



Agenda Report 2015-03-23-02

Date: March 13, 2015

To: Members, West Linn City Council

From: Dylan Digby, Public Improvement Specialist

Through: Lance Calvert, P.E., Public Works Director/City Engineer LEC
Chris Jordan, City Manager *CJ*

Subject: Transportation Systems Development Charge Update

Purpose

The proposed Resolution would update the Transportation Systems Development Charge ("SDC") project list, methodology, and fee to more accurately represent the multimodal character of West Linn's transportation system.

Question(s) for Council:

Should the City's Transportation SDC Capital Project List, methodology, and fee be revised?

Public Hearing Required:

Yes

Background & Discussion:

Recent Council goals to enhance pedestrian and biking opportunities for the community led to the recognition that revenues from the Bike/Pedestrian SDC can only fund 2.8 % of many important bike and pedestrian projects. At Council direction, City staff has been working with FCS Group, an independent public sector financial consulting firm, to review the Transportation SDC methodology. Changing to a person-trip methodology as recommended by FCS Group provides better representation of multimodal transportation in West Linn and will allow just over 20% of bike and pedestrian project funding to come from the Bike/Pedestrian SDC Fund.

Public notice of the proposed SDC modification was provided in accordance with ORS 223.304. In addition, staff mailed notices to the current development community, ran an ad in the local newspaper and placed information on the City website to ensure all interested parties would be informed. Presentation and discussion of this topic initially took place at the November 17, 2014, Council Work Session. The City last updated its Transportation SDC methodology in 2009.

Budget Impact:

N/A

Council Options:

1. Approve the Resolution, revising the Transportation SDC methodology, Capital Improvement Project Plan, and SDC fees as recommended in the FCS Group Report.
2. Approve the Resolution with SDC fees at lower rates than recommended in the Report.
3. Make no changes to the Transportation SDC methodology, Project Plan, or SDC fees.

Staff Recommendation:

Staff recommends Council option number 1.

Potential Motion:

Move to adopt Resolution 2015-03, “A Resolution of the West Linn City Council Revising the Transportation System Development Charge Methodology, Capital Improvement Project Plan, and System Development Charges.”

Attachments:

1. Resolution 2015-03
2. FCS Group Report, dated November 2014 and attached as “Exhibit A.”

RESOLUTION NO. 2015 - 03

A RESOLUTION OF THE WEST LINN CITY COUNCIL REVISING THE TRANSPORTATION SYSTEM DEVELOPMENT CHARGE METHODOLOGY, CAPITAL IMPROVEMENT PROJECT PLAN, AND SYSTEM DEVELOPMENT CHARGES

WHEREAS, West Linn Municipal Code (“WLMC”) Sections 4.400 through 4.485 authorize the City to charge and revise system development charges (“SDC”) pursuant to ORS 223.297 through 223.314 for the purpose of creating a source of funds to pay for the installation, construction and extension of capital improvements; and

WHEREAS, the City hired Financial Consulting Solutions Group (“FCS Group”) to review and update the project list and Transportation SDC methodology to more accurately represent multimodal transportation within the City; and

WHEREAS, FCS Group has submitted a report dated November 2014 containing their analysis, methodology, Transportation SDC recommendations, and updated Transportation Capital Improvement Project Plan; and

WHEREAS, WLMC Section 4.415, 4.420, and 4.435 specify that SDC charges, methodology, and project plans may be revised by resolution of the City Council; and

WHEREAS, the City desires to implement the SDC methodology and fee changes as provided in the FCS group report to allow a greater percentage of SDC funding for bicycle and pedestrian projects;

NOW, THEREFORE, THE CITY OF WEST LINN RESOLVES AS FOLLOWS:

SECTION 1. The Transportation SDC methodology contained in the November 2014 FCS Group Report (“Report”) is adopted as the methodology for the City’s Transportation SDC. The Report is attached as Exhibit A.

SECTION 2. The Transportation Capital Improvement Project Plan is modified and as set forth in the Report.

SECTION 3. Transportation Systems Development Charges are modified in the amounts recommended in the Report, and the Transportation SDC shall be due and payable consistent with West Linn Municipal Code Section 4.440. The updated Transportation SDC will become effective on July 1, 2015.

SECTION 4. The City Council determines that the fees imposed by this Resolution are not a tax subject to the property tax limitation of Article XI, Section 11(b) of the Oregon Constitution.

This resolution was PASSED and ADOPTED this 23rd day of March, 2015, and takes effect upon passage.

THOMAS FRANK, COUNCIL PRESIDENT

ATTEST:

KATHY MOLLUSKY, CITY RECORDER

APPROVED AS TO FORM:

CITY ATTORNEY

EXHIBIT A

West Linn, Oregon



TRANSPORTATION SYSTEM DEVELOPMENT CHARGE STUDY

November 2014

FCS GROUP

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TABLE OF CONTENTS

TABLE OF CONTENTS	i
I. BACKGROUND	1
A. Policy	1
B. Project	1
II. COST CALCULATION	3
A. Growth Calculation	3
A.1 Expected Growth Levels	3
B. Reimbursement Fee Cost Basis	4
B.1 SDC-Eligible Reimbursement Costs	4
B.2 Reimbursement Fee per ADPT	4
C. Improvement Fee Cost Basis	4
C.1 SDC-Eligible Improvement Costs	4
C.2 Improvement Fee per ADPT	5
D. Compliance Cost Fee Basis	5
E. SDC Costs to Development	6
E.1 New ADPT per Unit of Development	6
E.2 SDC per Unit of Development	6
III. SUMMARY	7
A. SDC Cost per Unit of Development	7
B. Credits, Exemptions, and Discounts	7
B.1 Credits	7
B.2 Exemptions	8
C. Indexing	8
D. Summary and Comparison	8
IV. APPENDICES	12
APPENDIX A – SDC-Eligible Projects from West Linn Transportation System Plan	12
APPENDIX B.1 – Historical SDC Expenditures	23
APPENDIX B.2 – Historical SDC Credits	24

I. BACKGROUND

This section describes the policy context and project scope upon which the body of this report is based.

A. POLICY

Oregon Revised Statutes (ORS) 223.297 to 223.314 authorize local governments to establish system development charges (SDCs). These are one-time fees on new development paid at the time of development. SDCs are intended to recover a fair share of the cost of existing and planned facilities that provide capacity to serve future growth.

ORS 223.299 defines two components of a SDC:

- ◆ A reimbursement fee that is designed to recover “costs associated with capital improvements already constructed, or under construction when the fee is established, for which the local government determines that capacity exists”
- ◆ An improvement fee that is designed to recover “costs associated with capital improvements to be constructed”

ORS 223.304(1) states, in part, that a reimbursement fee must be based on “the value of unused capacity available to future system users or the cost of existing facilities” and must account for prior contributions by existing users and any gifted or grant-funded facilities. The calculation must “promote the objective of future system users contributing no more than an equitable share to the cost of existing facilities.” A reimbursement fee may be spent on any capital improvement related to the system for which it is being charged (whether cash-financed or debt-financed) and on the costs of compliance with Oregon’s SDC law.

ORS 223.304(2) states, in part, that an improvement fee must be calculated to include only the cost of projected capital improvements needed to increase system capacity for future users. In other words, the cost of planned projects that correct existing deficiencies or do not otherwise increase capacity for future users may not be included in the improvement fee calculation. An improvement fee may be spent only on capital improvements (or portions thereof) that increase the capacity of the system for which it is being charged (whether cash-financed or debt-financed) and on the costs of compliance with Oregon’s SDC law.

B. PROJECT

The City last revised its transportation SDC methodology in 2009. In 2014, the City contracted with FCS GROUP to update its transportation SDCs.

We approached this project as a series of three steps:

- **Policy Review.** In this step, we worked with City staff to identify and agree on the approach to be used and the components to be included in the analysis. The City's primary interest was to define new allocation approaches for bicycle and pedestrian improvements.
- **Technical Analysis.** In this step, we worked with City staff to isolate the recoverable portion of existing facilities costs as well as planned capacity increasing facilities costs to calculate draft SDC rates.
- **Draft Methodology Report Preparation.** In this step, we documented the calculation of the proposed SDCs included in this report.

