RESOLUTION NO. 1149

A RESOLUTION AMENDING THE METHODOLOGIES AND FEES FOR TRANSPORTATION AND PARKS SYSTEM DEVELOPMENT CHARGES

WHEREAS, the Canby City Council has determined by Ordinance No. 867 that a charge shall be imposed upon new development for acquiring funds for capital improvements, and for reimbursement of constructed excess capacity to the City's Transportation and Park system; and

WHEREAS, said Ordinance No. 867 provides that methodology and charges for capital acquisition, improvements, and reimbursements be established and amended by resolution; and

WHEREAS, ORS 310.145 requires that a governing body, when adopting or amending a fee resolution imposing new rates, may include a provision classifying said fees as subject to or not subject to the limitations set in Section 11 (b), Article XI of the Oregon Constitution; and

RESOLVED, that the following methodology for system development charges for the City of Canby, attached here to as Exhibit "A" and Exhibit "B" be adopted to amend the current park and transportation system development charges effective immediately.

BE IT FURTHER RESOLVED that, except as otherwise specified in Ordinance 867, future changes to the methodology and charges resulting solely from inflationary cost impacts shall be measured and calculated annually by the City Recorder and charged according based upon changes in the Engineering News Record Construction Cost Index (ENR Index) of Portland, Oregon, with the current ENR Index as of enactment of this Resolution to be used for the basis of future calculations.

BE IT FURTHER RESOLVED that the Canby City Council hereby classifies the charges imposed herein as not being subject to the limitations imposed by Section 11 (b), Article XI of the Oregon Constitution and that the City Recorder is hereby directed to publish notice in accordance with ORS 310.145.

NOW THEREFORE, IT IS HEREBY RESOLVED by the City Council of the City of Canby, as follows:

(1) The Canby City Council adopts the City of Canby Transportation and Park System Development Charges as attached hereto as Exhibit "A" and Exhibit "B".

This resolution shall take effect January 16, 2013.

ADOPTED BY THE CANBY CITY COUNCIL, at a regular meeting thereof on January 16, 2013.

10

Brian Hodsøn Mayor

ATTEST:

fer Kimberly Scheafer, City Recorder

Exhibit "A"

Canby, Oregon



Draft Report for PARKS AND RECREATION SYSTEM DEVELOPMENT CHARGE STUDY

October, 2012

FCS GROUP

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SECTION 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, and they are 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 types of SDC:

- A reimbursement fee that is designed to recover "costs associated with capital improvements already construct, 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 that 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 methodology for parks and recreation SDCs in 2004. In 2011, the City contracted with FCS GROUP to update its parks and recreation SDCs.

We approached this project as a series of three steps:



- Framework for Charges. 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.
- **Technical Analysis**. In this step, we worked with City staff to isolate the recoverable portion of planned facility costs and calculate draft SDC rates.
- **Draft Methodology Report Preparation**. In this step, we documented the calculation of the draft SDC rates included in this report.





SECTION II: METHODOLOGY

This section provides a non-numeric overview of the calculations that result in SDC rates.

A. REIMBURSEMENT FEE

In order for a reimbursement fee to be calculated, excess (i.e., not currently utilized) capacity must be available to serve future growth. Our analysis of the current inventory of parks and the level of service standards in the master plan indicates that the City currently has no excess capacity in its parks system. Therefore, no basis for a reimbursement fee exists.

B. IMPROVEMENT FEE

The improvement fee is the cost of capacity-increasing capital projects per unit of growth that those projects will serve. The unit of growth, whether number of new residents or number of new employees, is the basis of the fee. In reality, the capacity added by many projects serves a dual purpose of both meeting existing demand and serving future growth. To compute a compliant SDC rate, growth-related costs must be isolated, and costs related to current demand must be excluded.

We have used the "capacity approach" to allocate costs to the improvement fee basis. Under this approach, the cost of a given project is allocated to growth in proportion to the growth-related capacity that projects of a similar type will create. For example, suppose that a city's master plan included the acquisition and development of 100 acres of new neighborhood parks. Suppose further that our analysis determined that 30 acres were required to meet existing demand, and 70 acres were required to serve future users. In that case, only 70 percent of the cost for any new neighborhood park would be eligible for recovery with an improvement fee.

Growth should be measured in units that most directly reflect the source of demand. In the case of parks, the most applicable units of growth are population and, where appropriate, population equivalents. However, the units in which demand is expressed may not be the same as the units in which SDC rates are charged. Many SDCs, for example, are charged in the basis of dwelling units. Therefore, conversion is often necessary from units of demand to units of payment. For example, using an average number of residents per household, the number of new residents can be converted to the number of new dwelling units.

C. COMPLIANCE COSTS

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." To



avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDC rates.

D. SUMMARY

In general, SDC rates are calculated by adding the reimbursement fee (if applicable) component, improvement fee component, and compliance cost component. Each component is calculated by dividing the eligible cost by the growth of units of demand. The unit of demand becomes the basis of the charge. Exhibit 1 shows this calculation in equation format:

C Equation				Exhibi
Eligible costs of excess capacity in + existing facilities	Eligible costs of capacity- increasing + capital improvements	Costs of complying - with Oregon SDC law	=	SDC per unit of growth in
Units of gro	wth in demand (e residents)	.g., new		demand

Section III of this report provides detailed calculations related to growth in demand, which is the denominator in the SDC equation. **Section IV** of this report provides detailed calculations on eligible costs, which is the numerator in the SDC equation.





SECTION III: GROWTH CALCULATION

This section provides detailed calculations related to growth in demand, which is the denominator in the SDC equation.

A. RELEVANT TYPES OF GROWTH

Parks and recreation facilities benefit City residents, businesses, non-resident employees, and visitors. The methodology used to update the City's parks and recreation SDCs establishes the required connection between the demands of growth and the SDC by analyzing the proportionate need of residents and employees for such facilities. The SDCs to be paid by a development meet statutory requirements because they are based on the nature of the development and the extent of the impact of that development on the types of park and recreation facilities for which they are charged. The Parks and Recreation SDCs are calculated based on the specific impact a development is expected to have on the City's population and employment.

B. POPULATION GROWTH

Having established the relevance of population, we now quantify expected growth in population and convert the result to dwelling units.

B.1 Expected Growth

Exhibit 2 shows our population growth projections as calculated from both (1) data provided by the Population Research Center at Portland State University and (2) the assumptions of the transportation system plan (TSP).

Gro	wth in Population	1	xhibit 2				
Row	Description	Calculation	Value				
a.	Population in 2012	Note 1	15,830				
b.	Population in 2030	Note 2	26,100				
c.	Compound average growth rate	((b/a)^(1/(2030-2012)))-1	2.82%				
d.	Population in 2032	b*((1+c)^(2032-2030))	27,591				
e.	Growth from 2012 to 2032	d-a	11,761				
Note	s:						
	1. PSU Population Research Center estim ate for July 1, 2011						
	2. Canby TSP, Appendix G						

B.2 Conversion to Dwelling Units

Residential SDCs are initially calculated based on costs per capita but are ultimately charged based on dwelling units. To convert population to dwelling units, we analyzed data gathered for Canby



from the most recent American Community Survey conducted by the U. S. Census Bureau. Exhibit 3 shows the resulting conversion factors:

Residents per Dwelling Unit	Exhibit 3
Type of Dwelling Unit	Residents
Single-family	2.87
Multi-family	2.99
Manufactured	2.40
Source: 2006-10 American Communi	ty Survey
Table B25024 (units in structure)	
Table B25033 (pop. in occupied hous	ing units)

C. EMPLOYMENT GROWTH

Having established the relevance of employment, we now quantify expected growth in employment. **Exhibit 4** shows our population growth projections as calculated from the data and assumptions of the TSP.

Gro	wth in Employment		Exhibit 4
Row	Description	Calculation	Value
a.	Employment in 2009	Note 1	3,965
b.	Employment in 2030	Note 1	8,588
C.	Compound average growth rate	((b/a)^(1/(2030-2009)))-1	3.75%
d.	Employment in 2012	a*((1+c)^(2012-2009))	4,428
e.	Employment in 2032	b*((1+c)^(2032-2030))	9,244
f.	Growth from 2012 to 2032	e-d	4,816
Note	es:		
	1. Canby TSP, Appendix G		

D. DEMAND

The parks and recreation facilities described in the capital improvement plan below were mostly designed with the needs of both residents and non-resident employees in mind. It is therefore appropriate to allocate the cost of these facilities to both residents and non-resident employees. However, these two groups do not utilize parks and recreation facilities with the same intensity. To apportion the demand for facilities between non-resident employees and residents in an equitable manner, we must account for differential intensity of use by different types of users.

First, we estimate the potential demand for parks and recreation facilities by type of user. Exhibit 5 presents potential use by different population groups in a manner that averages day-of-week and seasonal effects. These averages are based are based on the maximum number of hours per day that each population group would consider the use of parks and recreation facilities to be a viable option.



