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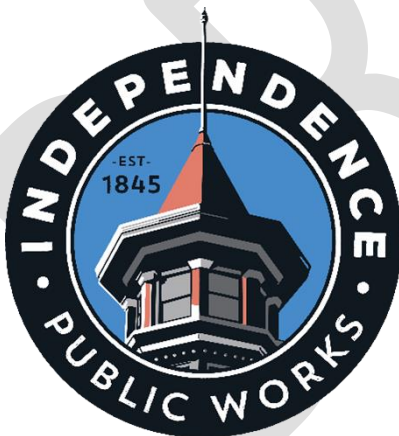
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Wastewater and Transportation System Development Charge Update

Final Report

Prepared for:



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City of Independence
2022 Wastewater and Transportation
SDC Methodology Update

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Introduction/History of the Project

The City of Independence conducts periodic updates to its Comprehensive Plan and its various Public Facility Plans to provide orderly and sustainable growth of municipal infrastructure. 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 numeric overview of the calculations presented in subsequent sections of this report for wastewater and transportation SDCs.

The city's current schedule of SDCs were last reviewed in the Fall of 2006. Since that time, the City has completed new master plans for wastewater and transportation. In March of 2022, the City hired Donovan Enterprises, Inc. to review and update the wastewater and transportation SDC methodologies. With this review and update, the City has stated a number of objectives:

- Review the basis for charges to ensure a consistent methodology;
- Address specific policy, administrative, and technical issues which had arisen from application of the existing SDCs;
- 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 SDC updates comply with Independence Municipal Code chapter 34, Article VII (sections 34-438 through 34-451).

Table 1 gives a component breakdown for the current and proposed residential equivalent SDCs for wastewater and transportation services.

Table 1 - Component Breakdown of the Proposed Residential Equivalent SDCs

Line Item Description	Service Unit	Proposed	Current	Difference
<i>Wastewater:</i>				
	per 5/8" or 3/4" water meter			
Reimbursement fee		\$ -	\$ -	\$ -
Improvement fee		8,884	4,070	4,814
Administration fee @ 5%		<u>444</u>	<u>-</u>	<u>444</u>
Total		\$9,328	\$4,070	\$5,258
<i>Transportation:</i>				
	per detached SF residence			
Reimbursement fee		\$318	\$ -	\$318
Improvement fee		6,820	3,680	3,140
Administration fee @ 5%		<u>357</u>	<u>-</u>	<u>357</u>
Total		\$7,495	\$3,680	\$3,815

Analytical Process for the Methodology Updates

The essential ingredient in the development of an SDC methodology 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 newly formulated and adopted capital improvement plans for wastewater and transportation. 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 SDCs

Service	Master Plan Document and/or Corroborating Source Documentation
Wastewater	<ul style="list-style-type: none"> • City of Independence Wastewater System Facilities Plan, March, 2022; Westech Engineering, Inc. • City of Independence wastewater system twenty-year capital improvement plan, April, 2022; City of Independence Public Works Department • City of Independence Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2021 • 2021 Discharge Monitoring Reports; City of Independence • Independence wastewater system fixed asset schedule; June 30, 2021; City records • City of Independence Utility Billing System – wastewater system active accounts and Equivalent Dwelling Units in service report; December, 2018 • Portland State University, College of Urban Affairs, Population Research Center; Certified census for Independence, Oregon; June, 2021
Transportation	<ul style="list-style-type: none"> • City of Independence transportation system twenty-year capital improvement plan, April, 2022; City of Independence Public Works Department • City of Independence transportation system fixed asset schedule; June 30, 2021; City records • U.S. Bureau of the Census; American Community Survey: <ul style="list-style-type: none"> ✓ City of Independence dwelling units; 2021 estimated ✓ City of Independence number of employees; 2021 estimated • Trip Generation Manual; Institute of Transportation Engineers; 10th Edition • City of Independence Transportation System Plan; August, 2021; Kittelson & Associates, Inc.

The data sources shown in Table 2 were used to formulate the two (2) components of the SDCs. These components are the reimbursement and improvement fees. The City has been constructing the SDCs with these two components for over twenty years, and our analysis does not propose to change that methodology. A brief definition of the two components are:

- *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, 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 additional equivalent residential units to be served by the City's facilities over the planning period. Such a fee represents the greatest potential for future SDC changes. The improvement fee must also provide a credit for construction of a qualified public improvement.

SDC Legal Authorization and Background

SDCs are authorized by Oregon Revised Statute (ORS) 223.297-314. The 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.

Finally, two cost basis adjustments are potentially applicable to both reimbursement and improvement fees: fund balance and compliance costs. In this study, the project team has paid attention to this detail to align future infrastructure costs to those responsible for paying those costs. The reasons for this attention is as follows:

- *Fund Balances* - 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 wastewater improvement fees that it has collected but not spent, then those unspent improvement fees should be deducted from the wastewater 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.

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.

In order 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 due to the fact that 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 of these points. First, the charge is based on the net investment in the system, rather than the gross cost. Therefore, donated facilities, typically including local facilities, 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. In the absence of a detailed asset by asset analysis, it is appropriate to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units over the planning period. This approach reflects the philosophy, consistent with the City's Updated Master Plans, 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 have 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.

In the past, the City has utilized the "improvements-driven" approach for the calculation of SDCs. This study continues to use this method and has relied on the capital improvement plans that are incorporated in the master plans, and plan updates for the wastewater and transportation systems.

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 newly adopted capital improvement plans established by the City for wastewater and 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 wastewater collection line that exclusively serves a newly 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 signalization project both expands the pm peak hour vehicle trip throughput 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 respective system's 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 in order to assess SDC eligibility. The criteria in Figure 1 were developed to guide the City's evaluation:

Figure 1 - SDC Eligibility Criteria

<p style="text-align: center;">City of Independence Steps Toward Evaluating <u>Capital Improvement Lists for SDC Eligibility</u></p> <p><u>ORS 223</u></p> <ol style="list-style-type: none">1. Capital improvements mean the facilities or assets used for :<ol style="list-style-type: none">a. Wastewater collection, transmission, treatment, and disposalb. Transportation – intersection improvements, street reconstruction and widening, roadway enhancement, and bike/ped expansion<p>This definition DOES NOT ALLOW costs for operation or routine maintenance of the improvements;</p>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.
<p style="text-align: center;"><u>Under the City’ approach, the following rules will be followed</u></p> <ol style="list-style-type: none">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;4. Costs will not be included which bring deficient systems up to established design levels.

In developing the improvement fee, the project team in consultation with City staff evaluated each of its 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 Equivalent Residential Units (expressed in ¾” water meter equivalents) for wastewater over the planning horizon. We measure demand for transportation facilities in PM peak-hour vehicle trips (PM PHVTs). One PM PHVT represents one person beginning or ending a vehicular trip at a certain property during the afternoon rush hour. Once the future costs to serve growth have been segregated (i.e., the numerator), they can be divided into the total number of new EDUs (and PM PHVT’s) that will use the capacity derived from those investments (i.e., the denominator).

Methodology for the Granting of Credits, Discounts, and Exemptions

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 particular 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 particular 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.

The City has adopted a policy for granting SDC credits and has codified this policy in the Independence Municipal Code (IMC) §34.448. The adopted SDC credit policy consists of four (4) items as follows:

- A. A system development charge shall be imposed when a change of use of a parcel or structure occurs, but credit shall be given for the computed system development charge to the extent that prior structures existed and services were established on or after the effective date of the ordinance codified in this chapter. The credit so computed shall not exceed the calculated system development charge. No refund shall be made on account of such credit.
- B. A credit shall be given for the cost of a qualified public improvement associated with a development. If a qualified public improvement is located partially on and partially off the parcel that is the subject of the residential development approval, the credit shall be given only for the cost of the portion of the improvement not located on or wholly contiguous to the property. The credit provided for by this subsection shall be only for the improvement fee charged for the type of improvement being constructed and shall not exceed the improvement fee even if the cost of the capital improvement exceeds the applicable improvement fee.
- C. Applying the methodology adopted by resolution, the City Manager may grant a credit against the public improvement charge, the reimbursement fee, or both, for a capital improvement constructed as part of the development that reduces the development's demand upon existing capital improvements or the need for future capital improvements or that would otherwise have to be constructed at city expense under existing Council policies.
- D. In situations where the amount of credit exceeds the amount of the system development charge, the excess credit is not transferable to another development. It may be transferred to another phase of the original development. Credit shall not be transferable from one development to another.

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 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(s).

Partial and Full SDC Exemption

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, the City has articulated a policy relative to partial and full SDC exemption. This SDC exemption policy is codified in IMC §34.447, and is as follows:

- A. Structures and uses established and existing on or before July 1, 1991, are exempt from a system development charge to the extent of the structure or use then existing and to the extent of the parcel of land as it is constituted on that date. Structures and uses affected by this subsection shall pay the water or sewer charges pursuant to the terms of this Code upon the receipt of a permit to connect to the water or sewer system.
- B. Additions to single-family dwellings that do not constitute the addition of a dwelling unit, as defined by the state uniform building code, are exempt from all portions of the system development charge.
- C. An alteration, addition, replacement or change in use that does not increase the parcel's or structure's use of the public improvement facility are exempt from all portions of the system development charge.
- D. A project financed by city revenues is exempt from all portions of the system development charge.

Wastewater SDCs

Wastewater Capital Improvement Plan

The principal sources of data for the wastewater system CIP are the 2022 capital improvement plans for wastewater treatment, pumping stations, and collection systems. City Staff have periodically updated these plans for current development conditions. With the assistance of City Staff, the project team has summarized the 2022 wastewater system CIPs for this SDC methodology update. The 2022 wastewater system CIP is shown in Table 3.

Table 3 - 2022 Wastewater System CIP

2022 Wastewater Capital Improvement Plan													
Project Number	Project Source	Project Name	Project Description	Priority Year 2023-2027	Priority Year 2028-2032	Priority Year 2033-2042	Master Plan Priority	Diameter (Inch)	Length (Feet)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Gravity Collection System Improvement Projects													
G-1	WWMP	9th Street Trunk Sewer (MH C-7 to C-74)	Project to increase 1,200 feet of 12-inch to 15-inch PVC mainline on 8th Street between Monmouth Street and F Street and rehabilitate 6 manholes. Project to be completed prior to G-9, G-10, G-12, and G-14.			2033-2042	Low	15	1200	Yes	36%	\$ 447,001	\$ 160,920
G-2	WWMP	Basin E Trunk Sewer (MH E-2 to E-6)	Project to increase 2,000 feet of 10-inch to 15-inch PVC mainline and rehabilitate 6 manholes.	2023-2027			High	15	2000	Yes	56%	\$ 557,001	\$ 309,693
G-3	WWMP	Lagoon Pump Station Trunk Sewer (MH D-4 to D-12)	Project to increase 2,500 feet of 15-inch to 18-inch PVC from the Lagoon Pump Station to the western edge of the WWTP and rehabilitate 10 manholes. Project to be completed prior to G-16.		2028-2032		Medium	18	2500	Yes	31%	\$ 692,001	\$ 211,752
G-4	WWMP	12th Street Sewer (MH D-14 to D-55)	Project to increase 900 feet of 10-inch to 12-inch PVC and rehabilitate 6 manholes. Project to be completed prior to G-16.		2028-2032		Medium	12	900	Yes	31%	\$ 319,001	\$ 97,614
G-5	WWMP	C Street Sewer (MH B-5 to B-83)	Project to replace 2,200 feet of 8-inch pipe and rehabilitate 7 manholes. Includes boring 100 feet under the railroad.	2023-2027			High	8	2200	No	0%	\$ 720,001	\$ -
G-6	WWMP	H Street Sewer from 3rd to Main (B-12 to B-126)	Project to replace 600 feet of 8-inch to 12-inch PVC and rehabilitation 6 manholes. Includes boring 100 feet under the railroad.	2023-2027			High	12	600	Yes	56%	\$ 331,001	\$ 184,037
G-7	WWMP	Spruce Court to Briar Road Sewer (B-159 to B-162)	Project to replace 350 feet of 8-inch PVC and rehabilitation of 4 manholes.	2023-2027			High	8	350	No	0%	\$ 304,001	\$ -
G-8	WWMP	E Street Sewer from 12th to 13th (MH C-37 to C-39)	Project to replace 550 feet of 8-inch PVC and rehabilitate 3 manholes.	2023-2027			High	8	550	No	0%	\$ 157,001	\$ -
G-9	WWMP	13th Street Sewer (13th St PS to Subbasin C3)	Construct 1,400 feet of new 8" PVC with 3 manholes from the 13th Street Pump Station to Sub-basin C3's trunk sewer. G-1, G-12, F-3, and P-12 must be completed prior to			2033-2042	Low	8	1400	Yes	100%	\$ 347,001	\$ 347,001
G-10	WWMP	Briar Road Sewer (Briar Rd PS to Subbasin C5)	Construct 500 feet of new 8-inch PVC with 2 manholes from Briar Road PS to Subbasin C5. G-1, F-4, and P-13 must be completed prior to completion of G-10.			2033-2042	Low	8	500	Yes	100%	\$ 138,001	\$ 138,001

Table 3- 2022 Wastewater System CIP (Continued)

2022 Wastewater Capital Improvement Plan													
Project Number	Project Source	Project Name	Project Description	Priority Year 2023-2027	Priority Year 2028-2032	Priority Year 2033-2042	Master Plan Priority	Diameter (Inch)	Length (Feet)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Gravity Collection System Improvement Projects													
G-11	WWMP	Mt Fir Park Sewer (MH C-79 to C-75)	Replace 1,400 feet of 12-inch to 15-inch PVC and rehabilitate 5 manholes. Includes 75-foot bore under Ash Creek. G-1 must be completed prior to project.			2033-2042	Low	15	1400	Yes	36%	\$ 480,001	\$ 172,800
G-12	WWMP	Subbasin C3 Trunk Sewer to Undeveloped Area	Construct 4,100 feet of new 8-inch PVC with 12 manholes. G-1 and G-11 must be completed prior to completion of G-12.			2033-2042	Low	8	4100	Yes	100%	\$ 1,007,001	\$ 1,007,001
G-13	WWMP	Subbasin C4 Trunk Sewer to Undeveloped Area	Construct 4,000 feet of new 8-inch PVC with 10 manholes. G-11 must be completed prior to G-13.			2033-2042	Low	8	4000	Yes	100%	\$ 903,001	\$ 903,001
G-14	WWMP	Subbasin C5 Trunk Sewer to Undeveloped Area	Construct 3,900 feet of new 8-inch PVC with 10 manholes. Includes boring 75-feet under railroad. G-1, G-11, F-4, and P13 must be completed prior to completion of G-14.			2033-2042	Low	8	3900	Yes	100%	\$ 990,001	\$ 990,001
G-15	WWMP	Hoffman Road Sewer to Undeveloped Area	Construct 1,500 feet of new 8-inch PVC with 4 manholes. G-2 and P-15 must be completed prior to G-15.			2033-2042	Low	8	1500	Yes	100%	\$ 351,001	\$ 351,001
G-16	WWMP	Gun Club Road Sewer to Undeveloped Area	Construct 4,200 feet of new 10-inch PVC and 2,800 feet of new 8-inch PVC with 18 manholes. G-3 and G-4 must be completed prior to G-16.			2033-2042	Low	8 / 10	2800 / 4200	Yes	100%	\$ 1,597,001	\$ 1,597,001
G-17	WWMP	Corvallis Road Sewer to Unsewered Area	Construct 2,300 feet of new 8-inch PVC with 6 manhole. G-1, G-11, G-14, F-4, and P13 must be completed prior to completion of G-17.			2033-2042	Low	8	2300	Yes	100%	\$ 578,001	\$ 578,001
G-18	WWMP	16th Street Sewer	Construct 600 feet of new 8-inch PVC with 3 manholes.			2033-2042	Low	8	600	Yes	100%	\$ 182,001	\$ 182,001
G-19	WWMP	Talmadge Road Sewer	Construct 2,500 feet of new 8-inch PVC with 8 manholes. G-14, G-20, and P14 must be completed prior to completion of G-19.			2033-2042	Low	8	2500	Yes	100%	\$ 608,001	\$ 608,001
G-20	WWMP	Subbasin C2 Sewer	Construct 2,800 feet of new 8-inch PVC with 8 manholes.			2033-2042	Low	8	2800	Yes	100%	\$ 675,001	\$ 675,001
Subtotal High Priority Costs												\$ 2,069,005	
Subtotal Medium Priority Costs												\$ 1,011,002	
Subtotal Low Priority Costs												\$ 8,303,014	
Subtotal Program Costs												\$ 11,383,021	
Subtotal SDC Eligible Costs												\$ 8,512,828	

