#### **RESOLUTION NO. 18-05**

# A RESOLUTION REPEALING A PORTION OF RESOLUTION NO. 09-02 AND ADOPTING AMOUNTS FOR THE CITY'S TRANSPORTATION SYSTEM DEVELOPMENT CHARGE AND ESTABLISHING EFFECTIVE DATES

**WHEREAS**, state law (ORS 223) authorizes the City to charge new development for full new growth impact costs to infrastructure; and

WHEREAS, City Code, Chapter 13.20 (System Development Charge (SDC) for Capital Improvements), implements the statutory authority to impose SDCs on new development and specifically authorizes the City Commission to adopt and modify the amount of the charges and the methodology upon which such charges are based; and

**WHEREAS,** the City's Transportation SDC (TSDC) was last amended in 2009 through Resolution No. 09-02; and

**WHEREAS**, the project costs necessary to mitigate the impacts of new development on the Oregon City transportation system exceed the funding potential derived from the previous TSDC calculation; and

WHEREAS, the City recently updated the Transportation Plan Capital Improvement Plan, also known as the Transportation System Development Charge (TSDC) Project List, which includes vehicle and bicycle/pedestrian project lists that were used in calculating the updated TSDC; and

**WHEREAS,** the City has updated the TSDC Methodology and calculated a new amount in accordance with Oregon Revised Statutes 223.297-223.314 and Oregon City Municipal Code 13.20; and

**WHEREAS,** the results of the updated TSDC Methodology and calculated amount are documented in the attached February 9, 2018 Memorandum prepared by FCS Group, Exhibit 1, adopted and incorporated herein.

#### NOW, THEREFORE, OREGON CITY RESOLVES AS FOLLOWS:

#### Section 1 – Action

- A. Section 2 of Resolution 09-02, adopted April 1, 2009, and setting forth the specific TSDC charges to be assessed, is hereby repealed.
- B. A new charge per PM Peak Hour Vehicle Trip and charge per Bike/Pedestrian Trip is hereby adopted as set forth below, based on the TSDC Project List, trip projections, calculations, and conclusions presented in the February 9, 2018 FCS Group Memorandum (Exhibit 1), as well as on the March, 2009, Report prepared by FCS Group (Exhibit 1 to Resolution No. 09-02).

Resolution No. 18-05 Effective Date: July 1, 2018

Page 1 of 2

### Section 2 - TSDC Details

A. The new TSDC has three charge components and is hereby adopted and made applicable to all new development within the city limits of Oregon City.

Component 1: Vehicle Charge = \$8,314 per PM Peak Hour Vehicle Trip

For those uses allowed outright in the Mixed Use Downtown and Willamette Falls Downtown District Zones pursuant to OCMC 17.34.020 and 17.35.020, as well as those uses along the 7th Street and Molalla Avenue Corridors (Exhibit 2), a ten percent reduction will be used for residential development including live/work units, and the lesser of the Shopping Center trip generation rate or the non-residential development's estimated trip generation rate will be used.

Component 2: General Bicycle/Pedestrian Charge = \$544 per bike/ped trip

This charge applies to all development.

Component 3: Residential Bicycle/Pedestrian Charge = \$1,654 per bike/ped trip

This charge applies to residential uses only, excluding live/work units located in the areas described in Component 1.

- B. Each component for individual developments will be calculated based on peak hour trip generation (Roadway Improvements Project List) and trip generation groups (Bike/Ped Improvements Project List) for the land use and development size. The FCS Group Memorandum, Exhibit 8, includes these trip generation factors for representative land uses.
- C. The City Engineer may use alternative data when, in the City Engineer's opinion, the alternative data are more reliable and realistic for a particular development than are the trip factors set forth in Exhibit 1.

#### Section 3 - Effective Dates and Annual Adjustment

- A. This resolution shall take effect beginning July 1, 2018.
- B. All TSDCs described above shall be annually adjusted on January 1 based on the Seattle Engineering News Record (ENR) Construction Cost Index (CCI).

Approved and adopted at a regular meeting	of the City Commission held on the 21st day
of February 2018.	

DAN HOLLADAY, Mayor

Attested to this 21st day of February 2018:

Approved as to legal sufficiency:

Kattie Riggs, City Recorder

City Attorney

Resolution No. 18-05 Effective Date: July 1, 2018

Page 2 of 2



# Memorandum

**To:** John Lewis and Dayna Webb, City of Oregon City **Date:** February 9, 2018

From: John Ghilarducci and Anthony Martin, FCS GROUP

**RE:** Oregon City Transportation System Development Charge

Oregon Revised Statutes (ORS) 223.297 to 223.314 authorize local governments to establish system development charges (SDCs), one-time fees on new development paid at the time of development. ORS 223.299 specifies that an SDC is made up of the following fees, or either fee separately:

- ♦ A reimbursement fee 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 designed to recover "costs associated with capital improvements to be constructed"

The purpose of this memo is to summarize the updated transportation system development charge (SDC). We calculate a reimbursement fee and reference the improvement fee calculation performed by DKS Associates. ORS also authorizes the expenditure of SDCs for "the costs of complying with the provisions of ORS 223.297 to 223.314...." To avoid spending monies for compliance that might otherwise be spent on growth-related projects, this report includes an estimate of compliance costs in the SDC calculation.

**Exhibit 1** shows the SDC calculation in equation format.

Exhibit 1: SDC Equation											
Eligible costs of available capacity in existing facilities	+	Eligible costs of capacity-increasing capital improvements	_ +	Pro-rata share of costs of complying with	=	SDC per unit of growth in demand					
Units of growth in demand	_	Units of growth in demand		Oregon SDC law		(trips)					

## 1. GROWTH CALCULATION

Growth is the denominator in both the improvement and reimbursement fee calculations, and it is measured in units that most directly reflect the source of demand.

# 1.A Trip Types

Units that most directly reflect the source of demand for transportation, and are most defensible, are some version of the trip-end (hereafter referred to as "trip"). A trip either begins from or ends at a particular site during a specified period of time. The City explored several different trip options, explained below.

♦ P.M. Peak Hour Vehicle Trips for Road Improvements, Bike/Ped Trips for Bike/Ped Improvements: P.M. Peak Hour Vehicle Trips measure the number of vehicle trips during the

evening rush hour, generally 4 p.m. to 6 p.m. Bike/ped trips measure the trips completed by non-vehicular modes. These trip types were used in the existing methodology, with each trip basis serving as the growth for road projects and bike/ped projects, respectively.

- ♦ Average Daily Person Trips: Person trips are defined as the number of people that either begin or end a trip at a site, regardless of transportation mode. This includes average daily vehicle trips (multiplied by the number of people in the vehicle) as well as trips for people who utilize bicycle, pedestrian, and transit facilities. This trip type allows the road and bike/ped projects to be combined and a single SDC calculation since average daily person trips represent demand on all transportation infrastructure.
- ♦ P.M. Peak Hour Person Trips: This methodology includes all trips, bicycle, pedestrian, transit, and vehicle, only during the P.M. peak hour. This trip type also allows all projects to be included in one trip basis and a single SDC calculated.