Potential Daily Demand by	/ Populatio	n Gro	oup		Exhibit 5
					Non-
	Non	Reside		Work	Residents
	Non- Employed,	Ados	Work inside		Work inside
Season, Day, and Time	Ages 16+	5-15	City	City	City
Summer (June through Septemb			0,		
Weekday	501)				
Before work			1.00		1.00
Meals and breaks			1.00		1.00
After work			2.00		2.00
Other leisure	14.00	14.00	2.00	2.00	2.00
Total weekday		14.00	6.00	2.00	4.00
Weekend		14.00	14.00	14.00	
Total summer		14.00	8.29	5.43	2.86
Spring/fall (April, May, October,					
Weekday		,			
Before work			0.50		0.50
Meals and breaks			1.00		1.00
After work			1.00		1.00
Other leisure	10.00	4.00	2.00	2.00	
Total weekday	10.00	4.00	4.50	2.00	2.50
Weekend	10.00	10.00	10.00	10.00	
Total spring/fall	10.00	5.71	6.07	4.29	1.79
Winter (December through Mar	ch)				
Weekday					
Before work			0.50		0.50
Meals and breaks			1.00		1.00
After work			0.50		0.50
Other leisure	9.00	2.00	1.00	1.00	
Total weekday	9.00	2.00	3.00	1.00	2.00
Weekend	9.00	9.00	9.00	9.00	
Total winter	9.00	4.00	4.71	3.29	1.43
Weighting factors					
Summer	0.33	0.33	0.33	0.33	0.33
Spring/fall	0.33	0.33	0.33	0.33	0.33
Winter	0.33	0.33	0.33	0.33	0.33
Total weighting factors	1.00	1.00	1.00	1.00	
Daily weighted average hours	11.00	7.90	6.36	4.33	2.02
Source: FCS GROUP					

Second, we multiply the weighted average hours derived in **Exhibit 5** by an actual count for each population group. The counts in **Exhibit 6** are based on U. S. Census Bureau data for 2010.



Exhibit 6

Estimate and Allocation of Daily Demand

	Residents			Non- Residents	Tot	al	
Description	Non- Employed, Ages 16+			outside	inside	#	%
Census counts	4,152	2,752	1,575	5,582	3,006	17,067	
Daily weighted average hours	11.00	7.90	6.36	4.33	2.02	32	
Total potential daily demand in hours	45,667	21,754	10,010	24,191	6,085	107,705	
Allocation of demand:						0	
Residence-related demand in hours	45,667	21,754	6,823	24,191	0	98,434	91.4%
Employment-related demand in hours	0	0	3,187	0	6,085	9,271	8.6%
Total potential daily demand in hours	45,667	21,754	10,010	24,191	6,085	107,705	100.0%
Source: U. S. Census Bureau (2010 data) and E	xhibit 5						

For most population groups, demand is clearly either residence-related or employment-related. Those who live and work inside Canby, however, have both types of demand. Based on **Exhibit 5**, a person who both lives and works in Canby has 3.1 times the demand for parks and recreational facilities than a person who just work in Canby. This multiple suggests that, for a person who both lives and works in Canby, residence-related demand is more than twice that person's employment-related demand. When this allocation is combined with other population groups (in the bottom three rows of **Exhibit 6**), 91.4 percent of all demand is residence related, and 8.6 percent is employment-related.



SECTION IV: COST CALCULATION

This section provides detailed calculations on eligible costs, which is the numerator in the SDC equation.

A. CURRENT FACILITIES

As detailed in **Exhibit 7**, the City has a current inventory of 71.0 developed acres in parks and recreation facilities.

Current Park Inve	ntory			Exhibit 7
Classification	Facility	Total Acres	Developed Portion	Developed Acres
Community Park	Canby Community Park	14.5	100%	14.5
Community Park	Eco Park	19.0	100%	19.0
Community Park	Skate Park	1.5	100%	1.5
Mini-Park	19th Avenue Loop	1.8	100%	1.8
Mini-Park	Arneson Garden	1.8	100%	1.8
Mini-Park	Faist Lot	0.3	0%	0.0
Mini-Park	Holly Corners	0.2	100%	0.2
Mini-Park	Locust Street Park	1.0	100%	1.0
Mini-Park	Northwoods Park	1.9	100%	1.9
Mini-Park	Viet Nam Memorial Park	0.2	100%	0.2
Mini-Park	Wait Park	2.0	100%	2.0
Neighborhood Park	Willamette Wayside: Disc golf facility	10.0	100%	10.0
Neighborhood Park	Dog Park	6.0	0%	0.0
Neighborhood Park	Willamette Wayside: Restricted	64.0	0%	0.0
Neighborhood Park	Legacy Park	5.7	100%	5.7
Neighborhood Park	Maple Street Park	9.0	100%	9.0
Neighborhood Park	NW Neighborhood Park	2.4	100%	2.4
		141.4		71.0
Source: Canby Parks A	cquisition Plan and City staff			

B. FACILITY NEEDS

The City's adopted standard for parks and recreation facilities is 10 acres per 1,000 residents. With a population of 15,830 in 2012, the City currently needs 158.3 acres of parks to meet this standard. With a current inventory of only 71.0 acres, the City has a current deficiency of 87.3 acres. To meet the needs of growth by 2032, the City will need to cure this deficiency and provide an additional 117.6 acres.

The projects listed in the 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). As shown in



Exhibit 8, only 57.4 percent of the planned capital improvements will benefit future users. Therefore, only 57.4 percent of the improvements' costs can be recovered through SDCs.

Park Needs and SDC Eligibility			Exhibit 8
Description	2012	Increase from 2012 to 2032	2032
Parks needs			
Population	15,830	11,761	27,591
Parks standard per 1,000 residents	10	10	10
Needed acres of parks	158.3	117.6	275.9
SDC eligibility			
Current developed parks in acres	71.0		71.0
Needed additions in acres	87.3	117.6	204.9
Needed acres of parks	158.3	117.6	275.9
Deficiency/growth proportions	42.6%	57.4%	100.0%
		SDC	
		Eligibility	
Source: Exhibits 2 and 7, City staff			

C. FACILITY COSTS

Over the next 20 years, the City intends to acquire and/or develop parks and recreation facilities with a total estimated cost of \$39,470,100. Of that cost, \$22,658,754 (or 57.4 percent) can be recovered through SDCs.

C.1 Projects

Exhibit 9 shows the projects that constitute the capital improvement plan for parks and recreation facilities.

Capital Improvement Plan for P	Exhibit 9		
Project	Estimate Co	d SDC st Eligibility	
Willamette Wayside Improvements	\$ 323,70	0 57.4%	\$ 185,828
Logging Road Trail Corridor	145,00	0 57.4%	83,241
Swim Center Replacement/Addition	10,020,00	0 57.4%	5,752,220
Northwoods Park	325,00	0 57.4%	186,574
NW Neighborhood Park North	350,00	0 57.4%	200,926
Acquisition and Development	28,306,40	0 57.4%	16,249,965
	\$39,470,10	0	\$ 22,658,754
Source: Citystaff			

C.2 Allocation to Residents and Employees

After determining the total SDC-eligible costs, these costs must be allocated between residents and employees. Using the allocation percentages from **Exhibit 6**, the portion of facility costs that is attributable to residents is \$20,708,328 (or 91.4 percent). The portion attributable to employees is \$1,950,426 (or 8.6 percent).

D. ADJUSTMENTS

The City incurs costs in the development and administration of SDCs and may recover those costs as provided in ORS 223.307(5). We estimate recoverable costs during the planning period of \$559,365.



Finally, because the City's SDC fund has a balance of \$843,521, the costs to be recovered through SDCs can also be reduced by that amount.

E. SUMMARY

Exhibit 10 summarizes and allocates SDC-eligible costs after all adjustments.

Allocation of SDC-Eligible Costs					Exhibit 10
	SDC-	SDC- Residents		En	nployees
Cost Type	Eligible Costs	%	\$	%	\$
Facilities	\$22,658,754	91.4%	\$20,708,328	8.6%	\$1,950,426
Compliance	559,365	91.4%	511,216	8.6%	48,149
Fund balance	(843,521)	91.4%	(770,912)	8.6%	(72,609)
	\$22,374,598		\$20,448,631		\$1,925,966
Growth in residents/employees			11,761		4,816
Cost per resident/employee			\$ 1,739		\$ 400
Source: Exhibits 2, 4, 6, 9 and FY 201	0-11 CAFR				



SECTION V: SDC CALCULATION

This section provides a detailed calculation of the residential and non-residential SDCs.

A. RESIDENTIAL COST PER CAPITA

As shown in **Exhibit 10**, total residential costs of \$20,448,631 divided by expected growth of 11,761 residents results in a cost per capita of \$1,739.

B. RESIDENTIAL SDC PER DWELLING UNIT

When we convert population to the dwelling units described in Exhibit 3, we can determine the total SDC per dwelling unit as shown in Exhibit 11.

SDC per Dwelling Unit Exhi					
		Residents			
	Cost	per		DC per	
Type of	per	Dwelling	Dv	velling	
Dwelling Unit	Capita	Unit		Unit	
Single-Family	\$1,739	2.87	\$	4,987	
Multi-Family	\$1,739	2.99	\$	5,192	
Manufactured	\$1,739	2.40	\$	4,165	
Source: Exhibits	3 and 10				

C. NON-RESIDENTIAL SDC PER EMPLOYEE

As shown in **Exhibit 10**, total employment-related costs of \$1,925,966 divided by expected growth of 4,816 employees results in a cost per employee of \$400.

D. SUMMARY AND COMPARISON

Exhibit 12 concludes our report by summarizing the SDC calculations and comparing them with SDCs currently in effect.



Comparison of SDCs				Ex	chibit 12
	F	ee		Char	ige
Type of SDC	Current	Pro	oposed	\$	%
Residential, Single-Family	\$4,725	\$	4,987	\$ 262	5.5%
Residential, Multi-Family	\$3,869	\$	5,192	\$ 1,323	34.2%
Residential, Manufactured	\$3,874	\$	4,165	\$ 291	7.5%
Non-Residential, Per Employee	\$ 129	\$	400	\$ 271	210.0%
Source: Master Fee Schedule, Exhi	bits 10 an	d 1 i			



EXHIBIT "B"

Canby, Oregon



Draft Report for TRANSPORTATION SYSTEM DEVELOPMENT CHARGE STUDY

October 5, 2012

FCS GROUP

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This entire report is made of readily recyclable materials, including the bronze wire binding and the front and back cover, which are made from post-consumer recycled plastic bottles.

