CITY OF TOLEDO
LINCOLN COUNTY, OREGON

PUBLIC INFRASTRUCTURE SYSTEM DEVELOPMENT CHARGE METHODOLOGY

May 2010

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APPENDICES

CITY OF TOLEDO SDC METHODOLOGY

Section 1

1.0 Executive Summary

1.1 Background

The City of Toledo has historically charged SDC's for water and sewer based on a methodology developed in 1994.

While the City had some planning documents in place, they did not have planning for each sector and not all of the planning was up to date. For each infrastructure sector, special accommodations had to be made. A description of these accommodations is provided within each infrastructure section of this methodology.

This methodology was prepared to present and summarize the methods and systems that have been used to establish public infrastructure SDC's for the City of Toledo.

The SDC methodologies and calculations presented herein are consistent with the framework set forth by the Oregon SDC legislation encapsulated within ORS 223.297 to ORS 223.314.

1.2 Overview of SDC Methodology

Each infrastructure sector was analyzed in this methodology and recommendations prepared for an appropriate and defendable SDC for each. A summary of that effort is provided below.

1.2.1 Water System SDC

The methodology utilized to establish a water system SDC is based on the 2010 Water Master Plan (Civil West Engineering Services, Inc).

Population estimates and the City's adopted growth rate were used to establish the projected or future EDU's that will require additional capacity in the system. The water system SDC was established by dividing the SDC eligible project costs by the total projected growth in the system, resulting in a maximum water system SDC.

Credits should be developed, as appropriate, to eliminate the potential for double charges that could result from a new user paying both increased user fees in support of a loan to construct new facilities in addition to paying SDC fees for the same facility.

A summary of the SDC methodology for the water system is provided below in Table 1.2.1. For detailed coverage of the water system SDC methodology, see Section 3 of this Methodology.

Table 1.2.1 – Water System SDC Summary
City of Toledo

SDC Component	SDC Amount
Improvement Fee - Toledo Residents	$5,242.57
Improvement Fee - Seal Rock Residents	$3,532.54
Reimbursement Fee	$0.00

1.2.2 Wastewater System SDC

The methodology utilized to establish a wastewater system SDC relies on capital improvement projects developed in the City's current Wastewater Facilities Plan (Clearwater Engineering, 1993) along with some bridge planning included within this methodology. The projects in the wastewater system CIP have been carefully analyzed to determine what percentage of each project is dedicated to providing capacity for future growth. Based on the analysis, a total SDC eligible project cost has been established.

Population estimates and the City's adopted growth rate were used to establish the projected or future EDU's that will require additional capacity in the system. The SDC was then calculated by dividing the eligible project costs by the estimated growth potential within the City's wastewater system.

Credits should be developed, as appropriate, to eliminate the potential for double charges that could result from a new user paying both increased user fees in support of a loan to construct new facilities in addition to paying SDC fees for the same facility.

A summary of the wastewater SDC is provided below in Table 1.2.2. Detailed information on the wastewater system SDC for Toledo is provided in Section 4 of this methodology.

Table 1.2.2 – Wastewater System SDC Summary
City of Toledo

SDC Component	SDC Amount
Improvement Fee	
Per Section 4.6	$1,152.00
Reimbursement Fee	
Per Section 4.5	$3,758.91
Subtotal of Wastewater SDC Fees per EDU	**$4,910.91**

1.2.3 Storm Drain System SDC

This plan includes a methodology for the development of a stormwater SDC for the City of Toledo. At the time this methodology was originally prepared, the City did not have a storm drain master plan completed. Therefore, bridge planning had to be prepared to provide for a preliminary CIP for the storm drainage sector.

Growth potential in the stormwater sector was based upon impervious surface methodology. Based on experience with similar communities, it was recommended that the City adopt a standard of impervious surface as the assessment method for determining the impact to the drainage system by new development. It was recommended that a single EDU be considered equal to 2,500 square feet of impervious surface based on experience in similar communities.

By using adopted growth rates and conversions to impervious surface, a value was established for growth potential in the storm drainage system within the planning period.

The SDC charge for the storm drainage system was calculated by dividing the SDC eligible project costs by the growth potential within the system.

A summary of the storm drainage SDC is provided below in Table 1.2.3. A detailed analysis of the storm drainage SDC methodology is provided within Section 5 of this methodology.

Table 1.2.3 – Storm Drainage SDC Methodology Summary
City of Toledo

SDC Component	SDC Amount
Improvement Fee	
$/EDU	**$844**
$/square foot	**$0.34**
Reimbursement Fee	$0

1.2.4 Transportation System SDC

This plan includes a methodology for the establishment of a transportation system SDC for the City of Toledo. The methodology is based on planning available in the City's current Transportation System Plan (W&H Pacific, Kittleson, 1995) and bridge planning provided within this methodology.

An analysis of growth potential was developed within this methodology using the other infrastructure sector's growth potential for internal trip generation growth and an estimate of external trip generation growth. Furthermore, the Institute of Transportation Engineer's (ITE) trip generation table was used to normalize trip generation for many different land use types to a typical residential dwelling. This allowed for the use of common EDU methodology to calculate growth potential within the system.

The transportation SDC was calculated by dividing the SDC eligible project costs by the growth potential in the system. A summary of the transportation SDC is provided below in Table 1.2.4. A detailed analysis of the transportation SDC methodology is provided within Section 6 of this methodology.

Table 1.2.4 – Transportation System SDC Summary
City of Toledo

SDC Component	SDC Amount
Improvement Fee	
Per Section 6.7	$1,162.75
Reimbursement Fee	
Per Section 6.6	$0.00
Subtotal of Transportation SDC Fees per typical EDU	**$1,162.75**

1.2.5 Parks

This plan includes a methodology for the establishment of an SDC for the City of Toledo Parks Department. This methodology was developed using the City's current Parks Master Plan (University of Oregon, 1993) and bridge planning developed within this methodology.

The growth potential in the parks system was determined by estimating the growth in lodging facilities and domiciles. This includes residential housing, motels, hotels, time shares, condos, and other land uses associated with housing people either on a permanent or part-time basis. The logic centers around the idea that pressure on the parks facilities will increase as people move to the area to live or as facilities are constructed to accommodate visitors to the City.

The parks SDC was calculated by dividing the SDC eligible project cost by the growth potential of the parks system.

Table 1.2.5 below summarizes the parks SDC as developed within this methodology. A detailed analysis of the parks SDC for the City of Toledo is provided in Section 7 of this plan.

Table 1.2.5 – Parks SDC Summary
City of Toledo

Description	SDC Amount
Parks SDC	**$1,806.26**
Parks SDC Reduction Percentage	100%
Adjusted Parks SDC / EDU	**$1,806.26**

1.2.6 Compliance Costs

Oregon law allows a utility service provider to use SDC revenues to pay for costs associated with complying with and administering SDC programs. While this is not a separate category, it is acceptable to assess a "compliance charge" when collecting SDC fees.

Acceptable compliance cost activities include accounting and auditing costs, SDC methodology updates and plans, master planning costs, CIP administration costs, and other costs that are determined to be necessary to support and properly manage an SDC program.

It was estimated that the City will face an annual compliance cost of around $32,000 related to administration of the SDC programs and maintaining proper infrastructure planning. A summary of the estimated SDC compliance expenses is provided below in Table 1.2.6.a.

Table 1.2.6.a – SDC Compliance Expense Summary

Compliance Activity	Estimated Cost	SDC Eligibility (%)	Frequency (years)	Annual $
General Accounting/Administration Costs				
Auditing/Accounting	$5,000	100%	1	$5,000
SDC Methodology Administration & Annual Adjustments	$10,000	100%	1	$10,000
SDC Methodology Update	$65,000	100%	10	$6,500
Wastewater SDC Compliance Costs				
Wastewater Facilities Planning/Master Planning	$180,000	50%	10	$9,000
Water System Compliance Costs				
Water Master Planning	$75,000	50%	10	$3,750
Water Conservation and Management Planning	$30,000	50%	20	$750
Storm Drain Compliance Costs				
Storm Drain Master Planning	$90,000	50%	20	$2,250
Parks Compliance Costs				
Parks Master Planning	$50,000	50%	10	$2,500
Transportation Compliance Costs				
Transportation Master Planning (TSP)	$125,000	50%	10	$6,250
Subtotal of Annual Costs	**$630,000**			**$46,000**

Collection of funds to pay for these annual SDC compliance costs should be in the form of a percentage surcharge on all SDC's collected. Therefore, an estimate must be made of the revenue that the City is projecting to collect over the planning period. By using average growth rates over the planning period, Table 1.2.6.b below summarizes the anticipated revenues that are expected for all SDC sectors.

Table 1.2.6.b – SDC Revenue Estimate Summary

Estimates of SDC Revenues	Added EDU's EDU's/yr	SDC Charge per EDU	Annual Revenue
Estimated Annual Wastewater SDC Revenues	29.45	$4,910.91	$144,626.29
Estimated Annual Water SDC Revenues	29.45	$5,242.57	$154,393.63
Estimated Annual Storm Drainage SDC Revenues	29.45	$843.59	$24,843.75
Estimated Annual Parks SDC Revenues	22.09	$1,806.26	$39,895.75
Estimated Annual Transportation SDC Revenues	36.81	$1,162.75	$42,803.76
Total Estimated Annual SDC Revenue			**$406,563.18**
Compliance Cost Charge (Annual cost/Annual Revenue)			**11.31%**

Based on this analysis, it will require a surcharge of around 11% on all SDC's to collect adequate funds to properly administer an SDC program for the City of Toledo.

Section 8.0 of this methodology includes information and details on the establishment of SDC compliance costs.

1.2.7 SDC Summary for all Infrastructure Sectors

The following table summarizes the maximum defendable SDC's for each infrastructure element as developed within this methodology.

Table 1.2.7 – Summary of SDC's for each Infrastructure Sector

Infrastructure Category	Reimbursement SDC SDC	Improvement SDC SDC	Total SDC per EDU per EDU	Rounded SDC per EDU per EDU
Water System SDC Charge*	$0.00	$5,242.57	$5,242.57	$5,243
Wastewater System SDC Charge	$3,758.91	$1,152.00	$4,910.91	$4,911
Storm Drainage System SDC Charge	$0.00	$843.59	$843.59	$844
Transportation System SDC Charge	$0.00	$1,162.75	$1,162.75	$1,163
Parks System SDC Charge	$0.00	$1,806.26	$1,806.26	$1,806
Totals	**$3,758.91**	**$10,207.17**	**$13,966.08**	**$13,966**
			Compliance Charge	**$1,580.17**
			Total SDC Charge	**$15,546.25**

* Note: Seal Rock Customers are charged at a separate rate. See Methodology For Details.

As shown in the table, the sum of all of the separate SDC charges is around $13,966 per EDU. With the addition of the compliance cost surcharge, the total SDC charge increases to $15,546 per EDU.

It should be reiterated that this total charge does not include SDC credits which may be appropriate, depending on the funding mechanisms and other factors, as projects move forward within the City.

1.2.8 Sample SDC Assessment

Residential Customers

A simple example of SDC assessment would be for a new single family dwelling. The assessment for this new customer would be as follows:

Table 1.2.8 – Sample Residential Assessment
Toledo SDC Methodology

SDC Sector	SDC Charge per EDU
Water System SDC	$5,242.57
Wastewater System SDC	$4,910.91
Stormwater System SDC	$843.59
Transportation System SDC	$1,162.75
Parks System SDC	$1,806.26
Subtotal	$13,966.08
Compliance Cost Surcharge	$1,580.17
Total Residential SDC	**$15,546.25**

Therefore a total SDC for all of the SDC programs in Toledo would be around $15,546 for an average new residential dwelling. This does not include any potential reductions for SDC credits that may be appropriate in Toledo, depending on how the City undertakes the various CIP projects in the future.

Non-Residential Customers

Non-residential development will require a more complicated and case-by-case assessment process. Each section within this methodology includes a discussion of the methods that are to be used to assess new residential and non-residential customers.

Appendix C includes a spreadsheet which illustrates various potential land uses in the community, including commercial and residential properties. The spreadsheet includes illustrations of the SDC charge that may be imposed on the different land uses. Appendix C is intended to provide examples only and potential charges and should not be considered as the definitive SDC charges for any one type of land use.

The City may also allow some new nonresidential customers to appeal their assessment and allow the customer to pay some of the assessment while a study is completed of their actual impact to the system. An example of a potential appeal process is provided in Section 3.11 of this methodology. The burden of paying for and making the case for an appeal should rest on the new customer making the appeal.

1.2.9 SDC Ordinance and Methodologies

The SDC program in Toledo is to be established through the municipal ordinance process. A single ordinance will set the ground work for all infrastructure sectors in the City. The ordinance will provide the legal clout necessary to govern the administration and operation of the program. A new ordinance has been prepared as part of this methodology. The new ordinance must pass through the regular and required ordinance process before being adopted as law within the City. Upon completion of the process, the new ordinance will repeal the previous SDC ordinance.

In addition to a new ordinance, a new resolution will be established to set the particular charge and other details for each SDC infrastructure sector. A resolution has been prepared for the water system SDC, sanitary sewer SDC, and so on.

This approach will allow the City to easily update SDC charges on a regular basis by simply passing a new resolution for the SDC program they wish to adjust. There will be no need to adjust the SDC ordinance in the future. Information on updating and adjusting SDC's is provided in Section 2 of this methodology.

2.0 Introduction to SDC Methodology

Section 2

2.1 Background

The City of Toledo owns and maintains a public infrastructure system that includes the following:

- A potable water system complete with raw water intakes, a treatment plant, storage reservoirs, and a distribution system to deliver water to the end users.
- A sanitary sewer system that includes a wastewater collection system, several pumping stations, a treatment plant, and a river outfall for treated effluent.
- A storm drainage system with piping and ditching to convey rainwater runoff from high ground to appropriate outfall locations.
- A transportation system made up of major and minor roads, sidewalks, and other facilities for the purposes of providing transportation within and without the community.
- A simple parks system with open space and other facilities for recreational purposes.

The City of Toledo has long had an SDC program in place. In the early 90's, with the passage of new SDC legislation, an SDC methodology was prepared to set up the framework and structure for an ongoing SDC program in Toledo. Since that time, the SDC charges have been updated several times to address increases in construction costs and as new planning information has become available.

The purpose of this study is to develop and discuss the methodology used to update the existing SDC programs for each of the infrastructure sectors.

2.1.1 Summary of Previous SDC Charge Structure in Toledo (Prior to the 2010 SDC Methodology Update)

Prior to the preparation of this methodology, the City assessed SDC's based on the following assessment methods for each infrastructure element:

1. Wastewater SDC Charge: The current wastewater SDC in Toledo is equal to around $1,144 per typical dwelling unit.
2. Water SDC Charge: The current potable water SDC in Toledo is equal to around $1,472 per typical dwelling unit.
3. Transportation/Storm Drainage SDC: The City does not currently charge an SDC in these sectors.
4. Parks SDC: The City does not currently charge an SDC for parks.

Based on the previous methodologies, the total SDC for a typical residence would have been around $2,616 per new typical equivalent dwelling. This information is provided so that the City may compare the final recommendations in this methodology to typical charges prior to the SDC update.

2.2 Oregon SDC Law

The State of Oregon has established statutory law for the development, assessment, and administration of SDC's for local governments, utility districts, and similar agencies. Oregon Revised Statutes (ORS) 223.297 - 223.314 authorizes local governments and service districts to assess SDC's for various infrastructure sectors including sewer, water, storm drainage, streets, and others.

In addition to specifying the infrastructure systems for which SDC's may be assessed, the SDC legislation provides guidelines on the calculation and modification of SDC's, accounting requirements to track SDC revenues, and the adoption of administrative review procedures. A summary of the statutory SDC provisions is provided below:

2.2.1 SDC Structure

SDC's are typically developed around two separate modes or philosophies of SDC logic. They are:

1. Reimbursement SDC
2. Improvement SDC

SDC's can also be assessed based on a combination of reimbursement and improvement charges. In addition to these charges, the statute allows agencies to recover administrative costs that are necessary to set up, comply with, and administer SDC programs. We will refer to these costs as compliance costs.

Reimbursement SDC. A reimbursement SDC is designed to recover capital costs for projects that have already been undertaken. Current legislation requires that the reimbursement SDC be established by an ordinance or resolution that sets forth the methodology used to calculate and assess the charge. The methodology must integrate a number of factors when determining an appropriate SDC cost including:

1. The cost of existing facilities when they were constructed or implemented
2. Remaining capacity available for growth or development use
3. Prior contributions from existing users
4. The value of unused capacity
5. Ratemaking principles employed to finance the capital improvements
6. Grants or other funding sources that must be subtracted from the eligible costs and
7. Other relevant factors

The objective of a reimbursement SDC is that future system users contribute an equitable portion of the capital costs of developing new facilities with excess capacity.

A typical example of how a reimbursement SDC could be utilized is with a recently upgraded or constructed sanitary sewer pump station. Sanitary sewer pump stations are required to be designed and constructed to handle a future (20 or 25 year) projected capacity. The additional costs required to upsize the pump station for projected flows becomes SDC eligible and part of the SDC methodology calculation for a completed project.

For example, if a pump station was built five years ago, but has additional capacity available for future growth, the value of the remaining unused capacity of the station can be calculated and assessed as a reimbursement SDC eligible project cost to all new customers who wish to utilize some of the remaining capacity during the remainder of the design period (15 or 20 years, or whatever the case may be).

Improvement SDC. The improvement fee is designed to recover costs of planned capital improvements as they appear on an adopted capital improvement list or capital improvement plan (CIP). The improvement fee must also be specified in an ordinance or resolution and is subject to the following conditions:

1. The costs of projected capital improvements will increase the capacity of the system.

2. Projects must appear on an approved and adopted CIP list or be added to the list through development review and approval.

3. Projects must serve more than the development for which the SDC is being charged. Specifically, to be considered a qualified project:

    a. the project is not located on or contiguous to property that is being developed, or

    b. the project is 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.

Revenues generated from improvement fees must be dedicated to capacity increasing capital improvements or the repayment of debt on such improvements. An increase in capacity is established if an improvement increases the level of service provided by existing facilities or provides new facilities. The portion of such improvements funded by improvement fees must be related to current or projected development.

Combined SDC. In most cases, growth needs due to development will be met through a combination of existing available capacity (reimbursement SDC) and future capacity enhancing improvements (improvement SDC). The sum of reimbursement and improvement SDC's is commonly referred to as a combined SDC. However, when utilizing a combined SDC, the methodology must demonstrate that the charge is not based on providing the same capacity-increasing result due to both SDC's. In short, an agency cannot "double-dip" when using a combined SDC. This is usually accomplished by structuring the fee to reflect the weighted average cost of existing and new facilities.