II. COST CALCULATION

This section provides a description of the transportation SDC calculation. We performed this analysis by taking the following steps:

- ◆ We estimated demand growth in average daily person trip-ends (ADPTs);
- ◆ With staff input, we identified the eligible reimbursement fee and improvement fee cost bases.
- ◆ We calculated each SDC component per trip-end and unit of development.

A. GROWTH CALCULATION

West Linn’s prior transportation SDC growth calculation was based on projected peak-hour vehicle trip-ends. With staff input, we used a different approach for this update. In order to appropriately account for a balanced transportation system with a mix of motor vehicle, bicycle, transit, and pedestrian facility improvements we utilized an average daily person trip-end (ADPT) basis. ADPTs include non-motor vehicle trips that utilize bicycle, pedestrian, and transit facilities.

A.1 Expected Growth Levels

To determine the forecasted increase in ADPTs in West Linn, we used Metro travel forecasts from the 2009 methodology. Interpolating from those figures, we projected an increase of 52,791 ADPT as shown in **Exhibit 1**. The increase in trips equates to approximately 1.6% annual growth.

Exhibit 1: Growth Estimates 2015-2030

	2009	Est. 2015	Proj. 2030	2015 to 2030 change	CAGR
PM 2 Hour Peak Trip-Ends	10,897	11,963	15,105	3,142	1.57%
Average Daily Vehicle Trip-Ends¹	108,970	119,627	151,050	31,423	1.57%
Average Daily Person Trip-Ends²	183,070	200,973	253,764	52,791	1.57%
New person trips as a % of future person trips				20.80%	

Source: Metro Trip Forecasts, 2009 West Linn Transportation SDC Methodology, compiled by FCS GROUP.

Abbreviations: CAGR: Compound Annual Growth Rate

¹Average Daily Trip-Ends assume 10% of all trips are Peak Hour Trip-Ends

²Person trip conversion rate of 1.68 derived from 2009 U.S. National Household Transportation Survey findings

This increase in ADPT, 52,791, will serve as the denominator in the improvement fee and reimbursement fee calculations. This is the total number of ADPTs attributed to growth between 2015 and 2030.

B. REIMBURSEMENT FEE COST BASIS

The reimbursement fee portion of the SDC is based on the estimated cost of unused transportation system capacity. The current estimated value of West Linn’s excess capacity in the transportation system was determined based on the prior City cost of SDC-funded capacity projects and SDC credits issued by the City. The historical cost incurred by the City for capacity-increasing transportation facilities is shown in **Appendix B.1** and **Appendix B.2**. Eligible reimbursement costs reflect the amount of current infrastructure capacity that will accommodate growth converted to 2014 dollar amounts derived from the Engineering News Record, 20-City Average Construction Cost Index.

B.1 SDC-Eligible Reimbursement Costs

The reimbursement fee is determined by summing SDC historical credits and SDC expenditures, converting those amounts to 2014 dollars, and determining the unused capacity of projects constructed with that money. For this analysis, we assume the capacity of any project built with SDC monies will be exhausted in 20 years. The eligible reimbursement cost basis is \$5,184,728, summarized in **Exhibit 2** and calculated in **Appendix B.1** and **Appendix B.2**.

Exhibit 2: SDC Expenditures		
	2014 Costs	2014 SDC-eligible Costs
SDC Credits	\$17,572,049	\$4,949,518
SDC Expenditures	\$249,009	\$235,210
Total	\$17,821,058	\$5,184,728

Source: City of West Linn, compiled by FCS GROUP.

B.2 Reimbursement Fee per ADPT

The reimbursement fee per ADPT is calculated by dividing the eligible cost basis by forecasted growth in ADPT. The outcome, reimbursement fee per ADPT, is summarized in **Exhibit 3** below.

Exhibit 3: Reimbursement Costs	
Mode	SDC Expenditures and Historical Credits
Eligible Costs	\$5,184,728
ADPT	52,791
Proposed SDC per ADPT	\$98.21

Source: City of West Linn, compiled by FCS GROUP.

C. IMPROVEMENT FEE COST BASIS

The improvement fee portion of the SDC is based on a specific list of planned capacity-increasing capital improvements. The portion of each project that is attributable to growth is determined and the improvement fee is calculated by dividing the total cost of growth-related projects, and portions therefore, by the projected increase in ADPTs.

C.1 SDC-Eligible Improvement Costs

West Linn’s current transportation SDC methodology is based on the 2008 West Linn Transportation System Plan (TSP). The TSP provides a list of capital projects needed to meet 2030 transportation conditions.

The TSP project list was adjusted to account for non-local funding sources and only includes improvements that increase capacity. The projects listed in the transportation capital improvement plan are eligible for SDC funding only to the extent that the projects will benefit future users rather than cure an existing deficiency. The capacity-increasing percentage of each project was identified through discussions with City staff and the growth calculation in Section A.1.

After adjusting for inflation and deleting projects that have already been completed, facility improvements total \$116,590,416, with SDC-eligible costs of \$27,052,929. The SDC-eligible facility costs include \$21,209,107 in roadway facilities, \$1,843,833 in bicycle facilities, \$3,678,886 in pedestrian facilities, and \$321,103 in transit facilities. See **Exhibit 4** for summary costs and **Appendix A** for complete calculations.

Exhibit 4: Improvement Cost Basis Summary by Mode				
	Cost in 2008	Local Cost in 2014	Growth Share	SDC-Eligible Costs
Pedestrian Projects	\$20,440,000	\$24,648,168	14.93%	\$3,678,886
Bicycle Projects	\$8,850,000	\$10,672,030	17.28%	\$1,843,833
Motor Vehicle Projects	\$66,115,000	\$79,726,693	26.60%	\$21,209,107
Transit Projects	\$1,280,000	\$1,543,525	20.80%	\$321,103
Total	\$96,685,000	\$116,590,416		\$27,052,929

Source: Appendix B, compiled by FCS GROUP.

C.2 Improvement Fee per ADPT

The improvement fee per ADPT is calculated using the following formula:

$$\frac{\text{SDC-Eligible Cost} - \text{Existing SDC Fund Balance}}{\text{Growth in ADPT}} = \text{Improvement Fee per ADPT}$$

SDC-eligible costs are capital improvement costs which will serve future growth, shown in **Exhibit 4** and **Appendix A**. The transportation improvement SDC fund balance that has been collected by the City but not yet spent is then subtracted from the SDC-eligible costs in order to avoid double-charging. Finally, that number is divided by growth in ADPTs. The outcome, improvement fee per ADPT, is summarized in **Exhibit 5** below.

Exhibit 5: Improvement Costs			
Mode	Pedestrian/Bicycle Projects	Motor Vehicle Projects	Transit Projects
Eligible Costs	\$5,522,719	\$21,209,107	\$321,103
SDC Current Fund Balance Adjustment	<u>\$396,793</u>	<u>\$1,212,788</u>	<u>\$0</u>
Subtotal	\$5,125,926	\$19,996,319	\$321,103
ADPT	52,791	52,791	52,791
Proposed SDC per ADPT	\$97.10	\$378.78	\$6.08

Source: West Linn Transportation System Plan, compiled by FCS GROUP.

D. COMPLIANCE COST FEE BASIS

ORS 223.307(5) authorizes the expenditure of SDCs on “the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures.”

After discussions with City staff, this SDC methodology assumes no compliance cost recovered through the SDC.

E. SDC COSTS TO DEVELOPMENT

In order to translate SDC costs per ADPT to SDC costs per unit of development, we must determine the number of ADPT generated by each type of development.

E.1 New ADPT per Unit of Development

The Institute of Transportation Engineers (ITE) *Trip Generation Manual* contains trip rates based on studies conducted nationwide and provides the base data of unadjusted counts of trips generated by various types of land use. The trip rates include all traffic entering or leaving a location but does not account for traffic that passes by or interrupts a primary trip between origin and destination. We have taken the step of removing pass-by trips because they would occur regardless of development activity.