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SECTION I: BACKGROUND

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

A. POLICY

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B. PROJECT

The City last revised its methodology for transportation SDCs in 2004. In 2011, the City contracted with FCS GROUP to update its transportation SDCs.

We approached this project as a series of three steps:



- Framework for Charges. 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.
- **Technical Analysis**. In this step, we worked with City staff to isolate the recoverable portion of planned facility costs and calculate draft SDC rates.
- **Draft Methodology Report Preparation**. In this step, we documented the calculation of the draft SDC rates included in this report.





SECTION II: METHODOLOGY

This section provides a non-numeric overview of the calculations that result in SDC rates.

A. REIMBURSEMENT FEE COST BASIS

Canby currently charges a reimbursement fee related to the estimated cost of unused system capacity investments on the local collector and arterial street system. In order for a reimbursement fee to continue to be collected and calculated, excess (i.e., not currently utilized) capacity must be available to serve future growth.

The current estimated value of Canby's excess capacity in the transportation system was determined based on the prior actual City cost of SDC-funded capacity projects. The actual historic cost incurred by the City of Canby for capacity-increasing transportation facilities is shown in **Appendix A**. The eligible reimbursement costs is determined by adjusting the actual capital facility cost expenditures downward to reflect the amount of capacity that has "used up" since the facility was constructed. Next, all costs were converted to year 2012 dollar amounts to adjust for inflation using factors derived from the *Engineering News Record*, Seattle Cost Index. The resulting calculated reimbursement fee cost basis of the unused roadway capacity in the transportation system is **\$4,650,750**.

B. IMPROVEMENT FEE COST BASIS

The "improvements-driven" approach 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 SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in demand. This approach works best where a detailed and up-to-date master plan or project list is available and the benefits of projects can be readily apportioned between growth and current users.

We recommend that Canby continue to utilize the "improvements-driven capacity approach" to allocate costs to the improvement fee basis for roadways as well as non-motorized facilities, including sidewalks and bicycle facilities. Canby's current transportation SDC methodology uses a variation of an "improvements-driven capacity approach" to allocate costs to the improvement fee basis. Under the "improvements-driven capacity approach," the cost of a given project is allocated to growth proportionately by the capacity made available for growth.

Ideally, the most directly applicable measure of capacity demand should be used as the basis for allocation. The *Canby Transportation System Plan, (2010),* includes a list of "financially constrained" transportation system plan (TSP) improvements that are needed to address future



growth needs. The Canby TSP long-range capital improvement project list has been adjusted to account for non-capacity projects and non-local funding sources (please refer to Appendix B).

According to the *Canby TSP (2010)* "financially constrained" plan, and after adjusting for projects that have already been completed, the long-range TSP facility improvements needed to address future capacity needs in Canby is \$38,828,000 (adjusted to 2012 dollars).

After accounting for capacity and local funding share assumptions (shown in Appendix B), \$25,016,000 in capital improvements is considered to be SDC eligible (locally SDC funded and needed to address growth). The SDC eligible facility cost includes \$19,483,000 in roadway facilities, \$2,960,000 in bicycle facilities, and \$2,573,000 in pedestrian facilities (costs in 2012 dollars), as reflected in Appendix B.

C. COMPLIANCE COSTS

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." To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this TSDC methodology update assumes that local City compliance costs will equate to 2.5% of the eligible TSDC facility costs (equals \$625,400 over the next 20 years or an average cost of \$31,270 per year).

D. SUMMARY

In general, SDC rates are calculated by adding the reimbursement fee component, improvement fee component, and compliance cost component. Each component is calculated by dividing the eligible cost by the growth of units of demand.

Section III of this report provides detailed calculations related to growth in demand, which is the denominator in the SDC equation. Section IV of this report provides detailed calculations on eligible costs, which is the numerator in the SDC equation.





SECTION III: GROWTH CALCULATION

This section provides detailed calculations related to growth in demand, which is the denominator in the SDC equation.

A. RELEVANT TYPES OF GROWTH

Canby's existing transportation SDCs are based on projected "equivalent length new daily trips" for motor vehicle trip generation. In light of the fact that the current *Canby TSP* (2010) plans to provide a balanced transportation system with a mix of roadway, bicycle and pedestrian facility improvements, it is recommended that the City's revised SDC methodology utilize an average daily (weekday) "person trip" basis for determining local SDCs required to pay for the growth-related share of all types of transportation modes of travel (including roads, bicycle and pedestrian facilities).

Transportation engineers commonly use peak-hour trip or average daily trip estimates to assess transportation performance and determine system needs. Average weekday P.M. peak-hour vehicle trip generation rates were derived from the Canby TSP (2010) with internal (inside city limit) trip estimates for 2010 and projections for 2030. Using the traffic modeling assumptions from the Canby TSP, internal trip rates were interpolated for year 2012 and extrapolated for year 2032. Average weekday *motor vehicle* trip generation statistics provided in the *Institute of Transportation Engineers* (ITE) *Trip Generation Manual* for each land use type and development size serve as the basis for converting peak-hour vehicle trip-ends to average weekday trip-end estimates and projections.

This new transportation SDC methodology includes additional calculations to identify average daily *person-trips*. In addition to trips by motor vehicles, *person-trips* also include non-motor vehicle trips that utilize bicycle and pedestrian facilities. The proposed charges continue to adjust for linked trips (also known as pass-by trips) and average trip length. The calculation of the proposed TSDC rates is summarized below.

B. GROWTH IN TRIP ENDS

Having established the relevance of average weekday person-trip ends, we now quantify expected growth rates.

B.1 Expected Growth Levels

To convert vehicle trips to person trips, we analyzed data from the *Canby TSP* (2010) and applied factors to covert average weekday vehicle trips to average weekday person trips using findings from the *U.S. National Household Transportation Survey* (2009), conducted by the U. S. Department of Transportation. Based on the current Canby TSP trip-end estimates and projections, the number of internal average weekday person-trip-ends in Canby is projected to increase by 162,431 between



2012 and 2032, as shown in **Table 1.** The rate of increase in trips equates to 3.1% annually over this time period.

B.2 Calculating the Growth Share

<u>New</u> collector or arterial facilities (roadways, bicycle and pedestrian facilities) that are only needed to serve growth are 100% SDC eligible.

<u>Existing</u> roadways and bicycle/pedestrian facilities that are planned for expansion may only be partially eligible for SDC funding. The share of existing transportation facilities that are planned for capacity upgrades to serve future growth needs is determined to be 46.8%, as shown in **Table 1**.

b d a с е g **Trip End** Proj. 2032 Increase Proj. 2032 Est. 2012 Est. 2012 Avg. (Avg. (Avg. (Avg. (Avg. in Person Annual Weedkay Weekday Weekday Weekday Trip-Growth Vehicle Vehicle Person Person ends Rate Trip Generator Trip Ends)¹ Trip Ends)¹ Trip Ends)² Trip Ends)² (e - d) (AAGR) **Residential Trip-ends** 49,647 83,161 83,406 139,711 56,304 2.6% 26,605 95,832 **Retail Trip-ends** 57,043 44,697 51,136 3.7% Non-retail Trip-ends 33,583 66,315 56,419 111,410 54,991 3.3% 109,835 206,520 184,522 346,953 162,431 **Total Trip-ends** 3.1% New person trips as a % of total future trips 46.8% Notes: 1 Derived from Canby Transportation System Plan, March 2010, with 2012 estimates and 2032 projections based on extrapolations of 2010 to 2030 forecast. Assumes peak trips account for 10% of average weekday trip rates. 2 Person trip conversion rate of 1.68 derived from 2009 U.S. National Houeshold Transportation Survey findings.

Table 1 Canby Existing and Projected Weekday Person-Trip-Ends: 2012 to 2032



SECTION IV: COST CALCULATION

This section provides detailed calculations on eligible costs, which is the numerator in the SDC equation. The Canby Transportation SDC rates are calculated using the following series of formulas which:

- a) Calculate the cost per person trip-end for motor vehicle improvements, non-motorized facility improvements, reimbursement costs, and compliance costs,
- b) Identify the number of new person trips for each type of land use,
- c) Adjust trip rates by land use type to allow for differences in "linked" or "pass-by" trips,
- d) Adjust trip rates by land use type to allow for differences in trip lengths,
- e) Calculate the motor vehicle improvements cost and SDC fee per trip-end and unit of development,
- f) Calculate the non-motorized (bicycle and pedestrian) facility improvements cost and SDC fee per trip-end and unit of development,
- g) Calculate the reimbursement cost and SDC fee per trip-end and unit of development,
- h) Calculate the compliance cost and SDC fee per trip-end and unit of development, and
- i) Calculate the total transportation SDC cost per unit of development.

A. IMPROVEMENT FEE

The projects listed in the financially constrained long-range transportation capital improvement plan that are eligible for SDC funding can only to the extent that the projects will benefit future users (rather than cure an existing deficiency). As mentioned previously, the total eligible SDC share of local transportation facilities is \$25,016,000, of which \$19,483,000 is for planned roadway facilities and \$5,533,000 is for planned bicycle/pedestrian facilities (costs in 2012 dollars), as reflected in **Appendix B**.

To calculate the improvement fee by unit of development, the following calculations were made.

A1. Cost Per Person Trip-End

The capital improvements included in the appendices include both motor vehicle improvements and nonmotorized facility improvements. The cost per person trip-end is calculated for each of these modes and for compliance costs by dividing the SDC-eligible costs by the increase in the average number of new person trip-ends shown in **Table 2**, using the following formula:



		Increase In		SDC-Eligible Cost
SDC-Eligible	÷	Person	=	Per Person
Cost (after reserves)		Trip-Ends		Trip-End

The SDC-Eligible Cost Per Person Trip-End for each mode and for compliance costs are shown in **Appendix C-1** and summarized in **Table 2**, below.