After consideration of these options, the City elected to maintain its current approach – using PM peak hour vehicle trips as the basis for recovering the cost of vehicular improvements and bike/ped trips as the basis for recovering the cost of bike/ped improvements. This approach has two advantages. First, separating trip counts by mode (vehicle vs. bike/ped) recognizes that different kinds of development have different mode splits. Although data on bike/ped generation is currently scarce, the City's approach creates a mechanism by which that data can be incorporated as it becomes available. Second, a focus on vehicle trips for vehicular improvements leverages the vast database of the Institute of Transportation Engineers.

## 1.B Chosen Trip Methodology

We forecast P.M. peak hour vehicle trip growth, shown in **Exhibit 2**, based on the Oregon City Transportation System Plan. Trips in 2016 were interpolated based on the compound annual growth rate (CAGR).

Exhibit 2: Vehicle	Exhibit 2: Vehicle Trip Growth													
				Growth	Growth		Trip Growth							
				(2010 to	(2016 to		as a % of							
	2010	2016	2035	2035)	2035)	CAGR	Future							
Peak-Hour Trips	33.012	37.226	54.461	21.449	17.235	2.02%	39.38%							

**Source:** Oregon City Transportation System Plan T.M. #6 - Future Traffic Performance on Major Street Network. **Abbreviation:** CAGR = Compound Annual Growth Rate

Bike/ped trips are derived based on trip growth in **Exhibit 2**. P.M. peak hour vehicle trips are converted to average daily vehicle trips using a ratio of one peak hour vehicle trip per ten average daily vehicle trips. Then, average daily vehicle trips are adjusted to include bike/ped trips. Finally, residential bike/ped trips are separated out based on further analysis of trip types by DKS. **Exhibit 3** shows the conversion from P.M. peak hour trips to bike/ped trips and the residential portion of bike/ped trips.

<sup>&</sup>lt;sup>2</sup> Census travel data for the Portland Metro area indicate that walking, bike, and transit trips generally account for 12% of all trips. Based on the 2009 transportation SDC methodology.



<sup>&</sup>lt;sup>1</sup> This ratio is determined by the rounded ratio of peak hour vehicle trips to average daily vehicle trips for a single family detached home.

Exhibit 3: Bike / Ped Trips within UGB	
	2010-2035 Growth
Peak-Hour Vehicle Trip Growth	21,449
Average Daily Vehicle Trip Growth (Estimate) <sup>1</sup>	214,490
Bike/Ped % of Total Trips <sup>2</sup>	12.0%
Total Daily Trip Growth (Vehicle & Bike/Ped)	243,739
Bike/Ped Daily Trip Growth	29,249
Residential Bike/Ped Daily Trip Growth <sup>3</sup>	16,674

<sup>&</sup>lt;sup>1</sup>Estimate based on ratio of 10 average daily vehicle trips per 1 P.M. peak-hour trip. <sup>2</sup>Census travel data for the Portland Metro area indicate that walking, bike, and transit trips generally account for 12% of all trips. From the 2009 transportation SDC methodology.

# 2. REIMBURSEMENT FEE BASIS

The reimbursement fee cost basis is the cost of capacity in the existing system that is available for future users. Calculation of the reimbursement fee begins with the historical cost of assets that have unused capacity to serve future users. For each asset or project, the portion that is available to serve future users is identified for inclusion in the fee.

In this case, the estimated cost of unused capacity in the City transportation system is determined based on previous investment of SDCs in capacity expanding projects. Eligible reimbursement fee costs reflect the amount of current infrastructure capacity that will accommodate future growth. For this analysis, we assume that any capacity-increasing expenditure is reduced by the growth in trips since the expenditure, as a portion of total trip growth to the end of the planning period. This reflects the assumption, confirmed by staff, that SDCs were expended on capacity-increasing projects. **Exhibit 4** shows the reimbursement fee cost basis calculation (see **Appendix A** for full calculations).

Exhibit 4: Rei	mbursement Fee Cost Ba	asis Calculation	
	Improvement Fee	Percent Unused	Unused
	Expenditures	Capacity	Capacity
FY 1993	\$ 12,444	55.6%	\$ 6,924
FY 1994	5,163	56.5%	2,917
FY 1995	507,849	57.4%	291,615
FY 1996	714,935	58.4%	417,404
FY 1997	136,330	59.4%	80,978
FY 1998	607,438	60.5%	367,325
FY 1999	349,194	61.6%	215,126
FY 2000	2,150,624	62.8%	1,350,785
FY 2001	464,918	64.1%	297,944
FY 2002	1,830,294	65.4%	1,197,786
FY 2003	1,623,524	66.9%	1,085,929
FY 2004	898,980	68.4%	615,158
FY 2005	1,433,872	70.1%	1,004,799
FY 2006	514,297	71.8%	369,474
FY 2007	2,937,689	73.7%	2,166,099
FY 2008	1,011,597	75.8%	766,519
FY 2009	816,519	78.0%	636,659
FY 2010	1,919,051	80.4%	1,541,986
FY 2011	959,333	82.9%	795,606
FY 2012	1,703,698	85.7%	1,460,818
FY 2013	553,328	88.8%	491,438
FY 2014	5,179	92.2%	4,774
FY 2015	473,661	95.9%	454,210
FY 2016	79,189	100.0%	79,189
Total	\$ 21,709,104		\$ 15,701,460



<sup>&</sup>lt;sup>3</sup>DKS Estimate

Exhibit 4: Reimbursement Fee Cost Basis Calculation										
	Improvement Fee	Percent Unused	Unused							
	Expenditures	Capacity	Capacity							

**Source**: FY1991 - FY2000 expenditures based on 2009 Transportation SDC Methodology; FY 2001-FY2016 expenditures based on City staff.

### 3. IMPROVEMENT FEE BASIS

The improvement fee cost basis was calculated based on analysis by DKS Associates and documented the City's Transportation SDC CIP Project List. The sources of projects in this methodology include the Transportation System Plan; South End Concept Plan; Linn Avenue, Leland Road & Meyers Road Corridor Plan; Willamette Fall Legacy Project; and Meyers Road Extension Concept Plan.

The City chose to update two project lists to reflect different modes: a roadway motor vehicle project list and a bike/ped project list. The growth for the roadway project list is measured in P.M. peak hour vehicle trips and growth for the bike/ped project list is measured in bike/ped trips. Further, the City decided to divide the bike/ped project list into projects that provide general benefit to all development areas and projects that primarily benefit residential development areas. Projects are located on local roads that primarily see residential traffic. This was done to reflect the assumption that residential development receives greater benefit from several bike projects than non-residential development.