We calculate the number of new ADPTs generated per day for each type of land use with the following formula:

$$\text{ITE Vehicle Trip Rate} \times \text{ADPT Conversion Factor} \times (1 - \% \text{ Pass-by Trips}) = \text{New ADPT}$$

E.2 SDC per Unit of Development

The SDC per unit of development is calculated for each type of land use by multiplying the new ADPT for each land use by the SDC per ADPT.

$$\text{SDC per ADPT} \times \text{New ADPT by Land Use} = \text{SDC by Land Use}$$

Appendix C shows the individual charges per unit for each portion of the SDC. It is important to note that the *Trip Generation Manual* may not contain some land use categories or may not include trip rates or number of net new trips generated. For such land use categories without data, the Public Works Director/City Engineer shall use her/his judgment to calculate the transportation SDC.

III. SUMMARY

This section summarizes the SDCs for selected ITE land use categories and discusses credits and exemptions from the West Linn transportation SDC.

A. SDC COST PER UNIT OF DEVELOPMENT

Exhibit 6 displays the total transportation SDC per ADPT.

Exhibit 6: West Linn Transportation SDC Cost per ADPT					
Mode	Improvement Fee			Reimbursement Fee	Total
	Pedestrian /Bicycle Projects	Motor Vehicle Projects	Transit Projects	SDC Expenditures and Historical Credits	
Eligible Costs	\$5,522,719	\$21,209,107	\$321,103	\$5,184,728	\$32,237,657
SDC Fund Balance	(\$396,793)	(\$1,212,788)	\$0		\$1,609,581
Subtotal	\$5,125,926	\$19,996,319	\$321,103	\$5,184,728	\$30,628,076
ADPT	52,791	52,791	52,791	52,791	52,791
Proposed SDC per ADPT	\$97.10	\$378.78	\$6.08	\$98.21	\$580.18

Source: Previous tables, compiled by FCS GROUP.

B. CREDITS, EXEMPTIONS, AND DISCOUNTS

The City of West Linn will continue to establish local policies for issuing credits, exemptions, annual adjustments, and other administrative procedures.

B.1 Credits

A credit is a reduction in the amount of the SDC for a specific development. ORS 223.304 requires that credit be allowed for the construction of a qualified public improvement which: is required as a condition of development approval; is identified in the City’s capital improvements program; and either is “not located on or contiguous to property that is the subject of development approval,” or is located “on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the particular development project....”

The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement (e.g., a transportation improvement can only be used for a credit for a future transportation SDC). Additionally, a credit must be granted “only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve” the particular project up to the amount of the improvement fee. For multi-phase projects, any “excess credit may be applied against SDCs that accrue in subsequent phases of the original development project.”

In addition to these required credits, the City may provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the City’s

SDC Capital Improvements Plan, or provide a share of the cost of an improvement by other means (i.e., partnerships, other City revenues, etc.).

B.2 Exemptions

The City may exempt specific classes of development such as minor additions from the requirement to pay transportation SDCs.

C. INDEXING

Oregon law (ORS 223.304) also allows for the periodic indexing of system development charges for inflation, as long as the index used is:

- “(A) A relevant measurement of the average change in prices or costs over an identified time period for materials, labor, real property or a combination of the three;
- (B) Published by a recognized organization or agency that produces the index or data source for reasons that are independent of the system development charge methodology; and
- (C) Incorporated as part of the established methodology or identified and adopted in a separate ordinance, resolution or order.”

We recommend that the City of West Linn index its charges to the Engineering News Record 20-City Average Construction Cost Index, and adjust the charges annually as per that index. There is no comparable Oregon-specific index.

D. SUMMARY AND COMPARISON

Exhibit 7 summarizes the SDC calculations and compares them with SDCs currently in effect for selected land uses.

Exhibit 7: Existing and Revised Transportation SDCs in West Linn				
Land Use Type	Unit	Current TSDC	Proposed TSDC	Change
General Light Industrial	per 1,000 ft ²	\$7,309	\$5,131	-\$2,178
Mini-Warehouse	per 1,000 ft ²	\$2,058	\$2,313	\$254
Single-Family Detached Housing	per house	\$8,990	\$9,208	\$218
Apartment	per unit	\$5,496	\$6,336	\$839
City Park	Acre	\$3,906	\$5,978	\$2,071
General Office Building	per 1,000 ft ²	\$14,115	\$8,168	-\$5,947
Free-Standing Discount Superstore	per 1,000 ft ²	\$20,434	\$26,992	\$6,558
Specialty Retail	per 1,000 ft ²	\$23,011	\$14,230	-\$8,782
Supermarket	per 1,000 ft ²	\$20,288	\$17,881	-\$2,407
Fast-Food Restaurant w/ Drive-Thru	per 1,000 ft ²	\$70,336	\$87,428	\$17,092

Source: Current West Linn Transportation SDC Methodology, compiled by FCS GROUP.

A full list of SDCs by land use is provided in **Exhibit 8** below.

Exhibit 8: ITE Trips and SDC Costs per Land Use											
ITE Code	Land Use	Unit	ITE Average Daily Trips	Number of Person Trips ¹	% Primary Trips	New Person Trip Ends	Improvement Cost			Reimbursement Cost	SDC Total
							Pedestrian/Bicycle Projects	Motor Vehicle Projects	Transit Projects		
21	Commercial Airport	CFD	123.1	206.8	100%	206.8	\$20,083	\$78,344	\$1,258	\$20,313	\$119,999
30	Intermodal Truck Terminal	Acre	62.5	105.0	100%	105.0	\$10,197	\$39,778	\$639	\$10,314	\$60,928
110	General Light Industrial	1,000 SFGFA	5.3	8.8	100%	8.8	\$859	\$3,350	\$54	\$869	\$5,131
130	Industrial Park	1,000 SFGFA	5.3	9.0	100%	9.0	\$871	\$3,397	\$55	\$881	\$5,203
140	Manufacturing	1,000 SFGFA	3.0	5.1	100%	5.1	\$494	\$1,928	\$31	\$500	\$2,953
151	Mini-Warehouse	1,000 SFGFA	2.4	4.0	100%	4.0	\$387	\$1,510	\$24	\$392	\$2,313
160	Data Center	1,000 SFGFA	1.0	1.7	100%	1.7	\$161	\$630	\$10	\$163	\$965
210	Single-Family Detached Housing	Dwelling unit	9.4	15.9	100%	15.9	\$1,541	\$6,012	\$97	\$1,559	\$9,208
220	Apartment	Dwelling unit	6.5	10.9	100%	10.9	\$1,060	\$4,136	\$66	\$1,072	\$6,336
230	Residential Condominium/Townhouse	Dwelling unit	5.7	9.5	100%	9.5	\$922	\$3,596	\$58	\$932	\$5,508
240	Mobile Home Park	ODU	4.9	8.2	100%	8.2	\$800	\$3,119	\$50	\$809	\$4,777
254	Assisted Living	Bed	2.6	4.3	100%	4.3	\$418	\$1,631	\$26	\$423	\$2,498
310	Hotel	Room	7.9	13.2	100%	13.2	\$1,281	\$4,999	\$80	\$1,296	\$7,657
320	Motel	Room	5.6	9.5	100%	9.5	\$918	\$3,583	\$58	\$929	\$5,488
411	City Park	Acre	6.1	10.3	100%	10.3	\$1,000	\$3,903	\$63	\$1,012	\$5,978
417	Regional Park	Acre	5.0	8.4	100%	8.4	\$814	\$3,176	\$51	\$824	\$4,865
430	Golf Course	Acre	5.3	8.9	100%	8.9	\$860	\$3,354	\$54	\$870	\$5,138
444	Movie Theater with Matinee	Movie screen	387.0	650.2	100%	650.2	\$63,135	\$246,289	\$3,955	\$63,859	\$377,237
492	Health/Fitness Club	1,000 SFGFA	30.3	50.9	100%	50.9	\$4,946	\$19,295	\$310	\$5,003	\$29,554
495	Recreational Community Center	1,000 SFGFA	27.4	46.0	100%	46.0	\$4,470	\$17,436	\$280	\$4,521	\$26,707
520	Elementary School	1,000 SFGFA	7.1	12.0	59%	7.1	\$686	\$2,675	\$43	\$694	\$4,097
522	Middle School/Junior High School	1,000 SFGFA	6.4	10.7	59%	6.3	\$612	\$2,389	\$38	\$619	\$3,659
530	High School	1,000 SFGFA	6.0	10.0	59%	5.9	\$573	\$2,234	\$36	\$579	\$3,422
540	Junior/Community College	1,000 SFGFA	21.4	36.0	100%	36.0	\$3,493	\$13,626	\$219	\$3,533	\$20,871
560	Church	1,000 SFGFA	13.2	22.2	100%	22.2	\$2,157	\$8,414	\$135	\$2,181	\$12,887
565	Day Care Center	1,000 SFGFA	18.0	30.3	33%	10.0	\$970	\$3,785	\$61	\$981	\$5,798
590	Library	1,000 SFGFA	50.5	84.8	100%	84.8	\$8,232	\$32,112	\$516	\$8,326	\$49,186
610	Hospital	1,000 SFGFA	12.2	20.4	100%	20.4	\$1,985	\$7,744	\$124	\$2,008	\$11,862
620	Nursing Home	1,000 SFGFA	7.2	12.1	100%	12.1	\$1,176	\$4,589	\$74	\$1,190	\$7,029
710	General Office Building	1,000 SFGFA	8.4	14.1	100%	14.1	\$1,367	\$5,333	\$86	\$1,383	\$8,168
720	Medical-Dental Office Building	1,000 SFGFA	27.3	45.9	100%	45.9	\$4,455	\$17,378	\$279	\$4,506	\$26,618
731	State Motor Vehicles Department	1,000 SFGFA	120.9	203.1	100%	203.1	\$19,722	\$76,935	\$1,235	\$19,948	\$117,841
732	United States Post Office	1,000 SFGFA	88.4	148.4	100%	148.4	\$14,412	\$56,222	\$903	\$14,577	\$86,114