Table 2

SDC-Eligible Cost Per Person Trip End, Before Existing SDC Fund Balance

Type of Cost	SDC-Eligible <u>Cost</u>	Avg	g. Weekday Pers <u>Trip-Ends</u>	son	Cost Per New Person Trip-End*
Motor Vehicle Facility Cost	\$19,483,000	÷	162,431	=	\$119.95
Non-Motorized Facility Cost	\$5,533,000	÷	162,431	=	\$36.06
Compliance Cost	\$625,000	÷	162,431	=	\$3.85

* denotes cost per person-trip end before deducting existing fund balance.

A2. Adjustment for Current Fund Balance

The transportation improvement SDC fund balance that has been collected by the City but not yet committed or spent has been deducted from total eligible SDC facility costs. According to City staff the existing fund balance is estimated to equate to approximately \$438,000. The adjusted eligible SDC for motor vehicle facility costs per person trip-end after deducting the current fund balance from the SDC cost per trip end is shown in **Table 3**.

a	b TSDC Eligible Cost	C Growth in Avg. Weekday Person Trip Ends ⁴	d Eligible TSDC Cost Per Person Trip End Before Fund Balance (b / d)	e Eligible TSDC Cost Per Person Trip End After Fund Balance
Motor Vehicle Facility Costs ¹	\$19,483,000	162,431	\$119.95	\$117.90
Pedestrian/Bicycle Facility Costs ¹	\$5,533,000	162,431	\$34.06	\$33.48
Subtotal	\$25,016,000			
Compliance Costs ²	\$625,000	162,431	\$3.85	\$3.78
Subtotal	\$25,641,000			
Less SDC Fund Balance ³	(\$438,000)	162,431	-\$2.70	
Total	\$25,203,000	162,431	\$155.16	\$155.16

Table 3

SDC-Eligible SDC Cost Per Person Trip End, After Existing SDC Fund Balance

¹ Derived from Appendix B. Amounts shown are adjusted to 2012 dollars.

² Assumed to be 2.5% of total SDC eligible capital costs, and allocated based on capital cost allocation shown above.

³ Based on City staff estimates.

⁴ Derived from Table 1.



Notes:

A3. New Person Trip-Ends Per Unit of Development

The number of new person trip-ends generated per day is calculated for each type of land use using the following formula:

ITE		Number of		Percent	New
Trip Rate	X	Person Trips	X	New Trips	= Person-Trip Ends

The ITE <u>Trip Generation</u> manual contains trip rates based on trip generation studies conducted nationwide, and provides the base data of unadjusted counts of trips generated by various types of land use. The trip rates included in <u>Trip Generation</u> include all traffic entering or leaving a primary location, and do not account for traffic that is passing by and interrupts a "primary" trip between two other locations. These "pass-by" trips are not "new" because they would occur regardless of development activity.

"New" trips are often based on the assumption that all trips from residential land uses are new trips (therefore, percentage = 100%), and all other land uses are evaluated to reflect the percentage of their trips that are "new" versus the remainder (which are "pass-by" trips). No land use category has greater than 100% new trips, but some categories have as few as 34% new trips. The percentages used to account for pass-by trips in this methodology are based on pass-by data included in the ITE *Trip Generation Handbook*, 2^{nd} Edition (2004).

Appendix C-1 lists the number of new trips generated for each selected ITE land use category, using Formula 2. Column 1 lists land use categories and their ITE code numbers. Column 2 contains the Weekday Average Trip Rate from ITE Trip Generation. Column 3 identifies the total person-trips (Column 2 X 1.68) (projected total person trips for all modes of travel per motor vehicle trip per U.S. National Household Transportation Survey, 2009). Column 4 identifies the percentage of trips that are new, as opposed to pass-by trips. Column 5 is the result of multiplying columns 3 and 4 by each other, producing the number of new person trips generated per day for each land use category. (NOTE: Because of small sample sizes in Trip Generation, some land use categories do not include trip rates or a number of net new trips generated. For these categories, the trip generation rate for the land use which is the most similar to actual land use will be used in determining the amount of the Transportation SDC).

A4. Trip-Length Adjustment

The ITE trip generation rates do not account for differences in the lengths of trips for different types of development. Because longer trips have a relatively greater impact on the road system than do shorter trips, an adjustment factor is needed to account for differences in trip lengths relative to the length of an "average" trip. The net adjusted trip-ends generated per day is determined for each type of land use by multiplying the number of new person trip-ends (from Formula 3) by the trip length factor for each type of land use:

New		Trip		Net Adjusted
Person	X	Length	=	Trip-Ends
Trip-Ends		Factor		Per Day

Trip length data from surveys conducted for the U.S. Department of Transportation and published in the "*National Household Travel Survey*" (2009) were used in developing the Trip Length Factors, as were concepts and methods recommended by James C. Nicholas, in "The Calculation of Proportionate-Share



Impact Fees" (American Planning Association, 1988), and "Development Impact Fee Policy and Administration", (American Planning Association, 1990).

Appendix C-2 lists the net adjusted trip-ends per day for each type of development, as calculated using Formula 2. Column 1 repeats the ITE codes and land use categories, and Column 2 repeats the new trips per day from the last column of Appendix C-1. Column 3 presents the trip length factor for each type of land use. As the result of multiplying the number of trips (Column 2) by the trip length factor (Column 3), Column 4 displays the net adjusted trips per day for each land use category.

A5. Motor Vehicle Improvements Cost Per Unit of Development

The motor vehicle improvements cost per unit of development is calculated for each type of land use by multiplying the net adjusted person trip-ends for each land use by the motor vehicle improvements cost per trip-end.

Net Adjusted		Motor Vehicle		Motor Vehicle
Person Trip-Ends	Χ	Improvements	=	Improvements
Per Unit		Cost Per Trip-End		Cost Per Unit

Appendix C-3 displays the motor vehicle improvements cost per unit for each land use category. Column 1 repeats the ITE land use codes and categories, Column 2 repeats the net adjusted trip-ends for each land use category (from Appendix C-2), and column 3 shows the motor vehicle improvements cost per trip-end (from Appendix C-1). The Motor Vehicle Improvements Cost Per Unit, shown in Column 4, is calculated by multiplying the net adjusted trip-ends (Column 2) by the motor vehicle improvements cost per trip-end (Column 3).

A6. Non-Motorized Facility Improvements Cost Per Unit of Development

The non-motorized facility cost per unit of development is calculated for each type of land use by multiplying the net adjusted person trip-ends for each land use by the non-motorized (bicycle and pedestrian facility) improvements cost per trip-end.

	Net Adjusted		Non-Motor Vehicle		Non-Motor Vehicle
5.	Person Trip-Ends	Χ	Improvements =	=	Improvements
	Per Unit		Cost Per Trip-End		Cost Per Unit

Appendix D-4 displays the non-motorized facility improvements cost per unit for each land use category. Column 1 repeats the ITE land use codes and categories, and Column 2 repeats the net adjusted trip-ends for each land use category (from Appendix C-2). The non-motorized facility improvements cost per trip-end is shown in Column 3.

A7. Compliance Cost Per Unit of Development

The compliance cost per unit of development is calculated for each type of land use by multiplying the net adjusted person trip-ends for each land use by the compliance cost per trip-end.

	Net Adjusted		Compliance		Compliance
6.	Person Trip-Ends	Χ	Cost Per	=	Cost
	Per Unit		Trip-End		Per Unit



Appendix C-5 displays the compliance cost per unit for each land use category. Column 1 repeats the ITE land use codes and categories, and Column 2 repeats the net adjusted person trip-ends for each land use category. The compliance cost per trip-end is shown in Column 3. The Compliance Cost Per Unit shown in Column 4 is calculated by multiplying the net adjusted person trip-ends for each land use category (Column 2) by the compliance cost per person trip-end (Column 3).

B. REIMBURSEMENT FEE

As mentioned previously, the eligible reimbursement cost basis is **\$\$4,650,760**. The reimbursement fee is determined by dividing the reimbursement fee cost basis (\$4,650,760) by the projected increase in person-trip-ends (162,431) that is expected to occur in Canby between 2012 and 2032.

The reimbursement cost per unit of development is calculated for each type of land use by multiplying the net adjusted person trip-ends for each land use by the compliance cost per trip-end.

Net Adjusted		Reimbursement		Compliance
Person Trip-Ends	X	Cost Per	=	Cost
Per Unit		Trip-End		Per Unit

Appendix C-6 displays the reimbursement cost per unit for each land use category. Column 1 repeats the ITE land use codes and categories, and Column 2 repeats the net adjusted person trip-ends for each land use category. The reimbursement cost per trip-end is shown in Column 3. The Reimbursement Cost Per Unit shown in Column 4 is calculated by multiplying the net adjusted person trip-ends for each land use category (Column 2) by the reimbursement cost per person trip-end (Column 3).

C. TOTAL TRANSPORTATION SDC

The Total Transportation SDC per unit of development is calculated for each type of land use by adding the motor vehicle improvements SDC per unit (from Appendix C-3), the non-motorized facility improvements SDC per unit (from Appendix C-4), the compliance cost per unit (from Appendix C-5) and the reimbursement cost per unit (from Appendix C-6).





SECTION V: SUMMARY

This section provides a detailed calculation of the residential and non-residential SDCs.

A. SDC COST PER UNIT OF DEVELOPMENT

Table 4 displays the total Transportation SDC cost for selected ITE land use categories, which is determined from adding together the motor vehicle improvements SDC per unit (from Appendix C-3), the non-motorized facility improvements SDC per unit (from Appendix C-4), the compliance cost per unit (from Appendix C-5) and the reimbursement cost per unit (from Appendix C-6).