After deducting the non-City share of costs, improvement fee eligibility is calculated based on the extent to which each project is expected to serve development from 2010 to 2035. All bike/ped projects (except one for which the City shares responsibility with another agency) were eligible based on the growth in trips as a percent of total future trips, 39.4%, in **Exhibit 2**, reflecting the assumption that bike/ped projects will serve existing and future customers proportionally. In the project list, the City differentiated between general bike/ped projects and those which primarily benefit residential projects. A summary of the improvement fee cost basis by project type is shown in **Exhibit 5**.

Exhibit 5: Improvement Fee Cost Basis											
	Total Project	Total SDC-Eligible	Total SDC								
	Cost	Portion	Eligible Cost								
Roadway Projects	\$ 258,730,000	64.0%	\$ 165,685,778								
General Bike/Ped Projects	43,250,000	36.8%	15,912,478								
Residential Bike/Ped Projects	69,975,000	39.4%	27,560,497								
Total	\$ 371,955,000	56.23%	\$ 209,158,753								
Source: Oregon City Transportation	Source: Oregon City Transportation SDC CIP Project List										

## 4. COMPLIANCE COST RECOVERY

The compliance cost recovery is calculated based on staff estimates of the annual cost of administering the SDC. Transportation SDC accounting and study costs equal approximately \$6,030 per year. As shown in **Exhibit 6**, administrative costs as a percent of total annual revenue, assuming level annual revenues, are 0.06 percent.



Exhibit 6: Compliance Cost Recovery Calculation								
		Calculation						
Annual Transportation SDC Administrative Cost	\$	6,030						
Annual Revenues from Roadway Improvements Charge	\$	7,537,371						
Annual Revenues from General Bike/Ped Improvements Charge		672,943						
Annual Revenues from Residential Bike/Ped Improvements Charge		2,044,529						
Estimated Annual Proposed SDC Revenues	\$	10,254,843						
Admin. Cost as a % of Total Ann'l Revenues		0.06%						
Source: City staff.								

## 5. CALCULATED FEE

The calculated SDC is the sum of the reimbursement fee, improvement fee, and compliance cost recovery factor. The reimbursement fee is derived by dividing the cost basis by the growth in vehicle trips from 2016 to 2035, based on the initial year of the analysis. All reimbursement fee eligible expenditures were for roadways and are therefore included in the roadway SDC fee calculation. The improvement fee is derived by first subtracting the SDC fund balance and then dividing the adjusted cost basis by the growth in trips from 2010 to 2035. We deduct the SDC fund balance to avoid double-charging for improvements that will be constructed using available monies. The adjusted improvement fee cost basis is divided by trip growth from 2010 to 2035 because the project improvement fee eligibility was calculated based on growth served from 2010 to 2035. Finally, the administrative cost recovery is added as 0.06 percent of the reimbursement and improvement fees.

Exhibit 7: Transportation SDC	Roadway Improvements G			Ge	neral Bike	Ped Improvem	ents		ntial Bike / Ped provements	
Reimbursement Fee										
Cost of Net Unused Capacity	\$ 15,701,	460 (	1)							
Less: Reimbursement Fee SDC Fund Balance										
Reimbursement Fee Cost Basis	\$ 15,701,	460 (	2)							
Growth to End of Planning Period	17	,235	P.M. Peak-Hour	Vehicle Trips						
Reimbursement Fee	\$ 91	.04	per PMPHVT							
Improvement Fee										
Capacity Expanding Projects	\$ 165,685,	778 (	3)		\$	15,912,478	(6)		\$ 27,560,497	(8)
Less: Improvement Fee SDC Fund Balance	(6,997,	251) (	4)							<u>.</u>
Improvement Fee Cost Basis	\$ 158,688,	527			\$	15,912,478			\$ 27,560,497	•
Citywide Growth to End of Planning Period	21	,449 (	5) P.M. Peak-Hour	Vehicle Trips		29,249	(7) Bike / Ped Ti	ips	16,67	4 (9) Bike / Ped Trips
Improvement Fee	\$ 7,398	3.41	per PMPHVT		\$	544.04	per Bike/Ped	Trip	\$ 1,652.90	per Bike/Ped Trip
Total System Development Charge										
Reimbursement Fee	\$ 91	.04	per PMPHVT		\$	-	per Bike/Ped	Trip	\$ -	per Bike/Ped Trip
Improvement Fee	\$ 7,398	<u> 8.41</u>	per PMPHVT		\$	544.04	per Bike/Ped	Trip	\$ 1,652.90	per Bike/Ped Trip
TSDC Subtotal	\$ 8,309	.45	per PMPHVT		\$	544.04	per Bike/Ped	Trip	\$ 1,652.90	per Bike/Ped Trip
plus: Administrative Cost Recovery 0.06%	\$ 4	.89	per PMPHVT		\$	0.32	per Bike/Ped	Trip	\$ 0.97	per Bike/Ped Trip
Total TSDC	\$ 8,	314	per PMPHVT		\$	544	per Bike/Ped	Trip	\$ 1,654	per Bike/Ped Trip

Sources:

- (1) Exhibit 4 Total unused capacity
- (2) Exhibit 2 Growth (2016 to 2035)
- (3) Exhibit 5 Total SDC eligible cost for roadway projects
- (4) City staff
- (5) Exhibit 2 Growth (2010 to 2035)
- (6) Exhibit 5 Total SDC eligible cost for general bike/ped projects
- (7) Exhibit 3 Bike/ped daily trip growth
- (8) Exhibit 5 Total SDC eligible cost for residential bike/ped projects
- (9) Exhibit 3 Residential bike/ped daily trip growth

The following table, **Exhibit 8**, shows the calculated fees for a variety of land uses. A given land use's impact on the transportation system is based on the Institute of Transportation Engineers (ITE) *Trip Generation Manual*, 9<sup>th</sup> Edition. The previous methodology used the 7<sup>th</sup> Edition of the ITE Manual, which is updated due to available resources.



