



Technical Memorandum: Transportation SDC Update

Date: July 31, 2024
 To: Deschutes County Board of County Commissioners
 From: Chris Doty, PE, Road Department Director
 RE: Transportation SDC Update: 2020-2040 Capital Improvement Plan

On March 6, 2024 the Deschutes County Board of County Commissioners approved the 2020-2040 Transportation System Plan – the County’s planning and policy document for a 20-year investment period. Included in the TSP is an updated Capital Improvement Plan (CIP) containing a 20-year list of capital projects within the following categories:

1. Intersection Improvements
2. Roadway Improvements
3. ODOT/County Intersections
4. Pedestrian Facilities
5. Bridges
6. Federal Land Access Program (FLAP) Projects

Central to the CIP (Attached, Exhibit B) is the funding chapter within the TSP which identifies and estimates funding source contribution – which included a Transportation System Development Charge (SDC) as a funding mechanism. The purpose of this Technical Memorandum is to provide an updated calculation of Deschutes County’s Transportation SDC based on the methodology established in Resolution 2013-020 (updated from Resolution 2008-059).

Existing SDC Methodology:

The existing SDC methodology was updated via Resolution 2013-020 in 2013 to include an Improvement Fee and a Reimbursement Fee, with methodologies for each described as follows:

1. Improvement Fee:

$$= \frac{\text{Eligible cost of planned capacity increasing capital improvements (\$)}}{\text{Growth in system capacity demand (in peak hour trips)}}$$

The Improvement Fee portion is designed to capture costs associated with growth’s share of **future projects**.

2. Reimbursement Fee:

$$= \frac{\text{Cost of assets funded by previously paid SDC improvement fees (\$)}}{\text{Growth in system capacity demand (in peak hour trips)}}$$

The Reimbursement Fee portion is designed to recover costs of **capital improvements already constructed**, but used

by future growth.

Growth Estimate:

The SDC will apply to growth within the unincorporated area of Deschutes County, which excludes growth within the incorporated city limits of Bend, Redmond, Sisters, and La Pine. Growth within the unincorporated area is primarily residential in nature and reflects development of existing undeveloped lots, limited partition/subdivision development, resort development infill, and accessory dwelling unit potential, with relatively small percentages of non-residential or commercial development in limited areas. It is anticipated that growth within the unincorporated area over the next 20 years will be similar in nature to growth observed over the prior 20-year period and will generally represent a smaller percentage of system use. As such, growth's portion of SDC eligible projects will decrease.

Within the prior decade of growth (2014-2023), approximately 2,839 peak hour trips were added to the system within the unincorporated area of Deschutes County. The added trips ranged from a high of 363 in 2021 to a low of 223 in 2014. Given the assumption that growth within the ensuing 20-year planning period will be similar in nature relative to the growth observed in the prior 10-year period, it is estimated that **5,680 peak hour trips will be added to the system** from growth within the unincorporated area. This estimate represents the growth in system capacity demand and the denominator in the Improvement Fee and Reimbursement Fee SDC equations.

Eligible Cost of Planned Capacity Increasing Capital Improvements

Estimating growth's cost of capital improvements requires both an estimate of which capital projects add capacity to the system as well as the assignment of growth's portion of each project.

The following project categories are considered capacity increasing projects:

Table 1: Capacity Increasing Project Classification

<i>Project Category</i>	<i>Capacity Adding?</i>	<i>Notes:</i>
Intersection Improvements	Yes	Intersection improvements add capacity to intersection operations.
Roadway Improvements	Yes	Road widening and modernization add corridor capacity and the ability to serve additional traffic volume.
ODOT/County Intersections	Yes	Intersection improvements add capacity to intersection operations.
Pedestrian Facilities	No	Identified projects add negligible system capacity and are not SDC eligible.
Bridges	No	Identified bridge projects replace existing bridges and do not add system capacity.
Federal Land Access Program (FLAP) Projects	No	Projects are funded primarily via the Federal FLAP program and primarily serve recreational corridors.

In assigning growth's portion of the capacity adding projects, the existing background traffic (2023) has been estimated at 31,593 peak hour trips generated by existing development within the unincorporated area (28,754 trips estimated in 2013 modelling with the addition of 2,839 trips added via development in the preceding decade).

Therefore it is estimated that new growth in the unincorporated area accounts for 15.2% of the added peak hour trips to the transportation system as follows:

$$\frac{5,680 \text{ new peak hour trips}}{37,273 \text{ total peak hour trips (31,593 baseline + 5,680 new)}} = 15.2\%$$

Application of the growth calculation to the cost of the eligible projects will produce a total cost of the capital project list attributable to growth as shown in Table 2. This represents the numerator in the Improvement Fee portion equation.