Ta	ble	24

Non-Motor Motor Compli-Reim-Total bursement Transpor-Vehicle Vehicle ance ITE LAND USE CODE/ SDC² SDC³ Cost⁴ Cost 5 Unit ⁶ CATEGORY tation SDC \$2,955 /dwelling unit 210 Dwelling Unit \$1,896 \$538 \$61 \$460 /dwelling unit \$1,327 \$377 \$322 \$2,069 220 Multifamily¹ \$43 520 Elementary School (Public) \$29 \$25 \$159 /student \$102 \$3 560 Church \$1,353 \$384 \$43 /T.S.F.G.F.A. \$2,110 \$329 \$354 \$101 \$11 \$553 /student 565 Day Care Center/Preschool \$86 \$1,604 \$10,294 /T.S.F.G.F.A. 630 Clinic \$6.603 \$1,87: \$212 814 Specialty Retail Center \$3,244 \$921 \$104 \$788 \$5,058 /T.S.F.G.L.A. \$3,143 \$893 \$763 \$4,900 T.S.F.G.L.A. 820 Shopping Center \$101 850 Supermarket \$10,887 \$3,092 \$349 \$2,644 \$16,972 /T.S.F.G.F.A.

\$6.800

\$2.170

\$3,919

\$1,442

\$6,000

\$1,712

\$2,032

\$392

\$84

\$279

\$141

\$834

\$619

\$768

\$245

\$443

\$163

\$678

\$94

\$193

\$70

\$230

\$44

\$10

\$32

\$16

\$5,815

\$1 856

\$3,351

\$1,233

\$5,131

\$713

\$1,464

\$530

\$1,738

\$335

\$72

\$239

\$120

\$37,325

\$9,400

\$3,400

\$11,156

\$2,152

/T.S.F.G.F.A.

\$11,913 /T.S.F.G.F.A.

\$21,511 /T.S.F.G.F.A.

\$7,916 /T.S.F.G.F.A.

\$32,936 /T.S.F.G.F.A.

\$4,576 /T.S.F.G.L.A.

/V.F.P.

\$463 /T.S.F.G.F.A.

\$772 /T.S.F.G.F.A.

\$1,532 /T.S.F.G.F.A.

/T.S.F.G.F.A.

/T.S.F.G.F.A.

/T.S.F.G.F.A.

\$23.943

\$7.642

\$13,798

\$5,078

\$21,127

\$2,936

\$6,030

\$2,181

\$7,156

\$1,381

\$297

\$982

\$495

Canby Transportation SDC Cost Per Unit of Development

Notes:

150 Warehouse

151 Mini-Warehouse

¹ Based on ITE land use code for apartment dwelling.

² Derived from Appendix Table C-3.

Derived from Appendix Table C-4.

853 Convenience Market

880 Pharmacy/Drugstore

931 Quality Restaurant

934 Fast Food Restaurant

942 Automobile Care Center

944 Gasoline/Service Station

720 Medical-Dental Office Building

710 General Office Building

110 General Light Industrial

120 General Heavy Industrial

911 Bank/Savings: Walk-in

⁺Derived from Appendix Table C-5.

Derived from Appendix Table C-6.

Abbreviations used in the "Unit" column:

T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area


B. CREDITS, EXEMPTIONS AND DISCOUNTS

The exiting Canby SDC administrative procedures will continue to establish local policies for issuing credits and exemptions, annual adjustments, and other administrative procedures.

(1) Credits

A credit is a reduction in the amount of the SDC for a specific development. The Oregon SDC Act requires that credit be allowed for the construction of a "qualified public improvement" which (1) is required as a condition of development approval, (2) is identified in the City's capital improvements program, and (3) 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), and 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, if it so chooses, 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.).

(2) Exemptions

The City may "exempt" specific classes of development (i.e., minor additions, etc.) from the requirement to pay transportation SDCs.

(3) Discounts

The City may "discount" the amount of the SDC by reducing the portion of growth-required improvements to be funded with SDCs. Alternatively, the City may decide to charge only a percentage (i.e., 50%, 75%, etc.) of the SDC rates required to fund identified growth-related facility costs. Because discounts reduce SDC revenues, they increase the amounts that must come from other sources, such as general fund contributions in order for the City to maintain levels of service.

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 Canby index its charges to the **Engineering News Record** (ENR) Construction Cost Index (CCI) for the City of Seattle, and adjust the charges annually as per that index. There is no comparable Oregon-specific index.

D. SUMMARY AND COMPARISON

Table 5 summarizes the SDC calculations and compares them with SDCs currently in effect.

LAND USE TYPE	Prior/Current Transportation SDC 1	New Revised Transportation SDC	Change
Residential: Single family per Dwelling Unit	\$2,603	\$2,955	\$352
Residential: Multi-family per Dwelling Unit	\$1,738	\$2,069	\$331
Commercial: Shopping Center (50,000 SF floor area)	\$165,655	\$196,017	\$30,362
Office building (4,000 SF floor area)	\$7,786	\$13,598	\$5,812
Light Industrial building (60,000 SF floor area)	\$127,400	\$129,129	\$1,729
Commercial/Industrial Rate per avg. daily vehicle-trip-end	\$272		varies
Commercial/Industrial Rate per avg. daily person-trip-end ²	\$162	\$184 (avg.)	\$22 (avg.)

Table 5 Existing and Revised Transportation SDCs in Canby

Notes:

¹ Based upon City of Canby Master Fee Schedule, effective as of 1/2/2012.

² Conversion of current transportation SDC from vehicle trips to person trips based on factor used for current methodology report.







APPENDIX A

Year																						Cun	nulative
Calender Year		2000		2001		2002		2003		2004		2005		2006		2007	2008	2009	2010		2011	A	mount
Transportation SDC Expenditures																							
Beginning Balance in Year 1^1	\$	1,637,155																					
Additional Annual Expenditure ²	\$	163,589	\$	182,690	\$	316,112	\$	231,525	\$	163,206	\$	183,903	\$	577,630	\$	668,044	\$ 682,790	\$ 98,168	\$ 32,008	\$	26,033		
Total Expenditures	\$	1,800,744	\$	182,690	\$	316,112	\$	231,525	\$	163,206	\$	183,903	\$	577,630	\$	668,044	\$ 682,790	\$ 98,168	\$ 32,008	\$	26,033	\$4,	,962,853
		12		11		10		9		8		7		6		5	4	3	2		1		
Depreciation Deduction Factor ³		0.4447		0.4011		0.3588		0.3178		0.2780		0.2394		0.2020		0.1657	0.1305	0.0963	0.0632		0.0311		
Depreciation Deduction Values																							
Year 1-Expenditures (12 years of dep.)	\$	(800,862)																				\$ ((800,862)
Year 2 Expenditures (11 years of dep.)			\$	(73,280)																		\$	(73,280)
Year 3 Expenditures (10 years of dep.)					\$	(113,423)																\$ ((113,423)
Year 4 Expenditures (9 years of dep.)							\$	(73,574)														\$	(73,574)
Year 5 Expenditures (8 years of dep.)									\$	(45,369)												\$	(45,369)
Year 6 Expenditures (7 years of dep.)											\$	(44,026)										\$	(44,026)
Year 7 Expenditures (6 years of dep.)													\$	(116,666)								\$ ((116,666)
Year 8 Expenditures (5 years of dep.)															\$	(110,681)						\$ ((110,681)
Year 9 Expenditures (4 years of dep.)																	\$ (89,091)					\$	(89,091)
Year 10 Expenditures (3 years of dep.)																		\$ (9,458)				\$	(9,458)
Year 11 Expenditures (2 years of dep.)																			\$ (2,024)			\$	(2,024)
Year 12 Expenditures (1 years of dep.)																				\$	(811)	\$	(811)
Total Depreciation Deduction																						\$(1,	,479,265
Remaining Transportation SDC Reimbur	sem	ent Value																					
Nominal current year value	\$	999,882	\$	109,410	\$	202,689	\$	157,951	\$	117,837	\$	139,877	\$	460,964	\$	557,363	\$ 593,699	\$ 88,710	\$ 29,984	\$	25,222	\$3,	,483,588
Inflation adjusted value (2012 \$) 4	\$	1,549,882	\$	163,511	\$	292,048	\$	219,425	\$	157,827	\$	180,628	\$	573,908	\$	669,038	\$ 687,094	\$ 98,983	\$ 32,256	\$	26,161	\$4,	,650,760
Projected Increase in Person Trips ⁵																							162,431
Reimbursement Cost Per Person Trip																						\$	28.63
Notes:																(_				
¹ Derived from prior adopted Canby Trai	nspo	rtation SDC	Met	hodology r	epo	rt (2001).																	
² Actual TSDC expenditures based on city	y bud	dge documei	nts,	provided b	y Ci	ty of Canby																	
³ Depreciation factors based on trip gene	erati	on model are	owt	h in vehicle	trip	ends, Canl	by ī	Transporta	itioi	n System I	Plan,	2010 (3.1	1%)										
⁴ Inflation escalation factors based on E														00 and 201	1 (3.	72%).							
⁵ Derived from Table 1.										92 0000 mm				4.1.4 201	_ (0.	,.,.							
Derived from Tuble 1.													<u> </u>							L			



APPENDIX B

CITY OF CANBY SDC-Eligible Transportation System Projects List Financially Constrained List (as of August 2012)

			MOTOR	VEHICLE			BIC	YCLE		PEDESTRIAN				í	
PLAN/ PROJECT NUMBER		ESTIMATED MOTOR VEHICLE PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE VEHICLE %	SDC- ELIGIBLE MOTOR VEHICLE COSTS	ESTIMATED BICYCLE FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE BICYCLE %	SDC- ELIGIBLE BICYCLE COSTS	ESTIMATED PEDESTRIAN FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE PED %	SDC- ELIGIBLE PEDESTRIAN COSTS	EL	AL SDC- IGIBLE COSTS
	N Holly St. (NW 6th Ave. to Multi-Use Trail). Install enhancements to create a bicycle boulevard.	\$ -			\$ -	\$ 30,000	100%	46.8%	\$ 1 <i>4,</i> 040	\$ -			\$ -	\$	14,040
B3	N Holly St. (NW 22nd Ave. to NW 6th Ave.). Stripe bike lanes (widen as needed).					\$ 663,000	100%	46.8%	\$ 310,284				-	\$	310,284
B6	Pine St. (OR 99E to NE 4th Ave.). Install bike lanes.					-									-
B7	Otto Rd. (OR 99E to Mulino Rd.). Install bike lanes.					-									-
B8	SE 4th Ave. (Sequoia Pkwy. To Mulino Rd.). Install bike Ianes.				-	-			-				-		-
	Notes: ¹ Local Cost Assumptions Streets	Source TSP, page 9-5													

Pedestrian	TSP, page 9-5
Bicycle	TSP, page 9-5
Streets	TSP, page 9-5

² Local TSDC Cost Share, ranges from 67% for projects with non-local funding to 100%. Derived from Canby TSP, Table 9-5.