Exhibit 8: ITE Trips and SDC Costs per Land Use											
ITE Code	Land Use	Unit	ITE Average Daily Trips	Number of Person Trips ¹	% Primary Trips	New Person Trip Ends	Improvement Cost			Reimbursement Cost	SDC Total
							Pedestrian/Bicycle Projects	Motor Vehicle Projects	Transit Projects		
750	Office Park	1,000 SFGFA	8.5	14.3	100%	14.3	\$1,387	\$5,409	\$87	\$1,402	\$8,285
760	Research and Development Center	1,000 SFGFA	6.2	10.5	100%	10.5	\$1,015	\$3,960	\$64	\$1,027	\$6,065
770	Business Park	1,000 SFGFA	9.4	15.9	100%	15.9	\$1,539	\$6,004	\$96	\$1,557	\$9,197
812	Building Materials and Lumber Store	1,000 SFGFA	43.1	72.5	100%	72.5	\$7,035	\$27,445	\$441	\$7,116	\$42,037
813	Free-Standing Discount Superstore	1,000 SFGFA	38.5	64.6	72%	46.5	\$4,517	\$17,623	\$283	\$4,569	\$26,992
814	Variety Store	1,000 SFGFA	30.6	51.4	48%	24.5	\$2,382	\$9,290	\$149	\$2,409	\$14,230
815	Free-Standing Discount Store	1,000 SFGFA	28.2	47.4	48%	22.6	\$2,198	\$8,574	\$138	\$2,223	\$13,132
816	Hardware/Paint Store	1,000 SFGFA	25.9	43.5	45%	19.4	\$1,881	\$7,338	\$118	\$1,903	\$11,239
817	Nursery (Garden Center)	1,000 SFGFA	82.9	139.2	100%	139.2	\$13,516	\$52,727	\$847	\$13,671	\$80,762
820	Shopping Center	1,000 SFGFA	20.7	34.7	50%	17.4	\$1,691	\$6,598	\$106	\$1,711	\$10,107
826	Specialty Retail Center	1,000 SFGFA	40.6	68.2	100%	68.2	\$6,620	\$25,824	\$415	\$6,696	\$39,554
841	Automobile Sales	1,000 SFGFA	29.3	49.2	100%	49.2	\$4,774	\$18,623	\$299	\$4,829	\$28,525
843	Automobile Parts Sales	1,000 SFGFA	27.2	45.8	44%	20.1	\$1,955	\$7,627	\$122	\$1,978	\$11,682
848	Tire Store	1,000 SFGFA	17.1	28.7	69%	19.7	\$1,913	\$7,462	\$120	\$1,935	\$11,430
850	Supermarket	1,000 SFGFA	47.3	79.5	39%	30.8	\$2,993	\$11,674	\$187	\$3,027	\$17,881
851	Convenience Market (Open 24 Hours)	1,000 SFGFA	246.8	414.6	33%	134.9	\$13,095	\$51,084	\$820	\$13,245	\$78,245
857	Discount Club	1,000 SFGFA	42.3	71.1	100%	71.1	\$6,908	\$26,947	\$433	\$6,987	\$41,274
862	Home Improvement Superstore	1,000 SFGFA	16.7	28.1	44%	12.4	\$1,201	\$4,685	\$75	\$1,215	\$7,177
880	Pharmacy/Drugstore without Drive-Through	1,000 SFGFA	38.1	64.1	42%	27.1	\$2,633	\$10,271	\$165	\$2,663	\$15,731
881	Pharmacy/Drugstore with Drive-Through	1,000 SFGFA	36.8	61.9	38%	23.5	\$2,283	\$8,905	\$143	\$2,309	\$13,640
890	Furniture Store	1,000 SFGFA	1.8	3.1	37%	1.1	\$109	\$426	\$7	\$111	\$653
911	Walk-in Bank	1,000 SFGFA	121.3	203.8	100%	203.8	\$19,787	\$77,190	\$1,240	\$20,014	\$118,230
912	Drive-in Bank	1,000 SFGFA	33.5	56.3	27%	15.4	\$1,495	\$5,834	\$94	\$1,513	\$8,936
925	Drinking Place	1,000 SFGFA	154.9	260.2	100%	260.2	\$25,268	\$98,571	\$1,583	\$25,558	\$150,980
931	Quality Restaurant	1,000 SFGFA	37.4	62.9	43%	26.7	\$2,594	\$10,119	\$162	\$2,624	\$15,500
932	High-Turnover (Sit-Down) Restaurant	1,000 SFGFA	52.6	88.3	40%	35.1	\$3,409	\$13,300	\$214	\$3,449	\$20,372
933	Fast-Food Restaurant without Drive-Through	1,000 SFGFA	208.3	349.9	40%	139.1	\$13,506	\$52,687	\$846	\$13,661	\$80,700
934	Fast-Food Restaurant with Drive-Through	1,000 SFGFA	219.1	368.0	41%	150.7	\$14,632	\$57,080	\$917	\$14,800	\$87,428
936	Coffee/Donut Shop without Drive-Through	1,000 SFGFA	102.6	172.4	40%	68.5	\$6,652	\$25,951	\$417	\$6,729	\$39,749

Exhibit 8: ITE Trips and SDC Costs per Land Use											
ITE Code	Land Use	Unit	ITE Average Daily Trips	Number of Person Trips ¹	% Primary Trips	New Person Trip Ends	Improvement Cost			Reimbursement Cost	SDC Total
							Pedestrian/Bicycle Projects	Motor Vehicle Projects	Transit Projects		
937	Coffee/Donut Shop with Drive-Through	1,000 SFGFA	335.2	563.1	41%	230.5	\$22,386	\$87,327	\$1,402	\$22,643	\$133,758
938	Coffee/Donut Kiosk	1,000 SFGFA	306.0	514.1	17%	87.4	\$8,486	\$33,103	\$532	\$8,583	\$50,704
944	Gasoline/Service Station	VFP	59.0	99.1	35%	34.7	\$3,368	\$13,140	\$211	\$3,407	\$20,126
945	Gasoline/Service Station with Convenience Market	VFP	20.8	34.9	13%	4.5	\$434	\$1,691	\$27	\$439	\$2,590
946	Gasoline/Service Station with Car Wash	VFP	36.5	61.3	24%	14.7	\$1,423	\$5,550	\$89	\$1,439	\$8,502
***	Other (median)		27.2	45.8	100%	45.8	\$4,444	\$17,335	\$278	\$4,495	\$26,551
***	Other (average)		54.0	90.7	76%	68.8	\$6,676	\$26,041	\$418	\$6,752	\$39,887

Source: ITE Trip Generation Manual, 9th Edition, compiled by FCS GROUP.

