CITY OF ASHLAND

Final Methodology Report

Transportation System Development Charges

Adopted November 6, 2018 (effective January 1, 2019)

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Executive Summary

Background

The City of Ashland (the City) last updated its transportation system development charges (TSDCs) in 2016 (effective July 1, 2017). However, concerns over the methodology, and certain development type impacts, led to the fees being repealed in November 2017. Since that time, the City has been charging TSDCs based on its prior methodology and fee schedule adopted in 1999. In January 2018, the City embarked on an effort to update its TSDC methodology and project list. The objectives of the study were to:

- Develop a new project list based on the 2013 Transportation System Plan and more current (2018) project costs.
- Work with a SDC Advisory Committee (SAC) to develop a methodology that was consistent with industry standards and Oregon Revised Statutes (ORS) 223.297 through 223.314 guidelines.
- Consider potential TSDC discounts and incentives related to broader City policy objectives.

The SAC met three times over the course of the project and reached consensus on methodological and policy recommendations.

The Ashland City Council intends on holding a public hearing to hear comments on the proposed Transportation SDC methodology on November 6, 2018, at its regularly scheduled business meeting. Subject to comments, first reading of the ordinance to impose these fees will be the same night, with second reading on November 20, 2018. The fees are intended to be enacted on January 1, 2019.

Overview of Proposed Methodology

Table ES-1 presents the key components of the recommended methodology, and provides comparison to the current (1999) and prior (2016) methodologies.

Table ES-1
TSDC Methodology Comparison

Methodology Element	Current (1999) Methodology	Prior (2016) Methodology	Recommended (2018) Methodology
Project List	Improvement only	Improvement only	Improvement & Reimbursement
Growth share	Population-based	Population based	Mode-specific planning criteria
Growth in trips	Estimated from population and employment data system-wide	Estimated from population and employment data system-wide	Based on travel demand model forecast that recognizes growth in land use by area (e.g., by TAZ)
Trip Rate Type	Average Daily Trips	PM Peak Trips	Average Daily Trips
Trip Rate Adjustments	Pass-by and trip length	None	Pass-by and diverted trips
Trip Rate Data by Land Use	ITE 5th edition	ITE 9th Edition	ITE current edition (10th edition most recent; 2017)

TAZ = Transportation Analysis Zone

As shown in Table ES-1, the recommended methodology differs from the current methodology in that it includes both an improvement and reimbursement element. The addition of a reimbursement element provides a more flexible capital funding source, and ensures that new development contributes an equitable share to existing roadway capacity. The new methodology also includes a more rigorous approach to both the determination of the growth share of project costs, and the projected growth in trips system-wide. The new methodology is based on data from the regional travel demand model.

Like the existing methodology, the recommended methodology is assessed based on average daily trips, and it maintains trip rate adjustments (a key difference from the 2016 methodology). However, the type of adjustments changed somewhat from the current methodology and the adjustment factors along with the trip rates have been updated to reflect current data from the Institute of Transportation Engineers (ITE) *Trip Generation Manual*.

Major Findings

TSDC Costs

A summary of the SDC improvement project costs by project type is provided in Table ES-2, and the detailed project list is provided in Appendix A-1. As shown in Table ES-2, the TSDC improvement project list includes about $56.3 million in planned improvements and related studies. The improvements include new facilities and upgrades to existing facilities in order to increase capacity and improve the level of performance of the transportation system. Approximately $23.9 million of project costs are assumed to be funded by other (external) funds, including grants, developer contributions, and state funding. When the project costs are reduced by projected external funding sources, the net project costs allocated to growth are about $16.8 million (about 52 percent of total project costs.)

Table ES-2

City of Ashland

Summary of Improvement Project List

Project Type	Total Cost	Other Funding	% Growth[1]	TSDC Cost[2]
Studies	$153,400	$0	11%	$16,430
Transit	$4,425,000	$0	11%	$473,937
Pedestrian	$16,359,225	$10,763,813	97%	$5,486,026
Bike	$5,943,660	$594,366	34%	$1,969,374
Intersection Studies	$330,400	$0	24%	$80,406
Intersection & Roadway Improvements	$27,884,972	$11,728,161	52%	$8,323,813
Crossing	$1,180,000	$767,000	100%	$413,000
Total	$56,276,657	$23,853,340	52%	$16,762,985

[1] Growth portion before other funds applied

[2] Other funding applied first to non-growth share of cost; any remaining funds reduce TSDC cost

The reimbursement fee is calculated based on the actual cost of reserve capacity from roadway improvements constructed over the past 20 years, exclusive of grants and contributions. A total value of $7.5 million was identified for reimbursement projects, of which about $3.4 million represents the estimated City-funded cost. Growth is allocated approximately $1.2 million (35 percent) of the net existing system value, based on individual project cost allocations.

TSDC Schedule

The growth-related improvement and reimbursement costs are divided by the projected future growth in trips (as measured by average daily trip ends) to determine the system-wide cost per trip. The regional travel demand model projects a growth in daily trips of 38,066, which results in a total cost per trip of about $472:

$440.36 (improvement fee) + $31.19 (reimbursement fee) = $471.55 combined fee

In addition, local governments are entitled to include in the SDCs, a charge to recover costs associated with complying with the SDC law. Compliance costs include costs related to developing and administering the TSDC methodology, project list, as well as annual accounting costs. The compliance charge is estimated to be about $16 per trip, or about three percent of the combined TSDC per trip ($488).

The TSDC for an individual development is based on the cost per trip, and the number of trips attributable to a particular development, where the number of development trips is computed as follows:

Number of Development Trips = Trip Generation Rate X Adjustment Factors X Development Units

The standard practice in the transportation industry is to use ITE trip generation rates to determine the TSDCs for *individual* developments. Adjustment factors applied to base trip rates reflect pass-by and diverted linked trip factors for some land uses. 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. A diverted linked trip is a similar 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.

Based on the TSDCs presented in this report, and the most current version of the ITE Trip Generation Manual (10th edition), the TSDC for a single family dwelling unit (with an average trip rate of 9.44) is $4,603. The full TSDC schedule is shown in Appendix Table A-2.

TSDC Implementation

In addition to the updated methodology and project list, the SAC made a number of recommendations related to the implementation of the TSDCs, aimed primarily at addressing revenue adequacy and affordability objectives.

Inflationary Adjustments

In order to keep pace with inflation, and avoid significant future TSDC adjustments, the SAC recommends that the City's fees increase with the Engineering News Record (ENR) construction cost index July 1st each year.

Phase-In

As a result of the updated cost per trip, as well as changes to ITE trip rates since the 1999 methodology, the TSDCs for many land use categories increase significantly compared with current fees. The SAC has recommended a 3-year phase in of the updated cost per trip, with the first year including 50 percent of the increase, and approximately 25 percent increases in years 2 and 3. Table A-2 shows the projected TSDCs (before future inflation adjustments) during the recommended 3-year phase-in period. The City Council has the final determination on the phasing option.