Exhibit 8	: Transportation SDC by Land Use	portation SDC by Land Use Vehicle Fee Portion							
ITE			P.M. Peak Hour Vehicle	Primary Trip Adjustments as a Percent	Adjusted P.M. Peak Hour Vehicle	Reimbursement	Improvement	Compliance	
Code	Land Use	Unit	Trips <sup>1</sup>	of Total <sup>2</sup>	Trips	Fee	Fee	Fee	Total
110	General Light Industrial	1,000 SFGFA	0.97	100%	0.97	\$884	\$7,176	\$5	\$8,065
130	Industrial Park	1,000 SFGFA	0.85	100%	0.85	\$774	\$6,289	\$4	\$7,067
140	Manufacturing	1,000 SFGFA	0.73	100%	0.73	\$665	\$5,401	\$4	\$6,069
151	Mini-Warehouse	1,000 SFGFA	0.26	100%	0.26	\$237	\$1,924	\$1	\$2,162
160	Data Center	1,000 SFGFA	0.09	100%	0.09	\$82	\$666	\$0	\$748
210	Single-Family Detached Housing	Dwelling unit	1.00	100%	1.00	\$911	\$7,398	\$5	\$8,314
220	Apartment	Dwelling unit	0.62	100%	0.62	\$565	\$4,587	\$3	\$5,155
	Residential					<b>.</b>	<b>.</b>		
230	Condominium/Townhouse	Dwelling unit	0.52	100%	0.52	\$474	\$3,847	\$3	\$4,323
240	Mobile Home Park	ODU	0.59	100%	0.59	\$538	\$4,365	\$3	\$4,905
254	Assisted Living	Bed	0.22	100%	0.22	\$200	\$1,628	\$1	\$1,829
310	Hotel	Room	0.60	100%	0.60	\$547	\$4,439	\$3	\$4,989
320	Motel	Room	0.47	100%	0.47	\$428	\$3,477	\$2	\$3,908
417	Regional Park	Acre	0.20	100%	0.20	\$182	\$1,480	\$1	\$1,663
430	Golf Course	Acre	0.30	100%	0.30	\$273	\$2,220	\$1	\$2,494
492	Health/Fitness Club	1,000 SFGFA	3.53	100%	3.53	\$3,216	\$26,116	\$17	\$29,350
495	Recreational Community Center	1,000 SFGFA	2.74	100%	2.74	\$2,496	\$20,272	\$13	\$22,781
520	Elementary School	Student	0.15	59%	0.09	\$81	\$655	\$0	\$736
522	Middle School/Junior High School	Student	0.16	59%	0.09	\$86	\$698	\$0	\$785
530	High School	Student	0.13	59%	0.08	\$70	\$567	\$0	\$638
540	Junior/Community College	Student	0.12	100%	0.12	\$109	\$888	\$1	\$998
560	Church	1,000 SFGFA	0.55	100%	0.55	\$501	\$4,069	\$3	\$4,573
565	Day Care Center	1,000 SFGFA	12.34	33%	4.07	\$3,710	\$30,128	\$20	\$33,858
590	Library	1,000 SFGFA	7.30	100%	7.30	\$6,651	\$54,008	\$36	\$60,695
610	Hospital	1,000 SFGFA	0.93	100%	0.93	\$847	\$6,881	\$5	\$7,732
620	Nursing Home	1,000 SFGFA	0.74	100%	0.74	\$674	\$5,475	\$4	\$6,153
710	General Office Building	1,000 SFGFA	1.49	100%	1.49	\$1,357	\$11,024	\$7	\$12,388
720	Medical-Dental Office Building	1,000 SFGFA	3.57	100%	3.57	\$3,252	\$26,412	\$17	\$29,682
731	State Motor Vehicles Department	1,000 SFGFA	17.09	100%	17.09	\$15,570	\$126,439	\$84	\$142,092
732	United States Post Office	1,000 SFGFA	11.22	100%	11.22	\$10,222	\$83,010	\$55	\$93,287
750	Office Park	1,000 SFGFA	1.48	100%	1.48	\$1,348	\$10,950	\$7	\$12,305
760	Research and Development Center	1,000 SFGFA	1.07	100%	1.07	\$975	\$7,916	\$5	\$8,896
770	Business Park	1,000 SFGFA	1.26	100%	1.26	\$1,148	\$9,322	\$6	\$10,476
812	Building Materials and Lumber Store	1,000 SFGFA	4.49	100%	4.49	\$4,091	\$33,219	\$22	\$37,331
813	Free-Standing Discount Superstore	1,000 SFGFA	4.35	72%	3.13	\$2,853	\$23,172	\$15	\$26,041
814	Variety Store	1,000 SFGFA	6.82	48%	3.26	\$2,967	\$24,093	\$16	\$27,076
815	Free-Standing Discount Store	1,000 SFGFA	4.98	48%	2.38	\$2,166	\$17,593	\$12	\$19,771
816	Hardware/Paint Store	1,000 SFGFA	4.84	45%	2.15	\$1,962	\$15,935	\$11	\$17,907

7525 166<sup>th</sup> Ave. NE., Suite D-215 Redmond, Washington 98052

Exhibit 8	3: Transportation SDC by Land Use					Vehicle Fee Portior	1		
			P.M. Peak	Primary Trip	Adjusted				
			Hour	Adjustments	P.M. Peak				
ITE			Vehicle	as a Percent	Hour Vehicle	Reimbursement	Improvement	Compliance	
Code	Land Use	Unit	Trips <sup>1</sup>	of Total <sup>2</sup>	Trips	Fee	Fee	Fee	Total
817	Nursery (Garden Center)	1,000 SFGFA	6.94	100%	6.94	\$6,323	\$51,345	\$34	\$57,702
820	Shopping Center	1,000 SFGLA	3.71	50%	1.86	\$1,695	\$13,762	\$9	\$15,466
826	Specialty Retail Center	1,000 SFGLA	2.71	100%	2.71	\$2,469	\$20,050	\$13	\$22,532
841	Automobile Sales	1,000 SFGFA	2.62	100%	2.62	\$2,387	\$19,384	\$13	\$21,784
843	Automobile Parts Sales	1,000 SFGFA	5.98	44%	2.63	\$2,397	\$19,467	\$13	\$21,877
848	Tire Store	1,000 SFGFA	4.15	69%	2.85	\$2,596	\$21,083	\$14	\$23,693
850	Supermarket	1,000 SFGFA	9.48	39%	3.67	\$3,347	\$27,178	\$18	\$30,543
	Convenience Market (Open 24								
851	Hours)	1,000 SFGFA	52.41	33%	17.05	\$15,531	\$126,121	\$83	\$141,735
857	Discount Club	1,000 SFGFA	4.18	100%	4.18	\$3,808	\$30,925	\$20	\$34,754
862	Home Improvement Superstore	1,000 SFGFA	2.33	44%	1.03	\$934	\$7,585	\$5	\$8,524
	Pharmacy/Drugstore without Drive-								
880	Through	1,000 SFGFA	8.40	42%	3.56	\$3,240	\$26,309	\$17	\$29,566
	Pharmacy/Drugstore with Drive-								
881	Through	1,000 SFGFA	9.91	38%	3.77	\$3,431	\$27,861	\$18	\$31,310
890	Furniture Store	1,000 SFGFA	0.45	37%	0.17	\$150	\$1,221	\$1	\$1,372
912	Drive-in Bank	1,000 SFGFA	24.30	27%	6.64	\$6,051	\$49,140	\$32	\$55,224
931	Quality Restaurant	1,000 SFGFA	7.49	43%	3.18	\$2,900	\$23,551	\$16	\$26,467
932	High-Turnover (Sit-Down) Restaurant	1,000 SFGFA	9.85	40%	3.92	\$3,567	\$28,968	\$19	\$32,554
	Fast-Food Restaurant with Drive-								
934	Through	1,000 SFGFA	32.65	41%	13.37	\$12,179	\$98,905	\$65	\$111,149
	Coffee/Donut Shop with Drive-								
937	Through	1,000 SFGFA	42.80	41%	17.52	\$15,965	\$129,651	\$86	\$145,702
938	Coffee/Donut Kiosk	1,000 SFGFA	75.00	17%	12.75	\$11,616	\$94,330	\$62	\$106,008
944	Gasoline/Service Station	VFP	13.87	35%	4.85	\$4,423	\$35,916	\$24	\$40,362
	Gasoline/Service Station with								
945	Convenience Market	VFP	13.51	13%	1.73	\$1,573	\$12,772	\$8	\$14,353
	Gasoline/Service Station with Car					<u>.</u>	<b>4</b>	<b>.</b>	
946	Wash	VFP	13.86	24%	3.31	\$3,016	\$24,496	\$16	\$27,529

