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Transportation System Development Charge Update

Final Report

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City of La Pine

2020 Transportation SDC Methodology Update

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Introduction

The City of La Pine conducts periodic updates to its Comprehensive Plan and its various Public Facility Plans to provide orderly and sustainable growth of local roads, water, sewer, and parks. A key component to funding these public facilities is the system development charge (SDC) program. SDCs are one-time charges for new development—designed to recover the costs of infrastructure capacity needed to serve new development. This section describes the policy context and project scope upon which the body of this report is based. It concludes with a non-numeric overview of the calculations presented in subsequent sections of this report.

The city does not currently have a transportation SDC methodology and does not charge new development a transportation SDC fee. The purpose of this study is to formulate a transportation SDC methodology for the City and prepare a transportation capital improvement plan (CIP) that can be incorporated into the new methodology to calculate a defensible SDC. The City’s current Transportation System Plan was adopted by the City Council in October of 2013 (via Ordinance No. 2013-04). That Plan contained a recommended CIP and was used as a starting point for the CIP update and refinement. The City Council has reviewed and adopted the updated CIP via Resolution No. 2020-05 (May 27, 2020). With this review and update, the City has stated several objectives:

- Review the basis for transportation charges to ensure a consistent methodology;
- Address specific policy, administrative, and technical issues relative to the implementation of a new transportation SDC.
- Determine the most appropriate and defensible fees, ensuring that development is paying its way;
- Consider possible revisions to the structure or basis of the charges which might improve equity or proportionality to demand;
- Provide clear, orderly documentation of the assumptions, methodology, and results, so that City staff could, by reference, respond to questions or concerns from the public.

This report provides the documentation of that effort and was done in close coordination with City staff and available facilities planning documents. The transportation SDC update complies Oregon Revised Statutes (ORS) Chapter 223.297-314.

Table 1 gives a component breakdown for the current and proposed single family residential equivalent SDCs for transportation. Appendix A to this report shows the detailed calculations that were used to arrive at the proposed SDCs for transportation services.

Table 1 - Component Breakdown of the Proposed Single Family Residential Equivalent Transportation SDC

<u>Transportation SDC Components</u>	<u>Proposed</u>	<u>Current</u>	<u>Difference</u>
Reimbursement fee	\$ 376		
Improvement fee	3,822		
Administration fee @ 5%	210		
Total transportation SDC	\$ 4,409	\$ -	\$ 4,409

The framework for SDC calculation is established by Oregon Revised Statute (ORS) 223.297-314 which is the basis for this review. Under ORS 223.299, SDC's are defined as one-time fees imposed on new development and have two components: reimbursement and improvement.

The reimbursement fee considers the cost of existing facilities, prior contributions by existing users of those facilities, the value of the unused/available capacity, and generally accepted ratemaking principles. The objective is future system users contribute no more than an equitable share to the cost of existing facilities. The reimbursement fee can be spent on capital costs or debt service related to the systems for which the SDC is applied.

The improvement fee portion of the SDC is based on the cost of planned future facilities that expand the system's capacity to accommodate growth or increase its level of performance. In developing an analysis of the improvement portion of the fee for transportation, each project in the respective service's capital improvement plan is evaluated to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. An example is a facility which improves system capacity to better serve current customers. The costs for this type of project must be eliminated from the improvement fee calculation. Only capacity increasing/level of performance costs provide the basis for the SDC calculation. The improvement SDC is calculated as a function of the estimated number of PM Peak Hour Vehicle Trips (PMPHVT's) to be served by the City's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes.

SDC Legal Authorization

The SDC statute is specific in its definition of system development charges, their application, and their accounting. In general, an SDC is a one-time fee imposed on new development or expansion of existing development and assessed at the time of development approval or increased usage of the system. Overall, the statute is intended to promote equity between new and existing customers by recovering a proportionate share of the cost of existing and planned/future capital facilities that serve the developing property. Statute further provides the framework for the development and imposition of SDCs and establishes that SDC receipts may only be used for capital improvements and/or related debt service.

The methodology used to determine the improvement fee portion of the SDC must consider the cost of projected capital improvements needed to increase system capacity or level of performance. In other words, the cost of planned projects that correct existing deficiencies or do not otherwise increase capacity would not be SDC eligible. The improvement fee must also provide a credit for construction of a qualified public improvement.

Finally, two cost basis adjustments are potentially applicable to both reimbursement and improvement fees: fund balance and compliance costs.

Fund Balance - To the extent that SDC revenue is currently available in fund balance, that revenue should be deducted from its corresponding cost basis. For example, if the city has transportation improvement fees that it has collected but not spent, then those unspent improvement fees should be deducted from the transportation system's improvement fee cost basis to prevent charging twice for the same capacity.

Compliance Costs - ORS 223.307(5) authorizes the expenditure of SDCs on "the costs of complying with the provisions of ORS 223.297 to 223.314, including the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures." To avoid spending monies for compliance that might otherwise have been spent on growth-related projects, this report includes an estimate of compliance costs in its SDCs.

SDC Methodology

The essential ingredient in the development of an SDC methodology for transportation services is valid sources of data. For this project, the consultant team has relied on a number of data sources. The primary sources have been the adopted 2013 TSP for these municipal facilities. We have supplemented these data sources with City utility billing records, certified census data, and other documents that we deemed helpful, accurate, and relevant to this study. Table 2 contains a bibliography of the key documents/sources that we relied upon to facilitate our analysis and hence the resulting SDCs.

Table 2 - Data Sources for the Calculation of Transportation SDC

Service	Master Plan Document and/or Corroborating Source Documentation
Transportation	<ul style="list-style-type: none"> • La Pine Transportation System Plan; October 2013; Kittelson & Associates. • 2020 La Pine Transportation Facilities Plan Amendment and Capital Improvement Plan Update; May, 2020; La Pine City Staff. • 2020 updated forecast of PM Peak Hour Vehicle Trips; Transight Consulting, LLC, April 28, 2020 • La Pine transportation system fixed asset schedule; June 30, 2019; City records. • City of La Pine Utility Billing System – active utility accounts and Equivalent Dwelling Units in service report; June 30, 2019. • Portland State University, College of Urban Affairs, Population Research Center; Certified census for La Pine, Oregon; June 2018 • U.S. Bureau of the Census; American Community Survey; multiple data sets.

Reimbursement Fee Methodology

The reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. Generally, if a system were adequately sized for future growth, the reimbursement fee might be the only charge imposed, since the new customer would be buying existing capacity. However, staged system expansion is needed, and an improvement fee is imposed to allocate those growth-related costs. Even in those cases, the new customer also relies on capacity within the existing system, and a reimbursement component is warranted.

To determine an equitable reimbursement fee to be used in conjunction with an improvement fee, two points should be highlighted. First, the cost of the system to the City’s customers may be far less than the total plant-in-service value. This is because elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources. Therefore, the net investment by the customer/owners is less. Second, the value of the existing system to a new customer is less than the value to an existing customer, since the new customer must also pay, through an improvement fee, for expansion of some portions of the system.

The method used for determining the reimbursement fee accounts for both points. First, the charge is based on the net investment in the system, rather than the gross cost. Therefore, donated facilities, typically including local collector streets, minor arterials, and grant-funded facilities, would be excluded from the cost basis. Also, the charge should be based on investments clearly made by the current users of the system, and not already supported by new customers. Tax supported activities fail this test since

funding sources have historically been from general revenues, or from revenues which emanate, at least in part, from the properties now developing. Second, the cost basis is allocated between used and unused capacity, and, capacity available to serve growth. This approach reflects the philosophy, consistent with the City's TSP, that facilities have been sized to meet the demands of the customer base within the established planning period.

Improvement Fee Methodology

There are three basic approaches used to develop improvement fee SDCs: "standards driven", "improvements-driven", and "combination/hybrid" approaches. The "standards-driven" approach is based on the application of Level of Service (LOS) standards for facilities. Facility needs are determined by applying the LOS standards to projected future demand, as applicable. SDC-eligible amounts are calculated based on the costs of facilities needed to serve growth. This approach works best where level of service standards has been adopted but no specific list of projects is available. The "improvements-driven" approach is based on a specific list of planned capacity increasing capital improvements. The portion of each project that is attributable to growth is determined, and the SDC-eligible costs are calculated by dividing the total costs of growth-required projects by the projected increase in projected future demand, as applicable. This approach works best where a detailed master plan or project list is available, and the benefits of projects can be readily apportioned between growth and current users. Finally, the combination/hybrid-approach includes elements of both the "improvements driven" and "standards-driven" approaches. Level of Service standards may be used to create a list of planned capacity-increasing projects, and the growth required portions of projects are then used as the basis for determining SDC eligible costs. This approach works best where levels of service have been identified and the benefits of individual projects are not easily apportioned between growth and current users.

This study is using the "improvements-driven" method and has relied on the capital improvement plans that are incorporated in the 2020 plan updates for transportation services and adopted by the City Council via Resolution No. 2020-05 on May 27, 2020.

For this SDC methodology update, the improvement fee represents a proportionate share of the cost to expand the systems to accommodate growth. This charge is based on the capital improvement plans established by the City in the master plans for transportation services. The costs that can be applied to the improvement fees are those that can reasonably be allocable to growth. Statute requires that the capital improvements used as a basis for the charge be part of an adopted capital improvement schedule, whether as part of a system plan or independently developed, and that the improvements included for SDC eligibility be capacity or level of service expanding. The improvement fee is intended to protect existing customers from the cost burden and impact of expanding a system that is already adequate for their own needs in the absence of growth.

The key step in determining the improvement fee is identifying capital improvement projects that expand the system and the share of those projects attributable to growth. Some projects may be entirely attributable to growth, such as a new street to serve a developing area. Other projects, however, are of mixed purpose, in that they may expand capacity, but they also improve service or correct a deficiency for existing customers. An example might be an intersection that both expands transportation collection system capacity and corrects a chronic capacity issue for existing users. In this case, a rational allocation basis must be defined.