Compliance Costs. Oregon law allows SDC revenue to be utilized by the assessing agency for costs incurred in an effort to comply, administer, study, and update an SDC program. Compliance costs include, but are not necessarily limited to:

1. Auditing and accounting costs

2. Master/Facilities Planning Costs and Planning Updates

3. SDC Methodology Development Costs and Updating of SDC Plans

4. Maintenance of a Capital Improvement Plan (CIP) list

Compliance costs are typically assessed based on a percentage of the overall or maximum anticipated or projected annual SDC revenue. These revenues must be used to maintain or administer an active SDC program. Compliance costs are discussed in Section 8.0 of this Methodology.

2.2.2 SDC Credits

Oregon law requires that an SDC credit be provided against any assessed improvement fee for the construction of "qualified public improvements." Qualified improvements, as discussed above, are improvements that are required as a condition of development approval, are included on the CIP list, and are either:

1. Not located on or contiguous to the property being developed, or

2. 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.

In simple terms and for example, if a new wastewater pump station appears on a CIP list and is required for a specific development to be undertaken, the owner of the development can construct the new pump station and receive an SDC credit for the SDC eligible portion of the project costs, assuming that the new station is needed to serve more customers than are represented by the subject development alone.

An additional credit must be included in the methodology for the present worth of financing payments that may occur in the future for an undertaken improvement. In short, new users cannot be required to pay SDC's for specific improvements as well as pay increased user rates to pay back loans that were required to construct the improvements. This form of "double-dipping" is overcome by establishing a credit based on the present worth of a potential increase in monthly user rates over a specified period of time.

2.2.3 Update and Review Requirements

SDC methodology is public information and must be made available for public review.

The SDC ordinance must include procedures and practices for not only the establishment but the modifying and updating of SDC fees. Public agencies must maintain a list of persons and organizations that have made a written request for notification prior to the adoption or amendment of any new or updated SDC fees.

However, some changes to SDC assessments do not require the agency to follow the public notification process. This includes:

1. changes to costs in materials, labor, or real property as applied to projects in the required project list, or

2. application of a cost index that considers average change in costs of materials, labor, or real property and is published for purposes other than SDC rate setting (i.e. ENR Construction Cost Index)

If changes to the SDC methodology or assessment amounts do represent a modification, the notification provisions in the Oregon law require a 90-day written notice period prior to the first public hearing, with the new SDC methodology available for review at least 60 days prior to the public meeting.

2.2.4 Other SDC Statutory Provisions

Other provisions of the Oregon legislation require:

1. Development of a capital improvement program/plan (CIP) or comparable planning effort that lists the improvements that may be funded with improvement fee revenues and the estimated timing and cost of each improvement. (This is usually accomplished through a master planning effort.)

2. Deposit of SDC revenues into dedicated and individual accounts and the annual accounting of revenues and expenditures. The annual accounting effort must include a list detailing the amount spent on each project funded, in whole or in part, by SDC revenues, including costs attributed to complying with the SDC legislation.

3. Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge any expenditure of SDC revenues.

4. Preclusion against challenging the SDC methodology after 60 days from the enactment of or revision to the SDC ordinance or resolution.

The provisions of the legislation are invalidated if they are construed to impair the local government's bond obligations or the ability of the local government to issue new bonds or other financing. Furthermore, the establishment or modification of an SDC or a project list is not a land use decision issue.

2.3 Capacity Replacement Protocol

It is common to have a system in place that allows a new land use or development to replace an existing land use and provide an adjustment to SDC's.

For example, if someone buys an older house, tears it down, and constructs a new home in its place, no demands or impacts are added to any of the public infrastructure systems. Therefore, no new system capacity is required to service the new residence. Therefore, it would be appropriate to waive SDC fees in this instance.

If someone tears down a number of old homes to build a new apartment complex, the project must be carefully considered, and an adjustment made, depending on how many new units there will be, how much more impervious surface, etc. compared to the previous land use.

Capacity replacement issues must be handled on a case by case basis and a process developed to allow a fair adjustment when existing capacity use is replaced with a similar land use.

2.4 Public Education and Input to Methodology

A successful SDC methodology update must incorporate a public education and public input component that effectively conveys information to interested and affected groups in the community and allows them a forum to ask questions, voice concerns, and seek resolutions. The City held public hearings and followed the statutory requirements for public notification and comment as part of the adoption process.

2.5 Report Organization

The following sections comprise this City of Toledo SDC Methodology as presently constituted:

- **Section 1 – Executive Summary.** This section provides a brief overview and summary of the SDC Plan and is intended to provide the reader with the important facts and findings contained in the overall plan.

- **Section 2 – Introduction.** This section provides information on the background of SDC's in Toledo, related efforts for other infrastructure areas, and the legal and statutory background for the establishment of SDC's within the State of Oregon.

- **Section 3 – Water System SDC Methodology.** This section provides a detailed accounting of the water system SDC methodology.

- **Section 4 – Wastewater System SDC Methodology.** This section provides a detailed accounting of the wastewater system SDC methodology.

- **Section 5 – Storm Drainage SDC Methodology.** This section provides a detailed accounting of the storm drainage SDC methodology.

- **Section 6 – Transportation SDC Methodology.** This section provides a detailed accounting of the transportation SDC methodology.

- **Section 7 – Parks SDC Methodology.** This section provides a detailed accounting of the parks SDC methodology.

- **Section 8 – Compliance Costs.** This section provides a detailed accounting and methodology for the establishment of a compliance cost for the maintenance of SDC programs for all of the SDC methodologies.

- **Appendix.** The Appendix includes information that is referenced in this study but is not included in the referenced planning documents.

Section 3

3.0 Water System SDC Methodology

3.1 Introduction

This section describes in detail, the methodology and SDC calculation for the potable water system for the City of Toledo, Oregon. This section describes the existing and future demand requirements of the system, the projects and project costs developed to address deficiencies and satisfy future demand needs, existing and future equivalent dwelling units for the assessment of the SDC's, and a calculation of the maximum justifiable SDC's for Toledo (per equivalent dwelling unit).

3.2 Water System Overview and Background

The City's Water System Master Plan (April 2010, Civil West Engineering Services, Inc.) has been used to establish present and future water demand, system capacity, improvement project development, project costs, and other information that will be used in this methodology.

This section will seek to provide some basic background information about the system as constituted at the time this methodology was prepared.

3.2.1 Overall Water System Description

The water treatment and distribution system in Toledo includes a number of separate elements to obtain and treat water for domestic consumption, and transmit water to individual customers. A brief overview of the different system elements is provided below.

Source. The City utilizes two sources to supply drinking water to their customers. A summary of the City's raw water supplies and the associated water rights is provided below:

Source Name	Permit	Certificate	Use	Priority Date	Rate (cfs)
Siletz River > Siletz Bay	S9370	~	Municipal	10/24/1929	4.0
Siletz River > Siletz Bay	S12553	14396	Municipal	2/12/1937	1.75
Siletz River > Siletz Bay	S44083	~	Municipal	3/23/1979	4.0
Siletz River (Seal Rock)	S40277	~	Municipal	2/28/1973	2.6
				Siletz Total	12.4
Mill Creek > Yaquina R.	S709	905	Domestic	1/14/1911	5.0
Mill Creek > Yaquina R.	S4085	9040	Domestic	5/15/1919	10.0
Mill Creek > Yaquina R.	S7192	9048	Municipal	12/22/1924	0.75
Unnamed Stream > Mill Cr.	S7191	9047	Municipal	12/22/1924	0.75
				Mill Creek Total	16.50

Storage	Permit	Certificate		Priority Date	Storage (acre-feet)
Mill Creek	S33124	42194		11/9/1959	250

The City has significant water rights but must provide water to not only their own customers but the customers of the nearby Seal Rock Water District which has a slightly larger population than the City of Toledo.

Treatment. The existing water treatment facility was constructed in 1976. The original capacity of the plant is reported to be around 3MGD, though the plant is rarely operated over 1.8 MGD. The plant is a traditional conventional facility utilizing chemical coagulation, flocculation, multi-media filtration, and disinfection.

As the plant is oversized for the current service population, the loading on the facilities is relatively low. The condition of the plant is relatively good considering its age. The master plan recommends some minor maintenance upgrades to extend the useful life of the treatment facilities.

Distribution. Water is stored in the clearwell tank located adjacent to the treatment facility and gravity fed throughout the system. The system is divided into three pressure zones that require the assistance of booster pump stations to transfer water "up" into the higher zones. The City has over 35 miles of distribution piping in their system and the system experiences relatively low levels of unaccounted water (~13.5%).

All services are metered and billing is performed on a monthly basis.

Storage. The City operates two treated water storage tanks within the distribution system, and an above-ground clearwell totaling 2.25 million gallons (MG). A summary of each tank is provided below:

Ammon Road Tank - A painted, welded steel reservoir constructed in the 1970's. 1 MG.

Graham Street Storage Tank – Painted, welded steel reservoir constructed in 1968. 0.4 MG.

WTP Clearwell – A covered concrete reservoir constructed in 1938. 0.85 MG.

The City's reservoirs all require maintenance to address coating issues and the clearwell requires additional improvements to address cracking and leakage in the aged concrete. The City is also deficient from a planning perspective and requires additional storage be added to the system.

3.2.2 Population and Population Projections

The water consuming population in Toledo includes primarily residential customers with a few institutional and commercial accounts. The largest commercial/industrial customer is the GP Mill though most of the Mill's process water comes from a private water intake on Olalla Creek.

The 2010 Water Master Plan Update states that the 2010 population of Toledo was estimated to be 3,683 persons. The City has also historically provided water to the Seal Rock Water District located to the west of Toledo along the Coast between Newport and Waldport. The 2010 population of Seal Rock was estimated at 4,172 persons.

The water master plan developed a growth scenario for the customers of Toledo and Seal Rock. A summary of this scenario is provided in the following figure.

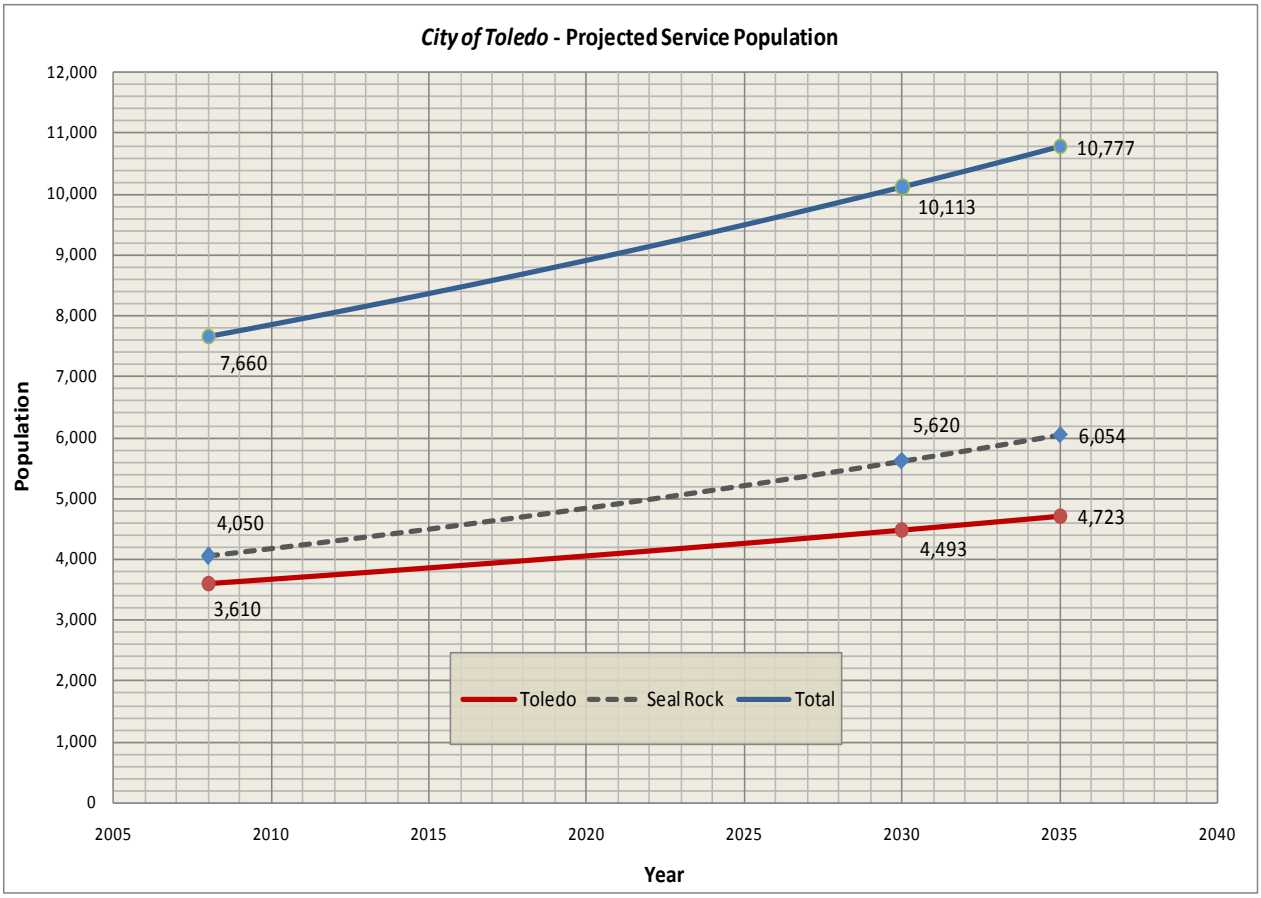

Figure 3.2.2 – Population Projections

3.3 EDU Methodology and Projected Growth

Local water system capacity is commonly defined using a system that seeks to reduce or convert all customer categories, including residential and non-residential categories, to a common denominator generally referred to as an equivalent dwelling unit or EDU. An equivalent dwelling unit represents the demand or quantity of water required on a daily basis by an average residential customer within the system. The cumulative demand or impact on the system generated by all the users can therefore be expressed in terms of a multiple of EDU's.

An example of using the EDU method to describe non-residential water use follows:

> A restaurant is a non-residential water customer that uses more water than a typical household. A review of the water records for a particular restaurant may show that, over a period of time (a typical yearly operation) that the restaurant used as much water as 14 average residential customers in the community. Therefore, it can be said that the restaurant's water use or water demands are equivalent to 14 residential dwellings. More simply, the restaurant is equal to 14 EDU's. This value can be used to calculate and compare the regular water use at the restaurant, or any non-residential customer, to the water use in the residential sector of the system.

In order to project future EDU's it is assumed that the EDU growth rate will equal the population growth rate. This logic assumes that all sectors in the community will grow at a rate similar to that of the

residential population. Under this assumption, it is anticipated that, for example, commercial enterprises (gas stations, restaurants, stores, etc.) will expand in response to population growth and job creation to service a growing population.

A critical portion of the SDC methodology for water is the establishment of the growth of customers during the planning period. In short, how many new EDU's are anticipated to require system capacity over the 20 year planning cycle? The following analysis was performed to determine the growth components for the water system SDC methodology (information obtained from the 2010 Master Plans for Seal Rock and Toledo, Civil West Engineering Services, Inc.):

Toledo
2010 EDU Total 2678
2030 EDU Total 3267
Growth in EDU's 589

Seal Rock
2010 EDU Total 3039
2030 EDU Total 3267
Growth in EDU's 1,054

Combined Growth (EDU's) 1,643

Therefore, based on this analysis, projects that serve Toledo only will be assessable to an estimated 589 EDU's during the planning period. Projects that service both Seal Rock and Toledo will be assessable to an estimated 1,643 EDU's.

3.4 CIP Project Summary and Project Costs

An integral component in this water SDC methodology is the establishment of a Water System Capital Improvement list or CIP. The CIP will list all past and future projects along with their actual or estimated project costs. Projects on the CIP that have been completed will form the basis for reimbursement SDC's as defined in Section 2. Projects that remain to be completed will form the basis for improvement SDC's.

3.4.1 Master CIP List

The City of Toledo Water CIP Master List is provided below in Table 3.4.1. The CIP Master List should be updated regularly as new needs or additional planning arise, resulting in new projects. Likewise, if it is determined that a particular project is no longer needed, it should be dropped from the CIP list.

Table 3.4.1 – Master Water System Improvement Project List (CIP)

Project No.	Project Description	Project Cost	Project Cost Date	ENR Index of Estimate	Current ENR Index	Adjusted Cost Estimate (current)
S1	Skyline Drive 1.6 MG Storage Tank	$1,596,437.00	Apr-10	8671	8671	$1,596,437.00
P1	Skyline Drive Booster Pump Station	$82,650.00	Apr-10	8671	8671	$82,650.00
P2	Wagon Road Pump Station	$192,850.00	Apr-10	8671	8671	$192,850.00
D1	Phase 1 Distribution System Improvements	$1,053,418.00	Apr-10	8671	8671	$1,053,418.00
T1	Water Treatment Maintenance Improvements	$478,935.00	Apr-10	8671	8671	$478,935.00
WS1	Siletz River Raw Water Intake and Pump Station	$2,380,000.00	Apr-10	8671	8671	$2,380,000.00
WS2	Olalla Reservoir Pipeline Crossing	$1,572,500.00	Apr-10	8671	8671	$1,572,500.00
D2	Phase 2 Distribution System Improvements	$1,057,703.00	Apr-10	8671	8671	$1,057,703.00
S2	Ammon Road Storage Tank Refurbishment	$269,150.00	Apr-10	8671	8671	$269,150.00
S3	Graham Street Storage Tank Refurbishment	$149,100.00	Apr-10	8671	8671	$149,100.00
T2	Water Treatment Plant Capacity Improvements	$297,250.00	Apr-10	8671	8671	$297,250.00
WS3	Mill Creek Pump Station and Transmission Piping	$9,600,000.00	Apr-10	8671	8671	$9,600,000.00
	Totals	**$18,729,993.00**				**$18,729,993.00**

The CIP project list above indicates the date when the original project cost estimate was prepared. Another column is provided indicating the corresponding Engineering News Record Index (ENR Index) for the original cost estimate. The ENR Index value is updated monthly to adjust for inflation, material and labor costs, changes in the industry, and other factors that affect the cost of engineering and construction efforts.

3.4.2 Need for Projects on List Not in Existing Planning Documents

All of the projects on the CIP were developed within the 2010 Water Master Plan. No additional bridge planning information is required.