Exhibit	8: Transportation SDC by Land Use	General Bike/Ped Fee Portion					
ITE					Improvement	Compliance	
Code	Land Use	Unit	Bike/Ped Group	Bike/Ped Trips	Fee	Fee	Total
110	General Light Industrial	1,000 SFGFA	1	0.10	\$54	\$0	\$54
130	Industrial Park	1,000 SFGFA	1	0.10	\$54	\$0	\$54
140	Manufacturing	1,000 SFGFA	2	0.20	\$109	\$0	\$109
151	Mini-Warehouse	1,000 SFGFA	1	0.10	\$54	\$0	\$54
160	Data Center	1,000 SFGFA	1	0.10	\$54	\$0	\$54



Exhibit	8: Transportation SDC by Land Use			General Bike/F	Ped Fee P <u>ortion</u>		
ITE					Improvement	Compliance	
Code	Land Use	Unit	Bike/Ped Group	Bike/Ped Trips	Fee	Fee	Total
210	Single-Family Detached Housing	Dwelling unit	5	1.00	\$544	\$0	\$544
220	Apartment	Dwelling unit	4	0.60	\$326	\$0	\$327
230	Residential Condominium/Townhouse	Dwelling unit	4	0.60	\$326	\$0	\$327
240	Mobile Home Park	ODU	3	0.40	\$218	\$0	\$218
254	Assisted Living	Bed	3	0.40	\$218	\$0	\$218
310	Hotel	Room	3	0.40	\$218	\$0	\$218
320	Motel	Room	2	0.20	\$109	\$0	\$109
417	Regional Park	Acre	6	2.00	\$1,088	\$1	\$1,089
430	Golf Course	Acre	1	0.10	\$54	\$0	\$54
492	Health/Fitness Club	1,000 SFGFA	5	1.00	\$544	\$0	\$544
495	Recreational Community Center	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089
520	Elementary School	Student	3	0.40	\$218	\$0	\$218
522	Middle School/Junior High School	Student	2	0.20	\$109	\$0	\$109
530	High School	Student	1	0.10	\$54	\$0	\$54
540	Junior/Community College	Student	1	0.10	\$54	\$0	\$54
560	Church	1,000 SFGFA	3	0.40	\$218	\$0	\$218
565	Day Care Center	1,000 SFGFA	1	0.10	\$54	\$0	\$54
590	Library	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089
610	Hospital	1,000 SFGFA	1	0.10	\$54	\$0	\$54
620	Nursing Home	1,000 SFGFA	1	0.10	\$54	\$0	\$54
710	General Office Building	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089
720	Medical-Dental Office Building	1,000 SFGFA	1	0.10	\$54	\$0	\$54
731	State Motor Vehicles Department	1,000 SFGFA	4	0.60	\$326	\$0	\$327
732	United States Post Office	1,000 SFGFA	4	0.60	\$326	\$0	\$327
750	Office Park	1,000 SFGFA	4	0.60	\$326	\$0	\$327
760	Research and Development Center	1,000 SFGFA	2	0.20	\$109	\$0	\$109
770	Business Park	1,000 SFGFA	1	0.10	\$54	\$0	\$54
812	Building Materials and Lumber Store	1,000 SFGFA	1	0.10	\$54	\$0	\$54
813	Free-Standing Discount Superstore	1,000 SFGFA	1	0.10	\$54	\$0	\$54
814	Variety Store	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089
815	Free-Standing Discount Store	1,000 SFGFA	1	0.10	\$54	\$0	\$54
816	Hardware/Paint Store	1,000 SFGFA	1	0.10	\$54	\$0	\$54
817	Nursery (Garden Center)	1,000 SFGFA	1	0.10	\$54	\$0	\$54
820	Shopping Center	1,000 SFGLA	2	0.20	\$109	\$0	\$109
826	Specialty Retail Center	1,000 SFGLA	6	2.00	\$1,088	\$1	\$1,089
841	Automobile Sales	1,000 SFGFA	1	0.10	\$54	\$0	\$54
843	Automobile Parts Sales	1,000 SFGFA	1	0.10	\$54	\$0	\$54
848	Tire Store	1,000 SFGFA	1	0.10	\$54	\$0	\$54
850	Supermarket	1,000 SFGFA	1	0.10	\$54	\$0	\$54
851	Convenience Market (Open 24 Hours)	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089



Exhibit	8: Transportation SDC by Land Use		General Bike/Ped Fee Portion											
ITE				Improvement	Compliance									
Code	Land Use	Unit	Bike/Ped Group	Bike/Ped Trips	Fee	Fee	Total							
857	Discount Club	1,000 SFGFA	1	0.10	\$54	\$0	\$54							
862	Home Improvement Superstore	1,000 SFGFA	1	0.10	\$54	\$0	\$54							
880	Pharmacy/Drugstore without Drive-Through	1,000 SFGFA	3	0.40	\$218	\$0	\$218							
881	Pharmacy/Drugstore with Drive-Through	1,000 SFGFA	3	0.40	\$218	\$0	\$218							
890	Furniture Store	1,000 SFGFA	1	0.10	\$54	\$0	\$54							
912	Drive-in Bank	1,000 SFGFA	1	0.10	\$54	\$0	\$54							
931	Quality Restaurant	1,000 SFGFA	1	0.10	\$54	\$0	\$54							
932	High-Turnover (Sit-Down) Restaurant	1,000 SFGFA	3	0.40	\$218	\$0	\$218							
934	Fast-Food Restaurant with Drive-Through	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089							
937	Coffee/Donut Shop with Drive-Through	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089							
938	Coffee/Donut Kiosk	1,000 SFGFA	6	2.00	\$1,088	\$1	\$1,089							
944	Gasoline/Service Station	VFP	1	0.10	\$54	\$0	\$54							
945	Gasoline/Service Station with Convenience Market	VFP	1	0.10	\$54	\$0	\$54							
946	Gasoline/Service Station with Car Wash	VFP	1	0.10	\$54	\$0	\$54							

