

CITY OF MOSIER

small enough to make a difference

[Topic: City Council Meeting City of Mosier](#)

[Time: Feb 16, 2022 06:00 PM Pacific Time \(US and Canada\)](#)

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PLEASE CALL OR TEXT JAYME BENNETT IF YOU HAVE TECHNICAL ISSUES: 541-490-7411 jayne.bennett@cityofmosier.com

I	6:00 pm	Call to Order/Roll Call – Council President Witt Anderson	
II		Agenda corrections or additions	
III	6:05 pm	Business from the Audience - This is for Mosier residents and anyone else to express concerns, needs, or opportunities. Please keep your comments succinct and under two minutes. You may bring in written materials for Committee and Staff to review. The Facilitator can assign the issue to a future Committee, or to an appropriate staff member. Please realize that we cannot always offer a response immediately but will give the matter due consideration. We encourage the participation of all stakeholders in our community.	5 mins
IV	6:10 pm	Approval of: February 02, 2022 MTG MINS	5 mins
V		BUSINESS	
1.	6:15 pm	SDC Methodology Presentation/Adoption – JG/FCSG	30 min
2.	6:45 pm	Project Updates: JG	15 min
3.	7:00 pm	JUF Updates: WA	15 mins
4.	7:15 pm	Community Projects/City Recorder/ICM Updates	10 mins
5.	7:25 pm	Items for Next Agenda (March 2nd and 16th)/Announcements	5 mins
	7: 30	ADJOURN	



City of Mosier City Council Meeting
February 05, 2022
6:00 PM ZOOM

Witt Anderson Calls Meeting to Order 6:00 PM

Roll Call: Mayor Arlene Burns, Brenna Campbell, Charlie Cannon, Acasia Berry, Peny Wallace

Ron Wright: Absent Excused

Staff: Laura Westmeyer, John Grim, Katie Skakel, Jayme Bennett

Scott Hege, Wasco County Commissioner

Community: Christie Nestler, Emily Stranz, Sam Trelstad, Nathan, MSM

Additions to Agenda:

Emily Stranz: Second track in Mosier was agreed for the next 5 years not to go through (UPRR). Reason to bring it up is that the legal rationale was around Tribal rights, and access to the river, if council hasn't talked to tribes, might be worthwhile before installation of gate, and I can offer contacts for Umatilla, Warm Springs, Yakama Nation – (involved tribes). I can also help work with the tribes if that is something that would be helpful.

Mayor Burns also spoke with the Tribes during the letters of support project for the Joint Use Facility (JUF), and the plan at the time was to give them passes and access and ensure they have access always as well as tribal police, fire, and sheriffs etc.

Commissioner Hege: Commissioner MTG today and brought up the Huskey Road squabble, and the appeal was denied today, so the project is moving forward.

Christie Nestler, just observing.

January 19th MINS corrections or additions:
Motion to approve minutes from Jan 19, 2022

1st Brenna Campbell

2nd Acasia Second

No opposition, motions passes, 6:08PM

Agenda addition: We were in motion to do interviews this council meeting, we had one great candidate, however, FCSG who is doing our analysis, rolled in with preliminary findings – which were to pause for now until we have more information.

Jayne, Mayor Burns, John Grim and FCSG – Let’s defer interviews until we take stock of what our finances are going forward. Meanwhile, Council President Anderson sent letters to all candidates letting them know we are going to complete the study and pull together and carry the load until we know where we really are. Of course, extending his gratitude and appreciation for their time.

Jayne gave overview of the FCSG mtg – great tool – Mayor B – do we need to go all the way to the finish line – or do we do a exec summary etc? If the data is simple and clear, there may be better ways to utilize those funds. (JUF operations and maintenance forecast etc).

Jayne Quorum on FCSG regarding the study and review of docs – always keep council abreast, but Ron Wright will be working closely on the budget this year, so to avoid quorum, preference is Ron has first access.

Arlene Burns: Won’t be on the call, since there is discussion on the JUF etc.

Business Item I: JUF/Mosier Center Agreement Types (Update to council): Laura Westmeyer/Witt Anderson.

IGA between City of Mosier and Mosier Fire requires an O&M agreement prior to construction – more recently to the forefront for a couple reasons.

1. How management and operational expenses going forward will be handled. Fundraising needed a story on how this would be handled for some of the grants.
2. The Fire Board needed some information for a possible loan. Their loan capability is sensitive to the O&M expense for the FD side.

Background on the last JUF meeting bringing us to Mike Gleason’s volunteer role and expertise in this field. Met with some staff, and with some JUF committee members. Before I turn this over to Laura, this isn’t something we need to decide on immediately, if we can get an idea as to what the expenses are. We are getting some data points. It would be good if the Fire Board and City Council are comfortable with one or more methods going forward when we ultimately craft this agreement.

Section 190 of ORS is what he recommended.

Laura: This is more of an update. Overview of process, and how we got to where we are. Leaning toward 190 entity – ultimately any agreement recommended by JUFC would then go to the respective boards and that would be the way forward.

What is a 190? The JUF is a 190 committee, not an entity. Allows, by written agreement the creation of a new organization – own policy and decision-making body. All the authority those entities choose to give it.

You would be appointing a board that would no longer come back to the council or fire board.

This is just recommendations from the committee. Not requirements.

Mayor B: Are there opportunities to separate entirely the two entities if the fire continues to have financial issues? Less problematic etc – same concerns as Jayme with the agreement. Master/Sub lease allows for a simple term.

Scott Hege: Master and Sublease is simple and common for this type of facility.

Business Item II: Comp Plan DLCD Grant Resolution: Katie Skakel: Back in October the City Council approved Katie to submit a grant to DLCD as it was recognized our Comp Plan hasn't been updated since 2004 except for the TSP. This is a technical assistance grant, and our comp plan needs to be updated to reflect properly our community and the work done from 2004 to now, a large part of the state desire is equity – the Mosier community hasn't been properly recognized in the comp plan as far as our diverse and lower income population are considered. Once we accept the money, and update our plan, we will be better positioned to have accurate data to serve the needs of our community.

May 31, 2023 is the deadline, I realized some of our values as we work through other processes (STR) aren't adopted into the comp plan yet. When I wrote the grant, there was an in-kind cash amount of \$1,500 from the City of Mosier and it was not required – if that is problematic, we can see how to avoid using City Staff time on this.

Witt Anderson – who is the consultant, and do you have someone in mind?

Katie: DLCD would provide someone to us if we needed a consultant. It is highly probable some of the other regional planners will want to also participate.

Witt – can we use some of the 10k for your services Katie?

Katie- It could be, but I also have the Natural Hazard Plan and I want to get that done on time as well. I will be involved regardless, but I recommend a consultant to assist with this.