3.5 Determination of Project SDC Eligibility

The SDC methodology must include a discussion of the percentage of each project's cost that can be attributed as necessary for growth and, therefore, be considered SDC eligible. As discussed previously, SDC's must be based on a project's costs or the portion of a project's cost that is necessary to add system capacity in response to or in anticipation of growth. Creating this "growth nexus" is the critical test for SDC eligibility.

When determining what percentage of a project should be considered SDC eligible, one must consider existing capacity needs versus future capacity needs. If a project is developed to provide a 50% increase in capacity to an element of the water treatment or distribution system, 50% of the project costs would be considered to be SDC eligible. If a project is developed to provide service to a new area not currently served by municipal water and where development is expected to occur, the project could be considered to be 100% SDC eligible.

Using this approach, all of the projects presented in Section 3.4 were reviewed to determine SDC eligibility. For projects already completed, the actual project costs were used to determine eligible SDC reimbursement costs. For projects that have not yet been completed, costs can be adjusted and updated using the ENR Index as developed above in Table 3.4.1.

It is also important to identify which projects are assessable to new Toledo customers along and which projects should be shared by Seal Rock customers and at what percentage.

A brief description is provided below to illustrate the logic and approach taken to determining the eligibility of each project on the CIP list.

Project S1: Skyline Drive 1.6 MG Storage Tank

The City is 1.1 MG deficient for storage now (2010). They require an additional 500,000 gallons of storage for projected demands. Therefore, the tank project should be considered as 31.25% SDC eligible (0.5/1.6 = .3125). This project should be considered as assessable to Toledo growth only.

Project P1: Skyline Booster Pump Station

This project is tied to project S1 and should be considered at the same level of SDC eligibility as that project or 31.25%.

The project should be assessable to Toledo growth only.

Project P2: Wagon Road Pump Station

This project is also tied to Project S1 and should be considered at the same level of SDC eligibility or 31.25%.

The project should be assessable to Toledo growth only.

Project D1: Phase 1 Distribution System Improvements

Because pipeline sizing is generally driven by fire flow needs, it is difficult to determine the individual capacity needs created by domestic consumption. However, as growth increases, fire flow requirements in the system will also increase. This section identifies that intake and transmission capacity increases are between 31% and 50%. To be conservative, it is recommended that distribution system projects in Toledo be considered as 20% SDC eligible as they will increase both the domestic and fire flow capacities in the system in response to system-wide growth.

These projects should be assessable to Toledo customers only.

Project T1: Water Treatment Maintenance Improvements

As this project focuses on maintenance and does not increase the capacity of the facility, it should not be considered as SDC eligible.

Project WS1: Raw Water Intake Pump Station – Siletz River

The nominal capacity of the intake and pump station are currently around 1,000 gpm. Projected future needs require the pump station to be increased to around 1,600 gpm. That would make the increased capacity approximately 37.5% based on the increased flow needs. Therefore, this project should be considered to be 37.5% SDC eligible.

The project should be assessable equally to both Seal Rock and Toledo growth.

Project WS2: Olalla Reservoir Pipeline Crossing Replacement

This project does not seek to increase capacity nor is it required due to growth. This is a maintenance project and should not be considered as SDC eligible.

Project D2: Phase 2 Distribution Piping Improvements

Like Project D1, this project will increase the capacity of the system and is, in part, necessary due to growth. Therefore, like Project D1, it is conservatively recommended that this project be considered as 20% SDC eligible.

The project should be assessable to Toledo growth only.

Project S2: Ammon Road Storage Tank Improvements

This project is a maintenance project and should not be considered as SDC eligible.

Project S3: Graham Street Tank Improvements

This project is a maintenance project and should not be considered as SDC eligible.

Project T2: Water Treatment Plant Capacity Improvements

Like the Siletz Intake, the plant is currently capable of a nominal and consistent treatment capacity of around 1,000 gpm. This project will seek to make improvements that will allow the plant to operate at 1,600 gpm for extended periods to meet the projected capacity needs for the system. Therefore, the project should be considered at 37.5% SDC eligible.

This project should be assessable to Seal Rock and Toledo growth, equally.

Project WS3: Mill Creek Pump Station and Piping Improvements

Because the water system has two sources that are used at different times of year, this project is necessary to service existing and projected customers. The existing Mill Creek system has a capacity of around 800 gpm. It is projected to need to be able to provide 1,600 gpm in the future. Therefore, this project should be considered to be 50% SDC eligible.

This project should be assessable to Seal Rock and Toledo growth, equally.

Table 3.5.1 below summarizes all of the projects on the CIP and lists the SDC eligibility and percentages for each project. Note that projects that are to be assessed to Toledo only are identified as Type A projects and projects that are to be shared between Seal Rock and Toledo are identified as Type B projects.

Table 3.5.1 – Water System Project SDC Eligibility Summary

Project No.	Project Description	Adjusted Cost Estimate (current)	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	Share Type A or B	% SDC Eligible	SDC Eligible Cost
S1	Skyline Drive 1.6 MG Storage Tank	$1,596,437.00	N	Y	A	31.25%	$498,886.56
P1	Skyline Drive Booster Pump Station	$82,650.00	N	Y	A	31.25%	$25,828.13
P2	Wagon Road Pump Station	$192,850.00	N	Y	A	31.25%	$60,265.63
D1	Phase 1 Distribution System Improvements	$1,053,418.00	N	N	A	20.00%	$210,683.60
T1	Water Treatment Maintenance Improvements	$478,935.00	N	N	B	0.00%	$0.00
WS1	Siletz River Raw Water Intake and Pump Station	$2,380,000.00	N	Y	B	37.50%	$892,500.00
WS2	Olalla Reservoir Pipeline Crossing	$1,572,500.00	N	N	B	0.00%	$0.00
D2	Phase 2 Distribution System Improvements	$1,057,703.00	N	N	A	20.00%	$211,540.60
S2	Ammon Road Storage Tank Refurbishment	$269,150.00	N	N	A	0.00%	$0.00
S3	Graham Street Storage Tank Refurbishment	$149,100.00	N	N	A	0.00%	$0.00
T2	Water Treatment Plant Capacity Improvements	$297,250.00	N	Y	B	37.50%	$111,468.75
WS3	Mill Creek Pump Station and Transmission Piping	$9,600,000.00	N	N	B	50.00%	$4,800,000.00
	Totals	**$18,729,993.00**					**$6,811,173.26**

3.6 Reimbursement SDC

As stated previously, Oregon Law includes provisions for a reimbursement SDC to be developed for projects that have been completed and that have remaining capacity available to service growth. In the City's previous SDC methodology (Bartlett, 1994), the value of available capacity in the system was determined to result in a reimbursement SDC of $180. This was calculated based on an estimate of the original value of the system, minus depreciation, minus payments and divided by total system capacity.

It is difficult today to accurately determine these values. It is also reasonable to assume that that much of the system is old and has completed been depreciated of its value over time. Therefore, it is recommended that the City take the conservative approach of not assessment as reimbursement SDC for the water system at this time.

As projects are completed over time, they will need to be transitioned from improvement SDC projects to reimbursement SDC projects.

3.7 Improvement SDC

Calculation of the improvement SDC is based upon the methodology and the establishment of the SDC eligible project costs as outlined in Section 3.5 above. The following table provides a summary of the total cost of SDC eligible projects on the CIP that have not yet been constructed.

Table 3.7.1 illustrates the calculation used to establish the improvement SDC for the Toledo water system (Type A Projects). Table 3.7.2 summarizes the improvement SDC calculation for projects that should be shared between Seal Rock and Toledo (Type B Projects).

Table 3.7.1 – Toledo Improvement SDC Summary – Water System
Toledo Only or Type A Projects

Project No.	Project Description	SDC Eligible Cost
S1	Skyline Drive 1.6 MG Storage Tank	$498,887
P1	Skyline Drive Booster Pump Station	$25,828
P2	Wagon Road Pump Station	$60,266
D1	Phase 1 Distribution System Improvements	$210,684
D2	Phase 2 Distribution System Improvements	$211,541
	Total Improvement Eligible Costs (A)	$1,007,204.51
	Total Growth EDU's (B)	589
	Maximum Improvement Water SDC (A/B)	**$1,710.02**

Table 3.7.2 – Toledo Improvement SDC Summary – Water System
Shared Projects Type B Projects

Project No.	Project Description	SDC Eligible Cost
WS1	Siletz River Raw Water Intake and Pump Station	$892,500
T2	Water Treatment Plant Capacity Improvements	$111,469
WS3	Mill Creek Pump Station and Transmission Piping	$4,800,000
	Total Improvement Eligible Costs (A)	$5,803,968.75
	Total Growth EDU's (B)	1,643
	Maximum Improvement Water SDC (A/B)	**$3,532.54**

Therefore, based on this methodology, the improvement components of the Toledo water system SDC should not exceed approximately $1,890 for Type A Projects (Toledo only) or $3,533 for Type B Projects (shared).

3.8 SDC Credits – Water System

An analysis of potential SDC credits should be included as part of an SDC methodology. Credits may be appropriate to offset financing costs that will be paid by all system customers including new customers. Credits are also appropriate for developers who construct or otherwise provide improvements to the system that are part of the current CIP project list. A brief description of a few potential SDC credit scenarios is provided below.

3.8.1 Improvement Offset Credit

In the case of a developer completing some or all of a CIP project, the credit provided should be equal to the value of the improvement made, though the credit cannot exceed the amount of SDC that the developer would have been required to pay.

For example:

> Assume that a developer undertakes a subdivision that would require him to pay $200,000 in SDC fees for the water system. This same developer elects to construct a new waterline to service his development. As the waterline is part of the City's water system CIP, the developer's efforts make him eligible to receive an SDC credit for the improvements that he completed. If we assume the project cost to install the waterline is around $300,000, the developer is only eligible to receive SDC credits up to the $200,000 that he would have paid into SDC's.

It should be noted that the determination of improvements offset credits requires judgment as development situations can vary. The City should maintain an open policy when working with developers to identify a fair and reasonable offset credit when it applies.

It should also be reiterated that offset credits are not available for improvements undertaken by the developer that do not appear on the City's CIP and are not part of the SDC methodology. They are also not available for improvements that benefit only a single developer or property.

3.8.2 Financing Credit - Project Costs and Potential Loan Amounts

Financing credits should be applied to SDC's so that new users who are assessed an SDC do not end up paying twice due to new debt loads incurred by the City to undertake improvements or portions of improvements intended to increase system capacity. As growth-related debt service may be repaid with SDC revenue, it is critical that the users who have paid SDC's receive an appropriate credit for the present value of rate increases that will likely be imposed for the purposes of paying back debt.

Establishing a precise financing credit for the City of Toledo is difficult as it is not currently known to what level the City will elect to undertake projects, how those projects will be funded, or what percentage of the project funding will require a rate increase.

When this information is available, the City should establish a credit schedule to adjust SDC's for new users to avoid a double-charge for funding improvements.

3.8.3 Present Worth Analysis of User Rate Increase and SDC Credits

It would be appropriate to provide a credit to new customers to offset the "double-dip" effects of paying an increased rate to payback a loan supporting the SDC eligible portion of a project in addition to paying the SDC itself. The following example will illustrate:

Assume the City undertakes a $1,000,000 project to construct a new facility. It is determined that the project is 50% SDC eligible and the other half of the project will be paid through a loan. The terms of the loan are as follows:

Term: 20 years (240 months)
Rate: 5%
Principal: $1,000,000 with $500,000 being SDC eligible
Number of EDU's setting rate of payback: Existing customer base or 640 EDU's

Assuming the City obtains the $1,000,000 loan, a monthly rate increase of around $10.31 per EDU would be required. Approximately $5.15 of that increase would be to cover the SDC eligible portion of the project. New customers would be charged an SDC to pay for their share of the SDC eligible portion of the project.

To avoid charging a rate increase in addition to an SDC, a present worth analysis of the $5.15 portion of the rate increase should be completed and a credit established. The amount of the credit will vary depending on the period of time in the planning period that the new customer joins the system and begins paying the higher rates. A range of potential credits for this example scenario is discussed below:

1. *A new customer joins the system early in the planning period and has nearly 20 years of increased rate payments in front of them. In this case, the present worth of a $5.15 per month rate increase over 20 years (at 5% interest) is around $780.*
2. *A new customer joins the system in the middle of the planning period with only 10 years of increased payments in front of them. Under this scenario, the present worth of a $5.15 rate increase over 10 years (at 5% interest) is around $486.*
3. *A new customer joins the system toward the end of the planning period with only 5 years remaining in the 20-year planning cycle. Under this scenario, the present worth of a $5.15 rate increase over the remaining 5 years (at 5% interest) is around $273.*

The amount of the credit that would be appropriate to offset the "double-dip" effect of a rate increase and an SDC charge varies with the following:

1. The amount of the loan and the resulting rate increase required to pay it back
2. The percentage of SDC eligibility for a specific project
3. The number of years remaining within the planning period or the remaining term left on the loan payback

Should the City elect to offer an SDC credit to offset a "double-dip" effect, a credit schedule should be established once a project is undertaken, a loan obtained, and a rate increase set to pay back the loan. A simple schedule can be established that varies based on years or months of time into the loan terms. When a new customer joins the system, the City can simply review the credit schedule for each affected project and total up each credit depending on the month that the new customer joins the system.

3.9 Water System SDC Summary

Section 3 has been developed to provide the City of Toledo with the methodology needed to establish the maximum allowable SDC's for the water treatment and distribution system. The following table provides a summary of the information utilized to complete this analysis:

Table 3.9.1 – Water System SDC
Summary per EDU (before compliance costs)

SDC Component	SDC Amount
Improvement Fee - Toledo Residents	$5,242.57
Improvement Fee - Seal Rock Residents	$3,532.54
Reimbursement Fee	$0.00

Based on the summary in Table 3.9.1, the maximum defendable SDC for the water system is around $5,242 per EDU *without the application of an SDC credit or SDC compliance costs* for new growth in Toledo and approximately $3,533 per EDU for new growth in the Seal Rock Water District.

It should be reiterated that this calculation represents the maximum SDC's that can be assessed and defended with proper methodology. The City has the autonomy to charge less than this amount if desired. However, if adequate SDC fees are not collected and projects must be undertaken to satisfy growth requirements, funds will have to be obtained from other sources such as from user rate increases.

3.10 SDC Assessment Schedule for Residential and Non-Residential Customers

The SDC established in Section 3.9 above is based on a cost per EDU or cost per single residential dwelling. For most non-residential developments, a plan review must be performed to determine the equivalent number of EDU's the development will require.

3.10.1 Residential and Nonresidential Assessment Table

The following tables should be used to assess water system SDC's for both residential and non-residential customers who wish to connect to the Toledo water system:

Table 3.10.1 – Residential and Non-Residential Customers Assessment Schedule for Water and Wastewater System SDC's

Enterprise	Number of EDU's	Units
Apartments	0.75	per dwelling unit (EDU)
Apparel Store	0.2	per 1,000 ft²
Athletic Club	0.3	per 1,000 ft²
Auto Care	0.1	per service bay
Auto Parts Sales	0.2	per 1,000 ft²
Auto Sales	0.2	per 1,000 ft²
Bank, Drive-in	0.3	per 1,000 ft²
Bank, Walk-in	0.3	per 1,000 ft²
Building Material and Lumber Store	0.2	per 1,000 ft²
Cab Company	0.2	per 1,000 ft²
Car Wash, Automated	na	See meter sizing assessment in Table 3.10.2
Car Wash, Self Service	0.7	per stall
Cemetery	0.2	per 1,000 ft²
Church	0.2	per 1,000 ft²
Community/Junior College	1.0	Per 250 gross square ft²
Convenience Market (Open 24 Hours)	0.2	per 1,000 ft²
Convenience Market (Open 15-16 Hours)	0.2	per 1,000 ft²
Convenience Market with Gasoline Pumps	0.2 0.1	per 1,000 ft² per pump
Day Care	0.2	per student
Drinking Establishment	0.7	per 1,000 ft²
Furniture Store	0.2	per 1,000 ft²
Hardware/Paint	0.2	per 1,000 ft²
Health/Fitness Club	0.3	per 1,000 ft²
Hospital	1.0	See meter sizing assessment in Table 3.10.2
Industrial	1.0	See meter sizing assessment in Table 3.10.2
Library	0.2	per 1,000 ft²
Lodge/Fraternal	0.3	per 1,000 ft²
Manufacturing	0.2	per 1,000 ft²
Medical/Dental Office	0.4	per 1,000 ft²
Mini-warehouse Storage and warehouses	0.1	per 1,000 ft²
Mobil Home Park	0.75	Per dwelling unit
Motel (not including laundry facilities or pools)	0.3	per room
Nursery Garden Center	0.2	per 1,000 ft²
Nursing Home	0.3	per bed
Office Building	0.2	per 1,000 ft²
Retail establishment, shopping center, grocery, etc.	0.2	per 1,000 ft²
Post Office	0.2	per 1,000 ft²
Quick Lubrication Vehicle Stop	0.1	per bay
Recreational Facility, Multipurpose	0.3	per 1,000 ft²
Restaurant, any type	4	per 1,000 ft²
Schools	1.4	Per 250 gross square ft²
Service Station	0.1	per bay
Service Station w/Convenience Market	0.1 0.2	per pump per 1,000 ft²
Townhouse/Condo/Duplex	1	per unit
Single Family Detached Housing	1	per house
Pools and aquatic facilities	na	See meter sizing assessment in Table 3.10.2
Brewery	na	See meter sizing assessment in Table 3.10.2
Movie Theatre	0.3	per 100 seats
Commercial/Coin-Op Laundry	1	Per washing machine

Table 3.10.2 – Equivalency Table to Convert Meter Size To Equivalent Dwelling Units for Customers not Included in Table 3.10.1

Meter Size	Hydraulic Capacity Factor	No. of EDU's
3/4"	1	1.0
1"	1.67	1.7
1-1/2"	3.33	3.3
2"	5.33	5.3
3"	10.67	10.7
4"	16.67	16.7
6"	33.33	33.3
8"	53.33	53.3
10"	76.67	76.7

When a specific land use is not included in Table 3.10.1 or if the table does not fit the application well, Table 3.10.2 can be used to convert the meter size of a new customer into an equivalent EDU amount. Staff should review the new customer's land use plans carefully to ensure that the proper meter size is being utilized by the new property.