Discounts and Incentives

The SAC discussed incentives and discounts for certain development types, and recommends the following:

- 50 percent discount for new homes (including Accessory Dwelling Units) that are 500 square feet or smaller
- 25 percent discount for homes (including cottage housing) that are 501-800 square feet
- Maintain the existing affordable housing 100 percent discount; qualified as affordable housing by the City of Ashland Housing Program and deed restricted to remain affordable for a minimum of 30 years.
- Provide a 20 percent discount for developers planning to employ Transportation Demand Management (measures aimed at reducing single occupancy vehicle use); as an example this credit recognizes developing near transit (e.g., Transit Triangle); eligible projects must demonstrate achievable transportation impact reductions and parking reductions.

Report Contents

This methodology report is organized as follows:

- **Executive Summary –** Provides background information on TSDCs in Ashland, and a summary of the recommended TSDC methodology and major findings.
- **Section 1 – Introduction –** Provides a summary of SDC statutory requirements.
- **Section 2 – Growth Requirements –** Presents the approaches used to determine future growth in trips and the growth share of project costs.
- **Section 3 – TSDC Cost –** Summarizes the reimbursement and improvement project costs, based on the approaches and assumptions presented in Section 2 and the updated Project List.
- **Section 4 – TSDC Schedule –** Provides information on system-wide unit costs, the process for assessing TSDCs to individual developments, and method for updating for future cost escalation.

Appendix A provides the detailed Improvement Project List, as well as the TSDC Schedule.

SECTION 1

Introduction

Oregon SDC Law

Oregon Revised Statutes 223.297-223.314 authorize local governments to assess System Development Charges (SDCs) for the following types of capital improvements:

- Drainage and flood control (i.e., storm water)
- Water supply, treatment, and distribution
- Wastewater collection, transmission, treatment, and disposal
- Transportation
- Parks and recreation

In addition to specifying the infrastructure systems for which SDCs may be assessed, the SDC legislation provides guidelines on the calculation and modification of SDCs, accounting requirements to track SDC revenues, and the adoption of administrative review procedures. A summary of key provisions is provided below.

SDC Structure

Oregon law allows that an SDC may include a reimbursement fee, an improvement fee, or a combination of the two.

Reimbursement Fee

The reimbursement fee is based on the value of available reserve capacity associated with capital improvements already constructed or under construction. The methodology used to calculate the reimbursement fee must consider the cost of existing facilities, prior contributions by existing users, the value of unused capacity, grants, and other relevant factors. The objective of the reimbursement fee methodology is to require new users to contribute an equitable share of the capital costs of existing facilities. When new users pay for their share of the available reserve capacity through the SDC reimbursement fee, the money received can be used to fund other capital needs (e.g., system replacements).

Improvement Fee

The improvement fee is designed to recover all or a portion of the costs of planned capital improvements that add system capacity to serve future users. An increase in system capacity may be established if a capital improvement increases the level of performance or service provided by existing facilities or provides new facilities. The portion of the improvements funded by improvement fees must be related to the need for increased capacity to provide service for future users.

Credits

The legislation requires that a credit be provided against the improvement fee for the construction of "qualified public improvements." Qualified public improvements are improvements that are required as a condition of development approval, identified in the system's capital improvement program, and either (1) not located on or contiguous to the property being developed, or (2) located in whole or in part, on or contiguous to, property that is the subject of development approval and required to be built larger or with greater capacity than is necessary for the particular development project to which the improvement fee is related.

Review and Notification Requirements

The methodology for establishing or modifying improvement or reimbursement fees shall be available for public inspection. The local government must maintain a list of persons who have made a written request for notification prior to the adoption or amendment of such fees. The notification requirements for changes to the fees that represent a modification to the methodology are 90-day written notice prior to first public hearing, with the SDC methodology available for review 60 days prior to public hearing.

Other Provisions

Other provisions of the legislation require:

- Preparation of a capital improvement program or comparable plan (prior to the establishment of a SDC), that includes a list of the improvements that the jurisdiction intends to fund with improvement fee revenues and the estimated timing, cost, and eligible portion of each improvement.
- Deposit of SDC revenues into dedicated accounts and annual accounting of revenues and expenditures, including a list of the amount spent on each project funded, in whole or in part, by SDC revenues.
- Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge an expenditure of SDC revenues.

The provisions of the legislation are invalidated if they are construed to impair the local government's bond obligations or the ability of the local government to issue new bonds or other financing.

SECTION 2

Growth Requirements

Introduction

This section presents the projected future growth needs, and the bases for determining the costs that will be recovered from growth through the TSDCs ("growth share"). To comply with Oregon SDC law and industry standard practices, new development cannot be charged for costs associated with capacity needed to serve existing development– either in the form of used capacity on existing facilities or future expansion needed to remedy existing deficiencies. To be defensible, the methodology must:

- Specify how growth needs will be evaluated (e.g., volume, volume/capacity ratio, level of service, etc.)
- Identify the list of existing facilities and future projects needed to address growth needs.
- Allocate project costs between growth and existing development, based on the portion of each project that relates to providing capacity for growth vs. addressing an existing deficiency or increase the level of performance for existing development.

System-Wide Growth in Trips

To evaluate the roadway capacity needs and the amount of vehicle trips that are generated by existing and future development, the regional travel demand model was utilized. Specifically, the model was utilized to approximate the existing number of trips (base year) using the City street network. The model then considers forecast population and employment increases by transportation analysis zone (TAZ) to project future year (2037) trips generated within the City's currently acknowledged Urban Growth Boundary (UGB).

Table 2-1 lists the total number of trip ends for the base year and future year scenarios. As listed, the total number of trip ends is forecasted to grow from 134,944 to 173,010. The growth in average daily trip ends (38,066) represents about 22 percent of the future projections.

Table 2-1
Model Vehicle Average Daily Trip Ends (Within the City's currently acknowledged UGB)[1]

	Base Year Trips	Future Trips	Growth Trips
Trip Ends	**134,944**	**173,010**	**38,066**
[1] ODOT TPAU (May 16, 2018); excludes external-external trips			

Growth Share

The system-wide growth in trips will be accommodated by existing roadway reserve capacity, as well as planned future system expansion for all modes of travel (auto, transit, bike and pedestrian). According to SDC statutory requirements: "An increase in system capacity may be established if a capital improvement increases the level of performance or service provided by existing facilities or provides new facilities." A key component of the SDC methodology is allocation of existing facility and planned future facility costs to growth, in proportion to estimated capacity requirements.