Table 2: Eligible Cost of Planned Capacity Increasing Capital Improvements

<i>Project Category</i>	<i>% Attributable to Growth</i>	<i>Total Cost of Projects in Category</i>	<i>Total Cost Attributable to Growth</i>
Intersection Improvements	15.2%	\$28,500,000	\$4,332,000
Roadway Improvements	15.2%	\$88,600,000	\$13,467,200
ODOT/County Intersections	15.2%	\$41,100,000	\$6,247,200
Pedestrian Facilities	0%	\$6,300,000	\$0
Bridges	0%	\$16,000,000	\$0
Federal Land Access Program (FLAP) Projects	0%	\$8,800,000	\$0
Total		\$189,300,000	\$24,046,400

Improvement Fee Calculation:

The Improvement Fee portion is designed to capture costs associated with growth’s share of **future projects**. Per the County’s SDC methodology established in Resolution 2013-020, the Improvement Fee is calculated as follows:

$$\frac{\$24,046,400}{5,680 \text{ peak hour trips}} = \$4,234 \text{ per peak hour trip}$$

Reimbursement Fee Calculation:

The Reimbursement Fee portion is designed to recover costs of **capital improvements already constructed**, but used by future growth. Per the County’s SDC methodology updated via Resolution 2013-020 (originally established in Resolution 2008-059), the basis upon which to establish the Reimbursement Fee portion is a reimbursement of the non-tax resource funded investment, which amounts to the cost of assets funded by previously paid SDC improvement fees.

Improvement fees expended by Deschutes County from FY 2014 to 2023 total \$7,879,085 (excluding improvement fees expended during that period on projects within proposed CIP, Exhibit B). This portion of recoverable funding represents the numerator in the Reimbursement Fee portion equation, as follows:

$$\frac{\$7,879,085}{5,680 \text{ peak hour trips}} = \$1,387 \text{ per peak hour trip}$$

Administrative Recovery Charge:

Resolution 2013-020 also established an Administration Recovery Charge amounting to an inflation adjusted \$70 per peak hour trip. The Administration Recovery Charge accounts for staff time and expense associated with application and collection of the SDC and is shared revenue between the Road Department and Community Development Department.

Proposed Transportation System Development Charge

The proposed Transportation SDC, inclusive of the Improvement Fee portion (\$4,234 per peak hour trip), Reimbursement Fee portion (\$1,387 per peak hour trip), and Administrative Fee (\$70 per peak hour trip), amounts to \$5,691 per peak hour trip. Table 3 compares and contrasts the existing (FY 2025 fee schedule) and proposed SDC rate and corresponding single family dwelling SDC.

Table 3: Existing and Proposed SDC Comparison

<i>Transportation SDC</i>		<i>Notes:</i>
Existing Transportation SDC (FY 25 rate)	\$5,670	Per PM peak hour trip
Proposed Transportation SDC	\$5,691	Per PM peak hour trip
\$ Increase	\$22	
% Increase	0.4%	
Existing Single Family Dwelling Unit	4,593	0.81 trip/peak hour for SFDU in Deschutes County
Proposed Single Family Dwelling Unit	4,610	0.81 trip/peak hour for SFDU in Deschutes County
\$ Increase	\$17	
% Increase	0.4%	

By resolution, Transportation SDCs are assessed based upon the estimated number of PM peak hour trips of a proposed development calculated via use of the Institute of Transportation Engineers (ITE), Trip Generation Manual. Specific to residential development, Deschutes County has adopted a specialty trip generation rate in consideration of the number of resort and second homes in the county. The specialty rate of 0.81 trips per single family dwelling unit considers a blend of the ITE rates for single family dwellings and recreational housing. No changes are proposed to this specialty trip generation rate.

Implementation of SDC Update

SDCs are authorized by ORS 223.297-223.316 and implemented in via ordinance (DCC Section 15.12) and resolution. Statutorily prescribed process requirements include Board adoption by public hearing to be preceded by a 90-day notification to individuals who have previously made a written request for notification prior to adoption or amendment of a methodology for any system development charge.

A public hearing has been scheduled for October 16th at 9:00 AM before the Board of County Commissioners at the Deschutes County Services Building, 1300 NW Wall Street (Barnes/Sawyer Room), Bend, OR.