3.11 Potential Appeal Process for Calculation of Water System EDU's:

While Tables 3.10.1 and 3.10.2 include a wide assortment of residential and non-residential customer types and meter size estimates along with an estimate of the number of EDU's that should be associated with a new customer, you cannot address all potential customers through simple tables. Furthermore, in some cases, the assessment system may not fairly represent a new customer's actual impact on the water system. This is often the case in the commercial or industrial developments where water use varies greatly from one business to another. In these cases, the City may choose to allow for an appeal process so that new customers are assessed at a fair and reasonable rate.

The following discussion provides a sample appeal process which may be utilized in Toledo when it is deemed appropriate by the City:

A single EDU in Toledo is assumed to be a water demand of around 5,350 gallons per month on average. If a new customer disagrees with the assessment that is calculated using Table 3.10, they may be allowed to appeal the assessment and request a trial period to track water use and compare their own water consumption (and therefore their equivalent water demand) to the average City water usage per EDU. In these cases, water use should be monitored between the months of November to April through the new customer's water bills. If time allows, a full year could be utilized to develop an average for the new customer. The average monthly water consumption of the new customer should be compared against the City's typical average. If this results in a lower EDU rating, an adjustment to the assessment could be made.

The City may wish to hold an SDC deposit during the appeal period. The amount of the deposit should be established by the City. A reasonable deposit amount equal to one-half (1/2) the amount estimated using Table 3.10 may be appropriate. Depending on the results of the winter water use, the new user may either receive a refund of some of the SDC payment or be required to pay additional SDC costs.

A specific example of the above appeal process follows:

A new restaurant wishes to open in Toledo. Through a plan review, it is determined that the restaurant has 2,000 square feet of floor space. Based on Table 3.10.1 the assessment to the restaurant would be for 8 EDU's.

The restaurant owner protests and appeals this calculation. They are assessed for 4 EDU's as a deposit and are allowed to track the water use during the winter months of their first year in operation. At the end of this period, they produce water bills showing that they used an average of 30,000 gallons per month. This equates to around 5.6 EDU's of water use.

The restaurant is charged for an additional 1.6 EDU's worth of water system SDC's. Through the appeal process, the restaurant reduced the SDC assessment for water by 2.4EDU's.

The inclusion of an appeal process will necessitate additional administration of individual customer SDC issues, and may increase the costs associated with SDC compliance and administration. Appeals should only be considered for non-residential customers. However, as the majority of the growth in Toledo will be in the residential sector, the potential for appeals from the non-residential sector is limited.

With regard to the residential sector, it is recommended that the City seek to keep the assessment method as simple as possible. Each new home should be assessed on a single EDU basis with no adjustments to be made for square footage, fixture counts, or other more complex methods.

Section 4

4.0 Wastewater System SDC Methodology

4.1 Wastewater Collection System

This section describes in detail the calculations, background information, and methodology used to develop and identify the maximum defendable SDC for the City of Toledo wastewater system. This section will describe the existing and future capacity requirements of the system, as well as projects and estimated costs to address deficiencies and satisfy future capacity requirements.

Existing and future equivalent dwelling units for assessment of the SDC's, as described in Section 3 for the water system, will also be utilized in this Section for the wastewater system. A calculation of the maximum defendable SDC per EDU for the wastewater system is developed herein.

4.2 Wastewater System Overview

The City's Wastewater Facilities Plan (Clearwater Engineering Corporation, 1993) was used to establish background planning for the wastewater system. The plan includes a capital improvement plan and makes recommendations for the percentage of SDC eligibility for each recommended improvement.

Some additional bridge planning was required to update or expand the CIP for the purposes of this SDC methodology until new planning is available.

4.2.1 Overall Wastewater System Description and Background

The City of Toledo owns and maintains a wastewater system for the collection, transmission, and treatment of municipal wastewater. The system is composed of gravity sewer piping and manholes, wastewater pump stations and their associated force mains, a wastewater treatment facility, and an outfall for treated effluent into the Yaquina River.

The original wastewater treatment facility was built in 1954. The plant was upgraded in 1991 and again in 2001 and has provided relatively good and reliable service to the City throughout its life. The plant is aging and does experience flows that exceed plant capacity during winter storm events.

4.2.2 Service Population

For the purposes of this methodology, it has been assumed that the service population is largely the same as the water system. Therefore, the population analyses and projections developed in the 2010 water master plan should be used. The population analysis is summarized in section 3.2 of this methodology.

4.3 EDU Methodology and Projected Growth

As with population, the EDU profile of the wastewater service population is assumed to be substantially similar to that of the water system. Therefore, the EDU analysis developed in the water SDC methodology is to be used within the wastewater methodology also. A summary of the SDC methodology for the wastewater system is provided below:

Toledo

2010 EDU Total	2,678
2030 EDU Total	3,267
Growth in EDU's	589

Based on these figures, the City should add around 30 new EDU's on average for each year of the planning period. This growth potential includes all residential, commercial, industrial, and other sectors of growth.

4.4 Project Summary and Project Costs (CIP)

The City's referenced Wastewater Facilities Plan includes detailed planning and project costs for many capital improvements in the wastewater system. This ranges from piping improvements to treatment plant upgrades.

As the City's Wastewater Facilities Plan is relatively out of date, this section will provide some updated planning information and serve as conservative bridge planning until the facilities plan is updated.

The following sections provide information on the projects that appear on the City's current wastewater CIP.

4.4.1 Project Descriptions

The following provides brief descriptions of the projects appearing on the wastewater capital improvement plan.

Project 1 - Collection System Rehabilitation Projects

This project is planned to address the high levels of inflow and infiltration in the collection system. The project includes evaluation and field investigations as well as rehabilitation projects to correct identified deficiencies.

The project has an estimated budget of $2-million. At the time this methodology was prepared, field investigations were underway.

As this project is considered to be maintenance and has no nexus with growth or capacity, it is not considered to be SDC eligible.

Project 2 – 'A' Street Pump Station Upgrades

The A Street Pump Station requires upgrading to address age and capacity issues. Project costs for improvements are based upon figures obtained from the 1993 Facilities Plan. The costs have been updated for inflation per the ENR index and marked up to include contingency and engineering costs. See table 4.4.3 for the current planning costs for the A Street Pump Station upgrades.

Improvements are needed to address a near equal part of maintenance and capacity needs. Therefore, it is recommended that the project be considered as 33% SDC eligible.

Project 3 – Butler Bridge Pump Station Upgrades

The Butler Bridge Pump Station requires upgrades to address maintenance and capacity issues. Project costs for improvements are based upon figures obtained from the 1993 Facilities Plan. The costs have been updated for inflation per the ENR index and marked up to include contingency and engineering costs. Also, additional costs have been included to add a new force main for the project. It was estimated that approximately 1,500 feet of 12" diameter force main will be required. See table 4.4.3 for the current planning costs for the Butler Bridge Pump Station upgrades.

Improvements are needed to address both maintenance and capacity needs. Therefore, it is recommended that the project be considered as 33% SDC eligible.

Project 4 – Ammon Road Pump Station Upgrades

The Ammon Road Pump Station requires upgrades due to age and capacity needs. The pump station serves an area with significant growth potential and must be upgraded to service that anticipated growth. The project will require a major upgrade and a new force main. Project costs for improvements are based upon figures obtained from the 1993 Facilities Plan. The costs have been updated for inflation per the ENR index and marked up to include contingency and engineering costs. See table 4.4.3 for the current planning costs for the Ammon Road Pump Station upgrades.

Because the improvements are required to address both existing deficiencies and capacity needs that are anticipated to be posed by growth, it is recommended this project be considered as 50% SDC eligible.

Project 5 – High School Pump Station Upgrades

The High School Pump Station requires upgrading to address age and capacity issues. Project costs for improvements are based upon figures obtained from the 1993 Facilities Plan. The costs have been updated for inflation per the ENR index and marked up to include contingency and engineering costs. See table 4.4.3 for the current planning costs for the High School Pump Station upgrades.

Improvements are needed to address both maintenance and capacity needs. Therefore, it is recommended that the project be considered as 50% SDC eligible.

Project 6 – Hospital Pump Station Upgrades

The Hospital Pump Station requires upgrading primarily to address age and maintenance issues but should be upsized to address some capacity needs. Project costs for improvements are based upon figures obtained from the 1993 Facilities Plan. The costs have been updated for inflation per the ENR index and marked up to include contingency and engineering costs. See table 4.4.3 for the current planning costs for the Hospital Pump Station upgrades.

As this project is required primarily as a maintenance project, it is recommended that it be considered as 25% SDC eligible for the capacity increases that will be included in the project.

Project 7 – Wastewater Facilities Plan Update

The City's current wastewater facilities plan was completed in 1993 making it more than 17 years old. Facilities plans are required to be updated at least every 20 years. The current plan is out of date with current needs and should be updated as soon as possible. For this reason, we are recommending that the

facilities plan update be included on the current CIP and that funds are budgeted for the completion of the plan.

We recommend that the project be considered 50% SDC eligible as it will address some existing issues as well as plan for growth in the coming planning period.

Project 8 - Wastewater Treatment Plant Upgrades

The City completed a wastewater plant upgrade project in 2001. The $4.1-million project expanded the capacity and upgraded the technology of the facility. Prior to the project, the plant had a nominal capacity of 1.2 MGD. The upgrade project resulted in a nominal capacity of 2.6 MGD. Virtually all of the additional capacity is available today to service new growth.

As this project was completed, the project should be considered as part of the reimbursement SDC calculation as there is available capacity for new customers available as a result of this project. The percentage of project SDC eligibility is recommended to be set at 54% as this is the amount of capacity expansion resulting from the project.

4.4.2 Wastewater CIP Project List Summary

Table 4.4.2 below summarizes the CIP projects developed above along with the original project costs and the updated project costs based on increases in the ENR index.

Table 4.4.2 – Wastewater CIP Project Summary List

Project No.	Project Description	Project Cost	Project Cost Date	ENR Index of Estimate	Current ENR Index	Adjusted Cost Estimate (current)
1	Collection System Rehabilitation - Phase 1	$2,000,000.00	40269	8671	8671	$2,000,000.00
2	A Street Pump Station Upgrades	$71,663.00	Jan-95	5471	8671	$164,689.33
3	Butler Bridge Pump Station Upgrades	$450,000.00	Apr-10	8671	8671	$652,500.00
4	Ammon Road Pump Station Upgrades	$91,618.00	Jan-95	5471	8671	$210,548.08
5	High School Pump Station Upgrades	$174,195.00	Jan-95	5471	8671	$400,318.96
6	Hospital Pump Station Upgrades	$23,358.00	Jan-95	5471	8671	$53,679.21
7	Wastewater Facilities Plan Update	$180,000.00	Apr-10	8671	8671	$180,000.00
8	2001 Wastewater Treatment Facility Expansion	$4,100,000.00	na	na	8671	$4,100,000.00
				Total		**$7,761,735.58**

The CIP project list above indicates the date when the original project cost estimate was prepared. Another column is provided indicating the corresponding Engineering News Record Construction Cost Index (ENR Index) for the original cost estimate. The ENR Index value is updated monthly to adjust for inflation, material and labor costs, changes in the industry, and other factors that affect the cost of engineering and construction efforts. In the future, costs on the CIP can be updated using the new ENR values as needed. Updates for changes in the ENR index should be processed every year or two.

4.4.3 Determination of Project SDC Eligibility

As discussed earlier in this section, each project was reviewed and evaluated for SDC eligibility. A percentage of SDC eligibility is recommended for each project based on the logic presented herein. As is always the case, some projects are intended for maintenance or to replace existing capacities. These projects would not be considered to be eligible for SDC funds.

Table 4.4.3 below provides a summary of the wastewater CIP projects and the amount of SDC eligibility that should be considered for each project based on the analysis presented above.

Table 4.4.3 – Wastewater System Project SDC Eligibility Summary

Project No.	Project Description	Adjusted Cost Estimate (current)	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	% SDC Eligible	SDC Eligible Cost
1	Collection System Rehabilitation - Phase 1	$2,000,000.00	N	N	0%	$0.00
2	A Street Pump Station Upgrades	$164,689.33	N	Y	33%	$54,347.48
3	Butler Bridge Pump Station Upgrades	$652,500.00	N	Y	33%	$215,325.00
4	Ammon Road Pump Station Upgrades	$210,548.08	N	Y	50%	$105,274.04
5	High School Pump Station Upgrades	$400,318.96	N	Y	50%	$200,159.48
6	Hospital Pump Station Upgrades	$53,679.21	N	Y	25%	$13,419.80
7	Wastewater Facilities Plan Update	$180,000.00	N	Y	50%	$90,000.00
8	2001 Wastewater Treatment Facility Expansion	$4,100,000.00	Y	N	54%	$2,214,000.00
					Total	**$2,892,525.80**

The identified SDC eligible costs above will be used to calculate appropriate reimbursement and improvement SDC for the wastewater system in Toledo below.

4.5 Calculation of Wastewater Reimbursement SDC

Oregon Law includes provisions for a reimbursement SDC to be developed for projects that have been completed and that have remaining capacity available to service growth. This section will establish the methodology and the charge for water system reimbursement SDC's in Toledo for the wastewater system. A summary of the recommended reimbursement SDC for the piping improvements is provided below:

Table 4.5.1 - Reimbursement SDC Calculation Summary

Project No.	Project Description	SDC Eligible Cost
8	2001 Wastewater Treatment Facility Expansion	$2,214,000.00
	Total Reimbursement Eligible Costs (A)	$2,214,000.00
	Total Growth EDU's per Section 4.3 (B)	589
	Maximum Reimbusement Wastewater SDC (A/B)	**$3,758.91**

Based on the above analysis, the reimbursement SDC for the wastewater system should not exceed approximately $3,759.

4.6 Calculation of Wastewater Improvement SDC

Calculation of the improvement SDC will be based upon the methodology and the establishment of the SDC eligible project costs as outlined earlier in this section. The following table provides a summary of the total cost of SDC eligible projects recommended in the Wastewater Facilities Plan that have not yet been constructed. In order to account for construction cost increases since the time of the Facilities Plan, we have used prorated costs based on the current ENR Index.

Table 4.6.1 – Improvement SDC Calculation Summary

Project No.	Project Description	SDC Eligible Cost
2	A Street Pump Station Upgrades	$54,347.48
3	Butler Bridge Pump Station Upgrades	$215,325.00
4	Ammon Road Pump Station Upgrades	$105,274.04
5	High School Pump Station Upgrades	$200,159.48
6	Hospital Pump Station Upgrades	$13,419.80
7	Wastewater Facilities Plan Update	$90,000.00
	Total Improvement Eligible Costs (A)	$678,525.80
	Total Growth EDU's per Section 4.3 (B)	589
	Maximum Improvement Wastewater SDC (A/B)	**$1,152.00**

Based on this methodology, a wastewater improvement SDC in Toledo should not exceed approximately $1,152 per EDU.

The SDC values discussed previously have not been adjusted for SDC credits or compliance costs.

4.7 SDC Credits – Wastewater System

An analysis of potential SDC credits should be included as part of an SDC methodology. Credits may be appropriate to offset financing costs that will be paid by all system customers including new customers. Credits are also appropriate for developers that construct or otherwise provide improvements to the system that are part of the current CIP project list. A brief description of potential SDC credit scenarios is provided below:

4.7.1 Improvement Offset Credit

In the case of a developer completing some or all of a CIP project, the credit provided should be equal to the value of the improvement made, though the credit cannot exceed the amount of SDC that the developer would have been required to pay.

For example: Assume that a developer undertakes a subdivision that would require him to pay $200,000 in SDC fees for the wastewater system. This same developer elects to construct a sewer pump station to service his development and other potential growth areas. As the pump station is part of the City's wastewater system CIP, the developer's efforts make him eligible to receive an SDC credit for a portion of the improvements that he completed. If we assume the project cost to construct the wastewater pump station is around $500,000, the developer is only eligible to receive SDC credits up to the $200,000 that he would have paid into SDC's.

It should be noted that determination of improvements offset credits can require some judgment as development situations can vary. The City should maintain an open policy when working with developers to identify fair and reasonable offset credits when they apply.

It should also be reiterated that offset credits are not available for improvements undertaken by the developer that do not appear on the City's CIP and are not part of the City's SDC methodology.

4.7.2 Financing Credit - Project Costs and Potential Loan Amounts

It may also be appropriate to provide a credit to offset the "double-dip" effect that could result from a new customer paying an SDC as well as increased rates to for the same improvement project.

Sections 3.8.2 and 3.8.3 of this methodology includes a detailed discussion about how a financing credit may be applied. Once the City undertakes a project and raises rates to pay for the project, they may consider developing an SDC credit schedule for each project undertaken. The amount of the credit will vary as discussed in Section 3.8.

4.8 Wastewater System SDC Summary

Section 4 has been developed to provide the City of Toledo with the methodology needed to establish the maximum defendable SDC for the wastewater system. The following table provides a summary of the information utilized to complete this analysis:

Table 4.8.1 – Wastewater System SDC Summary per EDU (not including compliance costs)

SDC Component	SDC Amount
Improvement Fee Per Section 4.6	$1,152.00
Reimbursement Fee Per Section 4.5	$3,758.91
Subtotal of Wastewater SDC Fees per EDU	**$4,910.91**

The maximum defendable SDC for the wastewater system is approximately $4,911 per EDU without the application of an SDC credit or compliance costs. It should be reiterated that this calculation represents the maximum SDC's that can be assessed and defended with proper methodology. The City has the autonomy to adjust this charge in any way they feel is appropriate as long as they do not charge more than this amount. However, if adequate SDC fees are not collected and projects must be undertaken to satisfy growth requirements, funds will have to be obtained from other sources such as through rate increases to all customers.

4.9 SDC Schedule for Residential and Non-Residential Customers

The wastewater system SDC established in Section 4.8 above is based on a cost per EDU or cost per single residential dwelling. For non-residential developments, a plan review must be performed to determine the equivalent number of EDU's of the development.

Tables 3.10.1 and 3.10.2, in the water system SDC methodology, should be used to assess wastewater system SDC's for both residential and non-residential customers.

As discussed in Section 3.10, the water/sewer values indicated in Table 3.10.1 represent a wide assortment of residential and non-residential customer types along with estimates of the number of EDU's that should be associated with each. However, the table does not address all potential customers. In some cases, the assessment system may not fairly represent a new customer's actual impact on the water and

wastewater systems. In these cases, it is recommended that the City allow for an appeal process as described in Section 3.11. The appeal process includes the assessment of at least a partial SDC based on the development EDU's calculated using the table, and collection of additional fees at a later time following review of the facility's actual water usage.

