

CITY OF ASHLAND

SDC Advisory Committee

MEETING #1 AGENDA

Tuesday, June 12, 2018

3:00–5:00 p.m.

*Community Development and Engineering Building,
51 Winburn Way
(Siskiyou Room)*

1. Project Background and Objectives
2. Transportation SDC Fundamentals
3. SDC Assessment Options
4. Next Steps
5. Additional Meetings: Tuesday June 26th, Thursday, July 19th

Attachment: Background Information Paper



Ashland System Development Charge Review Committee
MINUTES
June 12, 2018

CALL TO ORDER

Brown meeting began at 3:00 PM

Members Present: Troy Brown Jr., Dan Jovick, Jac Nickels, Russ Silbiger

Staff Present: Paula Brown, Scott Fleury, Brandon Goldman, Mark Welch and Tara Kiewel

Consultant Present: Deb Galardi, Galardi Rothstein Group

Council Liaison Present: Rich Rosenthal

Introductions – Roundtable introductions of members and staff.

Project Background and Objectives – Brown gave the background on Transportation System Development Charges (TSDCs). New fees were implemented on July 1, 2017. After receiving several commercial permits and implementing the fees Brown felt they should be reviewed. She asked Council to repeal the new fees, and re-establish the previous TSDCs. Brown would like the Committee to review and to ensure we are correctly assessing commercial activities and are following appropriate procedures. The goal is to have a defensible and appropriate TSDCs.

Transportation SDC Fundamentals- Deb Galardi, Galardi Rothstein Group - see attached presentation. The Committee is being asked to evaluate how fees are calculated and to consider the cost of future growth needs. The Committee will be discussing State law requirements, industry standards, and data sources.

SDC Assessment Options – Galardi explained all assessments are trying to determine an equitable distribution of costs. There are three types of trip adjustments; trip rates, trip rate adjustments, and trip length factors. Trip rates measure traffic impacts and are assessed to different kinds of development. The current TSDCs uses average daily trip rates. P.M. peak hour trips rates is another method used for assessment and looks at when system is the most congested to determine capacity needs. There are limited data sources on trip length assessments.

Brown asked if other communities are using trip lengths and Galardi said the trend is going away from using this assessment. Portland and Clackamas County just removed trip length adjustments, and she recommends removing this assessment. Galardi also shared that she isn't aware of any communities not using the pass by adjustment.

Brown doesn't want to have SDCs or streets built for the largest traffic day of the year. If the Committee wants to look at P.M. peak it should be aware that it is a big shift. Brown asked what methodology other municipalities are using and Galardi explained it is evenly split between average daily and P.M. peak. The Committee will see examples of both assessments at the next meeting.

Brown Jr. feels like P.M. peak is geared for larger working communities and average daily trip will work better for a smaller community. He requested more data to review before the next meeting.

Ashland System Development Charge Review Committee
MINUTES
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Silbiger asked for clarification about eligibility of projects and if studies are included. Galardi mentioned that some committees she works with do include studies. Studies that evaluate the system constraints are part of designing and building the system. Brown said this is compliance, and she will try to get a better definition for the Committee.

Jovick understands designing for peak, but feels average daily is a more equitable way to calculate fees.

Fleury mentioned that design accounts for a bigger impact automatically when looking at intersection control outside of peaks times.

Goldman mentioned SDC deferrals that will need to be considered. Brown asked for information that could sent to Galardi.

Next Steps Project- The Committee will receive a project list information highlighting changes to projects and updated costs. Galardi will share new cost per trip with P.M. peak and average daily adjustments for review.

NEXT MEETING DATE: Tuesday June 26, 2018

ADJOURNMENT: Meeting Adjourned 4:30 p.m.

Respectfully submitted,
Tara Kiewel
Public Works Administrative Assistant

City of Ashland Transportation System Development Charge Update

SDC Advisory Committee Meeting #1

Overview

The City of Ashland (the City) is working to update its Transportation System Development Charges (TSDCs). TSDCs are one-time fees paid by a developer at the time a building permit is issued. These fees are used to pay for needed improvements to the transportation system to accommodate growth in all modes of travel (auto, bike and pedestrian) associated with new development.

This update process will result in updates to:

- **TSDC rates** and basis for **how they are assessed** to different types of development.
- Update the **list of projects** that are eligible to be funded using TSDC funds (called the “TSDC Project List”).
- **Municipal code** provisions related to TSDC methodology and administration.

TSDC Assessment

The first set of policy issues to be reviewed and discussed by the SDC Advisory Committee relate to how TSDCs are assessed to different types of development. The TSDC that a developer pays is based on the system-wide cost per trip (to be established by the SDC project list) and the number of trips attributable to a particular development. Both the type and size of the development are predictors of trip generation as shown in the following standard equation:

$$\text{Development Trips} = \text{Trip Generation Rate per unit (for specific land use)} \times \text{Adjustment Factor(s)} \times \text{Size (number of units specific to development)}$$

Selection of the type of **trip generation rate** and specific **adjustment factors** to include in the methodology are policy decisions to be considered here. Development units are determined based on specific development plans, and are generally measured by dwelling units (in the case of residential development) or some other building scale factor (like square feet of building area).

The subsections below summarize the options related to TSDC assessment to be considered in the current update. For purposes of the discussion below “Current Methodology” and “Status Quo” refer to 1999 TSDC Methodology, which the City has been using since re-adoption in November 2017. **Each of these issues and options will be discussed further at the SDC Advisory Committee meeting on June 12, 2018.**

Trip Rate Type

The trip rate type refers the time of day during which traffic impacts are measured. The current TSDC schedule is based on weekday average trip rates. Many other communities use P.M. peak hour trip rates for assessing TSDCs. Generally, infrastructure systems are sized to meet the peak demands of

users. For transportation systems, the peak period generally occurs during the weekday afternoon period. Although it is widely recognized that peak-hour trips have a significant impact on roadway capacity, many communities base their SDCs solely on average weekday trips. SDCs based on average daily trips recognize the overall capacity utilization of different types of land uses, as opposed to system usage exclusively during the peak hour(s).

- **Option 1: Continue to use Average Daily Trip Rates**

Status quo

Pros and Cons of this approach:

<i>Pros</i>	<i>Cons</i>
<i>Recognizes overall transportation capacity utilization of different type of land uses and modes (bike and pedestrian). Maintains rate stability.</i>	<i>System performance and capacity needs evaluated based on PM Peak hour. More limited data availability compared to PM Peak Hour.</i>

- **Option 2: Use PM Peak Hour Trip Rates**

Using PM Peak Hour as the basis for the SDCs, as opposed to average daily trip rates, will result in higher SDCs for land uses that generate proportionately higher trips during the PM peak hour. Land uses with relatively higher peak hour rates include such developments as general offices, financial institutions, and industrial. The use of peak hour capacity will tend to result in lower SDCs for non-peak developments, like recreational, senior housing, and some institutional land uses (e.g., churches and hospitals), as well as some schools.

Pros and Cons of this approach:

<i>Pros</i>	<i>Cons</i>
<i>Trip rate aligned with system planning considerations. Data more readily available.</i>	<i>Would result in some significant changes to land use assumptions and corresponding rates.</i>

Trip Rate Adjustments

The current TSDC methodology includes two adjustments to trip rates: 1) percent new trips, and 2) trip length factors. Each is addressed separately.

Percent New Trips

Total trip rates are reduced by the portion of “pass-by” trips to determine the new (or primary) number of trips generated by a land use. Pass-by trips refer to trips that occur when a motorist is already on the roadway, as in the case of a traveler stopping by a fast-food restaurant on the way home from work. In this case, the motorist making a stop while “passing by” is counted as a trip generated by the restaurant, but it does not represent a new (or primary) trip on the roadway. Pass-by trips are studied and reported by the Institute of Transportation Engineers (ITE) and differ by land use. Retail establishments and fast-

food restaurants are generally among the land uses with the highest percent of pass-by trips relative to total trips generated.

A diverted linked trip is another type of non-primary trip but in this case the motorist will divert from a primary route to access a nearby use (e.g., a vehicle may turn off a major roadway onto an intersecting street to access a land use), and then return to the original route to complete the trip. Reported data on diverted linked trips is more limited, but is included in the ITE Trip Generation manual for some land use types.

- **Option 1: Discount Trip Rates for Pass-by Trips Only (Status Quo)**

Pros and Cons of this approach:

<i>Pros</i>	<i>Cons</i>
<p><i>Consistent with standard industry practices to assess SDCs based on new or primary trips only.</i></p> <p><i>Supported by data from ITE.</i></p> <p><i>Maintains rate stability.</i></p>	<p><i>Does not discount trip rates for diverted linked trips, which may have a reduced impact on system.</i></p>

- **Option 2: Discount Trip Rates for both Pass-by and Diverted Linked Trips**

Adding an adjustment for diverted linked trip will further reduce trip rates for a limited number of commercial categories (primarily, shopping centers, food and convenience markets, restaurants, and gas stations)

Pros and Cons of this approach:

<i>Pros</i>	<i>Cons</i>
<p><i>Supported by ITE data for some land use categories.</i></p> <p><i>May be used in place of trip length adjustment to reflect reduced system impact of these shorter, non-primary trips.</i></p>	<p><i>Data is very limited.</i></p> <p><i>Diverted trips still have some impact on system via use of intersecting street.</i></p>

Trip Length Factors

The current methodology includes an adjustment for average trip length. Unlike pass-by and diverted link trip adjustments, trip length factors by land use type are not based on ITE published data; it is unclear of the source of the current trip length data.

- **Option 1: Include Trip Length Factors (Status Quo)**

Current trip length factors included in the methodology vary from 0.07 (for service stations) to 1.12 (for some industrial uses). Single family residential dwelling units are

assumed to have a factor of 1.0. The trip rates (and associated TSDCs) are reduced for land uses with trip length factors less than 1.0, and are increased for land uses with factors greater than 1.0.

Pros and Cons of this approach:

<i>Pros</i>	<i>Cons</i>
<i>In theory, lower trip lengths have less impact on roadway system.</i>	<i>Data is extremely limited, and unlike other adjustment is not based on ITE. Furthermore, trip length may be more directly attributable to location and the availability of other similar uses in the area, than the type of land use.</i>

- **Option 2: Exclude Trip Length Factors**

Eliminating trip length factors (all other things being equal) will have the effect of increasing trip rates for some land uses (e.g., retail, service stations, and financial institutions) and decreasing trip rates for other land uses (industrial and schools). The increases to some of the land uses will be off-set to some extent if a diverted linked trip adjustment is implemented.

Pros and Cons of this approach:

<i>Pros</i>	<i>Cons</i>
<i>May be more equitable and defensible given the limited data available and the fact that land use may not be the primary factor in determining trip length.</i>	<i>Some significant rate changes for certain land use types.</i>

Attachment 1

Comparison of Current and Updated Trip Rates for Sample Land Uses
Based on Current Cost per Trip

Description	Unit of Measure	Current \$/Trip		Current Trip Assumptions				
		Current TSDC	\$214	Daily Trip Rate	Trip Length Factor	Linked Trip Factor ¹	Adjusted Trip Rate	
SINGLE FAMILY DWELLING	PER DU	\$ 2,044		9.55	1.00	1.00	9.55	
APARTMENTS	PER DU	\$ 1,343		6.47	0.97	1.00	6.28	
GENERAL OFFICE BUILDING	PER TGSF	\$ 2,306		16.58	0.65	1.00	10.78	
HOSPITAL	PER TGSF	\$ 3,411		16.78	0.95	1.00	15.94	
SUPERMARKET	PER TGSF	\$ 1,210		87.82	0.14	0.46	5.66	
HIGH TURNOVER RESTAURANT	PER TGSF	\$ 6,262		205.36	0.19	0.75	29.26	
GASOLINE/SERVICE STATION	PER VEH.FUEL.POS.	\$ 1,644		142.54	0.07	0.77	7.68	
ELEMENTARY SCHOOL	PER STUDENT	\$ 252		1.09	1.08	1.00	1.18	
GENERAL LIGHT INDUSTRIAL	PER TGSF	\$ 1,671		6.97	1.12	1.00	7.81	

Updated ITE 10th Edition

Description	Unit of Measure	Current TSDC w/revised ADTR	Daily Trip Rate	Trip Length Factor	Linked Trip Factor ²	Rev Adj. Daily Trip Rate (ADTR)	% Change in TSDC	2016 TSDC Study
APARTMENTS	PER DU	\$ 1,566	7.32	1.00	1.00	7.32	17%	\$ 1,415
GENERAL OFFICE BUILDING	PER TGSF	\$ 2,084	9.74	1.00	1.00	9.74	-10%	\$ 3,147
HOSPITAL	PER TGSF	\$ 2,294	10.72	1.00	1.00	10.72	-33%	\$ 2,450
SUPERMARKET	PER TGSF	\$ 5,941	106.78	1.00	0.26	27.76	391%	\$ 17,678
HIGH TURNOVER RESTAURANT	PER TGSF	\$ 7,442	112.18	1.00	0.31	34.78	19%	\$ 39,053
GASOLINE/SERVICE STATION	PER VEH.FUEL.POS.	\$ 8,466	172.01	1.00	0.23	39.56	415%	\$ 33,055
ELEMENTARY SCHOOL	PER STUDENT	\$ 404	1.89	1.00	1.00	1.89	61%	\$ 591
GENERAL LIGHT INDUSTRIAL	PER TGSF	\$ 1,061	4.96	1.00	1.00	4.96	-36%	\$ 2,281

¹ Pass-by adjustment only

² Pass-by and diverted link adjustment combined

ADTR = Adjusted Daily Trip Rate

TGSF = Thousand Gross Square Feet

TSFGLA = Thousand Square Feet Gross Leasable Area

DU = Dwelling Unit

VEH. FUEL POS. = Vehicle Fueling Position



Transportation & Wastewater SDC Update

SDC Advisory Committee Meeting

June 12, 2018



Agenda

- ⌘ Project Background & Objectives
- ⌘ Transportation SDC Fundamentals
- ⌘ TSDC Assessment Options
- ⌘ Next Steps

Background

- ⌘ Original TSDC methodology adopted in 1999
 - Based on then current Transportation System Plan (TSP)
 - Land use trip generation assumptions from *ITE Trip Generation Manual 5th edition*
- ⌘ TSP Updated and adopted in March 2013
- ⌘ TSDC methodology updated and adopted in 2016
 - New project list and \$/trip
 - New TSDC assessment basis
 - PM Peak hour traffic impact
 - No trip generation rate adjustments (e.g., pass-by trips)
 - TSDCs for some land uses increased by almost 2000%
- ⌘ Updated TSDCs repealed in 2017

ITE = Institute of Transportation Engineers

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Project Objectives

- ⌘ Equity/Fairness
 - Trip Assessment
 - Project costs (growth share)
- ⌘ Revenue Adequacy
 - Potential reimbursement fee
- ⌘ Incentives/Discounts
- ⌘ Defensibility

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TSDC Fundamentals: SDC Components

Reimbursement Fee

- Costs of **existing or in-process** facilities
- Related to **available capacity**

Improvement Fee

- Projects included on an **adopted list**
- Related to **capacity for growth**

Compliance Fee

- SDC methodology development
- Master planning
- SDC accounting, etc.

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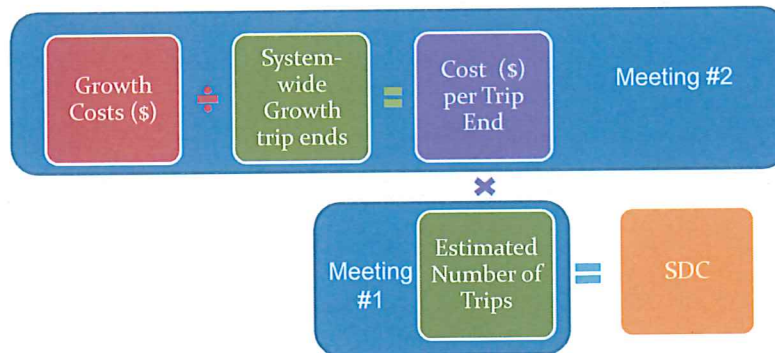
TSDC Fundamentals: Proportionate Share

Theory	Practice
Charge proportionate to "use"	Individual property trips are not 'monitored'
Use = number of trips to and from a property	Estimate from trip generation rates by land use type*

*Primary source of data is Institute of Transportation Engineers *Trip Generation Manual*

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TSDC Fundamentals: Basic Equation



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TSDC Assessment: Estimating Development Trips



Where trip rates:

- Are either based on average daily or afternoon (P.M.) peak hour
- Vary by land use category
- Are based on Institute of Transportation Engineers (ITE) Trip Generation Manual data

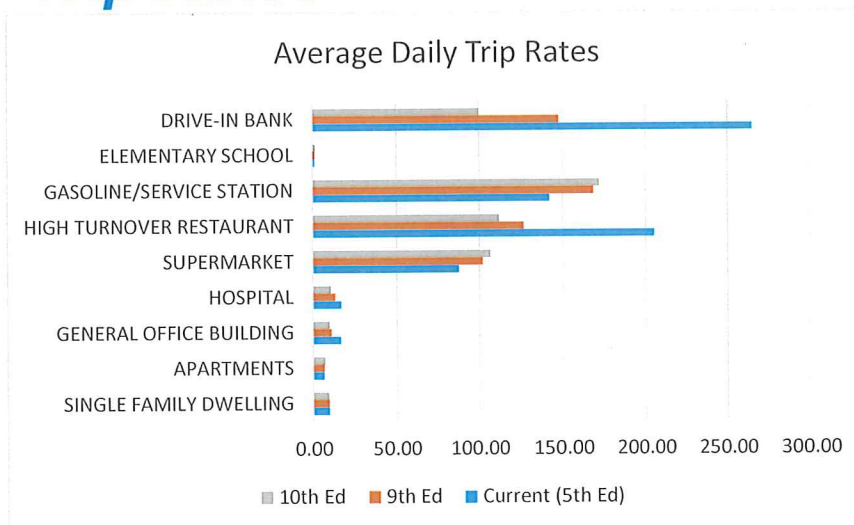
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Considerations for Update

Policy Questions	Data Considerations
Trip Rate Type	ITE 10 th edition vs. 5 th edition
Trip Rate Adjustments	Source for trip length adjustments
*Primary trips (pass-by and diverted link trip reductions)	Diverted link adjustments available for limited uses (9)
*Trip length	

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Data Considerations: ITE Trip Rates



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Sample Impacts: Update to ITE Trip Rates Only*

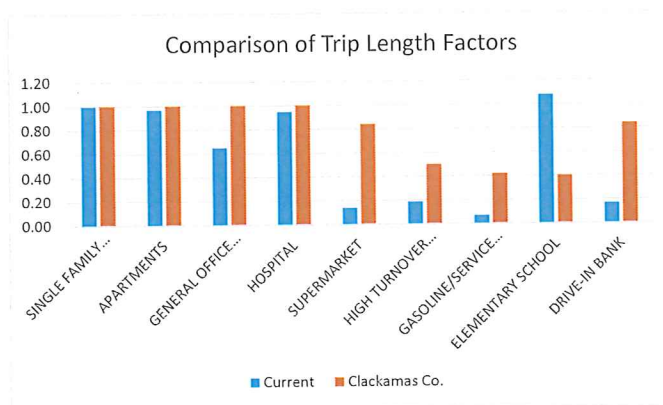
Description	Unit of Measure	Updated		Difference	
		Current	Trip Rates	Difference \$	%
SINGLE FAMILY DWELLING	PER DU	\$2,044	\$2,020	-\$24	-1%
APARTMENTS	PER DU	\$1,343	\$1,519	\$176	13%
GENERAL OFFICE BUILDING	PER TGFSF	\$2,306	\$1,355	-\$951	-41%
HOSPITAL	PER TGFSF	\$3,411	\$2,179	-\$1,232	-36%
SUPERMARKET	PER TGFSF	\$1,210	\$1,472	\$261	22%
HIGH TURNOVER RESTAURANT	PER TGFSF	\$6,262	\$3,421	-\$2,842	-45%
GASOLINE/SERVICE STATION	PER VEH.FUEL.P	\$1,644	\$1,984	\$340	21%
ELEMENTARY SCHOOL	PER STUDENT	\$252	\$437	\$185	73%
DRIVE-IN BANK	PER TGFSF	\$5,307	\$2,002	-\$3,305	-62%

*Assumes current methodology for trip type (average daily trips) and adjustment factors

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Data Considerations: Trip Length Factors

- ⊗ No industry standard source
- ⊗ Most surveys tend to be very dated and for rural counties
- ⊗ Significant variability in factors used



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Policy Issue #1: Trip Rate Type

Option	Pros	Cons
Average Daily	<ul style="list-style-type: none"> a) Considers broad capacity utilization; b) May better match active mode capacity needs c) Maintains rate stability (status quo) 	<ul style="list-style-type: none"> a) Auto system performance based on peak; b) ITE trip rates more limited; c) Trip adjustments based on peak
PM Peak	<ul style="list-style-type: none"> a) Aligns with auto system performance evaluation from TSP/CIP b) Better alignment with trip adjustment factors c) More robust data set 	<ul style="list-style-type: none"> a) More limited basis for capacity consideration b) Significant impacts to some uses