Table 3- 2022 Wastewater System CIP (Continued)

2022 Wastewater Capital Improvement Plan													
Project Number	Project Source	Project Name	Project Description	Priority Year 2023-2027	Priority Year 2028-2032	Priority Year 2033-2042	Master Plan Priority	Diameter (Inch)	Length (Feet)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Pump Station and Force Main Improvement Projects													
P-1	WWMP	9th Street Pump Station Capacity Upgrade (Phase 1)	Phase 1 involves installing larger pumps in the existing wetwell, install a new power service, install a new generator and upgrade the power and control systems. Will upgrade	2023-2027			High	N/A	N/A	Yes	77%	\$ 966,001	\$ 742,855
P-2	WWMP	9th Street Pump Station Capacity Upgrade (Phase 3)	Phase 3 involves installing a second wetwell with two additional and identical pumps, a new valve vault, and a larger generator. Flow from the influent sewers would be			2033-2042	Low	N/A	N/A	Yes	100%	\$ 928,001	\$ 928,001
P-3	WWMP	Oak Street Pump Station Capacity Upgrade	Install larger pumps to meet PH demands with the Riverview Pump Station running. The project would also rehabilitate the wetwell, upsize site piping, replace the wetwell top slab		2028-2032		Medium	N/A	N/A	Yes	47%	\$ 786,001	\$ 367,062
P-4	WWMP	North Main Pump Station Capacity Upgrade	Install larger pumps in the existing wetwell, new generator, new variable frequency drives, new control panel, level sensor, redundant level control		2028-2032		Medium	N/A	N/A	Yes	69%	\$ 309,001	\$ 214,447
P-5	WWMP	Maple drive Pump Station Upgrade	Rehabilitating the existing concrete wetwell, installing a new top slab and hatch, adding a small valve vault, and upgrading power & control equipment. The wetwell would	2023-2027			High	N/A	N/A	Yes	38%	\$ 508,001	\$ 192,532
P-6	WWMP	Lagoon Pump Station Capacity Upgrade	Add a pump to the existing wetwell and other improvements that would retrofit the pump station new variable frequency drives, new wetwell instruments, and new control &		2028-2032		Medium	N/A	N/A	Yes	48%	\$ 411,001	\$ 197,692
P-7	WWMP	Albert Street Pump Station Electrical System Upgrade	Addition of a new generator, variable frequency, drives, new pump disconnect, panel, pump control panel, level sensor, redundant level, control probe and a dedicated overflow		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 244,001	\$ 244,001
P-8	WWMP	Briar Road Pump Station Electrical Upgrade	Addition of a generator, new control panel, level sensor, redundant level control probe and a dedicated overflow sensor.		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 155,001	\$ 155,001
P-9	WWMP	13th Street Pump Station Electrical Upgrade	Addition of an auxiliary power generator, new control panel, level sensor, redundant level control probe and a dedicated overflow sensor, install vent in the wetwell top slab, and		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 253,001	\$ 253,001
P-10	WWMP	Mt Fir Pump Station Capacity and Electrical Upgrade	Addition of a third pump, variable frequency drives, new control panel, level sensor, redundant level control probe and a dedicated overflow sensor. Will upgrade the firm			2033-2042	Low	N/A	N/A	Yes	50%	\$ 256,001	\$ 128,001
P-11	WWMP	Stryker Road Pump Station Electrical Upgrade	Install larger pumps in the existing wetwell, new generator, new control panel, level sensor, redundant level control probe and a dedicated overflow sensor. Will upgrade the		2028-2032		Medium	N/A	N/A	Yes	86%	\$ 364,001	\$ 314,497
P-12	WWMP	New Ash Creek Pump Station	Construct new pump station to serve Sub-basins C2 and C3. Pump station is assumed to be roughly located south of Sweet Cherry Lane. Pump station includes a duplex pump			2033-2042	Low	N/A	N/A	Yes	100%	\$ 865,001	\$ 865,001

Table 3- 2022 Wastewater System CIP (Continued)

2022 Wastewater Capital Improvement Plan													
Project Number	Project Source	Project Name	Project Description	Priority Year	Priority Year	Priority Year	Master Plan Priority	Diameter (Inch)	Length (Feet)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
				2023-2027	2028-2032	2033-2042							
Pump Station and Force Main Improvement Projects													
P-13	WWMP	New Corvallis Road Pump Station	Construct new pump station to serve Sub-basins C5 and B4. Pump station is assumed to be roughly located south of Sweet Cherry Lane. Pump station includes a duplex pump			2033-2042	Low	N/A	N/A	Yes	100%	\$ 887,001	\$ 887,001
P-14	WWMP	New Talmadge Road Pump Station and Force Main	Construct new pump station and force main are proposed to serve undeveloped lots in the northwestern corner of Sub-basin C2. Pump station will convey flows from lots along			2033-2042	Low	N/A	N/A	Yes	100%	\$ 605,001	\$ 605,001
P-15	WWMP	Williams Street Pump Station Generator Upgrade	Replace existing generator.		2028-2032		Medium	N/A	N/A	No	0%	\$ 60,001	\$ -
F-1	WWMP	Common Force Main for the 9th Street and Lagoon Pump Stations	Install new 12-inch common force main. Project to be completed prior to P-6.			2033-2042	Low	12	2300	Yes	100%	\$ 806,001	\$ 806,001
F-2	WWMP	Maple Drive Pump Station Force Main	Install new 6-inch pipe force main. Project should be constructed with P-5.	2023-2027			High	6	250	Yes	100%	\$ 53,001	\$ 53,001
F-3	WWMP	New Ash Creek Pump Station Force Main	This 6-inch force main would convey flows approximately 2,800 feet from the pump station to the 9th Street gravity sewer at manhole C-74 (Project G-1). The force main would			2033-2042	Low	6	2800	Yes	100%	\$ 728,001	\$ 728,001
F-4	WWMP	New Corvallis Road Pump Station Force Main	This 6-inch force main would convey flows approximately 1,300 feet from the pump station to the gravity sewer near 6th & Rose Street at manhole C-98. This sewer was built in			2033-2042	Low	6	1300	Yes	100%	\$ 413,001	\$ 413,001
												Subtotal High Priority Costs	\$ 1,527,003
												Subtotal Medium Priority Costs	\$ 2,582,008
												Subtotal Low Priority Costs	\$ 5,488,008
												Subtotal Program Costs	\$ 9,597,020
												Subtotal SDC Eligible Costs	\$ 8,094,097

Table 3- 2022 Wastewater System CIP (Continued)

2022 Wastewater Capital Improvement Plan													
Project Number	Project Source	Project Name	Project Description	Priority Year 2023-2027	Priority Year 2028-2032	Priority Year 2033-2042	Master Plan Priority	Diameter (Inch)	Length (Feet)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Treatment Plant Improvement Projects													
T-1	WWMP	New Headworks and Cell 1 Distribution Piping	Construct new headworks east of the existing headworks and demo existing headworks. New headworks includes mechanical screening equipment with a screen size of 0.25	2023-2027			High	N/A	N/A	Yes	93%	\$ 1,382,001	\$ 1,279,733
T-2	WWMP	Lagoon Biosolids Removal Project	Measure lagoon biosolid depth in Lagoon's 1-4, remove trash and other debris, remove/dewater/haul biosolids to landfill.	2023-2027			High	N/A	N/A	No	0%	\$ 4,140,001	\$ -
T-3	WWMP	Lagoon Aeration and Conveyance Piping Improvements	install aeration equipment to improve the secondary treatment capacity of the plant. Includes diffused aeration system in the four lagoon cells, blower building and system, Construct effluent flow measurement flume, new 3-baffled chamber, chlorine and dechlor control systems, and new pipe gallery.	2023-2027			High	N/A	N/A	Yes	100%	\$ 5,989,001	\$ 5,989,001
T-4	WWMP	Chlorine Contact Chamber	Construct effluent flow measurement flume, new 3-baffled chamber, chlorine and dechlor control systems, and new pipe gallery.		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 858,001	\$ 858,001
T-5	WWMP	Land Application System Expansion Phase 1	New irrigation system improvements to increase the total area under irrigation in the south and middle fields to about 310 acres.		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 241,001	\$ 241,001
T-6	WWMP	Land Application System Expansion Phase 2	New irrigation system improvements to north fields to add about 115 acres.		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 1,526,001	\$ 1,526,001
T-7	WWMP	Outfall Improvements	Construct 1,050 feet of 36-inch CIPP, 1,500 feet of 24-inch CIPP and rehabilitate 3 manholes.		2028-2032		Medium	N/A	N/A	No	0%	\$ 1,054,001	\$ -
												Subtotal High Priority Costs	\$ 11,511,003
												Subtotal Medium Priority Costs	\$ 3,679,004
												Subtotal Low Priority Costs	\$ -
												Subtotal Program Costs	\$ 15,190,007
												Subtotal SDC Eligible Costs	\$ 9,893,737

Table 3- 2022 Wastewater System CIP (Continued)

2022 Wastewater Capital Improvement Plan													
Project Number	Project Source	Project Name	Project Description	Priority Year 2023-2027	Priority Year 2028-2032	Priority Year 2033-2042	Master Plan Priority	Diameter (Inch)	Length (Feet)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Operation, Maintenance, and Master Plan Projects													
Program 1	WWMP	Cleaning and video inspection program.	Clean and video inspect 33,000 LF of sewer main each year. Entire system on a 5-year rotation. (\$66,000/year in 2022 dollars)	2023-2027	2028-2032	2033-2042	High	N/A	33000	No	0%	\$ 1,320,001	\$ -
Program 2	WWMP	Sewer rehabilitation and replacement program	Includes annual mainline, manhole, and lateral replacements to prevent infiltration and inflow. (\$100,000/year in 2022 dollars)	2023-2027	2028-2032	2033-2042	High	N/A	N/A	No	0%	\$ 2,000,001	\$ -
M-1	WWMP	Comprehensive Map Update	Provide mapping updates during Program 1, Program 2, new development, and emergency repairs. (\$10,000/year for 5 years in 2022 dollars)	2023-2027			High	N/A	N/A	No	0%	\$ 50,001	\$ -
M-2	WWMP	Sewer System Evaluation Study	Conduct flow monitoring and smoke testing to provide assessment of system and priority list for improvements. (\$46,000/year for 4 years in 2022 dollars)	2023-2027			High	N/A	N/A	No	0%	\$ 184,001	\$ -
M-3	WWMP	Wastewater System Facility Plan Update	Update the wastewater master plan on a schedule not to exceed 10 years.		2028-2032		Medium	N/A	N/A	Yes	100%	\$ 300,001	\$ 300,001
												Subtotal High Priority Costs	\$ 1,064,003
												Subtotal Medium Priority Costs	\$ 1,130,002
												Subtotal Low Priority Costs	\$ 1,660,001
												Subtotal Program Costs	\$ 3,854,005
												Subtotal SDC Eligible Costs	\$ 300,001
												TOTAL High Priority Costs	\$ 16,171,014
												TOTAL Medium Priority Costs	\$ 8,402,016
												TOTAL Low Priority Costs	\$ 15,451,023
												TOTAL Program Costs	\$ 40,024,054
												TOTAL SDC Eligible Costs	\$ 26,800,664

Wastewater Customers Current and Future Demographics

Existing Wastewater Demand and Population Growth

Current Independence wastewater demands documented in the 2022 wastewater treatment system master plan are based on Average Annual Dry Weather Flows (AADWF) to the headworks of the wastewater treatment plant. These flows are expressed in million gallons per day (MGD) figures. For the purpose of this wastewater SDC methodology update, the project team had to translate these MGD figures into standard billing units used for charging out SDCs. In this case, those standard billing figures are expressed in EDUs. In the wastewater industry, an EDU is typically defined as the amount of wastewater a single-family residential customer contributes to the wastewater system during an average month in the winter, where winter is defined as November through April. Fortunately, the City's utility billing system tracks the winter average water consumption for the single-family residential customer class. When a new single family residential customer connects to the wastewater system, that customer is assigned the "system average winter monthly water consumption" for the basis of the sewer usage charge. Once that customer established his/her own winter water usage history, that actual average number overwrites the system average. For the winter period November, 2020 through April, 2021, the average single family residential customer contributes 5.58 hundred cubic feet (CCF) of water to the wastewater system in the average winter month. This hundred cubic feet figure translates to 137 gallons per day.

Forecasted EDUs

With this historical consumption data in hand, the project team was able to calculate the number of EDUs relative to the AADWF data from the wastewater treatment plant monitoring data that gets reported to the Oregon Department of Environmental Quality on a monthly basis. The EDU calculation methodology is shown in Table 4.