For purposes of determining growth share, individual projects are analyzed to determine the portion of capacity costs needed for future growth requirements versus existing development. Two general methods are used for determining the growth share:

1. **Standards-Based approach –** where the allocation of project costs to existing development is limited to correcting any existing deficiency. Existing deficiencies are evaluated based on current performance relative to the appropriate planning/design standard for the particular improvement. For intersections, the standard is a "volume-capacity ratio (v/c ratio)"[1]. For multimodal improvements, the standard is miles per capita of bikeways and pedestrian ways.

2. **Capacity Utilization approach –** Improvements to existing facilities to address safety, modernization, and other performance considerations provide capacity for growth and enhanced performance for existing development, so the costs are allocated in proportion to the utilization of the facilities, as determined for each improvement individually.

Table 2-2 provides a summary of the allocation basis for existing and future development by major project type.

Table 2-2
Summary of Growth Share Methods

Project Type	Existing Share	Future Development Share
Roadway and Intersection Level of Performance Improvements (e.g., safety and modernization)	Existing development trips as a percent of total future 2037 trips	Future development trips as a percent of total future 2037 trips
New roadways and extensions	0%	100%
Intersection capacity and Bike and Pedestrian Improvements	Limited to existing deficiency (as defined by v/c or level of service)	100% - Existing Deficiency
Studies	Share of future population (89%)	Share of future population (11%)

The recommended methodology is based on a mode-specific analysis for determining growth share of project costs, which takes into consideration the different travel characteristics of pedestrians, cyclists and motorists, as described below.

[1] Volume-to-capacity ratio is defined as motor vehicle trips divided by the hourly capacity of the facility to serve those trips.

Roadways and Intersections (Improved Level of Performance)

For upgrade of existing facilities (i.e., realignments, modernization, and other improvements), the growth share analysis for each roadway and intersection project was based on information from the travel demand model. These projects were evaluated using existing and future traffic volumes at each location. These volumes reflect the relationship between land use and transportation and rely upon estimates of household and employment growth by area of city (i.e., TAZ). This means that each new roadway or intersection project will have a different growth related proportion, as shown in Table A-1 (appendix).

New Roadway and Intersection Facilities; Existing Facility Expansion (Capacity Only)

New roadways and expansions driven by future development capacity requirements are allocated 100% to growth, since the capacity is needed entirely for new development.

Similarly, intersection improvements that are not needed to meet existing mobility standards, but are needed once the growth trips are added to the intersection, are assumed to be 100% funded by growth, since there is no existing deficiency. Data was compiled from the TSP to determine if facilities were operating with a volume/capacity ratio less than the required standard.

Bike and Pedestrian Improvements

Unlike roadway and intersection projects, trip data for bike and pedestrian improvements is not available. Therefore, the growth share for bike and pedestrian facilities is based on the planned level of service (LOS). The planned LOS is defined as the quantity of future facilities per 1,000 population served.

The following equation shows the calculation of the planned LOS:

$$\frac{Existing\,Q + Planned\,Q}{Future\,Population\,Served} = Planned\,LOS$$

Where:

Q = quantity (miles of bike or pedestrian facilities), and
Future Population Served (within the UGB) = 23,183

The existing and future miles of bike and pedestrian facilities are shown in Table 2-3.

Table 2-3

Existing and Future Bike and Pedestrian Facilities

Facility Type	Current (Miles)	Additional (miles) Stand-Alone Projects	Additional (miles) Road Projects	Future (Miles)
Multi Use Path	3.93	1.9	0	5.8
Bike Lanes[2]	22.0	9.6	2.4	34.0
Sidewalks [3]	80.0	9.8	2.5	92.3

[1]City-owned paved shared use paths

[2]Bike lanes only; does not include bike shoulders

[3]On improved and partially improved arterials and collectors

The City's population forecast for existing and future (2038) conditions are presented in Table 2-4. Growth during the planning period is estimated to be 2,483 people.

Table 2-4

Current and Future Population

	Current (2018)	Future (2038)	Growth
Population	20,700	23,183	2,483

Table 2-5 presents the existing and future LOS for bike and pedestrian facilities, based on the existing and planned future facilities presented in Table 2-3 divided by the existing and projected future population presented in Table 2-4. In all cases, the planned LOS is higher than the existing LOS, which means that there are existing deficiencies for bike and pedestrian improvements, so a portion of future improvements are needed by existing development.

Table 2-5

Existing and Future Bike and Pedestrian LOS

	Miles/1,000 People	
Facility Type	Current	Future
Multi Use Path	0.19	0.25
Bike Lanes	1.06	1.47
Sidewalks	3.86	3.98

The capacity requirements, or miles, needed for the existing population and for growth are shown in Table 2-6 and estimated by multiplying the planned (future) LOS for each facility type (from Table 2-5) by the population of each group (from Table 2-4).

Table 2-6
Existing and Growth Capacity Needs

	Total Miles Needed		
Facility Type	Current	Growth	Total
Multi Use Path	5.2	0.6	5.8
Bike Lanes	30.4	3.6	34.0
Sidewalks	82.4	9.9	92.3

Existing development's needs are assumed to be met first by the existing inventory of facilities; any shortfall is assumed to be provided from planned improvements. Therefore, the additional need for facilities by the existing population is equal to the total inventory needed (from Table 2-6) less the existing inventory (from Table 2-3). For example, the planned LOS results in a total need of 5.18 miles of multi-use paths for existing development. The current inventory of 3.93 miles is deducted from the total need to yield an additional need of 1.25 miles.

Table 2-7 shows the existing and growth allocation for the planned improvements by project type. For the multi-use paths, the growth need is equal to 0.6 miles, so the additional 1.9 miles of path are allocated 67 percent and 33 percent, respectively to existing and growth. For bike projects, the overall growth need is 30 percent (3.6 miles) of the planned additional bike lanes; however, improvements are in conjunction with roadway projects, and as such are allocated in proportion to future auto trip volumes. As shown in Table 2-7, the roadway project allocations result in 0.38 miles of bike lane costs allocated to growth, so there is an additional need of 3.3 miles (34 percent) from the stand-alone bike projects. Similarly, for sidewalk improvements, the roadway allocations result in 0.41 miles of new sidewalks allocated to growth. However, the total growth need is 9.9 miles, so 97 percent of the stand-alone sidewalk costs on the project list are allocated to growth.