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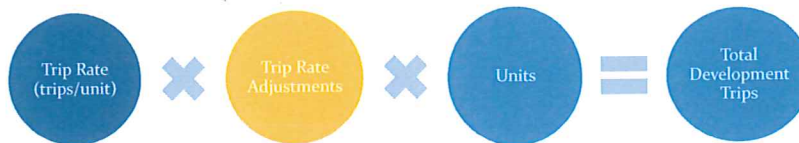
Policy Issue #1: Sample Impacts*

Description	Unit of Measure	Daily Trip Rate	PM Trip Rate	PM Peak/Daily
SINGLE FAMILY DWELLING	PER DU	9.44	0.99	0.10
APARTMENTS	PER DU	7.32	0.56	0.08
GENERAL OFFICE BUILDING	PER TGFSF	9.74	1.15	0.12
HOSPITAL	PER TGFSF	10.72	0.97	0.09
SUPERMARKET	PER TGFSF	106.78	9.24	0.09
HIGH TURNOVER RESTAURANT	PER TGFSF	112.18	9.77	0.09
GASOLINE/SERVICE STATION	ER VEH.FUEL.PO	172.01	14.03	0.08
ELEMENTARY SCHOOL	PER STUDENT	1.89	0.17	0.09
DRIVE-IN BANK	PER TGFSF	100.03	20.45	0.20

*System average PM Peak : Daily ratio = about .10

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Policy Issue #2: Trip Adjustments



Where current adjustments include:

- *Pass-by factor*
- *Trip length factor*

But, exclude

- *Diverted link factor*

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Trip Adjustment Considerations

- ⌘ Prior update in 2016 eliminated ALL adjustments
 - 30 land use categories increased >100%
 - 5 categories increased >1,000%
- ⌘ Pass-By and Diverted Link Trip adjustments are standard considerations for TSDCs
 - Reflect ITE published data
- ⌘ Trip length adjustments
 - Data extremely limited and not based on verifiable source
 - Trip length more attributable to location/proximity to other uses rather than type of use
 - Current factors vary widely from other jurisdictions

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Comparison of Trip Rate Adjustments

Description	Current			Revised		
	Trip Length Factor	Linked Trip Factor ¹	Adjusted Daily Trip Rate ²	Trip Length Factor	Linked Trip Factor ³	Adjusted Daily Trip Rate ²
SINGLE FAMILY DWELLING	1.00	1.00	9.44	1.00	1.00	9.44
APARTMENTS	0.97	1.00	7.10	1.00	1.00	7.32
GENERAL OFFICE BUILDING	0.65	1.00	6.33	1.00	1.00	9.74
HOSPITAL	0.95	1.00	10.18	1.00	1.00	10.72
SUPERMARKET	0.14	0.46	6.88	1.00	0.26	27.76
HIGH TURNOVER RESTAURANT	0.19	0.75	15.99	1.00	0.31	34.78
GASOLINE/SERVICE STATION	0.07	0.77	9.27	1.00	0.23	39.56
ELEMENTARY SCHOOL	1.08	1.00	2.04	1.00	1.00	1.89
DRIVE-IN BANK	0.17	0.55	9.35	1.00	0.43	43.01

¹ Pass-by adjustment only
² 10th Edition Trip Rates
³ Pass-by and diverted link adjustment combined

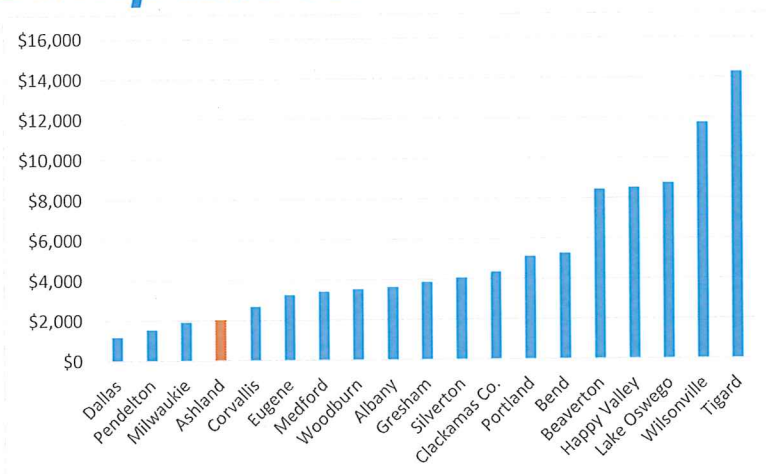
Combined Impacts (Trip Rate and Adjustments)*

Description	Unit of Measure	Current			Updated		Difference	
		Current	Updated	Difference \$	Difference %			
SINGLE FAMILY DWELLING	PER DU	\$2,044	\$2,020	-\$24	-1%			
APARTMENTS	PER DU	\$1,343	\$1,566	\$223	17%			
GENERAL OFFICE BUILDING	PER TGSF	\$2,306	\$2,084	-\$222	-10%			
HOSPITAL	PER TGSF	\$3,411	\$2,294	-\$1,117	-33%			
SUPERMARKET	PER TGSF	\$1,210	\$5,941	\$4,731	391%			
HIGH TURNOVER RESTAURANT	PER TGSF	\$6,262	\$7,442	\$1,180	19%			
GASOLINE/SERVICE STATION	PER VEH.FUEL.POS.	\$1,644	\$8,466	\$6,822	415%			
ELEMENTARY SCHOOL	PER STUDENT	\$252	\$404	\$153	61%			
DRIVE-IN BANK	PER TGSF	\$5,307	\$9,205	\$3,898	73%			

TGSF = Thousand Gross Square Feet
 TSFGLA = Thousand Square Feet Gross Leasable Area
 DU = Dwelling Unit
 VEH. FUEL POS. = Vehicle Fueling Position

**Based on average daily trip rate; preliminary analysis shows about 10 land uses with increases greater than 100% (based on current \$/trip)*

Single Family TSDC Comparison



*Primary Source: Oregon Building Officials Association 2017 Survey

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Next Steps

Project list information

- Reimbursement projects
- Future projects – updated costs

Growth share

- Mode-specific analysis
- Road/intersection projects based on modeled trip data and performance measures

Cost per trip

- System-wide trips based on travel demand model
- Both average daily and P.M. peak will be calculated

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Summary

- ⌘ Significant impacts to TSDCs just from updated data
- ⌘ SDC Committee Feedback needed on policy issues
 - Trip rate type
 - Trip rate adjustments

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Next Meetings

- ⌘ June 26: Project List and \$/Trip
- ⌘ July 19: Ordinance Issues and Recommendations

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TRANSPORTATION SYSTEMS DEVELOPMENT FEES - "EXHIBIT A"

	2016 Fee Amount
ITE 110 General Lighth Industrial Fee	\$1,670.57
ITE 120 General Heavy Industrial Fee	\$359.52
ITE 130 Industrial Park Fee	\$1,670.57
ITE 140 Manufacturing Fee	\$922.77
ITE 150 Warehouse Fee	\$1,169.64
ITE 151 Mini-Warehouse Fee	\$262.51
ITE 170 Utilities Fee	\$226.84
ITE 210 Single Family Fee	\$2,043.70
ITE 220 Multi-Family Fee	\$1,343.04
ITE 230 Residential Condominium Fee	\$1,216.42
ITE 240 Manufactured Housing Fee	\$998.46
ITE 260 Recreational Home/Condo Fee	\$676.24
ITE 30 Truck Terminals Fee	\$2,360.85
ITE 31 Bus Depot Fee	\$5,350.00
ITE 310 Hotel/Motel Fee	\$963.48
ITE 410 Park Fee	\$429.50
ITE 411 Park City (developed) Fee	\$9,630.00
ITE 430 Golf Course Fee	\$7,320.28
ITE 443 Movie Theater Fee	\$173.25
ITE 492 Raquet Club Fee	\$1,870.66
ITE 493 Raquetball Fee	\$4,365.60
ITE 494 Tennis Fee	\$3,274.20
ITE 501 Military Base Fee	\$380.92
ITE 520 Elementary School Fee	\$251.92
ITE 521 Junior High School Fee	\$277.34
ITE 530 High School Fee	\$318.95
ITE 540 Junlor/Community College Fee	\$307.39
ITE 560 Church Fee	\$2,154.04
ITE 565 Day Care Center/Preschool	\$228.87
ITE 590 Library Fee	\$4,771.13
ITE 610 Hospital Fee	\$3,411.37
ITE 620 Nursing Home Fee	\$528.58
ITE 630 Clinic Fee	\$2,698.26
ITE 710 General Office (Under 100,000 sf GFA) Fee	\$2,306.28
ITE 711 General Office (100,000-199,999 sf GFA)	\$1,951.57
ITE 712 General Office (200,000 sf GFA and over)	\$1,648.34
ITE 720 Medical Office Building Fee	\$3,875.56
ITE 730 Government Office Building Fee	\$14,160.98
ITE 731 State Motor Vehicles Dept Fee	\$34,107.15
ITE 732 U.S. Post Office Fee	\$17,897.93
ITE 760 Research Center Fee	\$1,104.03
ITE 770 Business Park Fee	\$2,060.37
ITE 812 Building Material/Lumber Fee	\$2,403.39
ITE 814 Specialty Retail Center Fee	\$3,198.49
ITE 815 Discount Stores Fee	\$5,515.37
ITE 816 Hardware/Paint Stores Fee	\$4,033.70
ITE 817 Nursing-Retail Fee	\$2,837.51
ITE 820 Shopping Center (under 50,000 sf GFA) Fee	\$3,113.02
ITE 821 Shopping Center (50,000-99,999 sf GFA) Fee	\$3,236.16
ITE 822 Shopping Center (100,000-199,999 sf GFA)	\$3,690.10
ITE 823 Shopping Center (200,000-299,999 sf GFA)	\$3,828.96
ITE 824 Shopping Center (300,000-399,999 sf GFA)	\$3,485.03
ITE 825 Shopping Center (400,000-499,999 sf GFA)	\$3,216.54
ITE 826 Shopping Center (500,000-599,999 sf GFA)	\$3,242.27
ITE 832 High Turnover Sit-Down Restaurant Fee	\$6,262.45
ITE 833 Fast Food Restaurant Fee	\$7,722.72
ITE 841 New Car Sales Fee	\$4,613.73
ITE 844 Service Station Fee	\$1,644.14
ITE 850 Supermarket Fee	\$1,210.30
ITE 851 Convenience Market Fee	\$4,422.04
ITE 853 Convenience Market w/Gas Pump Fee	\$2,927.85
ITE 860 Wholesale Fee	\$705.71
ITE 870 Apparel Store Fee	\$2,459.23
ITE 890 Furniture Store Fee	\$341.32
ITE 911 Bank/Savings: Walk-in Fee	\$3,836.54
ITE 912 Bank/Savings: Drive-in Fee	\$5,306.59

TRANSPORTATION SYSTEMS DEVELOPMENT CHARGES OCT 2017 EXHIBIT B PROJECT LIST

City of Ashland, Transportation System Development Charge

July 2016

Table 7 Transportation Capital Improvements Plan, 2013 Dollars

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
S	2	NA	Downtown Parking & Multi-Modal Circulation Study	100,000	18.4%	18,000	1.81
S	1	NA	Funding Sources Feasibility Study	30,000	18.4%	6,000	0.60
Total Policies & Studies Projects				\$130,000	18.5%	\$24,000	\$2.41
P	6	Orange Ave	N. Main St to Oak St	250,000	18.4%	46,000	4.63
P	7	Hersey St	Thomton Way to N. Main St	750,000	18.4%	138,000	13.90
P	9	Maple St	Chestnut St to 150' E of Rock St	100,000	18.4%	18,000	1.81
P	10(1)	Scenic Dr	Maple St to Wimer St	250,000	18.4%	46,000	4.63
P	18	A. St	Oak St to 100' W of 6th St	250,000	18.4%	46,000	4.63
P	22	N. Mountain Ave	100' S of Village Green Way to Iowa St	450,000	18.4%	83,000	8.36
P	25	Walker Ave	950' N of Iowa St to Ashland St	750,000	18.4%	138,000	13.90
P	27(1)	Walker Ave	Oregon St to Woodland Dr	200,000	18.4%	37,000	3.73
P	28(1)	Ashland St	S. Mountain Ave to Morton St	450,000	18.4%	83,000	8.36
P	38(1)	Clay St	Siskiyou Blvd to Mohawk St	300,000	18.4%	55,000	5.54
P	57(1)	Toleman Creek Rd	Siskiyou Blvd to west side City Limits	425,000	18.4%	78,000	7.86
P	58(1)	Helman St	Hersey St to Van Ness Ave	100,000	18.4%	18,000	1.81
P	1	N. Main St/Hwy 99	N. Main St to Schofield St	50,000	18.4%	9,000	0.91
O	1	NA	Travel Smart Education, Targeted Marketing Program	45,000	18.4%	8,000	0.81

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City of Ashland, Transportation System Development Charge

Table 7

Type*	#	Street	Description	Eligible SDC Projects			SDC
				High, Medium Development Driven	% Growth	Project Costs	
P	23	Wightman St	200' N of E. Main St to 625' S of E. Main St	400,000	18.4%	74,000	7.45
P	5	Glenn St/Orange Ave	N. Main St to 175' E of Willow St	200,000	18.4%	37,000	3.73
P	17	Beaver Slide	Water St to Lithia Way	50,000	18.4%	9,000	0.91
P	59	Garfield St	E. Main St to Siskiyou Blvd	750,000	18.4%	138,000	13.90
P	60	Lincoln St	E. Main St to Iowa St	450,000	18.4%	83,000	8.36
P	61	California St	E. Main St to Iowa St	500,000	18.4%	92,000	9.27
P	63	Liberty St	Siskiyou Blvd to Ashland St	650,000	18.4%	120,000	12.09
P	65	Faith Ave	Ashland St to Siskiyou Blvd	350,000	18.4%	64,000	6.45
P	66	Diane St	Clay St to Tolman Creek Rd	20,000	18.4%	4,000	0.40
P	67	Frances Lane	Siskiyou Blvd to Oregon St	10,000	18.4%	2,000	0.20
P	68	Carol St	Patterson St to Hersey St	150,000	18.4%	28,000	2.82
P	70	Park St	Ashland St to Siskiyou Blvd	650,000	18.4%	120,000	12.09
P	4	Laurel St	Nevada St to Orange Ave	500,000	18.4%	92,000	9.27
P	37	Clay St	Faith Ave to Siskiyou Blvd	1,000,000	18.4%	184,000	18.53
P	8	Winer St	Thornton Way to N. Main St	800,000	18.4%	147,000	14.81
P	62	Quincy St	Garfield St to Wightman St	150,000	18.4%	28,000	-
P	64	Water St	Van Ness Ave to B St	250,000	18.4%	46,000	4.63
P	72	C St	Fourth St to Fifth St	100,000	18.4%	18,000	1.81
P	73	Barbara St	Jaquelyn St to Tolman Creek Rd	100,000	18.4%	18,000	-
P	74	Roca St	Ashland St to Prospect St	250,000	18.4%	46,000	-
P	75	Blaine St	Morton St to Morse Ave	100,000	18.4%	18,000	-
P	78	Patterson St	Crispin St to Carol St	100,000	18.4%	18,000	-
P	79	Harrison St	Iowa St to Holly St	100,000	18.4%	18,000	-
P	80	Spring Creek Dr	Oak Knoll Dr to Road End	350,000	18.4%	64,000	-
P	81	Bellview Ave	Green Meadows Way to Siskiyou Blvd	250,000	18.4%	46,000	-
P	10(2)	Scenic Dr	Winer St to Grandview Dr	-	18.4%	-	-

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Table 7

Type*	#	Street	Description	Eligible SDC Projects		
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs
P	27(2)	Walker Ave	Woodland Dr to Peachey Rd	-	18.4%	-
P	28(2)	Ashland St	Morton St to Guthrie St	-	18.4%	-
P	38(2)	Clay St	Mohawk St to Southern Terminus	-	18.4%	-
P	42	S. Mountain Ave	Ashland St to Prospect St	-	18.4%	-
P	54	Iowa St	Terrace St to Auburn St	-	18.4%	-
P	57(2)	Tolman Creek Rd	Siskiyou Blvd to east side City Limits	-	18.4%	-
P	58(2)	Helman St	1500' N of Orange Ave to Orange Ave	-	18.4%	-
P	40	Hillyview Dr	Siskiyou Blvd to Peachey Rd	-	18.4%	-
P	71	Orchard St	Sunnyview Dr to Westwood St	-	18.4%	-
Total Pedestrian Projects				\$11,200,000	\$0	\$2,061,000
B	2	Wimer St	Scenic Dr to N. Main St	20,000	18.4%	4,000
B	7	Iowa St	Terrace St to Road Terminus; S. Mountain Ave to Walker Ave	240,000	18.4%	44,000
B	10	S. Mountain Ave	Ashland St to E. Main St	120,000	18.4%	22,000
B	11	Wightman St	E. Main St to Siskiyou Blvd	60,000	18.4%	11,000
B	13	B St	Oak St to N. Mountain Ave	80,000	18.4%	15,000
B	16	Lithia Way	Oak St to Helman St	110,000	18.4%	20,000
B	19	Helman St	Nevada St to N. Main St	80,000	18.4%	15,000
B	26	Normal Ave	E. Main St to Siskiyou Blvd	190,000	18.4%	35,000
B	29	Walker Ave	Siskiyou Blvd to Peachey Rd	40,000	18.4%	7,000
B	17	Main St	Helman St to Siskiyou Blvd	50,000	18.4%	9,000
TR	1	Northside Trail	Orchid Ave to Tolman Creek Rd	2,000,000	18.4%	368,000
O	4	NA	Retrofit Bicycle Program	50,000	18.4%	9,000
				\$207,60		

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Table 7

Type*	#	Street	Description	Eligible SDC Projects			SDC By Project
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	
B	5	Maple/Scenic/Nutley	N. Main St to Winburn Way	110,000	18.4%	20,000	2.01
B	31	Indiana St	Siskiyou Blvd to Oregon St	20,000	18.4%	4,000	0.40
B	33	8th St	A St to E. Main St	20,000	18.4%	4,000	0.40
B	38	Oregon/Clark St	Indiana St to Harmony Lane	40,000	18.4%	7,000	0.71
B	3	Nevada St	Vansant St to N. Mountain Ave	230,000	18.4%	42,000	4.23
B	9	Ashland St	Morton St to University Way	30,000	18.4%	6,000	0.60
B	25	Tohman Creek Rd	Siskiyou Blvd to Green Meadows Way	100,000	18.4%	18,000	1.81
B	37	Clay St	Siskiyou Blvd to Mohawk St	20,000	18.4%	4,000	0.40
B	18	N. Main St	Jackson Rd to Helman St	260,000	18.4%	48,000	4.83
TR	2	New Trail	Clay St to Tohman Creek Rd	400,000	18.4%	74,000	-
B	39	Glenn St/Orange Ave	N. Main St to Proposed Trail	40,000	18.4%	7,000	0.71
B	40	Laurel St	Orange St to Nevada St	40,000	18.4%	7,000	0.60
B	20	Water St	Hersey St to N. Main St	30,000	18.4%	6,000	-
B	14	A St	Oak St to 6th St	-	18.4%	-	-
B	21	Oak St	Nevada St to E. Main St	-	18.4%	-	-
B	22	Clay St	E. Main St to Ashland St	-	18.4%	-	-
B	24	Clover Lane	Ashland St to Proposed Bike Path	-	18.4%	-	-
B	30	Ashland St	I-5 Exit 14 SB to Hwy 66	-	18.4%	-	-
B	35	Railroad Property	Proposed Bike Path to N. Mountain Ave	-	18.4%	-	-
B	4	Glendower St	Bear Creek Greenway to Nevada St	-	18.4%	-	-
B	6	Winburn Way	Calle Guanajuato to Nutley St	-	18.4%	-	-
B	8	Morton St	E. Main St to Ashland St	-	18.4%	-	-
B	12	Wightman St	Road End to E. Main St	-	18.4%	-	-
B	28	Clay St	Rail Line to Siskiyou Blvd	-	18.4%	-	-
B	34	1st St	A St to E. Main St	-	18.4%	-	-
TR	3	New Trail	New Trail to Hersey St	220,000	18.4%	40,000	-

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City of Ashland, Transportation System Development Charge