¹Person trip conversion rate of 1.68 derived from 2009 U.S. National Household Transportation Survey findings

Abbreviations

CFD - commercial flights per day

ODU - occupied dwelling unit

SFGFA - square feet of gross floor area

SFGLA - square feet of gross leasable area

VFP - vehicle fueling position

IV. APPENDICES

APPENDIX A – SDC-Eligible Projects from West Linn Transportation System Plan

Projects in the Transportation System Plan									
Project Type	Location	Description			Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
Pedestrian Projects		Sidewalk Infill Extent	From	To					
Pedestrian 2	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Bolton Street	Failing Street	\$0	\$0	100%	20.80%	\$0
Pedestrian 3	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Failing Street	Davenport Street	\$0	\$0	100%	20.80%	\$0
Pedestrian 4	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Davenport Street	Caufield Street	\$0	\$0	100%	20.80%	\$0
Pedestrian 5	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Caufield Street	Barlow Street	\$0	\$0	100%	20.80%	\$0
Pedestrian 6	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Barlow Street	Dillow Drive	\$0	\$0	100%	20.80%	\$0
Pedestrian 7	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Dillow Drive	Pimlico Drive	\$0	\$0	100%	20.80%	\$0
Pedestrian 8	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Mark Lane	Mapleton Drive	\$0	\$0	100%	20.80%	\$0
Pedestrian 9	Willamette Drive ^{1,2}	Construct sidewalk on one side of street.	Mapleton Drive	100' south of Cedaroak Drive	\$0	\$0	100%	20.80%	\$0
Pedestrian 10	Willamette Drive ^{1,2}	Construct sidewalk on both sides of street.	Cedaroak Drive	Walling Circle (north)	\$0	\$0	100%	20.80%	\$0

Projects in the Transportation System Plan									
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs		
Pedestrian 11	Willamette Drive ^{1,2}	Construct sidewalk on both sides of street. Fairview Way Marylhurst Drive	\$0	\$0	100%	20.80%	\$0		
Pedestrian 12	Willamette Drive ^{1,2}	Construct sidewalk on both sides of street. Walling Circle (north) Fairview Way	\$0	\$0	100%	20.80%	\$0		
Pedestrian 13	Willamette Drive ^{1,2}	Construct sidewalk on both sides of street. Marylhurst Drive Shady Hollow Way	\$0	\$0	100%	20.80%	\$0		
Pedestrian 14	Willamette Drive ^{1,2}	Construct sidewalk on both sides of street. Shady Hollow Way North city limits	\$0	\$0	100%	20.80%	\$0		
Pedestrian 15	10th Street	Construct sidewalk on one side of street. I-205 8th Street	\$65,000	\$78,382	100%	20.80%	\$16,306		
Pedestrian 16	10th Street ¹	Construct sidewalk on one side of street. Blankenship Road I-205	\$55,000	\$66,323	100%	20.80%	\$13,797		
Pedestrian 17	Cedarook Drive ¹	Construct sidewalk on both sides of street. Old River Road Elmran Avenue	\$585,000	\$705,439	100%	20.80%	\$146,754		
Pedestrian 18	Dillow Drive	Construct sidewalk on both sides of street. Willamette Drive Larson Avenue	\$305,000	\$367,793	100%	0.00%	\$0		
Pedestrian 19	Dillow Drive ¹	Construct sidewalk on both sides of street. Larson Avenue Failing Street	\$220,000	\$265,293	100%	0.00%	\$0		
Pedestrian 20	Elmran Avenue ¹	Construct sidewalk on both sides of street. Nixon Avenue Old River Road	\$415,000	\$500,440	100%	20.80%	\$104,108		
Pedestrian 21	Failing Street ¹	Construct sidewalk on both sides of street. Willamette Drive Dillow Drive	\$395,000	\$476,322	100%	0.00%	\$0		
Pedestrian 22	Hillcrest Drive ¹	Construct sidewalk on both sides of street. Marylhurst Drive (North) Marylhurst Drive (South)	\$655,000	\$789,851	100%	0.00%	\$0		
Pedestrian 23	Jolie Pointe Drive ¹	Construct sidewalk on both sides of street. Larson Avenue Rainier Place	\$230,000	\$277,352	100%	0.00%	\$0		
Pedestrian 25	Larson Avenue ¹	Construct sidewalk on both sides of street. Dillow Drive Jolie Pointe Drive	\$205,000	\$247,205	100%	0.00%	\$0		

Projects in the Transportation System Plan								
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs	
Pedestrian 26	Mapleton Drive ¹	Construct sidewalk on both sides of street. Willamette Drive Nixon Avenue	\$645,000	\$777,792	100%	20.80%	\$161,806	
Pedestrian 27	Marylhurst Drive ¹	Construct sidewalk on both sides of street. Willamette Drive Hillcrest Court	\$950,000	\$1,145,585	100%	0.00%	\$0	
Pedestrian 28	Mckillican ¹	Construct sidewalk on one side of street. West A Street Willamette Falls Drive	\$105,000	\$126,617	100%	20.80%	\$26,340	
Pedestrian 29	Nixon Avenue ¹	Construct sidewalk on both sides of street. Mapleton Drive Elmran Avenue	\$540,000	\$651,175	100%	20.80%	\$135,465	
Pedestrian 30	Old River Road ¹	Construct sidewalk on both sides of street. Willamette Drive Cherokee Court	\$870,000	\$1,049,115	100%	20.80%	\$218,250	
Pedestrian 31	Ostman Road ¹	Construct sidewalk on both sides of street. Blankenship Road Willamette Falls Drive	\$560,000	\$675,292	100%	0.00%	\$0	
Pedestrian 32	Parker Road ¹	Construct sidewalk on one side of street. 200' east of Wild Rose Drive Sunset Avenue	\$245,000	\$295,440	100%	20.80%	\$61,461	
Pedestrian 33	Pimlico Drive ¹	Construct sidewalk on both sides of street. Willamette Drive Palamino Way (East)	\$330,000	\$397,940	100%	0.00%	\$0	
Pedestrian 34	Rosemont Road ¹	Construct sidewalk on both sides of street. Summit Street Ridge Lane	\$290,000	\$349,705	100%	20.80%	\$72,750	
Pedestrian 35	Rosemont Road ¹	Construct sidewalk on one side of street. Ridge Lane Carriage Way	\$880,000	\$1,061,174	100%	20.80%	\$220,758	
Pedestrian 38	Salamo Drive ¹	Construct sidewalk on both sides of street. 10th Street 300' south of Bland Circle	\$1,090,000	\$1,314,408	100%	20.80%	\$273,439	
Pedestrian 39	Skyline Drive ¹	Construct sidewalk on both sides of street. Summit Drive West A Street	\$915,000	\$1,103,379	100%	20.80%	\$229,538	
Pedestrian 40	Sunset Avenue ¹	Construct sidewalk on both sides of street. Parker Road Spring Rock Circle	\$535,000	\$645,145	100%	20.80%	\$134,211	
Pedestrian 41	Tannler Drive ¹	Construct sidewalk on both sides of street. Blankenship Road Greene Street	\$275,000	\$331,617	100%	20.80%	\$68,987	