³ Growth Required percentage calculation derived from Table 1.



			MOTOR	/EHICLE			BIC	YCLE				PEDES	TRIAN				
PLAN/ PROJECT		ESTIMATED MOTOR VEHICLE PORTION OF	Local TSDC	GROWTH REQUIRED SDC- ELIGIBLE	SDC- ELIGIBLE MOTOR VEHICLE	ESTIMATED BICYCLE FACILITY PORTION OF	Local TSDC	GROWTH REQUIRED SDC- ELIGIBLE	SDC- Eligible Bicycle	PE I PC	STIMATED DESTRIAN FACILITY DRTION OF	Local TSDC	GROWTH REQUIRED SDC- ELIGIBLE	ELIC PEDES	DC- SIBLE STRIAN	ELIC	AL SDC- GIBLE
NUMBER	DESCRIPTION	PROJECT	Cost Share*	VEHICLE %	COSTS	PROJECT	Cost Share*	BICYCLE %	COSTS		PROJECT	Cost Share*	PED %	CC	OSTS	CC	OSTS
	OR 99E and UPRR (at Elm St.). Improve crosswalk and ramps.									\$	40,000	67%	46.8%	\$	12,542	\$	12,542
	OR 99E and UPRR (at Grant St.). Improve crosswalk and ramps; install pedestrian refuge island.									\$	30,000	67%	46.8%		9,407		9,407
	OR 99E and UPRR (at Ivy St.). Improve crosswalk and ramps; install pedestrian refuge island.									- \$	30,000	67%	46.8%	\$	9,407	\$	9,407
	OR 99E (between Ivy St. and Locust St.). Install pedestrian refuge island.								-						-	\$	-
	S Ivy St. (north leg at Township Rd.). Install crosswalk and ramps.				-				-		-				-	\$	-
	Township Rd. (at Sequoia Pkwy.). Provide crosswalk.									-	-				-	\$	-
C7	OR 99E and UPRR (at Pine St.). Improve crosswalk and ramps.				-				-						-	\$	-
	S Ivy St. (south leg at SW 3rd Ave.). Install crosswalk, ramps, and pedestrian refuge island (remove crosswalk striping on north leg).															\$	-
	Notes:																
	¹ Local Cost Assumptions Streets	Source TSP, page 9-5															

StreetsISP, page 9-5BicycleTSP, page 9-5PedestrianTSP, page 9-5

² Local TSDC Cost Share, ranges from 67% for projects with non-local funding to 100%. Derived from Canby TSP, Table 9-5.

³ Growth Required percentage calculation derived from Table 1.



			MOTOR	/EHICLE			BIC	YCLE			PEDES	TRIAN			
PLAN/ PROJECT NUMBER	DESCRIPTION	ESTIMATED MOTOR VEHICLE PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE VEHICLE %	SDC- ELIGIBLE MOTOR VEHICLE COSTS	ESTIMATED BICYCLE FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE BICYCLE %	SDC- ELIGIBLE BICYCLE COSTS	ESTIMATED PEDESTRIAN FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE PED %	SDC- ELIGIBLE PEDESTRIAN COSTS	EL	AL SDC- IGIBLE :OSTS
n	Township Rd./S Ivy St. Install traffic signal (includes project C.5).	\$ 300,000	100%	46.8%	\$ 140,400					-			-	\$	140,400
12	Township Rd./Sequoia Pkwy Convert to all-way stop and install eastbound and westbound left-turn lanes (includes project C6).	\$ 510,000	100%	46.8%	\$ 238,680								-	\$	238, 680
13	N ky St./N 1st Ave. Remove southbound stop sign, restrict east leg to right- in/right-out, and install diverter on west leg to only allow southbound right turns.	\$ 10,000	100%	46.8%	\$ 4,680								-	\$	4, 680
14	N Grant St./NW 1st Ave. Remove southbound stop sign.	\$ 10,000	100%	46.8%	\$ 4,680					-			-	\$	4, 680
15	Knights Bridge Rd./Cedar St. Restripe northbound approach to include a right- turn lane.		100%	46.8%	\$ 2,340								-	\$	2,340
16	S Grant St./SW 2nd Ave. Install westbound right-turn Iane.	\$ 100,000	100%	46.8%	\$ 46,800								-	\$	46,800
17	S Ivy St./SW 2nd Ave. Install eastbound right-turn lane.	\$ 100,000	100%	46.8%	\$ 46,800									\$	46,800
18	S. IvySt./SW 3rd Ave. Install partial diverter on west leg to close westbound receiving lane (includes project C8).	\$ 40,000	100%	46.8%	\$ 18,720								-	\$	18,720
LI	Otto Rd. Extension (OR 99E to Mulino Rd.). Construct new road (includes two roundabouts and projects B7 and \$10).	\$ 8,915,000	100%	100%	\$ 8,915,000									\$ 1	3,915,000
L2	OR 99E/Otto Rd. Install traffic signal (associated with Otto Rd. Extension).	\$ 300,000	100%	100%	\$ 300,000								-	\$	300,000
L3 L4	NE 4th Ave./Pine St. OR 99E/Pine St. and	\$ 1,255,000 \$ 2,000,000	100% 100%	100% 100%	\$ 1,255,000 \$ 2,000,000								-		1,255,000 2,000,000
	Adjacent UPRR Crossing														
L5	SE 4th Ave. Extension (Sequoia Pkwy. To Mulino Rd.)	\$ 3,140,000	100%	100%	\$ 3,140,000								-	\$:	3, 140, 000
Ló	NE 3rd Ave. (Locust St. to NE 4th Ave.) and NE 4th Ave. (Locust St. to NE 3rd Ave.)	tbd	100%	100%									-	\$	-



			MOTOR	VEHICLE			BIC	YCLE		PEDESTRIAN ESTIMATED GROWTH		1			
PLAN/ PROJECT NUMBER	DESCRIPTION	ESTIMATED MOTOR VEHICLE PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE VEHICLE %	SDC- ELIGIBLE MOTOR VEHICLE COSTS	ESTIMATED BICYCLE FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE BICYCLE %	SDC- ELIGIBLE BICYCLE COSTS	ESTIMATED PEDESTRIAN FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE PED %	SDC- ELIGIBLE PEDESTRIAN COSTS	ELI	AL SDC- IGIBLE COSTS
N1	OR 99E (Elm St. to Locust St.). Construct multi-modal improvements and repave highway (includes projects C4 and S1).	\$ 3,770,000	tbd	0%										\$	-
N2	All traffic signals on OR 99E within Canby city limits. Convert to adaptive signal system.	\$ 400,000	67%	46.8%	\$ 125,424									\$	125,424
N3	13th Ave. (Berg Pkwy. To Sequoia Pkwy. Extension). Perform safety study and construct traffic calming and other safety improvements prior to constructing Sequoia Pkwy. Extension to SE 13th Ave.	\$ 750,000	tbd	0%	-				-					\$	-
01	SE 1st Ave./Haines Rd./Mulino Rd./Bremer Rd. Install roundabout.	\$ 2,000,000	100%	46.8%	\$ 936,000				-				-	\$	936,000
02	Township Rd./Redwood St. Install roundabout.	\$ 1,000,000	100%	46.8%	\$ 468,000									\$	468,000
03	Township Rd./Mulino Rd. Install roundabout.	\$ 1,000,000	100%	46.8%	\$ 468,000				-				-	\$	468,000
P1	Safe Routes to School (yearly funding).									\$ 1,050,000	tbd	0%		\$	-
P2	ADA Improvements (yearly funding).								-	\$ 1,050,000	tbd	0%	-	\$	-
R1	UPRR (at Elm St.). Improve rail crossing.				-	\$ 100,000	67%	46.8%					-	\$	31,356
R2	UPRR (at Grant St.). Improve rail crossing.					\$ 100,000	67%	46.8%					-	\$	31,356
R3	UPRR (at Ivy St.). Improve rail crossing.					\$ 100,000	67%	46.8%					-	\$	31,356
R4	UPRR (at Pine StNE 4th Ave.). Provide rail crossing.					\$-		46.8%						\$	
R5	OPRR (at Township Rd.). Move guardrail and improve rail crossing.					\$ 100,000	67%	46.8%	\$ 31,356					\$	31,356