Table 7		Eligible SDC Projects				
Type*	#	Street	Description	High, Medium Development Driven	SDC Eligible Project Costs	SDC By Project
RR	4	New Trail	A St to Clear Creek Dr - Extension	110,000	20,000	-
		Total Bicycle Projects		\$3,940,000	\$725,000	\$73.01
L	9	NA	Establish Transit Hubs	1,000,000	184,000	18.53
	1	NA	Support Circulator Svc	2,750,000	506,000	50.96
	1	NA	Support SOU Svc	-	-	-
		Total Transit Projects		\$3,750,000	690,000	\$69.49
S	10	Siskiyou Blvd	Highway 66 to Beach St	35,000	6,000	0.60
S	3	N. Main St (OR 99)	Helman St to Sheridan St	75,000	14,000	1.41
S	5	Siskiyou Blvd	Ashland St to Tolman Creek Rd	75,000	14,000	1.41
S	6	Ashland St (OR 66)	Siskiyou Blvd to Tolman Creek Rd	75,000	14,000	1.41
S	9	Ashland St (OR 66)	Clay St to Washington St	20,000	4,000	0.40
S	7	E. Main St	Siskiyou Blvd to Wightman St	-	-	-
		Studies Subtotal		\$280,000	52,000	\$5.23
R	17	E. Nevada St Ext	Bear Creek to Kestrel Pkwy	5,481,000	1,009,000	101.62
R	40	Walker Ave Festival St	Walker Ave to Normal St	780,000	144,000	14.50
R	35	N. Main St	N. Main St Temporary Diet	-	-	-
R	5	Siskiyou Blvd (OR 66)	Lithia Way (OR 99 NB) / E. Main St	50,000	9,000	0.91
R	6	Siskiyou Blvd (OR 66)	Tolman Creek Rd	61,000	11,000	1.11
R	8	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (realignment)	706,000	130,000	13.09

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Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
R	25	Washington St Ext	Washington St Tolman Creek Rd	1,835,000	100.0%	1,835,000	184.81
R	19	Normal Ave Ext	Normal Ave to E. Main St	2,705,000	18.4%	498,000	50.16
R	36	N. Main St	N. Main St Permanent Diet	200,000	18.4%	37,000	3.73
R	38	Ashland St	Siskiyou Blvd to Walker Ave Streetscape	-1,100,000	18.4%	-202,000	-
R	2	N. Main St	Wimer St / Hersey St	-	18.4%	-	-
R	9	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (roundabout)	-	18.4%	-	-
R	11	Lithia Way (OR 99 NB)	Oak Street	-	18.4%	-	-
R	45	New Roadway (F)	Washington St to New Roadway (E)	1,199,000	25.0%	300,000	30.21
R	39	Ashland St	Walker Ave to Normal Ave Streetscape	1,300,000	18.4%	239,000	24.07
R	43	New Roadway (E)	Mistletoe Rd to Siskiyou Blvd (OR 99)	4,322,000	75.0%	3,242,000	326.52
R	44	Tolman Creek	Mistletoe Rd Streetscape	3,478,000	50.0%	1,739,000	175.14
R	13	Siskiyou Blvd (OR 99)	Park St	296,000	18.4%	54,000	5.44
R	41	Ashland St	Tolman Creek Rd Streetscape	1,500,000	50.0%	750,000	75.54
R	42	E. Main St	N. Mountain Ave Streetscape	1,500,000	18.4%	276,000	27.80
R	12	Siskiyou Blvd (OR 99)	Sherman St	391,000	18.4%	72,000	7.25
R	14	Siskiyou Blvd (OR 99)	Terra Ave / Faith Ave	216,000	18.4%	40,000	4.03
R	24	Clear Creek Dr Ext	Oak St to N. Mountain Ave	2,505,000	50.0%	1,253,000	126.20
R	26	New Roadway (D)	E. Main St to Ashland St (OR 66)	2,422,000	0.0%	-	-
R	29	Washington St Ext	Washington St to Benson Way	1,301,000	75.0%	976,000	98.30
R	31	Wimer St Ext	Wimer St to Ashland Mine Rd	3,125,000	18.4%	575,000	57.91
R	20	Creek Dr Ext	Meadow Dr to Normal Ave	-	-	-	-
R	22	New Roadway (B)	Clay St to Tolman Creek Rd	-	-	-	-
R	23	New Roadway (C)	McCall Dr to Engle St	-	-	-	-
R	27	Grizzly Dr Ext	Jacquelyn St to Clay St	-	-	-	-
R	28	Mountain View Dr Ext	Parkside Dr to Helman St	-	-	-	-
R	30	Kirk Lane Ext	Kirk Lane to N. Mountain Ave	-	-	-	-

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Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
R	32	Kestrel Pkwy Ext	Kestrel Pkwy to N. Mountain Ave (at Nepeenthe Rd)	-	-	-	-
R	34	Railroad Property	Existing Adjacent Streets to End of Property	-	-	-	-
R	46	Ivy Lane Ext	Ivy Lane to Waterline Rd	-	-	-	-
R	47	Mary Jane Ave Ext	Mary Jane Ave to S. UGB then E. to Clay St	-	-	-	-
R	48	Forest St Ext	Between Existing Segments of Forest St	-	-	-	-
R	49	Croman Mill District	Croman Mill District Connectivity	-	-	-	-
R	50	E. Main St	Between Walker & Clay Streets	2,828,000	50.0%	1,414,000	142.41
Total Intersection & Roadway Improvements				38,201,000	38.2%	14,603,000	\$1,470.75
Total Roadway & Intersection Improvements				\$38,481,000	38.1%	\$14,655,000	\$1,475.98
X	1	4th St	Crossing	500,000	100.0%	500,000	50.36
X	2	Washington St	Crossing	1,000,000	100.0%	1,000,000	100.72
X	3	Normal Ave	Crossing Upgrade	1,316,253	100.0%	1,316,000	132.54
Total Railroad Crossing Projects				\$2,816,253	100.0%	\$2,816,000	\$283.62
Grand Total				\$60,317,253	34.8%	\$20,971,000	\$2,112

*Type and # correspond to those in the TSP.
 - No cost estimate; assumes improvements will be paid by developer

RESOLUTION NO. 2016-35

A RESOLUTION ADOPTING NEW TRANSPORTATION SYSTEMS DEVELOPMENT CHARGES, PURSUANT TO SECTION 4.20 OF THE ASHLAND MUNICIPAL CODE, AND REPEALING RESOLUTION 1999-42.

RECITALS:

- A. The current Transportation System Development Charge was approved on July 6, 1999.
- B. The City adopted a new Transportation Systems Plan March 19, 2013 through ordinance that amends the comprehensive plan. The plan updates the previous master plan with new forecasts of trip generation, capital improvements, and updated construction costs.


THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. The Transportation System Development Charges project list marked as Exhibit B, is adopted effective immediately.

SECTION 2. The existing System Development Charges and project list for Transportation adopted by Resolution 1992-42 is repealed, effective July 1, 2017.

SECTION 3. The Transportation System Development Charges Methodology and Fee Schedule marked as Exhibits A and B, are adopted effective July 1, 2017.

This resolution was duly PASSED and ADOPTED this 20 day of December, 2016, and takes effect upon signing by the Mayor.


Barbara Christensen, City Recorder

SIGNED and APPROVED this 20 day of December, 2016.


John Stromberg, Mayor

Reviewed as to form:

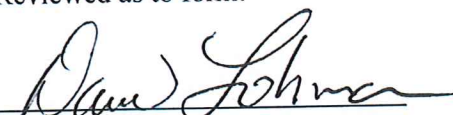

David H. Lohman, City Attorney

EXHIBIT A

ITE Land Use	ITE Land Use Code	Unit(*)	PM Peak- hour trips per unit	\$/PM Peak-hour trip \$2,112
RESIDENTIAL				
Single Family Multi-Family	210	Dwelling Unit	1.02	\$2,154.35
Multi-Family	220	Dwelling Unit	0.67	\$1,415.11
Residential Condominium	230	Dwelling Unit	0.52	\$1,098.30
Manufactured	240	Dwelling Unit	0.60	\$1,267.27
Recreational Home/Condo	260	Dwelling Unit	0.31	\$654.75
INSTITUTIONAL				
Truck Terminals	30	1,000 sf GFA	0.83	\$1,753.05
Park	411	Acres	4.50	\$9,504.50
City		Acres	4.50	\$9,504.50
Neighborhood		Acres	4.50	\$9,504.50
Amusement		Acres	4.50	\$9,504.50
Golf Course	430	Holes	3.56	\$7,519.11
Movie Theatre	443	Seats	0.32	\$675.88
Racquet Club	492	1,000 sf GFA	0.84	\$1,774.17
Military Base	501	Employee	0.30	\$633.63
Elementary School	520	Student	0.28	\$591.39
Junior High School		Student	0.30	\$633.63
High School	530	Student	0.29	\$612.51
Junior/Community College	540	Student	0.12	\$253.45
Church	560	1,000 sf GFA	0.94	\$1,985.38
Day Care Center/Preschool	565	Student	0.84	\$1,774.17
Library	590	1,000 sf GFA	7.20	\$15,207.19
Hospital	610	1,000 sf GFA	1.16	\$2,450.05
Nursing Home	620	Occupied Bed	0.37	\$781.48
BUSINESS & COMMERCIAL				
Hotel/Motel	310	Occupied Room	0.74	\$1,562.96
Building Materials/Lumber	812	1,000 sf GFA	5.56	\$11,743.33
Specialty Retail Center	814	1,000 sf GFA	5.02	\$10,602.79
Discount Stores	815	1,000 sf GFA	5.57	\$11,764.45
Hardware/Paint Stores	816	1,000 sf GFA	4.74	\$10,011.40
Nursery-Retail	817	1,000 sf GFA	9.04	\$19,093.47
Shopping Center	820			
(under 50,000 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23

ITE Land Use	ITE Land Use Code	Unit(*)	PM Peak-hour trips per unit	\$ /PM Peak-hour trip \$2,112
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	3.90	\$8,237.23
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	18.49	\$39,052.91
Fast Food Restaurant	833	1,000 sf GFA	47.30	\$99,902.80
New Car Sales	841	1,000 sf GFA	2.80	\$5,913.91
Service Station	844	Gasoline Pump	15.65	\$33,054.52
Supermarket	850	Employee	8.37	\$17,678.36
Convenience Market	851	1,000 sf GFA	36.22	\$76,500.62
Convenience Market w/ Gas Pump	853	Gasoline Pump	19.98	\$42,199.96
Apparel Store	870	1,000 sf GFA	4.20	\$8,870.86
Furniture Store	890	1,000 sf GFA	0.53	\$1,119.42
Bank/Savings: Walk-in	911	1,000 sf GFA	NA	
Bank/Savings: Drive-in	912	1,000 sf GFA	26.69	\$56,372.22
OFFICE				
Clinic	630	1,000 sf GFA	NA	
General Office				
(Under 100,000 sf GFA)	710	1,000 sf GFA	1.49	\$3,147.04
(100,000-199,999 sf GFA)	710	1,000 sf GFA	1.49	\$3,147.04
(200,000 sf GFA and over)	710	1,000 sf GFA	1.49	\$3,147.04
Medical Office Building	720	1,000 sf GFA	4.27	\$9,018.71
Government Office Bldg.	730	1,000 sf GFA	1.49	\$3,147.04
State Motor Vehicles Dept	731	1,000 sf GFA	19.93	\$42,094.35
U.S. Post Office	732	1,000 sf GFA	14.67	\$30,984.65
Research Center	760	1,000 sf GFA	1.07	\$2,259.96
Business Park	770	1,000 sf GFA	1.26	\$2,661.26
INDUSTRIAL				
General Light Industrial	110	1,000 sf GFA	1.08	\$2,281.08
General Heavy Industrial	120	1,000 sf GFA	0.68	\$1,436.23
Industrial Park	130	1,000 sf GFA	0.84	\$1,774.17
Manufacturing	140	1,000 sf GFA	0.75	\$1,584.08
Warehouse	150	1,000 sf GFA	0.45	\$950.45
Mini-Warehouse	151	1,000 sf GFA	0.22	\$464.66
Utilities	170	Employees	NA	
Wholesale	860	1,000 sf GFA	0.52	\$1,098.30

Source: City of Ashland, *Transportation System Development Charge Update*, [Economic & Financial Analysis, July 2016] Table 8.

3- 12.6.16 Public Hearing - Resolutions for New Water, Wastewater and Transportation System Development Charges_Atch 4.docxG:\legal\PAUL\FORMS\resolution form.wpd

EXHIBIT B

City of Ashland, Oregon

TRANSPORTATION: SYSTEM DEVELOPMENT CHARGE UPDATE

Prepared by:

ECONOMIC & FINANCIAL ANALYSIS

Vancouver, WA

July 2016

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INTRODUCTION

The City of Ashland retained Economic & Financial Analysis (EFA) to update the City's Transportation system development charge based on the *Transportation System Plan* (TSP) developed by Kittelson & Associates and adopted by the City in 2011.

This introduction is followed by a summary of the recommended changes to the Transportation SDC, a summary of the current SDC, and three sections that formulate the Transportation SDC update. The Appendix contains a listing of the ITE *Trip Generation Manual* for land uses for which ITE reports the PM Peak-Hour number of trips. We use the PM Peak-hour number of trips to both create the Transportation SDC and to assess the it for specific types of development.

SUMMARY

The current TSDC was developed in 1997 and last updated in 1999. The updated Transportation SDC is based on a new list of capital improvements, a new forecast of population and employment growth, and the measures of trip generation have been updated from the 5th edition of the Trip Generation Manual to the most currently available 9th edition. Two other key differences are made. First, the current SDC is based on measures of average daily trips (ADT) by land use while the updated TSDC is based on PM peak-hour trips by land use. Second, the current TSDC is applied to a select number of land uses with high-volume trip generation (e.g., fast-food, service stations) that effectively discounts the TSDC charged to them. This update eliminates these discounts which will have a significant impact on the TSDC for these select land uses.

The TSDC increases from \$214 per ADT to \$2,112 per PM peak-hour trip, a 887% increase. These TSDC rates are applied based on the number of trips by a specific land use. A single family residence produces 9.55 ADTs but only 1.02 PM peak-hour trips per day which results in a current TSDC of \$2,043 ($\214×9.55 ADT) and an updated TSDC of \$2,154 ($\$2,112 \times 1.02$ PM peak-hour trips), a 5% increase. For high-volume land uses such as service stations, the TSDC will increase from \$1,164 per pump to \$33,054, a 1910% increase. Table 8 below compares the current and updated TSDC for a wide range of land uses.

Discussions with the Systems Development Charge Review Committee and the Transportation Advisory Committee, recommended the final Transportation SDC should be \$2,112 per PM peak-hour trip with the changes noted above. The Transportation SDC is an improvement fee only. The current transportation system lacks sufficient excess capacity to develop a reimbursement fee. The Committee recommended the following changes to the original list and growth allocations by capital projects:

- Projects R41 (Ashland Street at Tolman Creek Road Streetscape) and R44 (Tolman Creek Road at Mistletoe Road Streetscape) are essentially one continuous project and should be allocated 50% to growth based on testimony from the City's Planning Director. The allocation reduces R41 from 100% to 50% and R41 was increased from 0% to 50%. These projects amount to \$250.68 of the total \$2,112 per trip SDC.
- All of the railroad crossing projects (X1 at 4th Street, X2 at Washington Street, and X3 at Normal Avenue) should be allocated 100% to growth. The committee concluded that these projects are

essential to improving access on both sides of the railroad rights of way. Together these projects amount to \$283.62 of the total \$2,112 per trip SDC.

CURRENT TRANSPORTATION SDC

The Current Transportation System Development Charge was adopted in 1997 and updated in 1999, seventeen years ago. The Current SDC has several weaknesses mostly due to its age in a changing environment. These include:

- Update of the capital improvements list and their costs
- Changes in travel patterns
- The primary source of trips per type of development is from the 5th edition of the *Trip Generation Manual* (Institute of Transportation Engineers, 1991), the “Manual”; the 9th edition was released in 2012. The current SDC also uses some unpublished estimates of travel for certain land uses that have since been updated in later editions of the Manual.
- In the current SDC several assumptions were made and categories of trips by land use were consolidated into a “short” list of possible land uses and their travel patterns. Later editions of the Manual provide a broader range of trip generation by land use.
- Also, the current SDC is based on average daily trips as was the original transportation master plan the SDC used as a source. The current transportation master plan is designed around PM peak-hour trip rates that more accurately determines the need for capital improvements.

In the following analysis and update, EFA bases this update to the transportation SDC on the current *Ashland Transportation System Plan* (2012 Kittelson & Associates, Inc.), the most recent *Trip Generation Manual* (Institute of Transportation Engineers, 9th Edition), 2012 land use and population data and forecasts, and recommendations by the Ashland Systems Development Charges Review Committee and the Ashland Transportation Advisory Committee.

The next three sections of this report develop the transportation SDC update:

- Forecast Number of PM Peak-Hour Trips is used to calculate the capital cost per trip of planned capital improvements
- Allocation of CIP List of Development contains the current list of capital improvements and the proportion that will benefit future developments
- Improvement Fee is the calculation of the updated transportation SDC

The current and proposed changes to the Transportation SDC does not include a reimbursement fee. The transportation network does not have sufficient excess capacity to meet the requirements for calculating a reimbursement fee which is based on the value of excess capacity. The current and proposed update the Transportation SDC is an improvement fee only which is based on increases in capacity.

FORECAST NUMBER OF PM PEAK-HOUR TRIPS

Ashland's TSP contains the following population and employment forecasts to determine the need for capital improvements. The expected growth reflects an aging population with fewer people in the workforce resulting in an increasing population/employment ratio. The planned improvements will accommodate this level of growth in population and employment.

Table 1 Population and Employment Growth

	2009	2034	Growth
Population	21,505	25,464	3,959
% Growth			18.4%
% Growth/Year			0.68%
Employment	13,284	15,496	2,212
% Growth			16.7%
% Growth/Year			0.62%
Population/Employment	1.62	1.64	

Source: Ibid., pp 60, 61.

To determine the numbers of trips now and in the future, we use trip generation data, jobs by type, and the current (2009) and forecast (2034) population and employment shown in Tables 2 and 3.

Table 2 Calculation of Residential and Employment Growth

	2009	2034	Growth
Households by Building Type [^]			
Single Family	9,271	10,535	1,264
Multiple Family	3,813	4,958	1,145
Total	13,084	15,493	2,409
Population	21,505	25,464	3,959
% Growth			18.4%
% Growth/Year			0.68%
Persons/Household	1.64	1.64	1.64
Employment*	13,284	17,220	3,936
% Growth			29.6%
% Growth/Year			1.04%
Population/Employment	1.62	1.48	1.01

[^]Ashland's utility billing system shows 9,271 single family residences and 3,813 multiple family residences and we assume the SF/MF split will remain constant through 2034.

*Employment growth derived from the TSP, page 59.

The ITE *Trip Generation Manual* (9th ed.) shows single-family residences produce 1.02 PM Peak-Hour trips and multiple family residences produce 0.67 PM Peak-Hour trips. Employees average 2 PM Peak-Hour Trips per employee.¹ The Appendix contains the *Trip Generation Manual* detailed list of the PM Peak-Hour trip rates for various uses.

Table 3 Calculation of PM Peak-Hour Trips

	2009	2034	Growth
PM Peak-Hour Trips			
Residential			
Single Family—1.02 trips	9,456	10,746	1,290
Multiple Family—0.68 trips	2,555	3,322	767
Total Residential PM P-H Trips	12,011	14,068	2,057
Employment	13,284	17,220	3,936
PM P-H Trips/Employee	2.00	2.00	2.00
Total PM P-H Trips	26,568	34,440	7,872
Total PM P-H Trips	38,579	48,508	9,929

Source: Compiled by EFA from City of Ashland Comprehensive Plan.

This update uses *PM peak-hour trips* to both determine the aggregate number of these trips within the boundaries of the TSP and to apply the transportation SDC to specific developments. The current SDC is based on *total average daily trips* and is applied to specific developments based on total average daily trips with adjustments for *equivalent length new daily trips* (ELNDT) for selected land uses.² Table 4 shows the schedule of the current SDC by broad categories of land uses. The list in Table 4 is a subset of land uses in the appendix to this report. The appendix to this report should be used to apply this updated SDC.

The PM Peak-hour trip rates were used to better reflect the demands placed on the roadways. The TSP is based on peak-hour vehicle movements through intersections. The update also drops the use of ELNDT. Since the current SDC was developed in 1999, the ITE Trip Generation Manual has been expanded to more uses and several categories of uses have been updated or changed with newer data.

¹ EFA compiled employment data from the City's utility billing system and business licenses, and from the US Census Bureau's survey of business. We matched trip generation data from the ITE manual with the employment by type of business to calculate the average.

² ITE defines the average weekday trip rate as "... the weighted weekday (Monday through Friday) average vehicle trip generation rate during a 24-hour period." ITE defines the average PM Peak-Hour trip rates as the peak hour of the generator between 4:00 p.m. and 6:00 p.m. [ITE, *Trip Generation Manual* Volume 1 User's Guide and Handbook, 9th ed., page 7]. ITE defines trip length and linked trips as measures affecting traffic on streets adjacent to a particular development. Only 22 of the more than 200 land uses in the ITE manual have been statistically measured for trip length and pass-by trips, and for this reason and the poor correlation with trip rates, the ITE cautions analysts in the use of these data [Ibid., page 33].