Table 4 - Forecast of Current and Future Wastewater EDUs

	2020	2040	Growth	CAGR ¹
Average Dry Weather Flow (ADWF) MGD ²	0.9100	1.4000	0.4900	2.18%
Observed Independence EDU (November 2020 - April, 2021)				
Ccf per month - Single Family Residential ³	5.58	5.58		
Gallons per month - SFR	4,173	4,173		
Gallons per day - SFR	137	137		
Estimated EDUs based on ADWF and observed SFR winter	6,632	10,204	3,572	2.18%

¹ CAGR - Compounded Annual Growth Rate

² Source: Wastewater System Facilities Plan; March 8, 2022; Westech Engineering, Inc.; Tables 5-4 and 5-5

³ Source: City of Independence utility billing system records

Reimbursement Fee Calculations

As discussed earlier in this report, the reimbursement fee represents a buy-in to the cost, or value, of infrastructure capacity within the existing system. In theory, this should be a simple calculation. Simply go to the Utility’s balance sheet, find the book value of assets in service, and divide that cost by the number of forecasted new connections to the wastewater system. That is a simple calculation, and it is wrong. In order to determine an equitable reimbursement, we have to account for some key issues of rate equity;

- First, the cost of the system to the City’s existing customers may be far less than the total plant-in-service value. This is due to the fact that elements of the existing system may have been contributed, whether from developers, governmental grants, and other sources.
- 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.
- Third, the accounting treatment of asset costs generally has no relationship to the capacity of an asset to serve growth. In the absence of a detailed asset by asset analysis detailed in the balance sheet (or fixed asset schedule), a method has to be used to allocate cost to existing and future users of the asset. Generally, it is industry practice to allocate the cost of existing facilities between used and available capacity proportionally based on the forecasted population growth as converted to equivalent dwelling units (i.e., equivalent ¾” meters) over the planning period.
- Fourth, the Oregon SDC statute has strict limitations on what type of assets can be included in the basis of the reimbursement fee. ORS 223.299 specifically states that a “capital improvement” does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy

repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

For this wastewater SDC methodology update, the following discrete calculation steps were followed to arrive at the recommended wastewater reimbursement fee.

- Step 1: Calculate the original cost of wastewater 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 wastewater fixed assets**.
- Step 2: Subtract from the adjusted original cost of wastewater fixed assets in service the accumulated depreciation of those fixed assets. This arrives at the **modified book value of wastewater fixed assets in service**.
- Step 3: Subtract from the modified book value of wastewater assets in service any grant funding or contributed capital. This arrives at the **modified book value of wastewater fixed assets in service net of grants and contributed capital**.
- Step 4: Subtract from the modified book value of wastewater 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 wastewater reimbursement fee basis**.
- Step 5: Subtract from the gross wastewater reimbursement fee basis the fund balance held in the Wastewater Reimbursement SDC fund (if available). This arrives at the **net wastewater reimbursement fee basis**.
- Step 6: Divide the net wastewater reimbursement fee basis by the sum of existing and future EDUs to arrive at the **unit net reimbursement fee**.

The actual data that was used to calculate the total wastewater reimbursement fee is shown below in Table 5.

Table 5 - Calculation of the Wastewater Reimbursement Fee

Utility Plant-in-Service (original cost): ¹	
Facilities	\$ 540,901
Equipment	297,985
Plant and System	10,200,283
Vehicles ²	<u>eliminated</u>
Total Utility Plant-in-Service	11,039,170
Accumulated depreciation ⁺	
Facilities	220,572
Equipment	162,972
Plant and System	6,340,704
Vehicles ²	<u>eliminated</u>
Total accumulated depreciation	6,724,247
Book value of wastewater utility plant-in-service @ June 30, 2021	4,314,923
Eliminating entries:	
Principal outstanding on bonds, notes, and loans payable	
2013 senior lien sewer bonds	2,025,000
Clean Water State Revolving Loan 2017	7,231,342
Developer Contributions	-
Grants, net of amortization	<u>-</u>
	9,256,342
Net basis in utility plant-in-service available to serve future customers	\$ (4,941,419)
Estimated existing and future wastewater treatment EDUs	10,204
Calculated reimbursement fee - \$ per treatment EDU	<u><u>\$ -</u></u>

¹ Source: Independence Accounting Summary Report - Capitalized Assets as of June 30, 2021

² ORS 223.299 specifically states that a “capital improvement” does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

Improvement Fee Calculations

The calculation of the wastewater improvement fee is more streamlined than the process used to calculate the wastewater reimbursement fee. This study continues to use the improvements-driven method and has relied on the 2022 wastewater system capital improvement plan. 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 Wastewater Improvement SDC Fund. This arrives at **the net wastewater improvement fee basis**.
- Step 3: Divide the net wastewater improvement fee basis by the forecasted number of growth EDUs over the planning period. This arrives at **the total wastewater improvement fee**.

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

Table 6 - Calculation of the Wastewater Improvement Fee

Project Description	Estimated Cost of Improvement in 2022 Dollars	Project Costs	
		Attributed to Existing Demands	Attributed to Future Demands
<i>Gravity sewers:</i>			
9th Street Trunk Sewer (MH C-7 to C-74)	\$ 447,001	286,081	160,920
Basin E Trunk Sewer (MH E-2 to E-6)	557,001	247,308	309,693
Lagoon Pump Station Trunk Sewer (MH D-4 to D-12)	692,001	480,249	211,752
12th Street Sewer (MH (D-14 to D-55)	319,001	221,387	97,614
C Street Sewer (MH B-5 to B-83)	720,001	720,001	-
H Street Sewer from 3rd to Main (B-12 to B-126)	331,001	146,964	184,037
Spruce Court to Briar Road Sewer (B-159 to B-162)	304,001	304,001	-
E Street Sewer from 12th to 13th (MH C-37 to C-39)	157,001	157,001	-
13th Street Sewer (13th St PS to Subbasin C3)	347,001	-	347,001
Briar Road Sewer (Briar Rd PS to Subbasin C5)	138,001	-	138,001
Mt Fir Park Sewer (MH C-79 to C-75)	480,001	307,201	172,800
Subbasin C3 Trunk Sewer to Undeveloped Area	1,007,001	-	1,007,001
Subbasin C4 Trunk Sewer to Undeveloped Area	903,001	-	903,001
Subbasin C5 Trunk Sewer to Undeveloped Area	990,001	-	990,001
Hoffman Road Sewer to Undeveloped Area	351,001	-	351,001
Gun Club Road Sewer to Undeveloped Area	1,597,001	-	1,597,001
Corvallis Road Sewer to Unsewered Area	578,001	-	578,001
16th Street Sewer	182,001	-	182,001
Talmadge Road Sewer	608,001	-	608,001
Subbasin C2 Sewer	675,001	-	675,001
<i>Pump stations and force mains:</i>			
9th Street Pump Station Capacity Upgrade (Phase 1)	966,001	223,146	742,855
9th Street Pump Station Capacity Upgrade (Phase 3)	928,001	-	928,001
Oak Street Pump Station Capacity Upgrade	786,001	418,939	367,062
North Main Pump Station Capacity Upgrade	309,001	94,554	214,447
Maple drive Pump Station Upgrade	508,001	315,469	192,532
Lagoon Pump Station Capacity Upgrade	411,001	213,310	197,692
Albert Street Pump Station Electrical System Upgrade	244,001	-	244,001
Briar Road Pump Station Electrical Upgrade	155,001	-	155,001
13th Street Pump Station Electrical Upgrade	253,001	-	253,001
Mt Fir Pump Station Capacity and Electrical Upgrade	256,001	128,001	128,001
Stryker Road Pump Station Electrical Upgrade	364,001	49,504	314,497
New Ash Creek Pump Station	865,001	-	865,001
New Corvallis Road Pump Station	887,001	-	887,001
New Talmadge Road Pump Station and Forcemain	605,001	-	605,001
Williams Street Pump Station Generator Upgrade	60,001	60,001	-
Common Forcemain for the 9th Street and Lagoon Pump Stations	806,001	-	806,001
Maple Drive Pump Station Forcemain	53,001	-	53,001
New Ash Creek Pump Station Forcemain	728,001	-	728,001
New Corvallis Road Pump Station Forcemain	413,001	-	413,001

Table 6 - Calculation of the Wastewater Improvement Fee (Continued)

Project Description	Estimated Cost of	Project Costs	
	Improvement in 2022 Dollars	Attributed to Existing Demands	Attributed to Future Demands
<i>Wastewater treatment plant:</i>			
New Headworks and Cell 1 Distribution Piping	1,382,001	102,268	1,279,733
Lagoon Biosolids Removal Project	4,140,001	4,140,001	-
Lagoon Aeration and Conveyance Piping Improvements	5,989,001	-	5,989,001
Chlorine Contact Chamber	858,001	-	858,001
Land Application System Expansion Phase 1	241,001	-	241,001
Land Application System Expansion Phase 2	1,526,001	-	1,526,001
Outfall Improvements	1,054,001	1,054,001	-
<i>Operations, maintenance, and master plans:</i>			
Cleaning and video inspection program.	1,320,001	1,320,001	-
Sewer rehabilitation and replacement program	2,000,001	2,000,001	-
Comprehensive Map Update	50,001	50,001	-
Sewer System Evaluation Study	184,001	184,001	-
Wastewater System Facility Plan Update	300,001	-	300,001
Subtotal master plan projects	\$ 40,024,054	\$ 13,223,390	\$ 26,800,664
<i>Construction work in progress (not yet capitalized):</i>			
Riverview pump station	\$ 538,995	\$ 359,510	\$ 179,485
Recycled water use facility - Williams st. pump station	5,753,379	-	5,753,379
9th st. pump station	93,860	21,682	72,178
Subtotal construction work in progress	\$ 6,386,234	\$ 381,191	\$ 6,005,043
Total improvement fee cost basis	\$ 46,410,288	\$ 13,604,582	\$ 32,805,706
Total Improvement Fee Eligible Costs for Future System Improvements			\$ 32,805,706
less: Wastewater SDC Fund balance as of June 30, 2021			<u>1,073,648</u>
Adjusted Improvement Fee Eligible Costs for Future System Improvements			\$31,732,058
Total Growth in 3/4" Meter Equivalents:			
Average annual growth in ME's per master plan	179		
Number of years of capacity available to serve growth	20		
Total number of growth ME's over the forecast horizon			3,572
Calculated Wastewater Improvement Fee SDC per Meter Equivalent			<u>\$8,884</u>

¹ Allocations from City staff

Wastewater SDC Model Summary

The 2022 wastewater SDC methodology update was done in accordance with Independence Municipal Code Chapter 34, and with the benefit of adopted capital improvement plans and plan updates for wastewater 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 \$9,328 for the standard ¾"

residential water meter. A comparison of the proposed and current wastewater SDCs for the average single-family residential customer is shown below in Table 7.

Table 7 - Proposed and Current Wastewater SDCs for a 3/4" Meter

Line Item Description	City-Wide
Proposed SDC components:	
Reimbursement fee	\$ -
Improvement fee	8,884
Administration fee at 5%	<u>444</u>
Total proposed wastewater SDC	\$ 9,328
Current SDC components:	
Reimbursement fee	\$ -
Improvement fee	4,070
Administration fee at 5%	<u>-</u>
Total current wastewater SDC	\$ 4,070

For water meters larger than 3/4," the schedule of wastewater SDC uses the same flow factors that were developed for the water SDCs (i.e., AWWA standards for displacement and compound meters). The complete proposed schedule of wastewater SDCs by potential meter size are shown in Table 8.

Table 8 - Proposed Schedule of Wastewater SDCs by Potential Water Meter Size

Meter Size	AWWA Rated Flow (GPM)*	Flow Factor Equivalence	Proposed Schedule of Wastewater SDCs			
			Reimbursement	Improvement	Administration	Total
0.75"x 0.75" - Displacement Multi-jet	30	1.00	\$ -	\$ 8,884	\$ 444	\$ 9,328
1.00 inch - Displacement Multi-jet	50	1.67	-	14,807	740	15,547
1.50 inch - Displacement Class I Turbine	100	3.33	-	29,613	1,481	31,094
2.00 inch - Displacement or Class I & II Turbine	160	5.33	-	47,381	2,369	49,750
3.00 inch - Displacement	300	10.00	-	88,840	4,442	93,282
4.00 inch - Displacement or Compound	500	16.67	-	148,067	7,403	155,470
6.00 inch - Displacement or Compound	1000	33.33	-	296,133	14,807	310,940
8.00 inch - Compound	1600	53.33	-	473,813	23,691	497,504

* - AWWA Manual of Practice M3; Safety Practices for Water Utilities; Table 2-2 Total Quantities Registered per Month by Meters Operating at Varying Percentages of Maximum Capacity

Transportation SDCs

Transportation Capital Improvement Plan

The principal sources of data for the transportation system CIP are the 2022 capital improvement plans for transportation. The primary categories of transportation system improvements are:

- Roadway Projects:
 - Major street connectivity
 - Intersection improvement
- Traffic Safety Projects:
 - Intersection improvements
 - Roadway improvements
- Pedestrian Projects:
 - Enhanced crossings and pedestrian amenities improvements
 - Shared-use paths/trails improvements
- Bicycle Projects:
 - Bike lane improvements
 - Enhanced crossings and bicycle amenities improvements
- Transit System Projects:
- New facilities and master plan projects

City Staff have periodically updated these plans for current development conditions. With the assistance of City Staff, the project team has summarized the 2022 transportation system CIPs for this SDC methodology update. The 2022 transportation system CIP is shown in Table 9.