The improvement portion of the SDC is based on the proportional approach toward capacity and cost allocation in that only those facilities (or portions of facilities) that either expand the transportation system capacity to accommodate growth or increase its respective level of performance have been

included in the cost basis of the fee. As part of this SDC update, City Staff and their engineering consultants were asked to review the planned capital improvement lists to assess SDC eligibility. The criteria in Figure 1 were developed to guide the City's evaluation:

Figure 1 - SDC Eligibility Criteria

City of La Pine
Steps Toward Evaluating
Capital Improvement Lists for SDC Eligibility

ORS 223

1. Capital improvements mean the facilities or assets used for:
 - a. Transit, intersections, driving, walking, biking, and shared use/path projectsThis definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements;
2. The SDC improvement base shall consider the cost of projected capital improvements needed to increase the capacity of the systems to which the fee is related;
3. An increase in system capacity is established if a capital improvement increases the "level of performance or service" provided by existing facilities or provides new facilities.

Under the City' approach, the following rules will be followed

1. Repair costs are not to be included;
2. Replacement costs will not be included unless the replacement includes an upsizing of system capacity and/or the level of performance of the facility is increased;
3. New regulatory compliance facility requirements fall under the level of performance definition and should be proportionately included;

In developing the improvement fee, the project team in consultation with City staff evaluated each of its high priority CIP projects to exclude costs related to correcting existing system deficiencies or upgrading for historical lack of capacity. Only capacity increasing/level of performance costs were used as the basis for the SDC calculation, as reflected in the capital improvement schedules developed by the City. The improvement fee is calculated as a function of the estimated number of projected additional PMPHVTs for transportation to be served by the City's facilities over the planning horizon.

Once the future costs to serve growth have been segregated (i.e., the numerator), they can be divided into the total number of new PMPHVTs that will use the capacity derived from those investments (i.e., the denominator).

Methodology for the Granting of Credits, Exemptions, and Discounts

SDC Credits Policy

ORS 223.304 requires that credit be allowed for the construction of a "qualified public improvement" which is required as a condition of development approval, is identified in the Capital Improvement Plan, and either is not located on or contiguous to property that is the subject of development approval or is located on or contiguous to such property and is required to be built larger or with greater capacity than is necessary for the development project. The credit for a qualified public improvement may only be applied against an SDC for the same type of improvement and may be granted only for the cost of that portion of an improvement which exceeds the minimum standard facility size or capacity needed to serve the project. For multi-phase projects, any excess credit may be applied against SDCs that accrue in subsequent phases of the original development project. In addition to these required credits, the City may, if it so chooses, provide a greater credit, establish a system providing for the transferability of credits, provide a credit for a capital improvement not identified in the Capital Improvement Plan, or provide a share of the cost of an improvement by other means.

We recommend the City adopt a policy for granting SDC credits and codify this policy through ordinance or resolution. We recommend the SDC credit policy consist of eight (8) items as follows:

1. A permittee is eligible for credit against the system development charge constructing a qualified public improvement. This credit shall be only for the improvement fee charged for the type of improvement being constructed. Credit under this section may be granted only for the cost of that portion of the improvement that exceeds the facility size or capacity needed to serve the development project.
2. Applying the adopted methodology, the city may grant a credit against the improvement charge for capital facilities provided as part of the development that reduces the development's demand upon existing capital improvements or the need for further capital improvements or that would otherwise have to be constructed at city expense under the then-existing council policies.
3. When the construction of a qualified public improvement gives rise to a credit amount greater than the improvement fee that would otherwise be levied against the project receiving development approval, the excess credit may be applied against improvement fees that accrue in subsequent phases of the original development project.
4. All credit requests must be in writing and filed with the city before the issuance of a building permit. Improvement acceptance shall be in accordance with the usual and customary practices, procedures and standards of the city of La Pine. The amount of any credit shall be determined by the city and based upon the subject improvement construction contract documents, or other appropriate information, provided by the applicant for the credit. Upon a finding by the city that the contract amounts exceed prevailing market rate for a similar project, the credit shall be based upon market rates. The city shall provide the applicant with a credit on a form provided by the city. The credit shall state the actual dollar amount that may be applied against any system development charge imposed against the subject property. The applicant has the burden of demonstrating qualification for a credit.
5. Credits shall be apportioned against the property which was subject to the requirements to construct an improvement eligible for credit. Unless otherwise requested, apportionment against lots or parcels constituting the property shall be proportionate to the anticipated

public facility service requirements generated by the respective lots or parcels. Upon written application to the city, however, credits shall be reapportioned from any lot or parcel to any other lot or parcel within the confines of the property originally eligible for the credit. Reapportionment shall be noted on the original credit form retained by the city.

6. Any credits are assignable; however, they shall apply only to that property subject to the original condition for land use approval upon which the credit is based or any partitioned or subdivided parcel or lots of such property to which the credit has been apportioned. Credits shall only apply against system development charges, are limited to the amount of the fee attributable to the development of the specific lot or parcel for which the credit is sought and shall not be a basis for any refund.
7. Any credit request must be submitted before the issuance of a building permit.
8. The applicant is responsible for presentation of any credit and no credit shall be considered after issuance of a building permit. Credits shall be used by the applicant within 10 years of their issuance by the city.

Partial and Full SDC Exemptions Policy

The City may exempt certain types of development, from the requirement to pay SDCs. Exemptions reduce SDC revenues and, therefore, increase the amounts that must come from other sources, such as user fees and property taxes. As in the case of SDC credits, it is recommended the City have a policy relative to partial and full SDC exemption. Our recommended SDC exemption policy is as follows:

1. Structures and uses established and existing on or before the effective date of the resolution establishing the transportation SDC.
2. Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the city's building code, are exempt from all portions of the system development charge.
3. An alteration, addition, replacement or change in use that does not increase the parcel's or structure's use of a capital improvement is exempt from all portions of the system development charge.

SDC Discount Policy

The City, at its sole discretion may discount the SDC rates by choosing not to charge a reimbursement fee for excess capacity, or by reducing the portion of growth-required improvements to be funded with SDCs. A discount in the SDC rates may also be applied on a pro-rata basis to any identified deficiencies, which must to be funded from sources other than improvement fee SDCs. The portion of growth-required costs to be funded with SDCs must be identified in the CIP. Because discounts reduce SDC revenues, they increase the amounts that must come from other sources, such as user fees or general fund contributions, in order to acquire the facilities identified in the Updated Master Plan

Conclusions and Recommendations

Fee Recommendation

The 2020 transportation SDC methodology update was done in accordance with ORS 223.297-314, and with the benefit of adopted master plans and plan updates for transportation services. We recommend the City implement the SDC charge and methodology to reflect the current capital improvement program and to incorporate the reimbursement fee component. This will provide additional revenues to help fund the utility's future capital needs. Our analysis indicates the City can charge a maximum of \$4,453 per PMPHVT for transportation. The components of this fee are as follows:

Reimbursement fee	\$ 380
Improvement fee	3,861
Administration fee	<u>212</u>
Total SDC per PMPHVT	<u>\$4,453</u>

Policy for Granting Transportation SDC Credits in La Pine

As part of this engagement, the project team was asked to craft a policy for City Staff to use when transportation SDC credit applications are submitted by developers. Itemized below is our policy guidance for Staff to use for granting such SDC credits.

The City may grant a credit against the transportation SDC, which is otherwise assessed for a new development, for eligible capital improvements constructed or dedicated as part of the new development. State statute clearly states this credit shall be only for the improvement fee charged for the type of improvement being constructed. In all cases, the applicant bears the burden of evidence and persuasion in establishing entitlement to a transportation SDC credit and to a particular value of SDC credit.

Any credits are assignable; however, they shall apply only to that property subject to the original condition for land use approval upon which the credit is based or any partitioned or subdivided parcel or lots of such property to which the credit has been apportioned. Credits shall only apply against system development charges, are limited to the amount of the fee attributable to the development of the specific lot or parcel for which the credit is sought and shall not be a basis for any refund.

To obtain an SDC credit, the applicant must specifically request a credit within 180 days after building permit issuance for the new development. In the request, the applicant must identify the improvement(s) for which credit is sought and explain how the improvement(s) meet the requirements for a qualified public improvement or other eligible improvement pursuant to ORS 223.304. The applicant shall also document, with credible evidence, the value of the improvement(s) for which credit is sought, as follows:

1. For dedicated lands, value shall be based upon a written appraisal of fair market value by a qualified, professional appraiser based upon comparable sales of similar property between unrelated parties in an arms-length transaction.
2. For improvements yet to be constructed, value shall be based upon the anticipated cost of construction. Any such cost estimates shall be certified by a professional architect or engineer or

based on a fixed price bid from a contractor ready and able to construct the improvement(s) for which SDC credit is sought.

3. For improvements already constructed, value shall be based on the actual cost of construction as verified by receipts submitted by the applicant.

If, in the Public Works Director's opinion, the improvement(s) are qualified public improvements, and the Public Works Director concurs with the proposed value of the improvement(s), an SDC credit shall be determined by the Public Works Director as follows:

1. For improvements on or contiguous to the new development site, only the costs for the over-capacity portion of the improvement as described in the definition of qualified public improvement are eligible for SDC credit. There is an inherent presumption that improvements built to the City's minimum standards are required to serve the applicant's new development and to mitigate for transportation system impacts attributable to the applicant's new development.
2. For qualified public improvements not located on or contiguous to the new development site, the full cost of the improvement may be eligible for SDC credit.

The Public Works Director may grant credit for all or a portion of the costs of capital improvements constructed or dedicated as part of the new development that do not meet the requirements of qualified public improvements, provided that the improvements are listed on the City's transportation SDC project list. In such case, the Public Works Director may determine what portion of the costs are eligible for SDC credit.

Granting SDC credits to new development prior to commencing construction of new development. When an eligible improvement is built by a developer prior to an applicant applying for building permits for the new development, the City may grant a credit for any eligible improvement(s). Credits issued are pursuant to the following requirements and conditions:

1. The developer must specifically request a credit prior to the first application for a building permit, but after the issuance of the public works/land use order or permit for the eligible improvement;
2. For improvements yet to be constructed, the developer shall provide the City with an enforceable mechanism to guarantee completion of the eligible improvement, either in the form of a performance bond or other financial guarantee acceptable to the Public Works Director; and
3. The developer shall submit written confirmation to the Public Works Director on the form provided acknowledging: (1) That SDC credits issued pursuant to this policy are in lieu of any other credits that could be claimed by the developer or other applicants on account of the eligible improvement; and (2) that it is the developer's obligation to advise subsequent applicants of the new development that SDC credits associated with the eligible improvement have already been issued and that no further credits are available.