Table 4 Comparison of Average Weekday Trip and PM Peak-Hour Trips for Selected Land Uses

ITE Land Use	ITE Land Use Code	Unit(*)	Current SDC Trip Rates				Updated SDC	
			Average Weekday Trip Rate	Equivalent Length Daily Trip	Length Adjustments	New Linked Trip Rate	Adjusted Avg. Weekday Trip Rate	PM Peak-Hour Trip Rate
RESIDENTIAL								
Single Family Multi-Family	210	Dwelling Unit	9.55	1.00	1.00	1.00	9.55	1.02
Multi-Family	220	Dwelling Unit	6.47	0.97	0.97	1.00	6.28	0.67
Residential Condominium	230	Dwelling Unit	5.86	0.97	0.97	1.00	5.68	0.52
Manufactured	240	Dwelling Unit	4.81	0.97	0.97	1.00	4.67	0.60
Recreational Home/Condo	260	Dwelling Unit	3.16	1.00	1.00	1.00	3.16	0.31
INSTITUTIONAL								
Truck Terminals	30	1,000 sf GFA	9.85	1.12	1.12	1.00	11.03	0.83
Bus Depot		1,000 sf GFA	25.00	1.00	1.00	1.00	25.00	NA
Park								
City		Acres	50.00	0.90	0.90	1.00	45.00	4.50
Golf Course	430	Holes	37.59	0.91	0.91	1.00	34.21	3.56
Movie Theatre	443	Seats	1.76	0.46	0.46	1.00	0.81	0.32
Racquet Club	492	1,000 sf GFA	17.14	0.51	0.51	1.00	8.74	0.84
Military Base	501	Employee	1.78	1.00	1.00	1.00	1.78	0.30
Elementary School	520	Student	1.09	1.08	1.08	1.00	1.18	0.28
Junior High School		Student	1.20	1.08	1.08	1.00	1.30	0.30
High School	530	Student	1.38	1.08	1.08	1.00	1.49	0.29
Junior/Community College	540	Student	1.33	1.08	1.08	1.00	1.44	0.12
Church	560	1,000 sf GFA	9.32	1.08	1.08	1.00	10.07	0.94
Day Care Center/Preschool	565	Student	4.63	0.23	0.23	1.00	1.06	0.84
Library	590	1,000 sf GFA	45.50	0.49	0.49	1.00	22.30	7.20
Hospital	610	1,000 sf GFA	16.78	0.95	0.95	1.00	15.94	1.16
Nursing Home	620	Occupied Bed	2.60	0.95	0.95	1.00	2.47	0.37
BUSINESS & COMMERCIAL								
Hotel/Motel	310	Occupied Room	8.70	0.69	0.69	0.75	4.50	0.74
Building Materials/Lumber	812	1,000 sf GFA	30.56	0.49	0.49	0.75	11.23	5.56

City of Ashland, Transportation System Development Charge

Table 4

ITE Land Use	ITE Land Use Code	Unit(*)	Current SDC Trip Rates				Updated SDC	
			Average Weekday Trip Rate	Equivalent Length Daily Trip	Length New Adjustments Linked Trip	Adjusted Ave. Weekday Trip Rate	PM Peak-Hour Trip Rate	
Specialty Retail Center	814	1,000 sf GFA	40.67	0.49	0.75	14.95	5.02	
Discount Stores	815	1,000 sf GFA	70.13	0.49	0.75	25.77	5.57	
Hardware/Paint Stores	816	1,000 sf GFA	51.29	0.49	0.75	18.85	4.74	
Nursery-Retail	817	1,000 sf GFA	36.08	0.49	0.75	13.26	9.04	
Shopping Center	820							
(under 50,000 sf GFA)	820	1,000 sf GFA	167.59	0.31	0.28	14.55	3.90	
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	91.65	0.33	0.50	15.12	3.90	
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	70.67	0.40	0.61	17.24	3.90	
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	54.50	0.49	0.67	17.89	3.90	
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	46.81	0.49	0.71	16.29	3.90	
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	42.02	0.49	0.73	15.03	3.90	
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	38.65	0.49	0.80	15.15	3.90	
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	205.36	0.19	0.75	29.26	18.49	
Fast Food Restaurant	833	1,000 sf GFA	786.22	0.09	0.51	36.09	47.30	
New Car Sales	841	1,000 sf GFA	47.91	0.60	0.75	21.56	2.80	
Service Station	844	Gasoline Pump	142.54	0.07	0.77	7.68	15.65	
Supermarket	850	Employee	87.82	0.14	0.46	5.66	8.37	
Convenience Market	851	1,000 sf GFA	737.99	0.08	0.35	20.66	36.22	
Convenience Market w/ Gas Pump	853	Gasoline Pump	194.34	0.32	0.22	13.68	19.98	
Apparel Store	870	1,000 sf GFA	31.27	0.49	0.75	11.49	4.20	
Furniture Store	890	1,000 sf GFA	4.34	0.49	0.75	1.59	0.53	
Bank/Savings: Walk-in	911	1,000 sf GFA	140.61	0.17	0.75	17.93	NA	
Bank/Savings: Drive-in	912	1,000 sf GFA	265.21	0.17	0.55	24.80	26.69	
OFFICE								
Clinic	630	1,000 sf GFA	23.79	0.53	1.00	12.61	NA	
General Office								
(Under 100,000 sf GFA)	710	1,000 sf GFA	16.58	0.65	1.00	10.78	1.49	
(100,000-199,999 sf GFA)	710	1,000 sf GFA	14.03	0.65	1.00	9.12	1.49	
(200,000 sf GFA and over)	710	1,000 sf GFA	11.85	0.65	1.00	7.70	1.49	

Table 4

ITE Land Use	ITE Land Use Code	Unit(*)	Current SDC Trip Rates			Updated SDC	
			Average Weekday Trip Rate	Equivalent Length New Daily Trip Adjustments	Adjusted Avg. Weekday Trip Rate	PM Peak-Hour Trip Rate	
Medical Office Building	720	1,000 sf GFA	34.17	0.53	1.00	18.11	4.27
Government Office Bldg.	730	1,000 sf GFA	68.93	0.96	1.00	66.17	1.49
State Motor Vehicles Dept	731	1,000 sf GFA	166.02	0.96	1.00	159.38	19.93
U.S. Post Office	732	1,000 sf GFA	87.12	0.96	1.00	83.64	14.67
Research Center	760	1,000 sf GFA	7.70	0.67	1.00	5.16	1.07
Business Park	770	1,000 sf GFA	14.37	0.67	1.00	9.63	1.26
INDUSTRIAL							
General Light Industrial	110	1,000 sf GFA	6.97	1.12	1.00	7.81	1.08
General Heavy Industrial	120	1,000 sf GFA	1.50	1.12	1.00	1.68	0.68
Industrial Park	130	1,000 sf GFA	6.97	1.12	1.00	7.81	0.84
Manufacturing	140	1,000 sf GFA	3.85	1.12	1.00	4.31	0.75
Warehouse	150	1,000 sf GFA	4.88	1.12	1.00	5.47	0.45
Mini-Warehouse	151	1,000 sf GFA	2.61	0.47	1.00	1.23	0.22
Utilities	170	Employees	1.06	1.00	1.00	1.06	NA
Wholesale	860	1,000 sf GFA	6.73	0.49	1.00	3.30	0.52

*Abbreviations include: GFA = Gross Floor Area and sf = square feet.
 The ratio between GFA and gross leasable area (GLA), as cited for shopping center in ITE Trip Generation is 1.5: 1. The ITE Trip Generation rates are factored up by 14% to derive GFA weekday rates.

ALLOCATION OF CIP LIST TO DEVELOPMENT

Table 4 is a summary of capital improvements from the 2012 *Transportation System Plan*. A full list of the projects is included at the end of this chapter. The projects are categorized as: General Policies & Studies, Pedestrian, Bicycle, Transit, Intersection & Roadway, and Railroad Crossing. Each project is identified by its priority. High priority projects are planned for implementation in the next five years; Medium priority in the following ten years, and Low priority for some time after fifteen years. Development Driven projects will be built only if and when private development occurs in the area to be served by these improvements.

Table 5 Summary of TSP Projects

Project Type	Priority (in years)			Development Driven	Total Improvements
	High 0-5	Medium 5-15	Low 15-25		
General Policies & Studies	100,000	30,000	0	0	130,000
Pedestrian	8,550,000	4,050,000	2,975,000	0	15,575,000
Bicycle	3,230,000	1,150,000	570,000	330,000	5,280,000
Transit	1,000,000	2,750,000	3,500,000	0	7,250,000
Intersection & Roadway Improvements	8,948,000	7,078,000	3,725,000	23,555,000	43,306,000
Railroad Crossing	2,816,000	0	0	2,816,253	5,632,253
2012 CIP Totals	\$24,644,000	\$15,058,000	\$10,770,000	\$26,701,253	\$77,173,253

As part of the TSP process, the advisory committee recommended that only High, Medium, and Development Driven projects be included in the calculation of the SDC and to exclude the Low priority projects. As a result, Table 6 shows that \$60.317 million of the \$77.173 million of projects is considered for the SDC improvement fee.

Each project in each category was evaluated for its benefit to growth. As a general rule, projects were considered to provide about 18.4% of benefit to future development which is the expected population growth through 2034. Some projects such as those in the Intersection & Roadway Improvements category and projects in the Development Driven category are either new roadways or roadway improvements that primarily service currently vacant areas of the City and primarily benefit future development.

The City's Transportation Commission recommended excluding \$3.27 million of improvements from the SDC calculations. Also, the City added an extension of East Main Street between Walker and Clay Streets. These corrections and one addition are shown as ~~strikeouts~~ or **bold** in Table 7 below.

In sum, Table 6 shows only \$20.971 million of the \$77.173 million of project costs are allocated to growth, which is the cost basis for the SDC improvement fee.

Table 6 Cost Allocation to the SDC Improvement Fee

Project Type	Total Improvements	High, Medium Development Driven	% Benefit Growth	Allocation to Growth
General Policies & Studies	130,000	130,000	18.5%	24,000
Pedestrian	15,575,000	11,200,000	18.4%	2,061,000
Bicycle	5,280,000	3,940,000	18.4%	725,000
Transit	7,250,000	3,750,000	18.4%	690,000
Intersection & Roadway Improvements	43,306,000	38,481,000	38.1%	14,655,000
Railroad Crossing	5,632,253	2,816,253	100.0%	2,816,000
2012 CIP Totals	\$77,173,253	\$60,317,253	34.8%	\$20,971,000

IMPROVEMENT FEE

The improvement fee is simply the allocation of cost to growth divided by the number of new PM Peak-Hour trips, $\$20.971 \text{ million} \div 9,929 \text{ PM Peak-Hour trips} = \$2,112/\text{PM Peak-Hour trip}$. The transportation SDC improvement fee for a new single-family house will be \$2,154 ($\$2,112 \times 1.02 \text{ PM Peak-hour trips}$)—\$110.65 (5%) more than the current \$2,043.70.

Table 7 shows each project, its priority, and cost contribution the improvement fee system development charge. Table 8 compares the current and updated SDC for a cross-section of land uses.

Table 8 shows that residential land uses are only modestly impacted by the updated SDC. The updated SDC for commercial land uses increase more, particularly those that have high trip rates such as service stations and fast food restaurants, and convenience markets. These large increases are due to two factors.

First the current SDC relies on total average daily trip rates which are generally greater than PM peak-hour trip rates, but the SDC itself increased from \$214/average daily trips to \$2,112/PM Peak-hour trips.

Second, the current SDC relies on equivalent length new daily trip (ELNDT) adjustments that reduce the number of trips charged by a significant number. For example, Service Stations have an ADT of 142.54 trips per gas pump; however, these are discounted by ELNDT to only 7.68 trips per day which results in an SDC of \$1,644.14/pump. Had ELNDT not been applied the current SDC would have been \$30,503.56 per pump. The updated SDC uses 15.65 PM peak-hour trips per gas pump at \$2,154/PM peak-hour trip or \$31,410.38/pump.

Table 7 Transportation Capital Improvements Plan, 2013 Dollars

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
S	2	NA	Downtown Parking & Multi-Modal Circulation Study	100,000	18.4%	18,000	1.81
S	1	NA	Funding Sources Feasibility Study	30,000	18.4%	6,000	0.60
Total Policies & Studies Projects				\$130,000	18.5%	\$24,000	\$2.41
P	6	Orange Ave	N. Main St to Oak St	250,000	18.4%	46,000	4.63
P	7	Hersey St	Thornton Way to N. Main St	750,000	18.4%	138,000	13.90
P	9	Maple St	Chestnut St to 150' E of Rock St	100,000	18.4%	18,000	1.81
P	10(1)	Scenic Dr	Maple St to Wimer St	250,000	18.4%	46,000	4.63
P	18	A St	Oak St to 100' W of 6th St	250,000	18.4%	46,000	4.63
P	22	N. Mountain Ave	100' S of Village Green Way to Iowa St	450,000	18.4%	83,000	8.36
P	25	Walker Ave	950' N of Iowa St to Ashland St	750,000	18.4%	138,000	13.90
P	27(1)	Walker Ave	Oregon St to Woodland Dr	200,000	18.4%	37,000	3.73
P	28(1)	Ashland St	S. Mountain Ave to Morton St	450,000	18.4%	83,000	8.36
P	38(1)	Clay St	Siskiyou Blvd to Mohawk St	300,000	18.4%	55,000	5.54
P	57(1)	Tolman Creek Rd	Siskiyou Blvd to west side City Limits	425,000	18.4%	78,000	7.86
P	58(1)	Helman St	Hersey St to Van Ness Ave	100,000	18.4%	18,000	1.81
P	1	N. Main St/Hwy 99	N. Main St to Schofield St	50,000	18.4%	9,000	0.91
O	1	NA	Travel Smart Education, Targeted Marketing Program	45,000	18.4%	8,000	0.81

City of Ashland, Transportation System Development Charge

Table 7		Eligible SDC Projects				
Type*	#	Street	Description	High, Medium Development Driven	SDC Eligible Project Costs	SDC By Project
P	23	Wightman St	200' N of E. Main St to 625' S of E. Main St	400,000	74,000	7.45
P	5	Glenn St/Orange Ave	N. Main St to 175' E of Willow St	200,000	37,000	3.73
P	17	Beaver Slide	Water St to Lithia Way	50,000	9,000	0.91
P	59	Garfield St	E. Main St to Siskiyou Blvd	750,000	138,000	13.90
P	60	Lincoln St	E. Main St to Iowa St	450,000	83,000	8.36
P	61	California St	E. Main St to Iowa St	500,000	92,000	9.27
P	63	Liberty St	Siskiyou Blvd to Ashland St	650,000	120,000	12.09
P	65	Faith Ave	Ashland St to Siskiyou Blvd	350,000	64,000	6.45
P	66	Diane St	Clay St to Tolman Creek Rd	20,000	4,000	0.40
P	67	Frances Lane	Siskiyou Blvd to Oregon St	10,000	2,000	0.20
P	68	Carol St	Patterson St to Hersey St	150,000	28,000	2.82
P	70	Park St	Ashland St to Siskiyou Blvd	650,000	120,000	12.09
P	4	Laurel St	Nevada St to Orange Ave	500,000	92,000	9.27
P	37	Clay St	Faith Ave to Siskiyou Blvd	1,000,000	184,000	18.53
P	8	Wimer St	Thornton Way to N. Main St	800,000	147,000	14.81
P	62	Quincy St	Garfield St to Wightman St	150,000	28,000	-
P	64	Water St	Van Ness Ave to B St	250,000	46,000	4.63
P	72	C St	Fourth St to Fifth St	100,000	18,000	1.81
P	73	Barbara St	Jaquelyn St to Tolman Creek Rd	100,000	18,000	-
P	74	Roca St	Ashland St to Prospect St	250,000	46,000	-
P	75	Blaine St	Morton St to Morse Ave	100,000	18,000	-
P	78	Patterson St	Crispin St to Carol St	100,000	18,000	-
P	79	Harrison St	Iowa St to Holly St	100,000	18,000	-
P	80	Spring Creek Dr	Oak Knoll Dr to Road End	350,000	64,000	-
P	81	Bellview Ave	Green Meadows Way to Siskiyou Blvd	250,000	46,000	-
P	10(2)	Scenic Dr	Wimer St to Grandview Dr	-	-	-

City of Ashland, Transportation System Development Charge

Table 7		Eligible SDC Projects				
Type*	#	Street	Description	High, Medium Development Driven	SDC Eligible Project Costs	SDC By Project
				% Growth		
P	27(2)	Walker Ave	Woodland Dr to Peachey Rd	-	-	-
P	28(2)	Ashland St	Morton St to Guthrie St	-	18.4%	-
P	38(2)	Clay St	Mohawk St to Southern Terminus	-	18.4%	-
P	42	S. Mountain Ave	Ashland St to Prospect St	-	18.4%	-
P	54	Iowa St	Terrace St to Auburn St	-	18.4%	-
P	57(2)	Tolman Creek Rd	Siskiyou Blvd to east side City Limits	-	18.4%	-
P	58(2)	Helman St	1500' N of Orange Ave to Orange Ave	-	18.4%	-
P	40	Hillview Dr	Siskiyou Blvd to Peachey Rd	-	18.4%	-
P	71	Orchard St	Sunnyview Dr to Westwood St	-	18.4%	-
Total Pedestrian Projects				\$11,200,000	\$0	\$2,061,000
B	2	Wimer St	Scenic Dr to N. Main St	20,000	18.4%	4,000
B	7	Iowa St	Terrace St to Road Terminus; S. Mountain Ave to Walker Ave	240,000	18.4%	44,000
B	10	S. Mountain Ave	Ashland St to E. Main St	120,000	18.4%	22,000
B	11	Wightman St	E. Main St to Siskiyou Blvd	60,000	18.4%	11,000
B	13	B St	Oak St to N. Mountain Ave	80,000	18.4%	15,000
B	16	Lithia Way	Oak St to Helman St	110,000	18.4%	20,000
B	19	Helman St	Nevada St to N. Main St	80,000	18.4%	15,000
B	26	Normal Ave	E. Main St to Siskiyou Blvd	190,000	18.4%	35,000
B	29	Walker Ave	Siskiyou Blvd to Peachey Rd	40,000	18.4%	7,000
B	17	Main St	Helman St to Siskiyou Blvd	50,000	18.4%	9,000
TR	1	Northside Trail	Orchid Ave to Tolman Creek Rd	2,000,000	18.4%	368,000
O	4	NA	Retrofit Bicycle Program	50,000	18.4%	9,000
				\$207,60		

Table 7			Eligible SDC Projects				
Type*	#	Street	Description	High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
B	5	Maple/Scenic/Nutley	N. Main St to Winburn Way	110,000	18.4%	20,000	2.01
B	31	Indiana St	Siskiyou Blvd to Oregon St	20,000	18.4%	4,000	0.40
B	33	8th St	A. St to E. Main St	20,000	18.4%	4,000	0.40
B	38	Oregon/Clark St	Indiana St to Harmony Lane	40,000	18.4%	7,000	0.71
B	3	Nevada St	Vansant St to N. Mountain Ave	230,000	18.4%	42,000	4.23
B	9	Ashland St	Morton St to University Way	30,000	18.4%	6,000	0.60
B	25	Toiman Creek Rd	Siskiyou Blvd to Green Meadows Way	100,000	18.4%	18,000	1.81
B	37	Clay St	Siskiyou Blvd to Mohawk St	20,000	18.4%	4,000	0.40
B	18	N. Main St	Jackson Rd to Helman St	260,000	18.4%	48,000	4.83
TR	2	New Trail	Clay St to Tolman Creek Rd	400,000	18.4%	74,000	-
B	39	Glenn St/Orange Ave	N. Main St to Proposed Trail	40,000	18.4%	7,000	0.71
B	40	Laurel St	Orange St to Nevada St	30,000	18.4%	6,000	0.60
B	20	Water St	Hersey St to N. Main St	-	18.4%	-	-
B	14	A St	Oak St to 6th St	-	18.4%	-	-
B	21	Oak St	Nevada St to E. Main St	-	18.4%	-	-
B	22	Clay St	E. Main St to Ashland St	-	18.4%	-	-
B	24	Clover Lane	Ashland St to Proposed Bike Path	-	18.4%	-	-
B	30	Ashland St	I-5 Exit 14 SB to Hwy 66	-	18.4%	-	-
B	35	Railroad Property	Proposed Bike Path to N. Mountain Ave	-	18.4%	-	-
B	4	Glendower St	Bear Creek Greenway to Nevada St	-	18.4%	-	-
B	6	Winburn Way	Calle Guanajuato to Nutley St	-	18.4%	-	-
B	8	Morton St	E. Main St to Ashland St	-	18.4%	-	-
B	12	Wightman St	Road End to E. Main St	-	18.4%	-	-
B	28	Clay St	Rail Line to Siskiyou Blvd	-	18.4%	-	-
B	34	1st St	A St to E. Main St	-	18.4%	-	-
TR	3	New Trail	New Trail to Hersey St	220,000	18.4%	40,000	-