Table 9 - 2022 Transportation System CIP

2022 Transportation Capital Improvement Plan												
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks SDC Funded (Y/N)	Part-Full State/Fed Funded (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost	
Roadway Projects												
Major Street Connectivity												
R1	TSP	Randal Way Extension	Extend Randal Way west to 13th Street at F Street	Medium	Yes	No	No	No	0%	\$ 868,790	\$ -	
R2	TSP	Chestnut Street Extension	Extend Chestnut Street southwest to the new east-west collector	Low	Yes	No	No	No	0%	\$ 1,033,013	\$ -	
R3	TSP	4th Street Extension (Deleted project through Monmouth wellfield. Source Water Protection)	Extend 4th Street south to the new east-west minor arterial	N/A	N/A	No	No	N/A	N/A	\$ -	\$ -	
R4	TSP	Madrona Street Connection (west) ³	Construct a new east-west collector from 16th Street at Madrona Street to 13th Street	Low	Yes	No	No	No	0%	\$ 3,173,203	\$ -	
R5	TSP	Madrona Street Connection (east)	Construct a new east-west collector from 13th Street at Madrona Street to G Street. The project should consider and reduce impacts to Inspiration Garden	Low	Yes	No	No	No	0%	\$ 3,649,978	\$ -	
R6	TSP	13th Street Extension ³	Extend 13th Street south to the south city limits	Low	Yes	No	No	No	0%	\$ 3,623,490	\$ -	
R7	TSP	Gwinn Street Connection ³ (City to construct bridge)	Construct a new east-west collector from 16th Street at Gwinn to Mountain Fir Drive Extension	Low	Yes	No	No	Yes	52%	\$ 7,676,078	\$ 4,000,000	
R8	TSP	Mountain Fir Drive Extension (New east-west minor arterial) ³	Extend Mountain Fir Drive east to Corvallis Road and west to the west City limits; coordinate with City of Monmouth on final alignment west of the City limits	Medium	Yes	No	No	Yes	50%	\$ 9,593,773	\$ 4,796,886	
R9	TSP	Gun Club Road-13th Street	Extend Gun Club Road south and realign to connect with 13th Street	Low	Yes	No	No	No	0%	\$ 1,361,458	\$ -	
R10	TSP	E Street Extension ³	Extend E Street west to 16th Street and the west city limit	High	Yes	No	No	No	0%	\$ 2,532,205	\$ -	

Table 9- 2022 Transportation System CIP (Continued)

2022 Transportation Capital Improvement Plan												
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks SDC Funded (Y/N)	Part-Full State/Fed Funded (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost	
Roadway Projects												
Intersection Improvements												
R11	TSP	OR 51/Polk Street ¹	Install a left-turn lane at the east-bound approach and a traffic signal when signal warrants are met; Coordinate with Project S2	High	No	No	No	Yes	100%	\$ 476,775	\$ 476,775	
R12	TSP	OR 51-Main Street/OR 51-Monmouth Street ¹	Install left- and right-turn lanes at the eastbound approach and a traffic signal when signal warrants are met	High	No	No	No	Yes	100%	\$ 370,825	\$ 370,825	
R13	TSP	OR 51-Monmouth Street/4th Street ¹	Install a center two-way left-turn lane on OR 51-Monmouth Street from 7th Street to 4th Street and taper east of 4th Street – continue to monitor the intersection and a traffic signal if/when signal warrants are met; Coordinate with Project S5	High	No	No	No	Yes	100%	\$ 52,975	\$ 52,975	
R14	TSP	OR 51-Monmouth Street/7th Street ¹	Install a center two-way left-turn lane on OR 51-Monmouth Street from 7th Street to 4th Street and taper west of 7th Street – continue to monitor the intersection and a traffic signal if/when signal warrants are met; Coordinate with Project S6	High	No	No	No	Yes	100%	\$ 52,975	\$ 52,975	
R15	TSP	Main Street/River Road ^{2, 3}	Install a southbound left-turn lane and reconfigure as all-way stop control; Install a westbound left- or right-turn lane in conjunction with a new bridge; Coordinate with Project S3 and P20	High	No	No	No	Yes	100%	\$ 206,603	\$ 206,603	
R16	TSP	OR 51-Monmouth Street/Gun Club Road ¹	Optimize the signal timing/phasing to provide more green time to the southbound left-turn movement	High	No	No	No	Yes	100%	\$ 10,595	\$ 10,595	
R17	TSP	Gun Club Road Bridge	Replace Gun Club Road Bridge	Low	No	No	Yes	No	0%	\$ 4,385,341	\$ -	
Subtotal High Priority Costs										\$	8,088,293	
Subtotal Medium Priority Costs										\$	10,462,563	
Subtotal Low Priority Costs										\$	24,902,558	
Subtotal Program Costs										\$	39,068,073	
Subtotal SDC Eligible Costs										\$	9,967,634	
<p>1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer. Further evaluation may be required to determine the most appropriate form of traffic control.</p> <p>2. Project cost includes the southbound left-turn lane. The westbound left- or right-turn lane will be provided with the new bridge.</p> <p>3. Project will require coordination with Polk County and/or Marion County.</p>												

Table 9- 2022 Transportation System CIP (Continued)

2022 Transportation Capital Improvement Plan											
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks SDC Funded (Y/N)	Part-Full State/Fed Funded (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Traffic Safety Projects											
Intersection Improvements											
S1	TSP	Hoffman Road/16th Street	Install advanced intersection warning signs, speed feedback signs, and traffic calming measures at the eastbound approach	High	No	No	No	No	0%	\$ 47,678	\$ -
S2	TSP	OR 51-Main Street/Polk Street ¹	Install advanced intersection warning signs and traffic calming measures at the southbound approach; Coordinate with Project R11	High	No	No	No	No	0%	\$ 37,083	\$ -
S3	TSP	S Main Street/River Road S	Install advanced intersection warning signs, speed feedback signs, and traffic calming measures at the northbound approach; Coordinate with Projects R15 and P20	Medium	No	No	No	No	0%	\$ 58,273	\$ -
S4	TSP	OR 51-Main Street/Stryker Road ^{1,2}	Install advanced intersection warning signs, speed feedback signs, and traffic calming measures at the southbound approach	Medium	No	No	No	No	0%	\$ 58,273	\$ -
S5	TSP	OR 51-Monmouth Street/4th Street ¹	Provide traffic calming measures on OR 51-Monmouth Street approaching the intersection; Coordinate with Project R13	Medium	No	No	No	No	0%	\$ 52,975	\$ -
S6	TSP	OR 51-Monmouth Street/7th Street ¹	Provide traffic calming measures on OR 51-Monmouth Street approaching the intersection; Coordinate with Project R14	Medium	No	No	No	No	0%	\$ 52,975	\$ -
S7	TSP	Hoffman Road/Gun Club Road	Provide traffic calming measures on Hoffman Road approaching the intersection	High	No	No	No	No	0%	\$ 52,975	\$ -
S8	TSP	Stryker Road/Hoffman Road-Polk Street	Close Hoffman Road at the westbound approach to Stryker Road; Coordinate with Project P21	Medium	No	No	No	No	0%	\$ 42,380	\$ -
Roadway Improvements											
S9	TSP	OR 51-Monmouth Street– West City Limits to Gun Club Road ^{1,2}	Install eastbound dynamic speed feedback sign east of west City Limits and reflectorized back plates for all traffic signal heads at 16th Street and Gun Club Road intersections	Medium	No	No	No	No	0%	\$ 15,893	\$ -
S10	TSP	4th Street – OR 51-B Street to Spruce Avenue	Provide traffic calming measures on 4th Street; improve visibility between OR 51-Monmouth Street and Spruce Avenue by providing “No Parking” zones and additional lighting on both sides of the street at intersections	Low	No	No	No	No	0%	\$ 513,858	\$ -
S11	TSP	Corvallis Road – South of River Road ^{3,4}	Conduct a speed study to evaluate the ability to move the posted speed sign further south	Medium	No	No	No	No	0%	\$ 21,190	\$ -
S12	TSP	River Road Bridge ⁴	Install “Bike on Bridge” warning signs with actuated beacons	Low	No	No	No	No	0%	\$ 52,975	\$ -
										Subtotal High Priority Costs	\$ 137,735
										Subtotal Medium Priority Costs	\$ 301,958
										Subtotal Low Priority Costs	\$ 566,833
										Subtotal Program Costs	\$ 1,006,525
										Subtotal SDC Eligible Costs	\$ -

Table 9- 2022 Transportation System CIP (Continued)

Pedestrian Projects												
Enhanced Crossings and Pedestrian Amenities Improvements												
P1	TSP	OR 51-Main Street ¹	Fill in the gaps on the east side of the road from Stryker Road to OR 51 Monmouth Street	Low	Yes	No	Yes	No	0%	\$ 757,543	\$ -	
P2	TSP	Main Street	Install sidewalks on the east side of the road from F Street to River Road	Medium	Yes	No	No	No	0%	\$ 238,388	\$ -	
P3	TSP	Corvallis Road ³	Install sidewalks on the east side of the road from River Road to the south city limits	Medium	Yes	No	No	No	0%	\$ 1,520,383	\$ -	
P4	TSP	Hoffman Road	Install sidewalks on the north side of the road from the west city limits to Airport Road; Coordinate with Project P37	Medium	Yes	No	No	No	0%	\$ 746,948	\$ -	
P5	TSP	Polk Street	Fill in the gaps on the north and south sides of the road from Ash Street to OR 51-Main Street	High	No	No	No	Yes	100%	\$ 180,115	\$ 180,115	
P6	TSP	Gun Club Road	Fill in the gaps on west side of the road from Hoffman Road to OR 51-Monmouth Street	High	Yes	No	No	No	0%	\$ 550,940	\$ -	
P7	TSP	Stryker Road	Fill in the gaps on both sides of the road from OR 51-Main Street to Polk Street	High	Yes	No	No	No	0%	\$ 1,345,565	\$ -	
P8	TSP	Ash Street/4th Street	Install sidewalks on the west side of the road from the Ash Creek Bridge to A Street	High	No	No	No	Yes	100%	\$ 153,628	\$ 153,628	
P9	TSP	16th Street	Fill in the gaps on the east side of the road from OR 51-Monmouth Street to south city limits	High	Yes	No	No	No	0%	\$ 158,925	\$ -	
P10	TSP	13th Street	Fill in the gaps on the east side of the road from OR 51-Monmouth Street to south city limits	High	Yes	No	No	No	0%	\$ 169,520	\$ -	
P11	TSP	4th Street	Fill in the gaps on the east side of the road from I Street to the south city limits	High	No	No	No	Yes	100%	\$ 238,388	\$ 238,388	
P12	TSP	Williams Street	Install sidewalks on the north side of the road from Log Cabin Street to Marsh Street	Medium	No	No	No	Yes	100%	\$ 79,463	\$ 79,463	
P13	TSP	F Street	Fill in the gap on the north side of the road from 10th Street to 7th Street	High	No	No	No	Yes	100%	\$ 275,470	\$ 275,470	

Table 9- 2022 Transportation System CIP (Continued)

Pedestrian Projects												
Enhanced Crossings and Pedestrian Amenities Improvements												
P14	TSP	Downtown Sidewalk Enhancements	Install new sidewalks on both sides of B Street, C Street, D Street, and E Street from 2nd Street to Main Street; both sides of 2nd Street from B Street to D Street; and the west side of Main Street from D Street to F Street. Install curb extensions at all major intersections	Low	No	No	No	No	0%	\$ 1,854,125	\$ -	
P15	TSP	OR 51-Main Street/Stryker Road ^{1,2}	Provide enhanced pedestrian crossing treatments	Low	No	No	Yes	Yes	100%	\$ 132,438	\$ 132,438	
P16	TSP	OR 51-Main Street/Deann Drive ^{1,2}	Provide enhanced pedestrian crossing treatments	Medium	No	No	Yes	Yes	100%	\$ 132,438	\$ 132,438	
P17	TSP	OR 51-Main Street/Williams Street ^{1,2}	Provide enhanced pedestrian crossing treatments on the south leg of the intersection to connect the bus stop	Medium	No	No	Yes	Yes	100%	\$ 132,438	\$ 132,438	
P18	TSP	OR 51-Monmouth Street/13th Street ^{1,2}	Provide enhanced pedestrian crossing treatments	Medium	No	No	Yes	Yes	100%	\$ 132,438	\$ 132,438	
P19	TSP	Main Street/G Street ²	Provide enhanced pedestrian crossing treatments	Low	No	No	No	Yes	100%	\$ 42,380	\$ 42,380	
P20	TSP	Main Street-Corvallis Road/River Road ^{2,3}	Provide enhanced pedestrian crossing treatments; Coordinate with Projects R15 and S3	Medium	No	No	No	Yes	100%	\$ 42,380	\$ 42,380	
P21	TSP	Stryker Road/Hoffman Road	Install a marked crosswalk on the north leg of the intersection; Coordinate with Project S8	Low	No	No	No	No	0%	\$ 26,488	\$ -	
P22	TSP	Ash Street/Polk Street	Provide enhanced pedestrian crossing treatments	Medium	No	No	No	Yes	100%	\$ 26,488	\$ 26,488	
P23	TSP	Gun Club Road/Marigold Street	Provide enhanced pedestrian crossing treatments	Medium	No	No	No	Yes	100%	\$ 26,488	\$ 26,488	
P24	TSP	Stryker Road Rail Crossing	Provide enhanced pedestrian crossing treatments across the rail line	Low	No	No	No	No	0%	\$ 158,925	\$ -	
P25	TSP	OR 51-Main Street/Main Street ^{1,2}	Consider opportunities for street patios, street furniture, and other amenities in the downtown area	Low	No	No	No	No	0%	\$ 26,488	\$ -	
P26	TSP	OR 51-Monmouth Street/2nd Street ^{1,2}	Consider opportunities for street patios, street furniture, and other amenities in the downtown area	Low	No	No	No	No	0%	\$ 26,488	\$ -	
P27	TSP	OR 51-Monmouth Street/11th Street	Provide enhanced pedestrian crossing treatments	High	No	No	Yes	No	0%	\$ 79,463	\$ -	

Table 9- 2022 Transportation System CIP (Continued)

Pedestrian Projects											
Shared-Use Paths/Trails Improvements											
P28	TSP	North South Connector Trail #1	Install a shared-use path/trail south from Hoffman Road to Wildfang Park	Low	No	Yes	Yes	No	0%	\$ 1,038,310	\$ -
P29	TSP	North South Connector Trail #2	Install a shared-use path/trail north from OR 51-Monmouth Street to Wildfang Park	Low	No	Yes	Yes	No	0%	\$ 164,223	\$ -
P30	TSP	Ash Creek Trail Phase 1	Install an east-west shared-use path/trail from Riverview Park to Wildfang Park	Low	No	Yes	Yes	No	0%	\$ 2,823,568	\$ -
P31	TSP	Mt. Fir North-South Trail	Install a north/south shared-use path/trail from F Street to Mt. Fir Park and south across Becken Road – may include some on-street segments	Low	Yes	Yes	Yes	No	0%	\$ 895,278	\$ -
P32	TSP	Mt. Fir Connector Trail	Install an east/west shared-use path/trail from Mt. Fir Street to Corvallis Road	Low	Yes	Yes	Yes	No	0%	\$ 784,030	\$ -
P33	TSP	River Trail	Install a north/south shared-use path/trail along Willamette Riverfront	Medium	No	Yes	Yes	No	0%	\$ 3,157,310	\$ -
P34	TSP	Going to the River Trail	Install an east/west shared-use path/trail from Williams Street to Howard Court – may include some on-street segments	Medium	No	Yes	Yes	No	0%	\$ 1,281,995	\$ -
P35	TSP	Central High School (HS) Connector Trail ^{1,2}	Install a north/south shared-use path/trail from Central High School to neighborhoods south of OR 51-Monmouth Street	Medium	No	Yes	Yes	No	0%	\$ 826,410	\$ -
P36	TSP	South Fork Trail	Install two north/south shared-use path/trails on the east/west sides of the South Fork Ash Creek	Low	Yes	Yes	Yes	No	0%	\$ 3,046,063	\$ -
P37	TSP	Drainage Trail	Install an east/west shared-use path/trail from 13th Street to the South Fork Trails	Low	No	Yes	Yes	No	0%	\$ 418,503	\$ -
P38	TSP	Old Highway 99 Trail	Install an east/west shared-use path/trail to the existing shared-use path along OR 99 – may include some on-street segments; Coordinate with Project P5	Low	No	Yes	Yes	No	0%	\$ 656,890	\$ -
P39	TSP	Willamette Valley Trail	Install an east/west shared-use path/trail to the Willamette Valley Scenic Bikeway – may include some on-street segments; Coordinate with Project B23	Low	Yes	Yes	Yes	No	0%	\$ 354,933	\$ -
P40	TSP	Polk Street Trail	Install an east/west shared-use path/trail from the eastern terminus of Polk Street to the River Trail	Low	No	Yes	Yes	No	0%	\$ 158,925	\$ -
P41	TSP	E Street Trail	Install an east/west shared-use path/trail from 13th Street to OR 51-Monmouth Street – may include some on-street segments.	Low	Yes	Yes	Yes	No	0%	\$ 778,733	\$ -
P42	TSP	E Street Bridge	Install a new pedestrian bridge along E Street at Ash Creek. Coordinate with Project B28	Medium	No	No	Yes	No	0%	\$ 762,840	\$ -
P43	TSP	Trestle Bridge	Repurpose the existing Trestle Bridge across south Ash Creek as a pedestrian bridge; Coordinate with Project P35	Low	No	Yes	Yes	No	0%	\$ 762,840	\$ -
										Subtotal High Priority Costs	\$ 4,630,015
										Subtotal Medium Priority Costs	\$ 9,482,525
										Subtotal Low Priority Costs	\$ 13,053,040
										Subtotal Program Costs	\$ 27,165,580
										Subtotal SDC Eligible Costs	\$ 1,594,548