Section 5

5.0 Storm Drainage SDC Methodology

5.1 Introduction

This section describes in detail the calculations, background information, and methodology used to identify the maximum defendable storm drainage SDC for the City of Toledo. This section will seek to identify the existing and future capacity requirements as well as provide a summary of the City's stormwater capital improvement plan (CIP).

This section will develop a method for determining system population or input based on impervious surface methodology and will seek to make projections for future capacity requirements, assuming an increase in impervious surfaces.

5.2 System Overview and Background

As of early 2010, the City of Toledo did not have a stormwater master plan or other stormwater planning effort available for this methodology. Therefore, this methodology was developed using bridge planning as well as accommodations to develop permanent planning early in the planning cycle. Once a master plan available, this methodology should be updated to reflect the recommendations and the CIP developed within that planning effort.

5.2.1 Overall System Description

Being a storm drainage system, the existing facilities are made up of a network of ditches, piping, manholes, catch basins, swales, outfalls, and other facilities typical to a storm drainage system.

Piping ranges from small 8-inch laterals, catch basins and culverts. In general, the storm drainage system has evolved over time in response to needs and drainage problems that have arisen.

The City funds maintenance and development of the storm drainage system through a variety of sources. The City does not currently charge a storm drainage fee as part of the regular utility charges for its customers.

Prior to this methodology, there was no SDC charge for storm drainage.

5.2.2 Basis for Population Impact & System Growth

The impact of growth on the stormwater system will be based on an impervious surface methodology. In general, this methodology will determine how much impervious surface a typical EDU will add to the system. All new development can then be compared against this typical value to determine how many EDU's are being added and how this will impact the stormwater facilities within the City of Toledo.

5.3 EDU Methodology and Projected Growth

This section will seek to describe the methods used in this SDC methodology to establish the growth component of the storm drainage SDC. The methodology is to be based on impervious surface

methodology and shall be based on experience with similar communities and typical impervious surface values.

Impervious surface areas include non-natural constructed areas such as:

- Roof areas
- Driveways
- Sidewalks
- Patios and impervious decks
- Outbuildings
- Any other improvement which will result in water running off the property

Based on experience with other similar communities, a conservative estimate of impervious surface area per typical residential dwelling is around 2,500 square feet. While this may be on the low side, without specific data for Toledo on impervious surfaces in past developments, it is recommended to use a potentially lower figure and update the value in the future when, or if, new information becomes available.

Section 3 presents the growth potential of the water system in the City of Toledo. It is estimated that, based on this growth scenario, that approximately 589 new EDU's will be added to the water system during the planning period. It is reasonable to assume that each EDU added will have a typical amount of impervious surface that will also be added to the system and will also impact the storm drainage system. Therefore:

- 589 new EDU's x 2,500 square feet of impervious surface per EDU = 1.473 million square feet or around 34 acres of new impervious surface added to the system during the planning period.

Therefore, the growth potential for the planning period for the stormwater SDC methodology is summarized as:

- 2,500 square feet per new EDU
- Approximately 589 new EDU's added to the system
- Approximately 1.473-million square feet of impervious surface added to the system
- Approximately 34 acres of impervious surface added to the system

These figures will be used later in this section to calculate appropriate SDC charges for the stormwater system.

5.4 CIP Project Summary and Project Costs

As there was no stormwater planning document available for the development of this methodology, some bridge planning was prepared to establish an interim methodology. The projects and recommendations that make up this bridge planning are described below. A summary of the Stormwater CIP is provided in Table 5.4.1.

5.4.1 Project Descriptions and Need

The project descriptions below are intended to provide some brief background and planning information in support of the projects on the current Toledo Stormwater CIP.

Project 1 – Stormwater Master Plan- This project is included in the bridge planning to accommodate the development of a stormwater master plan for Toledo. As the City does not currently have a plan in place, this project will be included within the CIP and considered as a capital improvement-type project.

However, as the stormwater planning will address existing issues related to current deficiencies as well as projected needs resulting due to growth, the project is to be considered as 50% SDC eligible. Costs to provide for updates to the plan will be included within the compliance cost section (Section 8) of this methodology.

The estimated cost for the completion of a comprehensive stormwater master planning effort is approximately $100,000.

Project 2 – A Street Storm Drain Pump Station Upgrades – The City owns and operates a storm drainage pump station located near A Street. The pump station lifts stormwater, from a lower area, over the dike and into the river. The pump station is undersized as it experiences flows that exceed its capacity. The tidegate in the basin also needs to be replaced to ensure that water does not flow back from the river and into the basin. This project should also include some piping, ditching, and culvert improvements in the basin for a complete solution.

Estimated costs for the project are around $500,000 for construction costs. Adding engineering and contingency costs to the project (approximately 43%), a total project cost of $715,000 is recommended assuming April/May 2010 dollars.

For the purposes of this methodology, it is recommended that this project be considered necessary primarily to address growth issues in the basin and in basins above. However, the project will also address existing deficiencies. Therefore, it is recommended that this project be considered as 50% SDC eligible.

Project 3 – 10th Street Storm Drainage Improvements – A natural drainage basin exists in the area of 10th Street and Burgess Road. The drainage basin includes local streets and impermeable areas as well as natural surface runoff. A ravine between 11th Street and Burgess transmits a nearly-year-round creek flow that grows dramatically in volume during a storm.

In recent years, the City Shops, Fire Department, and School Bus Barns and other facilities were construction on fill in the upper area of the basin. Proper accommodations for runoff planning were not made and the majority of the impermeable surface is drained to the ravine and through the existing drainage system. The system has become overwhelmed on a number of occasions causing damage to nearby homes and properties and causing a regular and expensive maintenance problem for the City.

The City completed some intermediate and temporary repairs during the winter of 2009-10. However, additional improvements are required to permanently address the drainage issues in this basin. It is estimated that to properly address the drainage issues, a construction estimate of around $250,000 would be in order. Adding engineering and contingency to the project (approximately 43%) suggests a total project cost of around $357,500 in May 2010 dollars.

It is clear that this project is necessary to address a number of existing deficiencies. However, there is undeveloped properties in the basin and additional impervious surfaces could be added over time to the drainage area. Therefore, it is recommended that this project be considered 25% SDC eligible. Table 5.4.1 below summarizes the projects on the Toledo Stormwater CIP.

Table 5.4.1 – Stormwater CIP Project Summary List

Project No.	Project Description	Project Cost	Project Cost Date	ENR Index of Estimate	Current ENR Index	Adjusted Cost Estimate (current)
1	Storm Drain Master Plan/BMP Study	$100,000.00	Apr-10	8671	8671	$100,000.00
2	A' Street Storm Drain Pump Station	$715,000.00	Apr-10	8671	8671	$715,000.00
3	10th Street Basin Storm System Uprgrades	$357,500.00	Apr-10	8671	8671	$357,500.00
					Total	**$1,172,500.00**

5.5 SDC Eligibility

The SDC methodology must include a discussion of the percentage of each project's cost that can be attributed as necessary for growth and, therefore, be considered SDC eligible. As discussed previously, SDC's must be based on a project's costs or the portion of a project's cost that is necessary to add system capacity in response to or in anticipation of growth.

Section 5.4 above includes a brief description of each project along with a discussion of each project's SDC eligibility. A summary of the SDC eligibilities for each project is provided below in table 5.5.1.

Table 5.5.1 – Stormwater Project SDC Eligibility Summary

Project No.	Project Description	Adjusted Cost Estimate (current)	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	% SDC Eligible	SDC Eligible Cost
1	Storm Drain Master Plan/BMP Study	$100,000.00	N	Y	50%	$50,000.00
2	A' Street Storm Drain Pump Station	$715,000.00	N	Y	50%	$357,500.00
3	10th Street Basin Storm System Uprgrades	$357,500.00	N	Y	25%	$89,375.00
					Total	**$496,875.00**

5.6 Calculation of Storm Drainage Reimbursement SDC Charge

None of the projects in the stormwater CIP are to be considered for a reimbursement SDC. Therefore, the stormwater reimbursement SDC is $0.

5.7 Calculation of Storm Drainage Improvement SDC Charge

Calculation of the improvement SDC will be based upon the methodology and the establishment of the SDC eligible project costs as outlined earlier in this section. The following table provides a summary of the total cost of SDC eligible projects discussed in this methodology that have not yet been constructed. In order to account for construction cost increases since the time the concepts were developed, we have used prorated costs based on the current ENR Index.

Table 5.7.1 – Improvement SDC Calculation Summary

Project No.	Project Description	SDC Eligible Cost
1	Storm Drain Master Plan/BMP Study	50,000.00
2	A' Street Storm Drain Pump Station	357,500.00
3	10th Street Basin Storm System Uprgrades	89,375.00
	Total Improvement Eligible Costs (A)	496,875.00
	Total Growth EDU's per Section 5.3 (B)	589
	Maximum Improvement Stormwater SDC (Based on EDU's, $/EDU)	**$843.59**
	Total Growth Impervious Area per Section 5.3 (sf)	1,472,500
	Maximum Improvement Stormwater SDC (Based on area, $/sf)	**$0.34**

Based on this analysis, a typical EDU in Toledo will pay around $844 for the improvement stormwater SDC based on an average impervious surface area of around 2,500 square feet per EDU. This equates to a unit charge of around $0.34 per square foot of newly created impervious surface area.

5.8 SDC Credits for Storm Drainage SDC

An analysis of potential SDC credits should be included as part of any SDC methodology. Credits may be appropriate to offset financing costs that will be paid by all system customers including new customers. Credits are also appropriate for developers that construct or otherwise provide improvements to the system that are part of the current CIP project list. A brief description of potential SDC credit scenarios is provided below:

5.8.1 Improvement Offset Credit

In the case of a developer completing some or all of a CIP project, the credit provided should be equal to the value of the improvement made, though the credit cannot exceed the amount of SDC that the developer would have been required to pay.

For example: Assume that a developer undertakes a subdivision that would require him to pay $50,000 in SDC fees for the stormwater system. If the same developer undertakes all or a portion of a stormwater improvement project that appears on the CIP, the developer should be eligible for some level of SDC credit for the value of the improvement he has undertaken. However, the improvement offset credit cannot exceed the value of the SDC or, in this case, $50,000.

It should be noted that determination of improvement offset credits can require some judgment as development situations vary widely. The City should maintain an open policy when working with developers to identify fair and reasonable improvement offset credits when they apply.

It should also be reiterated that offset credits are not available for improvements undertaken by the developer that do not appear on the City's CIP and are not part of the City's SDC methodology.

5.8.2 Financing Credit - Project Costs and Potential Loan Amounts

As the City does not currently have a rate structure or user fee for the stormwater system, it is not possible to develop a financing credit. However, if a stormwater utility is established and the City seeks to obtain funding for the stormwater CIP projects through loans to be paid back through increased user rates, an appropriate credit should be developed for that increase in user rates.

A potential financing credit is not currently necessary.

5.8.3 Impervious Surface Reduction Credit

In some cases, credits may be appropriate for development that incorporates improvements that are designed to reduce the impact of increased drainage on the stormwater system. These measures may include construction of cisterns, detention facilities, pervious surface technology, and other efforts designed to reduce runoff from a developed property.

In each case, the City would be required to review proposed mitigation measures and determine an appropriate SDC credit for impervious surface reduction. In no case should the credit be more than the value that the SDC charge would have been.

The City is not required to provide credits for these types of mitigating practices. Also, in the case of typical residential development, the cost of the impervious surface reducing efforts will likely be far greater than the stormwater SDC charge. However, in some commercial applications, there may be an advantage for a developer to incorporate these types of improvements into a project.

5.9 Storm SDC Summary

Section 5 has been developed to provide the City of Toledo with the methodology needed to establish the maximum defendable SDC for the stormwater system. The following table provides a summary of the information utilized to complete this analysis:

Table 5.9.1 – Stormwater System SDC Summary

SDC Component	SDC Amount
Improvement Fee	
$/EDU	**$844**
$/square foot	**$0.34**
Reimbursement Fee	$0

The maximum defendable SDC for the stormwater system is around $965 per EDU or $0.39 per square foot of impervious surface without the application of an SDC credit or compliance costs. It should be reiterated that this calculation represents the maximum SDC's that can be assessed and defended with proper methodology. The City has the autonomy to adjust this charge in any way they feel is appropriate. However, if adequate SDC fees are not collected and projects must be undertaken to satisfy growth requirements, funds will have to be obtained from other sources.

5.10 Storm SDC Assessment Schedule

Assessment of a stormwater SDC is a relatively simple process. A summary of a potential assessment schedule is provided below:

5.10.1 Residential Assessment Methods

Assessment of a stormwater SDC on a residential customer is a relatively simple process. The choice of assessment methods falls into one of two categories: assessment based on an assumed EDU basis or based on the impervious surface area created by each new customer.

Under the EDU method, each residential customer is assumed to be one EDU, regardless of the size of the new home or residential improvements. This method is the easier to administer as it does not require the City to review plans and measure or calculate impervious surface.

The EDU method assumes all residential development is relatively equal in the eyes of the stormwater SDC methodology.

The alternative is for the City to perform site plan reviews, measure and calculate impervious surface area, and charge each new residential development based on the impervious surface area that is being added to the system. If this method is chosen, the unit price of $0.39 per square foot should be used. This method requires additional effort by the City to administer the SDC assessment, but it provides for an equitable assessment method for all development.

For the purposes of simplifying the process and understanding that the majority of residential construction in Toledo will be relatively uniform in terms of size, it is recommended that the EDU method be utilized.

5.10.2 Non-residential Assessment Methods

It is recommended that all non-residential development be assessed on a unit basis per square foot of impervious surface area. Using this method, a site plan for each new development must be reviewed to determine the amount of impervious surface being added. The resulting assessment will be equitable for each case presented to the City for consideration.

Specifically, non-residential development should be assessed at the incremental rate of $0.39 per square foot of impervious surface area added to a previously pervious site. Accommodations may be made, on a case-by-case basis, for efforts to mitigate runoff impacts. These mitigation efforts may include detention systems, pervious surface materials, and others.

Section 6

6.0 Transportation SDC Methodology

6.1 Introduction

This section describes in detail the calculations, background information, and methodology used to develop and identify the maximum defendable transportation SDC for the City of Toledo. This section will seek to identify the existing and future capacity requirements as well as provide a summary of the City's transportation capital improvement plan.

This section will define the use-base (users) of the transportation system using a trip generation method and using commonly accepted trip tables for the assessment of transportation SDC for both residential and nonresidential development.

6.2 Transportation System Overview and Background

The City of Toledo owns and operates a network of roads, sidewalks, buses, and other public transportation facilities that are used by the public to make their way around and through the City. The City shares some transportation facilities with Benton County and the Oregon Department of Transportation.

The City currently uses a Transportation System Plan (TSP) from 1995 (W&H Pacific/Kittleson). Though less than 20 years old, the current plan would be considered out of date within the transportation planning community.

The City also utilizes a Toledo Waterfront Connectivity Plan completed in 2009 (Parametrix). This plan includes a number of transportation planning elements that will be utilized to develop the CIP within this methodology.

6.2.1 Overall System Description

The transportation system in Toledo is composed of vehicle and pedestrian facilities. A brief summary of each major system component is included below:

State Facilities: State Highway 20 borders Toledo on the North. This highway travels east and west between Newport on the coast and Corvallis/Albany and Interstate 5. It is a relatively busy highway which is anticipated to become busier with major improvements that will soon be completed on the highway.

County Roads: Many of the roads in and around Toledo fall under County jurisdiction for maintenance and operation.

Local Roads: Many of the smaller neighborhood roads are considered local roads. These roads primarily provide access to neighborhoods and residential areas.

Pedestrian: The City owns and maintains sidewalks, pathways, and other pedestrian facilities.

6.2.2 Basis for System Impact and Growth Component

The growth component for the transportation SDC should be based on a trip count method. Under this methodology, users that generate more trips and make greater use of the system should pay a larger share of the project costs for developing additional capacity.

For example, the Institute of Transportation Engineers (ITE) publishes tables that summarize the peak traffic impacts due to various types of land use. In these tables, for example, the following trip counts may be found:

- Typical residential dwelling (peak hourly trip generation): 10 trips per day
- Nursing home: 2.7 trips per 1,000 square feet of gross floor area
- General retail: 20.1 trips per 1,000 square feet of gross floor area
- Etc.

A complete listing of other ITE trip counts can be found in Section 6.10.

Often, a community will seek to normalize trip counts to a standard residential dwelling. In other words, if a typical residential dwelling generates 10 trip counts under peak conditions, the entire trip count list can be divided by 10 to normalize the trip generations to a typical EDU. Therefore, trip generation can be expressed in EDU's. Table 6.10.1 expresses different land uses in both trip counts and in normalized trip counts or EDU's.

6.3 EDU Methodology

This section will seek to establish an EDU methodology for the transportation SDC and determine the growth potential within the SDC sector.

Typically, a transportation master plan or TSP will be used to establish the anticipated growth of the transportation system in a community. However, the City of Toledo's TSP does not include a discussion of growth or increases in trip generation over time. Therefore, this methodology will provide an interim methodology for growth potential in the transportation facilities.

The following describes the methods used to estimate the growth potential within the transportation system:

6.3.1 Internal Trip Generation Growth

Internal trips are defined as trips that begin and end within the City's transportation network. Internal trips are generally related to residents of the City traveling to various destinations within the City or business traffic within the City.

For the purposes of this methodology, it is assumed that general development and growth within the City will create increases in the internal trip generation. To estimate the amount of internal trip generation growth, the previous analyses that were prepared for the water and wastewater system were utilized.

In the water analysis, the number of growth EDU's were estimated to be around 589 new EDU's within Toledo. If one residential EDU is equal to around 10 trips (per the ITE Trip Chart), then these new

EDU's will account for around 5,890 new internal trips, over the entire planning period, within the City of Toledo.

6.3.2 External Trip Generation Growth

External trip generation is defined as trips that begin outside of the City and end within the City or simply pass-through traffic, such as tourist traffic passing through Toledo on Highway 20. External traffic may include residents of Newport, Siletz, or other communities coming to Toledo to work in the paper mill. It could also include trips to town for school, shopping, or other purposes.

It is difficult to predict the amount of external trips that impact the City's transportation system. It is even more difficult to predict how those external trips may change in the future.

For the purposes of this methodology, it is recommended that external trips be defined as a percentage of the internal trips. For small rural communities, external trips can vary widely depending on the location of the community to major population centers and the layout of the transportation network. A community like Toledo will have a relatively low external trip rate as Highway 20 passes by the City without entering the community and other connector roads are not considered high traffic routes.