Ron Wright: is it reasonable to think this will be finished for 10k (without needing more funding)?

Yes.

Motion: Acasia Moves to adopt 2022-02 Authorizing Acceptance of Technical Assistance Grant 2nd: Charlie Cannon

All in, no opposition – motion passes 6:50

Grant manager is Angie Brewer! She's amazing, and we are glad to have her be a part of this!

Business Item III: John Grim Project Updates:

HWY 30: bid this month – plan to be under construction this spring.

Coburn on RCP – Suggested to Coburn to go to council for quotes again, the next day they did the one call locates. The entrance will be closed during construction work.

HUB:

There will be signage and communications with the community.

Does City Council want to do a public workshop or two?

Mayor B – Keeping community abreast and keeping a floor drain in mind in the bathroom and well house regarding maintenance and ease of cleaning and access to water etc. one toilet? Changing room? Etc? We want to accommodate our community in as many ways as possible with these small projects. It could be that someone needs to wash gear off, get changed before dinner at MoCo etc.

Witt: Don't know much about what has been involved here. When did we do that?

Mayor B: back in maybe 2015 ish – back when Kathy FP created the concept. The 750k grant included the bathroom as well. One of the thoughts was Minarik was involved with the design, so it is in sync with what is going on across the street, and gain efficiencies with the mobilization etc.

Council shares support of the project overall and further community engagement and involvement. Brenna will do what she can to share the outreach.

Ron would like a council workshop when we get closer to brainstorm and share the ideas, and make sure we didn't miss any great opportunities.

Katie – there are a lot of good examples in the other nearby communities and you can see how they function and work, and what they cost to operate.

Sam Trelstad – MSM would be happy to assist in facilitating a public input process – and work with Brenna on how that would look. If it is just a council working shop, I would worry we miss the mark on the community – public input can be such a valuable resource.

Thank you, Sam.

Grim: The other project was RCP restoration – we have 200k roughly set aside for the planting.

WWTP grant won't cover restrooms so there was then a comment about restroom facilitation in addition to parking and landscape.

I don't know where to go at this point. What would you like to do?

Can you do the restrooms for 50k?

Grim – closer to 100k?

Witt: what if we back into it – we have Jacob's design materials, can we back into it?

Grim – Used just the CMU numbers from the east side pump – it is 125k and it is a little bigger than what we would have for 2 bathrooms. Probably cost savings because we aren't going to have to build one wall. A little smaller, everything is inflated so high right now. Competitive bidding is hard right now.

Sounds like you would like me to come back to council with some estimates.

Arlene – The landscaping is something we really need to attend to. We aren't talking about asphalt here. It's some berms, trees, flowers, entrance etc.

Try to save 50k for the restroom idea if possible.

We owe the planting and the entrance to our community. Let's approach it there, then add the restrooms – Wrapping up the landscape design with Jacobs is easier than bring someone new. We will need to tweak it regardless.

Acasia reiterating the necessary input from locals and Roots etc for the use of the park and the landscape material etc.

Local contractors struggle a little with the ability to bond for the larger projects. Is there a way to navigate this so we can use locals?

Grim: Not really, the rules are governed by different tiers of cost of project. Competitive bidding, unless there is an exemption under Oregon criteria. We can say: use Humble Roots Nursery etc.

Always open the job to contractors and to people that are used to the red tape that goes with government work.

Grim will come back with scaled down version of landscape – somehow with public involved – then see where we are on cost estimate.

Then if we have the funding, we can pursue the bathroom at that time.

Ron action item – plan to bring large gravel in there or rock to try and raise the pond level to the road – a simpler thing to just go down there and measure something to make it less subjective – a line or a mark on a stick.

Bottom of gabion – puddle 8" deep – varies – put it somewhere at the base of the gabion – mixed with judgement – key is – as long as no mix between puddle and creek.

Jayme to follow up on rock and stick measuring during the month of February.
Ron reminds council that we have a rogue crew of entitlement, and we want to discourage volunteer work without our parks committee or public process.

Mayor Burns reminds everyone that in Aug/Sept we need to get someone lined up for election in November for Mayoral Role 2023 JAN-

Announcements

Next agenda: TLT DOR

SDC

JG project updates

JUF updates

Audit schedule

Jayme:

ODOT by Mosier Creek where trail loops and dives under bridge and the fence is missing along the trail to the hiway. Jayme check with ODOT for safety reasons etc.

Laura it is helpful to go over agenda items for future meetings.

Grim thanks for guidance on the projects, this is helpful.

Thanks to staff and all consultants for your hard work.

ADJOURN 7:39

5:30 PM
02/14/22
Cash Basis

City of Mosier
Expenses by Vendor Summary
January 2022

	<u>Jan 22</u>
Adobe	29.98
Amazon	39.91
Coburn Electric	123.00
colleen coleman.	-1,170.00
FCS Group	2,600.00
H.D. Fowler Company	2,722.23
Hightail	15.00
Home Depot	58.35
Humble Roots Farm and Nursery LLC	309.00
Jill Burnett	5,432.40
Les Schwab Tire Center	27.95
MCEDD	346.00
OAMR	60.00
Oregon Department of Revenue	36.52
OWRD	1,840.00
Radcomp Tech	1,891.80
Ring Central	65.65
Wasco Co.	94.80
Xerox Financial Services	66.90
Zoom	199.90
TOTAL	<u>14,789.39</u>

Mosier SDCs Update

Wednesday, February 16, 2021

Prepared by FCS GROUP



Agenda

- Originally Proposed SDCs
- Background on Scalable SDC Options
- Scalable SDC Calculations
 - » Sewer
 - » Stormwater
 - » Parks



Agenda

- Originally Proposed SDCs
- Background on Scalable SDC Options
- Scalable SDC Calculations
 - » Sewer
 - » Stormwater
 - » Parks



Previously Presented (November 17)

	Current	Study Results		Unit
		Maximum	Proposed	
Water	\$ 4,499	\$ 3,866	\$ 3,866	meter equivalent
Sewer	5,718	4,104	4,104	equivalent residential unit
Stormwater	931	1,499	1,499	equivalent dwelling unit
Transportation	-	4,514	4,514	single family residence
Parks	1,495	3,447	1,495	dwelling unit
Total for a SFR	\$ 12,643	\$ 17,430	\$ 15,478	



Agenda

- Originally Proposed SDCs
- **Background on Scalable SDC Options**
- Scalable SDC Calculations
 - » Sewer
 - » Stormwater
 - » Parks