City of Ashland, Transportation System Development Charge

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
TR	4	New Trail	A-St-to-Clear-Creek-Dr-Extension	110,000	18.4%	20,000	-
		Total Bicycle Projects		\$3,940,000	18.4%	\$725,000	\$73.01
L	0	NA	Establish Transit Hubs	1,000,000	18.4%	184,000	18.53
	1	NA	Support Circulator Svc	2,750,000	18.4%	506,000	50.96
	1	NA	Support SOU Svc	-	18.4%	-	-
		Total Transit Projects		\$3,750,000	18.4%	690,000	\$69.49
S	10	Siskiyou Blvd	Highway 66 to Beach St	35,000	18.4%	6,000	0.60
S	3	N. Main St (OR 99)	Helman St to Sheridan St	75,000	18.4%	14,000	1.41
S	5	Siskiyou Blvd	Ashland St to Tolman Creek Rd	75,000	18.4%	14,000	1.41
S	6	Ashland St (OR 66)	Siskiyou Blvd to Tolman Creek Rd	75,000	18.4%	14,000	1.41
S	9	Ashland St (OR 66)	Clay St to Washington St	20,000	18.4%	4,000	0.40
S	7	E. Main St	Siskiyou Blvd to Wightman St	-	18.4%	-	-
		Studies Subtotal		\$280,000	18.6%	52,000	\$5.23
R	17	E. Nevada St Ext	Bear Creek to Kestrel Pkwy	5,481,000	18.4%	1,009,000	101.62
R	40	Walker Ave Festival St	Walker Ave to Normal St	780,000	18.4%	144,000	14.50
R	35	N. Main St	N. Main St Temporary Diet	-	0.0%	-	-
R	5	Siskiyou Blvd (OR 66)	Lithia Way (OR 99 NB) / E. Main St	50,000	18.4%	9,000	0.91
R	6	Siskiyou Blvd (OR 66)	Tolman Creek Rd	61,000	18.4%	11,000	1.11
R	8	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (realignment)	706,000	18.4%	130,000	13.09

City of Ashland, Transportation System Development Charge

Table 7

Type*	#	Street	Description	Eligible SDC Projects			
				High, Medium Development Driven	% Growth	SDC Eligible Project Costs	SDC By Project
R	25	Washington St Ext	Washington St Tolman Creek Rd	1,835,000	100.0%	1,835,000	184.81
R	19	Normal Ave Ext	Normal Ave to E. Main St	2,705,000	18.4%	498,000	50.16
R	36	N. Main St	N. Main St Permanent Diet	200,000	18.4%	37,000	3.73
R	38	Ashland St	Siskiyou Blvd to Walker Ave Streetscape	1,100,000	18.4%	202,000	-
R	2	N. Main St	Wimer St / Hensey St	-	18.4%	-	-
R	9	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (roundabout)	-	18.4%	-	-
R	11	Lithia Way (OR 99 NB)	Oak Street	-	18.4%	-	-
R	45	New Roadway (F)	Washington St to New Roadway (E)	1,199,000	25.0%	300,000	30.21
R	39	Ashland St	Walker Ave to Normal Ave Streetscape	1,300,000	18.4%	239,000	24.07
R	43	New Roadway (E)	Mistletoe Rd to Siskiyou Blvd (OR 99)	4,322,000	75.0%	3,242,000	326.52
R	44	Tolman Creek	Mistletoe Rd Streetscape	3,478,000	50.0%	1,739,000	175.14
R	13	Siskiyou Blvd (OR 99)	Park St	296,000	18.4%	54,000	5.44
R	41	Ashland St	Tolman Creek Rd Streetscape	1,500,000	50.0%	750,000	75.54
R	42	E. Main St	N. Mountain Ave Streetscape	1,500,000	18.4%	276,000	27.80
R	12	Siskiyou Blvd (OR 99)	Sherman St	391,000	18.4%	72,000	7.25
R	14	Siskiyou Blvd (OR 99)	Terra Ave / Faith Ave	216,000	18.4%	40,000	4.03
R	24	Clear Creek Dr Ext	Oak St to N. Mountain Ave	2,505,000	50.0%	1,253,000	126.20
R	26	New Roadway (D)	E. Main St to Ashland St (OR 66)	2,422,000	0.0%	-	-
R	29	Washington St Ext	Washington St to Benson Way	1,301,000	75.0%	976,000	98.30
R	31	Wimer St Ext	Wimer St to Ashland Mine Rd	3,125,000	18.4%	575,000	57.91
R	20	Creek Dr Ext	Meadow Dr to Normal Ave	-	-	-	-
R	22	New Roadway (B)	Clay St to Tolman Creek Rd	-	-	-	-
R	23	New Roadway (C)	McCall Dr to Engle St	-	-	-	-
R	27	Grizzly Dr Ext	Jacquelyn St to Clay St	-	-	-	-
R	28	Mountain View Dr Ext	Parkside Dr to Helman St	-	-	-	-
R	30	Kirk Lane Ext	Kirk Lane to N. Mountain Ave	-	-	-	-

Table 7		Eligible SDC Projects				
Type*	#	Street	Description	High, Medium Development Driven	SDC Eligible Project Costs	SDC By Project
R	32	Kestrel Pkwy Ext	Kestrel Pkwy to N. Mountain Ave (at Nepenthe Rd)	-	-	-
R	34	Railroad Property	Existing Adjacent Streets to End of Property	-	-	-
R	46	Ivy Lane Ext	Ivy Lane to Waterline Rd	-	-	-
R	47	Mary Jane Ave Ext	Mary Jane Ave to S. UGB then E. to Clay St	-	-	-
R	48	Forest St Ext	Between Existing Segments of Forest St	-	-	-
R	49	Croman Mill District	Croman Mill District Connectivity	-	-	-
R	50	E. Main St	Between Walker & Clay Streets	2,828,000	1,414,000	142.41
Total Intersection & Roadway Improvements				38,201,000	14,603,000	\$1,470.75
Total Roadway & Intersection Improvements				\$38,481,000	\$14,655,000	\$1,475.98
X	1	4th St	Crossing	500,000	500,000	50.36
X	2	Washington St	Crossing	1,000,000	1,000,000	100.72
X	3	Normal Ave	Crossing Upgrade	1,316,253	1,316,000	132.54
Total Railroad Crossing Projects				\$2,816,253	\$2,816,000	\$283.62
Grand Total				\$60,317,253	\$20,971,000	\$2,112

*Type and # correspond to those in the TSP.
 - No cost estimate; assumes improvements will be paid by developer

Table 8 Comparison of the Current and Updated SDCs for Selected Land Uses

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	
			Adjusted Avg. Weekday Trip	\$/ADT	PM Peak-hour trip	S/PM Peak-hour trip		
			Rate	\$214	Rate	\$2,112		
RESIDENTIAL								
Single Family Multi-Family	210	Dwelling Unit	9.55	2,043.70	1.02	\$2,154.35	\$110.65	5%
Multi-Family	220	Dwelling Unit	6.28	1,343.04	0.67	\$1,415.11	\$72.07	5%
Residential Condominium	230	Dwelling Unit	5.68	1,216.42	0.52	\$1,098.30	(\$118.12)	-10%
Manufactured	240	Dwelling Unit	4.67	998.46	0.60	\$1,267.27	\$268.81	27%
Recreational Home/Condo	260	Dwelling Unit	3.16	676.24	0.31	\$654.75	(\$21.49)	-3%
INSTITUTIONAL								
Truck Terminals	30	1,000 sf GFA	11.03	2360.85	0.83	\$1,753.05	(\$607.80)	-26%
Bus Depot		1,000 sf GFA	25.00	5350	NA			
Park	411	Acres	2.01	429.5	4.50	\$9,504.50	\$9,075.00	2113%
City		Acres	45.00	9630	4.50	\$9,504.50	(\$125.50)	-1%
Neighborhood		Acres	4.50	963	4.50	\$9,504.50	\$8,541.50	887%
Amusement		Acres	72.00	15408	4.50	\$9,504.50	(\$5,903.50)	-38%
Golf Course	430	Holes	34.21	7,320.28	3.56	\$7,519.11	\$198.83	3%
Movie Theatre	443	Seats	0.81	173.25	0.32	\$675.88	\$502.63	290%
Racquet Club	492	1,000 sf GFA	8.74	1,870.66	0.84	\$1,774.17	(\$96.49)	-5%
Military Base	501	Employee	1.78	380.92	0.30	\$633.63	\$252.71	66%
Elementary School	520	Student	1.18	252.08	0.28	\$591.39	\$339.31	135%
Junior High School		Student	1.30	277.34	0.30	\$633.63	\$356.29	128%
High School	530	Student	1.49	318.95	0.29	\$612.51	\$293.56	92%
Junior/Community College	540	Student	1.44	307.39	0.12	\$253.45	(\$53.94)	-18%

Table 8

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference		
			Adjusted Avg-Weekday Trip Rate	\$/ADT	PM Peak-hour trip Rate	\$/PM Peak-hour trip			
Church	560	1,000 sf GFA	10.07	2151.04	0.94	\$1,985.38	(\$165.66)	-8%	
Day Care Center/Preschool	565	Student	1.06	229.00	0.84	\$1,774.17	\$1,545.17	675%	
Library	590	1,000 sf GFA	22.30	4,763.00	7.20	\$15,207.19	\$10,444.19	219%	
Hospital	610	1,000 sf GFA	15.94	3,406.00	1.16	\$2,450.05	(\$955.95)	-28%	
Nursing Home	620	Occupied Bed	2.47	528.58	0.37	\$781.48	\$252.90	48%	
BUSINESS & COMMERCIAL									
Hotel/Motel	310	Occupied Room	4.50	963.48	0.74	\$1,562.96	\$599.48	62%	
Building Materials/Lumber	812	1,000 sf GFA	11.23	2,403.39	5.56	\$11,743.33	\$9,339.94	389%	
Specialty Retail Center	814	1,000 sf GFA	14.95	3,198.49	5.02	\$10,602.79	\$7,404.30	231%	
Discount Stores	815	1,000 sf GFA	25.77	5,515.37	5.57	\$11,764.45	\$6,249.08	113%	
Hardware/Paint Stores	816	1,000 sf GFA	18.85	4,033.70	4.74	\$10,011.40	\$5,977.70	148%	
Nursery-Retail	817	1,000 sf GFA	13.26	2,837.51	9.04	\$19,093.47	\$16,255.96	573%	
Shopping Center	820								
(under 50,000 sf GFA)	820	1,000 sf GFA	14.55	3,113.02	3.90	\$8,237.23	\$5,124.21	165%	
(50,000 - 99,999 sf GFA)	820	1,000 sf GFA	15.12	3,236.16	3.90	\$8,237.23	\$5,001.07	155%	
(100,000 - 199,999 sf GFA)	820	1,000 sf GFA	17.24	3,690.10	3.90	\$8,237.23	\$4,547.13	123%	
(200,000 - 299,999 sf GFA)	820	1,000 sf GFA	17.89	3,828.96	3.90	\$8,237.23	\$4,408.27	115%	
(300,000 - 399,999 sf GFA)	820	1,000 sf GFA	16.29	3,485.03	3.90	\$8,237.23	\$4,752.20	136%	
(400,000 - 499,999 sf GFA)	820	1,000 sf GFA	15.03	3,216.54	3.90	\$8,237.23	\$5,020.69	156%	
(500,000 - 599,999 sf GFA)	820	1,000 sf GFA	15.15	3,242.27	3.90	\$8,237.23	\$4,994.96	154%	
High Turnover Sit-Down Restaurant	832	1,000 sf GFA	29.26	6,262.45	18.49	\$39,052.91	\$32,790.46	524%	
Fast Food Restaurant	833	1,000 sf GFA	36.09	7,722.72	47.30	\$99,902.80	\$92,180.08	1194%	

City of Ashland, Transportation System Development Charge

Table 8

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	
			Adjusted Avg. Weekday Trip Rate	\$/ADT	PM Peak-hour trip Rate	\$/PM Peak-hour trip	\$	%
				\$214		\$2,112		
New Car Sales	841	1,000 sf GFA	21.56	4,613.73	2.80	\$5,913.91	\$1,300.18	28%
Service Station	844	Gasoline Pump	7.68	1,644.14	15.65	\$33,054.52	\$31,410.38	1910%
Supermarket	850	Employee	5.66	1,210.30	8.37	\$17,678.36	\$16,468.06	1361%
Convenience Market	851	1,000 sf GFA	20.66	4,422.04	36.22	\$76,500.62	\$72,078.58	1630%
Convenience Market w/ Gas Pump	853	Gasoline Pump	13.68	2,927.85	19.98	\$42,199.96	\$39,272.11	1341%
Apparel Store	870	1,000 sf GFA	11.49	2,459.23	4.20	\$8,870.86	\$6,411.63	261%
Furniture Store	890	1,000 sf GFA	1.59	341.32	0.53	\$1,119.42	\$778.10	228%
Bank/Savings: Walk-in	911	1,000 sf GFA	17.93	3,836.54	NA			
Bank/Savings: Drive-in	912	1,000 sf GFA	24.80	5,306.59	26.69	\$56,372.22	\$51,065.63	962%
OFFICE								
Clinic	630	1,000 sf GFA	12.61	2,698.26	NA			
General Office								
(Under 100,000 sf GFA)	710	1,000 sf GFA	10.78	2,306.28	1.49	\$3,147.04	\$840.76	36%
(100,000-199,999 sf GFA)	710	1,000 sf GFA	9.12	1,951.57	1.49	\$3,147.04	\$1,195.47	61%
(200,000 sf GFA and over)	710	1,000 sf GFA	7.70	1,648.34	1.49	\$3,147.04	\$1,498.70	91%
Medical Office Building	720	1,000 sf GFA	18.11	3,875.56	4.27	\$9,018.71	\$5,143.15	133%
Government Office Bldg.	730	1,000 sf GFA	66.17	14,160.98	1.49	\$3,147.04	(\$11,013.94)	-78%
State Motor Vehicles Dept	731	1,000 sf GFA	159.38	34,107.15	19.93	\$42,094.35	\$7,987.20	23%
U.S. Post Office	732	1,000 sf GFA	83.64	17,897.93	14.67	\$30,984.65	\$13,086.72	73%
Research Center	760	1,000 sf GFA	5.16	1,104.03	1.07	\$2,259.96	\$1,155.93	105%
Business Park	770	1,000 sf GFA	9.63	2,060.37	1.26	\$2,661.26	\$600.89	29%
INDUSTRIAL								

Table 8

ITE Land Use	ITE Land Use Code	Unit(*)	Current		Update		Difference	
			Adjusted Avg. Weekday Trip	\$ / ADT	PM Peak-hour trip	\$ /PM Peak-hour trip	\$	%
			Rate	\$214	Rate	\$2,112	\$	%
General Light Industrial	110	1,000 sf GFA	7.81	1,670.57	1.08	\$2,281.08	\$610.51	37%
General Heavy Industrial	120	1,000 sf GFA	1.68	359.52	0.68	\$1,436.23	\$1,076.71	299%
Industrial Park	130	1,000 sf GFA	7.81	1,670.57	0.84	\$1,774.17	\$103.60	6%
Manufacturing	140	1,000 sf GFA	4.31	922.77	0.75	\$1,584.08	\$661.31	72%
Warehouse	150	1,000 sf GFA	5.47	1,169.64	0.45	\$950.45	(\$219.19)	-19%
Mini-Warehouse	151	1,000 sf GFA	1.23	262.51	0.22	\$464.66	\$202.15	77%
Utilities	170	Employees	1.06	226.84	NA			
Wholesale	860	1,000 sf GFA	3.30	705.71	0.52	\$1,098.30	\$392.59	56%

APPENDIX TABLES

ITE Trip Generation, 9th Edition PM Peak-Hour Trip Rates

Appendix Table		PM Peak-hour Trips			
ITE Code	Land Use	Unit ¹	Average	Low	High
30	Intermodal Truck Terminal	1,000 SF GFA	0.83		
110	General Light Industrial	1,000 SF GFA	1.08	0.36	4.50
120	General Heavy Industrial	1,000 SF GFA	0.68	0.49	0.78
130	Industrial Park	1,000 SF GFA	0.84	0.13	2.95
140	Manufacturing	1,000 SF GFA	0.75	0.09	7.85
150	Warehousing	1,000 SF GFA	0.45	0.16	1.65
151	Mini-Warehouse	1,000 SF GFA	0.29	0.13	0.50
152	High-Cube Warehouse	1,000 SF GFA	0.16	0.07	0.27
160	Data Center*	1,000 SF GFA	0.14	0.08	0.19
170	Utilities	1,000 SF GFA			
435	Multipurpose Recreational Facility	1,000 SF GFA	0.25		
437	Bowling Alley	1,000 SF GFA			
440	Adult Cabaret	1,000 SF GFA	38.67		
443	Movie Theater - no Matinee	1,000 SF GFA	14.05		
465	Ice Skating Rink	1,000 SF GFA			
473	Casino/Video Lottey Establishment	1,000 SF GFA			
491	Racquet/Tennis Club	1,000 SF GFA	0.84	0.70	1.06
492	Health/Fitness Club	1,000 SF GFA	4.06	3.27	4.30
493	Athletic Club	1,000 SF GFA	5.84	3.85	6.36
495	Recreational Community Center	1,000 SF GFA	3.35	2.31	5.37
520	Elementary School	1,000 SF GFA	3.11	0.94	6.06
522	Middle School/Junior High School	1,000 SF GFA	2.52	0.68	10.88
530	High School	1,000 SF GFA	2.12	0.98	5.14
534	Private School (K-8)	1,000 SF GFA	6.53	4.17	9.00
536	Private School (K-12)	1,000 SF GFA			
540	Junior/Community College	1,000 SF GFA	2.64	1.06	3.46
560	Church	1,000 SF GFA	0.94	0.38	4.04
561	Synagogue	1,000 SF GFA	1.69		
562	Mosque*	1,000 SF GFA	11.02		
565	Day Care Center	1,000 SF GFA	13.75	3.95	39.17
571	Prison	1,000 SF GFA	11.39		
590	Library	1,000 SF GFA	7.20	4.00	11.75
610	Hospital	1,000 SF GFA	1.16	0.66	7.63
620	Nursing Home	1,000 SF GFA	1.01	0.58	1.20
630	Clinic	1,000 SF GFA			

PM Peak-hour Trips

Appendix Table

ITE Code	Land Use	Unit ¹	Average	Low	High
640	Animal Hospital/Veterinary Clinic	1,000 SF GFA			
710	General Office Building	1,000 SF GFA	1.49	0.49	6.39
714	Corporate Headquarters Building	1,000 SF GFA	1.41	0.52	2.67
715	Single Tenant Office Building	1,000 SF GFA	1.74	0.79	5.14
720	Medical-Dental Office Building	1,000 SF GFA	4.27	2.21	7.60
730	Government Office Building	1,000 SF GFA	11.03		
731	State Motor Vehicles Department	1,000 SF GFA	19.93	13.78	31.91
732	United States Post Office	1,000 SF GFA	14.67	3.46	82.89
733	Government Office Complex	1,000 SF GFA	3.59		
750	Office Park	1,000 SF GFA	1.48	0.64	4.50
760	Research & Development Center	1,000 SF GFA	1.07	0.40	4.13
770	Business Park	1,000 SF GFA	1.26	0.55	2.97
810	Tractor Supply Store*	1,000 SF GFA			
811	Construction Equipment Rental Store*	1,000 SF GFA			
812	Building Materials & Lumber Store	1,000 SF GFA	5.56	4.33	7.18
813	Free-Standing Discount Superstore	1,000 SF GFA	4.40	2.05	7.40
814	Variety Store*	1,000 SF GFA	6.99	3.52	13.94
815	Free-Standing Discount Store	1,000 SF GFA	5.57	3.17	9.44
816	Hardware/Paint Store	1,000 SF GFA	4.74	3.98	8.27
817	Nursery (Garden Center)	1,000 SF GFA	9.04	2.46	30.25
818	Nursery (Wholesale)	1,000 SF GFA	5.00	1.05	29.00
823	Factory Outlet Center	1,000 SF GFA	1.94	1.57	3.20
841	Automobile Sales	1,000 SF GFA	2.80	0.89	5.41
842	Recreational Vehicle Sales*	1,000 SF GFA			
843	Automobile Parts Sales	1,000 SF GFA	6.44	4.33	7.60
848	Tire Store	1,000 SF GFA	3.26	1.62	8.14
849	Tire Superstore	1,000 SF GFA	2.58	1.63	3.41
850	Supermarket	1,000 SF GFA	8.37	4.55	18.62
851	Convenience Mart, 24 hour	1,000 SF GFA	53.42	20.83	79.00
852	Convenience Mart, 15-16 hour	1,000 SF GFA	36.22	15.83	56.67
853	Convenience Mart + Gas Pumps	1,000 SF GFA	62.57	19.54	292.89
854	Discount Supermarket	1,000 SF GFA	8.13	5.67	10.85
857	Discount Club	1,000 SF GFA	4.63	2.42	9.67
860	Wholesale Market	1,000 SF GFA	0.52		
861	Sporting Goods Superstore	1,000 SF GFA			
862	Home Improvement Superstore	1,000 SF GFA	3.17	1.96	5.89
863	Electronics Superstore	1,000 SF GFA	4.50	3.45	5.78
864	Toy/Children's Superstore	1,000 SF GFA			
865	Baby Superstore	1,000 SF GFA			
866	Pet Supply Superstore	1,000 SF GFA	2.19		
867	Office Supply Superstore	1,000 SF GFA			
868	Book Superstore	1,000 SF GFA	10.66		
869	Discount Home Furnishing Superstore	1,000 SF GFA			

