost of needed future improvements, or
- Combination of both Reimbursement and Improvement Fees.

The City's updated methodologies will identify current "replacement value" for all existing improvements to establish the basis of the Reimbursement Fee. The basis for the Improvement Fee is the "estimated cost" of improvements not yet constructed but needed to serve future populations.

Existing improvements typically have surplus capacity for future users as well as deficiencies in serving the existing users. Similarly, projects on the Capital Improvement Plan listing are required to provide capacity for future users but also frequently resolve deficiencies in service to the existing users. To account for the available capacity in the City's infrastructure and the concurrent need to undertake capital improvements to resolve deficiencies, the Molalla SDC Methodologies include a combination of both Reimbursement Fees and Improvement Fees.

To assure an equitable allocation of costs between existing and future users, the value of all existing facilities and the estimated cost of all future improvements are allocated to all users, current and future equally, based on their proportionate use of the available capacity. This method of allocating costs to all users assures that the charge to future connections is equitable and that it is no more than the proportionate cost allocated to each existing user. This methodology avoids double charging for capacity and is also independent of current population. With this approach there is no need to identify percentage of remaining capacity to serve future users, nor to estimate future population growth. This allocation is dependent only upon the ultimate capacity of the facility and the value or cost of the facility.

Although all SDCs are primarily related to population, the rate of population growth has no impact on calculation of the fee. The fee is based on funding needed improvements to support growth, independent of when that population growth is realized. In periods of high growth, SDC revenues will accrue more quickly to allow undertaking needed improvements earlier to support the accelerated growth. In periods of low growth, revenues will accrue more slowly, but the need for infrastructure improvements to support this growth is also protracted.

SDCs are typically collected with building permits which are not based on population. As a result, the unit of measure for allocating SDC costs is defined in various unique forms for each utility, but is generally based on the impact of one single family residential unit which is adopted to be one Equivalent Dwelling Unit (EDU).

EQUIVALENT DWELLING UNIT (EDU) DEFINITIONS

A water system EDU is based on the Maximum Daily Demand (MDD); that being the amount of water used during a peak day event by a single family residential unit. A wastewater EDU is based on the Maximum Monthly Dry Weather Flow (MMDWF) measured at the treatment facility per single family residential unit. A single stormwater EDU is based on the estimate of impervious area of a typical single family residential unit. Transportation EDUs are based on the average number of weekday Equivalent Length New Daily Trips (ELNDT) identified for a single family residential unit. Costs for Parks and Recreation improvements are based entirely on per capita needs, and therefore an EDU is allocated simply on the average population of a single family residential unit.

In each update below, the cost per basic unit is calculated and then multiplied by the number of basic units that define the typical use for a single family residential housing unit, which then defines one EDU.

Water and wastewater basic units are gallons for the City of Molalla. A water system EDU is 260 gallons per capita per day, times the average of 2.67 people per household, as defined in the 2010 census for the City of Molalla, for a total of 700 gallons per EDU at MDD. A wastewater EDU is 300 gallons per capita times 2.67 people per household for a total of 800 gallons per EDU at MMDWF.

Stormwater basic units are square feet of impervious area, with a typical single family residential unit, or one EDU, estimated as having 2,640 square feet of impervious area, as was defined in the existing SDC methodology.

The basic unit for the transportation system is an Equivalent Length New Daily Trip (ELNDT) with 9.52 ELNDT estimated for a single family residential dwelling unit as defined in the ITE Trip Generation Manual, 9th Edition, which then defines one EDU.

Parks and Recreation EDUs are based on the cost of providing a required Level of Service (LOS), which has been adopted previously to be 12.5 acres of parklands per 1,000 population. The per capita cost to fund this defined LOS times the average of 2.67 people per household establishes the cost of an EDU. Parks and Recreation fees are unique in that they are based the cost of providing a per capita Level of Service (LOS) as opposed to completion of a Capital Improvement plan or reimbursement for existing improvements.

ANNUAL ADJUSTMENTS

As permitted by the state statutes, the SDC should be reviewed annually and the cost of maintaining the SDC program recovered from the SDC improvement fees as part of the Planning line item in each CIP. Annual adjustments should include updating the Improvement Fee CIP cost estimates, the value of existing facilities listed in the Reimbursement Fee schedules, the values of credits for eligible public works projects, and the resulting Reimbursement and Improvement Fees, all in accordance with an adopted cost index.

The statutes require an adopted cost index to be:

(A) A relevant measurement of the average change in prices or costs over an identified time period for materials, labor, real property, or a combination of the three;

(B) Published by a recognized organization or agency that produces the index or date source for reasons that are independent of the system development charge methodology; and

(C) Incorporated as part of the established methodology or identified and adopted in a separate ordinance, resolution or order.

The Engineering News Record (ENR) publishes a nationwide 20-city average cost escalation factor called the Construction Cost Index (CCI) that satisfies the criteria in this statute. The use of this 20-city average provides a well established and well known industry standard for the average change in construction costs. For reference, this current SDC update is based on an ENR CCI for December 2013 of 9,668.

In accordance with ORS 223.309(2), the City may adjust any of the capital improvement plans, project cost estimates, or values of existing improvements, by resolution or ordinance at anytime. However, if the SDC is increased as a result of the addition of a new "capacity increasing capital improvement" project, the City must provide a written notice a minimum of 30 days prior to adoption of the modifications to persons who have requested notice under ORS 223.304(6). Subsequently, the City must hold a public hearing for adoption only if within seven days of the proposed adoption the City receives a written request for a hearing.

If the City elects to modify the cost allocation methodology as opposed to only adjusting the project values or CIP inventories, written notice is required to be mailed 90 days prior to any adoption hearings to all persons who have requested notification. Additionally, the revised methodology must subsequently be made available for public review a minimum of 60 days prior to the hearing for adoption.

If no one has requested to be on the list of interested persons, then no special notification is required for any adjustments.

CREDITS FOR ELIGIBLE CONSTRUCTION

ORS 223.304(4) requires that a method of credits be available for the construction of qualified public improvements. The statute further defines qualified public improvements as those required as a condition of development approval, identified in the plan and list adopted pursuant to ORS 223.309 and either:

(a) Not located on or contiguous to property that is the subject of development approval; or

(b) Located in whole or in part on or contiguous to property that is the subject of development approval and required to be built larger or with greater capacity than is necessary for the particular development project to which the improvement fee is related.

As a result of ORS 223.304(4)(a), credits must be provided for 100% of the cost of eligible off-site public improvements; and in accordance with ORS 223.2304(4)(b), a credit must be provided for on-site development only for the component of an eligible improvement which has capacity greater than the local government's minimum standard facility size or capacity. Under each infrastructure section below, minimum standard facility size and values for credits are summarized.

The value of the credits granted in accordance with ORS 223.304(4)(a) are ultimately collected from the adjacent benefited property owners as an SDC Overlay for the minimum standard facility size as each intervening benefited property develops. All credits granted as a result of ORS 223.304(4)(b) for on-site over-sizing are ultimately supported by the regional SDC revenues.

SITE SPECIFIC SDC OVERLAY

If a credit is provided under ORS 223.304(4)(a) for the entire cost of an off-site public improvement, a site-specific SDC Overlay allocation (as opposed to regional) should also be adopted by resolution specific to the improvement project. A site specific SDC Overlay is intended to collect the value of the 'minimum standard facility size' that will exclusively serve any undeveloped, off-site benefitting properties, such as the 8" waterline component, the 8" sanitary sewer component or a 36 foot street improvement.

A resolution defining a site specific SDC Overlay should be adopted at the time any off-site credits are provided to a developer. The resolution must contain a description of the benefitted properties and the allocation of cost based on the benefitted area. SDC Overlay fees are due and payable concurrently with the regional SDC, at the time of issuing of a building permit or change in use of the benefitted property.

The methodology of adopting an SDC Overlay is defined within this SDC document, so the process of the Overlay adoption is simplified. Technically no special notice is required as long as the project was on the CIP list, however, to be conservative a 30 day notice should be provided to impacted parties prior to adoption of the Overlay allocation.

Where there is no potential for additional development of off-site properties abutting a development, the credit can be issued for the entire cost of the off-site improvements without establishing a site specific SDC Overlay.

Additionally, when growth pressures mandate the improvement of infrastructure within fully developed areas or unrelated to any specific development, the entire cost of the improvement may be funded with SDC revenues. Improvement Fee revenues may be used if the project is listed in the CIP and Reimbursement Fee revenues may always be used for any capital improvement for the utility for which the fee was collected.

SDC CREDIT PAYMENTS

Credits are typically used to offset the SDC fees due from the developing property. In the event the credit exceeds the fees due from the development, the City has the option of reimbursing the developer with cash from current SDC reserves, cash receipts from future SDC revenues, and/or providing a credit against future development. Technically, the statutes limit the application of a credit for future development to a maximum of 10 years, but do not prevent the City from adopting any method of credits that are greater than the minimum stated.

In the interests of equity, cash payments should be made to the developer for any excess credit value if financially feasible for the SDC accounts. This eliminates the need to account for long term repayment agreements. Additionally, if a project from the CIP is undertaken by a developer, a credit should be made available for the entire cost incurred, which may exceed the Improvement Fee component of the SDC fees due from a specific development.

It is significant to note that reimbursements to private developers from SDC funds are not required to comply with prevailing wage or public bid laws if the City is not a party to the actual construction contract. This provides an opportunity to have needed capital improvements constructed at lower costs as a component of development by private developers.

CREDIT FOR PRE-EXISTING USE

A system development charge is imposed on all new construction or when a change of use on a parcel increases the demand on the utility. In the event of a change of use, the system development charge for the new use shall be offset by a credit in the amount of the calculated system development charge for the pre-existing use.

Infrastructure services must be in-service to receive a credit against a changed use. Service discontinued for more than 24 months will be considered abandoned and no offsetting credits shall be provided against any SDC fees due for development.