Table 9- 2022 Transportation System CIP (Continued)

2022 Transportation Capital Improvement Plan												
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks SDC Funded (Y/N)	Part-Full State/Fed Funded (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost	
Bicycle Projects												
Bike Lane Improvements												
B1	TSP	OR 51-Main Street ^{1,2,3,4}	Install 7-foot buffered bike lanes on both sides of the roadway from Stryker Road to B Street (5-foot bike lane, 2-foot buffer)	High	No	No	Yes	Yes	100%	\$ 132,438	\$ 132,438	
B2	TSP	OR 51-Main Street	Install shared lane pavement markings (sharrows) on both sides of the roadway from B Street to F Street	High	No	No	Yes	Yes	100%	\$ 10,595	\$ 10,595	
B3	TSP	OR 51-Monmouth Street ^{1,2,3,4}	Install 7-foot buffered bike lanes on both sides of the roadway from the west city limits to the Ash Creek Bridge (5-foot bike lane, 2-foot buffer)	High	No	No	Yes	Yes	100%	\$ 127,140	\$ 127,140	
B4	TSP	OR 51-Monmouth Street	Install shared lane pavement markings (sharrows) on both sides of the roadway from 7th Street to OR 51-Main Street	High	No	No	Yes	Yes	100%	\$ 10,595	\$ 10,595	
B5	TSP	Main Street ²	Install 7-foot buffered bike lanes on both sides of the roadway from F Street to River Road (5-foot bike lane, 2-foot buffer)	Low	No	No	No	Yes	100%	\$ 95,355	\$ 95,355	
B6	TSP	Corvallis Road ²	Install 7-foot buffered bike lanes on both sides of the roadway from River Road to the south city limits (5-foot bike lane, 2-foot buffer)	Low	Yes	No	No	No	0%	\$ 678,080	\$ -	
B7	TSP	Hoffman Road ^{2,3}	Install 7-foot buffered bike lanes on both sides of the roadway from the west city limits to Airport Road (5-foot bike lane, 2-foot buffer)	Medium	No	No	No	Yes	100%	\$ 529,750	\$ 529,750	
B8	TSP	Polk Street ^{2,3}	Install 7-foot buffered bike lanes on both sides of the roadway from Airport Road to OR 51-Main Street (5-foot bike lane, 2-foot buffer)	Medium	No	No	No	Yes	100%	\$ 190,710	\$ 190,710	
B9	TSP	Gun Club Road	Fill in the gaps with 6-foot bike lanes on both sides of the roadway from north of the high school property to Hoffman Road	Low	No	No	No	Yes	100%	\$ 323,148	\$ 323,148	
B10	TSP	Stryker Road	Install 6-foot bike lanes on both sides of the road from Polk Street to OR 51-Main Street	Low	No	No	No	Yes	100%	\$ 1,350,863	\$ 1,350,863	
B11	TSP	Ash Street/4th Street (north) ⁵	Install 6-foot bike lanes on both sides of the roads from Polk Street to OR 51-Monmouth Street	Low	No	No	No	Yes	100%	\$ 312,553	\$ 312,553	
B12	TSP	16th Street	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the south city limits	Low	Yes	No	No	No	0%	\$ 169,520	\$ -	

Table 9- 2022 Transportation System CIP (Continued)

2022 Transportation Capital Improvement Plan												
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks SDC Funded (Y/N)	Part-Full State/Fed Funded (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost	
Bicycle Projects												
Bike Lane Improvements												
B13	TSP	13th Street ^{4,5}	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the south city limits	High	Yes	No	No	No	0%	\$ 26,488	\$ -	
B14	TSP	7th Street ^{4,5}	Install 6-foot bike lanes on both sides of the roads from OR 51-Monmouth Street to the south city limits	High	No	No	No	Yes	100%	\$ 444,990	\$ 444,990	
B15	TSP	4th Street (south) ^{4,5}	Install 6-foot bike lanes on both sides of the road from OR 51-Monmouth Street to Spruce Avenue	High	No	No	No	Yes	100%	\$ 365,528	\$ 365,528	
B16	TSP	Picture Street ⁵	Install 6-foot bike lanes on both sides of the road from Gun Club Road to the eastern terminus	Low	No	No	No	Yes	100%	\$ 26,488	\$ 26,488	
B17	TSP	Williams Street ⁵	Install 6-foot bike lanes on both sides of the road from Ash Street to OR 51-Main Street	Low	No	No	No	Yes	100%	\$ 121,843	\$ 121,843	
B18	TSP	G Street ^{4,5}	Install 6-foot bike lanes on both sides of the road from the western terminus to Main Street	Low	No	No	No	Yes	100%	\$ 296,660	\$ 296,660	
B19	TSP	Chestnut Street ⁵	Install 6-foot bike lanes on both sides of the road from 6th Street to the western Terminus	Low	Yes	No	No	No	0%	\$ 47,678	\$ -	
B20	TSP	C Street	Install shared-lane pavement markings from 7th Street to OR 51-Main Street	Medium	No	No	No	Yes	100%	\$ 10,595	\$ 10,595	
B21	TSP	D Street	Install shared-lane pavement markings (sharrows) from 7th Street to Main Street	Medium	No	No	No	Yes	100%	\$ 10,595	\$ 10,595	
B22	TSP	E Street/F Street	Install a bicycle boulevard along E Street/F Street from 13th Street to Main Street	High	No	No	No	Yes	100%	\$ 21,190	\$ 21,190	
B23	TSP	River Road - Willamette River Bridge	Install 6-foot bike lanes on both sides of the Willamette River Bridge; this would require widening the bridge or providing cantilevered bike paths on one or two sides; Coordinate with Project P38	Medium	No	No	Yes	Yes	100%	\$ 1,589,250	\$ 1,589,250	
B24	TSP	Marigold Drive ⁵	Install 6-foot bike lanes on both sides of the road from 16th Street to Gunn Club Road	Medium	No	No	No	Yes	100%	\$ 26,488	\$ 26,488	

Table 9- 2022 Transportation System CIP (Continued)

2022 Transportation Capital Improvement Plan												
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks Funded (Y/N)	SDC Funded (Y/N)	Part-Full State/Fed (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Bicycle Projects												
Enhanced Crossings and Bicycle Amenities Improvements												
B25	TSP	OR 51-Main Street/OR 51-Monmouth Street	Install a bike corral on OR 51-Main Street near the OR 51-Main Street/OR 51-Monmouth Street Intersection	Low	No	No	Yes	Yes	Yes	100%	\$ 5,298	\$ 5,298
B26	TSP	OR 51-Main Street/OR 51-Monmouth Street	Install a bike corral on OR 51-Monmouth Street near the OR 51-Main Street/OR 51-Monmouth Street Intersection	Low	No	No	Yes	Yes	Yes	100%	\$ 5,298	\$ 5,298
Subtotal High Priority Costs											\$ 1,138,963	
Subtotal Medium Priority Costs											\$ 2,357,388	
Subtotal Low Priority Costs											\$ 3,432,780	
Subtotal Program Costs											\$ 6,929,130	
Subtotal SDC Eligible Costs											\$ 6,007,365	
<p>1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.</p> <p>2. This roadway contains segments with existing bike facilities (on-street bike lanes, shoulders, etc.). These facilities will be reconfigured to accommodate the preferred alternative.</p> <p>3. Install green skip striping on arterial and collector roadways where bike lanes continue through major intersections.</p> <p>4. Work with Cherriots to determine the bicycle facility configuration at bus stops for this intermodal facility.</p> <p>5. On-street parking restrictions will be required and therefore the bike lane installation should be considered when traffic volumes exceed 2,000 ADT per City standard.</p>												

Table 9- 2022 Transportation System CIP (Continued)

2022 Transportation Capital Improvement Plan											
Project Number	Project Source	Project Name	Project Description	Master Plan Priority	Developer Built (Y/N)	Parks SDC Funded (Y/N)	Part-Full State/Fed Funded (Y/N)	SDC Funding Eligible (Y/N)	SDC Share %	2022 Master Plan Cost Est.	SDC Eligible Cost
Transit System Projects											
T1	TSP	Local Transit System ²	Collaborate with Monmouth and other stakeholders to establish a local transit system based on the outcomes of the Local Transit Feasibility Study. This includes development of a complementary paratransit service if a dial-a-ride or deviated fixed route model is not put into service.	High	No	No	Yes	No	0%	TBD	\$ -
T2	TSP	Not Used									
T3	TSP	Stop 1516: OR 51-Main Street/Polk Street (to Salem)	Install ADA-compliant pedestrian ramps leading to the bus stop; provide bicycle parking, storage, and/or repair station	High	No	No	Yes	No	0%	\$ 21,190	\$ -
T4	TSP	Stop 1517: OR 51-Main Street/Polk Street (to Dallas)	Install ADA-compliant pedestrian ramps leading to the bus stop; provide bicycle parking, storage, and/or repair station	High	No	No	Yes	No	0%	\$ 21,190	\$ -
T5	TSP	Stop 1515: Library – OR 51-Monmouth Street/ 2nd Street (to Salem)	Install a “No Parking” zone adjacent to the bus stop; provide bicycle storage and/or repair station	High	No	No	Yes	No	0%	\$ 15,893	\$ -
T6	TSP	Stop 1502: 13th Street/OR 51-Monmouth Street (bi-directional)	Relocate the bus stop to Monmouth Street, east of Gun Club Road; Install street lighting; Install ADA-compliant pedestrian ramps leading to the bus stop; Install “No Parking” zone signage adjacent to the stop; Provide bicycle parking, storage, and/or repair station; Install a real-time bus arrival reader board; and Establish stops in both directions.	High	No	No	Yes	No	0%	\$ 63,570	\$ -
T7	TSP	Main Street/Oak Street – both directions	Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Medium	No	No	Yes	No	0%	\$ 21,190	\$ -
T8	TSP	4th Street/E/D Street – both directions	Install street lighting at the D Street (southbound) bus stop; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	No	No	Yes	Yes	100%	\$ 37,083	\$ 37,083
T9	TSP	5th Street/G Street – both directions	Install street lighting at both bus stops; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	No	No	Yes	Yes	100%	\$ 52,975	\$ 52,975
T10	TSP	7th Street/F Street – both directions	Install street lighting at both bus stops; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	No	No	Yes	Yes	100%	\$ 52,975	\$ 52,975
T11	TSP	1038 E Street (single stop to serve both directions)	Install street lighting; install ADA-compliant pedestrian ramps leading to the bus stop	Low	No	No	Yes	Yes	100%	\$ 52,975	\$ 52,975
T12	TSP	Monmouth Street/Talmadge Road – both directions	Install street lighting at both bus stops; Install ADA-compliant pedestrian ramps leading to the bus stops for both directions	Low	No	No	Yes	No	0%	\$ 52,975	\$ -
Subtotal High Priority Costs											\$ 121,843
Subtotal Medium Priority Costs											\$ 21,190
Subtotal Low Priority Costs											\$ 248,983
Subtotal Program Costs											\$ 392,015
Subtotal SDC Eligible Costs											\$ 196,008

Table 9- 2022 Transportation System CIP (Continued)

Master Plan & Planning Projects												
MP1	Staff	Update Transportation System Master Plan	Provide update to existing transportation system master plan	Medium	N/A	No	Yes	Yes	100%	\$ 211,900	\$ 211,900	
PP1	TSP	Downtown Parking Study	Prepare a municipal parking management plan for downtown Independence	High	N/A	No	Yes	No	0%	\$ 52,975	\$ -	
										Subtotal High Priority Costs	\$ 52,975	
										Subtotal Medium Priority Costs	\$ 211,900	
										Subtotal Low Priority Costs	\$ -	
										Subtotal Program Costs	\$ 264,875	
										Subtotal SDC Eligible Costs	\$ 211,900	

Transportation System Current and Future Demand

Existing Transportation Demand

Demand for transportation facilities is measured in PM peak-hour vehicle trips (PM PHVTs). One PM PHVT represents one person beginning or ending a vehicular trip at a certain property during the afternoon rush hour. Based on data from both the U. S. Census Bureau and the Independence Transportation System Plan Update (2021), we estimate that the transportation system is currently serving 4,595 PM PHVTs. The statistical process that was used to arrive at the current demand value is shown in Table 10.

Table 10 - Existing Transportation System Demand

	2017 Dwelling Units	2017 Employees	ITE Code ³	PM peak hour vehicle trips per unit	Total PM peak hour vehicle trips
<i>Number of dwelling units:</i> ¹					
Single Family Detached	2,002		210	0.99	1,982
Single Family Attached	373		270	0.69	257
Multifamily Dwelling Units	<u>943</u>		220	0.56	<u>528</u>
Subtotal dwelling units	3,318				2,767
<i>Number of employees:</i> ²					
Agriculture, Forestry, Fishing and Hunting		295	150	0.66	195
Mining, Quarrying, and Oil and Gas Extraction		-	-	-	-
Utilities		-	-	-	-
Construction		26	110	0.49	13
Manufacturing		620	140	0.33	205
Wholesale Trade		30	860	1.76	53
Retail Trade		212	820	1.62	343
Transportation and Warehousing		84	150	0.66	55
Information		18	160	0.09	2
Finance and Insurance		14	750	0.37	5
Real Estate and Rental and Leasing		14	770	0.39	5
Professional, Scientific, and Technical Services		19	770	0.39	7
Management of Companies and Enterprises		2	770	0.39	1
Admin. & Support, Waste Management and Remediation		167	538	0.72	120
Educational Services		357	538	0.72	257
Health Care and Social Assistance		244	720	0.97	237
Arts, Entertainment, and Recreation		25	495	2.66	67
Accommodation and Food Services		169	310	0.89	150
Other Services (excluding Public Administration)		109	710	0.63	69
Public Administration		<u>62</u>	730	0.71	<u>44</u>
Subtotal employees		2,467			1,828
Total PM peak hour vehicle trips					4,595

¹ Source: Angelo Planning; Population and Employment Forecast Methodology; September 7, 2020; Table 5

² Source: Angelo Planning; Population and Employment Forecast Methodology; September 7, 2020; Table 8

³ Trip Generation Manual; Institute of Transportation Engineers; 10th Edition

Forecasted EDUs

We are estimating the City's transportation system will serve 7,185 PM PHVTs in 2040. These estimates imply growth of 2,590 PM PHVTs over the planning period, as shown in Table 11. The 2040 end date is consistent with the planning period that was used for the 2021 Independence Transportation System Plan. The principal sources for the forecast are:

- Angelo Planning; Population and Employment Forecast Methodology; September 7, 2020; Figures 7 and 8
- Trip Generation Manual; Institute of Transportation Engineers; 10th Edition
- Kittelson & Associates Final Tech Memo 4; "Future Needs Analysis"; "Trip Generation Estimate, Weekday PM Peak Hour"

The growth forecast in PM PHVTs is shown in Table 11.