Table 2-7
Allocation of Additional Facilities

	Miles Added			% Allocation		
	Existing[1]	Growth	**Total**	**Existing**	**Growth**	**Total**
Multi Use Path	1.25	**0.6**	1.9	67%	**33%**	100%
Bike Lanes						
Road Projects[2]	2.0	0.38	2.4	84%	16%	100%
Bike Projects	6.4	3.3	9.6	66%	**34%**	100%
Subtotal	8.4	**3.6**	12.0	70%	30%	100%
Sidewalks						
Road Projects	2.1	0.41	2.5	84%	16%	100%
Pedestrian Projects	0.3	9.5	9.8	3%	**97%**	100%
Subtotal	2.42	**9.9**	12.3	20%	80%	100%

[1] Existing need assumed to be met first by current facilities
[2] Numbers in bold used for growth share of stand-alone bike & pedestrian projects in Table A-1

Studies

Growth share for corridor studies are based on the average of growth trips on facilities with future planned improvements.

SECTION 3

TSDC Cost

Introduction

The development of the TSDC cost generally involves the following key steps:

1. The TSDC project list is updated to reflect projects and costs related to current and future system needs.
2. Project costs are reduced by projected external funding amounts (assessments, grants, contributions by other agencies).
3. Net project costs are allocated between growth and existing development, as described in Section 2.

As allowed by Oregon SDC law, the TSDC costs include both completed (reimbursement) and planned future (improvement) projects costs. Both components of the TSDC cost are summarized below.

Project List and Costs

City staff reviewed the financially constrained transportation project list developed as a result of the adopted 2013 TSP. All projects were updated to 2018 costs based upon the Oregon Department of Transportation (ODOT) unit costs of construction. Costs were updated to include the new Americans with Disabilities Act (ADA) standards for crossings. Completed projects were moved to a list considered for the reimbursement fee based on actual construction costs and City funding sources.

Improvement Costs

The improvement TSDC cost is summarized by major project component in Table 3-1. A detailed list of projects is provided in Table A-1 (appendix). The TSP was adopted in 2013 and placed a priority on sidewalks, especially school routes. As a result, the project list has over $16M in sidewalk projects that will most likely be completed through Safe Routes to School or other grant programs. Based on Council's prior direction, the Nevada Street Bridge extension (Council action June 20, 2017) was removed from the eligible projects for funding and will be reviewed again during the TSP update. City staff added the Ashland Street, Oak Knoll, and E. Main/Hwy 66 intersection potential roundabout project (R9) to the list to reflect higher priority needs in the city.

Developer-driven projects expected to be constructed within the next 5-7 years are also included on the list shown in Table A-1. In most cases these new projects will provide benefits not only to the new development area, but also to the community at large. If the City will be giving TSDC credits for work being done by the developer, funds must be accounted for and collected through the TSDC. Many developer driven projects are constructed to include more pavement and

sidewalk width to be consistent with City standards for a certain type of street in lieu of a reflecting the minimum width that would be required just to serve development. For those development driven projects, the City's share to "upsize" the roadway was estimated to be 35%. The costs will be adjusted as the project is built to ensure equitable credits for the development completed above the general standard (similar to water and sewer pipeline up-sizing).

As shown in Table 3-1, the total cost of improvements on the project list is about $56 million. Future improvement costs were adjusted for expected external funding totaling almost $24 million, as follows:

- Sidewalk projects potentially eligible for Safe Routes to School or other grant programs are assumed to be grant funded at 75 percent
- New bikeways assume 10 percent grant funding
- Improvements on ODOT facilities include 90 percent external funding
- Roadway safety projects assume other funding of 25 percent
- Development driven projects assume 65 percent developer funded

The growth portion (i.e., TSDC cost) is about $16.7 million.

Table 3-1

Summary of Improvement Project Costs

Project Type	Total Cost	Other Funding	% Growth[1]	TSDC Cost[2]
Studies	$153,400	$0	11%	$16,430
Transit	$4,425,000	$0	11%	$473,937
Pedestrian	$16,359,225	$10,763,813	97%	$5,486,026
Bike	$5,943,660	$594,366	34%	$1,969,374
Intersection Studies	$330,400	$0	24%	$80,406
Intersection & Roadway Improvements	$27,884,972	$11,728,161	52%	$8,323,813
Crossing	$1,180,000	$767,000	100%	$413,000
Total	$56,276,657	$23,853,340	52%	$16,762,985

[1] Growth portion before other funds applied

[2] Other funding applied first to non-growth share of cost; any remaining funds reduce TSDC cost

Reimbursement Costs

The reimbursement project lists and costs are shown in Table 3-2. Project costs reflect actual construction costs, adjusted for other funding sources. The growth share represents the portion of roadway capacity reserved for future development trips, as estimated from the travel demand model. The total reimbursement growth cost is almost $1.2 million.

Table 3-2
Reimbursement Project Costs

Description	Actual Project Cost	Other Funding	NET CITY $	GROWTH %	SDC $
Siskiyou Blvd, Gresham, 3rd, Lithia Way Intersection	$5,128,571	$2,900,000	$2,228,571	36%	$802,657
N. Main/Hersey/Wimer Intersection Realignment	$1,049,051	$682,696	$366,356	17%	$60,802
Walker Ave @ E Main - Install right turn lane	$701,351	$418,920	$282,431	40%	$114,005
Railroad Crossing Imp; E Main (07)	$443,002	$100,000	$343,002	30%	$103,287
Railroad Crossing Improvements; Oak	$115,960		$115,960	71%	$82,481
Will Dodge Way reconstruction	$27,909		$27,909	51%	$14,192
N. Main Road Diet	$108,657	$32,597	$76,060	13%	$9,726
	$7,574,501	$1,234,213	$3,440,288	35%	$1,187,150

SECTION 4

TSDC Schedule

Introduction

The TSDC for an individual development is based on the system-wide unit cost per trip and the number of trips attributable to a particular development.

System-Wide Unit Costs ($/Trip)

Based on the growth trips and TSDC costs summarized in Sections 2 and 3, the total cost per average daily trip is equal to $471.55, as shown in Table 4-1, and is comprised of the following components:

$440.36 (improvement fee) + $31.19 (reimbursement fee)

Table 4-1
Transportation System Unit Costs of Capacity ($/Trip)

	Improvement SDC	Reimbursement SDC	Combined SDC
Cost Basis (1)	$16,762,985	$1,187,150	$17,950135
Growth Trip Ends (2)	38,066	38,066	38,066
SDC per Trip End	**$440.36**	**$31.19**	**$471.55**

(1) From Tables 3-1 and 3-2
(2) From Table 2-1

Compliance Charge

Local governments are entitled to include in the TSDCs, a charge to recover costs associated with complying with the SDC statutes. Compliance costs include costs related to developing and administering the SDC methodology, project list (including but not limited to TSP and other studies), and credit system; as well as annual accounting and other City administration costs.

Table 4-2 shows the calculation of the compliance charge per trip, which is $16.05, or about 3.3 percent of the total cost per trip ($488).