SDC ADMINISTRATION REQUIREMENTS

Per ORS 223.311, System Development Charge revenues must be deposited in dedicated accounts for each utility and an annual accounting prepared identifying amounts collected for each utility, amounts spent on each qualified project, and the annual cost of complying with these requirements.

The statute mandates that Reimbursement fees may be expended on any capital improvements or associated debt service within the subject infrastructure. Improvement Fees may only be spent on projects that are included in the Capital Improvement Plan for each infrastructure, including associated debt service. Accordingly it is important to account for reimbursement and improvement fees separately.

The City needs to establish administrative procedures to contest the methodology or calculations of the SDC fees. The SDC Methodology may only be contested within 60 days of adoption. Expenditures may only be contested within two years of the date of expenditure. The City must also advise a person making any written objection to the calculation of SDC fees of their right to petition for review pursuant to ORS 34.010 to 34.100.

Oregon Revised Statutes 223.307(5) allows SDC revenues to be expended for costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of administration and providing annual accounting of development charge expenditures. Accordingly, annual costs are estimated to be 2% of the annual revenues derived from SDCs. A 2% surcharge is added to each identified fee.

Annually, a transfer from each SDC fund in the amount of 2% of the annual collections should be made to the City's general fund to cover the costs of administration for calculations, collections, accounting and annual fee adjustments. This expenditure should be identified in each annual summary.

PUBLIC INFRASTRUCTURE SDC UPDATES

The following sections each contain a summary for each of the five public infrastructure systems of existing improvements with associated replacement value and capacity, a summary of the Capital Improvement Plans with estimate of project costs, capacity, timing and percentage of eligible costs, and last, allocation calculations to determine the updated System Development Charges.

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City of Molalla
WATER SYSTEM SDC UPDATE
January 2014

W-I. OVERVIEW

The City of Molalla Water System Master Plan was a joint effort completed in March of 1996. That document provided an evaluation of the existing water system, calculated the system demands and projected future demand and a listing of the Capital Improvement Plan (CIP). In 1997, the City prepared the System Development Charge (SDC) methodology and cost allocations based on the earlier Master Plan, which was then adopted in Resolution 1997-14 and currently remains in-force.

To be conservative, the capacity of all water system components, excepting distribution, is based on the ability to meet the Maximum Daily Demand (MDD). This assures that adequate resources are available at all times to serve the demand and replenish supplies within 24 hours. As the observed MDD approaches the system capacity, capital improvements should be undertaken to expand the system.

The MDD was derived in the 1996 Water System Master Plan to be 345 gallons per capita per day (gpcd). In 1996 demand records also indicated system losses that exceeded 30%. Subsequent distribution system repairs have resulted in a reduced per capita demand. The Maximum Day Demand recorded from 2010 through 2013 averaged 260 gallons per capita per day (gpcd). Average Day Demands over the same period were 125 gpcd.

Based on the 2010 US Census, the average household size for Molalla was 2.67 people per residence which defines the population of an Equivalent Dwelling Unit (EDU). This average is a substantial reduction from the 1990 census figure of 2.87 persons per household that was used in the previous SDC calculations. This reduction will allow for a greater number of EDUs to be served by the existing facilities and the projected capital improvements listed in the 1996 Master Plan. Accordingly, the current Maximum Day Demand per EDU is 2.67 people multiplied by 260 gpcd for a total of 700 gallons per day per EDU (gpd/EDU). Note these average values also include the demands for commercial/industrial improvements.

Using this per EDU MDD figure, it is easy to identify the existing EDU capacity of source, treatment and storage components and to identify the improvements required to serve future population growth. The 1996 Master Plan improvements were predicated on providing 4.0 Million Gallons per Day (MGD) capacity to meet maximum day demands, equivalent to the peak day demands of 5,710 EDU.

Distribution system capacities are defined not only by their ability to deliver the MDD plus fire flows, but also by a geographical service area. The distribution system provides the backbone for expanding the system throughout the service area or Urban Growth Boundary. As a result, cost allocations for distribution system improvements are based on the resulting MDD for the number of EDUs calculated at build-out of the UGB area.

There are multiple methods of calculating the build-out population of the UGB, and there are several varying estimates and growth rates contained in the City's various master plans. The most definitive document on the current growth projections is the Residential Land Needs Report completed for the City of Molalla in July of 2008. In that document, the City has projected an overall residential density of 7 housing units per net acre over all residential zoned properties. Gross acreage is estimated to be reduced by 20% to derive Net Acres, to account for right-of-way and public needs.

Each of the Master Plans was prepared based on the UGB adopted by the original 2000 Comprehensive Plan for the City of Molalla. The areas designated for all residential development total 721.8 gross acres. Committing 20% for right-of-way and public use and applying 7 housing units per net acre results in a build out population of 10,800 people and 4,040 EDU within the UGB.

Distribution system capital improvements serve the geographical service area defined by the UGB. The total number of EDU benefitting from the distribution system improvements are then limited to 4,040 barring future revision of the UGB or development densities.

W-II. CREDITS FOR ELIGIBLE CONSTRUCTION

As discussed previously, credits must be available for eligible public works construction that met the requirements of the statute. Credits should be issued for 100% of eligible off-site improvements, identified herein as an Offsite Credit, or for the oversize component only of eligible on-site improvements, identified herein as an Oversize Credit. The oversize component would be any improvements that exceed the local government's minimum standard facility size, which for a water line is 8" diameter. Thus in this SDC update, oversize credits will apply only to lines sized above the minimum 8" diameter.

The following table summarizes estimated construction costs, including 20% engineering and administration, which is recommended to be used as the basis for any SDC credits given for eligible distribution system improvements:

CITY OF MOLALLA
WATERLINE CONSTRUCTION CREDITS
January 2014

LINE SIZE	6"	8"	10"	12"	14"	18"
CONSTRUCTION COST	$48/LF	$54/lf	$66/lf	$78/lf	$92/lf	$108/lf
OFFSITE CREDIT	$48/lf	$54/lf	$66/lf	$78/lf	$92/lf	$108/lf
OVERSIZE CREDIT	$0	$0	$12/lf	$24/lf	$38/lf	$54/lf

W-III. WATER SYSTEM CAPITAL IMPROVEMENT PLAN

The most recent Capital Improvement Plan was prepared in the 1996 Water System Master Plan, and has minimal relevance today. The majority of all work identified in that document has been completed and is now contained in the Reimbursement schedules.

In an overview, source development is the most critically needed element of the CIP and should be undertaken within the next ten years. On the near term, demands can be accommodated with a transfer of water rights from Trout Creek. Due to the limited flows in Trout Creek, this CIP anticipates 3 cubic feet per second (2.0 MGD) will be the maximum amount available and anticipate the Oregon Water Resources Department will require installation of a stream gauging station to assure sufficient flow is available.

Due to a limited supply in the Molalla River and in Trout Creek, long term demands will mandate that additional source capacity be developed, such as a new well source located near the distribution system.

Treatment and transmission system improvements include several minor projects needed at the water treatment facility. Operationally, in order to meet more stringent regulatory treatment requirements, a filter to waste provision should be incorporated into the process piping of the old conventional ECI filters. Additionally, filter effluent pumps and piping should be upgraded at the same time to assure system wide reliability.

HVAC improvements are needed to condition the control room and lab facilities at the Treatment Plant. Access improvements to the plant will also be mandated in the future as the existing Logging Road surfacing fails.

Transmission piping leaving the plant is limited to one 20" pipe to Adams Cemetery Road. With all of the City's treatment and storage facilities located at the plant site, this creates a critical point of vulnerability. A redundant, parallel transmission line should be constructed along this initial reach to provide redundancy. From the intersection of the Molalla Forest Road and Adams Cemetery Road to the City limits, the existing transmission line consists of two lines in parallel, which provides the needed redundancy.

Reservoir storage volume is not adequate to serve the planning window defined in the 1996 Master Plan. An additional reservoir will be required to support Maximum Daily Demands in the 11 to 20 year time frame and should be separated from the existing storage. Additionally, minor improvements are required on the existing reservoirs to meet current regulations and design standards.

The following table lists capital improvements that have been identified by City Staff subsequent to publication of the 1996 Master Plan, as well as a description of the work scope. The cost estimates in the following table are based on an ENR CCI of 9,668 for December 2013. This table is published to document the list of needed capital improvements to serve growth, and to satisfy the requirements of ORS 223.309:

CITY OF MOLALLA
WATER SYSTEM CAPITAL IMPROVEMENT PLAN
BASED ON ENR CCI 9,668
January 2014

NO.	PROJECT DESCRIPTION	PROJECT PRIORITY	ELIGIBLE COST	EDU CAPACITY	SDC COST PER EDU
Source Development: Total Source Capacity 4.0 MGD (5,710 EDU)					
1.	Transfer Trout Creek Water Rights to the Molalla River, Install Trout Creek flow monitoring Station	1-5 yrs	$40,000	5,710	$7.00
2.	Alternative Well Source Development in NW quadrant	6-10 yrs	$300,000	5,710	52.53
3.	Molalla River Intake Capacity Expansion to 4.0 MGD	6-10 yrs	$150,000	5,710	26.27
Treatment Improvements: Total Ultimate Treatment Capacity 4.0 MGD (5,710 EDU)					
4.	ECI Treatment Unit Process Piping Modifications, filter to waste, pumping equipment	6-10 yrs	$60,000	5,710	1.51
5.	HVAC Improvements for power distribution room and office /lab facilities	6-10 yrs	$15,000	5,710	2.63
6.	Molalla Forest Road / WTP Access Road Improvements	6-10 yrs	$200,000	5,710	35.03
Distribution System Improvements: MDD of UGB Build-out is 2.83 MGD (4,040 EDU)					
7.	20" Parallel Transmission Piping, WTP to Adams Cemetery Road, est. 2,000 LF	1-5 yrs	$240,000	6,800*	35.29
8.	**1996 Master Plan CIP Distribution System upgrades to the EXISTING system:**				
8.A	Patrol Street - 700 lf of 6" from dead end to Hwy 211	1-20 yrs	33,600	4,040	8.32
8.B	Cole street - 750 lf of 6" from E. 4th to E. Main Street	1-20 yrs	36,000	4,040	8.91