Indexing Transportation SDCs for Inflation

Finally, we recommend the City adopt a policy of reviewing its suite of SDCs every five years. Between the review dates, the city should apply a cost adjustment index to the SDC rates annually to reflect changes in costs for land and construction. This policy should be codified in the La Pine Municipal Code. We suggest the City consider the following language for that code change:

1. Notwithstanding any other provision, the dollar amounts of the SDC set forth in the SDC methodology report shall on January 1st of each year be adjusted to account for changes in the costs of acquiring and constructing facilities. The adjustment factor shall be based on:
 - a. The change in construction costs according to the Engineering News Record (ENR) 20-City Average Construction Cost Index (CCI).
 - b. The system development charges adjustment factor shall be used to adjust the system development charges, unless they are otherwise adjusted by the city based on a change in the costs of materials, labor, or real property; or adoption of an updated methodology.

Appendix A

SDC Calculations

Transportation SDC Calculations

Existing and Future Transportation Demands in PMPHVTs

Demand for transportation facilities is measured in PMPHVTs. One PMPHVT represents one person beginning or ending a vehicular trip at a certain property during the afternoon rush hour. Based on data from the 2020 TSP refinement, and from the additional work done by Transight Engineering on behalf of the City, we estimate the transportation system is currently serving 2,867 PMPHVTs. The statistical process that was used to arrive at the current and 2040 demand is attached in Appendix B. We are estimating the City's transportation system will serve 5,015 PMPHVTs in 2040. These estimates imply growth of 2,148 PMPHVTs over the planning period, as shown in Table 3. A graphic rendering of existing and growth PMPHVTs is shown below in Figure 2.

Figure 2



Table 3 – Estimated Existing and Future Trip Generation - PMPHVTs

	PMPHVTs			PMPHVTs			Growth in PMPHVTs
	Demand Units	per unit of Demand	2020 PMPHVTs	Demand Units	per unit of Demand	2040 PMPHVTs	
Employment (FTE):							
Agricultural	54	0.42	23	97	0.42	41	18
Industrial	40	0.42	17	73	0.42	31	14
Retail	533	1.11	592	962	1.11	1,068	476
Service	937	0.46	431	1,695	0.46	780	349
Education/Health	248	1.94	481	448	1.94	869	388
Government	84	1.06	89	151	1.06	160	71
Other	310	1.06	329	560	1.06	594	265
Subtotal Employment	2,206		1,962	3,986		3,543	1,581
Housing:							
Persons	2,081			3,386			
Households (2.3 persons/HH)	905	1.00	905	1,472	1.00	1,472	567
Total PMPHVTs			2,867			5,015	2,148
Compound annualized growth in PMPHVTs							2.84%

Transportation Reimbursement Fee Calculations

Derivation of the transportation reimbursement fee methodology is a six (6) step process. The methodological steps in its construction are restated here.

- Step 1: Calculate the original cost of transportation fixed assets in service. From this starting point, eliminate any assets that do not conform to the ORS 223.299 definition of a capital improvement. This results in the **adjusted original cost of transportation fixed assets**.
- Step 2: Subtract from the adjusted original cost of transportation fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of transportation fixed assets in service**.
- Step 3: Subtract from the modified book value of transportation assets in service any grant funding or contributed capital. This arrives at the **modified book value of transportation fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of transportation fixed assets in service net of grants and contributed capital any principal outstanding on long term debt used to finance those assets. This arrives a **gross transportation reimbursement fee basis**.
- Step 5: Subtract from the gross transportation reimbursement fee basis the fund balance held in the Transportation Reimbursement SDC fund (if available). This arrives at the **net transportation reimbursement fee basis**.
- Step 6: Divide the net transportation reimbursement fee basis by the sum of existing and future PMPHVTs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total transportation reimbursement fee is shown below in Table 4.

Table 4 - Transportation Reimbursement Fee Calculations

Transportation Utility Plant-in-Service (original cost): ¹	
Land, Easements & Right of Way	\$ -
Land improvements	-
Street improvements and Construction	6,617,873
Tools and Equipment	eliminated
Construction Work-in-Progress	-
Total Utility Plant-in-Service	<u>\$ 6,617,873</u>
Accumulated depreciation ¹	
Land, Easements & Right of Way	-
Land improvements	-
Street improvements and Construction	4,711,000
Tools and Equipment	eliminated
Construction Work-in-Progress	-
Total accumulated depreciation	<u>4,711,000</u>
Book value of transportation utility plant-in-service @ June 30, 2018	\$ 1,906,873
Eliminating entries:	
Principal outstanding on bonds, notes, and loans payable	-
Contributed Capital:	
Urban renewal TIF net of depreciation and amortization	-
Grants net of depreciation and amortization	-
Developer contributions net of depreciation and amortization	-
Total eliminating entries	<u>-</u>
Net basis in transportation utility plant-in-service available to serve future customers	\$ 1,906,873
Estimated existing and future pm peak hour vehicle trips:	5,015
Transportation reimbursement fee per PM peak hour vehicle trip	\$380

¹ Source: La Pine Accounting Summary Report - Capitalized Assets as of June 30, 2019

2020 Transportation Capital Improvement Plan Project Costs and Funding Sources

For this transportation SDC update, the project team has included the projects identified in the transportation capital improvement plan adopted by the City Council via Resolution No. 2020-05 on May 27, 2020. The capacity increasing costs of these projects are included in the calculation of the improvement fee. Itemized in Tables 5 are the specific projects that were analyzed, and the projected funding source for each project by category.

Table 5 - High Priority Pedestrian Capital Improvement Project Costs and Funding Sources

Project No.	Project (Road) Name	Project Priority	Total Estimated Cost (Includes ROW)	Funding Agencies Cost Responsibilities			
				Private	City	County	ODOT
1	Finley Butte Improvements	Near-Term	\$ 1,238,000	\$ -	\$ 412,667	\$ 412,667	\$ 412,667
2	Skidgel Road	Near-Term	5,416,000	-	5,416,000	-	-
3	Huntington Road (downtown)	Near-Term	11,516,000	-	5,758,000	5,758,000	-
4	1st Street	Near-Term	635,000	-	317,500	317,500	-
5	Finley Butte Road - west	Near-Term	2,268,000	-	1,134,000	1,134,000	-
6	4th Street	Near-Term	164,000	-	82,000	82,000	-
7	William Foss Rd	Near-Term	1,477,000	-	738,500	738,500	-
8	3rd Street (near-term)	Near-Term	700,000	-	350,000	350,000	-
9	3rd Street (long-term)	Long-Term	1,330,000	-	665,000	665,000	-
10	Drafter Road	Near-Term	4,879,001	-	2,439,501	2,439,501	-
11	US 97/Burgess Road	Near-Term	1,500,000	-	250,000	250,000	1,000,000
12	US 97/Rosland Road	Near-Term	1,500,000	-	250,000	250,000	1,000,000
13	2nd Street	Near-Term	523,000	-	523,000	-	-
14	Burgess Road	Medium-Term	4,111,000	-	2,055,500	2,055,500	-
15	Huntington Road (Burgess South)	Medium-Term	10,430,000	-	5,215,000	5,215,000	-
16	Huntington Rd/Memorial Ln (future roundabout)	Medium-Term	2,100,000	-	1,050,000	1,050,000	-
17	Morson Street	Medium-Term	2,402,000	-	1,201,000	1,201,000	-
18	Finley Butte Road - east	Medium-Term	1,730,000	-	1,730,000	-	-
19	William Foss Rd	Medium-Term	533,000	-	533,000	-	-
20	South Huntington Rd Realignment	Medium-Term	2,160,000	-	1,080,000	1,080,000	-
21	1st Street	Long-Term	861,000	861,000	-	-	-
22	Hinkle Way	Long-Term	110,000	110,000	-	-	-
23	Hinkle Way	Long-Term	662,000	662,000	-	-	-
24	Huntington Road/Future Roundabout	Long-Term	2,100,000	2,100,000	-	-	-
25	Reed Road	Long-Term	1,215,000	1,215,000	-	-	-
26	6th Street	Long-Term	314,000	314,000	-	-	-
27	Cagle Road	Near-Term	4,736,000	2,368,000	2,368,000	-	-
28	Proposed East Side N-S Connector	Long-Term	17,996,000	17,996,000	-	-	-
29	Rosland Road	Long-Term	299,000	299,000	-	-	-
30	Mitts Way	Long-Term	1,294,000	1,294,000	-	-	-
Total			\$ 86,199,001	\$ 27,219,000	\$ 33,568,667	\$ 22,998,667	\$ 2,412,667
				31.58%	38.94%	26.68%	2.80%

Transportation Improvement Fee Calculations

The calculation of the transportation improvement fee also follows the logic discussed in the body of this report. As earlier stated, this study uses the improvements-driven method, and has relied on the capital improvement plans, and plan updates for the transportation infrastructure. Under this methodology, only three steps are required to arrive at the improvement fee. These steps are:

- Step 1: Accumulate the future cost of planned improvements needed to serve growth. This arrives at **the gross improvement fee basis**.
- Step 2: Subtract from the gross improvement fee basis the fund balance held in the Transportation Improvement SDC Fund. This arrives at **the net transportation improvement fee basis**.
- Step 3: Divide the net transportation improvement fee basis by the forecasted number of growth PMPHVTs over the planning period. This arrives at **the total transportation improvement fee**.

The actual data that was used to calculate the total transportation improvement fee is shown below in Table 6.