Table 4-2
Estimated Compliance Costs

	Total $	Amortize (Years)	Annual $	Growth %	Growth $
SDC Study	$50,000	5	$10,000	100%	$10,000
TSP	$225,000	10	$22,500	52%	$11,633
Accounting, Legal, Planning	$1,000	1	$1,000	100%	$1,000
			Total Cost		$22,633
			Annual Trips		1,410
			Compliance $/Trip		$16.05

TSDC Schedule

The TSDC for an individual development is based on the cost per trip (including the reimbursement, improvement, and compliance fees) and the number of trips (average daily) attributable to a particular development, where the number of development trips is computed as follows:

Number of Development Trips = Trip Generation Rate X Adjustment Factors X Development Units

Table A-2 (in Appendix A) includes the updated TSDC rates and traffic impact assumptions for typical land use categories.

Trip Generation Rates

In recognition of Ashland's character and its residents' travel behaviors, the SAC reviewed the differences between basing the TSDC on average daily versus PM peak hour (4-6 pm) trip generation. After significant debate, the SAC recommended the use of average daily trips as more proportional and equitable for TSDC assessment purposes. Average daily trips recognize the overall capacity utilization of the system, not just capacity used by trips generated during the PM peak.

The City will continue to use the Institute of Transportation Engineers (ITE) average daily trip generation rates to determine the TSDCs for *individual* developments. Use of ITE trip generation data is standard in the transportation industry. ITE trip rates by land use are based on studies from around the country, and in the absence of local data, represent the best available source of trip data for specific land uses.

Trip Rate Adjustments

The updated methodology includes pass-by and diverted linked trip adjustments. The current methodology adjustments for trip length are eliminated, as available data to reasonably estimate average trip length for a given land use type in comparison to other uses is extremely limited. Furthermore, trip length may be more directly attributable to location within an area and the availability of other similar uses in the area than it is to simply the type of use.

The updated methodology adjustments are discussed in more detail below.

Pass-by Trips

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 trip adjustments in the updated methodology are based on published data by land use from the ITE.

Diverted Link Trips

The updated methodology also adjusts traffic impact based on "diverted link" trips, which is another type of non-primary trip. 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. As with the pass-by trip adjustments, the diverted link trip adjustments included in the updated methodology are based on reported ITE data.

TSDC Implementation

The SAC made a number of recommendations related to the implementation of the TSDCs, aimed primarily at addressing revenue adequacy and affordability objectives.

Inflationary Adjustments

In order to keep pace with inflation, and avoid significant future TSDC adjustments, the SAC recommends that the City's fees increase with the Engineering News Record (ENR) construction cost index July 1st each year.

Phase-In

As a result of the updated cost per trip, as well as changes to ITE trip rates since the 1999 methodology, the TSDCs for many land use categories increase significantly compared with current fees. The SAC has recommended a 3-year phase in of the updated cost per trip, with the first year including 50 percent of the increase, and approximately 25 percent increases in years 2 and 3. Table A-2 shows the projected TSDCs (before future inflation adjustments) during the recommended 3-year phase-in period.

Discounts and Incentives

The SAC discussed incentives and discounts for certain development types, and recommends the following:

- 50 percent discount for new homes (including Accessory Dwelling Units) that are 500 square feet or smaller
- 25 percent discount for homes (including cottage housing) that are 501-800 square feet
- Maintain the existing affordable housing 100 percent discount; qualified as affordable housing by the City of Ashland Housing Program and deed restricted to remain affordable for a minimum of 30 years.
- Provide a 20 percent discount for developers planning to employ Transportation Demand Management (measures aimed at reducing single occupancy vehicle use); as an example this credit recognizes developing near transit (e.g., Transit Triangle); eligible projects must demonstrate achievable transportation impact reductions and parking reductions.

Table A-1
City of Ashland, Oregon
TRANSPORTATION SDC Project List

Type/ #	Street	Description	Classification	Priority	2018 Cost	Other Funding	% Growth	TSDC Cost [1]
GENERAL POLICIES & STUDIES								
S1	NA	Funding Sources Feasibility Study	NA	2	$35,400		11%	$3,791
S2	NA	Downtown Parking & Multi-Modal Circulation Study		1	$118,000		11%	$12,638
ST	Total Policies & Studies Projects				$153,400			$16,430
PEDESTRIAN PROJECTS								
O1	NA	Travel Smart Education, Targeted Marketing Program			$53,100		0%	$0
P1	N. Main St/Hwy 99	N. Main St to Schofield St	Boulevard	1	$73,750		97%	$71,626
P4	Laurel St	Nevada St to Orange Ave	Avenue	2	$737,500	$553,125	97%	$184,375
P5	Glenn St/Orange Ave	N. Main St to 175' E of Willow St	N'hood Street	1	$295,000	$221,250	97%	$73,750
P6	Orange Ave	175' west of Drager St to Helman St	Avenue	1	$368,750	$276,563	97%	$92,188
P8	Wimer St	Thornton Way to N. Main St	N'hood Street	2	$1,180,000	$885,000	97%	$295,000
P9	Maple St	Chestnut St to 150' E of Rock St	Avenue	1	$147,500	$110,625	97%	$36,875
P10(1)	Scenic Dr	Maple St to Wimer St	Avenue	1	$368,750	$276,563	97%	$92,188
P17	Beaver Slide	Water St to Lithia Way	N'hood Street	1	$73,750		97%	$71,626
P18	A St	Oak St to 100' W of 6th St	Avenue	1	$368,750	$276,563	97%	$92,188
P22	N. Mountain Ave	100' S of Village Green Way to Iowa St	Avenue	1	$663,750		97%	$644,634
P23	Wightman St	200' N of E. Main St to 625' S of E. Main St	N'hood Collector	1	$590,000	$442,500	97%	$147,500
P27(1)	Walker Ave	Oregon St to Woodland Dr	Avenue	1	$295,000	$221,250	97%	$73,750
P28(1)	Ashland St	S. Mountain Ave to Morton St	Avenue	1	$663,750	$497,813	97%	$165,938
P38(1)	Clay St	Siskiyou Blvd to Mohawk St	Avenue	1	$442,500	$331,875	97%	$110,625
P57(1)	Tolman Creek Rd	Siskiyou Blvd to west side City Limits	Avenue	1	$626,875		97%	$608,821
P58(1)	Helman St	Hersey St to Van Ness Ave	Avenue	1	$147,500	$110,625	97%	$36,875
P59	Garfield St	E. Main St to Siskiyou Blvd	N'hood Street	1	$1,106,250	$829,688	97%	$276,563
P60	Lincoln St	E. Main St to Iowa St	N'hood Street	1	$663,750	$497,813	97%	$165,938
P61	California St	E. Main St to Iowa St	N'hood Street	1	$737,500	$553,125	97%	$184,375
P62	Quincy St	Garfield St to Wightman St	N'hood Street	2	$221,250	$165,938	97%	$55,313
P63	Liberty St	Siskiyou Blvd to Ashland St	N'hood Street	1	$958,750	$719,063	97%	$239,688
P64	Water St	Van Ness Ave to B St	N'hood Street	2	$368,750	$276,563	97%	$92,188
P65	Faith Ave	Ashland St to Siskiyou Blvd	N'hood Street	1	$516,250	$387,188	97%	$129,063
P66	Diane St	Jaquelyn St to Tolman Creek Rd	N'hood Street	1	$29,500	$22,125	97%	$7,375
P67	Frances Lane	Siskiyou Blvd to Oregon St	N'hood Street	1	$14,750	$11,063	97%	$3,688
P68	Carol St	Patterson St to Hersey St	N'hood Street	1	$221,250	$165,938	97%	$55,313
P70	Park St	Ashland St to Siskiyou Blvd	N'hood Street	1	$958,750	$719,063	97%	$239,688
P72	C St	Fourth St to Fifth St	N'hood Street	2	$147,500		97%	$143,252