Therefore, it is recommended that a conservative figure be utilized to define the potential external trip load. For conservative purposes, it is assumed that 25% of additional trips are generated externally and either terminate or pass through the City for a specific purpose. This may include trips generated by the schools, parks, the paper mill, or other local draws.

At a rate of 25%, it is estimated that a total of 1,473 external trips will be generated by the end of the planning period.

6.3.3 Total Trips and Transportation Growth in EDU's

By adding internal and external growth potential in the transportation system, we calculate a total trip increase in the system of 7,363 additional trips generated during the planning period.

If we divide the total additional trips by the typical residential EDU rate of 10 trips per residential dwelling, we calculate an increase in the transportation sector of around 736 EDU's which compares favorably to the other projections in the other infrastructure sectors. These growth figures will be used to calculate SDC's for the transportation sector.

6.4 CIP Project Summary & Project Costs

The City has an older TSP with some CIP projects. Along with the Waterfront Connectivity Plan, the following projects were developed as part of the City of Toledo Transportation CIP.

6.4.1 Transportation Project Descriptions

Project 1 – Transportation Master Plan. To provide the City with the transportation planning they will need for the planning period, it is recommended that the City plan to undertake an update to their transportation master planning effort as soon as funding can be made available. The result of this planning effort will be a comprehensive analysis of the City's transportation needs along with a CIP to address those needs for the entire planning period.

A budget of $75,000 is recommended for the initial planning effort. As the planning effort will address both existing and projected needs, it is recommended that the project be considered 50% SDC eligible with half the funding coming from grant or other sources.

Project 2 – Business 20 Improvements. When the State constructed the Highway 20 bypass around Toledo, the main road through town was renamed the Business 20 Loop. The City has planned for some time to make improvements to Business 20 to improve its capacity and performance.

The City has completed some of the desired improvements to Business 20 though it is estimated that approximately $360,000 in improvements remain (construction cost). Adding for design and contingency (43%), a total project budget of 514,800 is recommended.

The Business 20 Improvements are primarily, required to address existing deficiencies. However, capacity and growth is also driving the project to a lesser degree. Therefore, it is recommended that the project be considered as 25% SDC eligible.

Project 3 – East Slope Road Improvements. The Master Plan recommends improvements to East Slope Road south of 10th Street. The project includes new pavement as well as curb, gutter, and sidewalk improvements.

The 1995 TSP included a cost estimate for this project of $63,280.

The project has potential to address growth and capacity issues, though it primary function is to address existing deficiencies. Therefore, it is recommended that the project be considered as 25% SDC eligible.

Project 4 – Butler Bridge Road. The TSP includes a project to improve Butler Bridge Road. According to City staff, this project is being driven by growth and capacity needs. The project is to extend from NW First Street to the Butler Bridge crossing, a distance of around 1 mile. Improvements are to include curb, gutter, sidewalk, lane widening, turn lanes, and drainage improvements.

A preliminary construction estimate for the project is around $600,000 (May 2010 dollars). Adding for contingency and engineering (43%), a total project budget of 858,000 is recommended.

As this project is being driven in larger part by growth and capacity needs, it is recommended that it be considered as 50% SDC eligible.

Project 5 – NW First Street Improvements. The TSP and City Staff recommend that improvements are necessary at NW First Street. Improvements are needed to improve the railroad crossing including improved pedestrian facilities.

Construction costs for the project are estimated at $50,000 (May 2010 dollars). Adding engineering and contingency (43%) suggests a total project cost of $71,500.

This project is primarily necessary to address existing deficiencies. However, a minor increase in capacity will be obtained by correct some of these deficiencies. Therefore, it is recommended that the project be considered as 10% SDC eligible.

Project 6 – Burgess Road Improvements – The TSP recommends improvements to Burgess Road. Burgess Road continues to be an area of growth with recent construction of the City Shops, school

offices, bus facilities, and fire department in the area. Burgess also provides connectivity to areas of Toledo with growth potential.

A project is needed to add curb, gutter, and sidewalk along with street drainage upgrades. Lane widening and turn lanes should also be added as appropriate. The TSP included a project to improve burgess for a total project cost of $39,970 (in 1995 dollars).

The project will enhance existing conditions as well as provide improved capacity for continued growth in the area. Therefore, it is recommended that this project be considered as 50% SDC eligible.

Project 7 – Arcadia Drive Improvements – Arcadia Drive provides connectivity between Highway 20, and the rest of the community including schools, offices, and residential areas. Improvements are needed to add curb and gutter, sidewalk, surface drainage improvements, lane widening, and turning lanes. The project is needed to add capacity to service the growing areas that Arcadia services.

Estimated construction costs for the project are around $200,000 (May 2010 dollars). Adding engineering and contingency (43%) suggests a total project budget of around $286,000.

The project is driven, in large part by capacity needs and anticipated growth. Therefore, it is recommended that the project be considered as 50% SDC eligible.

Project 8 – Lincoln Way Improvements – Lincoln Way provides access to a residential area on the fringes of the community. The old hospital is located in this area which has been converted to a church. Improvements are needed to facilitate pedestrian movements and improvement traffic conditions. Growth and infill development is expected in these outer areas.

A project was developed in the TSP with a total budget of $48,230 (June 1995 dollars).

As the project will address existing issues and provide some response to future capacity needs, it is recommended that this project be considered as being 25% SDC eligible.

Project 9 – Local Street Improvements – The TSP recommended a general project to improve traffic conditions on local streets, add curb and gutter, and sidewalks where appropriate and generally upgrade the smaller local streets in the community. The TSP recommended a total project budget of $220,220 for this effort (in June 1995 dollars).

As this project will primarily address existing deficiencies, it is recommended that the project be considered as 10% SDC eligible.

Table 6.4.1 summarizes all of the projects on the City of Toledo Transportation CIP list. The Toledo Transportation CIP includes projects with a current estimated project cost of nearly $3million.

Table 6.4.1 – City of Toledo Transportation CIP List

Project No.	Project Description	Project Cost	Project Cost Date	ENR Index of Estimate	Current ENR Index	Adjusted Cost Estimate (current)
1	Transportation System Master Plan Update	$75,000.00	May-10	8671	8671	$75,000.00
2	Business 20 Improvements	$514,800.00	May-10	8671	8671	$514,800.00
3	East Slope Road Improvements (South of 10th)	$63,280.00	Jun-95	5471	8671	$100,292.61
4	Butler Bridge Road Improvements	$858,000.00	May-10	8671	8671	$858,000.00
5	NW First Street Improvements	$71,500.00	May-10	8671	8671	$71,500.00
6	Burgess Road Improvemetns	$39,970.00	Jun-95	5471	8671	$63,348.54
7	Arcadia Drive Improvements	$286,000.00	May-10	8671	8671	$286,000.00
8	Lincoln Way Improvements	$48,230.00	Jun-95	5471	8671	$76,439.83
9	Local Street Imrpovements	$220,000.00	Jun-95	5471	8671	$348,678.49
10						
				Total		**$2,394,059.47**

6.5 SDC Eligibility Summary

In the project descriptions in the previous section, rationale was provided for each project with a recommendation for SDC eligibility. Eligibility varied depending on the perception of the need for the project to address growth or capacity issues.

Table 6.5.1 below summarizes the SDC eligibility for each project on the Toledo Transportation CIP list.

Table 6.5.1 – SDC Eligibility Summary – Transportation CIP Projects

Project No.	Project Description	Adjusted Cost Estimate (current)	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	% SDC Eligible	SDC Eligible Cost
1	Transportation System Master Plan Update	$75,000.00	N	Y	50%	$37,500.00
2	Business 20 Improvements	$514,800.00	N	Y	25%	$128,700.00
3	East Slope Road Improvements (South of 10th)	$100,292.61	N	Y	25%	$25,073.15
4	Butler Bridge Road Improvements	$858,000.00	N	Y	50%	$429,000.00
5	NW First Street Improvements	$71,500.00	N	Y	10%	$7,150.00
6	Burgess Road Improvemetns	$63,348.54	N	Y	50%	$31,674.27
7	Arcadia Drive Improvements	$286,000.00	N	Y	50%	$143,000.00
8	Lincoln Way Improvements	$76,439.83	N	Y	25%	$19,109.96
9	Local Street Imrpovements	$348,678.49	N	Y	10%	$34,867.85
10						
					Total	**$856,075.23**

Of the total projects on the transportation CIP list, approximately 36% of the project costs are to be considered as SDC eligible.

6.6 Calculation of Transportation Reimbursement SDC

Oregon Law includes provisions for a reimbursement SDC to be developed for projects that have been completed and that have remaining capacity available to service growth. This section will establish the methodology and the charge for transportation system reimbursement SDC's in Toledo.

As none of the projects on the CIP have yet to be undertaken, no reimbursement SDC is currently recommended.

6.7 Calculation of Transportation Improvement SDC

The calculation of the transportation improvement SDC is accomplished by considering the total value of the improvement SDC eligible projects above divided by the growth potential in the transportation system.

A summary of the transportation improvement SDC calculation is provided below in Table 6.7.1:

Table 6.7.1 – Summary of Transportation Improvement SDC Calculation

Project No.	Project Description	SDC Eligible Cost
1	Transportation System Master Plan Update	$37,500.00
2	Business 20 Improvements	$128,700.00
3	East Slope Road Improvements (South of 10th)	$25,073.15
4	Butler Bridge Road Improvements	$429,000.00
5	NW First Street Improvements	$7,150.00
6	Burgess Road Improvemetns	$31,674.27
7	Arcadia Drive Improvements	$143,000.00
8	Lincoln Way Improvements	$19,109.96
9	Local Street Imrpovements	$34,867.85
	Total Improvement Eligible Costs (A)	$856,075.23
	Total Growth Trips per Section 6.3 (B)	7,363
	Total Growth EDU's (1 EDU = 10 Trips/Day)	736
	Maximum Improvement Transportation SDC (A/B) per typical EDU	**$1,162.75**

Based on the above methodology, a transportation improvement SDC of around $1,163 would be defendable.

6.8 SDC Credits

An analysis of potential SDC credits should be included as part of any SDC methodology. Credits may be appropriate to offset financing costs that will be paid by all system customers including new customers. Credits are also appropriate for developers who construct or otherwise provide improvements to the system that are part of the current CIP project list. A brief description of potential SDC credit scenarios is provided below:

6.8.1 Improvement Offset Credit

In the case of a developer completing some or all of a CIP project, the credit provided should be equal to the value of the improvement made, though the credit cannot exceed the amount of SDC that the developer would have been required to pay.

For example, if a developer elects to construct a section of roadway to provide service to their development, and the improvement is included and all or part of a project listed on the City's CIP, a credit should be negotiated for the improvement provided by the developer.

It should be noted that determination of improvement offset credits can require some judgment as development situations vary widely. The City should maintain an open policy when working with developers to identify fair and reasonable improvement offset credits when they apply.

It should also be reiterated that offset credits are not available for improvements undertaken by the developer that do not appear on the City's CIP and are not part of the City's SDC methodology.

6.8.2 Financing Credit - Project Costs and Potential Loan Amounts

As the City does not currently have a rate structure or user fee for the transportation system, it is not possible to develop a financing credit. However, it may be possible for the City to fund a major transportation project through a bond or property tax-related funding mechanism. Should this occur, the City should, as part of the funding for the project, develop an appropriate transportation SDC credit to offset the value of the increased property tax so that new development is not charged for higher property taxes in addition to SDC's.

A potential financing credit will not be developed at this time for the transportation system.

6.9 Transportation SDC Summary

The purpose of this section is to establish a methodology for a fair and reasonable transportation SDC for the City of Toledo. Efforts have been made to define the current transportation CIP, the growth potential in the transportation system, and calculate both a reimbursement and an improvement SDC component for the transportation system.

Table 6.9.1 below summarizes the transportation SDC as developed within this methodology.

Table 6.9.1 – Transportation SDC Summary

SDC Component	SDC Amount
Improvement Fee Per Section 6.7	$1,162.75
Reimbursement Fee Per Section 6.6	$0.00
Subtotal of Transportation SDC Fees per typical EDU	**$1,162.75**

6.10 Transportation SDC Assessment and Schedule

Assessment of the transportation SDC should be based on the use of a standard trip generation table. Like Table 3.10 which is used to establish the assessment method for several of the SDC modules in this methodology, Table 6.10 below should be utilized to establish the assessment of the transportation SDC among different land use development types. A brief summary of the recommended assessment methods is provided below:

6.10.1 Assessment of a Transportation SDC for Residential and Non Residential Development

As is the case with the other SDC modules, a typical single family detached home should be considered as a standard EDU resulting in the base trip count as defined below in Table 6.10 (ITE Code 210). The Institute of Transportation Engineers (ITE) provides updates to the trip tables every few years. If necessary, much more detailed information and data is available in the ITE manuals.

Trip counts for other land uses should be based on the counts shown in Table 6.10. The table includes a column to determine trip counts for each specified land use along with a column where the trip counts are normalized to a typical residential dwelling or EDU.

Table 6.10.1 – ITE Trip Counts and EDU Counts for the City of Toledo Transportation System

ITE Code	Landuse	Trips per Day (ITE)	Equivalent Transportation EDU's	Unit
10	Waterport/Marine Terminal	11.93	1.19	Acre
21	Commercial Airport	13.4	1.34	Employees
22	General Aviation Airport	5	0.50	Based Aircraft
30	Truck Terminal	81.9	8.19	Acre
90	Park-and-Ride Lot with Bus Service	4.5	0.45	Parking Spaces
93	Light Rail Transit Station with Parking	2.51	0.25	Parking Spaces
110	General Light Industrial	6.97	0.70	1,000 Sq. Ft. Gross Floor Area
120	General Heavy Industrial	1.5	0.15	1,000 Sq. Ft. Gross Floor Area
130	Industrail Park	6.96	0.70	1,000 Sq. Ft. Gross Floor Area
140	Manufacturing	3.82	0.38	1,000 Sq. Ft. Gross Floor Area
150	Warehousing	4.96	0.50	1,000 Sq. Ft. Gross Floor Area
151	Mini-Warehousing	2.5	0.25	1,000 Sq. Ft. Gross Floor Area
152	High-Cube Warehouse	0.12	0.01	1,000 Sq. Ft. Gross Floor Area
170	Utilities	0.76	0.08	1,000 Sq. Ft. Gross Floor Area
210	Single-Family Detached Housing	9.57	0.96	Dwelling Unit
	Two-Family Housing (townhouse, etc)	10	1.00	Dwelling Unit
220	Apartments (3 Units or more)	6.72	0.67	Dwelling Unit
221	Low-Rise Apartment	6.59	0.66	Occupied Dwelling Units
222	High-Rise Apartment	4.2	0.42	Dwelling Units
223	Mid-Rise Apartment	0.3	0.03	Dwelling Units
224	Rental Townhouse	0.7	0.07	Dwelling Units
230	Residential Condominium/Townhouse	5.86	0.59	Dwelling Unit
231	Low-Rise Residential Condominium/Townhouse	0.67	0.07	Dwelling Unit
232	High-Rise Residential Condominium/Townhouse	4.18	0.42	Dwelling Unit
233	Luxury Condominium/Townhouse	0.56	0.06	Occupied Dwelling Units
240	Mobil Home Park	39.61	3.96	Acre
240	Mobil Home Park	4.99	0.50	Occupied Dwelling Units
251	Senior Adult Housing - Detached	3.71	0.37	Dwelling Units
252	Senior Adult Housing - Attached	3.48	0.35	Occupied Dwelling Units
253	Congregate Care Facility	2.02	0.20	Dwelling Unit
254	Assisted Living	2.66	0.27	Beds
255	Continuing Care Retirement Community	2.81	0.28	Occcupied Units
260	Recreational Homes	3.16	0.32	Dwelling Units
270	Residential Planned Unit Development	46.78	4.68	Acres
310	Hotel	8.17	0.82	Hotel Room
311	All Suites Hotel	4.9	0.49	Hotel Room
312	Business Hotel	7.27	0.73	Occupied Rooms
320	Motel	5.63	0.56	Hotel Room
330	Resort Hotel	13.43	1.34	Occupied Rooms
411	City Park	1.59	0.16	Acre
412	County Park	2.28	0.23	Acre
413	State Park	0.65	0.07	Acre
414	Water Slide Park	1.67	0.17	Parking Spaces
415	Beach Park	29.81	2.98	Acre
416	Recreational Vehicle Park	0.41	0.04	Occupied Camp Sites (Peak Hour)
417	Regional Park	4.57	0.46	Acre
418	National Monument	5.37	0.54	Acre
420	Marina	2.96	0.30	Berth
430	Golf Course	35.74	3.57	Hole
431	Miniature Golf Course	0.33	0.03	Hole
432	Golf Driving Range	13.65	1.37	Tees
433	Batting Cages	2.22	0.22	Cages
435	Multipurpose Recreational Facility	90.38	9.04	Acre
437	Bowling Alley	33.33	3.33	1,000 Sq. Ft. Gross Floor Area
440	Adult Cabaret	38.67	3.87	1,000 Sq. Ft. Gross Floor Area
441	Live Theater	0.02	0.00	Seat
443	Movie Theater Without Matinee	1.76	0.18	Seat
444	Movie Theater With Matinee	2.24	0.22	Seat
445	Multiplex Movie Theater	292.5	29.25	Movie Screens

Table 6.10.1 Continued – ITE Trip Counts and EDU Counts for the City of Toledo Transportation System