8.C	Debra Street - 350 lf of 8" N from Frances to 14" main	1-20 yrs	18,900	4,040	4.68
8.D	Frances Christopher link - 200 lf of 6" Upgrade	1-20 yrs	9,600	4,040	2.38
8.E	Hood Street - 300 lf 6" South of 5th Street	1-20 yrs	14,400	4,040	3.56
8.F	Metzler Ave - 800 lf of 6" Section Street to 7th Street	1-20 yrs	38,400	4,040	9.51
8.G	7th Street - 700 lf of 8" from Hart Street to S Molalla Ave	1-20 yrs	37,800	4,040	9.36
8.H	Toliver Road - 1,850 lf of 12" from Del Mar to Molalla Ave	1-20 yrs	144,300	4,040	35.72
8.I	Main Street - 6,350 lf of 12" from Hwy 213 to Shaver St	1-20 yrs	495,300	4,040	122.60
9.	**1996 Master Plan CIP Distribution System upgrades to the FUTURE system:**				
9.A	EW Grid 1 - 5,200 lf of 14" N Molalla Ave to Highway 213	1-20 yrs	478,400	4,040	118.42
9.B	EW Grid 2 - 5,200 lf of 10" N Molalla Ave to Meadowlawn	1-20 yrs	343,200	4,040	84.95
9.C	EW Grid 3 - 6,060 lf 10" Section St to Highway 213	1-20 yrs	400,000	4,040	99.01
9.D	School NS Grid 2 - 4,400 lf 12" Main Street North	1-20 yrs	343,200	4,040	84.95
9.E	School NS Grid 2 - 900 lf 10" Main Street South	1-20 yrs	59,400	4,040	14.70
9.F	Western NS Grid 1 - 4,400 lf 12" Main Street North	1-20 yrs	343,200	4,040	84.95
9.G	Western NS Grid 1 - 950 lf 10" Main Street South	1-20 yrs	62,700	4,040	15.52
9.H	Del Mar Tie to N UGB - 2,450 lf 12" water main	1-20 yrs	191,100	4,040	47.30
9.I	Highway 213 - 2,000 lf 12" Main Street to Toliver Road	1-20 yrs	156,000	4,040	38.61
9.J	Highway 213 - 1,500 lf 10" Main Street to South UGB	1-20 yrs	99,000	4,040	24.51
9.K	Big Meadows Tie N - 1,650 lf 10" Meadows Dr to north grid	1-20 yrs	108,900	4,040	26.96

9.L	Molalla Avenue - 1,600 lf 14" Miller St to north grid	1-20 yrs	147,200	4,040	36.44
9.M	5th Street - 1,300 lf 14" Mathias Rd to Eckerd Ave	1-20 yrs	119,600	4,040	29.60
Storage Improvements: Total Capacity 5.2 MG (6,800 EDU plus 0.4 MG Fire Storage)					
10.	New 2.0 MG Reservoir & Jockey Pump Station per Master Plan (1996 ENR 5,620)	11- 20 yrs	1,740,000	6,800	25.59
11.	1.2 MG Reservoir Safety & Access Hatch Improvements, exterior ground-level painting	1-5 yrs	40,000	6,800	5.88
Planning & General Improvements - Benefit to the entire UGB (4,040 EDU)					
12.	Planning & SDC Updates	1-20 yrs	50,000	4,040	12.38
13.	Miscellaneous Pipeline Upsizing and Oversizing	1-20 yrs	150,000	4,040	37.13
		TOTAL	**$6,665,200**	**per EDU**	**$1,150**

*Transmission line capacity was equated to the capacity of the storage system.

W-IV. WATER SYSTEM SDC IMPROVEMENT FEE CALCULATION

The Improvement Fee is intended to quantify the cost of needed improvements to serve future users. The fee is based on the cost per EDU for each capital improvement listed in the above table. The Improvement Fee component of the SDC is thus:

SDC Improvement Fee = $1,150 per EDU

W-V. WATER SYSTEM SDC REIMBURSEMENT FEE ASSET SUMMARY

The Reimbursement Fee is intended to quantify the value of existing capacity available to serve future demands. The following table lists the current value of each capital improvement completed to-date, based on actual costs adjusted to the December 2013 ENR CCI of 9,668, or an estimated current value if actual costs are not available. The current value is then divided by the capacity in EDU of each existing facility to determine the cost per EDU.

Values for the majority of the existing system improvements were based on the acquisition costs provided in the 2013 Capital Asset Inventory prepared by the City of Molalla. The following table lists the replacement value of all existing source, treatment, storage and a summary of distribution oversizing for inclusion in the reimbursement fee calculation.

CITY OF MOLALLA
WATER SYSTEM REIMBURSEMENT FEE
EXISTING IMPROVEMENTS SUMMARY & CAPACITY
January 2014

NO.	PROJECT DESCRIPTION	2013 ASSET VALUE	CAPACITY IN EDU	SDC COST PER EDU
1.	Molalla River Intake, Building Structure, piping & Land	$1,139,100	5,710	$199
2.	Water Treatment Plant & Lands	$4,421,860	5,710	774
3.	Water Transmission Lines	$5,054,000	6,800*	743
.	2.0 MG Concrete Reservoir	$1,307,400	6,800	192
5.	1.2 MG Concrete Reservoir	$1,200,000	6,800	176
6.	System Oversizing 2,300 LF 10" @ $12/LF 50,750 LF 12" @ $24/LF	 $27,600 $1,218,000	 4,040 4,040	 7 302
7.	1996 Water System Master Plan	$30,000	4,040	7
8.	2013 SDC Update	$5,200	4,040	1
	TOTAL	**$14,403,160**	**Per EDU**	**$2,400**

*Transmission line capacity was equated to the capacity of the storage system.

W-VI. WATER SYSTEM SDC REIMBURSEMENT FEE CALCULATION

Similar to the Improvement Fee, the reimbursement component of the SDC is cost per EDU identified in the table above:

SDC Reimbursement Fee per EDU = $2,400

W-VII. WATER SYSTEM SDC FEE SUMMARY

All residential units are assigned one EDU per dwelling unit. Commercial and industrial developments are assessed proportionate SDC charges based on the capacity of water meter used to service the facility. All SDC costs also include a charge of 2% for staff administration.

SDC charges apply to all meters serving domestic demands. Meters installed for the sole purpose of fire protection, which are completely isolated from any demands other than fire protection, will not be assessed an SDC charge for connection to the system.

CITY OF MOLALLA
WATER SYSTEM SDC FEE SCHEDULE
January 2014

METER SIZE	EDU FACTOR	IMPROVEMENT FEE	REIMBURSEMENT FEE	ADMINISTRATION FEE (2%)	TOTAL SDC
3/4"*	1	$1,150	$2,400	70	**$3,620**
1"	1.66	$1,910	$4,000	$120	**$6,030**
1 ½"	3.33	$3,830	$8,000	$240	**$12,070**
2"	5.33	$6,130	$12,800	$380	**$19,310**
3"	11.67	$13,420	$28,000	$830	**$42,250**
4"	20	$23,000	$48,000	$1,400	**$72,400**

* Includes 5/8" x 3/4" and 3/4" x 3/4" meters

City of Molalla
SANITARY SEWER SYSTEM SDC UPDATE
January 2014

SS-I. OVERVIEW

The sanitary sewer system is well defined in the 2000 Wastewater Facility Plan and in preparation for construction, was again updated in a 2005 Wastewater Facility Plan. The current System Development Charge (SDC) methodology was adopted in Resolution 2006-07, and incorporated the CIP from the 2005 Facility Plan to support the SDC Improvement Fee. Resolution 2006-07 does not include a Reimbursement Fee for the wastewater system.

This current 2014 document is intended to update the 2006 SDC and is based on the CIP from the 2005 Facility Plan as well as additional improvements identified by City staff needed to support growth. This current document also establishes a basis for a Reimbursement Fee to account for the capacity of the existing collection, treatment and disposal systems.

The capacity of the wastewater collection, treatment and disposal system is defined as its ability to convey and treat the Maximum Monthly Dry Weather Flow (MMDWF). Based on the Facility Plan calculations, the MMDWF was calculated to be 300 gallons per capita per day (GPCD). The capacity of the current collection and treatment facilities is defined as 4.0 million gallons per day (MGD), and therefore has a capacity to serve the future population identified in the Facility Plans of 13,370, which includes growth beyond the current Urban Growth Boundary (UGB).

Based on the 2010 census average of 2.67 persons per household for the City of Molalla, the design loading per Equivalent Dwelling Unit (EDU) is 2.67 times 300 gpcd, for a total of 800 gallons per EDU per day. Based on the projected population of 13,370, the collection, treatment and disposal system has the capacity to serve a total of 5,008 EDUs.

The value of all current system improvements as well as the estimated cost of needed future improvements to serve a population of 13,370, or 5,008 EDUs, is defined in this current update to support the SDC Reimbursement and Improvement Fees.

SS-II. CREDITS FOR ELIGIBLE CONSTRUCTION

The minimum line size under DEQ standards for a public sewer is 8" diameter. Similar to the water and stormwater systems, SDC credits are required for the oversized component of any on-site improvements, and for 100% of off-site improvements. To receive a credit, the project must be a qualified public improvement contained in the Capital Improvement Plan.