Appendix Table		PM Peak-hour Trips			
ITE Code	Land Use	Unit ¹	Average	Low	High
872	Bed & Linen Superstore	1,000 SF GFA			
875	Department Store	1,000 SF GFA	2.81	1.68	4.70
876	Apparel Store	1,000 SF GFA	4.20	1.78	6.80
879	Arts & Crafts Store	1,000 SF GFA	6.85		
880	Pharmacy/Drugstore	1,000 SF GFA	11.07	7.47	24.00
881	Pharmacy/Drugstore + Drive-Thru	1,000 SF GFA	9.72	6.50	13.48
890	Furniture Store	1,000 SF GFA	0.53	0.09	1.70
896	DVD/Video Rental Store	1,000 SF GFA	31.54		
897	Medical Equipment Store*	1,000 SF GFA	1.24		
911	Walk-in Bank	1,000 SF GFA			
912	Drive-in Bank	1,000 SF GFA	26.69	7.14	68.50
918	Hair Salon^	1,000 SF GFA	1.93		
920	Copy, Print & Express Ship Store	1,000 SF GFA	12.27		
925	Drinking Place	1,000 SF GFA	15.49	3.73	29.98
931	Quality Restaurant	1,000 SF GFA	9.02	3.24	15.89
932	High-Turnover Sit-Down Restaurant	1,000 SF GFA	18.49	5.60	69.20
933	Fast-Food Restaurant	1,000 SF GFA	52.40	29.05	112.00
934	Fast-Food Restaurant + Drive-Thru	1,000 SF GFA	47.30	13.33	158.46
935	Fast-Food Restaurant + Drive-Thru (no indoor seating)	1,000 SF GFA			
936	Coffee/Donut Shop	1,000 SF GFA	25.81	18.19	39.10
937	Coffee/Donut Shop + Drive-Thru	1,000 SF GFA	36.16	2.08	60.50
938	Coffee/Donut Shop + Drive-Thru (no indoor seating)	1,000 SF GFA	96.00	50.00	150.00
939	Bread/Donut/Bagel Shop^	1,000 SF GFA			
940	Bread/Donut/Bagel Shop + Drive-Thru	1,000 SF GFA			
943	Automobile Parts & Service Center	1,000 SF GFA			
945	Gasoline/Service Station + Convenience Mart	1,000 SF GFA	97.14	27.86	451.28
948	Automated Car Wash	1,000 SF GFA			
950	Truck Stop*	1,000 SF GFA			
820	Shopping Center	1,000 SF GLA			
826	Specialty Retail Center (formerly Code 814)	1,000 SF GLA	5.02	4.59	6.18
942	Automobile Care Center	1,000 SF GLA (occupied)	3.51	2.75	7.14
151	Mini-Warehouse	1,000 SF Net Rentable Area	0.22	0.14	0.33
10	Waterport/Marine Terminal	Acre	7.24	6.27	8.37
30	Intermodal Truck Terminal	Acre			
90	Park & Ride Lot + Bus Service	Acre	8.77	1.32	31.25
110	General Light Industrial	Acre	4.22	1.26	10.67
120	General Heavy Industrial	Acre	8.39	2.07	59.38
130	Industrial Park	Acre	9.21	0.62	148.00
140	Manufacturing	Acre	8.77	3.80	30.80
150	Warehousing	Acre	3.89	1.29	6.94
151	Mini-Warehouse	Acre	2.73	0.36	10.39
210	Single-Family Detached Housing	Acre	4.61	1.24	10.00
240	Mobile Home Park	Acre			

Appendix Table		PM Peak-hour Trips			
ITE Code	Land Use	Unit ¹	Average	Low	High
260	Recreational Homes	Acre	0.14	0.08	1.33
270	Residential Planned Unit Development	Acre	4.13	3.44	4.93
411	City Park	Acre	4.50		
412	County Park	Acre	0.59	0.08	5.30
413	State Park	Acre			
415	Beach Park	Acre	0.60	0.23	1.35
417	Regional Park	Acre	0.26	0.11	1.33
418	National Monument	Acre	0.51		
420	Marina	Acre			
430	Golf Course	Acre	0.39	0.30	0.63
435	Multipurpose Recreational Facility	Acre	11.54		
452	Horse Racetrack	Acre	0.22		
460	Arena	Acre			
481	Zoo	Acre			
490	Tennis Courts	Acre	1.79		
566	Cemetery	Acre	1.64		
750	Office Park	Acre	28.28	15.25	88.40
760	Research & Development Center	Acre	15.44	2.42	284.62
770	Business Park	Acre	16.84	2.31	32.54
811	Construction Equipment Rental Store*	Acre			
816	Hardware/Paint Store	Acre	55.64	45.71	101.11
817	Nursery (Garden Center)	Acre	10.49	2.40	41.67
818	Nursery (Wholesale)	Acre	0.53	0.16	2.50
860	Wholesale Market	Acre	9.94		
480	Amusement Park	Acres	4.11		
452	Horse Racetrack	Attendee	0.22		
453	Automobile Racetrack	Attendee			
454	Dog Racetrack	Attendee	0.41		
21	Commercial Airport	Avg Flights / Day	6.96	5.12	7.82
22	General Aviation Airport	Avg Flights / Day	0.30	0.17	0.33
22	General Aviation Airport	Based Aircraft	0.52	0.31	0.67
254	Assisted Living	Bed	0.35	0.16	0.87
610	Hospital	Bed	1.60	0.80	5.74
620	Nursing Home	Bed	0.37	0.21	0.51
420	Marina	Berth	0.21	0.18	0.30
433	Batting Cages	Cage			
21	Commercial Airport	Commercial Flights / Day	8.20	6.93	8.83
490	Tennis Courts	Court	3.67		
491	Racquet/Tennis Club	Court	4.38	1.73	7.21
912	Drive-in Bank	Drive-In Lane	29.05	8.50	68.50
210	Single-Family Detached Housing	Dwelling Unit	1.02	0.42	2.98
220	Apartment	Dwelling Unit	0.67	0.10	1.64
222	High-Rise Apartment	Dwelling Unit	0.40	0.30	0.59

Appendix Table		PM Peak-hour Trips			
ITE Code	Land Use	Unit ¹	Average	Low	High
223	Mid-Rise Apartment	Dwelling Unit	0.44	0.19	0.60
224	Rental Townhouse	Dwelling Unit	0.73		
230	Condo/Townhouse	Dwelling Unit	0.52	0.18	1.24
231	Low-Rise Residential Condo/Townhouse	Dwelling Unit	0.64	0.46	0.79
232	High-Rise Residential Condo/Townhouse	Dwelling Unit	0.38	0.33	0.50
251	Senior Adult Housing - Detached	Dwelling Unit	0.34	0.20	1.01
252	Senior Adult Housing - Attached	Dwelling Unit	0.35	0.24	0.53
253	Congregate Care Facility	Dwelling Unit	0.20	0.16	0.21
260	Recreational Homes	Dwelling Unit	0.31	0.25	1.33
265	Timeshare	Dwelling Unit			
270	Residential Planned Unit Development	Dwelling Unit	0.72	0.59	1.17
21	Commercial Airport	Employee	1.00	0.90	1.60
22	General Aviation Airport	Employee	1.46	0.99	2.27
30	Intermodal Truck Terminal	Employee	164.00	0.62	0.35
110	General Light Industrial	Employee	0.51	0.36	1.18
120	General Heavy Industrial	Employee	0.40	0.22	1.10
130	Industrial Park	Employee	0.45	0.26	1.36
140	Manufacturing	Employee	0.40	0.24	1.11
150	Warehousing	Employee	0.58	0.37	2.22
152	High-Cube Warehouse	Employee	0.35		
170	Utilities	Employee			
254	Assisted Living	Employee	0.55	0.30	1.09
310	Hotel	Employee	0.90	0.51	1.96
312	Business Hotel	Employee	7.60	6.58	9.50
320	Motel	Employee	1.24	0.48	4.00
330	Resort Hotel	Employee	0.31	0.20	0.82
417	Regional Park	Employee	12.77	7.41	32.00
418	National Monument	Employee	5.58		
430	Golf Course	Employee	2.08	1.92	2.56
432	Golf Driving Range	Employee	6.71		
443	Movie Theater - no Matinee	Employee	9.56		
452	Horse Racetrack	Employee			
460	Arena	Employee			
480	Amusement Park	Employee	0.52		
481	Zoo	Employee			
490	Tennis Courts	Employee	7.33		
491	Racquet/Tennis Club	Employee	3.40	1.65	8.00
493	Athletic Club	Employee	8.33		
495	Recreational Community Center	Employee	3.16		
501	Military Base	Employee	0.37	0.30	0.49
520	Elementary School	Employee	3.41	1.03	6.68
522	Middle School/Junior High School	Employee	2.97	1.23	4.61
530	High School	Employee	3.23	1.13	6.98

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
534	Private School (K-8)	Employee	5.72	1.85	9.69
536	Private School (K-12)	Employee	3.82	3.18	4.56
540	Junior/Community College	Employee	1.49	0.83	3.29
550	University/College	Employee	0.85	0.49	3.08
561	Synagogue	Employee	3.27		
565	Day Care Center	Employee	5.12	1.13	14.00
566	Cemetery	Employee	13.57		
571	Prison	Employee	0.68	0.50	1.88
580	Museum*	Employee	0.58		
590	Library	Employee	6.78	3.13	12.73
591	Lodge/Fraternal Organization	Employee	4.05		
610	Hospital	Employee	0.41	0.21	1.19
620	Nursing Home	Employee	0.47	0.41	0.94
630	Clinic	Employee	0.86	0.78	1.38
710	General Office Building	Employee	0.46	0.16	3.12
714	Corporate Headquarters Building	Employee	0.38	0.20	1.00
715	Single Tenant Office Building	Employee	0.51	0.29	1.14
720	Medical-Dental Office Building	Employee	0.97	0.58	2.06
730	Government Office Building	Employee	1.91		
731	State Motor Vehicles Department	Employee	5.35	3.24	7.58
732	United States Post Office	Employee	3.11	0.97	40.40
733	Government Office Complex	Employee			
750	Office Park	Employee	0.39	0.31	0.51
760	Research & Development Center	Employee	0.41	0.18	1.39
770	Business Park	Employee	0.39	0.24	1.01
812	Building Materials & Lumber Store	Employee	3.83	3.19	5.75
815	Free-Standing Discount Store	Employee	3.52	2.24	6.93
816	Hardware/Paint Store	Employee	5.43	4.83	6.50
817	Nursery (Garden Center)	Employee	2.55	1.03	7.43
818	Nursery (Wholesale)	Employee	0.67	0.47	3.00
826	Specialty Retail Center (formerly Code 814)	Employee			
841	Automobile Sales	Employee	0.96	0.48	1.93
848	Tire Store	Employee			
854	Discount Supermarket	Employee	3.24	2.57	3.86
857	Discount Club	Employee	3.36	2.41	4.98
860	Wholesale Market	Employee	0.64		
890	Furniture Store	Employee	1.27	0.55	3.50
912	Drive-in Bank	Employee	4.71	3.10	6.18
920	Copy, Print & Express Ship Store	Employee	6.63		
942	Automobile Care Center	Employee	1.43		
561	Synagogue	Family Member	0.07		
488	Soccer Complex	Field	18.36	9.71	26.50
853	Convenience Mart + Gas Pumps	Fueling Position	19.98	7.60	75.50

Appendix Table

PM Peak-hour Trips

ITE Code	Land Use	Unit ¹	Average	Low	High
944	Gasoline/Service Station	Fueling Position	15.65	6.83	29.33
945	Gasoline/Service Station + Convenience Mart	Fueling Position	13.57	4.25	57.80
946	Gasoline/Service Station + Convenience Mart + Car Wash	Fueling Position	14.62	7.00	26.71
630	Clinic	Full-time Doctor	4.43	4.40	4.44
430	Golf Course	Hole	3.56	3.42	3.83
431	Miniature Golf Course	Hole			
437	Bowling Alley	Lane	4.50		
466	Snow Ski Area*	Lift	32.50		
493	Athletic Club	Member	0.17		
495	Recreational Community Center	Member	0.02		
591	Lodge/Fraternal Organization	Member	0.03		
443	Movie Theater - no Matinee	Movie Screen	37.83		
444	Movie Theater + Matinee	Movie Screen	37.83		
445	Multiplex Movie Theater	Movie Screen	25.84	13.33	69.45
254	Assisted Living	Occupied Bed	0.37	0.28	0.53
571	Prison	Occupied Bed	1.22		
416	Campground/RV Park	Occupied Camp Site	0.41	0.38	0.57
221	Low-Rise Apartment	Occupied Dwelling Unit	0.62	0.38	1.23
233	Luxury Condo/Townhouse	Occupied Dwelling Unit	0.65	0.60	0.72
240	Mobile Home Park	Occupied Dwelling Unit	0.60	0.39	1.07
252	Senior Adult Housing - Attached	Occupied Dwelling Unit	0.31	0.25	0.46
253	Congregate Care Facility	Occupied Dwelling Unit	0.21	0.21	0.21
265	Timeshare	Occupied Dwelling Unit			
90	Park & Ride Lot + Bus Service	Occupied Parking Space			
93	Light Rail Transit Station + Parking	Occupied Parking Space			
310	Hotel	Occupied Room	0.74	0.25	1.23
311	All Suites Hotel	Occupied Room	0.55	0.40	0.87
312	Business Hotel	Occupied Room	0.57	0.41	0.75
320	Motel	Occupied Room	0.69	0.29	1.33
330	Resort Hotel	Occupied Room	0.59	0.36	1.06
151	Mini-Warehouse	Occupied Storage Unit	0.02	0.02	0.03
255	Continuing Care Retirement Community^	Occupied Unit			
90	Park & Ride Lot + Bus Service	Parking Space			
93	Light Rail Transit Station + Parking	Parking Space			
414	Water Slide Park	Parking Space	0.28		
210	Single-Family Detached Housing	Person	0.27	0.12	0.68
220	Apartment	Persons	0.40	0.19	0.77
221	Low-Rise Apartment	Persons	0.33	0.22	0.65
222	High-Rise Apartment	Persons	0.20	0.18	0.26
230	Condo/Townhouse	Persons	0.24	0.15	0.57
240	Mobile Home Park	Persons	0.27	0.14	0.47
411	City Park	Picnic Site			
413	State Park	Picnic Site			

Appendix Table		PM Peak-hour Trips			
ITE Code	Land Use	Unit ¹	Average	Low	High
417	Regional Park	Picnic Site			
310	Hotel	Room	0.61	0.20	1.23
311	All Suites Hotel	Room	0.40	0.32	0.47
320	Motel	Room	0.56	0.24	1.83
330	Resort Hotel	Room	0.51	0.35	0.69
441	Live Theater	Seat			
443	Movie Theater - no Matinee	Seat	0.32		
445	Multiplex Movie Theater	Seat	0.28		
452	Horse Racetrack	Seat	0.11		
465	Ice Skating Rink	Seat			
560	Church	Seat			
931	Quality Restaurant	Seat	0.30	0.18	0.44
932	High-Turnover Sit-Down Restaurant	Seat	0.72	0.27	2.09
933	Fast-Food Restaurant	Seat	6.59		
934	Fast-Food Restaurant + Drive-Thru	Seat	1.62	0.26	4.79
937	Coffee/Donut Shop + Drive-Thru	Seat	0.90	0.31	1.88
848	Tire Store	Service Bay	5.65	3.33	8.00
849	Tire Superstore	Service Bay	3.87	2.38	6.17
941	Quick Lubrication Vehicle Shop	Service Bay	4.60	3.25	6.00
151	Mini-Warehouse	Storage Unit	0.03	0.02	0.05
520	Elementary School	Student	0.28	0.09	0.50
522	Middle School/Junior High School	Student	0.30	0.12	0.63
530	High School	Student	0.29	0.10	0.74
534	Private School (K-8)	Student	0.60	0.42	0.75
536	Private School (K-12)	Student	0.58	0.46	0.79
540	Junior/Community College	Student	0.12	0.08	0.20
550	University/College	Student	0.15	0.11	0.44
565	Day Care Center	Student	0.84	0.29	1.72
432	Golf Driving Range	Tee/Driving Position	1.65		
30	Intermodal Truck Terminal	Truck Berth	0.57		
255	Continuing Care Retirement Community	Unit	0.25	0.22	0.28
210	Single-Family Detached Housing	Vehicle	0.67	0.24	1.37
220	Apartment	Vehicle	0.61	0.32	1.19
230	Condo/Townhouse	Vehicle	0.31	0.17	0.66
240	Mobile Home Park	Vehicle	0.37	0.28	0.75
501	Military Base	Vehicle			
947	Self-Service Car Wash	Wash Stall	8.00		

				PM PEAK HOUR TRIPS			
ITE Code	Land Use	Unit ¹	# Studies ²	TRIPS		Standard Deviation ⁶	
				Avg ³	Low High 4 5		
21	Commercial Airport	Employee	2	1.00	0.90 1.60		
22	General Aviation Airport	Employee	5	1.46	0.99 2.27	1.24	
30	Intermodal Truck Terminal	Employee	2	0	0.62 0.35	4.48	
110	General Light Industrial	Employee	21	0.51	0.36 1.18	0.75	
120	General Heavy Industrial	Employee	3	0.40	0.22 1.10	0.69	
130	Industrial Park	Employee	37	0.45	0.26 1.36	0.70	
140	Manufacturing	Employee	51	0.40	0.24 1.11	0.65	
150	Warehousing	Employee	14	0.58	0.37 2.22	0.80	
152	High-Cube Warehouse	Employee	1	0.35			
170	Utilities	Employee					
254	Assisted Living	Employee	17	0.55	0.30 1.09	0.76	
310	Hotel	Employee	13	0.90	0.51 1.96	1.03	
312	Business Hotel	Employee	3	7.60	6.58 9.50	2.99	
320	Motel	Employee	13	1.24	0.48 4.00	1.37	
330	Resort Hotel	Employee	4	0.31	0.20 0.82	0.58	
417	Regional Park	Employee	3	12.77	7.41 32.00	9.07	
418	National Monument	Employee	1	5.58			
430	Golf Course	Employee	3	2.08	1.92 2.56	1.45	
432	Golf Driving Range	Employee	1	6.71			
443	Movie Theater - no Matinee	Employee	1	9.56			
452	Horse Racetrack	Employee					
460	Arena	Employee					
480	Amusement Park	Employee	1	0.52			
481	Zoo	Employee					
490	Tennis Courts	Employee	1	7.33			
491	Racquet/Tennis Club	Employee	6	3.40	1.65 8.00	2.68	
493	Athletic Club	Employee	1	8.33			
495	Recreational Community Center	Employee	1	3.16			
501	Military Base	Employee	8	0.37	0.30 0.49	0.61	
520	Elementary School	Employee	33	3.41	1.03 6.68	2.24	
522	Middle School/Junior High School	Employee	18	2.97	1.23 4.61	2.04	
530	High School	Employee	53	3.23	1.13 6.98	2.08	
534	Private School (K-8)	Employee	6	5.72	1.85 9.69	3.54	
536	Private School (K-12)	Employee	3	3.82	3.18 4.56	2.05	
540	Junior/Community College	Employee	4	1.49	0.83 3.29	1.36	
550	University/College	Employee	7	0.85	0.49 3.08	1.00	
561	Synagogue	Employee	1	3.27			
565	Day Care Center	Employee	60	5.12	1.13 14.00	3.24	

			PM PEAK HOUR TRIPS				
ITE Code	Land Use	Unit ¹	# Studies ²	TRIPS		Standard Deviation ⁶	
				Avg ³	Low 4 High 5		
566	Cemetery	Employee	1	13.57			
571	Prison	Employee	2	0.68	0.50	1.88	
580	Museum*	Employee	1	0.58			
590	Library	Employee	10	6.78	3.13	12.73	
591	Lodge/Fraternal Organization	Employee	1	4.05			
610	Hospital	Employee	18	0.41	0.21	1.19	
620	Nursing Home	Employee	4	0.47	0.41	0.94	
630	Clinic	Employee	3	0.86	0.78	1.38	
710	General Office Building	Employee	173	0.46	0.16	3.12	
714	Corporate Headquarters Building	Employee	20	0.38	0.20	1.00	
715	Single Tenant Office Building	Employee	39	0.51	0.29	1.14	
720	Medical-Dental Office Building	Employee	16	0.97	0.58	2.06	
730	Government Office Building	Employee	1	1.91			
731	State Motor Vehicles Department	Employee	8	5.35	3.24	7.58	
732	United States Post Office	Employee	11	3.11	0.97	40.40	
733	Government Office Complex	Employee					
750	Office Park	Employee	5	0.39	0.31	0.51	
760	Research & Development Center	Employee	29	0.41	0.18	1.39	
770	Business Park	Employee	13	0.39	0.24	1.01	
812	Building Materials & Lumber Store	Employee	4	3.83	3.19	5.75	
815	Free-Standing Discount Store	Employee	7	3.52	2.24	6.93	
816	Hardware/Paint Store	Employee	3	5.43	4.83	6.50	
817	Nursery (Garden Center)	Employee	11	2.55	1.03	7.43	
818	Nursery (Wholesale)	Employee	8	0.67	0.47	3.00	
826	Specialty Retail Center (formerly Code 814)	Employee					
841	Automobile Sales	Employee	7	0.96	0.48	1.93	
848	Tire Store	Employee					
854	Discount Supermarket	Employee	4	3.24	2.57	3.86	
857	Discount Club	Employee	10	3.36	2.41	4.98	
860	Wholesale Market	Employee	1	0.64			
890	Furniture Store	Employee	8	1.27	0.55	3.50	
912	Drive-in Bank	Employee	2	4.71	3.10	6.18	
920	Copy, Print & Express Ship Store	Employee	1	6.63			
942	Automobile Care Center	Employee	1	1.43			

RESOLUTION NO. 99-42

**A RESOLUTION ADOPTING A NEW TRANSPORTATION SYSTEMS
DEVELOPMENT CHARGE METHODOLOGY AND CHARGES,
PURSUANT TO SECTIONS 4.20.040 AND 4.20.050 OF THE ASHLAND
MUNICIPAL CODE.**

THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. The Transportation Systems Development report recommended by the Ad-hoc Systems Development Charge Committee, marked exhibit "A", is adopted by the Ashland City Council and replaces the current resolution establishing the methodology and charges for transportation systems development charges.