Exhibit 8:	Transportation SDC by Land Use		Residential Bike/Ped Fee Portion											
ITE					Improvement	Compliance								
Code	Land Use	Unit	Bike/Ped Group	Bike/Ped Trips	Fee	Fee	Total							
210	Single-Family Detached Housing	Dwelling unit	5	1.00	\$1,653	\$1	\$1,654							
220	Apartment	Dwelling unit	4	0.60	\$992	\$1	\$992							
230	Residential Condominium/Townhouse	Dwelling unit	4	0.60	\$992	\$1	\$992							
240	Mobile Home Park	ODU	3	0.40	\$661	\$0	\$662							
254	Assisted Living	Bed	3	0.40	\$661	\$0	\$662							

Exhibit 8: T	ransportation SDC by Land Use		Total									
ITE Code	Land Use	Unit	Reimbursement Fee	Improvement Fee	Compliance Fee	Total						
110	General Light Industrial	1,000 SFGFA	\$884	\$7,231	\$5	\$8,119						
130	Industrial Park	1,000 SFGFA	\$774	\$6,343	\$4	\$7,122						
140	Manufacturing	1,000 SFGFA	\$665	\$5,510	\$4	\$6,178						
151	Mini-Warehouse	1,000 SFGFA	\$237	\$1,978	\$1	\$2,216						
160	Data Center	1,000 SFGFA	\$82	\$720	\$0	\$803						
210	Single-Family Detached Housing	Dwelling unit	\$911	\$9,595	\$6	\$10,513						
220	Apartment	Dwelling unit	\$565	\$5,905	\$4	\$6,474						
230	Residential Condominium/Townhouse	Dwelling unit	\$474	\$5,165	\$3	\$5,642						
240	Mobile Home Park	ODU	\$538	\$5,244	\$3	\$5,785						
254	Assisted Living	Bed	\$200	\$2,506	\$2	\$2,708						
310	Hotel	Room	\$547	\$4,657	\$3	\$5,206						
320	Motel	Room	\$428	\$3,586	\$2	\$4,017						
417	Regional Park	Acre	\$182	\$2,568	\$2	\$2,752						



Exhibit 8: T	ransportation SDC by Land Use			Total		
ITE Code	Land Use	Unit	Reimbursement Fee	Improvement Fee	Compliance Fee	Total
430	Golf Course	Acre	\$273	\$2,274	\$1	\$2,549
492	Health/Fitness Club	1,000 SFGFA	\$3,216	\$26,660	\$18	\$29,894
495	Recreational Community Center	1,000 SFGFA	\$2,496	\$21,360	\$14	\$23,870
520	Elementary School	Student	\$81	\$872	\$1	\$954
522	Middle School/Junior High School	Student	\$86	\$807	\$1	\$894
530	High School	Student	\$70	\$622	\$0	\$692
540	Junior/Community College	Student	\$109	\$942	\$1	\$1,052
560	Church	1,000 SFGFA	\$501	\$4,287	\$3	\$4,791
565	Day Care Center	1,000 SFGFA	\$3,710	\$30,182	\$20	\$33,912
590	Library	1,000 SFGFA	\$6,651	\$55,096	\$36	\$61,783
610	Hospital	1,000 SFGFA	\$847	\$6,935	\$5	\$7,787
620	Nursing Home	1,000 SFGFA	\$674	\$5,529	\$4	\$6,207
710	General Office Building	1,000 SFGFA	\$1,357	\$12,112	\$8	\$13,477
720	Medical-Dental Office Building	1,000 SFGFA	\$3,252	\$26,467	\$17	\$29,737
731	State Motor Vehicles Department	1,000 SFGFA	\$15,570	\$126,765	\$84	\$142,419
732	United States Post Office	1,000 SFGFA	\$10,222	\$83,337	\$55	\$93,614
750	Office Park	1,000 SFGFA	\$1,348	\$11,276	\$7	\$12,632
760	Research and Development Center	1,000 SFGFA	\$975	\$8,025	\$5	\$9,005
770	Business Park	1,000 SFGFA	\$1,148	\$9,376	\$6	\$10,531
812	Building Materials and Lumber Store	1,000 SFGFA	\$4,091	\$33,273	\$22	\$37,386
813	Free-Standing Discount Superstore	1,000 SFGFA	\$2,853	\$23,226	\$15	\$26,095
814	Variety Store	1,000 SFGFA	\$2,967	\$25,181	\$17	\$28,165
815	Free-Standing Discount Store	1,000 SFGFA	\$2,166	\$17,647	\$12	\$19,826
816	Hardware/Paint Store	1,000 SFGFA	\$1,962	\$15,989	\$11	\$17,962
817	Nursery (Garden Center)	1,000 SFGFA	\$6,323	\$51,399	\$34	\$57,756
820	Shopping Center	1,000 SFGLA	\$1,695	\$13,871	\$9	\$15,575
826	Specialty Retail Center	1,000 SFGLA	\$2,469	\$21,138	\$14	\$23,621
841	Automobile Sales	1,000 SFGFA	\$2,387	\$19,438	\$13	\$21,838
843	Automobile Parts Sales	1,000 SFGFA	\$2,397	\$19,521	\$13	\$21,931
848	Tire Store	1,000 SFGFA	\$2,596	\$21,137	\$14	\$23,748
850	Supermarket	1,000 SFGFA	\$3,347	\$27,232	\$18	\$30,597
851	Convenience Market (Open 24 Hours)	1,000 SFGFA	\$15,531	\$127,209	\$84	\$142,824
857	Discount Club	1,000 SFGFA	\$3,808	\$30,980	\$20	\$34,808
862	Home Improvement Superstore	1,000 SFGFA	\$934	\$7,639	\$5	\$8,578
880	Pharmacy/Drugstore without Drive-Through	1,000 SFGFA	\$3,240	\$26,526	\$18	\$29,784
881	Pharmacy/Drugstore with Drive-Through	1,000 SFGFA	\$3,431	\$28,079	\$19	\$31,528
890	Furniture Store	1,000 SFGFA	\$150	\$1,275	\$1	\$1,426
912	Drive-in Bank	1,000 SFGFA	\$6,051	\$49,195	\$32	\$55,278
931	Quality Restaurant	1,000 SFGFA	\$2,900	\$23,605	\$16	\$26,521
932	High-Turnover (Sit-Down) Restaurant	1,000 SFGFA	\$3,567	\$29,185	\$19	\$32,772
934	Fast-Food Restaurant with Drive-Through	1,000 SFGFA	\$12,179	\$99,993	\$66	\$112,238



Exhibit 8: Ti	ransportation SDC by Land Use		Total										
ITE Code	Land Use	Unit	Reimbursement Fee	Improvement Fee	Compliance Fee	Total							
937	Coffee/Donut Shop with Drive-Through	1,000 SFGFA	\$15,965	\$130,739	\$86	\$146,791							
938	Coffee/Donut Kiosk	1,000 SFGFA	\$11,616	\$95,418	\$63	\$107,097							
944	Gasoline/Service Station	VFP	\$4,423	\$35,970	\$24	\$40,416							
945	Gasoline/Service Station with Convenience Market	VFP	\$1,573	\$12,826	\$8	\$14,407							
946	Gasoline/Service Station with Car Wash	VFP	\$3,016	\$24,551	\$16	\$27,583							

**Source:** ITE Trip Generation Manual, 9th Edition, and Oregon City.

### <u>Abbreviations</u>

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



<sup>&</sup>lt;sup>1</sup> P.M. Peak Hour Vehicle Trips are peak hour of adjacent street traffic, one hour between 4 p.m. and 6 p.m.