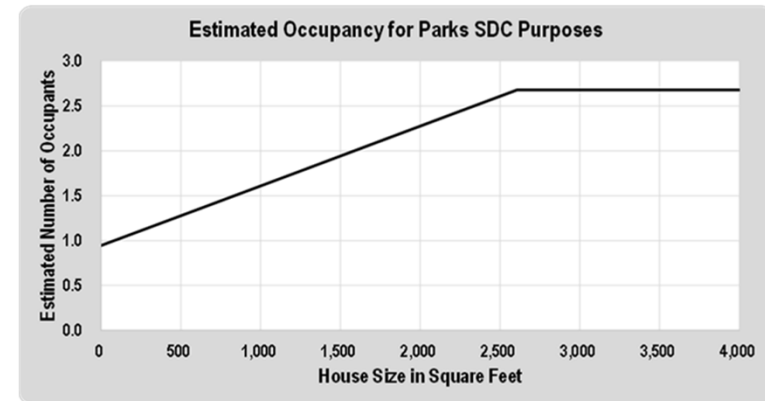


Background on Scalable Options

	Scalable?	Comments
Water		Meter size / flow basis measures potential demand
Sewer	✓	Data linking square footage to occupancy
Stormwater	✓	Impervious footprint measures contribution of runoff
Transportation		No ITE data linking dwelling unit size to trip generation
Parks	✓	Data linking square footage to occupancy

Approach to SDC Scaling

- Parks and Wastewater infrastructure demands can be linked to occupancy and home size
 - » Research in Portland metro area shows link ceases at 2,605 s.f.
 - » Average Mosier home size, 2,369 s.f., used to calculate an SDC per square foot
- Stormwater can be scaled directly to the impervious footprint
 - » The average impervious surface area for Mosier single family residences is 3,500 square feet, including:
 - Roofline
 - Driveway
 - Decks / Patios





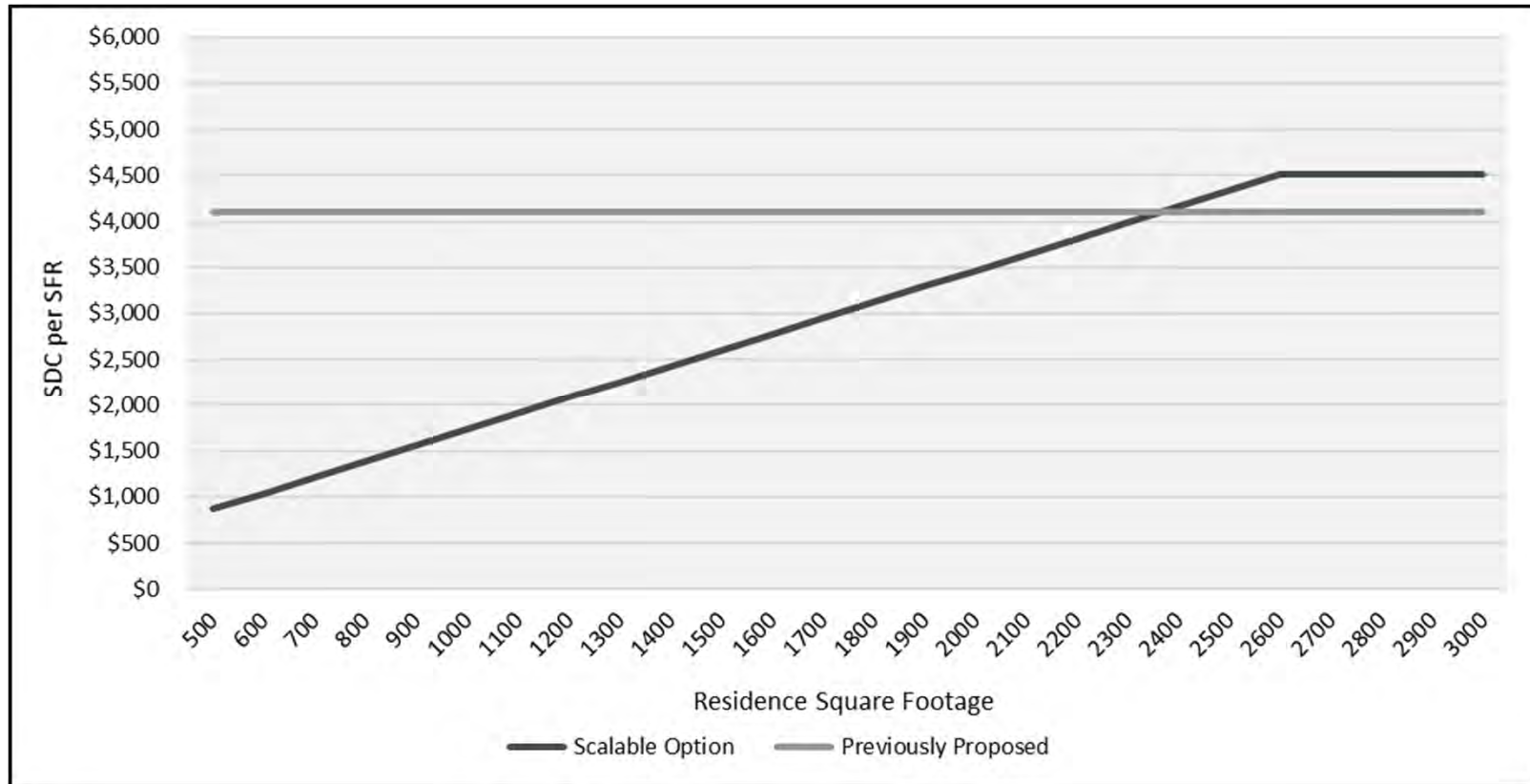
Agenda

- Originally Proposed SDCs
- Background on Scalable SDC Options
- **Scalable SDC Calculations**
 - » Sewer
 - » Stormwater
 - » Parks