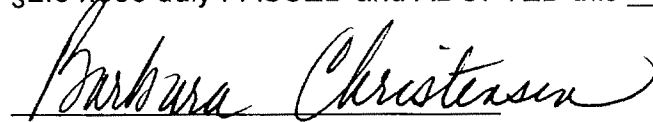
SECTION 2. The Transportation Systems Development Charges shall be phased in three steps. Phase one of the charge implementation described in exhibit "A" shall be effective August 16, 1999, with phase two effective January 2, 2000 and phase three effective July 1, 2000. Charges shall be adjusted for inflation at each phase.

SECTION 3. The Transportation Systems Development Charge methodology and charges will be reviewed three years from the date of adoption to ensure consistency between the Transportation System Plan and the Transportation Systems Development Charges.

SECTION 4. Transportation Systems Development Charges collected will be distributed to transportation projects based on the aggregate growth percentage described in exhibit "A".

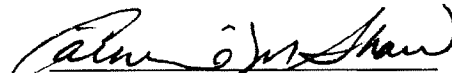
This resolution was read by title only in accordance with Ashland Municipal Code

§2.04.090 duly PASSED and ADOPTED this 6th day of July, 1999.

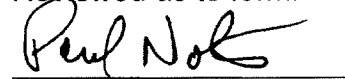


Barbara Christensen, City Recorder

SIGNED and APPROVED this 7th day of July, 1999.


Catherine M. Shaw, Mayor

Reviewed as to form:



Paul Nolte, City Attorney

Exhibit "A"

City of Ashland



Transportation Systems Development Charge Fee Increase Proposal - July, 1999

INTRODUCTION

Background

In 1996, the City of Ashland adopted its current transportation Systems Development Charge (SDC) which became effective January 1, 1997. The current SDC is based on a pro-rate share of future transportation system needs, including new street and street frontage costs (needs) and new trip generation/travel need estimates for typical developments. The future "needs" are not defined by specific projects. The City of Ashland has developed a **Transportation System Plan** (TSP) that outlines transportation system needs for the City within the Urban Growth Boundary (UGB) area. The Ashland TSP identifies project specific needs for street, bicycle facility, pedestrian and transit improvements. Long-range travel projections used in the TSP have been developed based on future land development projects consistent with the City's Comprehensive Plan. These land development projections were used by W & H Pacific, Inc. to estimate the trip generation capacity of land consumption by the year 2017 and define the detailed methodology for a revised SDC.

The purpose of this report is to describe the revised methodology for implementing a project specific transportation SDC to fund a portion of the needed transportation projects within the Ashland UGB by year 2017. This same methodology may be adjusted to include a revised scope of transportation improvements, as needed. The Ashland Transportation SDC Methodology is based on similar SDC methods already adopted and in place by other Oregon jurisdictions, mainly Salem and Portland, Oregon.

Consistency With State Law

ORS 223.297 through 223.314 establishes a uniform framework for governmental units to impose systems development charges to pay for capital improvements, including facilities or assets used for transportation. Such charges may be assessed or collected "at the time of increased usage of a capital improvement or issuance of a development permit, building permit or connection to the capital improvement." ORS 223.299(4)(a). The statute allows imposition of systems development charges for costs associated with capital improvements to be constructed ("improvement fees") and capital improvements already constructed or under construction ("reimbursement fees"). ORS 223.304. The statute also provides for credits against fees for the construction of qualified public improvements. ORS 223.304 (3), (4).

As relevant to the City's proposed Transportation SDC, ORS 22.307(2) authorizes improvement fees on new development to help cover the costs of capacity increasing capital improvements. Under ORS 223.309(1), such improvements must be identified in a capital improvement plan, public facilities plan, transportation master plan or similar plan which lists the capital improvements which may be funded with improvement fee revenues. Consistent with ORS 223.307(2), the capital improvements identified in the TSP and included in this report are limited to those which are capacity increasing. Their

inclusion in a plan as defined in ORS 223.309(1) assures compliance with that requirement of the statute.

Under ORS 223.304(2), improvement fees must be established by ordinance or resolution setting forth a methodology that considers the costs of projected capital improvements needed to increase the capacity of the system to which the fee is related. The statute requires no specific methodology. However, there must be a rational basis for the charge, i.e. the costs imposed on development must reasonably relate to the impacts created by the development and the overall costs of the improvements.

NEEDED IMPROVEMENTS

Types of Deficiencies

The Ashland TSP indicates that there are a number of projects that will be needed by 2017 to provide sufficient transportation system capacity to accommodate future travel demand. These improvements include new streets, upgrades to existing streets to urban standards (i.e., added bicycle lanes, curbs/gutters, sidewalks, etc.), new bicycle lanes and/or sidewalks, new traffic signals and improved transit to serve expanded public transportation needs.

New streets and bridges, street upgrades, and new traffic signals provide improvements resulting in a transportation system that can accommodate higher travel demand (additional capacity). New buses and shelters provide added capacity to route coverage serving more transit riders; and together with bicycle and pedestrian improvements provide the needed capacity that otherwise require major street widening in areas deficient of adequate right-of-way or compatible land use (e.g., North Main Street between Helman and Wimer).

Estimated Improvement Costs

Improvement costs are those capital costs that will be required to construct the projects identified in the Ashland TSP. These projects and the estimated costs (estimated in 1998 dollars) for each project are listed in Appendix A of this document. *Improvement fees* are the systems development charges (defined and summarized below) imposed on new development to help fund the projects identified in the Ashland TSP. *Improvement fees* imposed on new development are used to provide a portion of the funding required for project *improvement costs*.

The Ashland Transportation SDC includes improvement fees, but does not include reimbursement fees. Improvement fees are system development charges that are applied to improvement costs associated with capital improvements to be constructed. Reimbursement fees are systems development charges applied to improvement costs for capital improvements already constructed or under construction.

To comply with Oregon law, only a portion of the roadway and transit improvement costs are eligible for funding through an SDC program. Improvement costs to maintain or improve the structure of existing roadways and intersections, or costs associated with transit operations do not provide significant capacity increases. Thus, this portion of the improvement cost is not eligible for funding through the SDC. As previously stated, improvement fees are authorized under Oregon law to help cover the costs of capacity increasing capital improvements, identified in a capital improvement plan, public facilities plan, transportation master plan, or similar plan. New streets, bridges, traffic signals, sidewalk, and buses are fully eligible for SDC funding. The cost associated with street upgrades paid for by the SDC can be based on the proportionate share of the added street amenities to the total street improvement costs (e.g., bike lanes, curb/gutter and sidewalks).

Additionally, it is proposed that a portion of local street improvements done through the LID process be funded through the Transportation SDC. It is estimated that an overall capacity of 18% will be realized city-wide by the improvement of local streets. This is based up the buildable lands analysis undertaken by the city which has shown that when local streets are improved, the opportunity for additional lot splits will be available, increasing the use of local streets for new trips related to growth.

As such, the Ashland Transportation SDC program will generate funds from improvement fees that may be used to partially fund improvement projects that provide additional roadway and transit capacity. As discussed below, the improvement fees are based on the estimated number of daily trips generated by new development, resulting in an improvement fee that is fair and equitable. Thus, the program is in compliance with Oregon law.

SDC ELIGIBLE TRANSPORTATION IMPROVEMENTS

#	Priority (yrs)	STREETS	Type	Revised Estimated Cost	Rebate Eligible	Capacity %	SDC Portion of Total Project
1	1-5	Beach Street - at Siskiyou	Upgrade	\$92,000	\$92,000	15%	13,800
2	1-5	Tolman Cr Rd - Siskiyou to UPRR	Capacity	\$620,400	\$352,387	50%	310,200
3	6-10	Nevada - Bear Creek to N Mountain	Capacity	\$422,400	\$239,923	65%	274,560
4	6-10	Bear Creek Bridge @ Nevada	Capacity	\$2,500,000	\$2,500,000	65%	1,625,000
5	6-10	N Mountain - Hersey to Nepenthe (1/2 street)	Capacity	\$314,160	\$120,278	65%	204,204
6	6-10	Tolman Cr - Siskiyou Blvd Approaches	Capacity	\$184,000	\$184,000	45%	82,800
7	6-10	Clay St - Siskiyou to Ashland	Upgrade	\$660,000	\$374,880	35%	231,000
8	6-10	E Main - City Limits to Normal (west)	Capacity	\$184,800	\$104,966	25%	46,200
9	11-20	N Main - Hwy 99 to Fox	Upgrade	\$66,000	\$37,488	15%	9,900
10	11-20	Ashland Mine Rd	Upgrade	\$330,000	\$187,440	15%	49,500
11	11-20	E Hersey - Ann to Mountain (1/2 Street)	Upgrade	\$142,560	\$39,917	15%	21,384
12	11-20	4th St Extension to Hersey	Capacity	\$106,250	\$60,350	100%	106,250
13	11-20	N Mountain - Nepenthe to Nevada	Capacity	\$286,440	\$109,666	65%	186,186
14	11-20	Tolman Cr - Green Meadows to Black Oak	Upgrade	\$528,000	\$299,904	15%	79,200
15	11-20	Tolman Cr - Black Oak to Siskiyou	Upgrade	\$158,400	\$89,971	15%	23,760
16	11-20	E Main - Normal Ave to City Limits (east)	Upgrade	\$3,976,800	\$3,554,822	15%	596,520
17	11-20	E Main - at Tolman Creek Rd	Upgrade	\$272,000	\$272,000	15%	40,800
18	11-20	Crowson Rd - Siskiyou to Green Springs Hwy	Upgrade	\$1,000,000	\$568,000	30%	300,000
19	11-20	Normal Avenue Extension to E Main	Capacity	\$607,200	\$344,890	75%	455,400
20	11-20	Clay St - Ashland to E Main	Upgrade	\$737,500	\$418,900	15%	110,625
21	11-20	Tolman Cr Rd - Ashland St to E Main	Capacity	\$424,200	\$162,408	65%	275,730
22	11-20	Mistletoe - Siskiyou to Tolman Creek	Upgrade	\$1,201,250	\$682,310	75%	900,938
23	11-20	Dead Indian - Green Springs Hwy Approach	Upgrade	\$92,000	\$92,000	15%	13,800
Subtotal				\$ 14,906,860	\$ 10,888,501	41%	\$5,957,757

INTERSECTIONS

24	11-20	Siskiyou/Lithia/E Main	Capacity	1,000,000		25%	250,000
25	11-20	Oak St/Hersey St Traffic Signal	Capacity	175,000		40%	70,000
Subtotal				\$ 1,175,000		33%	\$320,000

26	11-20	UPRR CROSSINGS (4)	Upgrade	1,000,000		15%	150,000
27	11-20	TRANSIT (Local, capital costs)	Capacity	303,282		25%	75,821
28	11-20	SIDEWALKS	Capacity	2,052,000		25%	513,000
29	11-20	BICYCLE FACILITIES	Capacity	3,041,000		25%	760,250
LOCAL IMPROVEMENT DISTRICTS				Combo	3,135,119	18%	564,321
TOTAL				\$ 25,612,761		32%	\$8,341,148

ELNDT=	39,040
Cost Per ELNDT	\$214

August 1, 1999	Cost per
ELNDT = \$93	
January 1, 2000	Cost per
ELNDT = \$154	
July 1, 2000	Cost per
ELNDT = \$214	

TRANSPORTATION SDC UNIT COST

Introduction

The Ashland Transportation SDC has been developed to provide fairness and equity among the various types of development that are likely to occur by 2017. To reach this goal, the Ashland Transportation SDC methodology recognizes that the number of trips generated varies by type of land use. It has been shown that some types of land use (retail, for example) attract trips from traffic that is already passing the retail site (a motorist that is going home from work that stops en route to buy groceries). In this instance, a trip is “generated” by the retail use, but not all generated trips are new to the adjacent roadway traffic stream, hence the retail use adds lower number of new vehicle-miles of travel to the roadway system compared to other uses. This type of trip is known as a “linked trip”. A “Linked Trip Factor” has been used to account for this difference in new trip generation versus total trip generation. When the basic trip generation rates (i.e. trips per dwelling unit) is adjusted by the linked trip factor and applied to the new development, the resulting number of new generated trips are *called Equivalent Length New Daily Trips* (ELNDT). The ELNDT are used as the basis for the Ashland Transportation SDC.

Methodology

To develop the City of Ashland Transportation SDC, a summary of the planned land uses within the UGB was made. From these planned land uses the number of daily vehicle trips generated on the public street system was made. These trips were added to the number of existing traffic volumes throughout the study area to estimate the total number of vehicle trips on the study area street system. Since the SDC is based on trips generated by new development, the number of new trips divided into the estimated improvement costs results in the dollar cost per new trip generated. The future planned land use and new trip generation estimates within the Ashland UGB are summarized in the attachments.

Future land use estimates and the daily trips generated by new land development within the Ashland UGB are estimated based on future trip estimates from Ashland’s *emme/2* travel model, and validated by ITE Trip Generation Manual estimates summarized in Appendix B. Inherent in these trip estimates is the provision for linked-trip characteristics by land use type. The *Equivalent Length New Daily Trips* generated within the Ashland UGB by the year 2017 is indicated in the table on the following page.

Trip Generation Adjustments

As mentioned previously, inherent in the travel demand forecasting model is the type of trip by land use and effect of linked trips. The methodology used to determine the transportation system development charge fee in Ashland is consistent with the *ELNDT* concept. This methodology uses the best available trip generation, and linked trip information. Trip generation rates for each of the land use categories were adjusted using

the trip generation rates reported in Trip Generation, Fifth Edition (published by the Institute of Transportation Engineers, 1991). The attachment at the end of this report lists these trip generation rates and the adjustment factors used to determine the *ELNDT* generation rate for each general land use category listed in the ITE Trip Generation Manual.

Unit Cost Methodology

The Transportation SDC is calculated by dividing the total cost of the SDC-related transportation improvements by the number of city-wide *ELNDT*, resulting in an SDC cost per *ELNDT*. The Transportation SDC unit cost per trip is summarized as follows:

Ashland Transportation Systems Development Charge		
SDC-Related Transportation Improvement Costs	Total ELNDT	Cost/ELNDT
\$8,341,148	39,040	\$214

Transportation SDC Calculation

The Transportation SDC is applicable to all new land development within the Ashland UGB and is calculated at \$214 per *ELNDT*. The Trip Generation, Fifth Edition is to be used for all SDC calculations. Tabulations of trip generation rates and linked trip factors for various land uses are found in the attachments.

The following table identifies the Ashland Transportation SDC fee as applied to various land use developments such a single-family, multi-family homes, fast food restaurant (3,000 sq. ft), and industrial centers (30,000 sq. ft.)

Transportation System Development Charge Calculations		
Typical Development	Current Ashland SDC	Proposed Ashland SDC
Single Family Dwelling	\$324	\$2,040
Multi Family Dwelling	\$196	\$1,382
Fast Food Restaurant (3000 sq. ft.)	\$8,826	\$23,131
Light Industrial (30,000 sq. ft.)	\$6,123	\$50,037

Credits

Credits against the calculated SDC will be given for the cost of qualified public improvements, in whole or in part, identified on the "SDC Eligible Transportation Improvements" table. Costs not included in the calculation of the SDC shall *not* be eligible for SDC credit. Except that the City may agree that certain costs may, in fact, represent "system" costs that will be considered for addition to SDC-eligible costs during the next SDC update. If those "non-eligible" costs are subsequently changed to become

SDC eligible, credit will be given in a form of a reimbursement of a portion of the SDC improvement fees.

TDM Credits

Credits may be given for developments that implement transportation demand management (TDM) plans designed to reduce generated vehicle trips. The proponent of the development must declare an intention to apply for TDM vehicle trip reduction and Transportation SDC credit as a part of the building permit application. The TDM plan must be prepared by a transportation planning professional recognized by the Community Development Director as being proficient in TDM programs.

Oregon law requires that provisions be included in the SDC for alternative methodologies to calculate the trip generation (ELNDT) for use in calculation of improvement fees. These provisions are needed in case standard trip generation rates or linked trip factors included in the SDC do not adequately reflect the true trip generation characteristics of a particular land use development. These provisions also provide an approach for project proponents that believe their development does not generate trips in the same way as described in the SDC.

Credits for TDM vehicle trip reductions will be limited to a maximum of 15% of the SDC charge calculated without TDM credits. TDM plans must include an annual reporting plan that will document the amount of vehicle trip reduction that is actually achieved. Failure to achieve the projected level of trip reduction shall result in the required payment of the full SDC.

Redevelopment

Redevelopment of existing land use (of which the traffic generated by the existing use is implied to be already accounted for under existing traffic conditions and will not be considered as part of the transportation SDC calculation) requiring a building permit that results in a net change in trip generation (due to either a change in general land use category – residential vs. commercial, number of dwelling units, or building area) will also be required to pay a transportation SDC in lieu of the existing use. Specifically, the transportation SDC will be calculated based on the net difference between the trip generation (including equivalent and new trip rate adjustments) of the new use less the trip generation of the existing use. If the new use generates fewer trips than the existing use no transportation SDC shall be paid, but no reimbursements will be given to the proposed development.