Table 6 - Transportation Improvement Fee Calculations

Total Estimated Cost (Includes ROW)	Funding Agencies Cost Responsibilities				SDC Eligibility of City Share of Costs		
	Private	City	County	ODOT	City Allocated Total Cost	SDC Eligible Costs	SDC Ineligible Costs
\$ 86,199,001	\$ 27,219,000	\$ 33,568,667	\$ 22,998,667	\$ 2,412,667	\$ 33,568,667	\$ 8,294,167	\$ 25,274,500
	31.58%	38.94%	26.68%	2.80%		24.71%	75.29%
Total improvement fee eligible costs for future system improvements						8,294,167	
less: transportation SDC fund balance as of June 30, 2019						-	
Adjusted improvement fee eligible costs for future system improvements						8,294,167	
Estimated PMPHVTs added over 20 years						2,148	
Transportation improvement fee per PMPHVT						<u>\$ 3,861</u>	

Transportation SDC Model Summary

The 2020 transportation SDC methodology update was done in accordance with State law and with the benefit of adopted capital improvement plans and plan updates for transportation services. We recommend the City update the SDC charge and methodology to reflect the current capital improvement program. Our analysis indicates the City can charge a maximum of \$4,453 per PMPHVT. To charge the appropriate SDC, the City must estimate how many PMPHVTs will be generated by the development in question. That number can then be multiplied by \$4,453 to determine the amount of SDC owed by new development projects.

The number of PMPHVTs that a property will generate is a function of the increase in scope and scale of activities that will occur on that property. By “scope of activities,” we mean land use. For example, a new single-family residence will generate trip-ends differently from a new retail store of the same size. By “scale of activities,” we mean some measure of quantity. For residential land uses, the number of dwelling units is an appropriate measure of scale. For many commercial and industrial land uses, building floor area is the best measure. For example, a 20,000-square-foot store is likely to generate twice the number of trip-ends as a 10,000-square-foot store of the same type. Table 7 presents proposed transportation SDCs per unit of scale for several land uses in the 9th edition of Trip Generation Manual, published by the Institute of Transportation Engineers (ITE):

Table 7 - Transportation SDCs by Sample ITE Code

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Port and Terminal (Land Uses 000-099)							
010	Waterport/Marine Terminal*	17.15	66,224	6,522	3,637	76,383	Berth
021	Commercial Airport	5.75	22,201	2,186	1,219	25,606	Average flights per day
022	General Aviation Airport	1.57	6,062	597	333	6,992	Employee
030	Intermodal Truck Terminal	1.87	7,220	711	397	8,328	1,000 square feet of gross floor area
090	Park-an-Ride Lot with Bus Service	0.43	1,660	163	91	1,915	Parking space
093	Light Rail Transit Station with Parking	1.24	4,788	471	263	5,522	Parking space
Industrial (Land Uses 100-199)							
110	General light industrial	0.63	2,432	240	134	2,806	1,000 square feet of gross floor area
120	General heavy industrial	0.68	2,625	259	144	3,028	1,000 square feet of gross floor area
130	Industrial park	0.40	1,544	152	85	1,781	1,000 square feet of gross floor area
140	Manufacturing	0.67	2,587	255	142	2,984	1,000 square feet of gross floor area
150	Warehousing	0.19	734	72	40	846	1,000 square feet of gross floor area
151	Mini-warehouse	0.17	656	65	36	757	1,000 square feet of gross floor area
154	High-Cube transload & short-term warehouse	0.10	386	38	21	445	1,000 square feet of gross floor area
155	High-Cube fulfillment center warehouse	1.37	5,290	521	291	6,101	1,000 square feet of gross floor area
156	High-Cube Parcel hub warehouse	0.64	2,471	243	136	2,850	1,000 square feet of gross floor area
157	High-Cube cold storage warehouse	0.12	463	46	25	534	1,000 square feet of gross floor area
160	Data center	0.09	347	34	19	401	1,000 square feet of gross floor area
170	Utilities	2.27	8,764	863	481	10,109	1,000 square feet of gross floor area
180	Specialty trade contractor	1.97	7,606	749	418	8,773	1,000 square feet of gross floor area
Residential (Land Uses 200-299)							
210	Single family detached housing	0.99	3,822	376	210	4,409	Dwelling unit
220	Apartment	0.56	2,162	213	119	2,494	Dwelling unit
221	Low-Rise Apartment	0.44	1,699	167	93	1,959	Dwelling unit
222	High-Rise Apartment	0.36	1,390	137	76	1,603	Dwelling unit
225	Off-Campus student apartment	0.25	965	95	53	1,113	Dwelling unit
231	Mid-Rise residential w/1st-floor commercial	0.36	1,390	137	76	1,603	Dwelling unit
232	High-Rise Residential w/1st-floor commercial	0.21	811	80	45	935	Dwelling unit
240	Mobile home park	0.46	1,776	175	98	2,049	Dwelling unit
251	Senior Adult Housing - Detached	0.30	1,158	114	64	1,336	Dwelling unit
252	Senior Adult Housing - Attached	0.26	1,004	99	55	1,158	Dwelling unit
253	Congregate Care Facility	0.18	695	68	38	802	Dwelling unit
254	Assisted living	0.26	1,004	99	55	1,158	Bed
255	Continuing Care Retirement Community	0.16	618	61	34	713	Unit
260	Recreational Homes	0.28	1,081	106	59	1,247	Dwelling unit
265	Timeshare	0.63	2,432	240	134	2,806	Dwelling unit
270	Residential Planned Unit Development	0.69	2,664	262	146	3,073	Dwelling unit
Lodging (Land Uses 300-399)							
310	Hotel	0.60	2,317	228	127	2,672	Room
311	All Suites Hotel	0.36	1,390	137	76	1,603	Room
312	Business Hotel	0.32	1,236	122	68	1,425	Occupied Room
320	Motel	0.38	1,467	144	81	1,692	Room
330	Resort Hotel	0.41	1,583	156	87	1,826	Room

Table 7 Continued - Transportation SDCs by Sample ITE Code

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Recreational (Land Uses 400-499)							
411	Public park	0.11	425	42	23	490	Acre
416	Campground/Recreational Vehicle Park	0.98	3,784	373	208	4,364	Acre
420	Marina	0.21	811	80	45	935	Berth
430	Golf course	2.91	11,236	1,106	617	12,959	Hole
431	Miniature Golf Course	0.33	1,274	125	70	1,470	Hole
432	Golf Driving Range	1.25	4,826	475	265	5,567	Tees/Driving Position
433	Batting Cages	2.22	8,571	844	471	9,886	Cage
434	Rock climbing gym	1.64	6,332	624	348	7,303	1,000 square feet of gross floor area
435	Multipurpose Recreational Facility	3.58	13,822	1,361	759	15,943	1,000 square feet of gross floor area
436	Trampoline park	1.50	5,792	570	318	6,680	1,000 square feet of gross floor area
437	Bowling Alley	1.30	5,019	494	276	5,789	Bowling lane
440	Adult Cabaret	2.93	11,313	1,114	621	13,048	1,000 square feet of gross floor area
444	Movie Theater with Matinee - Friday pm peak hou	6.17	23,822	2,346	1,308	27,477	1,000 square feet of gross floor area
445	Multiplex Movie Theater - Friday pm peak hour	4.91	18,958	1,867	1,041	21,866	1,000 square feet of gross floor area
452	Horse Racetrack	0.06	232	23	13	267	Seat
453	Automobile Racetrack - Saturday peak hour	0.28	1,081	106	59	1,247	Attendee
454	Dog Racetrack	0.15	579	57	32	668	Attendee
460	Arena*	0.47	1,815	179	100	2,093	1,000 square feet of gross floor area
462	Professional baseball stadium	0.15	579	57	32	668	Attendee
465	Ice Skating Rink	1.33	5,135	506	282	5,923	1,000 square feet of gross floor area
466	Snow Ski Area	26.00	100,386	9,886	5,514	115,785	Slopes
470	Bingo hall	0.82	3,166	312	174	3,652	Attendee
473	Casino/Video Lottery Establishment	13.49	52,085	5,129	2,861	60,075	1,000 square feet of gross floor area
480	Amusement Park	3.95	15,251	1,502	838	17,590	Acre
482	Water slide park Saturday peak hour generator	22.92	88,494	8,715	4,860	102,069	Acre
488	Soccer Complex	16.43	63,436	6,247	3,484	73,167	Field
490	Tennis Courts	4.21	16,255	1,601	893	18,748	Court
491	Racquet/Tennis Club	3.82	14,749	1,452	810	17,012	Court
492	Health/Fitness Club	3.45	13,320	1,312	732	15,364	1,000 square feet of gross floor area
493	Athletic Club	6.29	24,286	2,392	1,334	28,011	1,000 square feet of gross floor area
495	Recreational Community Center	2.31	8,919	878	490	10,287	1,000 square feet of gross floor area
Institutional (Land Uses 500-599)							
501	Military Base	0.39	1,506	148	83	1,737	Employee
520	Elementary School	1.37	5,290	521	291	6,101	1,000 square feet of gross floor area
522	Middle School/Junior High School	1.19	4,595	452	252	5,299	1,000 square feet of gross floor area
530	High School	0.97	3,745	369	206	4,320	1,000 square feet of gross floor area
534	Private School (K-8) - pm peak hour generator	6.53	25,212	2,483	1,385	29,080	1,000 square feet of gross floor area
536	Private School (K-12) - pm peak hour generator	5.50	21,236	2,091	1,166	24,493	1,000 square feet of gross floor area
537	Charter elementary school	4.96	19,151	1,886	1,052	22,088	1,000 square feet of gross floor area
537	School district office	2.04	7,876	776	433	9,085	1,000 square feet of gross floor area
540	Junior/Community College	1.86	7,181	707	394	8,283	1,000 square feet of gross floor area
550	University/College	1.17	4,517	445	248	5,210	1,000 square feet of gross floor area
560	Church	0.49	1,892	186	104	2,182	1,000 square feet of gross floor area
561	Synagogue - Friday	2.92	11,274	1,110	619	13,004	1,000 square feet of gross floor area
562	Mosque - Friday	4.22	16,293	1,605	895	18,793	1,000 square feet of gross floor area
565	Day Care Center	4.89	18,891	1,860	1,038	21,789	1,000 square feet of gross floor area
566	Cemetary	0.46	1,776	175	98	2,049	Acres
571	Prison	2.91	11,236	1,106	617	12,959	1,000 square feet of gross floor area
575	Fire and rescue station	0.48	1,853	183	102	2,138	1,000 square feet of gross floor area
580	Museum	0.18	695	68	38	802	1,000 square feet of gross floor area
590	Library	8.16	31,506	3,103	1,730	36,339	1,000 square feet of gross floor area