Table A-1
City of Ashland, Oregon
TRANSPORTATION SDC Project List

Type/ #	Street	Description	Classification	Priority	2018 Cost	Other Funding	% Growth	TSDC Cost 1
P73	Barbara St	Jaquelyn St to Tolman Creek Rd	N'hood Street	2	$147,500	$110,625	97%	$36,875
P74	Roca St	Ashland St to Prospect St	N'hood Street	2	$368,750	$276,563	97%	$92,188
P75	Blaine St	Morton St to Morse Ave	N'hood Street	2	$147,500	$110,625	97%	$36,875
P78	Patterson St	Crispin St to Carol St	N'hood Street	2	$147,500	$110,625	97%	$36,875
P79	Harrison St	Iowa St to Holly St	N'hood Street	2	$147,500	$110,625	97%	$36,875
P80	Spring Creek Dr	Oak Knoll Dr to Road End	N'hood Street	2	$516,250	$387,188	97%	$129,063
P81	Bellview Ave	Green Meadows Way to Siskiyou Blvd	N'hood Street	2	$368,750		97%	$358,130
P37	Clay St	Faith Ave to Siskiyou Blvd	Avenue	2	$1,475,000	$1,106,250	97%	$368,750
ST	**Total Pedestrian Projects**				**$16,359,225**	**$10,763,813**		**$5,486,026**
BICYCLE PROJECTS								
B2	Wimer St	Scenic Dr to N. Main St	Avenue	1	$27,140	$2,714	34%	$9,201
B3	Nevada St	Vansant St to N. Mountain Ave	Avenue	2	$312,110	$31,211	34%	$105,806
B5	Maple/Scenic/Nutley	N. Main St to Winburn Way	N'hood Collector	1	$149,270	$14,927	34%	$50,603
B7	Iowa St	Terrace St ; S. Mountain to Walker Ave	Avenue	1	$325,680	$32,568	34%	$110,406
B9	Ashland St	Morton St to University Way	Avenue	2	$40,710	$4,071	34%	$13,801
B10	S. Mountain Ave	Ashland St to E. Main St	Avenue	1	$162,840	$16,284	34%	$55,203
B11	Wightman St	E. Main St to Siskiyou Blvd	Avenue	1	$81,420	$8,142	34%	$27,602
B13	B St	Oak St to N. Mountain Ave	Avenue	1	$108,560	$10,856	34%	$36,802
B16	Lithia Way	Oak St to Helman St	Avenue	1	$149,270	$14,927	34%	$50,603
B17	Main St	Helman St to Siskiyou Blvd	Boulevard	1	$67,850	$6,785	34%	$23,001
B18	N. Main St	Jackson Rd to Helman St	Boulevard	2	$352,820	$35,282	34%	$119,607
B19	Helman St	Nevada St to N. Main St	Avenue	1	$108,560	$10,856	34%	$36,802
B20	Water St	Hersey St to N. Main St	N'hood Street	2	$40,710	$4,071	34%	$13,801
B25	Tolman Creek Rd	Siskiyou Blvd to Green Meadows Way	Avenue	2	$135,700	$13,570	34%	$46,003
B26	Normal Ave	E. Main St to Siskiyou Blvd	Avenue	1	$257,830	$25,783	34%	$87,405
B29	Walker Ave	Siskiyou Blvd to Peachey Rd	Avenue	1	$54,280	$5,428	34%	$18,401
B31	Indiana St	Siskiyou Blvd to Oregon St	N'hood Street	1	$27,140	$2,714	34%	$9,201
B33	8th St	A St to E. Main St	N'hood Street	1	$27,140	$2,714	34%	$9,201
B37	Clay St	Siskiyou Blvd to Mohawk St	Avenue	2	$27,140	$2,714	34%	$9,201
B39	Glenn St/Orange Ave	N. Main St to Proposed Trail	N'hood Collector	2	$54,280	$5,428	34%	$18,401
B40	Laurel St	Orange St to Nevada St	N'hood Collector	2	$54,280	$5,428	34%	$18,401
TR2	New Trail	Clay St to Tolman Creek Rd	Multi-Use Path	2	$542,800	$54,280	33%	$180,316
TR1	Northside Trail	Orchid Ave to Tolman Creek Rd	Multi-Use Path	1	$2,714,000	$271,400	33%	$901,578
B38	Oregon/Clark St	Indiana St to Harmony Lane	NS	1	$54,280	$5,428	33%	$18,032
ST	**Total Bicycle Projects**				**$5,943,660**	**$594,366**		**$1,969,374**