The following table summarizes estimated construction costs for 2014, including engineering, which will be used as the basis for any SDC credits for eligible collection system improvements:

CITY OF MOLALLA
SANITARY SEWER COLLECTION SYSTEM
VALUE OF CONSTRUCTION CREDITS
January 2014

LINE SIZE	8"	10"	12"	16"	18"	24"
CONSTRUCTION COST	$64/lf	$74/lf	$84/lf	$94/lf	$102/lf	$122/lf
OFFSITE CREDIT	$64/lf	$74/lf	$84/lf	$94/lf	$102/lf	$122/lf
OVERSIZE CREDIT	$0	$10/lf	$20/lf	$30/lf	$40/lf	$60/lf

SS-III. SANITARY SEWER CAPITAL IMPROVEMENT PLAN

As a result of the methodology defined in this current update, 100% of the estimated costs of the CIP are allocated over the entire benefitted population, in contrast to the previous methodology that estimated a current population and only allocated that portion of each project to growth. The methodology used in this 2014 update equitably accounts for excess capacity as well as various system deficiencies, by allocating the value of existing improvements and the cost of all needed improvements over all users. The magnitude of the resulting fee is identical to that resulting from the previous methodology if an accurate estimate of existing capacity and future benefitting population is available.

Under the old methodology, inaccuracies are incorporated by making gross assumptions of percentage related to future growth of each individual improvement. Each system component will have varying capacities, and specific deficiencies that need resolution. Additionally, if a gross percentage is identified and allocated to future growth only, that percentage would change with each annual SDC update, creating a substantial task to complete for each update.

A more accurate and defensible method of accounting for the existing improvements and needed future improvements is to allocate the total value (as in the Reimbursement Fee) and estimated cost (in the Improvement Fee) over the entire benefitted population.

The following table identifies the capital improvements listed in the 2000 and 2005 Wastewater Facilities Plan as well as improvements required to support growth identified subsequent to the last Facility Plan update. All estimated costs have been adjusted from the 2006 average of 7,751 to the reference December 2013 ENR CCI of 9,668.

CITY OF MOLALLA
SANITARY SEWER CAPITAL IMPROVEMENT PLAN
January 2014

NO.	PROJECT DESCRIPTION	PROJECT PRIORITY	ELIGIBLE COST	CAPACITY EDU	SDC COST PER EDU
Collection System Improvements: Total Design Capacity 4.0 MGD, 5,008 EDU					
1	Collection System I/I Abatement & System Expansion (50% SDC eligible to increase capacity)	1-20 yrs	$310,000	5,008	$62
2	Treatment Plant Trunk Upgrade - new 30" trunk from confluence of Bear Cr and Toliver Rd trunk to the WWTP; new 24" from confluence to Toliver Rd and to Hwy 213 (Project C1)	1-5 yrs	$750,000	5,008	$150
3	Bear Creek Trunk Upgrade - New 21" trunk from Hwy 211 to Hwy 213 (Project C4)	6-10 yrs	$560,000	5,008	$112
Treatment System Improvements: Total Design Capacity 4.0 MGD MMDWF, 5,008 EDU					
4	Install 3 - 10 Hp Aspirating Aerators at west end of Lagoon 1 (Project T-6)	1-5 yrs	$62,000	5,008	$12
5	Ph. I Solids Management - partition Lagoon 1 for sludge cell, (Project T-14), install wet sludge loadout, loading dock	1-5 yrs	$600,000	5,008	$120
6	Ph. I Secondary Treatment Upgrades (Project T-13) create two aerated cells in Lagoon 1	6-10 yrs	$1,860,000	5,008	$371
7	Phase I Effluent Disinfection Upgrades (Project T-15) Install Dechlorination Facilities	6-10 yrs	$475,000	5,008	$95
8	Install Grit Removal Facilities	6-10 yrs	$400,000	5,008	$80
9	Staff Building, Locker/showers, Rest room, break/meeting room	6-10 yrs	$300,000	5,008	$60
Planning & General Improvements - Benefit to the entire UGB					
10	Misc Upsizing and Oversizing	1-20 yrs	$50,000	5,008	$10
11	Planning & SDC Update	1-20 yrs	$50,000	5,008	$10

TOTAL	**$5,417,000**	**TOTAL**	**$1,082**

SS-IV. SANITARY SEWER SDC IMPROVEMENT FEE CALCULATION

The Improvement Fee is the total of the per EDU cost of each CIP project listed above and is intended to quantify the cost of needed improvements to serve future users. The Improvement Fee component of the Wastewater SDC is thus:

SDC Improvement Fee = $1,082 per EDU

SS-V. SANITARY SEWER SDC REIMBURSEMENT FEE ASSET SUMMARY

The Reimbursement Fee is intended to quantify the value of all existing improvements available to serve future demands. The following table lists the current value of each capital improvement completed to-date, based on actual costs adjusted to the December 2013 ENR CCI of 9,668, or an estimated current value if actual costs are not available. The current value is then divided by the capacity in EDU of each existing facility to determine the cost per EDU.

Values for the existing system improvements are based on the acquisition costs listed in the 2013 Capital Asset Inventory prepared by the City of Molalla, adjusted by the ENR CCI and industry pricing. The following table lists the replacement value of all existing treatment and disposal improvements as well as a summary of oversizing in the collection system:

CITY OF MOLALLA
SANITARY SEWER REIMBURSEMENT FEE
EXISTING IMPROVEMENTS SUMMARY & CAPACITY
January 2014

NO.	PROJECT DESCRIPTION	2013 ASSET VALUE	CAPACITY IN EDU	SDC COST PER EDU
1	Wastewater Treatment Plant	$9,800,000	5,008	$1,956
2	Effluent Irrigation / Molalla River Effluent Force Main	$6,320,000	5,008	$1,262
3	Cascade Aeration Structure	$40,000	5,008	$8
4	Cole Street Lift Station	$150,000	5,008	$30
5	South Molalla Street Lift Station	$150,000	5,008	$30
6	Coho Street Lift Station	$180,000	5,008	$36
7	Taurus Street Lift Station	$150,000	5,008	$30
8	Stowers Lift Station	$180,000	5,008	$36

9	Collection System Oversizing 4,275 LF 10" @ $10/LF 5,200 LF 12" @ $20/LF	 $42,750 $104,000	 5,008 5,008	 $8 $20
10	Master Planning & SDC Update	$60,000	5,008	$12
	TOTAL	**$15,311,750**	**Per EDU**	**$3,428**

SS-VI. SANITARY SEWER SDC REIMBURSEMENT FEE CALCULATION

Similar to the Improvement Fee, the Reimbursement Fee is the total of the per EDU cost of each system improvement. The Reimbursement Fee component of the Sanitary Sewer SDC is thus:

SDC Reimbursement Fee = $3,426 per EDU

SS-VII. SANITARY SEWER SDC FEE SUMMARY

All residential units are assigned one EDU per dwelling unit which is based on 2.67 people per UDU and 800 gpd at MMDWF per EDU. All Commercial and industrial developments are assessed proportionate SDC charges based on the capacity of the water meter serving the property in relationship to a typical 3/4" meter serving a typical single family residence, in accordance with the following table. All SDC costs also include a charge of 2% for staff administration.

CITY OF MOLALLA
SANITARY SEWER SDC FEE SCHEDULE
January 2014

	EDU FACTOR	IMPROVEMENT FEE	REIMBURSEMENT FEE	ADMIN FEE (2%)	TOTAL SDC
Single Family and Multi Family Residential:					
	1	$1,082	$3,428	$90	**$4,600**
Commercial / Industrial Development:					
METER SIZE	**EDU FACTOR**	**IMPROVEMENT FEE**	**REIMBURSEMENT FEE**	**ADMIN FEE (2%)**	**TOTAL SDC**
3/4"	1	$1,082	$3,428	$90	**$4,600**
1"	1.66	$1,800	$5,710	$150	**$7,660**
1 ½"	3.33	$3,600	$11,420	$300	**$15,320**
2"	5.33	$5,770	$18,270	$480	**$24,520**
3"	11.67	$12,620	$40,000	$1,050	**$53,670**
4"	20	$21,640	$68,560	$1,800	**$92,000**

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City of Molalla
STORMWATER SDC UPDATE
January 2014

SD-I. OVERVIEW

The existing Storm Drainage System Development Charge (SDC) was adopted through Resolution 1999-13 and although very brief, does provide a methodology to allocate costs of needed improvements. The existing SDC methodology was prepared prior to any master planning, and was based on a Capital Improvement Plan (CIP) prepared by City staff and was allocated over a conservatively low arbitrary number of projected Equivalent Dwelling Units (EDU). The existing 1999 SDC is limited to an Improvement Fee only.

In 2003 the City of Molalla prepared a Stormwater Master Plan that included a new CIP to accommodate build-out of the Urban Growth Boundary (UGB). This current SDC Update incorporates the CIP from the 2003 Master Plan and allocates the costs to all benefitting properties. The 1999 text makes reference to an EDU being 2,640 square feet of impervious area, which will define an EDU and will be used as the basis to allocate costs to development in all land use designations.

This current SDC Update will incorporate the value of existing improvements as the foundation for a Reimbursement Fee, and will allocate the cost of needed improvements identified in the 2003 Master Plan CIP based on the projected area of impervious surface at build-out of the UGB.

SD-II. CREDITS FOR ELIGIBLE CONSTRUCTION

Common to all SDCs, credits must be available for eligible public works construction that met the requirements of the statute. When a project is listed in the Capital Improvement Plan, credits must be issued for 100% of off-site improvements, which are typically improvements made in existing developed areas that are needed to support growth in other areas, which are called Offsite Credits. Additionally, credits are mandated when the on-site utility improvements are required to be made larger than needed for the specific development, which are identified as Oversizing.

The minimum line size for storm drainage system piping improvement is defined to be 12” diameter. Thus, oversizing credits apply only to storm sewers sized above the minimum 12” diameter.