Table 7 Continued - Transportation SDCs by Sample ITE Code

ITE Code	Land Use	Primary				Total SDC	Basis for Calculating a Customer's SDC
		Trip Ends	Improve.	Reimb.	Compliance		
Medical (Land Uses 600-699)							
610	Hospital	0.97	3,745	369	206	4,320	1,000 square feet of gross floor area
620	Nursing Home	0.59	2,278	224	125	2,627	1,000 square feet of gross floor area
630	Clinic	3.28	12,664	1,247	696	14,607	1,000 square feet of gross floor area
640	Animal Hospital/Veterinary Clinic	3.53	13,629	1,342	749	15,720	1,000 square feet of gross floor area
650	Free-Standing emergency room	1.52	5,869	578	322	6,769	1,000 square feet of gross floor area
Office (Land Uses 700-799)							
710	General office building	1.15	4,440	437	244	5,121	1,000 square feet of gross floor area
712	Small office building	2.45	9,459	932	520	10,911	1,000 square feet of gross floor area
714	Corporate Headquarters Building	0.60	2,317	228	127	2,672	1,000 square feet of gross floor area
715	Single Tenant Office Building	1.71	6,602	650	363	7,615	1,000 square feet of gross floor area
720	Medical-dental office building	3.46	13,359	1,316	734	15,408	1,000 square feet of gross floor area
730	Government Office Building	1.71	6,602	650	363	7,615	1,000 square feet of gross floor area
731	State Motor Vehicles Department	5.20	20,077	1,977	1,103	23,157	1,000 square feet of gross floor area
732	United States Post Office	11.21	43,282	4,262	2,377	49,921	1,000 square feet of gross floor area
733	Government Office Complex	2.82	10,888	1,072	598	12,558	1,000 square feet of gross floor area
750	Office park	1.07	4,131	407	227	4,765	1,000 square feet of gross floor area
760	Research and development center	0.49	1,892	186	104	2,182	1,000 square feet of gross floor area
770	Business park	0.42	1,622	160	89	1,870	1,000 square feet of gross floor area
Retail (Land Uses 800-899)							
810	Tractor Supply Store	1.40	5,405	532	297	6,235	1,000 square feet of gross floor area
811	Construction Equipment Rental Store	0.99	3,822	376	210	4,409	1,000 square feet of gross floor area
812	Building Materials and Lumber Store	2.06	7,954	783	437	9,174	1,000 square feet of gross floor area
813	Free Standing Discount Super Store	3.07	11,870	1,169	652	13,691	1,000 square feet of gross floor area
814	Variety Store	4.51	17,430	1,716	957	20,104	1,000 square feet of gross floor area
815	Free Standing Discount Store	2.31	8,905	877	489	10,271	1,000 square feet of gross floor area
816	Hardware/Paint Store	1.19	4,605	453	253	5,311	1,000 square feet of gross floor area
817	Nursery (Garden Center)	6.94	26,795	2,639	1,472	30,906	1,000 square feet of gross floor area
818	Nursery (Wholesale)	5.18	20,000	1,970	1,098	23,068	1,000 square feet of gross floor area
820	Shopping Center	1.91	7,376	726	405	8,507	1,000 square feet of gross leasable area
823	Factory Outlet Center	2.29	8,842	871	486	10,198	1,000 square feet of gross floor area
840	Automobile Sales (New)	2.43	9,382	924	515	10,821	1,000 square feet of gross floor area
841	Automobile Sales (Used)	3.75	14,479	1,426	795	16,700	1,000 square feet of gross floor area
842	Recreational Vehicle Sales	0.77	2,973	293	163	3,429	1,000 square feet of gross floor area
843	Automobile Parts Sales	2.16	8,341	821	458	9,621	1,000 square feet of gross floor area
848	Tire Store	2.73	10,552	1,039	580	12,171	1,000 square feet of gross floor area
849	Tire Superstore	2.11	8,147	802	447	9,396	1,000 square feet of gross floor area
850	Supermarket	3.58	13,824	1,361	759	15,945	1,000 square feet of gross floor area
851	Convenience Market	20.88	80,636	7,941	4,429	93,005	1,000 square feet of gross floor area
853	Convenience Market with Gasoline Pumps	7.98	30,830	3,036	1,693	35,559	1,000 square feet of gross floor area
854	Discount Supermarket	4.68	18,054	1,778	992	20,824	1,000 square feet of gross floor area
857	Discount Club	2.63	10,168	1,001	558	11,727	1,000 square feet of gross floor area
858	Farmers market - weekday pm peak hour	179.84	694,362	68,379	38,137	800,878	Acres
860	Wholesale Market	1.76	6,795	669	373	7,838	1,000 square feet of gross floor area
861	Sporting Goods Superstore	2.02	7,799	768	428	8,996	1,000 square feet of gross floor area
862	Home Improvement Superstore	1.21	4,678	461	257	5,396	1,000 square feet of gross floor area
863	Electronics Superstore	1.15	4,441	437	244	5,122	1,000 square feet of gross floor area
864	Toy/Children's Superstore	5.00	19,305	1,901	1,060	22,266	1,000 square feet of gross floor area
865	Baby Superstore	1.82	7,027	692	386	8,105	1,000 square feet of gross floor area
866	Pet Supply Superstore	3.55	13,707	1,350	753	15,809	1,000 square feet of gross floor area
867	Office Supply Superstore	2.77	10,695	1,053	587	12,336	1,000 square feet of gross floor area
868	Book Superstore	15.83	61,120	6,019	3,357	70,495	1,000 square feet of gross floor area
869	Discount Home Furnishing Superstore	1.57	6,062	597	333	6,992	1,000 square feet of gross floor area
872	Bed and Linen Superstore	2.22	8,571	844	471	9,886	1,000 square feet of gross floor area
875	Department Store	1.95	7,529	741	414	8,684	1,000 square feet of gross floor area
876	Apparel Store	4.12	15,907	1,567	874	18,348	1,000 square feet of gross floor area
879	Arts and Crafts Store	6.21	23,977	2,361	1,317	27,655	1,000 square feet of gross floor area
880	Pharmacy/Drugstore without Drive-Through	3.60	13,910	1,370	764	16,043	1,000 square feet of gross floor area
881	Pharmacy/Drugstore with Drive-Through	3.91	15,097	1,487	829	17,413	1,000 square feet of gross floor area
882	Marijuana Dispensary	21.83	84,286	8,300	4,629	97,215	1,000 square feet of gross floor area
890	Furniture Store	0.19	736	72	40	849	1,000 square feet of gross floor area
895	Beverage container recycling depot -PM peak hr	10.10	38,996	3,840	2,142	44,978	1,000 square feet of gross floor area
897	Medical Equipment Store	1.24	4,788	471	263	5,522	1,000 square feet of gross floor area
899	Liquor store	16.37	63,205	6,224	3,471	72,900	1,000 square feet of gross floor area

Table 7 Continued - Transportation SDCs by Sample ITE Code

ITE Code	Land Use	Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
Services (Land Uses 900-999)							
911	Walk-in Bank	12.13	46,834	4,612	2,572	54,018	1,000 square feet of gross floor area
912	Drive-in Bank	11.40	44,028	4,336	2,418	50,782	1,000 square feet of gross floor area
918	Hair Salon	1.45	5,598	551	307	6,457	1,000 square feet of gross floor area
920	Copy, Print and Express Ship Store	7.42	28,649	2,821	1,573	33,043	1,000 square feet of gross floor area
925	Drinking Place	11.36	43,861	4,319	2,409	50,589	1,000 square feet of gross floor area
926	Food Cart Pod	3.08	11,892	1,171	653	13,716	Food Cart
930	Fast Casual Restaurant	14.13	54,556	5,373	2,996	62,925	1,000 square feet of gross floor area
931	Quality Restaurant	3.32	12,799	1,260	703	14,763	1,000 square feet of gross floor area
932	High-Turnover (Sit Down) Restaurant	3.88	14,994	1,477	824	17,295	1,000 square feet of gross floor area
933	Fast-food restaurant without drive-through	11.27	43,495	4,283	2,389	50,167	1,000 square feet of gross floor area
934	Fast-food restaurant with drive-through	13.38	51,647	5,086	2,837	59,570	1,000 square feet of gross floor area
935	Fast-food restaurant with drive-through and no in	4.69	18,114	1,784	995	20,893	1,000 square feet of gross floor area
936	Coffee/donut shop without drive-through	14.43	55,727	5,488	3,061	64,275	1,000 square feet of gross floor area
937	Coffee/donut shop with drive-through	4.77	18,424	1,814	1,012	21,250	1,000 square feet of gross floor area
938	Coffee/donut kiosk	9.17	35,391	3,485	1,944	40,820	1,000 square feet of gross floor area
939	Bread/Donut/Bagel Shop without Drive-Through V	28.00	108,108	10,646	5,938	124,692	1,000 square feet of gross floor area
940	Bread/Donut/Bagel Shop with Drive-Through Winc	19.02	73,436	7,232	4,033	84,701	1,000 square feet of gross floor area
941	Quick Lubrication Vehicle Shop	8.70	33,591	3,308	1,845	38,744	Servicing Position
942	Automobile Care Center	3.11	12,008	1,182	660	13,850	1,000 sq. ft. of occupied gross leasable area
943	Automobile Parts and Service Center	2.26	8,726	859	479	10,064	1,000 square feet of gross floor area
944	Gasoline/service station	38.24	147,662	14,541	8,110	170,314	1,000 square feet of gross floor area
945	Gasoline/service station with convenience market	11.29	43,587	4,292	2,394	50,274	1,000 square feet of gross floor area
947	Self-Service Car Wash	5.54	21,390	2,106	1,175	24,671	Wash stall
948	Automated Car Wash	13.60	52,510	5,171	2,884	60,565	Wash stall
949	Car Wash and Detail Center	14.20	54,826	5,399	3,011	63,237	1,000 square feet of gross floor area
950	Truck Stop	22.73	87,761	8,642	4,820	101,223	1,000 square feet of gross floor area
960	Super Convenience Market/Gas Station	69.28	267,490	26,342	14,692	308,523	1,000 square feet of gross floor area
970	Winery	7.31	28,224	2,779	1,550	32,553	1,000 square feet of gross floor area