Projects in the Transportation System Plan									
Project Type	Location	Description			Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
Pedestrian 42	Tualatin Avenue ¹	Construct sidewalk on both sides of street.	Volpp Street	12th Street	\$170,000	\$204,999	100%	0.00%	\$0
Pedestrian 88	Willamette Drive /Burns Street ²	Crossing with Pedestrian Refuge	South Leg	-	\$0	\$0	100%	20.80%	\$0
Pedestrian 84	Willamette Drive /Chow Mein Lane ²	Crossing with Pedestrian Refuge	North Leg	-	\$0	\$0	100%	20.80%	\$0
Pedestrian 83	Willamette Drive /Fairview Way ²	Crossing with Pedestrian Refuge	South Leg	-	\$0	\$0	100%	20.80%	\$0
Pedestrian 85	Willamette Drive / Mary S. Young Pak ²	Crossing with Pedestrian Refuge	South Leg	-	\$0	\$0	100%	20.80%	\$0
Pedestrian 86	Willamette Drive /Pimlico Drive ²	Traffic Signal with Crosswalks	-	-	\$0	\$0	100%	20.80%	\$0
Pedestrian 87	Willamette Drive /White Tail Drive ²	Crossing with Pedestrian Refuge	North Leg	-	\$0	\$0	100%	20.80%	\$0
Pedestrian 43	Willamette Falls Drive ¹	Construct sidewalk on both sides of street.	6th Street	10th Street	\$435,000	\$524,557	100%	20.80%	\$109,125
Pedestrian 44	Willamette Falls Drive ¹	Construct sidewalk on both sides of street.	19th Street	16th Street	\$220,000	\$265,293	100%	20.80%	\$55,190
Pedestrian 45	19th Street ²	Construct sidewalk on both sides of street.	Dollar Street	Willamette Falls Drive	\$0	\$0	100%	20.80%	\$0
Pedestrian 46	19th Street ¹	Construct sidewalk on both sides of street.	Blankenship Road	Dollar Street	\$420,000	\$506,469	100%	20.80%	\$105,362
Pedestrian 47	Bland Circle	Construct sidewalk on both sides of street.	North Limits	Salamo Road	\$720,000	\$868,233	100%	20.80%	\$180,620
Pedestrian 50	Blankenship Road	Construct sidewalk on one side of street.	100' east of Virginia Lane	13th Street	\$40,000	\$48,235	100%	0.00%	\$0
Pedestrian 51	Blankenship Road ¹	Construct sidewalk on one side of street.	Ostman Road	19th Street	\$105,000	\$126,617	100%	0.00%	\$0
Pedestrian 52	Blankenship Road ¹	Construct sidewalk on one side of street.	Under I-205	-	\$60,000	\$72,353	100%	20.80%	\$15,052
Pedestrian 53	Carriage Way ¹	Construct sidewalk on both sides of street.	Rosemont Road	700' north of Rosemont Road	\$150,000	\$180,882	100%	20.80%	\$37,629

Projects in the Transportation System Plan								
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs	
Pedestrian 54	Chestnut Street	Construct sidewalk on both sides of street. Sunset Avenue Willamette Falls Drive	\$140,000	\$168,823	100%	0.00%	\$0	
Pedestrian 55	Cornwall Street ¹	Construct sidewalk on both sides of street. Sunset Avenue Oxford Street	\$280,000	\$337,646	100%	20.80%	\$70,241	
Pedestrian 56	Debok Road ¹	Construct sidewalk on both sides of street. 100' north of Summerlin Drive Farvista Drive	\$135,000	\$162,794	100%	0.00%	\$0	
Pedestrian 57	Dollar Street ¹	Construct sidewalk on one side of street. Ostman Road Willamette Falls Drive	\$585,000	\$705,439	100%	20.80%	\$146,754	
Pedestrian 58	Dollar Street ^{1,2}	Construct sidewalk on one side of street. River Heights Circle Ostman Road	\$0	\$0	100%	20.80%	\$0	
Pedestrian 59	Exeter Street ¹	Construct sidewalk on both sides of street. Oxford Street Long Street	\$140,000	\$168,823	100%	0.00%	\$0	
Pedestrian 60	Hidden Springs Road	Construct sidewalk on one side of street. Carriage Drive Wildwood Drive	\$145,000	\$174,852	100%	0.00%	\$0	
Pedestrian 61	Hidden Springs Road	Construct sidewalk on one side of street. Santa Anita Drive 300' east of Suncrest Drive	\$135,000	\$162,794	100%	0.00%	\$0	
Pedestrian 62	Hidden Springs Road ¹	Construct sidewalk on one side of street. Wildwood Drive 400' south of Autumn View	\$65,000	\$78,382	100%	20.80%	\$16,306	
Pedestrian 63	Johnson Road	Construct sidewalk on both sides of street. Woodbine Road Blankenship Road	\$870,000	\$1,049,115	100%	20.80%	\$218,250	
Pedestrian 64	New Off-Street Accessway ^{1,3}	Construct new bicycle /pedestrian connection. Wisteria Road Bland Circle	\$0	\$0	100%	20.80%	\$0	
Pedestrian 65	New Off-Street Accessway ^{1,3}	Construct new bicycle /pedestrian connection. Sinclair Street Holly Street	\$0	\$0	100%	20.80%	\$0	
Pedestrian 66	New Off-Street Accessway ^{1,3}	Construct new bicycle /pedestrian connection. Rosepark Drive Rosemont Road	\$0	\$0	100%	20.80%	\$0	

Projects in the Transportation System Plan									
Project Type	Location	Description			Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
Pedestrian 67	New Off-Street Accessway ^{1,3}	Construct new bicycle /pedestrian connection.	River Road	Perrin Street	\$0	\$0	100%	20.80%	\$0
Pedestrian 68	New Off-Street Accessway ^{1,3}	Construct new bicycle /pedestrian connection.	Hillcrest Court	Marylhurst Drive	\$0	\$0	100%	20.80%	\$0
Pedestrian 69	Oxford Street	Construct sidewalk on both sides of street.	Cornwall Street	Exeter Street	\$130,000	\$156,764	100%	0.00%	\$0
Pedestrian 70	Pimlico Drive	Construct sidewalk on one side of street.	Santa Anita Drive	Palamino Way (West)	\$120,000	\$144,705	100%	0.00%	\$0
Pedestrian 71	Riverview Avenue	Construct sidewalk on both sides of street.	Turnwater Street	Sunset Avenue	\$80,000	\$96,470	100%	0.00%	\$0
Pedestrian 72	Salamo Drive	Construct sidewalk on one side of street.	Bland Circle	Weathermill Road	\$140,000	\$168,823	100%	0.00%	\$0
Pedestrian 73	Salamo Drive	Construct sidewalk on one side of street.	S. Day Road	Parker Road	\$100,000	\$120,588	100%	0.00%	\$0
Pedestrian 74	Santa Anita Drive ¹	Construct sidewalk on one side of street.	Pimlico Drive	Clubhouse Drive	\$50,000	\$60,294	100%	0.00%	\$0
Pedestrian 75	Santa Anita Drive ¹	Construct sidewalk on one side of street.	Clubhouse Circle	Hidden Springs Road	\$85,000	\$102,500	100%	0.00%	\$0
Pedestrian 76	Simpson Street	Construct sidewalk on both sides of street.	Long Street	Turnwater Street	\$105,000	\$126,617	100%	0.00%	\$0
Pedestrian 77	Summit Drive ¹	Construct sidewalk on one side of street.	Skyline Drive	Oxford Street	\$245,000	\$295,440	100%	20.80%	\$61,461
Pedestrian 78	Suncrest Drive ¹	Construct sidewalk on one side of street.	Hillcrest Drive	Carriage Way	\$205,000	\$247,205	100%	20.80%	\$51,427
Pedestrian 79	Turnwater Street	Construct sidewalk on both sides of street.	Simpson Street	Riverview Avenue	\$105,000	\$126,617	100%	0.00%	\$0
Pedestrian 80	Willamette Falls Drive	Construct sidewalk on one side of street.	16th Street	Dollar Street (East)	\$45,000	\$54,265	100%	20.80%	\$11,289