			MOTOR \	/EHICLE			BIC	CLE		PEDESTRIAN ESTIMATED GROWTH						
PLAN/ PROJECT NUMBER	DESCRIPTION	ESTIMATED MOTOR VEHICLE PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE VEHICLE %	SDC- ELIGIBLE MOTOR VEHICLE COSTS	ESTIMATED BICYCLE FACILITY PORTION OF PROJECT	Local TSDC Cost Share*	GROWTH REQUIRED SDC- ELIGIBLE BICYCLE %	SDC- ELIGIBLE BICYCLE COSTS	ESTIMATE PEDESTRIA FACILITY PORTION C PROJECT	N F Local TSDC	GROWTH REQUIRED SDC- ELIGIBLE PED %	SD ELIG PEDES CO	TRIAN	EL	TAL SDC- LIGIBLE COSTS
	OR 99E (north side, Knott St. to Locust St.). Install								-		-			-	\$	-
S04	sidewalks (north side). S Ivy St. (OR 99E to Lee Elementary). Fill in sidewalk								-	\$ 490,00	0 100%	46.8%	\$ 2	229,320	\$	229,320
S05	gaps. Pine St. (OR 99E to NE 4th Ave.). Install sidewalks.								-	\$		46.8%	\$	-	\$	-
S07	N. Holly St. (Knights Bridge Rd. to NW Territorial Rd.). Fill in sidewalk gaps.								-	\$ 550,00	0 100%	46.8%	\$ 2	257,400	\$	257,400
S08	Territorial Rd. (Holly St. to OR 99E). Fill in sidewalk gaps.				-				-	\$ 1,230,00) 100%	46.8%	\$ 5	575,640	\$	575,640
	NE 10th Ave. (Holly St. to Pine St.). Install sidewalks.									\$ 830,00	0 100%	100%	\$8	330,000	\$	830,00
\$10	Otto Rd. (OR 99E to Mulino Rd.). Install sidewalks, crosswalks, ramps.								-	\$		100%	\$	-	\$	
\$11	S Ivy St. (S 13th Ave. to S 16th Ave.). Fill in sidewalk								-	\$ 100,00	0 100%	100%	\$ 1	00,000	\$	100,00
\$12	gaps. S Township Rd. (OP RR to Sequoia Pkwy.). Install sidewalks.				-				-	\$ 200,00	0 100%	100%	\$ 2	200,000	\$	200,00
\$13	Statewarks. SE 4th Ave. (Sequoia Pkwy. To Mulino Rd.). Install sidewarks.								-	\$		46.8%	\$	-	\$	-
	OR 99E and Molalla Forest Rd. Trail. Connect multi-use trail to sidewalks on south side of OR 99E.								-	\$ 360,00	0 100%	46.8%	\$ 1	68,480	\$	168,480
T2	Parallel Route to OR 99E (between Elm St. and Molalla Forest Rd. Trail). Construct 12-wide multi-use trail along rail corridor.					\$ 3,435,000	67%	1 00%	\$ 2,301,450		-			-	\$:	2,301,450
	Costs in 2010 dollars	\$ 25,605,000				\$ 4,528,000			\$ 2,751,198							23, 253, 918
	Costs in 2012 dollars	\$ 27,545,000			\$ 19,483,000	\$ 4,871,000			\$ 2,960,000	\$ 6 412 00	1		\$ 2 57	3 000	S 2	25,016,000

 Local Cost Assumptions
 Source

 Streets
 TSP, page 9-5

 Bicycle
 TSP, page 9-5

 Pedestrian
 TSP, page 9-5

² Local TSDC Cost Share, ranges from 67% for projects with non-local funding to 100%. Derived from Canby TSP, Table 9-5.

 $^{\rm 3}$ Growth Required percentage calculation derived from Table 1.



APPENDIX TABLE C-1
NEW AVG. WEEKDAY TRIP-ENDS PER UNIT OF DEVELOPMENT

	Weekday Avg. Vehicle	Est. Person	% New	New Person	
ITE LAND USE CODE/CATEGORY	<u>Trip Ends</u>	<u>Trip Ends</u> ²	<u>Trips</u> ³	<u>Trip-Ends</u>	<u>Unit</u> ⁴
210 Single Family Dwelling	9.6	16.08	100%	16.08	/dwelling unit
220 Multifamily ¹	6.7	11.26	100%	11.26	/dwelling unit
520 Elementary School (Public)	1.3	2.17	100%	2.17	/student
560 Church	9.1	15.30	100%	15.30	/T.S.F.G.F.A.
565 Day Care Center/Preschool	4.5	7.53	100%	7.53	/student
630 Clinic	31.5	52.84	100%	52.84	/T.S.F.G.F.A.
814 Specialty Retail Center	44.3	74.46	44%	32.76	/T.S.F.G.L.A.
820 Shopping Center	42.9	72.14	44%	31.74	/T.S.F.G.L.A.
850 Supermarket	102.2	171.76	64%	109.93	/T.S.F.G.F.A.
853 Convenience Market	738.0	1239.82	39%	483.53	/T.S.F.G.F.A.
880 Pharmacy/Drugstore	90.1	151.30	51%	77.16	/T.S.F.G.F.A.
911 Bank/Savings: Walk-in	156.5	262.89	53%	139.33	/T.S.F.G.F.A.
931 Quality Restaurant	90.0	151.12	57%	86.14	/T.S.F.G.F.A.
934 Fast Food Restaurant	496.1	833.48	43%	358.40	/T.S.F.G.F.A.
942 Automobile Care Center ⁵	40.1	67.37	44%	29.64	/T.S.F.G.L.A.
944 Gasoline/Service Station	168.6	283.18	43%	121.77	/V.F.P.
710 General Office Building	11.0	18.50	100%	18.50	/T.S.F.G.F.A.
720 Medical-Dental Office Building	36.1	60.70	100%	60.70	/T.S.F.G.F.A.
110 General Light Industrial	7.0	11.71	100%	11.71	/T.S.F.G.F.A.
120 General Heavy Industrial	1.5	2.52	100%	2.52	/T.S.F.G.F.A.
150 Warehouse	5.0	8.33	100%	8.33	/T.S.F.G.F.A.
151 Mini-Warehouse	2.5	4.20	100%	4.20	/T.S.F.G.F.A.

Notes:

¹ Based on ITE land use code for apartment dwelling.

² Derived from U.S. National Household Transportation Survey. 2009.

³ Reflects percent of trips that are direct vs. "linked": Source: ITE. Trip Generation Handbook. 8th Ed.

⁴Abbreviations used in the "Unit" column:

T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area

V.F.P. = Vehicle Fueling Position

5 Because there is no ITE Weekday Average Trip Rate for this land use category, the trip rate shown is the ITE P.M. peak-hour trip rate multiplied by a factor of ten.



	New	Trip Length	Net	
	Person	Adjustment	Person	
ITE LAND USE CODE/CATEGORY	<u>Trip-Ends</u>	Factor ²	<u>Trip-Ends</u>	<u>Unit³</u>
210 Single Family Dwelling	16.08	1.00	16.08	/dwelling unit
220 Multifamily ¹	11.26	1.00	11.26	/dwelling unit
520 Elementary School (Public)	2.17	0.40	0.87	/student
560 Church	15.30	0.75	11.48	/T.S.F.G.F.A.
565 Day Care Center/Preschool	7.53	0.40	3.01	/student
630 Clinic	52.84	1.06	56.01	/T.S.F.G.F.A.
814 Specialty Retail Center	32.76	0.84	27.52	/T.S.F.G.L.A.
820 Shopping Center	31.74	0.84	26.66	/T.S.F.G.L.A.
850 Supermarket	109.93	0.84	92.34	/T.S.F.G.F.A.
853 Convenience Market	483.53	0.42	203.08	/T.S.F.G.F.A.
880 Pharmacy/Drugstore	77.16	0.84	64.82	/T.S.F.G.F.A.
911 Bank/Savings: Walk-in	139.33	0.84	117.04	/T.S.F.G.F.A.
931 Quality Restaurant	86.14	0.50	43.07	/T.S.F.G.F.A.
934 Fast Food Restaurant	358.40	0.50	179.20	/T.S.F.G.F.A.
942 Automobile Care Center	29.64	0.84	24.90	/T.S.F.G.L.A.
944 Gasoline/Service Station	121.77	0.42	51.14	/V.F.P.
710 General Office Building	18.50	1.00	18.50	/T.S.F.G.F.A.
720 Medical-Dental Office Building	60.70	1.00	60.70	/T.S.F.G.F.A.
110 General Light Industrial	11.71	1.00	11.71	/T.S.F.G.F.A.
120 General Heavy Industrial	2.52	1.00	2.52	/T.S.F.G.F.A.
150 Warehouse	8.33	1.00	8.33	/T.S.F.G.F.A.
151 Mini-Warehouse	4.20	1.00	4.20	/T.S.F.G.F.A.

APPENDIX TABLE C-2 NET ADJUSTED PERSON TRIP-ENDS PER UNIT OF DEVELOPMENT AVG. TRIP LENGTH ADJUSTMENT FACTORS

Notes:

¹ Based on ITE land use code for apartment dwelling.

² Derived from U.S. National Household Transportation Survey, 2009.