Table 11 - Forecast of Future Transportation PM PHVTs

TAZ	2040 Net New Housing PMPHVTs			2040 Net New Employment PMPHVTs			2040 Net New PM Peak Hour Totals		
	In	Out	Total	In	Out	Total	In	Out	Total
1	9	5	14	34	134	168	43	139	182
2	1	-	1	20	26	46	21	26	47
3	2	1	3	-	-	-	2	1	3
4	92	54	146	20	28	48	112	82	194
5	6	4	10	69	97	166	75	101	176
6	47	28	75	-	-	-	47	28	75
7	37	22	59	-	-	-	37	22	59
8	6	4	10	2	3	5	8	7	15
9	6	4	10	-	-	-	6	4	10
10	40	23	63	8	11	19	48	34	82
11	22	13	35	8	11	19	30	24	54
12	25	15	40	11	15	26	36	30	66
13	48	28	76	2	3	5	50	31	81
14	6	4	10	1	2	3	7	6	13
15	228	134	362	-	-	-	228	134	362
16	88	52	140	-	-	-	88	52	140
17	325	191	516	-	-	-	325	191	516
18	324	191	515	-	-	-	324	191	515
	1,312	773	2,085	175	330	505	1,487	1,103	2,590

Source: City of Independence Transportation System Plan Volume II; Appendix E - Technical Memo #4: Future Conditions; Attachment B Trip Generation Estimate; August, 2021

Reimbursement Fee Calculations

The transportation reimbursement fee methodology mirrors that used for the wastewater reimbursement fee. 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 at 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 PM PHVTs 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 12.

Table 12 - Calculation of the Transportation Reimbursement Fee

Utility Plant-in-Service (original cost): ¹	
Land	\$ 528,374
Facilities	247,553
Equipment	200,405
Infrastructure	1,907,327
Vehicles ²	eliminated
Total Utility Plant-in-Service	<u>2,883,660</u>
Accumulated depreciation ¹	
Land	-
Facilities	76,980
Equipment	114,577
Infrastructure	386,694
Vehicles ²	eliminated
Total accumulated depreciation	<u>578,252</u>
Book value of water utility plant-in-service @ June 30, 2021	2,305,408
Eliminating entries:	
Principal outstanding on bonds, notes, and loans payable	-
Developer Contributions	-
Grants, net of amortization	-
	<u>-</u>
Net basis in utility plant-in-service available to serve future customers	\$ 2,305,408
Estimated existing and future pm peak hour vehicle trips	7,185
Transportation reimbursement fee per PM peak hour vehicle trip	\$321

¹ Source: Independence Accounting Summary Report - Capitalized Assets as of June 30, 2021

² ORS 223.299 specifically states that a “capital improvement” does not include costs of the operation or routine maintenance of capital improvements. This means the assets on the balance sheet such as certain vehicles and equipment used for heavy repair and maintenance of infrastructure cannot be included in the basis of the reimbursement fee.

Improvement Fee Calculations

The calculation of the transportation improvement fee also follows the logic that was used to calculate the wastewater improvement fee. As in the case of wastewater, this study continues to use 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 PM PHVTs 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 13.

Table 13 - Calculation of the Transportation Improvement Fee

Project Description	Total Cost in 2022 Dollars	Funding Source				SDCs
		General Fund & Gas Tax	Future Development	Parks SDCs	State/Federal Grants	
Roadway Projects						
<i>Major Street Connectivity</i>						
Randal Way Extension	868,790		868,790	-	-	-
Chestnut Street Extension	1,033,013		1,033,013	-	-	-
4th Street Extension (Deleted project through Monmouth wellfield. Source Water Protection)	-		-	-	-	-
Madrona Street Connection (west)3	3,173,203		3,173,203	-	-	-
Madrona Street Connection (east)	3,649,978		3,649,978	-	-	-
13th Street Extension3	3,623,490		3,623,490	-	-	-
Gwinn Street Connection3 (City to construct bridge)	7,676,078		3,676,078	-	-	4,000,000
Mountain Fir Drive Extension (New east-west minor arterial)3	9,593,773		4,796,886	-	-	4,796,886
Gun Club Road-13th Street	1,361,458		1,361,458	-	-	-
E Street Extension3	2,532,205		2,532,205	-	-	-
<i>Intersection Improvements</i>						
OR 51/Polk Street1	476,775		-	-	-	476,775
OR 51-Main Street/OR 51-Monmouth Street1	370,825		-	-	-	370,825
OR 51-Monmouth Street/4th Street1	52,975		-	-	-	52,975
OR 51-Monmouth Street/7th Street1	52,975		-	-	-	52,975
Main Street/River Road2, 3	206,603		-	-	-	206,603
OR 51-Monmouth Street/Gun Club Road1	10,595		-	-	-	10,595
Gun Club Road Bridge	4,385,341		-	-	4,385,341	-
Traffic Safety Projects						
<i>Intersection Improvements</i>						
Hoffman Road/16th Street	47,678	47,678	-	-	-	-
OR 51-Main Street/Polk Street1	37,083		-	-	37,083	-
S Main Street/River Road S	58,273	58,273	-	-	-	-
OR 51-Main Street/Stryker Road1, 2	58,273		-	-	58,273	-
OR 51-Monmouth Street/4th Street1	52,975		-	-	52,975	-
OR 51-Monmouth Street/7th Street1	52,975		-	-	52,975	-
Hoffman Road/Gun Club Road	52,975	52,975	-	-	-	-
Stryker Road/Hoffman Road-Polk Street	42,380	42,380	-	-	-	-
<i>Roadway Improvements</i>						
OR 51-Monmouth Street– West City Limits to Gun Club Road1, 2	15,893		-	-	15,893	-
4th Street – OR 51-B Street to Spruce Avenue	513,858	513,858	-	-	-	-
Corvallis Road – South of River Road3, 4	21,190	21,190	-	-	-	-
River Road Bridge4	52,975	52,975	-	-	-	-

Table 13 - Calculation of the Transportation Improvement Fee (Continued)

Project Description	Total Cost in 2022 Dollars	Funding Source				SDCs
		General Fund & Gas Tax	Future Development	Parks SDCs	State/Federal Grants	
Pedestrian Projects						
<i>Enhanced Crossings and Pedestrian Amenities Improvements</i>						
OR 51-Main Street1	757,543		757,543	-	-	-
Main Street	238,388		238,388	-	-	-
Corvallis Road3	1,520,383		1,520,383	-	-	-
Hoffman Road	746,948		746,948	-	-	-
Polk Street	180,115		-	-	-	180,115
Gun Club Road	550,940		550,940	-	-	-
Stryker Road	1,345,565		1,345,565	-	-	-
Ash Street/4th Street	153,628		-	-	-	153,628
16th Street	158,925		158,925	-	-	-
13th Street	169,520		169,520	-	-	-
4th Street	238,388		-	-	-	238,388
Williams Street	79,463		-	-	-	79,463
F Street	275,470		-	-	-	275,470
Downtown Sidewalk Enhancements	1,854,125	1,854,125	-	-	-	-
OR 51-Main Street/Stryker Road1, 2	132,438		-	-	-	132,438
OR 51-Main Street/Deann Drive1, 2	132,438		-	-	-	132,438
OR 51-Main Street/Williams Street1, 2	132,438		-	-	-	132,438
OR 51-Monmouth Street/13th Street1, 2	132,438		-	-	-	132,438
Main Street/G Street2	42,380		-	-	-	42,380
Main Street-Corvallis Road/River Road2, 3	42,380		-	-	-	42,380
Stryker Road/Hoffman Road	26,488	26,488	-	-	-	-
Ash Street/Polk Street	26,488		-	-	-	26,488
Gun Club Road/Marigold Street	26,488		-	-	-	26,488
Stryker Road Rail Crossing	158,925	158,925	-	-	-	-
OR 51-Main Street/Main Street1, 2	26,488	26,488	-	-	-	-
OR 51-Monmouth Street/2nd Street1, 2	26,488	26,488	-	-	-	-
OR 51-Monmouth Street/11th Street	79,463		-	-	79,463	-
<i>Shared-Use Paths/Trails Improvements</i>						
North South Connector Trail #1	1,038,310		-	346,103	692,207	-
North South Connector Trail #2	164,223		-	54,741	109,482	-
Ash Creek Trail Phase 1	2,823,568		-	941,189	1,882,378	-
Mt. Fir North-South Trail	895,278		298,426	298,426	298,426	-
Mt. Fir Connector Trail	784,030		261,343	261,343	261,343	-
River Trail	3,157,310		-	1,052,437	2,104,873	-
Going to the River Trail	1,281,995		-	427,332	854,663	-
Central High School (HS) Connector Trail1, 2	826,410		-	275,470	550,940	-
South Fork Trail	3,046,063		1,015,354	1,015,354	1,015,354	-
Drainage Trail	418,503		-	139,501	279,002	-
Old Highway 99 Trail	656,890		-	218,963	437,927	-
Willamette Valley Trail	354,933		118,311	118,311	118,311	-
Polk Street Trail	158,925		-	52,975	105,950	-
E Street Trail	778,733		259,578	259,578	259,578	-
E Street Bridge	762,840		-	-	762,840	-
Trestle Bridge	762,840		-	254,280	508,560	-

Table 13 - Calculation of the Transportation Improvement Fee (Continued)

Project Description	Total Cost in 2022 Dollars	Funding Source				SDCs
		General Fund & Gas Tax	Future Development	Parks SDCs	State/Federal Grants	
Bicycle Projects						
<i>Bike Lane Improvements</i>						
OR 51-Main Street1, 2, 3, 4	132,438		-	-	-	132,438
OR 51-Main Street	10,595		-	-	-	10,595
OR 51-Monmouth Street1, 2, 3, 4	127,140		-	-	-	127,140
OR 51-Monmouth Street	10,595		-	-	-	10,595
Main Street2	95,355		-	-	-	95,355
Corvallis Road2	678,080		678,080	-	-	-
Hoffman Road2, 3	529,750		-	-	-	529,750
Polk Street2, 3	190,710		-	-	-	190,710
Gun Club Road	323,148		-	-	-	323,148
Stryker Road	1,350,863		-	-	-	1,350,863
Ash Street/4th Street (north)5	312,553		-	-	-	312,553
16th Street	169,520		169,520	-	-	-
13th Street4, 5	26,488		26,488	-	-	-
7th Street4, 5	444,990		-	-	-	444,990
4th Street (south)4, 5	365,528		-	-	-	365,528
Picture Street5	26,488		-	-	-	26,488
Williams Street5	121,843		-	-	-	121,843
G Street4, 5	296,660		-	-	-	296,660
Chestnut Street5	47,678		47,678	-	-	-
C Street	10,595		-	-	-	10,595
D Street	10,595		-	-	-	10,595
E Street/F Street	21,190		-	-	-	21,190
River Road - Willamette River Bridge	1,589,250		-	-	-	1,589,250
Marigold Drive5	26,488		-	-	-	26,488
<i>Enhanced Crossings and Bicycle Amenities Improvements</i>						
OR 51-Main Street/OR 51-Monmouth Street	5,298		-	-	-	5,298
OR 51-Main Street/OR 51-Monmouth Street	5,298		-	-	-	5,298

Table 13 - Calculation of the Transportation Improvement Fee (Continued)

Project Description	Total Cost in 2022 Dollars	Funding Source				SDCs
		General Fund & Gas Tax	Future Development	Parks SDCs	State/Federal Grants	
Transit System Projects						
Local Transit System2	TBD					
Stop 1516: OR 51-Main Street/Polk Street (to Salem)	21,190		-	-	21,190	-
Stop 1517: OR 51-Main Street/Polk Street (to Dallas)	21,190		-	-	21,190	-
Stop 1515: Library – OR 51-Monmouth Street/ 2nd Street (to Salem)	15,893		-	-	15,893	-
Stop 1502: 13th Street/OR 51-Monmouth Street (bi-directional)	63,570		-	-	63,570	-
Main Street/Oak Street – both directions	21,190		-	-	21,190	-
4th Street/E/D Street – both directions	37,083		-	-	-	37,083
5th Street/G Street – both directions	52,975		-	-	-	52,975
7th Street/F Street – both directions	52,975		-	-	-	52,975
1038 E Street (single stop to serve both directions)	52,975		-	-	-	52,975
Monmouth Street/Talmadge Road – both directions	52,975		-	-	52,975	-
Master Plan & Planning Projects						
Update Transportation System Master Plan	211,900		-	-	-	211,900
Downtown Parking Study	52,975		-	-	52,975	-
Total	\$ 74,826,198	\$ 2,881,840	\$ 33,078,085	\$ 5,716,003	\$ 15,172,817	\$ 17,977,454
Total Improvement Fee Eligible Costs for Future System Improvements						\$ 17,977,454
less: Transportation SDC Fund balance as of June 30, 2021						<u>135,618</u>
Adjusted Improvement Fee Eligible Costs for Future System Improvements						\$ 17,841,836
Future PM peak hour vehicle trips created by growth:						
Average annual growth in PMPHVTs per TSP			113			
Number of years of capacity available to serve growth			23			
Total number of growth PMPHVTs over the forecast horizon						2,590
Transportation improvement fee per PM peak hour vehicle trip						<u>\$ 6,889</u>

1. Project will require coordination with ODOT and approval from the State or Regional Traffic Engineer.
2. This roadway contains segments with existing bike facilities (on-street bike lanes, shoulders, etc.). These facilities will be reconfigured to accommodate the preferred alternative.
3. Install green skip striping on arterial and collector roadways where bike lanes continue through major intersections.
4. Work with Cherriots to determine the bicycle facility configuration at bus stops for this intermodal facility.
5. On-street parking restrictions will be required and therefore the bike lane installation should be considered when traffic volumes exceed 2,000 ADT per City standard.

Transportation SDC Model Summary

The 2022 transportation SDC methodology update was done in accordance with Independence Municipal Code Chapter 34, 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 the following per PM PHVT:

<u>Transportation SDC Components</u>	<u>Proposed</u>
Reimbursement fee	\$ 321
Improvement fee	6,889
Administration fee @5%	<u>361</u>
Total transportation SDC	\$ 7,571

To charge the appropriate SDC, the City must estimate how many PM PHVTs will be generated by the development in question. That number can then be multiplied by \$7,571 to determine the amount of SDC owed by new development projects.