Scalable Sewer SDC

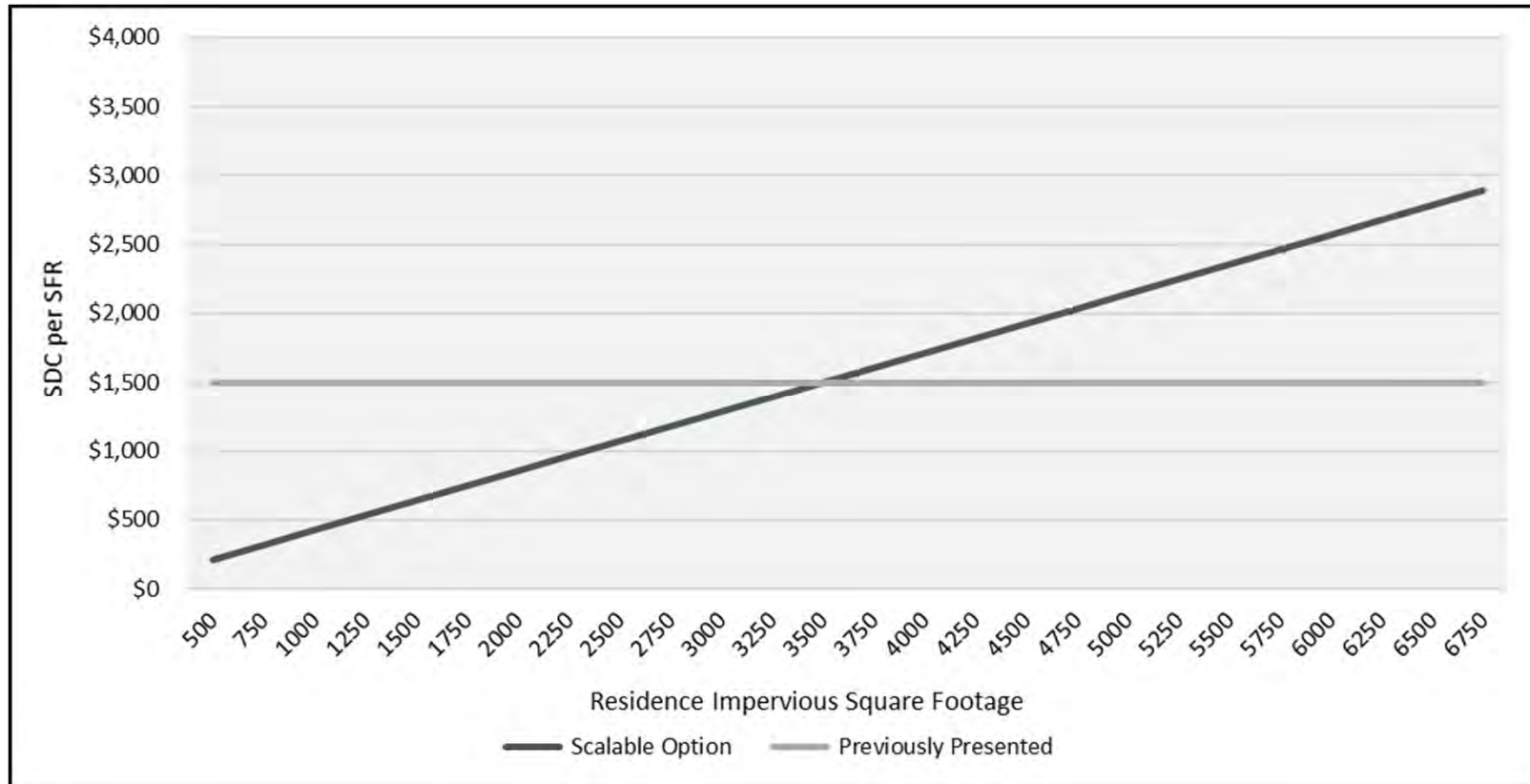
	Square Feet	SDC
SDC per square foot of single-family residence	1	\$1.73
Maximum SDC per single-family residence	2,605	\$4,513.83





Scalable Stormwater SDC

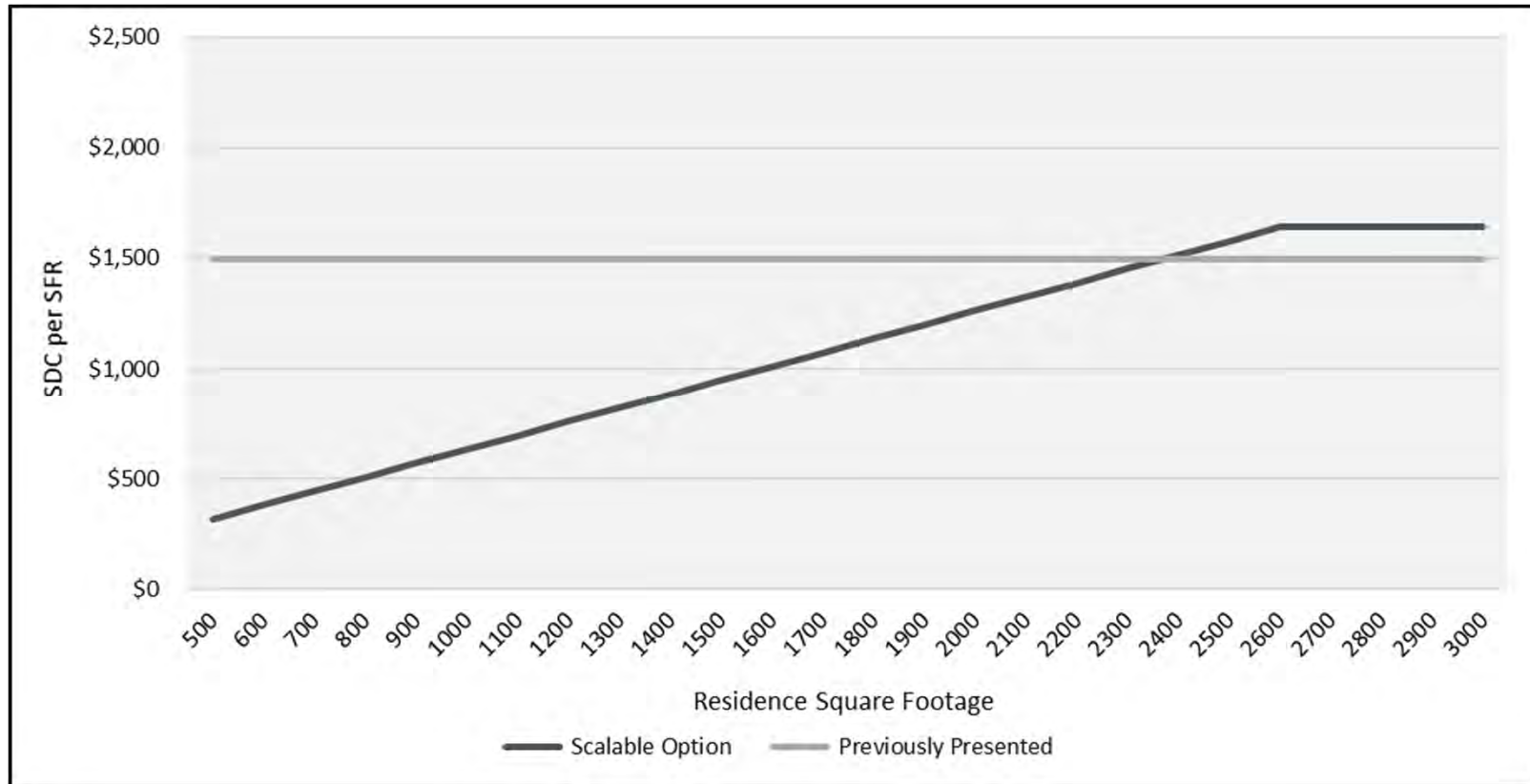
	Square Feet	SDC
Total SDC per sq. ft. of impervious surface	1	\$0.428
Total SDC per average SFR impervious	3,500	\$1,499.49