Projects in the Transportation System Plan									
Project Type	Location	Description			Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
Pedestrian 81	Willamette Falls Drive	Construct sidewalk on both sides of street.	200' west of Ostman Road	Dollar Street (West)	\$655,000	\$789,851	100%	20.80%	\$164,314
Pedestrian 82	Willamette Falls Drive ¹	Construct sidewalk on both sides of street.	West A Street	6th Street	\$2,200,000	\$2,652,934	100%	20.80%	\$551,896
Pedestrian Total					\$20,440,000	\$24,648,168			\$3,678,886
Bicycle Projects		Sidewalk Infill Extent	From	To					
Bicycle 1	Rosemont Road ¹	On-street Bike Lanes	Carriage Way	Summit Street	\$1,475,000	\$1,778,672	100%	20.80%	\$370,021
Bicycle 2	Salamo Road ¹	On-street Bike Lanes	10th Street	Barrington Drive	\$405,000	\$488,381	100%	20.80%	\$101,599
Bicycle 3	Clark Street /Long Street /Simpson Street /Kelly Street	Bicycle Boulevard Treatment	Skyline Drive	Sunset Avenue	\$105,000	\$126,617	100%	0.00%	\$0
Bicycle 4	Old River Road	Bicycle Boulevard Treatment	Willamette Drive	North City Limits	\$105,000	\$126,617	100%	20.80%	\$26,340
Bicycle 5	Pimlico Drive	Bike Lane/ Shoulder Bikeway	Santa Anita Drive	Willamette Drive(Hwy 43)	\$100,000	\$120,588	100%	0.00%	\$0
Bicycle 6	Blankenship Road	On-street Bike Lanes	Road	Debok Road		\$0	100%	0.00%	\$0
Bicycle 7	Hidden Springs Road ¹	On-street Bike Lanes	Rosemont Road	Willamette Drive	\$345,000	\$416,028	100%	0.00%	\$0
Bicycle 8	Santa Anita Drive ¹	On-street Bike Lanes	Rosemont Road	Hidden Springs Road	\$545,000	\$657,204	100%	0.00%	\$0
Bicycle 9	Skyline Drive ¹	On-street Bike Lanes	Summit Street	West A Street	\$655,000	\$789,851	100%	20.80%	\$164,314
Bicycle 10	Summit Street ¹	On-street Bike Lanes	Skyline Drive	Cornwall Street	\$375,000	\$452,205	100%	20.80%	\$94,073
Bicycle 11	Sunset Avenue	On-street Bike Lanes	Parker Road	Falls Drive	\$945,000	\$1,139,556	100%	20.80%	\$237,064
Bicycle 24	Willamette Drive	On-street Bike Lanes	North City Limits	McKillican Street	\$0	\$0	100%	20.80%	\$0
Bicycle 12	Willamette Falls Drive ¹	On-street Bike Lanes	Epperly Street	West City Limits	\$390,000	\$470,293	100%	20.80%	\$97,836
Bicycle 13	Willamette Falls Drive ¹	On-street Bike Lanes	Willamette Drive	Ostman Drive	\$2,520,000	\$3,038,815	100%	20.80%	\$632,171
Bicycle 14	Johnson Road	Shoulder Bike Lane	Blankenship Road	City Limits	\$25,000	\$30,147	100%	20.80%	\$6,272

Projects in the Transportation System Plan									
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs		
Bicycle 15	New Off-Street Accessway ¹	Construct new bicycle and pedestrian connection. Wisteria Road Bland Circle	\$120,000	\$144,705	100%	20.80%	\$30,103		
Bicycle 16	New Off-Street Accessway ¹	Construct new bicycle and pedestrian connection. Sinclair Street Holly Street	\$40,000	\$48,235	100%	0.00%	\$0		
Bicycle 17	New Off-Street Accessway ¹	Construct new bicycle and pedestrian connection. Rosepark Drive Rosemont Road	\$40,000	\$48,235	100%	0.00%	\$0		
Bicycle 18	New Off-Street Accessway ¹	Construct new bicycle and pedestrian connection. Hillcrest Court Marylhurst Drive	\$40,000	\$48,235	100%	0.00%	\$0		
Bicycle 19	10th Street ¹	On-street Bike Lanes Salamo Road Willamette Falls Drive	\$200,000	\$241,176	100%	20.80%	\$50,172		
Bicycle 20	12th Street	On-street Bike Lanes Willamette Falls Drive Avenue	\$150,000	\$180,882	100%	0.00%	\$0		
Bicycle 22	Parker Road ¹	On-street Bike Lanes Sunset Avenue 500' east of Coho Lane	\$135,000	\$162,794	100%	20.80%	\$33,866		
Bicycle 23	Tualatin Avenue	On-street Bike Lanes 12th Street Tualatin River	\$135,000	\$162,794	100%	0.00%	\$0		
Bicycle Total			\$8,850,000	\$10,672,030			\$1,843,833		
Motor Vehicle Projects									
Motor Vehicle 1	Salamo Road /Rosemont Road	Add a traffic signal when warranted and pave adjacent intersection legs	\$520,000	\$627,057	100%	0.00%	\$0		
Motor Vehicle 2	Willamette Falls Drive / Sunset Avenue	Add a traffic signal when warranted	\$260,000	\$313,529	100%	100.00%	\$313,529		
Motor Vehicle 3	Rosemont Road /Carriage Way	Add a center median on Rosemont Road to allow two-stage left turn from Carriage Way	\$1,475,000	\$1,778,672	100%	100.00%	\$1,778,672		
Motor Vehicle 4	Rosemont Way /Hidden Springs Road	Add a traffic signal when warranted and northbound/southbound left turn lanes on Rosemont Road	\$780,000	\$940,586	100%	100.00%	\$940,586		
Motor Vehicle 5	Willamette Falls Drive / Ostman Road	Widen Willamette Falls Drive with center median 500' on each side of intersection to allow for two-stage left turn from Ostman Rd	\$1,335,000	\$1,609,849	100%	100.00%	\$1,609,849		
Motor Vehicle 6	Willamette Falls Drive / Dollar Street (east)	Widen Willamette Falls Drive with center median 500' on each side of intersection for two-stage left turn from Dollar St	\$1,475,000	\$1,778,672	100%	100.00%	\$1,778,672		

Projects in the Transportation System Plan							
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
Motor Vehicle 7	10th Street (I-205 SB Ramps to 8th Court)	Widen to 5-lane section with center turn lane and 2 travel lanes each direction	\$1,685,000	\$2,031,906	100%	100.00%	\$2,031,906
Motor Vehicle 8	10th Street (8th Ave to Willamette Falls Drive)	Add through lanes on 10th Street for a total of 2 lanes in each direction. Prohibit northbound left turn movement and replace left turn lane with ped island.	\$500,000	\$602,940	100%	20.80%	\$125,431
Motor Vehicle 9	Blankenship Road /10th Street	Add 2nd eastbound right turn lane and restripe westbound approach to have exclusive left turn and shared left-thru lane	\$520,000	\$627,057	100%	100.00%	\$627,057
Motor Vehicle 10	10th Street /Willamette Falls Drive	Change/upgrade traffic control to either signal or roundabout	\$830,000	\$1,000,880	100%	100.00%	\$1,000,880
Motor Vehicle 11	10th Street / 8th Avenue	Add right-in right-out access at the time of 8th Court extension.	\$20,000	\$24,118	100%	20.80%	\$5,017
Motor Vehicle 12	10th Street / I-205 NB Ramps	Add turn lanes (northbound right turn lane, stripe southbound approach to have dual left turn lanes and one thru lane, add exclusive NB Off-ramp left turn lane, and widen NB On-ramp to have two receiving lanes to support dual SB left turn movement)	\$1,035,000	\$1,248,085	100%	100.00%	\$1,248,085
Motor Vehicle 13	8th Court	Extend 8th Ct to Willamette Falls Dr. to provide additional access to 8th Court retail. (Concurrently make 10th Street/8th Avenue right-in right-out access.)	\$2,075,000	\$2,502,199	100%	20.80%	\$520,538
Motor Vehicle 14	Willamette Falls Drive /12th Street	All way stop control/ traffic signal when warrants are met	\$260,000	\$313,529	100%	100.00%	\$313,529
Motor Vehicle 15	Willamette Falls Drive /14th Street	All way stop control when warrants are met	\$10,000	\$12,059	100%	20.80%	\$2,509
Motor Vehicle 16	Willamette Falls Drive /19th Street	All way stop control when warrants are met	\$10,000	\$12,059	100%	0.00%	\$0
Motor Vehicle 17	8th Avenue	Modify Dollar St connection to reconnect to 8th Avenue, and provide alternative route for local trips.	\$1,035,000	\$1,248,085	100%	20.80%	\$259,642
Motor Vehicle 18	19th Street /Blankenship Road	Upgrade to current City standards from Blankenship Rd/Debok Road to Willamette Falls Drive	\$6,115,000	\$7,373,950	100%	0.00%	\$0
Motor Vehicle 19	8th Avenue	Upgrade from 10th Street to Dollar Street	\$1,760,000	\$2,122,347	100%	20.80%	\$441,516
Motor Vehicle 20	Salamo Road /Parker Road	Add a traffic signal when warranted	\$260,000	\$313,529	100%	100.00%	\$313,529
ODOT Motor Vehicle 21	Highway 43 /Willamette Falls Drive	Add a traffic signal that is coordinated with adjacent signal at I-205 NB Off Ramps	\$260,000	\$313,529	20%	20.80%	\$13,045
ODOT Motor Vehicle 22	I 205/10th Street Interchange ⁴	Construct a long-term interchange improvement (SPUI or Split Diamond)	\$22,500,000	\$27,132,279	20%	100.00%	\$5,426,456