Implementation

Given the substantial proposed increase in the transportation SDC, it is recommended that the new charge be implemented using a phased approach, as follows:

1 st Phase	August 16, 1999	ELNDT = \$93
2 nd Phase	January 1, 2000	ELNDT = \$154
3 rd Phase	July 1, 2000	ELNDT = \$214

This phasing would result in an implementation schedule and costs for typical development shown in the following table:

Typical Development	Current SDC	Phase 1 8/16/1999	Phase 2 1/2/2000	Phase 3 – full 7/1/2000
Single Family Dwelling	\$324	\$888	\$1,471	\$2,040
Multi Family Dwelling	\$196	\$584	\$966	\$1,382
Fast Food Restaurant (3000 sq. ft.)	\$8,826	\$10,068	\$16,672	\$23,131
Light Industrial (30,000 sq. ft.)	\$6,123	\$21,780	\$36,066	\$50,037

**ITE Trip Generation Rates &
ELNDT Adjustment Factors**

ITE Land Use	Notes	ITE Land Use Code	Average Weekday ITE Trip Rate		Equivalent Length New Daily Trip & ELNDT Adjustment Factors		Cost Per Unit			
			Rate	Unit(*)	Trip Length	Linked Trip	8/1/99	1/2/00	7/1/00	
							\$93	\$154	\$214	
RESIDENTIAL										
Single Family		210	9.55	Dwelling Unit	1.00	1.0	\$888	\$1,471	\$2,040	
Multi-Family		220	6.47	Dwelling Unit	0.97	1.0	\$584	\$966	\$1,341	
Residential Condominium		230	5.86	Dwelling Unit	0.97	1.0	\$529	\$875	\$1,214	
Manufactured Housing		240	4.81	Occupied Dwelling Unit	0.97	1.0	\$434	\$719	\$997	
Recreational Home/Condo		260	3.16	Dwelling Unit	1.00	1.0	\$294	\$487	\$675	
INSTITUTIONAL										
Truck Terminals	1	30	9.85	1,000 sf GFA	1.12	1.0	\$1,026	\$1,699	\$2,357	
Bus Depot	5		25	1000 sf GFA	1.00	1.0	\$2,325	\$3,850	\$5,341	
Park	1	411	2.23	Acres	0.90	1.0	\$187	\$309	\$429	
City (developed)	5		50	Acres	0.90	1.0	\$4,185	\$6,930	\$9,615	
Neighborhood (undeveloped)	5		5	Acres	0.90	1.0	\$419	\$693	\$961	
Amusement (Theme)	5		80	Acres	0.90	1.0	\$6,696	\$11,088	\$15,383	
Golf Course	2	430	37.59	Holes	0.91	1.0	\$3,181	\$5,268	\$7,309	
Movie Theatre	1	443	1.76	Seats	0.46	1.0	\$75	\$125	\$173	
Racquet Club	2	492	17.14	1,000 sf GFA	0.51	1.0	\$813	\$1,346	\$1,868	
Racquetball	5		40	1,000 sf GFA	0.51	1.0	\$1,897	\$3,142	\$4,359	
Tennis	5		30	Court	0.51	1.0	\$1,423	\$2,356	\$3,269	
Military Base			501	Employee	1.00	1.0	\$166	\$274	\$380	
Elementary School			520	Student	1.08	1.0	\$109	\$181	\$252	
Junior High School	4		1.20	Student	1.08	1.0	\$121	\$200	\$277	
High School			530	Student	1.08	1.0	\$139	\$230	\$318	
Junior-Community College	1, 3		540	Student	1.08	1.0	\$134	\$221	\$307	
Church			560	1,000 sf GFA	1.08	1.0	\$936	\$1,550	\$2,151	
Day Care Center/Preschool	2		565	Student	0.23	1.0	\$99	\$165	\$229	
Library	1		590	1,000 sf GFA	0.49	1.0	\$2,073	\$3,433	\$4,763	
Hospital			610	1,000 sf GFA	0.95	1.0	\$1,483	\$2,455	\$3,406	
Nursing Home			620	Occupied Bed	0.95	1.0	\$230	\$380	\$528	
BUSINESS & COMMERCIAL										
Hotel/Motel			310	3.70	Occupied Room	0.69	0.75	\$419	\$693	\$962
Building Materials/Lumber			812	30.56	1,000 sf GFA	0.49	0.75	\$1,044	\$1,730	\$2,400
Specialty Retail Center	1		814	40.67	1,000 sf GFA	0.49	0.75	\$1,390	\$2,302	\$3,193
Discount Stores			815	70.13	1,000 sf GFA	0.49	0.75	\$2,397	\$3,969	\$5,507
Hardware/Paint Stores	1		816	51.29	1,000 sf GFA	0.49	0.75	\$1,753	\$2,903	\$4,027
Nursery-Retail	2		817	36.08	1,000 sf GFA	0.49	0.75	\$1,233	\$2,042	\$2,833
Shopping Center			820							
(under 50,000 sf GFA)			820	167.59	1,000 sf GFA	0.31	0.28	\$1,353	\$2,240	\$3,108
(50,000 - 99,999 sf GFA)			820	91.65	1,000 sf GFA	0.33	0.50	\$1,406	\$2,329	\$3,231
(100,000 - 199,999 sf GFA)			820	70.67	1,000 sf GFA	0.40	0.61	\$1,604	\$2,655	\$3,684
(200,000 - 299,999 sf GFA)			820	54.50	1,000 sf GFA	0.49	0.67	\$1,664	\$2,755	\$3,823
(300,000 - 399,999 sf GFA)			820	46.81	1,000 sf GFA	0.49	0.71	\$1,515	\$2,508	\$3,479
(400,000 - 499,999 sf GFA)			820	42.02	1,000 sf GFA	0.49	0.73	\$1,398	\$2,315	\$3,211
(500,000 - 599,999 sf GFA)			820	38.65	1,000 sf GFA	0.49	0.80	\$1,409	\$2,333	\$3,237
High Turnover Sit-Down Restaurant	1		832	205.36	1,000 sf GFA	0.19	0.75	\$2,722	\$4,507	\$6,252
Fast Food Restaurant			833	786.22	1,000 sf GFA	0.09	0.51	\$3,356	\$5,557	\$7,710
New Car Sales			841	47.91	1,000 sf GFA	0.60	0.75	\$2,005	\$3,320	\$4,606
Service Station	1, 3		844	142.54	Gasoline Pump	0.07	0.77	\$715	\$1,183	\$1,642
Supermarket	1		850	87.82	Employee	0.14	0.46	\$526	\$871	\$1,208
Convenience Market	2		851	737.99	1,000 sf GFA	0.08	0.35	\$1,922	\$3,182	\$4,415
Convenience Market w/ Gas Pump	3, 5		853	194.34	Gasoline Pump	0.32	0.22	\$1,272	\$2,107	\$2,923
Apparel Store	3		870	31.27	1,000 sf GFA	0.49	0.75	\$1,069	\$1,770	\$2,455
Furniture Store	2		890	4.34	1,000 sf GFA	0.49	0.75	\$148	\$246	\$341
Bank/Savings Walk-in	1		911	140.61	1,000 sf GFA	0.17	0.75	\$1,667	\$2,761	\$3,830
Bank/Savings Drive-in	2		912	265.21	1,000 sf GFA	0.17	0.55	\$2,306	\$3,819	\$5,298
OFFICE										
Clinic	1		630	23.79	1,000 sf GFA	0.53	1.0	\$1,173	\$1,942	\$2,694
General Office			710							
(Under 100,000 sf GFA)			710	16.58	1,000 sf GFA	0.65	1.0	\$1,002	\$1,660	\$2,303
(100,000-199,999 sf GFA)			710	14.03	1,000 sf GFA	0.65	1.0	\$848	\$1,404	\$1,948
(200,000 sf GFA and over)			710	11.85	1,000 sf GFA	0.65	1.0	\$716	\$1,186	\$1,646
Medical Office Building			720	34.17	1,000 sf GFA	0.53	1.0	\$1,684	\$2,789	\$3,869
Government Office Bldg.	1		730	68.93	1,000 sf GFA	0.96	1.0	\$6,154	\$10,191	\$14,138
State Motor Vehicles Dept			731	166.02	1,000 sf GFA	0.96	1.0	\$14,822	\$24,544	\$34,052
U S Post Office	2		732	87.12	1,000 sf GFA	0.96	1.0	\$7,778	\$12,880	\$17,869
Research Center			760	7.70	1,000 sf GFA	0.67	1.0	\$480	\$794	\$1,102
Business Park			770	14.37	1,000 sf GFA	0.67	1.0	\$895	\$1,483	\$2,057

**ITE Trip Generation Rates &
ELNDT Adjustment Factors**

ITE Land Use	Notes	ITE Land Use Code	Average Weekday ITE Trip Rate		Equivalent Length New Daily Trip & ELNDT Adjustment Factors		Cost Per Unit		
			Rate	Unit(*)	Trip Length	Linked Trip	8/1/99	1/2/00	7/1/00
INDUSTRIAL							\$93	\$154	\$214
General Light Industrial		110	6.97	1,000 sf GFA	1.12	1.0	\$726	\$1,202	\$1,668
General Heavy Industrial	1	120	1.50	1,000 sf GFA	1.12	1.0	\$156	\$259	\$359
Industrial Park	2	130	6.97	1,000 sf GFA	1.12	1.0	\$726	\$1,202	\$1,668
Manufacturing		140	3.85	1,000 sf GFA	1.12	1.0	\$401	\$664	\$921
Warehouse		150	4.88	1,000 sf GFA	1.12	1.0	\$508	\$842	\$1,168
Mini-Warehouse		151	2.61	1,000 sf GFA	0.47	1.0	\$114	\$189	\$262
Facilities	1	170	1.06	Employees	1.00	1.0	\$99	\$163	\$226
Wholesale	1	860	6.73	1,000 sf GFA	0.49	1.0	\$307	\$508	\$705

* Abbreviations include: GFA = Gross Floor Area and sf = square feet

The ratio between GFA and gross leasable area (GLA), as cited for shopping center in ITE Trip Generation is 1.5:1
The ITE Trip Generation rates are factored up by 14% to derive GFA weekday rates.

Notes:

- (1) The ITE Trip Generation has less than 5 studies supporting this average rate. Applicants are strongly encouraged to conduct, at their own expense, independent trip generation studies in support of their application.
- (2) The fitted relationship between the number of units and the average weekday trip generation as noted in ITE Trip Generation has a coefficient of correlation (R2) of less than 0.70. Applicants are strongly encouraged to conduct, at their own expense, independent trip generation studies in support of their application.
- (3) The rate shown has been approximated from the published p.m. peak hour trip generation rate. Applicants are strongly encouraged to conduct, at their own expense, independent trip generation studies in support of their application.
- (4) Average of elementary and high school trip generation rates.
- (5) San Diego Traffic Generators. San Diego Association of Governments, March 1993.

ASHLAND - FUTURE LAND USE VALIDATION

LAND USE CATEGORIZATION					LAND DENSITY [3]				DEVELOPABLE LAND AREA			
Land Use Category [1]	FORECAST GROWTH [2]		ITE Code [3]	Sub-Allocation	ADJUSTED GROWTH		DUs/ Acre	Employee s/ 1000 SF GFA	Local Adjustment	1000 SF GFA/Acre	1000	
	DUs	Employees			DUs	Employees					SF GFA	Acres
Single-Family Residential	2558		210	100%	2558		4.0				NA	640
Multi-Family Residential	644		220	100%	644		15.0				NA	43
Health Care – Senior Housing	180		220	100%	180		15.0				NA	12
Retail/Commercial		1014										
Specialty Retail			814	14%	142		1.82	100%	8.83		78	9
Hardware			816	7%	71		0.96	100%	10.64		74	7
Quality Restaurant			831	17%	172		7.46	100%	7.50		23	3
Fast Food Restaurant			834	17%	172		10.90	100%	7.50		16	2
Drive-In Bank			912	20%	203		3.82	100%	7.50		53	7
Shopping Center [4]			820	25%	254		1.00	100%	11.00		254	23
Industrial												
Light	370		110	34%	370		2.16	100%	8.18		171	21
Heavy	245		120	33%	245		1.82	100%	4.51		135	30
Industrial Park	399		130	33%	399		2.00	100%	11.06		200	18
Service [7]		145	912	50%	73		3.82	100%	8.00		19	2
			848	50%	73		0.94	100%	8.00		77	10
School		200										
Elementary			520	50%	100		NA		NA		NA	NA
High School			530	50%	100		NA		NA		NA	NA
Office												
Office Park			750	50%	0		3.59	100%	18.16		0	0
General [5]			710	50%	0		3.29	100%	2.24		0	0
Total	3202	2373			3202	2373					0	826

Notes

[1] Consistent with Ashland TSP/City of Ashland Comprehensive Plan.

[2] Residential = dwelling units; all other uses = employees

[3] ITE Trip Generation, Fifth Edition

[4] Assumes 1 employee per 1000 SF GFA

[5] Assumes office building of 25,000 SF GFA (trip generation rates vary by building size)

[6] Average of 9.5 employees and 4000 SF GFA

[7] Assumes Bank [ITE 912] and Tire Store [ITE 848]

ASHLAND - FUTURE TRIP GENERATION VALIDATION

DEVELOPABLE LAND AREA [4][5]		ITE TRIP GENERATION (2-WAY)				EQUIVALENT LENGTH NEW DAILY TRIPS						
Land Use Category	DUS	SF GFA	Employees	New Use Factor	PM Peak Hour Rate	Daily Rate	PM Peak Hour Trips	Daily Trips	Adjustment Factors	Length [1]	Linked [2]	ELNDT
					Rate	Rate	Trips	Trips				
		1000										
Single-Family Residential	2558			100%	1.01	9.55	2584	24,429	y	1.00	y	24,429
Multi-Family Residential	644			100%	0.63	6.47	406	4,167		0.97	1.00	4,042
Health Care – Senior Housing	180			100%	1.00	3.00	180	540		1.00	1.00	540
Retail/Commercial												
Specialty Retail		38		100%	4.93	40.67	187	1,545		0.49	0.75	568
Hardware		19		100%	4.74	51.29	90	975		0.49	0.75	358
Quality Restaurant		46		100%	9.72	76.51	447	3,519		0.19	0.75	502
Fast Food Restaurant		46		100%	46.26	632.12	2,128	29,078		0.09	0.51	1,335
Drive-In Bank		55		100%	51.23	265.21	2,818	14,587		0.17	0.55	1,364
Shopping Center [3]		68		100%	6.57	167.59	447	11,396		0.31	0.28	989
Industrial												
Manufacturing		384		100%	0.86	3.85	150	1,478		1.12	1.00	1,656
School												
Elementary			100	100%	3.10	13.39	310	1,339		1.08	1.00	1,446
High School			100	100%	2.87	16.79	287	1,679		1.08	1.00	1,813

TOTAL 39,040

Notes

[1] Trip length variation compared to single-family residential

[2] Pass-by/linked trip rate reduction

[3] Assumes 50,000 SF GFA shopping center

[4] Based on buildable lands data within the city limits (1/26/95) and outside the city limits inside the UGB (10/30/90)

[5] Data for buildable lands outside the city limits (inside the UGB) assumes no development or rezoning since 10/90, and assumes any annexation was concomitant with UGB expansion.

Council Business Meeting

November 7, 2017

Title: Public Hearing and Adoption of a Resolution regarding Transportation Systems Development Charges
From: Paula C. Brown, PE Public Works Director
paula.brown@ashland.or.us

Summary:

Before the Council is a request to hold a public hearing and adopt a resolution titled, “A resolution **repealing** Resolution 2016-35 Transportation Systems Development Charges; and **adopting** the System Development Charges Set Forth in Resolution 1999-42, New Transportation Systems Development Charge Methodology and Charges, Pursuant to Ashland Municipal Code Section 4.20.040 and 4.20.050.”

Last December 20, 2016, Council heard a staff report, held a public hearing and approved resolutions to modify the fees for systems development charges for water, wastewater and transportation. The new water and wastewater SDC charges became effective immediately, December 21, 2016, and the new transportation SDC charges became effective on July 1, 2017.

Systems Development Charges are based upon projects identified in the City’s adopted master plans. These charges are paid by developers and property owners to reimburse the City for the cost of capital improvements made to expand the existing infrastructure or to build new infrastructure to accommodate growth in residential or business development.

Actions, Options, or Potential Motions:

This is a request to hold a public hearing to repeal Resolution 2016-35 (a Resolution Adopting New Transportation Systems Development Charges Pursuant to Section 4.20 of the Ashland Municipal Code); approve the repeal; and then adopt a new resolution, 2017-__, identical to Resolution 1999-42 dated July 7th, 1999, which was the SDC charges resolution in effect until the Council’s December 20, 2016 approval of Resolution 2016-35.

Council should hold a public hearing then has the option to do one of the following:

1. Move approval of a resolution titled, “A resolution repealing Resolution 2016-35 Transportation Systems Development Charges; **adopting** the System Development Charges Set Forth in Resolution 1999-42, New Transportation Systems Development Charge Methodology and Charges, Pursuant to Ashland Municipal Code Section 4.20.040 and 4.20.050.”
2. Do nothing. Resolution 2016-35 will remain in effect with significantly higher transportation SDCs being assessed to many commercial activities for new development actions.

Staff Recommendation:

Staff recommends repealing Resolution 2016-35, and re-establishment of the SDC charges adopted in Resolution 1999-42. Staff further recommends that Council direct the Public Works Director, in consultation with the Community Development and Administrative Services Directors, to review the current Transportation SDCs and return to Council with a recommendation not later than 12 months from now.

Resource Requirements:

If staff recommendations are accepted, staff will solicit, negotiate and enter into a contract to complete a comprehensive review of the Transportation SDCs and methodology and a cursory review of both the water and wastewater SDCs. Funds are not in the current budget and will be charged to the respective enterprise fund and are 100% SDC eligible.

Policies, Plans and Goals Supported:

Council Goals:

- 2.2 Engage boards and commissions in supporting the strategic plan
- 4 Evaluate real property and facility assets to strategically support city mission and goals
- 5.2 Support and promote, through policy, programs that make the City affordable to live in
- 7.2 Support land-use plans and policies that encourage family-friendly neighborhoods

Department Goals:

- Maintain existing infrastructure to meet regulatory requirements and minimize life-cycle costs
- Deliver timely life cycle capital improvement projects
- Maintain and improve infrastructure that enhances the economic vitality of the community
- Evaluate all city infrastructure regarding planning management and financial resources

Background and Additional Information:

Oregon Revised Statutes (ORS) 223.297 through 223.314 authorize cities, to establish Systems Development Charges (SDCs) as a one-time fee on new development to recover a fair share of costs of existing and planned facilities that provide capacity to serve future growth. ORS 223.399 defines two types of SDCs; a reimbursement fee and an improvement fee. The City of Ashland has never utilized the reimbursement fee portion and has consistently based the transportation SDCs on improvement fees only which are based on increases in capacity for capital projects to be constructed.

The change in methodology from the prior 1999 SDC rates to the current 2016 were based upon utilizing an updated Institute of Transportation Engineers (ITE) Manual, utilizing the updated capital improvements list from the City's Transportation System Plan (Kittleson, 2012) and using PM (evening) peak hour rates. As stated in the SDC Update prepared by the City's consultant, Economic & Financial Analysis, some of the commercial SDCs will be increased substantially.

The City utilized a strong SDC Committee that met between March 2014 and February 2015, as well as the Transportation Commission to review the work. Staff held a study session with council on November 14, 2016, prior to the adoption on December 20, 2016.

Upon implementation of the new transportation SDC rates on July 1, 2017, Community Development and Public Works Engineering staff specifically reviewed the cost increases for new commercial development. Although there are actually a few commercial uses that have decreased the rates due to the PM Peak methodology (for instance the rate for hospitals goes down 28%; college rates decrease by 18% and city parks decreases by 1%), the remaining businesses see increases in rates from 3% (golf courses), 48% for nursing homes, 62% hotel/motel, 231% for specialty retail, to the highest increase of 1630% for convenience markets and 1910% for service stations.

Having recently received inquiries about new building permits that would trigger greatly increased SDC charges, staff has recognized prudence requires taking a step back to re-examine the efficacy of such large, abrupt increases.

Recommended Next Steps:

Should Council accept the staff recommendation to repeal Resolution 2016-35 and adopt in a new resolution SDC charges identical to those in Resolution 1999-42, the latter fees will become effective immediately. Staff would then undertake three additional actions:

- 1) Hire a consultant to complete a comprehensive review of the Transportation SDCs and methodology and a cursory review of both the water and wastewater SDCs as soon as practical but not longer than 12 months.
- 2) Form an internal staff review committee of the Public Works Director, Community Development Director and Administrative Services Director to fully vet the proposed SDCs.
- 3) Reinstate the SDC Committee to review any changes to the methodology and proposed new charges

Attachments:

1. Proposed Resolution
2. Resolution No. 2016-35 Adopted December 20, 2016
3. Resolution No. 1999-42 Transportation SDCs Originally Adopted July 7, 1999

Additional Links:

- Council Study Session, November 17, 2016 ([link](#))
Council Meeting Agenda, December 20, 2016 ([link](#))
Council Meeting Minutes, December 20, 2016 ([link](#))

RESOLUTION NO. 2017-

**A RESOLUTION REPEALING RESOLUTION 2016-35
TRANSPORTATION SYSTEMS DEVELOPMENT CHARGES; AND
ADOPTING THE SYSTEM DEVELOPMENT CHARGES SET FORTH IN
RESOLUTION 1999-42, NEW TRANSPORTATION SYSTEMS
DEVELOPMENT CHARGE METHODOLOGY AND CHARGES,
PURSUANT TO ASHLAND MUNICIPAL CODE SECTION 4.20.040 AND
4.20.050.**

RECITALS:

- A. The City adopted a new Transportation Systems Plan on March 19, 2013 through ordinance 3080 that amended the comprehensive plan.
- B. Resolution 2016-35 adopted a new Transportation System Development Charges project list.

THE CITY OF ASHLAND RESOLVES AS FOLLOWS:

SECTION 1. Resolution 2016-35 is repealed.

SECTION 2. The Transportation Systems Development Charges and costs per unit described in Resolution 1999-42 are hereby adopted in their entirety.

SECTION 3. The Transportation Systems Development Charges and costs per unit attached to this resolution and marked "Exhibit A" represent the latest charges as described in Resolution 1999-42 for "phase three effective July 1, 2000" with the adjustment for inflation as noted.

SECTION 4. The Transportation Systems Development Charges project list marked as "Exhibit B" remains in effect as adopted by the new Transportation Systems Plan on March 19, 2013. The Transportation Systems Development Charges collected will be distributed to transportation projects based on the aggregate growth percentage described in "Exhibit A".

SECTION 5. One copy of this Resolution along with both "Exhibit A" and "Exhibit B" shall be maintained in the office of the City Recorder and shall be available for public inspection during regular business hours.

SECTION 6. The Fees adopted pursuant to this Resolution shall be effective immediately.

SECTION 7. The Transportation Systems Development Charge methodology and charges will be reviewed and presented to the Council within 12 months of this resolution.

SECTION 8. The fees imposed by this Resolution are classified as not subject to the limits of Section 11b of Article XI of the Oregon Constitution (Ballot Measure No. 5).

This resolution was read by title only in accordance with Ashland Municipal Code §2.04.090
duly PASSED and ADOPTED this ____ day of _____, 2017.

Melissa Huhtala, City Recorder

SIGNED and APPROVED this ____ day of _____, 2017.

John Stromberg, Mayor

Reviewed as to form:

David Lohman, City Attorney