³Abbreviations used in the "Unit" column:

T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area



	Net	Motor Veh.	Motor Veh.
	Person	Cost Per	Cost
ITE LAND USE CODE/CATEGORY	<u>Trip-Ends</u>	Person Trip-End ²	<u>Per Unit</u>
210 Single Family Dwelling	16.08	\$117.90	\$1,896
220 Multifamily ¹	11.26	\$117.90	\$1,327
520 Elementary School (Public)	0.87	\$117.90	\$102
560 Church	11.48	\$117.90	\$1,353
565 Day Care Center/Preschool	3.01	\$117.90	\$355
630 Clinic	56.01	\$117.90	\$6,603
814 Specialty Retail Center	27.52	\$117.90	\$3,244
820 Shopping Center	26.66	\$117.90	\$3,143
850 Supermarket	92.34	\$117.90	\$10,887
853 Convenience Market	203.08	\$117.90	\$23,943
880 Pharmacy/Drugstore	64.82	\$117.90	\$7,642
911 Bank/Savings: Walk-in	117.04	\$117.90	\$13,798
931 Quality Restaurant	43.07	\$117.90	\$5,078
934 Fast Food Restaurant	179.20	\$117.90	\$21,127
942 Automobile Care Center	24.90	\$117.90	\$2,936
944 Gasoline/Service Station	51.14	\$117.90	\$6,030
710 General Office Building	18.50	\$117.90	\$2,181
720 Medical-Dental Office Building	60.70	\$117.90	\$7,156
110 General Light Industrial	11.71	\$117.90	\$1,381
120 General Heavy Industrial	2.52	\$117.90	\$297
150 Warehouse	8.33	\$117.90	\$982
151 Mini-Warehouse	4.20	\$117.90	\$495

APPENDIX TABLE C-3 motor vehicle facility cost per unit of development

Notes:

¹ Based on ITE land use code for apartment dwelling.

² Derived from Table 3.

³Abbreviations used in the "Unit" column:

T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area



APPENDIX TABLE C-4
NON-MOTOR VEHICLE FACILITY COST PER UNIT OF DEVELOPMENT

		Net Person	Non-MV Cost Per	Non-MV Cost	
<u>Unit³</u>	ITE LAND USE CODE/CATEGORY				<u>Unit³</u>
/dwelling unit	210 Single Family Dwelling	16.08	\$33.48	\$538	/dwelling unit
/dwelling unit	220 Multifamily ¹	11.26	\$33.48	\$377	/dwelling unit
/student	520 Elementary School (Public)	0.87	\$33.48	\$29	/student
/T.S.F.G.F.A.	560 Church	11.48	\$33.48	\$384	/T.S.F.G.F.A.
/student	565 Day Care Center/Preschool	3.01	\$33.48	\$101	/student
/T.S.F.G.F.A.	630 Clinic	56.01	\$33.48	\$1,875	/T.S.F.G.F.A.
/T.S.F.G.L.A.	814 Specialty Retail Center	27.52	\$33.48	\$921	/T.S.F.G.L.A.
/T.S.F.G.L.A.	820 Shopping Center	26.66	\$33.48	\$893	/T.S.F.G.L.A.
/T.S.F.G.F.A.	850 Supermarket	92.34	\$33.48	\$3,092	/T.S.F.G.F.A.
/T.S.F.G.F.A.	853 Convenience Market	203.08	\$33.48	\$6,800	/T.S.F.G.F.A.
/T.S.F.G.F.A.	880 Pharmacy/Drugstore	64.82	\$33.48	\$2,170	/T.S.F.G.F.A.
/T.S.F.G.F.A.	911 Bank/Savings: Walk-in	117.04	\$33.48	\$3,919	/T.S.F.G.F.A.
/T.S.F.G.F.A.	931 Quality Restaurant	43.07	\$33.48	\$1,442	/T.S.F.G.F.A.
/T.S.F.G.F.A.	934 Fast Food Restaurant	179.20	\$33.48	\$6,000	/T.S.F.G.F.A.
/T.S.F.G.L.A.	942 Automobile Care Center	24.90	\$33.48	\$834	/T.S.F.G.L.A.
/V.F.P.	944 Gasoline/Service Station	51.14	\$33.48	\$1,712	/V.F.P.
/T.S.F.G.F.A.	710 General Office Building	18.50	\$33.48	\$619	/T.S.F.G.F.A.
/T.S.F.G.F.A.	720 Medical-Dental Office Building	60.70	\$33.48	\$2,032	/T.S.F.G.F.A.
/T.S.F.G.F.A.	110 General Light Industrial	11.71	\$33.48	\$392	/T.S.F.G.F.A.
/T.S.F.G.F.A.	120 General Heavy Industrial	2.52	\$33.48	\$84	/T.S.F.G.F.A.
/T.S.F.G.F.A.	150 Warehouse	8.33	\$33.48	\$279	/T.S.F.G.F.A.
/T.S.F.G.F.A.	151 Mini-Warehouse	4.20	\$33	\$141	/T.S.F.G.F.A.

Notes:

¹ Based on ITE land use code for apartment dwelling. ² Derived from Table 3.

³Abbreviations used in the "Unit" column: T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area



APPENDIX TABLE C-5
COMPLIANCE COST PER UNIT OF DEVELOPMENT

	Net	Compliance	Compliance)
	Person	Cost Per	Cost	
ITE LAND USE CODE/CATEGORY	<u>Trip-Ends</u>	<u>Person Trip-End²</u>	Per Unit	<u>Unit³</u>
210 Single Family Dwelling	16.08	\$3.78	\$61	/dwelling unit
220 Multifamily ¹	11.26	\$3.78	\$43	/dwelling unit
520 Elementary School (Public)	0.87	\$3.78	\$3	/student
560 Church	11.48	\$3.78	\$43	/T.S.F.G.F.A.
565 Day Care Center/Preschool	3.01	\$3.78	\$11	/student
630 Clinic	56.01	\$3.78	\$212	/T.S.F.G.F.A.
814 Specialty Retail Center	27.52	\$3.78	\$104	/T.S.F.G.L.A.
820 Shopping Center	26.66	\$3.78	\$101	/T.S.F.G.L.A.
850 Supermarket	92.34	\$3.78	\$349	/T.S.F.G.F.A.
853 Convenience Market	203.08	\$3.78	\$768	/T.S.F.G.F.A.
880 Pharmacy/Drugstore	64.82	\$3.78	\$245	/T.S.F.G.F.A.
911 Bank/Savings: Walk-in	117.04	\$3.78	\$443	/T.S.F.G.F.A.
931 Quality Restaurant	43.07	\$3.78	\$163	/T.S.F.G.F.A.
934 Fast Food Restaurant	179.20	\$3.78	\$678	/T.S.F.G.F.A.
942 Automobile Care Center	24.90	\$3.78	\$94	/T.S.F.G.L.A.
944 Gasoline/Service Station	51.14	\$3.78	\$193	/V.F.P.
710 General Office Building	18.50	\$3.78	\$70	/T.S.F.G.F.A.
720 Medical-Dental Office Building	60.70	\$3.78	\$230	/T.S.F.G.F.A.
110 General Light Industrial	11.71	\$3.78	\$44	/T.S.F.G.F.A.
120 General Heavy Industrial	2.52	\$3.78	\$10	/T.S.F.G.F.A.
150 Warehouse	8.33	\$3.78	\$32	/T.S.F.G.F.A.
151 Mini-Warehouse	4.20	\$3.78	\$16	/T.S.F.G.F.A.

Notes:

¹ Based on ITE land use code for apartment dwelling. ² Derived from Table 3.

³Abbreviations used in the "Unit" column: T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area



APPENDIX TABLE C-6 REIMBURSEMENT COST PER UNIT OF DEVELOPMENT

	Net Person	Reimbursement Cost Per	Compliance Cost	
ITE LAND USE CODE/CATEGORY	<u>Trip-Ends</u>	Person Trip-End ²	<u>Per Unit</u>	<u>Unit³</u>
210 Single Family Dwelling	16.08	\$28.63	\$460	/dwelling unit
220 Multifamily ¹	11.26	\$28.63	\$322	/dwelling unit
520 Elementary School (Public)	0.87	\$28.63	\$25	/student
560 Church	11.48	\$28.63	\$329	/T.S.F.G.F.A.
565 Day Care Center/Preschool	3.01	\$28.63	\$86	/student
630 Clinic	56.01	\$28.63	\$1,604	/T.S.F.G.F.A.
814 Specialty Retail Center	27.52	\$28.63	\$788	/T.S.F.G.L.A.
820 Shopping Center	26.66	\$28.63	\$763	/T.S.F.G.L.A.
850 Supermarket	92.34	\$28.63	\$2,644	/T.S.F.G.F.A.
853 Convenience Market	203.08	\$28.63	\$5,815	/T.S.F.G.F.A.
880 Pharmacy/Drugstore	64.82	\$28.63	\$1,856	/T.S.F.G.F.A.
911 Bank/Savings: Walk-in	117.04	\$28.63	\$3,351	/T.S.F.G.F.A.
931 Quality Restaurant	43.07	\$28.63	\$1,233	/T.S.F.G.F.A.
934 Fast Food Restaurant	179.20	\$28.63	\$5,131	/T.S.F.G.F.A.
942 Automobile Care Center	24.90	\$28.63	\$713	/T.S.F.G.L.A.
944 Gasoline/Service Station	51.14	\$28.63	\$1,464	/V.F.P.
710 General Office Building	18.50	\$28.63	\$530	/T.S.F.G.F.A.
720 Medical-Dental Office Building	60.70	\$28.63	\$1,738	/T.S.F.G.F.A.
110 General Light Industrial	11.71	\$28.63	\$335	/T.S.F.G.F.A.
120 General Heavy Industrial	2.52	\$28.63	\$72	/T.S.F.G.F.A.
150 Warehouse	8.33	\$28.63	\$239	/T.S.F.G.F.A.
151 Mini-Warehouse	4.20	\$28.63	\$120	/T.S.F.G.F.A.

Notes:

¹ Based on ITE land use code for apartment dwelling.

² Derived from Appendix B.

³Abbreviations used in the "Unit" column:

T.S.F.G.F.A. = Thousand Square Feet Gross Floor Area

T.S.F.G.L.A. = Thousand Square Feet Gross Leasable Area