Scalable Parks SDC

	Square Feet	SDC
SDC per square foot of single-family residence	1	\$0.63
Maximum SDC per single-family residence	2,605	\$1,644.21





Comparative SFR SDCs

	Water	Sewer	Stormwater	Transportation	Parks	Total SDCs
Mosier (Proposed, 2,605 sf SFR*)	\$ 3,866	\$ 4,513	\$ 1,714	\$ 4,514	\$ 1,644	\$ 16,251
Mosier (Proposed, Average SFR)	3,866	4,104	1,499	4,514	1,495	15,478
Hood River	4,451	2,005	756	2,097	5,064	14,373
Statewide Average**	4,507	3,709	973	4,339	3,804	13,135
Mosier (Current)	4,499	5,718	931	-	1,495	12,643
Mosier (Proposed, 1,200 sf SFR***)	3,866	2,079	857	4,514	757	12,073
The Dalles	2,317	1,789	342	1,500	1,747	7,695

Source: League of Oregon Cities, 2020 System Development Charges Survey Report (table 11); Individual city government websites

*Assumes 4,000 sf of impervious surface area

**The "Total SDC" amount in this row is not equal to the sum of the other entries because not every city charges every SDC

***Assumes 2,000 sf of impervious surface area



Next Steps

- Consider immediate adoption of water and transportation SDC methodologies and proposed charges
- Issue a new 90-day notice for the scaled sewer, stormwater, and parks SDC options
- Adopt scaled sewer, stormwater, and parks SDCs at noticed public hearing

Thank you! Questions?

John Ghilarducci – Managing Principal
(425) 336-1865
JohnG@fcsgroup.com

www.fcsgroup.com



**BEFORE THE CITY COUNCIL
FOR THE CITY OF MOSIER, OREGON**

Resolution No. 2022- 03

**A Resolution Adopting an Updated Methodology for Water System
Development Charges and Establishing a Transportation System
Development Charge**

WHEREAS, the Mosier City Council under the authority of ORS 223.297 to 223.314 has adopted an ordinance providing for the establishment and collection of system development charges for the City’s water, sewer, stormwater, transportation, and parks systems, to provide equitable funding for the orderly growth and development of capital improvements in these five areas;

WHEREAS, the Mosier City Council, by resolution, may adopt changes to the methodology for calculating system development charges;

WHEREAS, the Mosier City Council held public hearings on September 22, 2021 and on November 17, 2021, and, pursuant to ORS 223.304(7), a report containing the methodology supporting updated system development charges was mailed to interested persons at least 90 days prior to the first public hearing, and was made available to the public at least 60 days prior to that public hearing;

WHEREAS, the Mosier City Council took public comment at the hearings, considered the updated methodology report, and finds it in the City’s best interests to adopt the updates as presented in the report set forth hereto and adopted herein;

NOW, THEREFORE, BE IT RESOLVED BY THE MOSIER CITY COUNCIL:

Section 1. Adoption of Water and Transportation System Development Charge Methodologies. The City Council hereby adopts the methodology report titled, “Water and Transportation System Development Charges Update,” dated January 25, 2022 (the “Water and Transportation SDC Report”), which report is attached hereto as **Exhibit A** and incorporated herein by this reference. The adoption of the Water and Transportation SDC Report includes the adoption of all assumptions, conclusions, capital improvement project lists, and rate schedules included therein.

Section 2. Adoption of Water System Development Charges. The water system development charges fee schedule, as identified in the Water and Transportation SDC Report, is hereby adopted.

Section 3. **Adoption of Transportation System Development Charges.** The transportation system development charges fee schedule, as identified in the Water and Transportation SDC Report, is hereby adopted.

Section 4. **Effect on Previously Adopted Fees.** This Resolution supersedes and replaces any and all previously adopted system development charge methodologies and fee schedules for the system development charges adopted herein.

Section 5: **Effective Date.** The Water and Transportation SDC Report and the system development charges adopted herein shall take effect immediately upon the date of adoption of this Resolution, and shall remain in effect until superseded or repealed by action of the City Council.

INTRODUCED AND ADOPTED this 16th day of February 2022, by the Mosier City Council:

By: _____ Title: _____

Attest: By: _____ Title: _____

Exhibit A

City of Mosier

WATER AND TRANSPORTATION SYSTEM DEVELOPMENT CHARGES UPDATE

Final Report
January 25, 2022

Washington

7525 166th Avenue NE, Ste. D215
Redmond, WA 98052
425.867.1802

Oregon

5335 Meadows Road, Ste 330
Lake Oswego, OR 97035
503.841.6543

Colorado

PO Box 19114
Boulder, CO 80301-9998
719.284.9168

www.fcsgroup.com

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FCS GROUP
Solutions-Oriented Consulting

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Section I. INTRODUCTION

This section describes the project scope and policy context upon which the body of this report is based.

I.A. PROJECT

The City of Mosier (City) provides a variety of services to its residences, including water, sewer, stormwater, parks, and transportation. The City imposes system development charges (SDCs) to recover eligible infrastructure costs and provide partial funding for the capital needs of four of these five different systems; it does not currently charge a transportation SDC. The existing SDCs are charged to all new developments within the City's boundaries. For a typical single-family home, the current SDCs are \$4,499 for water, \$5,718 for sewer, \$931 for stormwater, and \$1,495 for parks.

In 2019, the City engaged FCS GROUP to update the water system development charge. In 2021, the City engaged FCS GROUP to update its sewer, stormwater, and parks SDCs, as well as to calculate a new transportation SDC. Below is a table summarizing the current total SDC for a single-family residence, as well as the proposed total SDC and the statewide average.

Table 1: Comparison for the Total SDC for a Single-Family Residence

	Total SDC
Mosier (Proposed)	\$ 17,822
Statewide Average	13,135
Mosier (Current)	12,643

Source: League of Oregon Cities, 2020 System Development Charges Survey Report (table 11)

This report only addresses the water and transportation SDCs. The sewer, stormwater, and parks SDCs will be addressed in a future report.

I.B. POLICY

SDCs are enabled by state statute, authorized by local ordinance, and constrained by the United States Constitution.

I.B.1. State Statute

Oregon Revised Statutes (ORS) 223.297 to 223.314 enable local governments to establish SDCs, which are one-time fees on development that are paid at the time of development or redevelopment that creates additional demand for a city's facilities. SDCs are intended to recover a fair share of the cost of existing and planned facilities that provide capacity to serve future users (i.e., growth).