The following table summarizes construction costs, including engineering, as the basis for SDC credits for eligible storm drainage system improvements:

CITY OF MOLALLA
STORMWATER SYSTEM CONSTRUCTION CREDITS
January 2014

LINE SIZE	12"	15"	18"	21"	24"	27"	30"	36"
CONSTRUCTION COST	$38/lf	$44/lf	$50/lf	$56/lf	$64/lf	$72/lf	$82/lf	$94/lf
OFFSITE CREDIT	$38/lf	$44/lf	$50/lf	$56/lf	$64/lf	$72/lf	$82/lf	$94/lf
OVERSIZE CREDIT	$0	$6/lf	$12/lf	$18/lf	$26/lf	$34/lf	$44/lf	$56/lf

When offsite improvements are approved with credits, an SDC overlay should be adopted to allocate the cost to the base pipeline size, the cost of a 12" pipeline, over the frontage of the offsite undeveloped properties. At the time the future offsite development occurs, both the regional SDC and the SDC overlay should be collected from the developer.

If there are no undeveloped offsite properties, the cost of an offsite improvements required to support growth can be funded 100% from SDC revenues.

SD-III. STORMWATER SYSTEM CAPITAL IMPROVEMENT PLAN

The most recent stormwater planning effort was published as the 2003 Stormwater Master Plan. This document includes an analysis of system components and a listing of needed capital improvements. The improvements were designed to support build-out of the UGB established in the 1980 Comprehensive Plan.

The need to complete drainage system improvements is a result of growth pressure contributing additional runoff to the existing conveyance system. As discussed in the introduction to this SDC Update document, all capital improvement costs are allocated over all of the population, existing and future, which assures an equitable allocation of costs and accommodates expansion as well as system deficiencies. As a result of these two concepts, all Capital Improvements are deemed to be 100% SDC eligible.

The following table summarizes the capital improvements identified in the Stormwater Master Plan and as identified by City staff, with associated costs adjusted to the December 2013 ENR CCI of 9,668. This table is published to satisfy the requirements of ORS 223.309 and provides the CIP listing of projects eligible for SDC expenditures.

CITY OF MOLALLA
STORMWATER CAPITAL IMPROVEMENT PLAN
January 2014

PROJECT DESCRIPTION	ELIGIBLE COST	CONSTRUCTION SCHEDULE	PROJECT COST
2nd St/Railway Alignment Storm System - 15' to 60" pipeline and open channel Lola Avenue to Creamery Cr ***-Or Alternatively-*** 15" to 48" pipeline Lola Avenue to Creamery Creek at Heintz Street	100%	1 - 5 yrs	$1,770,000
Detention at Mathias Ave & Creamery Cr. - Temporary detention on est 10 acres up to 3 feet deep, with controlled outfall	100%	1 - 5 yrs	$140,000
Heintz Street Collector Replacement - 18" to 60" pipeline, Intercept Creamery Creek at Indian Oak Ct and divert Creek to Heintz Street, pipe on Heintz to Kennel Avenue.	100%	6 - 10 yrs	$1,725,000
Shirley Street Drainage Improvements - 24" pipeline to intercept Shirley St drainage and divert to Heintz Street	100%	6 - 10 yrs	$130,000
Miller Street Drainage Improvements - 12" to 15" pipeline from Affolter Ave to N Molalla Avenue	100%	6 - 10 yrs	$65,000
Sunrise Acres Drainage Improvements - 12" pipelines on E 5th, 6th and 7th to Stowers lane	100%	6 - 10 yrs	$60,000
Bear Cr Culvert Replacements, **20% Match**, 12' Bridge at Mathias Rd; 14' Bridge at Molalla Ave; 15' Bridge at Ona Way; 18' Bridge at Highway 213	100%	6 - 20 yrs	$360,000
Master Planning & SDC Update	100%	1 - 20 yrs	$50,000
System Upsizing and Oversizing	100%	1 - 20 yrs	$100,000
		TOTAL CIP COST	**$4,400,000**

SD-IV. STORMWATER SYSTEM IMPROVEMENT FEE CALCULATION

The EDU capacity of each capital improvement is based on serving the impervious area at build-out of the UGB. An estimate of the impervious area within the build-out UGB can be made based on population estimates and the inventory of employment lands identified for the City of Molalla.

Based on the 2009 Residential Land Needs Inventory, build-out population or EDU can be estimated based on an average density of 7 housing units per net acre. The 1981 UGB includes 721.8 gross acres of residential land use, which results in a net acreage of 577.4 acres for a total of 4,040 housing units, or EDU, and an estimated build-out population of 10,800 people. This equates to a total of 245 acres of impervious area based on an estimated 2,640 square feet of impervious area on average per EDU as established in the prior SDC.

Commercial impervious area is based on an estimated 30% lot coverage. Based on 203 acres of Commercial land use in the Molalla UGB, this results in 60.9 acres of impervious area. The 419 acres of Industrial lands identified in the UGB are estimated to have 15% lot coverage, resulting in 62.8 acres of impervious area.

The total impervious area in residential, commercial and industrial lands is thus estimated to be 368.7 acres at build-out.

The Stormwater Improvement Fee is based on the CIP cost being allocated over the total projected impervious area within the UGB. A single family residential Equivalent Dwelling Unit is estimated to have an average of 2,640 square feet of impervious area. The Improvement Fee calculation is:

SDC Cost per SF = (Eligible CIP Cost) / (Total Impervious area)

SDC Cost per SF = ($4,400,000) / (368.7 Acres * 43,560 sf/ac)

SDC Cost per SF = $0.274 per SF

SDC Improvement Fee = (2,640 sf/EDU) * ($0.274 per SF)

SDC Improvement Fee = $724 per EDU

SD-V. STORMWATER SYSTEM REIMBURSEMENT FEE

The Reimbursement Fee is intended to quantify the value of existing capacity available to accommodate future growth. This is the value of the existing improvements that have been constructed by the existing residents, and provides the backbone for collection of increased runoff created by growth. Only the value of the oversize component, the incremental value over 12" diameter, is defined as providing capacity for growth.

The following table lists the current value of all existing storm system oversizing, based on an estimated current construction cost. Similar to the improvement fee calculation, the current value is then divided by the amount of total impervious area estimated within the UGB. A summary of all oversized components was derived from the most recent assert inventory prepared by the City of Molalla:

CITY OF MOLALLA
STORM DRAINAGE SYSTEM REIMBURSEMENT FEE
EXISTING IMPROVEMENTS SUMMARY
January 2014

PROJECT DESCRIPTION	CURRENT VALUE
Collection System Oversizing:	
15" Pipeline, 2,700 LF @ $6 per LF	$16,200
18" Pipeline, 1,275 LF @ $12 per LF	$15,300
24" Pipeline, 200 LF @ $26 per LF	$5,200
36" Pipeline, 425 LF @ $56 per LF	$23,800
Master Planning & SDC Methodology	$65,000
TOTAL REIMBURSEMENT VALUE	**$125,500**

SD-VI. STORMWATER SDC REIMBURSEMENT FEE CALCULATION

As determined in the above table, the Reimbursement Fee required to recover the cost of existing facilities that have been installed with capacity to serve future growth is the value per KSF times the impervious area. For a single family residential dwelling, one EDU is equal to 2,800 square feet of impervious area:

SDC Cost per SF = (Total Reimbursement Value) / (Total Impervious area)

SDC Cost per SF = ($125,500) / (368.7 Acres * 43,560 sf/ac)

SDC Cost per SF = $0.008 per SF

SDC Reimbursement Fee = (2,640 sf/EDU) * ($0.008 per SF)

SDC Reimbursement Fee = $21 per EDU

SD-VII. STORM DRAINAGE SYSTEM SDC FEE SUMMARY

All residential units are assigned one EDU per dwelling unit, which is based on an average of 2,640 square feet of impervious area. Commercial and industrial developments are assessed SDC charges based on the actual impervious area times the unit costs for Improvement and Reimbursement fees. All SDC costs also include a charge of 2% for program administration.

CITY OF MOLALLA
STORM DRAINAGE SDC FEE SCHEDULE
January 2014

LAND USE	UNITS	IMPROVEMENT FEE	REIMBURSEMENT FEE	ADMINISTRATION FEE (2%)	TOTAL SDC
Residential	EDU	$724	$21	$15	**$ 760 / EDU**
Commercial/ Industrial	KSF*	$274	$8	$5	**$ 282 / KSF**

* Units are per 1,000 square feet of impervious area on the development site.

City of Molalla
TRANSPORTATION SDC UPDATE
January 2014

T-I. OVERVIEW

The current Transportation System Development Charge (SDC) was adopted by Resolution 1999-23 and was based on implementing the June 2001 Transportation System Plan (TSP). That plan projected a planning window population of 13,370, whereas build-out of the Urban Growth Boundary was limited to an estimated 8,842 population. As a result, the Capital Improvement Plan (CIP) adopted in the SDC is predicated on providing transportation improvements beyond the current UGB.

This 2014 SDC Update will incorporate the Capital Improvement Plan (CIP) contained in the 2001 TSP, adjust all project cost estimates to a current construction cost index, and provide a methodology of equitably allocating these costs to support the SDC Improvement Fee. Additionally, this SDC Update will quantify the investment in the existing transportation system to establish a basis to add a new Reimbursement Fee to recover costs of existing improvements.

The 2001 TSP identified thirty capital improvement projects required to serve the projected population in the year 2019. Since 2001, five of these thirty projects have been completed and the remaining projects are reincorporated into this update.

T-II. CREDITS FOR ELIGIBLE CONSTRUCTION

State statutes require a credit be made available to private developers for construction of qualified public improvements. This could include oversizing street improvements on a development site, or construction of transportation improvements off-site.

Qualified public improvements within a development site are eligible for Oversizing Credits if required to be constructed larger than the local government standards. The Oversize credit would be equal to the incremental cost of that portion of the construction that exceeds the minimum street standards. The minimum street standard adopted as a component of this SDC includes a 36-foot street construction with curbs and sidewalks, within a 50-foot right-of–way.