<sup>&</sup>lt;sup>2</sup> Adjustment factor deducts pass-by and diverted/linked trips between land use types.

# APPENDIX A - REIMBURSEMENT FEE CALCULATION

Unused Capacity of As	sets	Funded b	y TSI	DC Expend	litures	S				•			•		•								
Construction Year		FY 1993		FY 1994		FY 1995	F	Y 1996	FY 1997	FY 1998	FY 1999	FY 1999 FY 2000		FY 2001		FY 2002			FY 2003	FY 2004		FY 2005	
Improvement Fee																							
Expenditures [Note A]	\$	12,444	\$	5,163	\$	507,849	\$ 7	14,935	\$ 136,330	\$ 607,438	\$ 349,194	\$ 2	,150,624	\$	464,918	\$	1,830,294	\$ -	1,623,524	\$ 898,980	\$ 1	,433,872	
Percentage For																							
Capacity Increasing																							
Projects		100%		100%		100%		100%	100%	100%	100%		100%		100%		100%		100%	100%		100%	
Applicable TSDC																							
Expenditures	\$	12,444	\$	5,163	\$	507,849	\$ 7	14,935	\$ 136,330	\$ 607,438	\$ 349,194	\$ 2	,150,624	\$	464,918	\$	1,830,294	\$ 1	1,623,524	\$ 898,980	\$ 1	,433,872	
Beginning Trip Total																							
[Note B]		23,487		23,962		24,447		24,941	25,446	25,961	26,486		27,021		27,568		28, 125		28,694	29,275		29,867	
Current Trip Total (FY																							
2016) [Note B]		37,226		37,226		37,226		37,226	37,226	37,226	37,226		37,226		37,226		37,226		37,226	37,226		37,226	
Ending Trip Total for																							
Study Period (FY																							
2035) [Note B]		54,461		54,461		54,461		54,461	54,461	54,461	54,461		54,461		54,461		54,461		54,461	54,461		54,461	
% of Capacity Used by		,		,		, i			,	ĺ	ĺ		,				,		,			,	
Growth to FY 2016		44.4%		43.5%		42.6%		41.6%	40.6%	39.5%	38.4%		37.2%		35.9%		34.6%		33.1%	31.6%		29.9%	
Cost of Unused																							
Capacity	\$	6,924	\$	2,917	\$	291,615	\$ 4	17,404	\$ 80,978	\$ 367,325	\$ 215,126	\$ 1	,350,785	\$	297,944	\$	1,197,786	\$ ^	1,085,929	\$ 615,158	\$ 1	,004,799	

Note [A]. Source: FY1991 - FY2000 expenditures based on 2009 Transportation SDC Methodology; FY 2001-FY2016 expenditures based on City staff.

Note [B]. Source: Historical peak-hour trips derived from rate of growth implied in trip growth forecast.

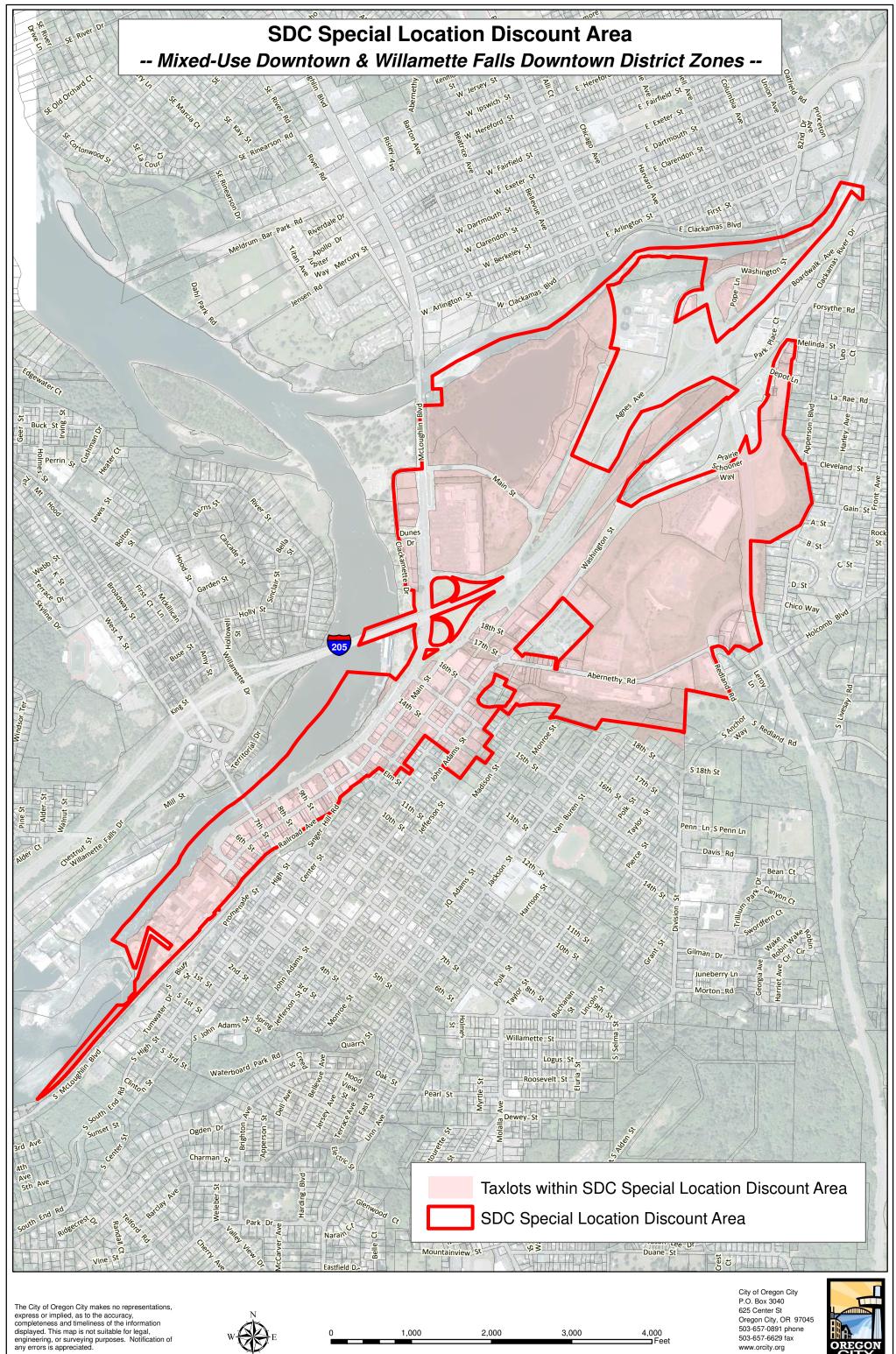
#### Unused Capacity of Assets Funded by TSDC Expenditures