Table A-1
City of Ashland, Oregon
TRANSPORTATION SDC Project List

Type/ #	Street	Description	Classification	Priority	2018 Cost	Other Funding	% Growth	TSDC Cost 1
TRANSIT PROJECTS								
O5	Transit Service Program	Provides funds & allocation guidance to improve transit svc			$3,245,000		11%	$347,554
O5	Transit Service Program	Provides funds & allocation guidance to improve transit svc			$1,180,000		11%	$126,383
ST	**Total Transit Projects**				**$4,425,000**	**$0**		**$473,937**
INTERSECTION & ROADWAY IMPROVEMENTS								
S3	N. Main St (OR 99)	Helman St to Sheridan St	Boulevard	2	$88,500		21%	$18,891
S5	Siskiyou Blvd	Ashland St to Tolman Creek Rd	Boulevard	2	$88,500		20%	$17,467
S6	Ashland St (OR 66)	Siskiyou Blvd to Tolman Creek Rd	Boulevard	2	$88,500		28%	$25,185
S9	Ashland St (OR 66)	Clay St to Washington St	Boulevard/Ave	2	$23,600		31%	$7,210
S10	Siskiyou Blvd	Highway 66 to Beach St	Blvd/N'hood Coll	1	$41,300		28%	$11,653
ST	**Studies Subtotal**				**$330,400**	**$0**		**$80,406**
Intersection & Roadway Projects								
R5	Siskiyou Blvd (OR 66)	Lithia Way (OR 99 NB) / E. Main St	Boulevard/Ave	1	$73,750	$66,375	100%	$7,375
R6	Siskiyou Blvd (OR 66)	Tolman Creek Rd	Boulevard/Ave	1	$118,273	$106,445	14%	$11,827
R8	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (realignment)	Boulevard/Ave	1	$602,851	$542,566	24%	$60,285
R19	Normal Ave Ext	Normal Ave to E. Main St	Avenue	2	$3,630,499		31%	$1,133,777
R25	Washington St Ext	Washington St Tolman Creek Rd	N'hood Collector	1	$1,584,169	$1,029,945	17%	$267,855
R29	Washington St Ext	Washington St to Benson Way	N'hood Collector		$1,535,180	$997,867	100%	$537,313
R36	N. Main St	N. Main St Permanent Diet	Boulevard	2	$295,000		13%	$37,722
R38	Ashland St	Siskiyou Blvd to Walker Ave Streetscape	Boulevard	2	$1,298,000	$843,700	40%	$454,300
R39	Ashland St	Walker Ave to Normal Ave Streetscape	Boulevard		$1,534,000	$997,100	39%	$536,900
R40	Walker Ave Festival St	Siskiyou Blvd to Ashland St	Avenue	1	$1,150,500		36%	$416,717
R9	Ashland St (OR 66)	Oak Knoll Dr / E. Main St (roundabout)	Boulevard/Ave	3	$4,646,250	$1,161,563	24%	$1,123,342
R43	New Roadway (E)	Mistletoe Rd to Siskiyou Blvd (OR 99)	Boulevard		$5,099,960	$3,314,974	100%	$1,784,986
R44	Tolman Creek	Mistletoe Rd Streetscape	Boulevard		$4,104,040	$2,667,626	28%	$1,164,086
R41	Ashland St	Tolman Creek Rd Streetscape	Boulevard/Ave	4	$2,212,500		36%	$787,328
ST	**Total Intersection & Roadway Improvements**				**$27,884,972**	**$11,728,161**	**52%**	**$8,323,813**
RAILROAD CROSSING PROJECTS								
X3	Normal Ave	Crossing Upgrade	Planned Avenue	4	$1,180,000	$767,000	100%	$413,000
ST	**Total Railroad Crossing Projects**				**$1,180,000**	**$767,000**		**$413,000**
	Total				**$56,276,657**	**$23,853,340**	**52%**	**$16,762,985**

1 Grants & contributions applied first to non-growth share of cost; any remaining funds reduce growth cost for TSDC calculation purposes

Implementation Priority Key: Priority 1= Next 5 years | Priority 2= 5-15 years | Priority 3= 15-20 years | Priority 4 = Driven by development