ORS 223.299 defines two types of SDC:

- A reimbursement fee that is designed to recover “costs associated with capital improvements already constructed, or under construction when the fee is established, for which the local government determines that capacity exists”
- An improvement fee that is designed to recover “costs associated with capital improvements to be constructed”

ORS 223.304(1) states, in part, that a reimbursement fee must be based on “the value of unused capacity available to future system users or the cost of existing facilities” and must account for prior contributions by existing users and any gifted or grant-funded facilities. The calculation must “promote the objective of future system users contributing no more than an equitable share to the cost of existing facilities.” A reimbursement fee may be spent on any capital improvement related to the system for which it is being charged (whether cash-financed or debt-financed).

ORS 223.304(2) states, in part, that an improvement fee must be calculated to include only the cost of projected capital improvements needed to increase system capacity for future users. In other words, the cost of planned projects that correct existing deficiencies or that do not otherwise increase capacity for future users may not be included in the improvement fee calculation. An improvement fee may be spent only on capital improvements (or portions thereof) that increase the capacity of the system for which it is being charged (whether cash-financed or debt-financed).

In addition to the reimbursement and improvement fees, ORS 223.307(5) states, in part, that “system development charge revenues may be expended on the costs of complying” with state statutes concerning SDCs, including “the costs of developing system development charge methodologies and providing an annual accounting of system development charge expenditures.”

I.B.2. Local Ordinance

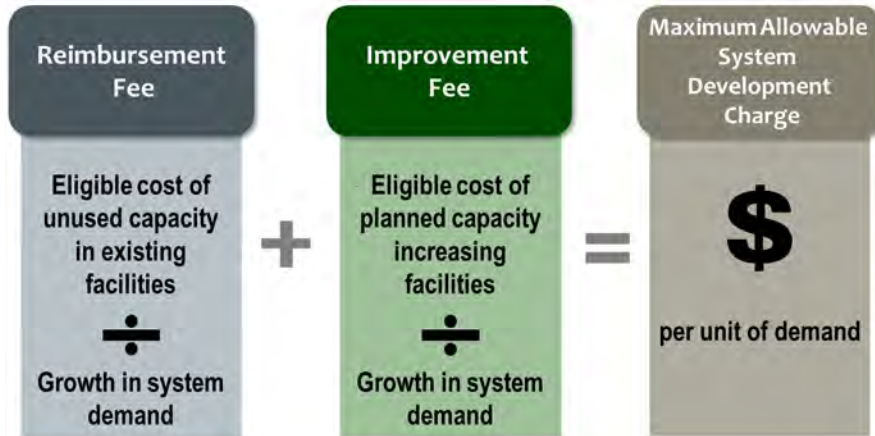
The City's code (chapter 3.05) authorizes and governs the imposition and expenditure of SDCs in the City.

I.B.3. United States Constitution

The United States Supreme Court has determined that SDCs, impact fees, or other exactions that comply with state and/or local law may still violate the United States Constitution if they are not proportionate to the impact of the development. The SDCs calculated in this report are designed to meet all constitutional and statutory requirements.

I.C. SDC BACKGROUND

In general, SDCs are calculated by adding a reimbursement fee component (if applicable) and an improvement fee component—both with potential adjustments. Each component is calculated by dividing the eligible cost by growth in units of demand. The unit of demand becomes the basis of the charge. Below is an illustration of this calculation:



The inputs used for calculating each component of an SDC are unique to each service. Our primary concern is that the growth in the denominator matches the growth assumed in the development of the project list. This may lead to growth or other assumptions differing among services.

The calculations for water and transportation SDCs are detailed in the following sections.

Section II. WATER SDC

This section provides the detailed calculations of the maximum allowable water SDC.

II.A. GROWTH

The calculation of projected growth begins with defining the units by which current and future demand will be measured. Then, using the best available data, we quantify the current level of demand and estimate a future level of demand. The difference between the current level and the future level is the growth in demand that will serve as the denominator in the SDC calculations.

II.A.1. Unit of Measurement

A good unit of measurement allows an agency to quantify the incremental demand of development or redevelopment that creates additional demand for water facilities. A great unit of measurement allows an agency to distinguish different levels of demand added by different kinds of development or redevelopment.

For water SDCs, the meter size necessary for a development is broadly used as a measure of its potential water demand. In order to compare meters and calculate the total demand of the system, meters are often compared by their flow rates and measured by their resulting meter capacity equivalents (MCEs). In this system, the smallest meter employed by the City has one MCE, and every larger meter has a larger number of MCEs based on their relative flow rates.

Currently, the City charges its water SDC using the MCE method. Flow rates are based on the American Water Work Association's (AWWA) flow rates assuming a 5/8" meter base. This method is also used for this water SDC calculation.

II.A.2. Growth in Demand

The City had 270 MCEs and 310 equivalent residential units of water demand (ERUs) as of 2020. According to the water system master plan, the water system will have 583 ERUs at buildout. If MCEs grow at the same rate as population, there will be 507 MCEs at buildout, which means there will be a growth of 237 MCEs.

These calculations are summarized in **Table 2** below. The growth of 237 MCEs will be the denominator for the SDC calculation.

Table 2: Growth in MCEs for the Water SDC Calculation

	2020	Buildout	Growth
ERUs	310	583	273
Meter Equivalents	270	507	237

Source: City staff, 2016 Water System Plan

On occasion, a city will separate out SDC cost bases for different locations. In the City’s case, a separate improvement fee has been charged to new developments in the Mosier Bluffs area to capture the cost for a storage tank that only benefits that area. Mosier Bluffs is expected to add 18 MCEs between now and buildout, which will be important to recall when calculating the reimbursement fee for that area.

II.B. IMPROVEMENT FEE

An improvement fee is the eligible cost of planned projects per unit of growth that such projects will serve. Since we have already calculated growth (denominator) above, we will focus here on the improvement fee cost basis (numerator).

II.B.1. Eligibility

A project’s eligible cost is the product of its total cost and its eligibility percentage. The eligibility percentage represents the portion of the project that creates capacity for future users. Where possible, specific details about a project can provide an eligibility percentage.

The eligibility percentages for projects on the water SDC list were taken from the 2016 Water System Plan. Specifically, the eligibility for the 3rd Ave. Steel Pipeline Replacement Project was taken from Section 6.5 of that plan, and the eligibility for the Well No. 5 Project was taken from Worksheet 5-1.

II.B.2. Improvement Fee Cost Basis

Table 3 below shows all the projects in the water system improvement fee cost basis. The eligibility for each project is shown in the SDC Eligibility column, and the SDC-Eligible Costs column shows that full amount of the improvement fee cost basis is \$556,658.