• •	Construction Year FY 2006 FY 2007 FY 2008 FY 2009 FY 2010 FY 2011 FY 2012 FY 2013 FY 2014 FY 2015 FY 2016																			
Construction Year		FY 2006		FY 2007		FY 2008		FY 2009		FY 2010		FY 2011		FY 2012		FY 2013	 FY 2014	 FY 2015	FY 2016	Total
Improvement Fee																				
Expenditures [Note A]	\$	514,297	\$	2,937,689	\$	1,011,597	\$	816,519	\$	1,919,051	\$	959,333	\$	1,703,698	\$	553,328	\$ 5,179	\$ 473,661	\$ 79,189	\$ 21,709,104
Percentage For																				
Capacity Increasing																				
Projects		100%		100%		100%		100%		100%		100%		100%		100%	100%	100%	100%	
Applicable TSDC																				
Expenditures	\$	514,297	\$	2,937,689	\$	1,011,597	\$	816,519	\$	1,919,051	\$	959,333	\$	1,703,698	\$	553,328	\$ 5,179	\$ 473,661	\$ 79,189	\$ 21,709,104
Beginning Trip Total																				
[Note B]		30,471		31,087		31,716		32,358		33,012		33,680		34,361		35,056	35,765	<i>36,488</i>	37,226	
Current Trip Total (FY																				
2016) [Note B]		37,226		37,226		37,226		37,226		37,226		37,226		37,226		37,226	37,226	37,226	37,226	
Ending Trip Total for																				
Study Period (FY																				
2035) [Note B]		54,461		54,461		54,461		54,461		54,461		54,461		54,461		54,461	54,461	54,461	54,461	
% of Capacity Used by				-																
Growth to FY 2016		28.2%		26.3%		24.2%		22.0%		19.6%		17.1%		14.3%		11.2%	7.8%	4.1%	0.0%	
Cost of Unused																				
Capacity	\$	369,474	\$	2,166,099	\$	766,519	\$	636,659	\$	1,541,986	\$	795,606	\$	1,460,818	\$	491,438	\$ 4,774	\$ 454,210	\$ 79,189	\$ 15,701,460

Note [A]. Source: FY1991 - FY2000 expenditures based on 2009 Transportation SDC Methodology; FY 2001-FY2016 expenditures based on City staff.

Note [B]. Source: Historical peak-hour trips derived from rate of growth implied in trip growth forecast.

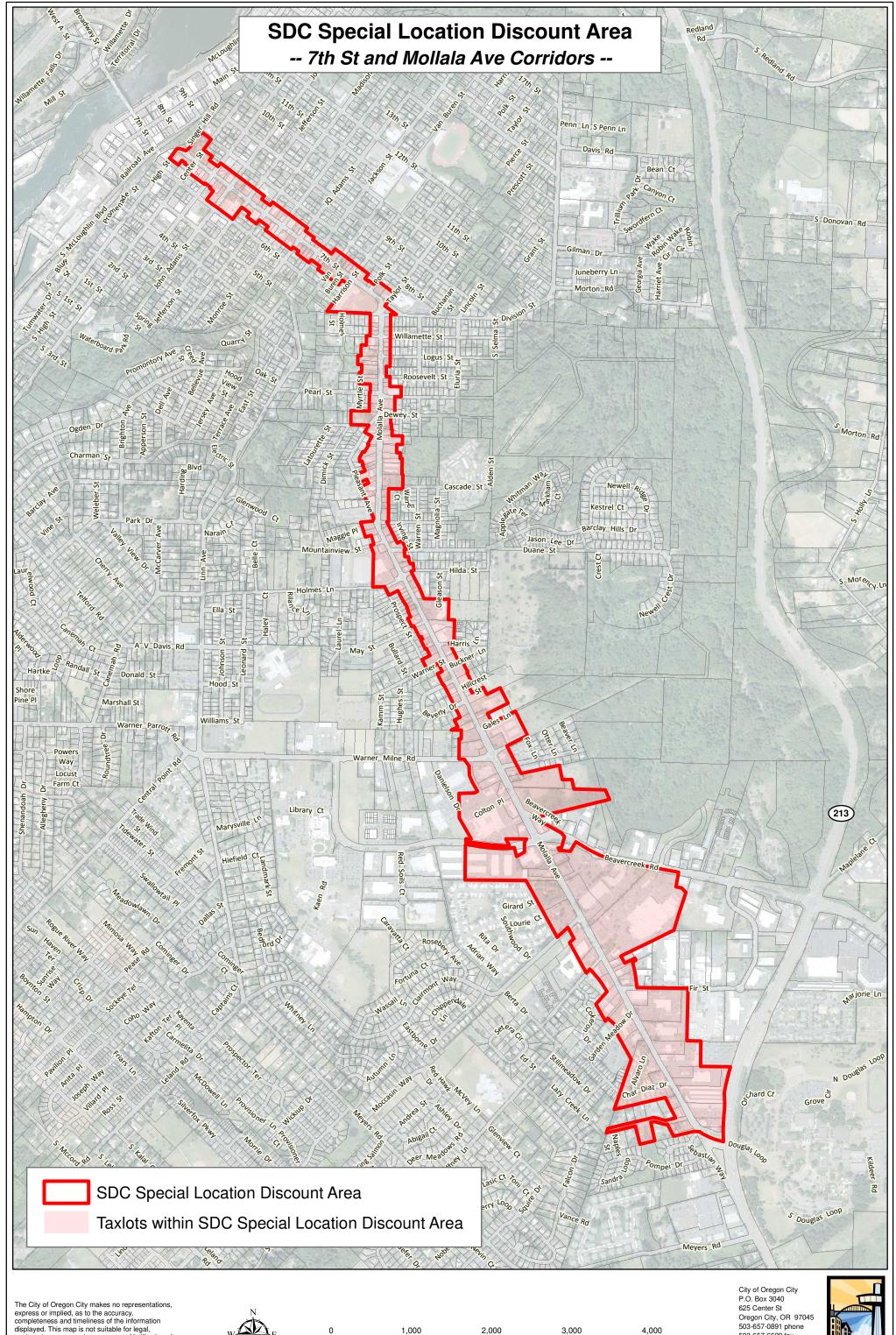




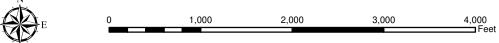
Please recycle with colored office grade paper.

www.orcity.org





displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.



503-657-6629 fax www.orcity.org