The value of transportation credits given for qualified improvements required off-site of the development property are mandated by statute to be equal to 100% of the costs of the eligible improvement, and are noted as Offsite Credits in the following table. The following table lists the eligible credits, including engineering fees, to be applied to all eligible transportation improvements, for half street construction on a front foot basis:

CITY OF MOLALLA
TRANSPORTATION SDC FOR STREET CONSTRUCTION
CREDIT FOR FULL STREET CONSTRUCTION
January 2014

	UP TO 36'	40'	44'	48'
Total Cost	$270 / ft	$290 / ft	$310 / ft	$330 / ft
Offsite Credit	$270 / ft	$290 / ft	$310 / ft	$330 / ft
Oversizing Credit	$ 0 / ft	$ 20 / ft	$ 40 / ft	$ 60 / ft

T-III. TRIP RATE FACTORS:

An industry standard for allocating demands on a transportation system is to proportion the costs based on the relative number of trips created by a development. Trips are technically referred to as Equivalent Length New Daily Trips (ELNDT), and trip rates are published by the Institute of Transportation Engineers (ITE) for various land uses. This 2014 SDC Update adopts the use of Weekday Average Trips as contained in the current ITE Trip Generation Manual, 9th Edition, as the basis for the ELNDT generation standards.

In addition, this update incorporates a Local Factor that considers the length of a typical trip, the number of shared trips and pass-by trips. This factor is an estimate of how many of the trips specific to the subject land use are linked to other destinations, where the actual trip is shared by multiple destinations or multiple stops on the same trip. All commercial / industrial development has been assigned a Local Factor of 0.50. This adjustment encourages commercial / industrial development which in-turn supports the vitality of the community.

ITE Trip Rates and associated Local Factors are listed at the end of this document.

T-IV. TRANSPORTATION SYSTEM CAPITAL IMPROVEMENT PLAN:

The 2001 TSP provided a CIP to support a 20-year growth projection. The projected population for the year 2019 exceeds the build-out population of the current Urban Growth Boundary (UGB). As a result, the cost of needed capital improvements and the value of existing improvements are allocated over a population beyond the build-out population.

Similar to the Water, Stormwater and Sanitary Sewer SDCs, the Transportation SDC allocates 100% of the costs of needed improvements over all users, existing and future. This assures an equitable allocation of cost and equitably incorporates existing system deficiencies. All projects are included in the list due to the impacts of anticipated growth within the City.

The following table summarizes the improvements identified in the June, 2011 Transportation CIP as well as the projects discussed in the 2007 Downtown Development Plan. All entries have been adjusted to the Engineering News Record Construction Cost Index (ENR CCI) of 9,668 for December 2013 dollars.

CITY OF MOLALLA
TRANSPORTATION SYSTEM CAPITAL IMPROVEMENT PLAN
January 2014

NO	PROJECT DESCRIPTION	PROJECT PRIORITY	CURRENT COST
1	Toliver Road / HWY 213 Intersection	1-5 yrs	$495,000
2	Meadow Drive / Hwy 213 Intersection	1-5 yrs	$225,000
3	May Avenue, Between 5th and 6th Streets	1-5 yrs	$115,000
4	Section Street, Molalla to Hart Avenues	1-5 yrs	$150,000
5	S. Cole Avenue, south of Main Street	1-5 yrs	$210,000
6	Mathias Road / Freyrer Park Rd Intersection	1-5 yrs	$150,000
7	Main St / Grange St / Berkley Intersection Safety Improvements	1-5 yrs	$30,000
8	Molalla Avenue / Main Street Intersection Improvement, Signalization	6-10 yrs	$245,000
9	Molalla Avenue / Toliver Road Intersection	6-10 yrs	$225,000
10	Toliver Road Widening	6-10 yrs	$3,050,000
11	Leroy Avenue / Main Street Intersection	11-20 yrs	$300,000
12	Molalla Avenue / Shirley Street Intersection	11-20 yrs	$225,000
13	Mathias Road / Main Street Intersection	11-20 yrs	$600,000
14	Molalla Forest Rd / Main St Intersection including Signalization Improvements	11-20 yrs	$500,000
15	Downtown Bypass - Hwy 211 Widening	11-20 yrs	$275,000
16	Mathias Road Widening	11-20 yrs	$1,950,000
17	S. Ona Way, Main St to Molalla Forrest	11-20 yrs	$625,000
18	S. Lowe Road, Ona Way to Hwy 213	11-20 yrs	$1,450,000
19	Ped & Bicycle Improvements ($25k/yr) Downtown Pedestrian District Improvements	1-20 yrs	$500,000

20	County / ODOT Projects (Vick Rd southbound left turn lane; Vaughn Rd (County/ODOT Cont) northbound left turn lane; Hwy 213 Bike Lanes; Sawtell Rd/Molalla Ave/Wilhoit Rd Realignment; Sawtell Rd/Eaves Rd Realignment)*	1-20 yrs	$680,000
21	Molalla Avenue Widening	1-20 yrs	$2,860,000
22	OR Hwy 211 Streetscape - Seed Funds**	1-20 yrs	$1,000,000
23	Downtown Streetscape - Seed Funds**	1-20 yrs	$1,000,000
24	Downtown Land Use / Transportation Concept - Seed Funds**	1-20 yrs	$1,000,000
25	Realign Intersections - (Hart/Kennel and Berkley/Grange)	1-20 yrs	$1,200,000
26	Main/Molalla Intersection signalization Improvements	1-20 yrs	$410,000
27	Other OR 211 Intersection Improvements (OR 211/Ridings; Thelander)*	1-20 yrs	$600,000
28	Molalla Forest Road - Main to Mathias	1-20 yrs	$6,500,000
29	Master Planning & SDC Update	1-20 yrs	$50,000
30	Miscellaneous Roadway Oversizing	1-20 yrs	$50,000
		TOTAL	**$26,670,000**

* Match funds for County and ODOT jurisdiction projects were estimated at 50% of the estimated project costs
** Seed Funds for Downtown Plan Projects were set at $1,000,000 per project

T-V. TRANSPORTATION SYSTEM SDC IPROVEMENT FEE CALCULATION

The transportation SDC costs are allocated based on the number of Equivalent Length New Daily Trips (ELNDT) generated by the benefitting properties. The TSP estimated benefitted population through the year 2019 at approximately 13,370. No projections were made for Average Weekday ELNDT nor was the total area of the expanded UGB defined in the 2001 TSP.

Based on the areas contained within the existing UGB, the estimated build-out population and estimates of commercial / industrial development, an estimate of ELNDT can be made for the proportionately larger planning area used in the 2001TSP. Assumptions used to calculate the UGB build-out are:

- 20 percent of gross acres are dedicated to public use for all zones
- Average of 7 EDU per net acre in all residential zones
- Average of 2.67 people per EDU population
- Average of 8 ELNDT per EDU for all residential zones

- Average 30% lot coverage for buildings in commercial zones
- Average 15% lot coverage for buildings in industrial zones
- Average of 10 ELNDT/KSF Commercial and 3 ELNDT/KSF industrial

The number of ELNDT within the existing UGB is estimated in the following table:

CITY OF MOLALLA
ESTIMATED EQUIVALENT LENGTH NEW DAILY TRIPS
WITHIN THE 2000 UGB
January 2014

LAND USE	Gross Acres	Estimated Units	ELNDT Per Unit	ELNDT AVE WEEKDAY
RESIDENTIAL	721.8	4,040 EDU	8	32,320
COMMERCIAL	203	2,653 KSF	10	26,530
INDUSTRIAL	419	2,740 KSF	3	8,220
TOTAL	**1,343.8**		**TOTAL**	67,070

The 2001 TSP is based on infrastructure improvements to serve a population of 13,370. Build-out population of the UGB is 4,040 EDU and at 2.67 people per EDU equates to 10,800 population. The TSP planning window population is 24% greater, therefore the estimate of total ELNDT in the planning window is estimated at 124% of the UFB trip estimate, or a total of 83,000 ELNDT. This estimate assumes the commercial industrial UGB expansions remain in the same relative proportion to residential as in the current UGB.

The SDC improvement fee cost per ELNDT is then:

SDC Improvement Fee = (SDC ELIGIBLE COSTS) / (Total ELNDT)

SDC Improvement Fee = ($26,670,000)/ (83,000 ELNDT)

Improvement Fee = $321 per ELNDT

T-VI. TRANSPORTATION SYSTEM SDC REIMBURSEMENT FEE:

A Reimbursement Fee is incorporated into this 2014 SDC Update to quantify the value of existing transportation system improvements with capacity to accommodate future growth. The value of the oversize component will include the incremental value over a 36 foot wide roadway. Offsite improvements include the total value of a transportation system improvement if not associated with a private development site. These existing improvements provide the network of transportation improvements to serve the needs of the existing residents and future growth.

The following table lists the value of the existing transportation system improvements with capacity to serve buildout of the UGB:

CITY OF MOLALLA
EXISTING TRANSPORTATION SYSTEM IMPROVEMENTS
January 2014

NO.	PROJECT DESCRIPTION	CURRENT VALUE
1	Highway 211/Highway 213 Intersection	$360,000
2	5th Street Extension, Eckerd Avenue to Cole Street	376,000
3	Shirley Street, between Molalla and Cole Avenues	296,000
4	Heintz Street, between Cole and Grange Avenues	168,000
5	Master Planning & SDC Updates	$75,000
	TOTAL	**$1,039,000**

T-VII. TRANSPORTATION SDC REIMBURSEMENT FEE CALCULATION:

As determined in the above table, the value of existing improvements is estimated at $2,724,000. The Reimbursement Fee component of the SDC is calculated by dividing the total value by the number of benefitting ELNDT:

SDC Cost per SF = (Total Reimbursement Value) / (Total ELNDT)

SDC Cost per SF = ($1,039,000) / (83,000 ELNDT)

SDC Reimbursement Fee = $12 per ELNDT

T-VIII. TRANSPORTATION SYSTEM TOTAL SDC FEE CALCUATION

Based on the identified Capital Improvement Plan, reimbursement values and the projected number of new Equivalent Length New Daily Trips through the planning period, the SDC fee is summarized below:

SDC Improvement Fee = $321 per ELNDT

SDC Reimbursement Fee = $12 per ELNDT

Transportation SDC = $333 per ELNDT

The cost per ELDNT should be applied to the ITE Trip Generation factor, as adjusted by the Local Factor, to determine the specific charge for each land use. The ITE Trip Generation factor should be based on the average weekday trips from the best category fit in the most current Trip Generation Manual, which is included at the end of this text as listed in the 9th Edition.