The number of PM PHVTs 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 14 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 14 - Proposed Transportation SDCs by ITE Code

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked and pass-by Trip Adjustment	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	0.00%	0.00%	-	17.15	118,160	5,506	6,183	129,849	Berth
021	Commercial Airport	5.75	0.00%	0.00%	-	5.75	39,612	1,846	2,073	43,530	Average flights per day
022	General Aviation Airport	1.57	0.00%	0.00%	-	1.57	10,816	504	566	11,886	Employee
030	Intermodal Truck Terminal	1.87	0.00%	0.00%	-	1.87	12,882	600	674	14,157	1,000 square feet of gross floor area
090	Park-an-Ride Lot with Bus Service	0.43	0.00%	0.00%	-	0.43	2,962	138	155	3,255	Parking space
093	Light Rail Transit Station with Parking	1.24	0.00%	0.00%	-	1.24	8,542	398	447	9,387	Parking space
Industrial (Land Uses 100-199)											
110	General light industrial	0.63	0.00%	0.00%	-	0.63	4,340	202	227	4,769	1,000 square feet of gross floor area
120	General heavy industrial	0.68	0.00%	0.00%	-	0.68	4,685	218	245	5,148	1,000 square feet of gross floor area
130	Industrial park	0.40	0.00%	0.00%	-	0.40	2,756	128	144	3,028	1,000 square feet of gross floor area
140	Manufacturing	0.67	0.00%	0.00%	-	0.67	4,616	215	242	5,072	1,000 square feet of gross floor area
150	Warehousing	0.19	0.00%	0.00%	-	0.19	1,309	61	68	1,438	1,000 square feet of gross floor area
151	Mini-warehouse	0.17	0.00%	0.00%	-	0.17	1,171	55	61	1,287	1,000 square feet of gross floor area
154	High-Cube transload & short-term warehouse	0.10	0.00%	0.00%	-	0.10	689	32	36	757	1,000 square feet of gross floor area
155	High-Cube fulfillment center warehouse	1.37	0.00%	0.00%	-	1.37	9,438	440	494	10,372	1,000 square feet of gross floor area
156	High-Cube Parcel hub warehouse	0.64	0.00%	0.00%	-	0.64	4,409	205	231	4,845	1,000 square feet of gross floor area
157	High-Cube cold storage warehouse	0.12	0.00%	0.00%	-	0.12	827	39	43	908	1,000 square feet of gross floor area
160	Data center	0.09	0.00%	0.00%	-	0.09	620	29	32	681	1,000 square feet of gross floor area
170	Utilities	2.27	0.00%	0.00%	-	2.27	15,638	729	818	17,185	1,000 square feet of gross floor area
180	Specialty trade contractor	1.97	0.00%	0.00%	-	1.97	13,571	632	710	14,914	1,000 square feet of gross floor area
Residential (Land Uses 200-299)											
210	Single family detached housing	0.99	0.00%	0.00%	-	0.99	6,820	318	357	7,495	Dwelling unit
220	Apartment	0.56	0.00%	0.00%	-	0.56	3,858	180	202	4,239	Dwelling unit
221	Low-Rise Apartment	0.44	0.00%	0.00%	-	0.44	3,031	141	159	3,331	Dwelling unit
222	High-Rise Apartment	0.36	0.00%	0.00%	-	0.36	2,480	116	130	2,725	Dwelling unit
225	Off-Campus student apartment	0.25	0.00%	0.00%	-	0.25	1,722	80	90	1,893	Dwelling unit
231	Mid-Rise residential w/1st-floor commercial	0.36	0.00%	0.00%	-	0.36	2,480	116	130	2,725	Dwelling unit
232	High-Rise Residential w/1st-floor commercial	0.21	0.00%	0.00%	-	0.21	1,447	67	76	1,590	Dwelling unit
240	Mobile home park	0.46	0.00%	0.00%	-	0.46	3,169	148	166	3,482	Dwelling unit
251	Senior Adult Housing - Detached	0.30	0.00%	0.00%	-	0.30	2,067	96	108	2,271	Dwelling unit
252	Senior Adult Housing - Attached	0.26	0.00%	0.00%	-	0.26	1,791	83	94	1,968	Dwelling unit
253	Congregate Care Facility	0.18	0.00%	0.00%	-	0.18	1,240	58	65	1,363	Dwelling unit
254	Assisted living	0.26	0.00%	0.00%	-	0.26	1,791	83	94	1,968	Bed
255	Continuing Care Retirement Community	0.16	0.00%	0.00%	-	0.16	1,102	51	58	1,211	Unit
260	Recreational Homes	0.28	0.00%	0.00%	-	0.28	1,929	90	101	2,120	Dwelling unit
265	Timeshare	0.63	0.00%	0.00%	-	0.63	4,340	202	227	4,769	Dwelling unit
270	Residential Planned Unit Development	0.69	0.00%	0.00%	-	0.69	4,753	221	249	5,224	Dwelling unit
Lodging (Land Uses 300-399)											
310	Hotel	0.60	0.00%	0.00%	-	0.60	4,133	193	216	4,542	Room
311	All Suites Hotel	0.36	0.00%	0.00%	-	0.36	2,480	116	130	2,725	Room
312	Business Hotel	0.32	0.00%	0.00%	-	0.32	2,204	103	115	2,423	Occupied Room
320	Motel	0.38	0.00%	0.00%	-	0.38	2,618	122	137	2,877	Room
330	Resort Hotel	0.41	0.00%	0.00%	-	0.41	2,824	132	148	3,104	Room

Table 14 – Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Diverted/Linked		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
				Pass-by Trips	and pass-by Trip Adjustment						
Recreational (Land Uses 400-499)											
411	Public park	0.11	0.00%	0.00%	-	0.11	758	35	40	833	Acre
416	Campground/Recreational Vehicle Park	0.98	0.00%	0.00%	-	0.98	6,751	315	353	7,419	Acre
420	Marina	0.21	0.00%	0.00%	-	0.21	1,447	67	76	1,590	Berth
430	Golf course	2.91	0.00%	0.00%	-	2.91	20,047	934	1,049	22,030	Hole
431	Miniature Golf Course	0.33	0.00%	0.00%	-	0.33	2,273	106	119	2,498	Hole
432	Golf Driving Range	1.25	0.00%	0.00%	-	1.25	8,611	401	451	9,463	Tees/Driving Position
433	Batting Cages	2.22	0.00%	0.00%	-	2.22	15,294	713	800	16,807	Cage
434	Rock climbing gym	1.64	0.00%	0.00%	-	1.64	11,298	526	591	12,416	1,000 square feet of gross floor area
435	Multipurpose Recreational Facility	3.58	0.00%	0.00%	-	3.58	24,663	1,149	1,291	27,102	1,000 square feet of gross floor area
436	Trampoline park	1.50	0.00%	0.00%	-	1.50	10,334	482	541	11,356	1,000 square feet of gross floor area
437	Bowling Alley	1.30	0.00%	0.00%	-	1.30	8,956	417	469	9,842	Bowling lane
440	Adult Cabaret	2.93	0.00%	0.00%	-	2.93	20,185	941	1,056	22,182	1,000 square feet of gross floor area
444	Movie Theater with Matinee - Friday pm peak hou	6.17	0.00%	0.00%	-	6.17	42,505	1,981	2,224	46,710	1,000 square feet of gross floor area
445	Multiplex Movie Theater - Friday pm peak hour	4.91	0.00%	0.00%	-	4.91	33,825	1,576	1,770	37,171	1,000 square feet of gross floor area
452	Horse Racetrack	0.06	0.00%	0.00%	-	0.06	413	19	22	454	Seat
453	Automobile Racetrack - Saturday peak hour	0.28	0.00%	0.00%	-	0.28	1,929	90	101	2,120	Attendee
454	Dog Racetrack	0.15	0.00%	0.00%	-	0.15	1,033	48	54	1,136	Attendee
460	Arena*	0.47	0.00%	0.00%	-	0.47	3,238	151	169	3,558	1,000 square feet of gross floor area
462	Professional baseball stadium	0.15	0.00%	0.00%	-	0.15	1,033	48	54	1,136	Attendee
465	Ice Skating Rink	1.33	0.00%	0.00%	-	1.33	9,162	427	479	10,069	1,000 square feet of gross floor area
466	Snow Ski Area	26.00	0.00%	0.00%	-	26.00	179,114	8,346	9,373	196,833	Slopes
470	Bingo hall	0.82	0.00%	0.00%	-	0.82	5,649	263	296	6,208	Attendee
473	Casino/Video Lottery Establishment	13.49	0.00%	0.00%	-	13.49	92,933	4,330	4,863	102,126	1,000 square feet of gross floor area
480	Amusement Park	3.95	0.00%	0.00%	-	3.95	27,212	1,268	1,424	29,903	Acre
482	Water slide park Saturday peak hour generator	22.92	0.00%	0.00%	-	22.92	157,896	7,357	8,263	173,516	Acre
488	Soccer Complex	16.43	0.00%	0.00%	-	16.43	113,186	5,274	5,923	124,383	Field
490	Tennis Courts	4.21	0.00%	0.00%	-	4.21	29,003	1,351	1,518	31,872	Court
491	Racquet/Tennis Club	3.82	0.00%	0.00%	-	3.82	26,316	1,226	1,377	28,919	Court
492	Health/Fitness Club	3.45	0.00%	0.00%	-	3.45	23,767	1,107	1,244	26,118	1,000 square feet of gross floor area
493	Athletic Club	6.29	0.00%	0.00%	-	6.29	43,332	2,019	2,268	47,618	1,000 square feet of gross floor area
495	Recreational Community Center	2.31	0.00%	0.00%	-	2.31	15,914	742	833	17,488	1,000 square feet of gross floor area

Table 14 – Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Diverted/Linked		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
				Pass-by Trips	and pass-by Trip Adjustment						
Institutional (Land Uses 500-599)											
501	Military Base	0.39	0.00%	0.00%	-	0.39	2,687	125	141	2,952	Employee
520	Elementary School	1.37	0.00%	0.00%	-	1.37	9,438	440	494	10,372	1,000 square feet of gross floor area
522	Middle School/Junior High School	1.19	0.00%	0.00%	-	1.19	8,198	382	429	9,009	1,000 square feet of gross floor area
530	High School	0.97	0.00%	0.00%	-	0.97	6,682	311	350	7,343	1,000 square feet of gross floor area
534	Private School (K-8) - pm peak hour generator	6.53	0.00%	0.00%	-	6.53	44,985	2,096	2,354	49,435	1,000 square feet of gross floor area
536	Private School (K-12) - pm peak hour generator	5.50	0.00%	0.00%	-	5.50	37,890	1,766	1,983	41,638	1,000 square feet of gross floor area
537	Charter elementary school	4.96	0.00%	0.00%	-	4.96	34,169	1,592	1,788	37,550	1,000 square feet of gross floor area
537	School district office	2.04	0.00%	0.00%	-	2.04	14,054	655	735	15,444	1,000 square feet of gross floor area
540	Junior/Community College	1.86	0.00%	0.00%	-	1.86	12,814	597	671	14,081	1,000 square feet of gross floor area
550	University/College	1.17	0.00%	0.00%	-	1.17	8,060	376	422	8,857	1,000 square feet of gross floor area
560	Church	0.49	0.00%	0.00%	-	0.49	3,376	157	177	3,710	1,000 square feet of gross floor area
561	Synagogue - Friday	2.92	0.00%	0.00%	-	2.92	20,116	937	1,053	22,106	1,000 square feet of gross floor area
562	Mosque - Friday	4.22	0.00%	0.00%	-	4.22	29,072	1,355	1,521	31,948	1,000 square feet of gross floor area
565	Day Care Center	11.12	56.00%	0.00%	6.23	4.89	33,706	1,571	1,764	37,041	1,000 square feet of gross floor area
566	Cemetary	0.46	0.00%	0.00%	-	0.46	3,169	148	166	3,482	Acres
571	Prison	2.91	0.00%	0.00%	-	2.91	20,047	934	1,049	22,030	1,000 square feet of gross floor area
575	Fire and rescue station	0.48	0.00%	0.00%	-	0.48	3,307	154	173	3,634	1,000 square feet of gross floor area
580	Museum	0.18	0.00%	0.00%	-	0.18	1,240	58	65	1,363	1,000 square feet of gross floor area
590	Library	8.16	0.00%	0.00%	-	8.16	56,214	2,619	2,942	61,775	1,000 square feet of gross floor area
Medical (Land Uses 600-699)											
610	Hospital	0.97	0.00%	0.00%	-	0.97	6,682	311	350	7,343	1,000 square feet of gross floor area
620	Nursing Home	0.59	0.00%	0.00%	-	0.59	4,065	189	213	4,467	1,000 square feet of gross floor area
630	Clinic	3.28	0.00%	0.00%	-	3.28	22,596	1,053	1,182	24,831	1,000 square feet of gross floor area
640	Animal Hospital/Veterinary Clinic	3.53	0.00%	0.00%	-	3.53	24,318	1,133	1,273	26,724	1,000 square feet of gross floor area
650	Free-Standing emergency room	1.52	0.00%	0.00%	-	1.52	10,471	488	548	11,507	1,000 square feet of gross floor area
Office (Land Uses 700-799)											
710	General office building	1.15	0.00%	0.00%	-	1.15	7,922	369	415	8,706	1,000 square feet of gross floor area
712	Small office building	2.45	0.00%	0.00%	-	2.45	16,878	786	883	18,548	1,000 square feet of gross floor area
714	Corporate Headquarters Building	0.60	0.00%	0.00%	-	0.60	4,133	193	216	4,542	1,000 square feet of gross floor area
715	Single Tenant Office Building	1.71	0.00%	0.00%	-	1.71	11,780	549	616	12,946	1,000 square feet of gross floor area
720	Medical-dental office building	3.46	0.00%	0.00%	-	3.46	23,836	1,111	1,247	26,194	1,000 square feet of gross floor area
730	Government Office Building	1.71	0.00%	0.00%	-	1.71	11,780	549	616	12,946	1,000 square feet of gross floor area
731	State Motor Vehicles Department	5.20	0.00%	0.00%	-	5.20	35,823	1,669	1,875	39,367	1,000 square feet of gross floor area
732	United States Post Office	11.21	0.00%	0.00%	-	11.21	77,226	3,598	4,041	84,865	1,000 square feet of gross floor area
733	Government Office Complex	2.82	0.00%	0.00%	-	2.82	19,427	905	1,017	21,349	1,000 square feet of gross floor area
750	Office park	1.07	0.00%	0.00%	-	1.07	7,371	343	386	8,100	1,000 square feet of gross floor area
760	Research and development center	0.49	0.00%	0.00%	-	0.49	3,376	157	177	3,710	1,000 square feet of gross floor area
770	Business park	0.42	0.00%	0.00%	-	0.42	2,893	135	151	3,180	1,000 square feet of gross floor area