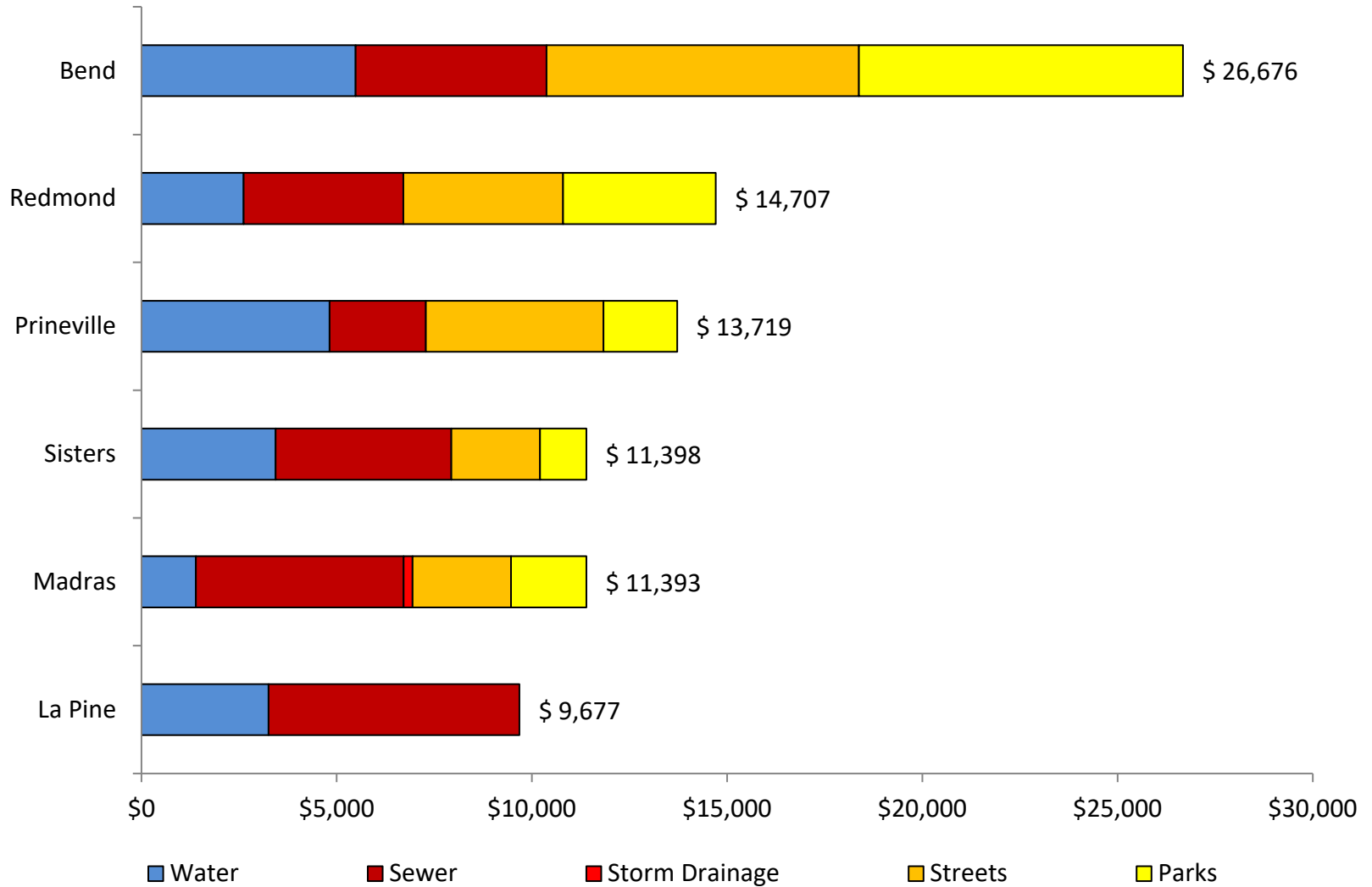
* No ITE PM peak hour trip generation for this code/category, the trip generation shown is ITE weekday average divided by ten.

Source: ITE, Trip Generation Manual, 10th edition

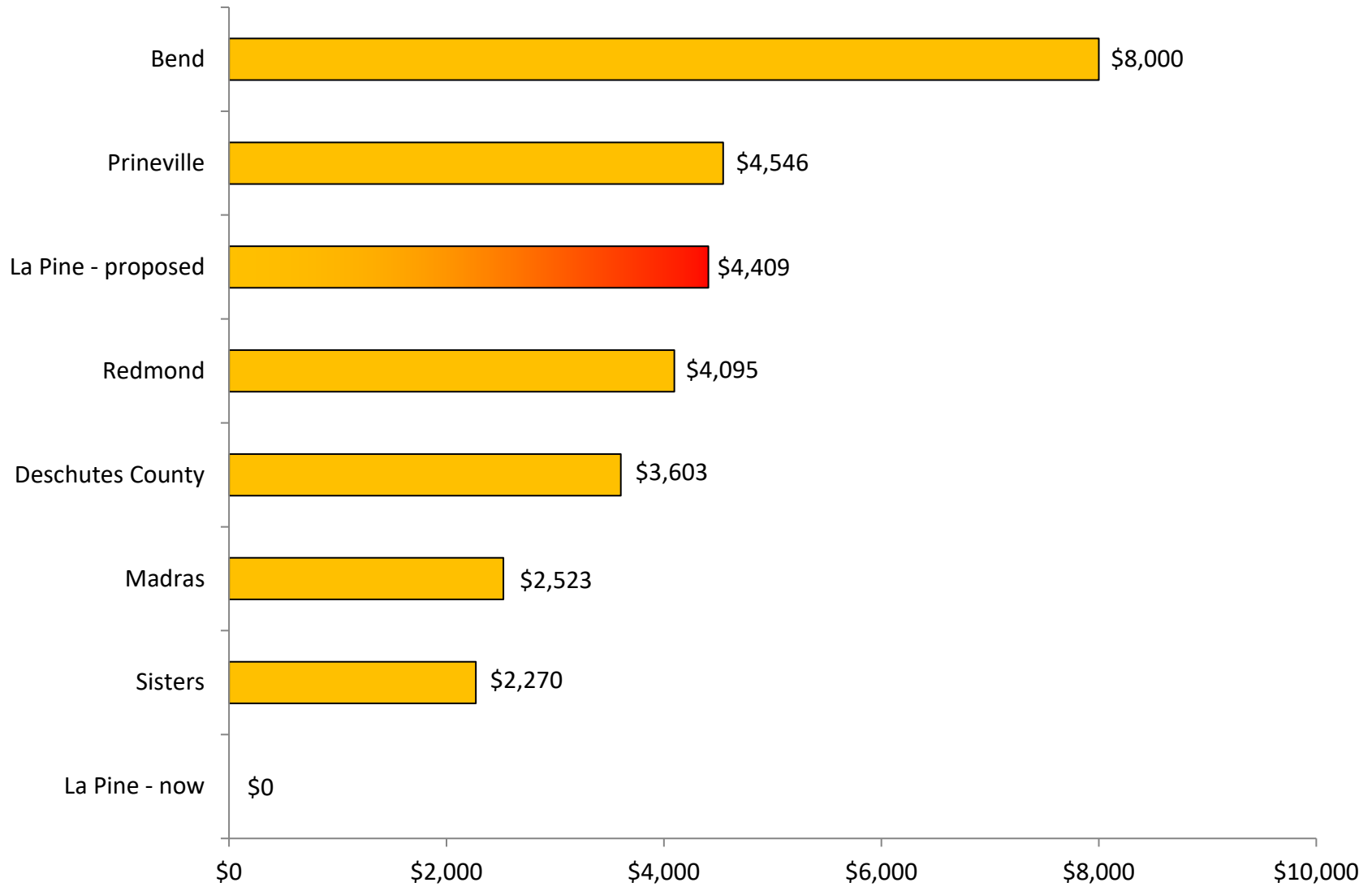
PM peak vehicle trips expressed in trip ends on a weekday, peak hour of adjacent street traffic, one hour, between 4:00 pm and 6:00 pm unless otherwise noted

Neighboring Communities' SDCs

Total Single Family Residential SDCs by Component



Single Family Residential SDCs for Streets



Appendix B

PM Peak Hour Vehicle Trip Forecasting Methodology

2020 Transight Engineering, LLC PMPHVT Forecasting Methodology



Date:	April 28, 2020
To:	Melissa Bethel, La Pine City Manager Steve Donovan, Donovan Enterprises
From:	Joe Bessman, PE
Project Reference No.:	1402
Project Name:	City of La Pine TSDC Methodology



The purpose of this memorandum is to provide information on the future weekday p.m. trips for use in the City of La Pine’s calculations of Transportation System Development Charges (TSDC). Prior to the City’s 2005 inception, development within the unincorporated La Pine Community was subject to Deschutes County’s TSDC. However, once La Pine incorporated the County determined that it could not continue to assess these fees within City limits despite many of the paved roads remaining under Deschutes County jurisdiction.

Typically, a City’s TSDC is developed from a listing of capacity-improving transportation projects that are necessary to support 20 years of population and employment growth. The cost of these projects is proportioned based on anticipated State, County, and federal funding. This remaining cost is then divided by the total number of additional trips that are anticipated to be generated within this timeframe, so that growth pays for the needed system capacity improvements. By statute these costs or associated funds cannot be applied to other system needs, such as existing deficiencies, safety improvements, sidewalk infill, or roadway maintenance. The idea is that projects are already needed by current residents or that benefit the entire community should not be solely borne by development but shared more broadly through other forms of revenue.

This memorandum describes the proposed methodology to identify “growth trips” within the City of La Pine through the planning horizon.