ITE Code	Landuse	Trips per Day (ITE)	Equivalent Transportation EDU's	Unit
452	Horse Racetrack	43	4.30	Acre
453	Automobile Racetrack	0.28	0.03	Attendees
454	Dog Racetrack	0.15	0.02	Attendees
460	Arena	33.33	3.33	Acre
465	Ice Skating Rink	2.36	0.24	1,000 Sq. Ft. Gross Floor Area
473	Casino/Video Lottery Establishment	13.43	1.34	1,000 Sq. Ft. Gross Floor Area
480	Amusement Park	75.76	7.58	Acre
481	Zoo	114.88	11.49	Acre
488	Soccer Complex	117.43	11.74	Fields
490	Tennis Courts	31.04	3.10	Tennis Court
491	Racquet/Tennis Club	14.03	1.40	1,000 Sq. Ft. Gross Floor Area
492	Health/Fitness Club	32.93	3.29	1,000 Sq. Ft. Gross Floor Area
493	Athletic Club	43	4.30	1,000 Sq. Ft. Gross Floor Area
495	Recreational Community Center	9.1	0.91	1,000 Sq. Ft. Gross Floor Area
501	Military Base	1.78	0.18	Employees
520	Elementary School	14.49	1.45	1,000 Sq. Ft. Gross Floor Area
522	Middle School/Junior High School	13.78	1.38	1,000 Sq. Ft. Gross Floor Area
530	High School	12.89	1.29	1,000 Sq. Ft. Gross Floor Area
534	Private School (K-8)	3.54	0.35	1,000 Sq. Ft. Gross Floor Area
540	Junior/Community College	27.49	2.75	1,000 Sq. Ft. Gross Floor Area
550	University/College	2.38	0.24	Students
560	Church	36.63	3.66	1,000 Sq. Ft. Gross Floor Area
561	Synagogue	7.58	0.76	1,000 Sq. Ft. Gross Floor Area
565	Day Care Center	79.26	7.93	1,000 Sq. Ft. Gross Floor Area
566	Cemetery	4.73	0.47	Acre
571	Prison	0.68	0.07	Employees (Peak Hour)
590	Library	54	5.40	1,000 Sq. Ft. Gross Floor Area
591	Lodge/Fraternal Organization	46.9	4.69	Employees
610	Hospital	11.81	1.18	Bed
620	Nursing Home	6.1	0.61	1,000 Sq. Ft. Gross Floor Area
630	Clinic	31.45	3.15	1,000 Sq. Ft. Gross Floor Area
710	General Office	11.01	1.10	1,000 Sq. Ft. Gross Floor Area
714	Corpotate Headquarters Building	7.98	0.80	1,000 Sq. Ft. Gross Floor Area
715	Single Tennant Office Building	11.57	1.16	1,000 Sq. Ft. Gross Floor Area
720	Medical-Dental Office Building	36.13	3.61	1,000 Sq. Ft. Gross Floor Area
730	Government Office Building	68.93	6.89	1,000 Sq. Ft. Gross Floor Area
731	State Motor Vehicles Department	166.02	16.60	1,000 Sq. Ft. Gross Floor Area
732	Post Office	108.19	10.82	1,000 Sq. Ft. Gross Floor Area
733	Government Office Complex	27.92	2.79	1,000 Sq. Ft. Gross Floor Area
750	Office Park	11.42	1.14	1,000 Sq. Ft. Gross Floor Area
760	Research and Development Center	8.11	0.81	1,000 Sq. Ft. Gross Floor Area
770	Business Park	12.76	1.28	1,000 Sq. Ft. Gross Floor Area
812	Building Materials & Lumber Store	45.16	4.52	1,000 Sq. Ft. Gross Floor Area
813	Free-Standing Discount Superstore	49.21	4.92	1,000 Sq. Ft. Gross Floor Area
814	Specialty Retail Center	44.32	4.43	1,000 Sq. Ft. Gross Floor Area
815	Free Standing Discount Store	56.02	5.60	1,000 Sq. Ft. Gross Floor Area
816	Hardware/Paint Store	51.29	5.13	1,000 Sq. Ft. Gross Floor Area
817	Nursery (Garden Center)	36.08	3.61	1,000 Sq. Ft. Gross Floor Area
818	Nursery-Wholesale	3.11	0.31	Acre
820	Shopping Center	42.94	4.29	1,000 Sq. Ft. Gross Floor Area
823	Factory Outlet Center	26.59	2.66	1,000 Sq. Ft. Gross Floor Area
841	New Car Sale	33.34	3.33	1,000 Sq. Ft. Gross Floor Area
843	Automobile Parts Sales	61.91	6.19	1,000 Sq. Ft. Gross Floor Area

Table 6.10.1 Continued – ITE Trip Counts and EDU Counts for the City of Toledo Transportation System

ITE Code	Landuse	Trips per Day (ITE)	Equivalent Transportation EDU's	Unit
848	Tire Store	24.87	2.49	1,000 Sq. Ft. Gross Floor Area
849	Tire Superstore	30.55	3.06	Service Bays
850	Supermarket	102.24	10.22	1,000 Sq. Ft. Gross Floor Area
851	Convenivence Market (Open 24 Hours)	737.99	73.80	1,000 Sq. Ft. Gross Floor Area
852	Convenience Market (Open 15-16 Hours)	34.57	3.46	1,000 Sq. Ft. Gross Floor Area
853	Convenience Market with Gasoline Pumps	845.6	84.56	1,000 Sq. Ft. Gross Floor Area
854	Discount Supermarket	96.82	9.68	1,000 Sq. Ft. Gross Floor Area
860	Wholesale Market	6.73	0.67	1,000 Sq. Ft. Gross Floor Area
861	Discount Club	41.8	4.18	1,000 Sq. Ft. Gross Floor Area
862	Home Improvement Superstore	29.8	2.98	1,000 Sq. Ft. Gross Floor Area
863	Electronics Superstore	45.04	4.50	1,000 Sq. Ft. Gross Floor Area
864	Toy/Children's Superstore	4.99	0.50	1,000 Sq. Ft. Gross Floor Area
865	Baby Superstore	3.73	0.37	1,000 Sq. Ft. Gross Floor Area
866	Pet Supply Superstore	4.96	0.50	1,000 Sq. Ft. Gross Floor Area
867	Office Supply Superstore	3.4	0.34	1,000 Sq. Ft. Gross Floor Area
868	Book Superstore	21.3	2.13	1,000 Sq. Ft. Gross Floor Area
869	Discount Home Furnishings Superstore	47.81	4.78	1,000 Sq. Ft. Gross Floor Area
870	Apparel Store	66.4	6.64	1,000 Sq. Ft. Gross Floor Area
879	Arts and Crafts Store	56.55	5.66	1,000 Sq. Ft. Gross Floor Area
880	Pharmacy/Drugstore without Drive-Through Window	90.06	9.01	1,000 Sq. Ft. Gross Floor Area
881	Pharmacy/Drugstore with Drive-Through Window	88.16	8.82	1,000 Sq. Ft. Gross Floor Area
890	Furniture Store	5.06	0.51	1,000 Sq. Ft. Gross Floor Area
896	Video Rental Store	31.54	3.15	1,000 Sq. Ft. Gross Floor Area
911	Walk-in Bank	156.48	15.65	(1)
912	Drive-in Bank	246.49	24.65	(1)
931	Quality Restaurant	89.98	9.00	1,000 Sq. Ft. Gross Floor Area
932	High-Turnover (Sit-Down) Restaurant	127.15	12.72	1,000 Sq. Ft. Gross Floor Area
933	Fast Food Restaurant without Drive-Through Window	716	71.60	1,000 Sq. Ft. Gross Floor Area
934	Fast Food Restaurant with Drive-Through Window	496.12	49.61	1,000 Sq. Ft. Gross Floor Area
935	Fast Food Restaurant with Drive-Through Window and No Indoor Seating	1400	140.00	1,000 Sq. Ft. Gross Floor Area
936	Drinking Place	11.34	1.13	1,000 Sq. Ft. Gross Floor Area
941	Quick Lubrication Vehicle Shop	40	4.00	Servicing Positions
942	Automobile Care Center	15.86	1.59	1,000 Sq. Ft. Occupied Gross Leasable Area
943	Automobile Parts and Service Center	4.46	0.45	1,000 Sq. Ft. Gross Floor Area
944	Gasoline/Service Station	168.56	16.86	Vehicle Fueling Positions
945	Gasoline/Service Station with Convenience Market	162.78	16.28	Vehicle Fueling Positions
946	Gasoline/Service Station with Convenience Market and Car Wash	152.84	15.28	Vehicle Fueling Positions
947	Self-Service Car Wash	5.54	0.55	Wash Stalls
948	Automated Car Wash	11.64	1.16	1,000 Sq. Ft. Gross Floor Area

Note: Judgement needs to be exercised in the application of trip generation for specific sites. Although the information in the table is a guideline, consult a traffic engineer for more details.

(1) For banks, the assessment method will be based on a per 1,000 square feet of teller area plus the balance of the bank area calculated as general office space

It is common for an agency to provide a bypass factor or pass by reduction factor for some land uses. The factor applies to land uses that are incidental to trip generation. For example, a convenience store is not generally the reason a trip is generated but is simply a stop on the way to somewhere else. An agency cannot count a trip for a convenience store and a shopping center as two trips if the convenience store is just a stop en route to the ultimate destination.

Table 6.10.2 below summarizes various land use categories and provides a suggested pass-by factor. When considering the SDC assessment for nonresidential land uses, the City should select a pass-by factor, if applicable, and reduce the EDU or trip count by the recommended pass-by percentage.

The bypass factors shown in the table are typical of small communities. Some flexibility may be required when assessing transportation SDC's as the ITE table is not a one-size fits all table.

Table 6.10.2 Potential Pass-by factors for Various Land Uses
City of Toledo Transportation System

Category	Category Description	Bypass % Range	
No.		Low	High
1	Hotel/Motel/Accommodations	30%	50%
2	Medical Facilities	20%	40%
3	Offices	10%	20%
4	Small retail	30%	50%
5	Large retail	40%	60%
6	Sit down restaurant	40%	60%
7	Fast food w/ drive through	60%	70%
8	Bars and drinking establishments	30%	50%
9	Convenience stores, specialty shops, etc	75%	85%
10	Supermarket, grocery store, etc.	10%	30%
11	Wholesale club, superstore, etc.	10%	20%
12	Banks, financial institutions	15%	25%
13	Gas station, service stations, etc.	75%	85%

For land uses not shown in Table 6.10.2, the City will have to evaluate an appropriate bypass factor with the land use at the time of application and plan review. Some flexibility and judgment will be required to evaluate some land uses.

7.0 Parks SDC Methodology

Section 7

7.1 Introduction

This section describes in detail the calculations, background information, and methodology used to develop and identify the maximum defendable SDC for the City of Toledo Parks and Recreation Department. This section will describe the existing and future needs of the system, as well as projects and estimated costs to address deficiencies and satisfy future growth-related requirements.

7.2 Parks Department Overview

Current City of Toledo Facilities Include:

- **Deer Park –** Deer Park is located near the intersection of 12th Place and Deer Drive. Deer Park is considered a "pocket park" with only 0.21 acres of park area. The park includes some basic playground equipment and grassy areas. There are no restrooms or public parking available at the park nor is there tables or picnic facilities.

- **Fort Nye Park –** Fort Nye Park is located on 14th Street NE between Nye and Alder Streets and encompasses 0.29 acres of park area. The park is small and has a frontier theme. The park includes some basic, though aged, playground equipment and structures. The park does not include off-street parking or restroom facilities.

- **Maple Street Park –** Maple Street park is a larger park covering 0.75 acres. The park includes basic playground equipment and some open area. The park does not include off-street parking or restroom facilities.

- **James Branstiter Park -** James Branstiter Park is located near 6th and Elder Streets. The park is small, covering only 0.23 acres. The park includes some basic playground equipment, benches, and a small basketball area. The park does not include off-street parking or restroom facilities.

- **Yaquina View Park –** The Yaquina View Park is located near 18th Street S.E and Sturdevant Road. The small park covers 0.22 acres. Like the other parks in Toledo, this park includes some basic playground equipment though it lacks parking and on-site restroom facilities.

- **East Slope Park –** East Slope Park is located on the narrow strip of land between Olalla Road and Olalla Slough. The park is long and narrow and covers approximately 3 acres of area. The Park includes a fitness path with a paracourse made up of a series of stations with individual exercises associated with each station. The park includes a horseshoe pit and views of the river and slough. There is no off street parking or restroom facilities at the park.

- **Glen Lyons Nature Park –** The Glen Lyons Park is an undeveloped park area located near the confluence of the Olalla Slough and the Yaquina River. The park is unimproved and generally provides open space for bikers, hikers, and others.

- **Arcadia Park –** The largest of the Toledo parks, Arcadia park covers 4.5 acres near 7th and A Streets. The park includes a wide array of facilities to cater to the recreational needs of the community. This includes playground equipment, tennis courts, basketball areas, walking and nature trails, a swimming pool and more.

- **Toledo Memorial Field –** The City is the owner of the field though it is leased to the school district for use by the local school teams. The facility includes a lighted baseball field, a lighted football field, grandstands for spectation, a concession and storage building, and scoreboards. The field includes off street parking and restrooms to accommodate those attending sporting events at the field.

- **Skateboard Park –** The skateboard park is located near the NW 6th and A Streets. The facility includes a concrete skateboard bowl with a number of skateboard features. The park includes a limited amount of off-street parking and has portable restrooms available for those using the facilities.

7.2.1 Service Population

The service population utilizing parks facilities in Toledo is difficult as parks are used by full-time residents, part-time residents, tourists, and other visitors to the community for the recreational opportunities that are offered. Therefore, specific data is not available on the numbers of people that utilize the parks facilities each year.

For the purposes of this methodology, it will be assumed that parks SDC's should be assessed against new properties that are established to provide a domicile or lodging for full-time or part-time residents who may make use of parks facilities. This will include residential development, hotels, condos, and other land uses that will include lodging facilities for residents and visitors alike. It is not recommended that a park SDC be assessed against general commercial development as it is difficult to define the nexus between new commercial development and park use.

7.2.2 Recent Potential Parks SDC Legislation

Recent legislation considers placing limitations on the amount a community can assess for a park SDC.

Senate Bill 45 (SB 45) sought to combine both parks and school SDC's and set a cap on the total amount that can be charged for these SDC's. The State House of Representatives is considering a bill with similar language that would cap the total amount that can be charged for a parks and recreation SDC at $4,000.

The rationale for this potential legislation is that, unlike water, sewer, and other public infrastructure SDC's, the calculation of parks and school SDC's are more subjective in nature and, therefore, should be regulated. While it is not anticipated that this legislation will affect the recommendations in this methodology, this subsection is provided only as information and background to this methodology.

7.3 EDU Methodology and Projected Growth

As discussed previously, this methodology assumes that the Parks SDC will only be assessed against new properties that are creating new domiciles or lodging facilities for full- or part-time residents who may

utilize parks facilities. With this in mind, the following methodology was used to estimate the growth component to be used in the Parks SDC calculation in Toledo:

7.3.1 Parks Growth Population – EDU Method

It is recommended that growth in the parks sector be tied to a percentage of growth in the water and wastewater sectors. This rationale assumes that the majority of growth in the community will be related to residential growth and, therefore, should be considered as SDC assessable.

For the purposes of a conservative estimate, it is recommended that the City assume that 75% of the growth experienced in the water sector will be directly related to residential or growth that is related to the establishment of new domiciles. This will include homes, condos, apartments, rentals, etc.

With this assumption in mind, the recommended growth potential for the Parks sector is equal to approximately 442 EDU's.

7.4 Project Summary and Project Costs (CIP)

The City does not currently have a parks master plan. Therefore, preliminary bridge planning is included within this methodology to provide the necessary background to develop a preliminary CIP for the establishment of a park SDC.

Information on the parks CIP projects is provided below.

7.4.1 Parks and Recreation CIP Projects

A brief description of each project on the Parks CIP is provided below:

Parks Project No. 1 – Parks Master Plan – This project will provide the City with a parks master plan that will provide detailed analysis of the City's parks facilities and needs and will make recommendations to the City for a full planning period. The new plan will result in a more comprehensive CIP list and schedule that the City will be able to utilize to update the parks SDC in the future.

The estimated project costs for a parks master planning effort is $50,000.

As the plan will address both existing and projected issues, it is recommended that the project be considered as 50% SDC eligible.

Parks Project No. 2 – Deer Park Upgrades – Deer Park should be upgraded during the planning period as need and use increases. Planned upgrades should include ADA accessibility improvements, and new playground equipment.

A construction budget of $85,000 is recommended for this park upgrade. Adding contingency and engineering to the project (43%) suggests a total project budget of $121,550.

This project will primarily address existing deficiencies. While the utility of the park will be increased, it is recommended that the project be considered as 25% SDC eligible.

Parks Project No. 3 – Fort Nye Park Upgrades – Fort Nye requires an upgrade of the existing playground equipment and some minor ADA compliance improvements.

A construction budget of $40,000 is recommended for this project. Adding contingency and engineering to the project (43%) suggests a total project budget of $57,200.

This project is to primarily address existing issues. Therefore, a conservative recommendation of 10% SDC eligible is recommended to address increases in the utility of the park due to the improvements.

Park Project No. 4 – Maple Street Park Improvements – Maple Street requires some minor upgrades during the planning period. The playground equipment at the park should be replaced and standardized with other equipment in town. The park also requires some ADA improvements to provide better access. Some drainage and grading improvements should also be made to eliminate standing water issues.

A construction budget of $50,000 is recommended for this project. Adding engineering and contingency (43%) suggests a total project budget of $71,500.

This project is primarily a maintenance project. While park utility will be improved, an SDC eligibility level of 20% is recommended.

Park Project No. 5 – James Branstiter Park Improvements – James Branstiter Park should be upgraded during the planning period. The park is well used and has the potential for increased use. Improvements should include ADA improvements to expand access and utility, the installation of new standardized playground equipment, and the construction of permanent restrooms.

A construction budget of $200,000 is recommended for this park upgrade. Adding engineering and contingency (43%) increases the overall budget recommended to $286,000.

The improvements in this project will expand the utility of this park as well as address existing deficiencies. As such, it is recommended that this project be considered as 33% SDC eligible.

Park Project No. 6 – Yaquina View Park Improvements – The Yaquina View Park should be upgraded during the planning period in response to high use and growing needs. The park requires some expansion of space and parking, ADA improvements to increase accessibility and utility, and the construction of a permanent bathroom facility.

A construction budget of $200,000 is recommended for this park upgrade. The addition of engineering and contingency costs (43%) suggests a total project budget of $286,000.

As the improvements will address existing deficiencies and provide increased utility for growth, it is recommended that the project be considered as 33% SDC eligible.

Park Project No. 7 – East Slope Park Improvements – This popular park requires to address some maintenance issues as well as improvements to expand the accessibility and utility of the park. The existing fitness course requires maintenance and improvements, ADA accessibility improvements are needed, parking should be expanded and improved to allow access to the increasing numbers of park users, the bike trail should be improved and permanent restroom facilities should be constructed.

A construction budget of $250,000 is recommended for these improvements. The addition of engineering and contingency funds (43%) raises the total recommended project budget to $357,500.

This project will primarily address maintenance concerns. It will also expand the utility and accessibility of the park for a growing user base. Therefore, it is recommended that the project be considered as 33% SDC eligible.

Park Project No. 8 – Glen Lyons Park Improvements – This relatively unimproved park could increase its use and utility through a number of minor upgrades. To do this, it is recommended that improvements be made to add and expand parking facilities, staging areas, bike racks, picnic tables and benches.

A construction budget of $75,000 is recommended for these improvements. The addition of engineering and contingency (43%) suggests a total recommended project budget of $107,250.