Table 14 – Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked and pass-by Trip		Primary Trip Ends	Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					Adjustment	Trip Ends						
Retail (Land Uses 800-899)												
810	Tractor Supply Store	1.40	0.00%	0.00%	-	1.40	9,645	449	505	10,599	1,000 square feet of gross floor area	
811	Construction Equipment Rental Store	0.99	0.00%	0.00%	-	0.99	6,820	318	357	7,495	1,000 square feet of gross floor area	
812	Building Materials and Lumber Store	2.06	0.00%	0.00%	-	2.06	14,191	661	743	15,595	1,000 square feet of gross floor area	
813	Free Standing Discount Super Store	4.33	0.00%	29.00%	1.26	3.07	21,179	987	1,108	23,274	1,000 square feet of gross floor area	
814	Variety Stoe	6.84	0.00%	34.00%	2.33	4.51	31,100	1,449	1,627	34,176	1,000 square feet of gross floor area	
815	Free Standing Discount Store	4.83	35.25%	17.00%	2.52	2.31	15,888	740	831	17,460	1,000 square feet of gross floor area	
816	Hardware/Paint Store	2.68	29.50%	26.00%	1.49	1.19	8,216	383	430	9,029	1,000 square feet of gross floor area	
817	Nursery (Garden Center)	6.94	0.00%	0.00%	-	6.94	47,810	2,228	2,502	52,539	1,000 square feet of gross floor area	
818	Nursery (Wholesale)	5.18	0.00%	0.00%	-	5.18	35,685	1,663	1,867	39,215	1,000 square feet of gross floor area	
820	Shopping Center	3.81	15.86%	34.00%	1.90	1.91	13,160	613	689	14,462	1,000 square feet of gross leasable area	
823	Factory Outlet Center	2.29	0.00%	0.00%	-	2.29	15,776	735	826	17,336	1,000 square feet of gross floor area	
840	Automobile Sales (New)	2.43	0.00%	0.00%	-	2.43	16,740	780	876	18,396	1,000 square feet of gross floor area	
841	Automobile Sales (Used)	3.75	0.00%	0.00%	-	3.75	25,834	1,204	1,352	28,389	1,000 square feet of gross floor area	
842	Recreational Vehicle Sales	0.77	0.00%	0.00%	-	0.77	5,305	247	278	5,829	1,000 square feet of gross floor area	
843	Automobile Parts Sales	4.91	13.00%	43.00%	2.75	2.16	14,883	693	779	16,355	1,000 square feet of gross floor area	
848	Tire Store	3.98	3.33%	28.00%	1.25	2.73	18,827	877	985	20,690	1,000 square feet of gross floor area	
849	Tire Superstore	2.11	0.00%	0.00%	-	2.11	14,536	677	761	15,974	1,000 square feet of gross floor area	
850	Supermarket	9.24	25.25%	36.00%	5.66	3.58	24,666	1,149	1,291	27,106	1,000 square feet of gross floor area	
851	Convenience Market	49.11	6.47%	51.00%	28.23	20.88	143,875	6,704	7,529	158,107	1,000 square feet of gross floor area	
853	Convenience Market with Gasoline Pumps	49.29	17.80%	66.00%	41.31	7.98	55,009	2,563	2,879	60,450	1,000 square feet of gross floor area	
854	Discount Supermarket	8.38	23.20%	21.00%	3.70	4.68	32,213	1,501	1,686	35,400	1,000 square feet of gross floor area	
857	Discount Club	4.18	0.00%	37.00%	1.55	2.63	18,141	845	949	19,936	1,000 square feet of gross floor area	
858	Farmers market - weekday pm peak hour	179.84	0.00%	0.00%	-	179.84	1,238,918	57,729	64,832	1,361,479	Acres	
860	Wholesale Market	1.76	0.00%	0.00%	-	1.76	12,125	565	634	13,324	1,000 square feet of gross floor area	
861	Sporting Goods Superstore	2.02	0.00%	0.00%	-	2.02	13,916	648	728	15,292	1,000 square feet of gross floor area	
862	Home Improvement Superstore	2.33	6.00%	42.00%	1.12	1.21	8,347	389	437	9,172	1,000 square feet of gross floor area	
863	Electronics Superstore	4.26	33.00%	40.00%	3.11	1.15	7,924	369	415	8,708	1,000 square feet of gross floor area	
864	Toy/Children's Superstore	5.00	0.00%	0.00%	-	5.00	34,445	1,605	1,803	37,853	1,000 square feet of gross floor area	
865	Baby Superstore	1.82	0.00%	0.00%	-	1.82	12,538	584	656	13,778	1,000 square feet of gross floor area	
866	Pet Supply Superstore	3.55	0.00%	0.00%	-	3.55	24,456	1,140	1,280	26,875	1,000 square feet of gross floor area	
867	Office Supply Superstore	2.77	0.00%	0.00%	-	2.77	19,083	889	999	20,970	1,000 square feet of gross floor area	
868	Book Superstore	15.83	0.00%	0.00%	-	15.83	109,053	5,081	5,707	119,841	1,000 square feet of gross floor area	
869	Discount Home Furnishing Superstore	1.57	0.00%	0.00%	-	1.57	10,816	504	566	11,886	1,000 square feet of gross floor area	
872	Bed and Linen Superstore	2.22	0.00%	0.00%	-	2.22	15,294	713	800	16,807	1,000 square feet of gross floor area	
875	Department Store	1.95	0.00%	0.00%	-	1.95	13,434	626	703	14,762	1,000 square feet of gross floor area	
876	Apparel Store	4.12	0.00%	0.00%	-	4.12	28,383	1,323	1,485	31,190	1,000 square feet of gross floor area	
879	Arts and Crafts Store	6.21	0.00%	0.00%	-	6.21	42,781	1,993	2,239	47,013	1,000 square feet of gross floor area	
880	Pharmacy/Drugstore without Drive-Through	8.51	4.67%	53.00%	4.91	3.60	24,818	1,156	1,299	27,273	1,000 square feet of gross floor area	
881	Pharmacy/Drugstore with Drive-Through	10.29	13.00%	49.00%	6.38	3.91	26,937	1,255	1,410	29,602	1,000 square feet of gross floor area	
882	Marijuana Dispensary	21.83	0.00%	0.00%	-	21.83	150,387	7,007	7,870	165,264	1,000 square feet of gross floor area	
890	Furniture Store	0.52	10.33%	53.00%	0.33	0.19	1,314	61	69	1,443	1,000 square feet of gross floor area	
895	Beverage container recycling depot -PM peak hr	10.10	0.00%	0.00%	-	10.10	69,579	3,242	3,641	76,462	1,000 square feet of gross floor area	
897	Medical Equipment Store	1.24	0.00%	0.00%	-	1.24	8,542	398	447	9,387	1,000 square feet of gross floor area	
899	Liquor store	16.37	0.00%	0.00%	-	16.37	112,773	5,255	5,901	123,929	1,000 square feet of gross floor area	

Table 14 – Proposed Transportation SDCs by ITE Code (Continued)

ITE Code	Land Use	Total Trip Ends	Diverted/Linked Trips	Pass-by Trips	Diverted/Linked and pass-by Trip		Improve.	Reimb.	Compliance	Total SDC	Basis for Calculating a Customer's SDC
					Adjustment	Trip Ends					
Services (Land Uses 900-999)											
911	Walk-in Bank	12.13	0.00%	0.00%	-	12.13	83,564	3,894	4,373	91,830	1,000 square feet of gross floor area
912	Drive-in Bank	20.45	9.24%	35.00%	9.05	11.40	78,557	3,660	4,111	86,329	1,000 square feet of gross floor area
918	Hair Salon	1.45	0.00%	0.00%	-	1.45	9,989	465	523	10,977	1,000 square feet of gross floor area
920	Copy, Print and Express Ship Store	7.42	0.00%	0.00%	-	7.42	51,116	2,382	2,675	56,173	1,000 square feet of gross floor area
925	Drinking Place	11.36	0.00%	0.00%	-	11.36	78,259	3,647	4,095	86,001	1,000 square feet of gross floor area
926	Food Cart Pod	3.08	0.00%	0.00%	-	3.08	21,218	989	1,110	23,317	Food Cart
930	Fast Casual Restaurant	14.13	0.00%	0.00%	-	14.13	97,342	4,536	5,094	106,971	1,000 square feet of gross floor area
931	Quality Restaurant	7.80	13.50%	44.00%	4.49	3.32	22,837	1,064	1,195	25,096	1,000 square feet of gross floor area
932	High-Turnover (Sit Down) Restaurant	9.77	17.25%	43.00%	5.89	3.88	26,754	1,247	1,400	29,401	1,000 square feet of gross floor area
933	Fast-food restaurant without drive-through	28.34	17.25%	43.00%	17.07	11.27	77,606	3,616	4,061	85,283	1,000 square feet of gross floor area
934	Fast-food restaurant with drive-through	32.67	9.06%	50.00%	19.29	13.38	92,151	4,294	4,822	101,267	1,000 square feet of gross floor area
935	Fast-food restaurant with drive-through and no inc	42.65	0.00%	89.00%	37.96	4.69	32,320	1,506	1,691	35,517	1,000 square feet of gross floor area
936	Coffee/donut shop without drive-through	36.31	17.25%	43.00%	21.88	14.43	99,430	4,633	5,203	109,267	1,000 square feet of gross floor area
937	Coffee/donut shop with drive-through	43.38	0.00%	89.00%	38.61	4.77	32,873	1,532	1,720	36,125	1,000 square feet of gross floor area
938	Coffee/donut kiosk	83.33	0.00%	89.00%	74.16	9.17	63,147	2,942	3,304	69,393	1,000 square feet of gross floor area
939	Bread/Donut/Bagel Shop without Drive-Through W	28.00	0.00%	0.00%	-	28.00	192,892	8,988	10,094	211,974	1,000 square feet of gross floor area
940	Bread/Donut/Bagel Shop with Drive-Through Winc	19.02	0.00%	0.00%	-	19.02	131,029	6,105	6,857	143,991	1,000 square feet of gross floor area
941	Quick Lubrication Vehicle Shop	8.70	0.00%	0.00%	-	8.70	59,934	2,793	3,136	65,863	Service Position
942	Automobile Care Center	3.11	0.00%	0.00%	-	3.11	21,425	998	1,121	23,544	1,000 sq. ft. of occupied gross leasable area
943	Automobile Parts and Service Center	2.26	0.00%	0.00%	-	2.26	15,569	725	815	17,109	1,000 square feet of gross floor area
944	Gasoline/service station	109.27	23.00%	42.00%	71.03	38.24	263,466	12,276	13,787	289,530	1,000 square feet of gross floor area
945	Gasoline/service station with convenience market	88.35	31.22%	56.00%	77.06	11.29	77,771	3,624	4,070	85,465	1,000 square feet of gross floor area
947	Self-Service Car Wash	5.54	0.00%	0.00%	-	5.54	38,165	1,778	1,997	41,941	Wash stall
948	Automated Car Wash	13.60	0.00%	0.00%	-	13.60	93,690	4,366	4,903	102,959	Wash stall
949	Car Wash and Detail Center	14.20	0.00%	0.00%	-	14.20	97,824	4,558	5,119	107,501	1,000 square feet of gross floor area
950	Truck Stop	22.73	0.00%	0.00%	-	22.73	156,587	7,296	8,194	172,077	1,000 square feet of gross floor area
960	Super Convenience Market/Gas Station	69.28	0.00%	0.00%	-	69.28	477,270	22,239	24,975	524,484	1,000 square feet of gross floor area
970	Winery	7.31	0.00%	0.00%	-	7.31	50,359	2,347	2,635	55,340	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

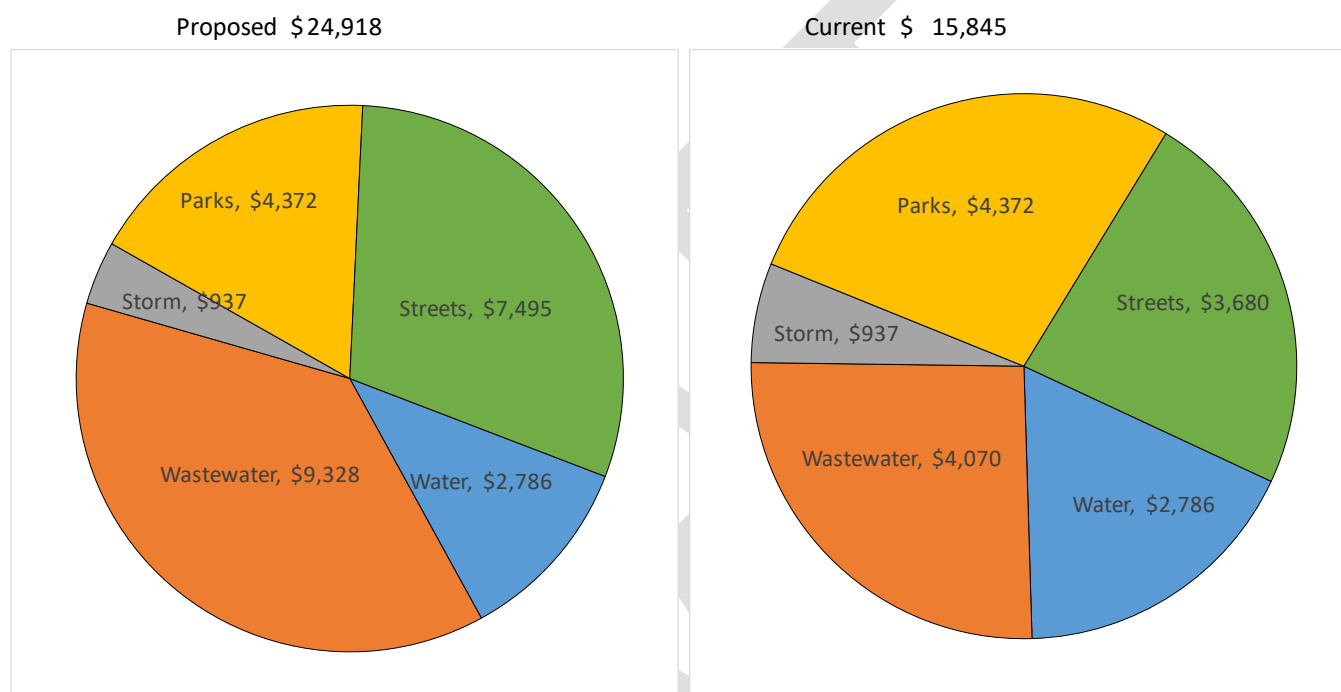
PM peak vehicle trips expressed in trip ends on a weekday, peak hour of adjacent street traffic, one hour, between 4:00 pm and 6:00 pm unless otherwise noted

Conclusions and Recommendations

The 2022 SDC methodology update was done in accordance with IMC Chapter 34, and with the benefit of adopted plans and plan updates for municipal services. Our analysis indicates the City can charge a maximum of \$9,328 for wastewater, and \$7,495 for transportation. These figures are on a per equivalent single-family residential unit basis.

A graphic side by side comparison of the proposed and current schedule of SDCs is shown below in figure 2.

Figure 2 - Proposed and Current Schedule of SDCs



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 Independence Municipal Code (IMC Chapter 34). We suggest the City consider the following language for that section of the IMC:

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) twenty 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.