Table A-2

City of Ashland, Oregon			**New $/Trip**						**Phased $/Trip**		
TSDC by Land Use (Updated and 3-Year Phase In)			**$488**	**Updated ITE 10th Edition**					**$320**	**$397**	**$488**
ITE Code	Description	Unit of Measure	Updated TSDC per Unit	Daily Trip Rate	Diverted	Pass-by	Linked Trip Factor [2]	Adjusted Daily Trip Rate	Year 1	Year 2	Year 3
90	PARK & RIDE LOT WITH BUS SERVICE	PER PARKING SPACE	$ 1,370	2.81	0%	0%		2.81	$ 899	$ 1,116	$ 1,370
110	GENERAL LIGHT INDUSTRIAL	PER TGSF	$ 2,419	4.96	0%	0%	1.00	4.96	$ 1,587	$ 1,969	$ 2,419
130	INDUSTRIAL PARK	PER TGSF	$ 1,643	3.37	0%	0%	1.00	3.37	$ 1,078	$ 1,338	$ 1,643
140	MANUFACTURING	PER TGSF	$ 1,916	3.93	0%	0%	1.00	3.93	$ 1,258	$ 1,560	$ 1,916
150	WAREHOUSING	PER TGSF	$ 848	1.74	0%	0%	1.00	1.74	$ 557	$ 691	$ 848
151	MINI WAREHOUSE	PER TGSF	$ 736	1.51	0%	0%	1.00	1.51	$ 483	$ 599	$ 736
154	HIGH-CUBE/SHORT-TERM STORAGE WAREHOUSE	PER TGSF	$ 683	1.40	0%	0%	1.00	1.40	$ 448	$ 556	$ 683
160	DATA CENTER	PER TGSF	$ 483	0.99	0%	0%	1.00	0.99	$ 317	$ 393	$ 483
210	SINGLE FAMILY DWELLING/TOWNHOME	PER DU	$ 4,603	9.44	0%	0%	1.00	9.44	$ 3,021	$ 3,748	$ 4,603
220	APARTMENTS/CONDOS	PER DU	$ 3,569	7.32	0%	0%	1.00	7.32	$ 2,342	$ 2,906	$ 3,569
225	OFF-CAMPUS STUDENT APARTMENT	PER BEDROOM	$ 1,536	3.15	0%	0%	1.00	3.15	$ 1,008	$ 1,251	$ 1,536
240	MANUFACTURED HOUSING		$ 2,438	5.00	0%	0%	1.00	5.00	$ 1,600	$ 1,985	$ 2,438
251	SENIOR HOUSING DETACHED	PER DU	$ 2,082	4.27	0%	0%	1.00	4.27	$ 1,366	$ 1,695	$ 2,082
252	SENIOR HOUSING ATTACHED	PER DU	$ 1,804	3.70	0%	0%	1.00	3.70	$ 1,184	$ 1,469	$ 1,804
253	CONGREGATE CARE FACILITY	PER DU	$ 985	2.02	0%	0%	1.00	2.02	$ 646	$ 802	$ 985
			$ -								
310	HOTEL/MOTEL	PER ROOM	$ 4,076	8.36	0%	0%	1.00	8.36	$ 2,675	$ 3,319	$ 4,076
411	CITY PARK	PER ACRE	$ 380	0.78	0%	0%	1.00	0.78	$ 250	$ 310	$ 380
430	GOLF COURSE	HOLES	$ 14,813	30.38	0%	0%	1.00	30.38	$ 9,722	$ 12,061	$ 14,813
444	THEATER	SEATS	$ 858	1.76	0%	0%	1.00	1.76	$ 563	$ 699	$ 858
492	HEALTH/FITNESS CLUB	PER TGSF	$ 12,205	25.03	0%	0%	1.00	25.03	$ 8,010	$ 9,937	$ 12,205
491	TENNIS	PER COURT	$ 13,511	27.71	0%	0%	1.00	27.71	$ 8,867	$ 11,001	$ 13,511
495	COMMUNITY CENTER	PER TGSF	$ 14,053	28.82	0%	0%	1.00	28.82	$ 9,222	$ 11,442	$ 14,053
520	ELEMENTARY SCHOOL	PER STUDENT	$ 922	1.89	0%	0%	1.00	1.89	$ 605	$ 750	$ 922
536	PRIVATE SCHOOL (K-12)	PER STUDENT	$ 1,209	2.48	0%	0%	1.00	2.48	$ 794	$ 985	$ 1,209
522	MIDDLE SCHOOL/JUNIOR HIGH SCHOOL	PER STUDENT	$ 1,039	2.13	0%	0%	1.00	2.13	$ 682	$ 846	$ 1,039
530	HIGH SCHOOL	PER STUDENT	$ 990	2.03	0%	0%	1.00	2.03	$ 650	$ 806	$ 990
540	JUNIOR/COMMUNITY COLLEGE	PER STUDENT	$ 561	1.15	0%	0%	1.00	1.15	$ 368	$ 457	$ 561
550	UNIVERSITY/COLLEGE	PER STUDENT	$ 761	1.56	0%	0%	1.00	1.56	$ 499	$ 619	$ 761
560	PLACE OF WORSHIP	PER TGSF	$ 3,389	6.95	0%	0%	1.00	6.95	$ 2,224	$ 2,759	$ 3,389
565	DAY CARE CENTER	PER STUDENT	$ 877	4.09	56%	0%	0.44	1.80	$ 576	$ 714	$ 877
590	LIBRARY	PER TGSF	$ 35,132	72.05	0%	0%	1.00	72.05	$ 23,056	$ 28,604	$ 35,132
610	HOSPITAL	PER TGSF	$ 5,227	10.72	0%	0%	1.00	10.72	$ 3,430	$ 4,256	$ 5,227
710	GENERAL OFFICE BUILDING	PER TGSF	$ 4,749	9.74	0%	0%	1.00	9.74	$ 3,117	$ 3,867	$ 4,749
720	MEDICAL-DENTAL OFFICE	PER TGSF	$ 16,969	34.8	0%	0%	1.00	34.80	$ 11,136	$ 13,816	$ 16,969
731	DEPARTMENT OF MOTOR VEHICLES	PER TGSF	$ 5,466	11.21	0%	0%	1.00	11.21	$ 3,587	$ 4,450	$ 5,466
732	US POST OFFICE		$ 50,681	103.94	0%	0%	1.00	103.94	$ 33,261	$ 41,264	$ 50,681
813	FREE-STANDING DISCOUNT SUPERSTORE	PER TGSF	$ 17,552	50.7	0%	29%	0.71	36.00	$ 11,519	$ 14,291	$ 17,552
816	HARDWARE/PAINT STORE	PER TGSF	$ 3,298	9.14	0%	26%	0.74	6.76	$ 2,164	$ 2,685	$ 3,298
817	NURSERY (GARDEN CENTER)	PER TGSF	$ 33,206	68.1	0%	0%	1.00	68.10	$ 21,792	$ 27,036	$ 33,206
820	SHOPPING CENTER/RETAIL	PER TSFGLA	$ 7,363	37.75	26%	34%	0.40	15.10	$ 4,832	$ 5,995	$ 7,363
841	AUTOMOBILE SALES	PER TGSF	$ 13,575	27.84	0%	0%	1.00	27.84	$ 8,909	$ 11,052	$ 13,575
850	SUPERMARKET	PER TGSF	$ 13,537	106.78	38%	36%	0.26	27.76	$ 8,884	$ 11,022	$ 13,537
851/853	CONVENIENCE MARKET	PER TGSF	$ 54,785	624.2	16%	66%	0.18	112.36	$ 35,954	$ 44,605	$ 54,785
854	DISCOUNT SUPERMARKET	PER TGSF	$ 22,597	90.87	28%	21%	0.51	46.34	$ 14,830	$ 18,398	$ 22,597
857	DISCOUNT CLUB	PER TGSF	$ 12,841	41.8	0%	37%	0.63	26.33	$ 8,427	$ 10,455	$ 12,841
862	HOME IMPROVEMENT SUPERSTORE	PER TGSF	$ 8,694	30.74	0%	42%	0.58	17.83	$ 5,705	$ 7,078	$ 8,694
880	PHARMACY/DRUGSTORE W/OUT DRIVE THRU WI	PER TGSF	$ 14,495	90.08	14%	53%	0.33	29.73	$ 14,495	$ 14,495	$ 14,495
881	PHARMACY/DRUGSTORE WITH DRIVE THRU WIN	PER TGSF	$ 20,226	109.16	13%	49%	0.38	41.48	$ 20,226	$ 20,226	$ 20,226
911	WALK-IN BANK	PER TGSF	$ 12,440	59.33	22%	35%	0.43	25.51	$ 8,164	$ 10,129	$ 12,440
912	DRIVE-IN BANK	PER TGSF	$ 20,973	100.03	22%	35%	0.43	43.01	$ 13,764	$ 17,076	$ 20,973
931	QUALITY RESTAURANT	PER TGSF	$ 11,855	83.84	27%	44%	0.29	24.31	$ 7,780	$ 9,652	$ 11,855
932	HIGH TURNOVER RESTAURANT	PER TGSF	$ 16,957	112.18	26%	43%	0.31	34.78	$ 11,128	$ 13,806	$ 16,957
934	FAST FOOD RESTAURANT WITH DRIVE-THRU	PER TGSF	$ 62,002	470.95	23%	50%	0.27	127.16	$ 40,690	$ 50,481	$ 62,002
937	COFFEE/DONUT WITH DRIVE-THROUGH	PER TGSF	$ 44,002	820.38	0%	89%	0.11	90.24	$ 28,877	$ 35,826	$ 44,002
936	COFFEE/DONUT WITHOUT DRIVE-THROUGH	PER TGSF	$ 50,010	932.39	0%	89%	0.11	102.56	$ 32,820	$ 40,717	$ 50,010
944	GASOLINE/SERVICE STATION	PER VEH.FUEL.POS.	$ 19,291	172.01	35%	42%	0.23	39.56	$ 12,660	$ 15,706	$ 19,291
945	GAS/SERVICE STATION W/CONVENIENCE MKT	PER VEH.FUEL.POS.	$ 13,017	205.36	31%	56%	0.13	26.70	$ 8,543	$ 10,599	$ 13,017

[1] Discounted by pass-by trips

[2] Discounted by pass-by and diverted link trips

TGSF = Thousand Gross Square Feet

TSFGLA = Thousand Square Feet Gross Leasable Area

DU = Dwelling Unit

VEH. FUEL POS. = Vehicle Fueling Position