This project will vastly increase the utility and accessibility of the park. And the need for the improvements will be based on growth and demand for these types of facilities. Therefore, it is recommended that this project be considered as 50% SDC eligible.

Park Project No. 9 – Arcadia Park Improvements – Arcadia Park should be upgraded within the planning period. Recommended improvements include the construction of permanent restrooms and drinking fountains, the tennis courts should be rehabilitated, the parking area needs to be expanded to provide more parking and access, ADA accessibility improvements, and some new playground equipment should be installed.

A construction budget of 275,000 is recommended for these improvements. By adding additional funds for contingency and engineering costs (43%), a total project budget of $393,250.

The project will address, primarily, existing deficiencies, though the parking and ADA upgrades will expand the utility of the park. Therefore, it is recommended that the project be considered as 33% SDC eligible.

Park Project No. 10 – Toledo Memorial Filed Improvements – This high-use facility requires a number of upgrades to increase the utility of the park facility and expand the capacity of the facility for a growing user base as well as to address a number of existing deficiencies. It is recommended that this project include the construction of permanent restroom facilities, construction of ADA accessibility improvements, install fencing, construction of improved spectation (seating), construction of bleachers at the ball field, and major drainage upgrades.

A construction budget for this project is recommended to be set at $500,000. The addition of contingency and engineering costs (43%) increases the overall recommended budget to $715,000.

The project addresses a number of existing deficiencies and needs faced at the park as well as maintenance issues. However, the utility and capacity of the park to serve new users will be increased as a result of this project. Therefore, it is recommended that the project be considered as 25% SDC eligible.

Park Project No. 11 – Skate Park Improvements – This park is relatively new though some enhancements to the park could increase the utility and accessibility of the facility for future users. Recommended improvements to the facility include: parking and ADA accessibility upgrades, permanent restroom facilities, additional seating for spectators, and picnic facilities.

A construction budget for this project should be set at $150,000. The addition of contingency and engineering costs (43%) increases the overall recommended budget to $214,500.

The project will serve to address existing deficiencies and increase the utility of the park facility. As such, this project should be considered as 25% SDC eligible.

All of the parks CIP projects are summarized below in Table 7.4.1.

Table 7.4.1 – Parks CIP Project Summary List

Project No.	Project Description	Project Cost	Project Cost Date	ENR Index of Estimate	Current ENR Index	Adjusted Cost Estimate (current)
1	Park Master Plan	$50,000.00	Apr-10	8671	8671	$50,000.00
2	Deer Park Upgrades	$121,550.00	May-10	8671	8671	$121,550.00
3	Fort Nye Park Upgardes	$57,200.00	May-10	8671	8671	$57,200.00
4	Maple Street Park Upgrades	$71,500.00	May-10	8671	8671	$71,500.00
5	James Branstiter Park Upgrades	$286,000.00	May-10	8671	8671	$286,000.00
6	Yaquina View Park Upgrades	$286,000.00	May-10	8671	8671	$286,000.00
7	East Slope Park Upgrades	$357,500.00	May-10	8671	8671	$357,500.00
8	Glen Lyons Park Upgrades	$107,250.00	May-10	8671	8671	$107,250.00
9	Arcadia Park Upgrades	$393,250.00	May-10	8671	8671	$393,250.00
10	Toledo Memorial Field Park Upgrades	$715,000.00	May-10	8671	8671	$715,000.00
11	Skate Park Upgrades	$214,500.00	May-10	8671	8671	$214,500.00
12						
				Total		**$2,659,750.00**

7.5 SDC Eligibility Summary

The SDC methodology must include a discussion of the percentage of each project's cost that can be attributed as necessary for growth and, therefore, be considered SDC eligible. As discussed previously, SDC's must be based on a project's costs or the portion of a project's cost that is necessary to add system capacity in response to or in anticipation of growth.

Section 7.4 above includes a brief description of each project along with a discussion of each project's SDC eligibility. A summary of the SDC eligibilities for each project is provided below in table 7.5.1.

Table 7.5.1 – Stormwater Project SDC Eligibility Summary

Project No.	Project Description	Adjusted Cost Estimate (current)	Reimbursement SDC Eligible (Y/N)	Improvement SDC Eligible (Y/N)	% SDC Eligible	SDC Eligible Cost
1	Park Master Plan	$50,000.00	N	Y	50%	$25,000.00
2	Deer Park Upgrades	$121,550.00	N	Y	25%	$30,387.50
3	Fort Nye Park Upgardes	$57,200.00	N	Y	10%	$5,720.00
4	Maple Street Park Upgrades	$71,500.00	N	Y	20%	$14,300.00
5	James Branstiter Park Upgrades	$286,000.00	N	Y	33%	$94,380.00
6	Yaquina View Park Upgrades	$286,000.00	N	Y	33%	$94,380.00
7	East Slope Park Upgrades	$357,500.00	N	Y	33%	$117,975.00
8	Glen Lyons Park Upgrades	$107,250.00	N	Y	50%	$53,625.00
9	Arcadia Park Upgrades	$393,250.00	N	Y	33%	$129,772.50
10	Toledo Memorial Field Park Upgrades	$715,000.00	N	Y	25%	$178,750.00
11	Skate Park Upgrades	$214,500.00	N	Y	25%	$53,625.00
12						
				Total		**$797,915.00**

This methodology provides for nearly $2.7-million in projects with around 30 percent of the projects being considered as SDC eligible.

7.6 Calculation of Parks Reimbursement SDC

No parks projects were identified in the CIP as being reimbursement SDC eligible. Therefore, there is not a parks reimbursement SDC at this time.

7.7 Calculation of Parks Improvement SDC

Calculation of the parks improvement SDC will be based upon the methodology and the establishment of the SDC eligible project costs as outlined earlier in this section. The following table provides a summary of the total cost of SDC eligible projects on the Parks CIP that have not yet been constructed. In order to account for construction cost increases since the time of the original estimates, we have used prorated costs based on the current ENR Index.

Table 7.7.1 – Improvement SDC Calculation Summary

Project No.	Project Description	SDC Eligible Cost
1	Park Master Plan	$25,000.00
2	Deer Park Upgrades	$30,387.50
3	Fort Nye Park Upgardes	$5,720.00
4	Maple Street Park Upgrades	$14,300.00
5	James Branstiter Park Upgrades	$94,380.00
6	Yaquina View Park Upgrades	$94,380.00
7	East Slope Park Upgrades	$117,975.00
8	Glen Lyons Park Upgrades	$53,625.00
9	Arcadia Park Upgrades	$129,772.50
10	Toledo Memorial Field Park Upgrades	$178,750.00
11	Skate Park Upgrades	$53,625.00
12	0	$0.00
	Total Improvement Eligible Costs (A)	$797,915.00
	Total Growth EDU's per Section 7.3 (B)	442
	Maximum Improvement Parks SDC (A/B)	**$1,806.26**

Based on this analysis, a Parks Improvement SDC in excess of around $1,806 would be defendable. Table 7.7.1 summarizes the calculation of the improvements SDC.

7.8 Parks SDC Credits

An analysis of potential SDC credits should be included as part of any SDC methodology. Credits may be appropriate to offset financing costs that will be paid by all system customers including new customers. Credits are also appropriate for developers who construct or otherwise provide improvements to the system that are part of the current CIP project list. A brief description of potential SDC credit scenarios is provided below:

7.8.1 Improvement Offset Credit

An improvement offset credit for the park SDC program is difficult as a specific development may have no relationship with or proximity to a park improvement that appears on the Parks CIP. However, this does not eliminate the potential for a developer to offset a park SDC with an equivalent improvement or partial improvement of a Parks CIP project.

For example, the City may wish to provide a Parks CIP offset credit to a developer who chooses to install a public restroom facility on one of the planned parks projects. If it is determined that the value of the restroom improvement is $65,000, a credit could be provided to the development for up to that amount but not more than the development would be required to pay for their park SDC.

As with the other SDC programs, a parks improvement offset credit must be considered on a case-by-case basis.

7.8.2 Financing Credit - Project Costs and Potential Loan Amounts

As the City does not currently have a rate structure or user fee for the parks system, it is not possible to develop a financing credit. As it is unlikely that a user fee will be established to support parks activities in Toledo, no recommendations are provided at this time to provide a credit to offset a potential park user fee.

However, it is possible that property taxes could be increased through bonds, levies, or other property tax related funding mechanisms. As is the case with user rates, a property cannot be charged an SDC and an increased property tax for the same SDC eligible project. Therefore, if Parks CIP projects are funded through an increase in the property taxes in Toledo, an appropriate financing credit should be established to eliminate the potential for "double-dipping" to pay for growth required parks projects.

7.9 Parks SDC Summary & Reduction Calculation

Section 7 has been developed to provide the City of Toledo with the methodology needed to establish the maximum defendable SDC for the parks system. The following table provides a summary of the information utilized to complete this analysis:

Table 7.9.1 – Parks System SDC Summary
(not including compliance costs)

Description	SDC Amount
Parks SDC	**$1,806.26**
Parks SDC Reduction Percentage	100%
Adjusted Parks SDC / EDU	**$1,806.26**

The maximum defendable SDC for the parks system is around $1,806 per EDU without the application of an SDC credit or compliance costs. It should be reiterated that this calculation represents the maximum SDC's that can be assessed and defended with proper methodology. The City has the autonomy to adjust this charge in any way they feel is appropriate. However, if adequate SDC fees are not collected and projects must be undertaken to satisfy growth requirements, funds will have to be obtained from other sources.

7.10 Parks SDC Assessment Schedule

As with other SDC programs, the parks program should include an assessment schedule that considers both residential and non-residential development. The assessment schedule should be easy to administer and equitable to the development parties.

The following assessment methods are provided for the City's consideration.

7.10.1 Residential Parks SDC Assessment

It is recommended that the parks SDC be assessed against residential development on a simple per EDU method. While some communities will adjust the residential parks SDC assessment based on the number of bedrooms in a home or on the size of a home, it is recommended that to simplify the assessment that one residential development be considered equal to one EDU.

Multi-family housing such as duplexes and apartments should be considered similarly to the assessment method discussed in Section 3 of this methodology. Specifically:

- Apartments should be assessed at a rate of 0.75 EDU per unit
- Duplexes and townhouses should be assessed at a rate of 1 EDU per separate dwelling or 2 EDU's per duplex.
- Etc.

7.10.2 Nonresidential Parks SDC Assessment

Non residential SDC's should be assessed assuming that each lodging room is equal to half of one EDU. Therefore, a new motel with 100 new rooms should be assessed as 50 EDU's when calculating a parks SDC.

Under this methodology, there is no recommended assessment for commercial or industrial land uses not associated with lodging facilities or domiciles, permanent or temporary.

Section 8

8.0 Compliance Costs

8.1 Introduction

Oregon law includes provisions that allow SDC revenues to be used to offset costs incurred by local governments in complying with the provisions of SDC law, including expenses associated with developing SDC methodologies, master planning, administration and updating of CIP's, and other compliance related costs. Recent amendments to the law require annual accounting of SDC expenditures, including revenue collected and attributed to the costs of compliance. The expenses of this annual accounting process are also considered to be related to the costs of compliance and can, therefore, be paid for with SDC revenues.

8.2 Compliance Costs

Unlike reimbursement and improvement SDC's, compliance costs do not represent another category of system development charges. For the City of Toledo, it is recommended that compliance costs be established as a "percentage" of the total SDC's that are likely to be assessed each year. The additional surcharge that is to be added to all SDC's will provide the funds necessary to administer each of the SDC programs and comply with current SDC laws and requirements.

The following sections provide a brief description of the components that will make up the compliance cost methodology.

8.2.1 Auditing/Accounting Costs

As mentioned previously, the City will be required to complete annual accounting and auditing of all of the SDC programs that are implemented. The City must account for all revenues collected through SDC assessments, as well as all expenses and project costs that are fully or partially paid for with SDC funds, and all other debits or credits from the SDC funds.

For the purposes of this Study, it will be assumed that auditing and accounting expenses will not exceed $5,000 per year for additional costs related to SDC's.

8.2.2 SDC Methodology and Administration

It will be assumed that the City will have to perform regular updates of their SDC methodology to account for increases in project costs (inflation), additions to the capital improvement plan (CIP), adjustments for project financing specifics as projects develop (i.e. interest rates, grants, etc.), population or growth rate changes, and other issues that may change the SDC charge for one or more of the individual SDC programs. These updates may be required, to a greater or lesser extent, on an annual basis.

It is also assumed that a full SDC methodology update will be required at least once each decade as planning efforts are updated. This major SDC methodology update may be required once every ten years

and would ensure that the City's SDC methodology meets all current legal requirements as well as being coordinated with updated planning efforts and CIP's.

While the cost of administering and updating the City's methodology may vary, it is recommended that the City plan on budgeting around $10,000 per year for this purpose. This will include costs for consulting assistance as well as covering some of the administrative costs of city staff as they address SDC issues, determine assessments, track funds, and other administrative tasks each year.

8.2.3 Infrastructure Planning Efforts

Most master planning and facilities efforts include a planning period of 20 years. However, in many cases, planning is updated before the end of the planning period. Changes in community needs, development pressures, regulatory changes, or other issues often prompt planning to be updated or repeated on a more regular basis than the planning period suggests.

For the purposes of establishing compliance costs, it is recommended that water and wastewater system planning be repeated on a schedule of at least once every 10 years. It may be that a major planning effort is required in year 1 and a less involved planning effort or update is appropriate for year 10. In any event, the City should be collecting revenues through the planning process that will allow them to update their planning documents as often as is needed or required.

It can be argued that 100 percent of the costs associated with planning should be considered SDC eligible. However, much of the efforts that go into infrastructure planning consist of assessing existing facilities, their capacities and condition, and the capabilities of the existing systems to provide service to existing and future customers. The planning efforts also include efforts to predict the infrastructure needs associated with growth and development. Therefore, the compliance cost associated with infrastructure planning should be shared in part by the SDC programs and in part by the existing users in the system.

For the purposes of this analysis, it is recommended that 50% of the recurring planning costs be considered attributable to growth and are therefore, considered to be SDC eligible. The individual costs of these planning efforts are estimated in Table 8.2.5.

8.2.4 Total Estimated SDC Revenue

As it is recommended that compliance costs should be charged as a percentage surcharge of SDC revenues, the amount of SDC revenue that is anticipated to be collected must be established.

For this calculation, we must make an assumption as to what the City will choose to charge for each SDC program. This may require adjustment once the final SDC for each infrastructure element is established. Once the annual compliance costs and annual revenue expected for SDC's are established, we can calculate the percentage surcharge that must be included to cover the annual compliance costs over and above the regular SDC revenues.

The growth component for each SDC program must be reviewed individually and an annual average growth unit established. For example, if it is determine that a water SDC program will add 2,000 new EDU's over 20 years, it should be assumed that the system will add an average of 100 EDU's each year to the system. Therefore, the compliance costs associated with the water SDC program should be paid as a

percentage of the SDC revenues collected from the 100 new EDU's added to the system in any given year.

This same analysis should be repeated for each of the separate SDC programs. A summary of this analysis is provided below in Table 8.2.5.

8.2.5 Calculation of Compliance Expenses

The following table illustrates and summarizes the estimated compliance costs that will be associated with the proper administration of an SDC program in the City of Toledo. These expenses include annual costs for accounting and administration as well as longer term costs for planning efforts.

Table 8.2.5 – Calculation of SDC Compliance Expenses
City of Toledo SDC Program

Compliance Activity	Estimated Cost	SDC Eligibility (%)	Frequency (years)	Annual $
General Accounting/Administration Costs				
Auditing/Accounting	$5,000	100%	1	$5,000
SDC Methodology Administration & Annual Adjustments	$10,000	100%	1	$10,000
SDC Methodology Update	$65,000	100%	10	$6,500
Wastewater SDC Compliance Costs				
Wastewater Facilities Planning/Master Planning	$180,000	50%	10	$9,000
Water System Compliance Costs				
Water Master Planning	$75,000	50%	10	$3,750
Water Conservation and Management Planning	$30,000	50%	20	$750
Storm Drain Compliance Costs				
Storm Drain Master Planning	$90,000	50%	20	$2,250
Parks Compliance Costs				
Parks Master Planning	$50,000	50%	10	$2,500
Transportation Compliance Costs				
Transportation Master Planning (TSP)	$125,000	50%	10	$6,250
Subtotal of Annual Costs	**$630,000**			**$46,000**

Based on this analysis, it is estimated to require nearly $46,000 per year to properly administer the entire SDC program in Toledo. This includes costs for planning as well as general administration.

8.2.6 Summary of SDC Revenue and Calculation of Compliance Surcharge

Within each section of this methodology, an effort was made to establish the growth potential, over a 20-year planning period, for each infrastructure sector. If we assume that growth occurs evenly over the planning period, we can assume a straight line growth rate for each sector and determine the annual growth in each sector.

If we then multiply the average cost per EDU by the growth expected in each sector, we can calculate the estimated annual revenue within each infrastructure sector.

Table 8.2.6 below summarizes the estimated revenue expected within each sector.

Table 8.2.6 – Calculation of Anticipated SDC Revenue by Sector
City of Toledo SDC Program

Estimates of SDC Revenues	Added EDU's EDU's/yr	SDC Charge per EDU	Annual Revenue
Estimated Annual Wastewater SDC Revenues	29.45	$4,910.91	$144,626.29
Estimated Annual Water SDC Revenues	29.45	$5,242.57	$154,393.63
Estimated Annual Storm Drainage SDC Revenues	29.45	$843.59	$24,843.75
Estimated Annual Parks SDC Revenues	22.09	$1,806.26	$39,895.75
Estimated Annual Transportation SDC Revenues	36.81	$1,162.75	$42,803.76
Total Estimated Annual SDC Revenue			**$406,563.18**
Compliance Cost Charge (Annual cost/Annual Revenue)			**11.31%**

By dividing the calculated compliance costs in Table 8.2.5 by the total estimated annual revenue in Table 8.2.6, we can calculate an appropriate SDC surcharge that is required to administer the SDC program in Toledo.

Based on this analysis, it is recommended that compliance costs of approximately 11% of the SDC revenue be collected for each of the individual SDC programs. On average, this surcharge should produce enough revenue annually to assist the City with the compliance and administration of all of the SDC programs.

It should be noted that compliance costs should be shared between all infrastructure sectors. Therefore, when SDC's are collected, the City must deposit an appropriate amount into each SDC account taking care to separate the individual SDC charges as well as an appropriate portion of the compliance costs into each separate account.

APPENDIX