Projects in the Transportation System Plan							
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
ODOT Motor Vehicle 23	Highway 43 / Arbor Drive	Add left turn lanes on Highway 43 (cost included in Highway 43 segment cost, listed below)	\$0	\$0	20%	0.00%	\$0
ODOT Motor Vehicle 24	Highway 43 / Cedar Oak Drive	Realign shopping center driveway located to the southeast with intersection	\$520,000	\$627,057	20%	0.00%	\$0
ODOT Motor Vehicle 25	Highway 43 / Holmes Street	Modify circulation to allow exit only traffic from Holmes Street	\$10,000	\$12,059	20%	20.80%	\$502
ODOT Motor Vehicle 26	Highway 43 / Lewis Street	Modify circulation to prohibit left turns out from Lewis Street	\$10,000	\$12,059	20%	0.00%	\$0
ODOT Motor Vehicle 27	Highway 43 / Pimlico Drive	Add a traffic signal when warranted	\$260,000	\$313,529	20%	95.00%	\$59,570
ODOT Motor Vehicle 28	Highway 43 / Hood Street /McKillican Street	Modify traffic signal timing to have protected/permitted phasing on Hood and McKillican	\$50,000	\$60,294	20%	20.80%	\$2,509
ODOT Motor Vehicle 29	North City Limit to Marylhurst ⁵	Highway 43 Improvements ⁵	\$3,030,000	\$3,653,814	20%	0.00%	\$0
ODOT Motor Vehicle 30	Marylhurst to Hidden Springs ⁵	Highway 43 Improvements ⁵	\$4,350,000	\$5,245,574	20%	100.00%	\$1,049,115
ODOT Motor Vehicle 31	Hidden Springs to Pimlico ⁵	Highway 43 Improvements ⁵	\$5,585,000	\$6,734,834	20%	100.00%	\$1,346,967
ODOT Motor Vehicle 32	Pimlico to Buck ⁵	Highway 43 Improvements ⁵	\$3,460,000	\$4,172,342	20%	0.00%	\$0
ODOT Motor Vehicle 33	West A Street to Webb ⁵	Highway 43 Improvements ⁵	\$2,140,000	\$2,580,581	20%	0.00%	\$0
ODOT Motor Vehicle 34	Webb to Hood-McKillican ⁵	Highway 43 Improvements ⁵	\$1,980,000	\$2,387,641	20%	0.00%	\$0
Motor Vehicle Total Cost			\$66,115,000	\$79,726,693			\$21,209,107
Transit Projects							
Transit 1	Improve Service Coordination for Route 154	Coordinate with TriMet to modify the schedule, stop locations, or add a layover to improve connections and service for Route 154	\$0	\$0	100%	20.80%	\$0
Transit 2	Transit Expansion Study and Survey	Explore the feasibility of local fixed-route transit (e.g. jitney) service including surveys of residents and potential users.	\$80,000	\$96,470	100%	20.80%	\$20,069
Transit 3	Provide Transit Amenities at Major Transit Stops	Provide shelters, information kiosks, etc along key transit routes in West Linn with land use development. Specific locations (5) to be determined through transit study and survey.	\$50,000	\$60,294	100%	20.80%	\$12,543
Transit 4	Improve Pedestrian Connections to Transit Facilities ⁶	Construct sidewalks, crosswalks, etc. adjacent to transit routes and facilities.	\$0	\$0	100%	20.80%	\$0

Projects in the Transportation System Plan							
Project Type	Location	Description	Cost in 2008	Cost in 2014	City Share	Growth Share	SDC-Eligible Costs
Transit 5	Decrease Headways	Provide more frequent transit service during peak commute periods.	\$0	\$0	100%	20.80%	\$0
Transit 6	Provide More Local Service	Expand coverage by providing local (e.g. jitney) service to connect to existing transit lines. Enhance/expand local pick up services. Specific locations/actions to be determined through transit study and survey. This project is a placeholder for funds pending the outcome of the study.	\$1,150,000	\$1,386,761	100%	20.80%	\$288,491
Transit Project Total (for 23 years)			\$1,280,000	\$1,543,525			\$321,103
Total (high estimate)			\$96,685,500	\$116,590,416			\$27,052,929

Source: West Linn 2008 Transportation System Plan, compiled by FCS GROUP

Notes: ¹Included in previously adopted 1998 TSP

²Included in Highway 43 Concept Plan Cost Estimates

³Included in Bicycle Plan Cost Estimates

⁴Cost of SPUI would be approximately \$15,000,000 while the split diamond configuration would cost approximately \$30,000,000

⁵Refer to Highway 43 Concept Plan for details

⁶Specific projects and costs included in Pedestrian Plan of this TSP

⁷2014 local costs derived from Engineering New Resource 20-City Average Construction Cost Index

	June 2008	September 2014
Construction Costs Index	8,185	9,870

*All manual inputs from City staff

APPENDIX B.1 – Historical SDC Expenditures

Costs Previously Incurred in West Linn					
	Historical Cost	Average Year to Reach Capacity	Remaining Capacity	Cost in 2014 ¹	SDC-Eligible Credit ²
SDC expenditures in 2007	-	2027	65.0%	-	-
SDC expenditures in 2008	-	2028	70.0%	-	-
SDC expenditures in 2009	-	2029	75.0%	-	-
SDC expenditures in 2010	6,311	2030	80.0%	7,077	5,661
SDC expenditures in 2011	-	2031	85.0%	-	-
SDC expenditures in 2012	116,782	2032	90.0%	123,838	111,454
SDC expenditures in 2013	-	2033	95.0%	-	-
SDC expenditures in 2014	118,095	2034	100.0%	118,095	118,095
Totals	\$241,188			\$249,009	\$235,210

Source: Quarterly Financial Reports, compiled by FCS Group.

¹Costs escalated using Engineering New Resource 20-City Average Construction Cost Index.

²Assume SDC-credit project capacity is reached at 20 years.

APPENDIX B.2 – Historical SDC Credits

Historical SDC Credits				
Construction Year (fiscal year ending)	SDC Credit Cashed	SDC Credits Not Cashed	SDC Credits Value in 2014 ¹	SDC-Eligible Credit ²
1993	\$58,119	\$0	\$110,095	\$0
1994	\$438,752	\$0	\$800,827	\$0
1995	\$890,931	\$0	\$1,607,262	\$80,363
1996	\$50,093	\$0	\$87,942	\$8,794
1997	\$1,264,236	\$0	\$2,142,144	\$321,322
1998	\$813,431	\$0	\$1,356,098	\$271,220
1999	\$1,121,601	\$0	\$1,826,939	\$456,735
2000	\$1,415,100	\$0	\$2,245,110	\$673,533
2001	\$2,770,885	\$0	\$4,312,301	\$1,509,305
2002	\$786,542	\$0	\$1,187,407	\$474,963
2003	\$190,227	\$0	\$280,456	\$126,205
2004	\$24,493	\$0	\$33,978	\$16,989
2005	\$459,455	\$0	\$609,029	\$334,966
2006	\$0	\$0	\$0	\$0
2007	\$161,000	\$0	\$199,460	\$129,649
2008	\$614,000	\$0	\$729,272	\$510,490
2009	\$0	\$28,500	\$0	\$0
2010	\$39,000	\$0	\$43,731	\$34,985
2011	\$0	\$0	\$0	\$0
2012	\$0	\$0	\$0	\$0
2013	\$0	\$0	\$0	\$0
2014	\$0	\$0	\$0	\$0
Total	\$11,097,866	\$28,500	\$17,572,049	\$4,949,518

Source: City of West Linn, SDC expenditures prior to 2006 taken from previous methodology from City staff; compiled by FCS Group.

¹Costs escalated using Engineering New Resource 20-City Average Construction Cost Index.

²Assume SDC-credit project capacity is reached at 20 years.