Growth Trips

The primary factors that need to be accounted for in determining the number of growth trips are the questions of what is being measured and when is it being measured to.

Time Period

An agency has discretion to adopt various trip metrics to apply in their SDC calculations. Throughout the State these are most commonly based on the number of weekday daily trips or the number of weekday p.m. peak hour trips. Throughout Central Oregon all of the agencies consistently assess impacts based on the number of weekday p.m. peak hour trips. The advantages of this methodology are as follows:

- Throughout Central Oregon the weekday p.m. peak hour (single hour with the highest total entering traffic between 4:00 p.m. and 6:00 p.m.) is the time period that the area experiences peak travel volumes on the transportation system. Accordingly, the sizing of transportation facilities within Transportation System Plans, Corridor Plans, and Refinement Plans typically assess conditions during this peak travel period. Use of weekday p.m. peak hour data maintains an alignment between planning efforts and project needs.
- The regional travel demand models for Central Oregon contain the most complete data around the evening commute period and are the most calibrated for this time period. These models are used to assess growth on major City, County, and State corridors.
- The selection of the weekday p.m. peak hour allows agencies to leverage a more complete dataset of development trip rates. The ITE Trip Generation Manual, which is applied to identify the number of trips for a given development type and scale, includes more data across the most available land uses for the weekday p.m. peak hour.
- In addition to a more complete set of trip rates, the weekday p.m. peak hour also contains substantially more data on other types of trip characteristics such as pass-by and diverted trips. These are trips that are already on the system that may only have an impact at driveways or within the immediate project area.
- While some agencies within Oregon have elected to assess SDC fees based on weekday daily trips, the extended data collection requirements incur much higher costs to appeal standard ITE-based fees for unique land uses. Data collection for a more limited time period is easier to assemble.

The primary disadvantage of the use of weekday p.m. peak hour data is off-peak uses, such as movie theaters, breakfast and lunch-oriented cafes, churches, and schools operate at a significantly reduced capacity during the evening commute period. Prior studies within La Pine have identified late afternoon and even lunch hour peaks in parts of the City. While City planning efforts and projects could still be conducted for these off-peak periods, assessment of SDC fees may not be perfectly aligned in those instances. The disadvantages of this approach are considered to be outweighed by the benefits.

Horizon Year

The horizon year is the other metric that should be considered, as the farther out the horizon year is the more growth will occur and the more projects that will be needed to support this growth. Ideally, there would be alignment between the planning horizon of the City’s Transportation System Plan, regional travel demand modeling, census data and projections, and project lists. However, each of these are independent and “living” documents that are subjected to periodic and continuous refinements and updates.

- La Pine’s US 97 Corridor Plan was prepared in July 2011 and assessed year 2032 conditions along US 97 within the downtown core area. This plan did not consider the Wickiup Junction as the area was being separately planned by ODOT’s Transportation Planning and Analysis Unit.
- The City’s Transportation System Plan was prepared in 2013 and also considered a horizon year of 2032.
- The Wickiup Refinement Plan is currently being finalized and is assessing year 2040 conditions to provide a 20-year planning horizon.
- ODOT’s regional travel demand modeling is premised on future year 2040 conditions but is calibrated with 2010 census data. The travel demand models will be updated when the 2020 census data is released.

For consistency with current planning and modeling data (future population and employment values) it is recommended that a consistent year 2040 horizon period be applied within the City’s TSDC

methodology. The inclusion of projects from the La Pine Transportation System Plan, US 97 Corridor Plan, and Wickiup Refinement Plan will all contribute toward this project list.

Population and Households Forecast

A review of the most recent coordinated population forecasts prepared in 2018 by Portland State University (PSU) Population Forecast Program indicates a continued projection of growth in La Pine through this planning horizon. Figure 1 illustrates the projected growth in the City that is expected to remain elevated but slower than the current period after 2020, with projected population growth in the City of approximately 2.5 percent. Historical data between 2010 and 2020 shows annual growth of approximately 1.4 percent.

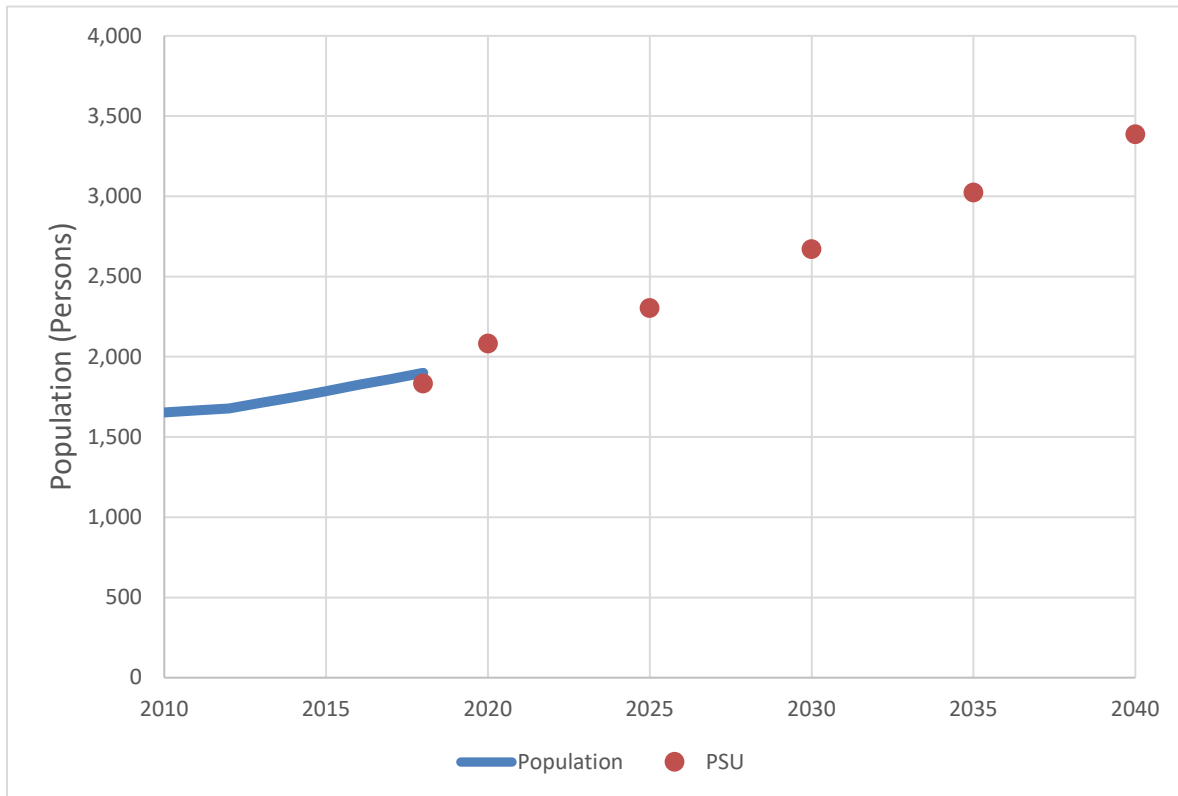


Figure 1. Population Forecast Comparison for the City of La Pine showing historical and projected population growth.

To convert population to the number of households, the PSU growth projections reflect continued application of the 2010 census data showing an average of 2.3 persons per household. Between current year 2020 conditions and the projected 2040 horizon year this shows 1,305 additional persons within 567 added households, or approximately 28.3 new households per year.

Employment Forecast

Information on future employment of often obtained through the Buildable Lands Inventory and the Economic chapter of the City's Comprehensive Plan. As these were drafted shortly after incorporation of the City this information is limited and dated. The best information available through the 2010 census as

compiled by the Oregon Employment Department’s Employment and Wages by Industry (QCEW) data. This information identifies employment throughout the City by industry classification:

- Natural resources/mining
- Construction
- Manufacturing
- Trade, Transportation, and Utilities
- Information
- Financial Activities
- Professional/Business Services
- Education and Health Services
- Leisure and Hospitality
- Other services
- Unclassified

Based on discussions with ODOT’s long range travel demand modeling group there are no coordinated employment forecasts for the City of La Pine that could be directly applied. Instead, it was suggested that the employment forecasts maintain the same proportion as the 2010 census and the same ratio of employees per person within the population. However, as it was noted that there was a high rate of unemployment throughout Deschutes County in 2010 (approximately 13.8 percent, see Figure 2) versus the current (historically low) level of 4.1 percent. While the area is subject to high seasonal variation, the persons per job ratio was adjusted to reflect a more typical 7.0 percent unemployment rate.

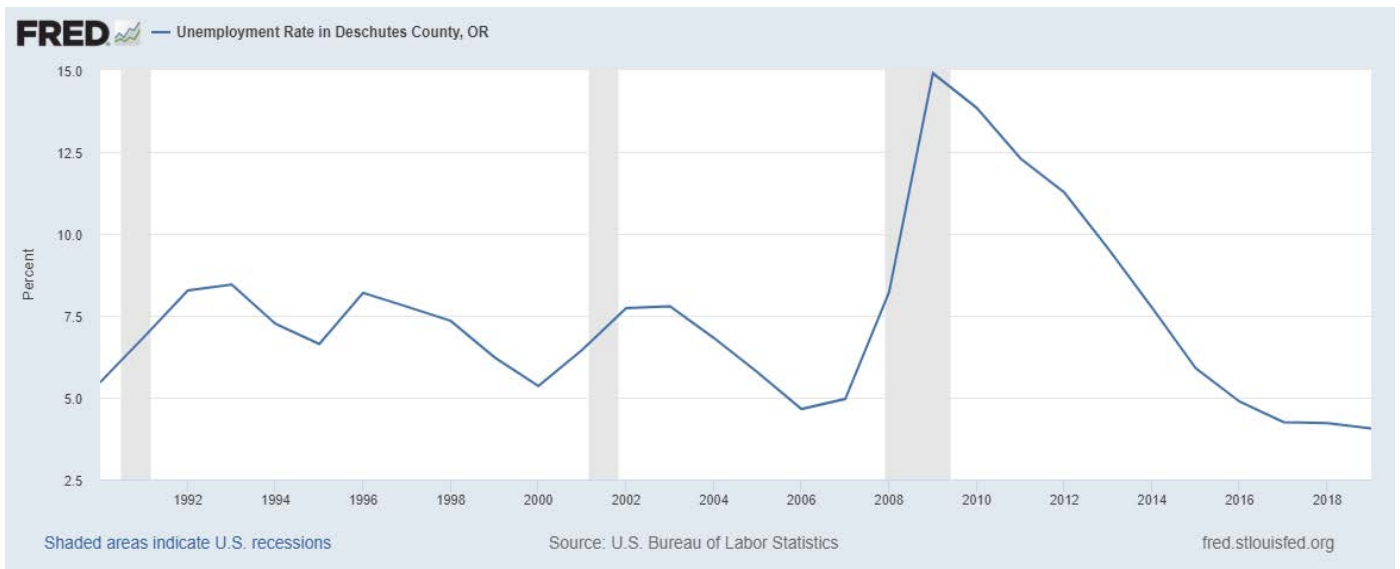


Figure 2. Deschutes County Annual Unemployment Data. Source: Federal Reserve Economic Data (FRED)

Accordingly, the number of employees within La Pine in 2010 was adjusted resulting in 1,405 employees, or approximately 1.18 persons per job. Assuming that this same employment ratio is maintained through the year 2040, with projections for 3,386 total persons this results in 3,982 total jobs, broken into the categories as shown in Figure 3.