The ITE tables publish average trip rates for each land use, however, they do not account for length of trip or linked trips because those factors are specific to each community. The length factor is an estimate of the ratio of the subject land use trip length to an average single family residential trip length. The linked trip factor is an estimate of how many of the trips specific to the subject land use are linked to other destinations, where the actual trip is shared by multiple destinations or multiple stops on the same trip.

The following table lists the SDC costs for selected land use, including a 2% charge for administration. Attached at the end of this section is a complete listing of all available ITE trip categories with published average weekday trip rates from the 9th Edition as adjusted by the factors discussed above.

CITY OF MOLALLA
TRANSPORTATION SDC FEES FOR SELECTED LAND USES
BASED ON ITE AVERAGE WEEKDAY ELNDT
January 2014

	ITE CATEGORY, UNITS	ELNDT/ UNIT	TRIP FACTOR	FEE PER ELNDT	ADMIN FEE (2%)	SDC COST
--	All ITE Trip Categories	--	--	$333	$6	$339
	Residential					
210	Single family, per unit	9.52	100%	$333	$63	**$3,225**
220	Apartment, per unit	6.65	100%	$333	$44	**$2,260**
	Commercial / Industrial					
110	Light Industrial, per KSF*	6.97	50%	$333	$23	**$1,185**
120	Heavy Industrial, per KSF*	1.50	50%	$333	$5	**$255**
320	Motel, per room	5.63	50%	$333	$19	**$955**
630	Medical Clinic, per KSF*	31.45	50%	$333	$105	**$5,340**
710	General Office, per KSF*	11.03	50%	$333	$37	**$1,875**
814	Specialty Retail, per KSF*	64.03	50%	$333	$213	**$10,875**

* Units are per 1,000 square feet of gross building area

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TRANSPORTATION SDC FEES
AVERAGE WEEKDAY ELNDT FACTORS
* ITE 9th Edition

ITE #	LAND USE	ITE TRIP RATE*	LOCAL FACTOR	ELNDT RATE
Port & Terminal Use				
10	Waterport / Marine Terminal, Per Acre	11.93	50%	5.97
21	Commercial Airport, Per Commercial Flight per day	122.21	50%	61.10
22	General Aviation Airport, Per Average Flights per Day	1.97	50%	0.98
30	Truck Terminal, Per Acre	81.9	50%	40.95
90	Park-and-Ride Lot with Bus Service, Per Parking Space	4.50	50%	2.25
93	Light Rail Transit Station with Parking, Per Parking Space	2.51	50%	1.25
Industrial Use				
110	General Light Industrial, Per KSF	6.97	50%	3.48
120	General Heavy Industrial, Per KSF	1.50	50%	0.75
130	Industrial Park, Per KSF	6.83	50%	3.41
140	Manufacturing, Per KSF	3.82	50%	1.91
150	Warehousing, Per KSF	3.56	50%	1.78
151	Mini-Warehouse, Per KSF	2.50	50%	1.25
160	Data Center, Per KSF	0.99	50%	0.49
Residential Use				
210	Single-Family Detached Housing, Per Dwelling	9.52	100%	9.52
220	Apartment, Per Dwelling	6.65	100%	6.65
221	Low-Rise Apartment, Per Occupied Unit	6.59	100%	6.59
222	High-Rise Apartment, Per Dwelling	4.20	100%	4.20
230	Residential Condominium/ Townhouse, Per Dwelling	5.81	100%	5.81
232	High-Rise Residential Condominium /Townhouse, Per Dwelling	4.18	100%	4.18
240	Mobile Home Park, Per Occupied Dwelling	4.99	100%	4.99
251	Senior Adult Housing - Detached, Per Dwelling	3.68	100%	3.68
252	Sr. Adult Housing - Attached, Per Occupied Dwelling Unit	3.44	100%	3.44

ITE #	LAND USE	ITE TRIP RATE*	LOCAL FACTOR	ELNDT RATE
253	Congregate Care Facility, Per Occupied Dwelling Unit	2.15	100%	1.07
254	Assisted Living, Per Bed	2.66	100%	1.33
255	Continuing Care Retirement Community, Per Occupied Unit	2.50	100%	1.25
260	Recreational Home, Per Dwelling	3.16	100%	3.16
270	Residential Planned Unit Development, Per Dwelling	7.50	100%	7.5
Lodging				
310	Hotel, Per Room	8.17	50%	4.08
311	All Suites Hotel, Per Room	4.90	50%	2.45
312	Business Hotel, Per Occupied Unit	7.27	50%	3.63
320	Motel, Per Room	5.63	50%	2.81
Recreational				
411	City Park, Per Acre	1.89	50%	0.94
412	County Park, Per Acre	2.28	50%	1.14
413	State park, Per Acre	0.65	50%	0.32
414	Water Slide Park, Per Parking Space	2.27	50%	1.13
415	Beach Park, Per Acre	29.81	50%	14.90
417	Regional Park, Per Acre	4.57	50%	2.28
418	National Monument, Per Acre	5.37	50%	2.68
420	Marina, Per Berth	2.96	50%	1.48
430	Golf Course, Per Acre	5.04	50%	2.52
435	Multipurpose Recreational Facility, Per Acre	90.38	50%	45.19
437	Bowling Alley, Per KSF or Per Lane	33.33	50%	16.66
443	Movie Theater without Matinee, Per KSF	78.06	50%	39.03
444	Movie Theater with Matinee, Per KSF	99.28	50%	49.64
452	Horse Track, Per Acre	43.00	50%	21.50
460	Arena, Per Acre	33.33	50%	16.66
480	Amusement Park, Per Acre	75.76	50%	37.88
481	Zoo, Per Acre	114.88	50%	57.44
488	Soccer Complex, Per Field	71.33	50%	35.66
490	Tennis Courts, Per Court	31.04	50%	15.52
491	Racquet/Tennis Club, Per KSF	14.03	50%	7.01

ITE #	LAND USE	ITE TRIP RATE*	LOCAL FACTOR	ELNDT RATE
492	Health/Fitness Club, Per KSF	32.93	50%	16.46
493	Athletic Club, Per KSF	43.00	50%	21.50
495	Recreational Community Center, Per KSF	33.82	50%	16.91
Institutional				
520	Elementary School, Per KSF	15.43	50%	7.71
522	Middle School/Junior High School, Per KSF	13.78	50%	6.89
530	High School, Per KSF	12.89	50%	6.44
540	Junior/Community College, Per KSF	27.49	50%	13.74
560	Church, Per KSF	9.11	50%	4.55
561	Synagogue, Per KSF	10.64	50%	5.32
565	Day Care Center, Per KSF	74.06	50%	37.03
566	Cemetery, Per Acre	4.73	50%	2.36
590	Library, Per KSF	56.24	50%	28.12
Medical				
610	Hospital, Per KSF	13.22	50%	6.61
620	Nursing Home, Per KSF	7.60	50%	3.80
630	Clinic, Per KSF	31.45	50%	15.72
Office				
710	General Office Building, Per KSF	11.03	50%	5.51
714	Corporate Headquarters Building, Per KSF	7.98	50%	3.99
715	Single Tenant Office Building, Per KSF	11.65	50%	5.82
720	Medical-Dental Office Building, Per KSF	36.13	50%	18.06
730	Government Office Building, Per KSF	68.93	50%	34.46
731	State Motor Vehicles Department, Per KSF	166.02	50%	83.01
732	United States Post Office, Per KSF	108.19	50%	54.09
733	Government Office Complex, Per KSF	27.92	50%	13.96
750	Office Park, Per KSF	11.42	50%	5.71
760	Research and Development Center, Per KSF	8.11	50%	4.05

ITE #	LAND USE	ITE TRIP RATE*	LOCAL FACTOR	ELNDT RATE
770	Business Park, Per KSF	12.44	50%	6.22
Retail				
812	Building Materials & Lumber Store, Per KSF	45.16	50%	22.58
813	Free-Standing Discount Superstore, Per KSF	50.75	50%	25.37
814	Specialty Retail Center, Per KSF	64.03	50%	32.01
815	Free-Standing Discount Store, Per KSF	57.24	50%	28.62
816	Hardware/Paint Store, Per KSF	51.29	50%	25.64
817	Nursery (Garden Center), Per KSF	68.10	50%	34.05
818	Nursery (Wholesale), Per Acre	39.00	50%	19.50
820	Shopping Center, Per KSF	42.70	50%	21.35
823	Factory Outlet Center, Per KSF	26.59	50%	13.29
826	Specialty Retail Center, Per KSF	44.32	50%	22.16
841	New Car Sales, Per KSF	32.30	50%	16.15
843	Automobile Parts Sales, Per KSF	61.91	50%	30.95
848	Tire Store, Per KSF	24.87	50%	12.43
849	Tire Superstore, Per KSF	20.36	50%	10.18
850	Supermarket, Per KSF	102.24	50%	51.12
851	Convenience Market (Open 24 Hours), Per KSF	737.99	50%	368.99
853	Convenience Market with Gasoline Pumps, Per KSF	845.60	50%	422.80
854	Discount Supermarket, Per KSF	90.86	50%	45.43
857	Discount Club, Per KSF	41.80	50%	20.90
860	Wholesale Market, Per KSF	6.73	50%	3.36
862	Home Improvements Superstore, Per KSF	30.74	50%	15.37
863	Electronics Superstore, Per KSF	45.04	50%	22.52
863	Book Superstore, Per KSF	143.53	50%	71.76
869	Discount Home Furnishing Superstore, Per KSF	20.00	50%	10.00
875	Department Store, Per KSF	22.88	50%	11.44
876	Apparel Store, Per KSF	66.40	50%	33.20