Table 3: Water SDC Improvement Fee Cost Basis

Project	Timing	Total Cost	Outside Funding	SDC Eligibility	SDC-Eligible Costs
3rd Ave. Steel Pipeline Replacement	2029	\$ 80,839	\$ -	0.0%	\$ -
Well No. 5 Including Telemetry	2021	1,199,806	479,923	46.4%	556,658
Total		\$ 1,280,645	\$ 479,923		\$ 556,658

Source: City staff, 2016 Water System Plan Section 6.5 and Worksheet 5-1

II.C. REIMBURSEMENT FEE

A reimbursement fee is the eligible cost of the water system facilities available for future users per unit of growth that such facilities will serve. Since growth was calculated above, we will focus on the eligible cost of the water facilities available for future users. That is, we will focus on the cost of reimbursable water system facilities.

On occasion, a city will separate out SDC cost bases for different locations. In the City’s case, a separate improvement fee has been charged to new developments in the Mosier Bluffs area to capture the cost for a storage tank that only benefits Mosier Bluffs. As that tank is now completed, there is

reimbursable capacity for inclusion in a reimbursement fee. But, since that facility only benefits developments in Mosier Bluffs, the reimbursement fee can only be charged in that area.

However, there are some facilities that benefit the entire city that are eligible for inclusion in a reimbursement fee, which will be discussed first.

II.C.1. Reimbursement Fee Cost Basis for Citywide Facilities

According to the City, there are three water system facilities with capacity for future users. For two of these facilities, Well No. 4 (and distribution system) and Offsite Improvements for Tank No. 4, the original cost is shown in the first row of **Table 4** below. According to the 2016 Water System Plan, there is capacity remaining for these citywide assets and it is shown in the second row of the table below. Multiplying the first and the second rows results in the unadjusted reimbursable cost of both facilities shown in the third row. Because new developments will pay for outstanding debt in their water rates, outstanding debt must be removed from the cost basis to the extent that the debt provided capacity for those users. That amount is shown in row four below. After subtracting that amount from the unadjusted reimbursable costs, the reimbursable amount for those assets is shown in row five.

In addition, the City recently spent SDC improvement fees on the Eastside Booster Pump Station (BPS). Because SDC improvement fees can only be spent on facilities that provide capacity for future users, the amount spent can be included in the SDC. That \$70,000 amount is shown in row six of **Table 4**. The final reimbursement fee cost basis is \$464,849, as shown in the table's final row.

Table 4: Reimbursement Fee Cost Basis Citywide Water System Facilities

	Well No. 4 and Distribution System	Tank No. 4 Offsite Improvements	Total
1 Original Cost	\$ 1,587,369	116,408	\$ 1,703,777
2 Capacity Remaining*	46.4%	46.8%	
3 Unadjusted Reimbursable Cost	\$ 736,471	\$ 54,436	\$ 790,907
4 Un-reimbursable Outstanding Debt	396,058	-	396,058
5 Adjusted Reimbursable Cost	\$ 340,413	\$ 54,436	\$ 394,849
6 Reimbursable Cost for Eastside BPS			70,000
7 Reimbursement Fee Cost Basis			\$ 464,849

Source: City staff, 2016 Water System Plan Worksheet 5-1

*Total capacity taken from Worksheet 5-1 of the 2016 Water System Plan

II.C.2. Reimbursement Fee Cost Basis Mosier Bluffs Facilities

In addition to the reimbursement fee cost basis calculated in the previous section, a small amount of reimbursable cost exists for Storage Tank No. 4, a storage tank designed to specifically benefit the residents of Mosier Bluffs. According to the City, the original cost of the tank was \$125,000. In addition, in 2020 there were 18 available ERUs in Mosier Bluffs, out of a total capacity of 33. This means that 54.55 percent of Storage Tank No. 4 is available for future users, or \$68,182 of the original cost. Because there are no other adjustments to be made, that is also the total reimbursable amount for Storage Tank No. 4.

II.D. CALCULATED SDC

The section applies some adjustments to the improvement and reimbursement fee cost bases, and then divides that by the expected growth. This is done for both the citywide facilities and for the facilities local to Mosier Bluffs. The result is a total SDC per MCE for both citywide and Mosier Bluffs developments, which can then be applied to each meter size using the City’s flow factors.

II.D.1. Adjustments

No adjustments for outstanding reimbursement fee fund balance are necessary because the City currently charges only an improvement fee. However, the City estimates that \$140,558 should be removed from the improvement fee cost basis to account for outstanding fund balance. In addition, \$35,840 should be added to the cost basis to collect the compliance costs allowed by statute.

No adjustments are necessary for the Mosier Bluffs reimbursement fee.

II.D.2. Calculated SDC

Table 5 below summarizes the calculation of the citywide water SDC. As shown, the maximum allowable SDC is \$3,866 per MCE.

Table 5: Calculated Water SDC

Cost Basis:	
Improvement Fee	\$ 416,100
Reimbursement Fee	464,849
Compliance Costs	35,840
Total Cost Basis	\$ 916,790
Growth in MCEs	237
Improvement Fee per MCE	\$ 1,754
Reimbursement Fee per MCE	1,960
Compliance Fee per MCE	151
Total SDC per MCE	\$ 3,866

Source: City staff, previous tables.

In addition, **Table 6** shows the calculated SDC for the Mosier Bluffs area. This SDC is only to be charged in the Mosier Bluffs area. However, because Mosier Bluffs also benefits from the citywide facilities, new developments in the Mosier Bluffs area should also be charged the calculated SDC shown in **Table 5**.

Table 6: Calculated Water SDC for the Mosier Bluffs Area

Cost Basis:	
Reimbursement Fee	\$ 68,182
Total Cost Basis	\$ 68,182
Growth in MCEs	18
Reimbursement Fee per MCE	\$ 3,788
Total SDC per MCE	\$ 3,788

Source: City staff, previous tables.

Table 7 below shows the full water SDC fee schedule and the additive Mosier Bluffs charge.