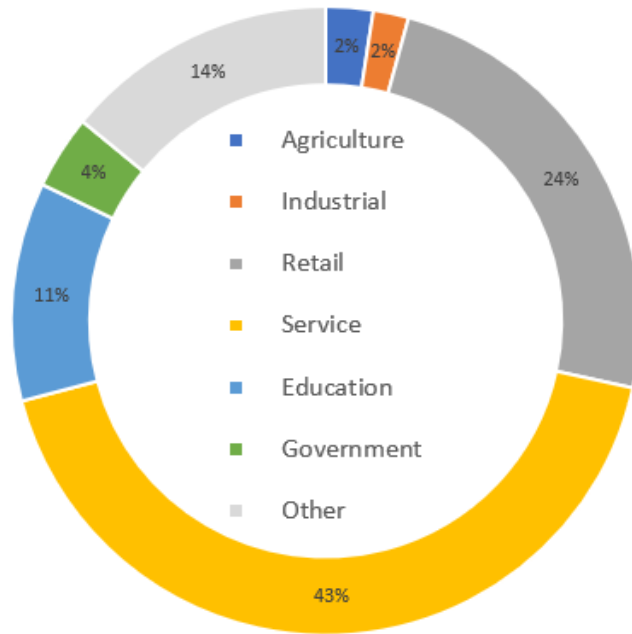


Figure 3. Summary of 2040 La Pine Employment by Category

Population and Employment to Weekday PM Peak Hour Trips

The household and employment growth in the City of La Pine was converted to weekday p.m. peak hour trips by application of the City of Prineville’s calibrated travel demand model outputs. The City of Prineville established an SDC methodology using the travel demand model to convert the number of households and employment types to weekday p.m. peak hour trips. As a similar travel demand model is not available for the City of La Pine, these calibrated small-City Central Oregon datasets were considered a relevant surrogate. Table 1 provides a summary of the City of Prineville’s equivalent “trip per unit” for each employee type or household would generate.

Table 1. Summary of City of Prineville Weekday PM Peak Hour Growth Trips

Growth Type	Projected Prineville Growth	Weekday PM Peak Hour Trips	Trips per Unit
Aggregated Employment	1,747	1,141	0.65/Emp
<i>Agriculture</i>	0	0	-
<i>Industrial</i>	955	401	0.42/Emp
<i>Retail</i>	317	353	1.11/Emp
<i>Service</i>	299	138	0.46/Emp
<i>Education</i>	71	138	1.94/Emp
<i>Government</i>	0	0	-
<i>Other</i>	105	111	1.06/Emp
Housing (+4,000 Persons)	1,647 2.43 persons/HH	1,647	1.00/Household

Applying the same general trip rates that were prepared as part of ODOT’s forecast for the City of Prineville updated with the projected change in population and employment for the City of La Pine provides the revised total weekday p.m. peak hour trip estimates shown in Table 2.

Table 2. City of La Pine Weekday PM Peak Hour Growth Trips

Growth Type	Existing Year 2020	Projected Year 2040	2020 to 2040 Growth	Weekday PM Trips per Unit	Added Weekday PM Peak Hour Trips
Aggregated Employment	2,205 Emp	3,982 Emp	+1,777 Emp	-	1,580 Trips
• Agricultural	54 Emp	97 Emp	+43 Emp	0.42/Emp	18 Trips
• Industrial	40 Emp	73 Emp	+33 Emp	0.42/Emp	14 Trips
• Retail	533 Emp	962 Emp	+429 Emp	1.11/Emp	477 Trips
• Service	937 Emp	1,692 Emp	+755 Emp	0.46/Emp	347 Trips
• Education/Health	248 Emp	448 Emp	+200 Emp	1.94/Emp	388 Trips
• Government	84 Emp	151 Emp	+67 Emp	1.06/Emp	72 Trips
• Other	310 Emp	560 Emp	+250 Emp	1.06/Emp	265 Trips
Housing (+1,305 persons)	2,081 Persons	3,386 Persons	+567 Households (2.3 persons/HH ¹)	1.00/Household	567 Trips
Additional Weekday PM Trips in La Pine					2,148 PM Trips

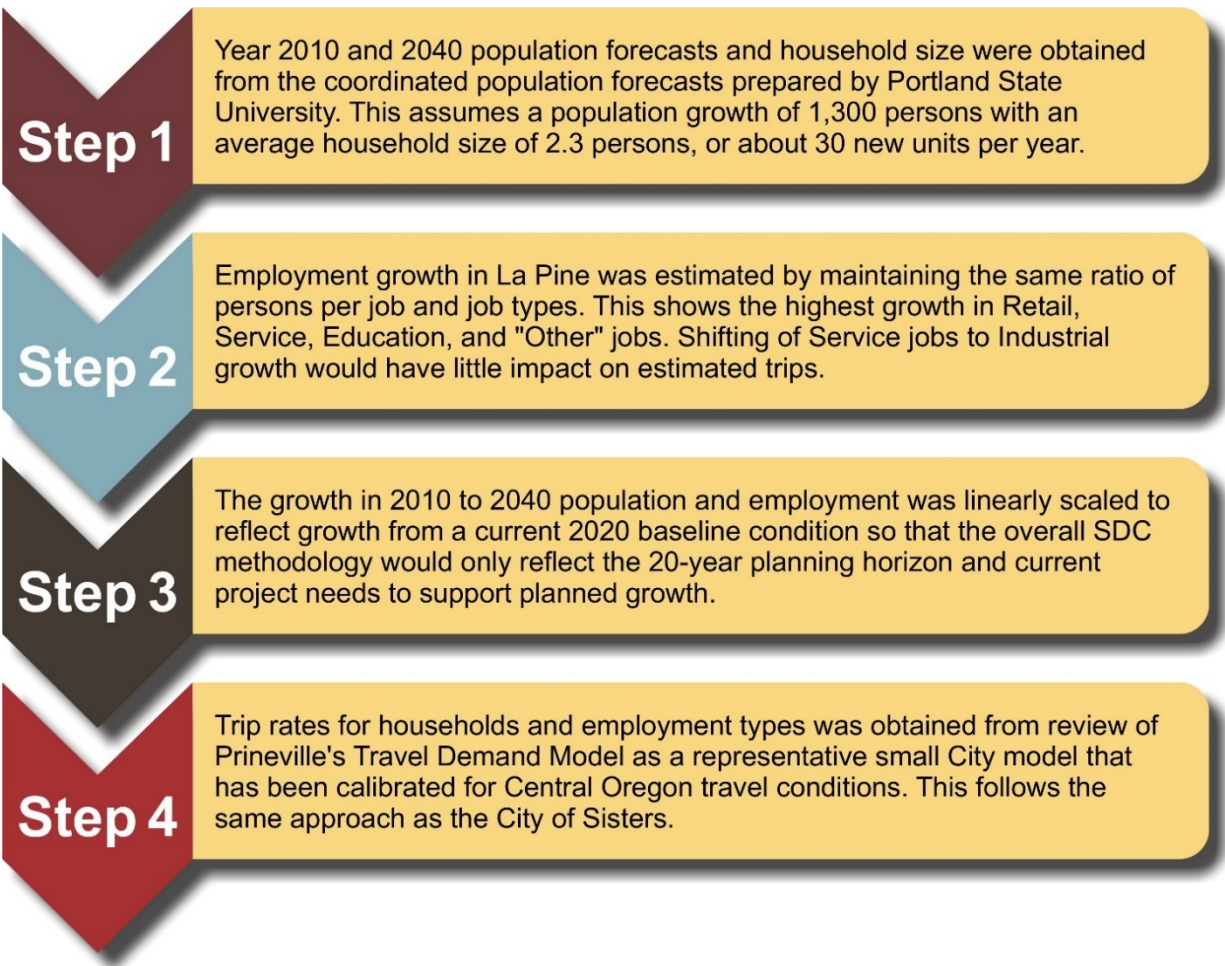
RED values reflect an assigned estimate as calibrated data was not available in the Prineville Travel Demand Model.

¹PSU Coordinated Population Forecasts

This forecast shows that by 2040 there will be an additional 2,148 weekday p.m. peak hour trips (total trip ends) on the transportation system associated with new growth.

Summary

Adopted transportation plans within the City of La Pine include an assessment the system with a horizon year ranging between 2032 and 2040. For purposes of planning for the City’s 20-year infrastructure needs it is recommended that the City consider a consistent year 2040 listing of projects and growth trips for its SDC methodology. With the location of the City on the edge of the regional travel demand model and serving a substantial number of regional “through” trips, an alternative forecasting method was applied that is similar to recent efforts within the Cities of Sisters and Prineville. This follows a four-step process as shown below:



Thank you for the opportunity to provide this information in support of La Pine's TSDC methodology. Please let me know if you have any questions or comments on this memorandum at (503) 997-4473 or via email at joe@transightconsulting.com.