ITE #	LAND USE	ITE TRIP RATE*	LOCAL FACTOR	ELNDT RATE
879	Arts and Craft Store, Per KSF	56.55	50%	28.27
880	Pharmacy/Drugstore without Drive-Through Window, Per KSF	90.06	50%	45.03
881	Pharmacy/Drugstore with Drive-Through Window, Per KSF	96.91	50%	48.45
890	Furniture Store, Per KSF	5.06	50%	2.53
897	Medical Equipment Store, Per KSF	6.00	50%	3.00
Service				
912	Drive-In Bank, Per KSF	148.15	50%	74.07
931	Quality Restaurant, Per KSF	89.95	50%	44.97
932	High-Turnover (sit-Down) Restaurant, Per KSF	127.15	50%	63.57
933	Fast Food Restaurant without Drive-Through Window, Per KSF	716.00	50%	358.00
934	Fast Food Restaurant with Drive-Through Window, Per KSF	496.12	50%	248.06
937	Coffee / Donut Shop w/Drive Thru, Per KSF	818.58	50%	409.29
938	Coffee / Donut Shop Drive Thru Only, Per KSF	1,800.00	50%	900.00
941	Quick Lubrication Vehicle Shop, Per Bay	40.00	50%	20.00
942	Automotive Care Center, Per KSF	23.72	50%	11.86
944	Gasoline/Service Station, Per Fueling Positions	168.56	50%	84.28
945	Gasoline/Service Station with Convenience Market, Per Fueling Positions	162.78	50%	81.39
946	Gasoline/Service Station with Convenience Market and Car Wash, Per Fueling Positions	152.84	50%	76.42
947	Self-Service Car Wash, Per Wash Stall	108	50%	54.00

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City of Molalla
PARKS & RECREATION SDC UPDATE
January 2014

P-I. OVERVIEW

In 2005 the City of Molalla adopted Resolution 2005-04 updating the City Parks & Recreation System Development Charge (SDC) Fees. The Parks & Recreation SDC fee is only applied to residential development and assumes 2.5 persons per Equivalent Dwelling Unit (EDU). In 2005 the SDC Fee was increased to $903 per EDU and has not been adjusted since adoption. Similar to the previously adopted 1999 SDC methodology, the 2005 SDC fee was based on a projected list of needed improvements and an estimate of benefitting population.

In 2007 the City of Molalla prepared a Parks, Recreation & Trails Master Plan to establish development standards to guide future development of the parks & recreation infrastructure. The Plan quantified the desired Level of Service (LOS) and priorities to generally comply with the recommendations of the National Recreation and Park Association (NRPA). General capital improvement projects were identified based on Level of Service standards and a list of specific capital improvements was also identified to guide the City in park facility development.

Based on the standards adopted in the 2007 City of Molalla Parks, Recreation & Trails Master Plan, this current SDC update modifies the Parks & Recreation SDC methodology to adopt a Level of Standards approach for needed capital improvements. This approach simplifies the application of the SDC fee by eliminating the need to project the increase in population, and eliminates the need to define that portion of any capital improvement that specifically benefits future population. The overall LOS of 12.5 acres per 1,000 population has been adopted through the master planning process. 2.5 acres per 1,000 population was intended to be on unbuildable lands, with the remaining 10 acres per 1,000 on buildable lands.

An LOS approach is independent of population growth and establishes a per capita demand for park facilities. The 2005 Park, Recreation and Trails Master Plan identified the following LOS for the City of Molalla:

Neighborhood Parks	3.0 Acres per 1,000 residents
Community Parks	3.0 Acres per 1,000 residents
Natural/Open Space	4.0 Acres per 1,000 residents
Other Facilities	2.5 Acres per 1,000 residents
Trails	Within 1/2 mile of all residents
Baseball/Softball Fields	1 per 1,500 residents
Soccer Fields	1 per 1,000 residents
Football/Rugby/Lacrosse	1 per 4,000 residents
Basketball Courts	1 per 500 residents
Tennis Courts	1 per 1,500 residents

A variety of populations per household numbers have been used in the City's planning documents, varying from 2.5 persons per household to over 2.8 persons per household. The 2010 census defined the average number of 2.67 persons per household for the City of Molalla. As a result, an EDU for Parks and Recreation will be defined in this update as a household of 2.67 population.

P-II. CREDITS FOR ELIGIBLE CONSTRUCTION

In accordance with the state statutes, credits must be available for eligible public works construction. Credits must be issued for 100% of eligible off-site improvements, and for the oversize component only of on-site improvements.

Parks and Recreation improvements differ from typical infrastructure in that each facility generally benefits a wide region of residents and are not typically located in all developments. As a result, except for the value of donated land, credits within any specific development would be unusual. Improvements should generally be defined and improved by the City with growth typically paying their share through the SDC fee.

The amount of any credit should be based on actual costs, but also generally follow the values listed in the CIP tables. If the City elects to have park improvements constructed by private development, the City should be integrally involved in the selection of materials and purchase of equipment and pre-approve all expenditures.

P-III. PARKS & RECREATION CAPITAL IMPROVEMENT PLAN

The 2005 Parks, Recreation and Trails Master Plan identified the required capital improvements for Parks and Recreation based on population. The following table identifies each component of the parks & recreation system and identifies the estimated cost from the Master Plan for needed capital improvements.

The total cost of the CIP in the Master Plan was approximately $27 million dollars in 2007. Cost per acre or per facility to fully develop each improvement was derived from Table 11 in the 2007 Master Plan for the improvements defined in Table 5. The costs were then revised to include recent cost history and adjusted to the December 2013 ENR CCI of 9,668. Funding improvements to the level identified in the Master Plan is not financially feasible without sources of revenue outside of the SDC. As a result, the table anticipates 30% grant or alternative funding source participation in each of the four major park types.

The Master Plan also identified $3.072 million of deficiencies from the desired level of service in the existing park and recreation system improvements. Using the unit pricing of fully developed facilities from the following table, the existing park system is valued in 2013 dollars at $17,800,000. The deficiencies amount to approximately 17% of the fully developed value of the existing parks. Accordingly, the SDC fee should be reduced by 17% to provide an equivalent LOS to future users.

CITY OF MOLALLA
PARKS & RECREATION SYSTEM
LEVEL OF SERVICE ESTIMATES
January 2014

NO	PROJECT DESCRIPTION	DEVELOPMENT PRIORITY	ESTIMATED COST	BENEFITTED POPULATION	COST PER PERSON
1	Neighborhood Parks, 3 acres @ $240k	1-20 yrs	$500,000*	1,000	**$500**
2	Community Parks, 3 acres @ $240k	1-20 yrs	$500,000*	1,000	**500**
3	Natural/Open Space, 4 acres @ $150k	1-20 yrs	$420,000*	1,000	**420**
4	Other Facilities, 2.5 acres @ $250k	1-20 yrs	$420,000*	1,000	**420**
5	Trails, Walking Paths	1-20 yrs	$50,000	1,000	**50**
6	Baseball/Softball Fields, each	1-20 yrs	$150,000	1,500	**100**
7	Soccer Fields, each	1-20 yrs	$300,000	1,500	**200**
8	Football/Rugby/Lacrosse Fields, each	1-20 yrs	$300,000	1,500	**200**
9	Basketball Courts, each	1-20 yrs	$40,000	500	**80**
10	Tennis Courts, each	1-20 yrs	$60,000	1,500	**40**
11	Master Planning & SDC Update	1-20 yrs	$40,000	12,100	**3**
				Total Cost Per Person	**$2,463**
				Reduction of 17% to match existing LOS	**(418)**
				Net Cost Per Person	**$2,045**

* Assumes Grant or alternative participation of approximately 30%

P-IV. PARKS & RECREATION SDC IMPROVEMENT FEE CALCULATIONS

The Parks and Recreation SDCs are based on population only. This approach does not incorporate the collection of any SDCs from institutional, commercial or industrial development as it is difficult to define the nexus between non-residential land use and park facilities.

The 2010 census documented the average residential household population for the City of Molalla to be 2.67 people per unit, which will be used for defining an EDU in this SDC update. Using a methodology based on residential population, with the cost per person as identified in the CIP table above, and the average population per household from the Census Bureau estimates, the Parks and Recreation SDC Improvement Fee per EDU is calculated as follows:

SDC Improvement Fee = ($2,045 per person) * (2.67 people per EDU)

SDC Improvement Fee = $5,460 per EDU

The Improvement Fee revenues are based on providing the defined Level of Service and can be expended on any capital improvements within the Park System towards that goal.

P-V. PARKS & RECREATION SDC REIMBURSEMENT FEE SUMMARY

This SDC Update provides support for an Improvements Fee and does not include any costs for reimbursement. The 2007 Master Plan provided details to conclude the existing park system was approximately 17% deficient from the adopted LOS standards. As a result, the LOS for future growth was reduced by 17% to provide for a comparable level of service to future users, and no reimbursement fee is proposed.

P-VI. PARKS & RECREATION SDC FEE SUMMARY

All Parks & Recreation SDCs are charged based on average population per residential dwelling unit. No Parks & Recreation SDC is allocated to commercial / industrial development. Additionally, a 2% administration fee is incorporated into each SDC charge as shown.

CITY OF MOLALLA
PARKS & RECREATION SYSTEM SDC FEES
January 2014

TYPE OF UNIT	POPULATION PER EDU	IMPROVEMENT FEE PER EDU	REIMBURSEMENT FEE PER EDU	ADMINISTRATION FEE (2%)	TOTAL SDC PER EDU
Single & Multi Family Residential	2.67	$5,460	$0	$110	**$5,570**