Table 7: Water SDC Fee Schedule

Citywide							
Meter	Equivalency Factor	Reimbursement Fee	Improvement Fee	Compliance Fee	Total SDC		
3/4-inch	1.00	\$ 1,960	\$ 1,754	\$ 151	\$ 3,866		
1-inch	2.50	4,900	4,386	378	9,664		
1 1/2-inch	5.00	9,800	8,772	756	19,328		
2-inch	8.00	15,680	14,035	1,209	30,924		
3-inch	16.00	31,360	28,071	2,418	61,848		
4-inch	25.00	48,999	43,861	3,778	96,638		
6-inch	50.00	97,999	87,722	7,556	193,276		
8-inch	80.00	156,798	140,355	12,089	309,242		

Mosier Bluffs							
Meter	Equivalency Factor	Reimbursement Fee	Improvement Fee	Compliance Fee	Total SDC		
3/4-inch	1.00	\$ 3,788	\$ -	\$ -	\$ 3,788		
1-inch	2.50	9,470	-	-	9,470		
1 1/2-inch	5.00	18,939	-	-	18,939		
2-inch	8.00	30,303	-	-	30,303		
3-inch	16.00	60,606	-	-	60,606		
4-inch	25.00	94,697	-	-	94,697		
6-inch	50.00	189,394	-	-	189,394		
8-inch	80.00	303,030	-	-	303,030		

Section III. TRANSPORTATION SDC

This section provides the detailed calculations of the maximum allowable transportation SDC.

III.A. GROWTH

The calculation of projected growth begins with defining the units by which current and future demand will be measured. Then, using the best available data, we quantify the current level of demand and estimate a future level of demand. The difference between the current level and the future level is the growth in demand that will serve as the denominator in the SDC calculations.

III.A.1. Unit of Measurement

Once again, a good unit of measurement allows an agency to quantify the incremental demand of development or redevelopment that creates additional demand for transportation facilities. A great unit of measurement allows an agency to distinguish different levels of demand added by different kinds of development or redevelopment.

For transportation SDCs, a common unit of growth is the PM peak hour person trip end. A PM peak hour person trip end represents one person departing or arriving at a particular property during the peak travel time of the afternoon by any means. For example, a vehicle with three passengers arriving at a property would generate three person trip ends, and a bike with one passenger would generate one trip end.

III.A.2. Growth in Demand

The City recently finished its transportation system plan (TSP). However, estimating person trip ends was not a part of its planning process. To estimate person trip ends, FCS GROUP contacted the Oregon Department of Transportation (ODOT) to access their *Oregon Small Urban Models* (OSUM). Through coordination with ODOT and use of their OSUM model for The Dalles (a comparable city to Mosier), PM peak hour vehicle trip ends were calculated for Mosier as of 2019. Then, using the *National Household Travel Survey* for 2017 conducted by the U.S. Department of Transportation, the PM peak hour vehicle trip end total was converted to person trip ends. Finally, using population estimates from the TSP, the growth in PM peak hour person trip ends was calculated.

These numbers are summarized in **Table 8** below. The growth of 87 PM peak hour person trip ends will be the denominator for the SDC calculation, and the growth share of 18.86 percent will be useful when calculating the eligibility of selected projects on the project list.

Table 8: Growth in PM Peak Hour Person Trip Ends for the Transportation SDC

	2019	2020	2040	Growth	Growth Share
Population	455	475	586	111	18.86%
PM Peak Hour Vehicle Trip Ends	213	223	275	52	18.86%
PM Peak Hour Person Trip Ends	359	375	463	87	18.86%

Source: FCS GROUP, Oregon Department of Transportation, and US Census Bureau, 2019 ACS 5-Year Estimates (2019 trip ends and population); City staff (population estimates); U.S. Department of Transportation, 2017 National Household Travel Survey (person trip conversion factor of 1.68).

III.B. IMPROVEMENT FEE

An improvement fee is the eligible cost of planned projects per unit of growth that such projects will serve. Since we have already calculated growth (denominator) above, we will focus here on the improvement fee cost basis (numerator).

III.B.1. Eligibility

A project’s eligible cost is the product of its total cost and its eligibility percentage. The eligibility percentage represents the portion of the project that creates capacity for future users. Where possible, specific details about a project can provide an eligibility percentage. However, when this is not possible, projects can still be sorted into three broad categories.

The first category is for projects that do not provide capacity for future users. Such projects may be purely replacement projects, or they may be solving a deficiency in the transportation system. Projects in this category are zero percent eligible. The second category is for projects that are purely for future users, such as when new road is laid to provide for a new development. These projects are 100 percent eligible. Finally, projects that provide capacity that will be roughly equally shared between current and future users are eligible at the growth share percentage discussed in **Section III.A**, or 18.86 percent.

Projects for consideration in the improvement fee cost basis were all sorted into these three categories.

III.B.2. Improvement Fee Cost Basis

Projects in the improvement fee cost basis were taken from the City’s 2019 Transportation System Plan. More detailed descriptions of each project are provided there.

Table 9: Transportation SDC Improvement Fee Cost Basis below shows all the projects in the transportation system improvement fee cost basis. The outside funding percentage is shown in the Outside Funding (%) column. The eligibility for each project is shown in the SDC Eligibility column, and the SDC-Eligible Cost column shows that full amount of the improvement fee cost basis is \$200,530. Note that this column is calculated by first removing outside funding from the total cost of each project, and then multiplying that cost by the eligibility shown in the SDC Eligibility column.

Table 9: Transportation SDC Improvement Fee Cost Basis

Project ID	Priority	Timing	Total Cost	Outside		SDC-Eligible Cost
				Funding (%)	SDC Eligibility	
A01-A03	Medium	2033-2042	691,500	75%	19%	32,608
B01.A	High	Unscheduled	124,000	0%	0%	-
B01.B	High	Unscheduled	800	0%	0%	-
B01.C	High	Unscheduled	800	0%	0%	-
B02	Low	Unscheduled	16,500	0%	0%	-
B03	Low	Unscheduled	16,500	0%	0%	-
B04	High	Unscheduled	84,000	0%	0%	-
B05.A	High	Unscheduled	16,500	0%	0%	-
B05.B	Low	Unscheduled	248,000	0%	0%	-
B05.C	High	Unscheduled	107,000	0%	0%	-
B05.D	High	Unscheduled	42,000	0%	0%	-
B06.A	High	Unscheduled	49,500	0%	0%	-
B06.B	High	Unscheduled	1,500	0%	0%	-
B07	High	Unscheduled	32,000	0%	0%	-
B08.A	High	Unscheduled	49,500	0%	0%	-
B08.B	High	Unscheduled	1,500	0%	0%	-
B09.A	High	Unscheduled	49,500	0%	0%	-
B09.B	High	Unscheduled	1,500	0%	0%	-
B10	High	Unscheduled	83,000	0%	0%	-
B11.A	High	Unscheduled	8,300	0%	0%	-
B11.B	High	Unscheduled	1,500	0%	0%	-
B11.C	High	Unscheduled	4,500	0%	0%	-
B11.D	High	Unscheduled	495,000	0%	0%	-
B11.E	Medium	Unscheduled	N/A	0%	0%	-
B12	Low	Unscheduled	6,600	0%	0%	-
B13	Medium	2028-2032	38,000	0%	19%	7,168
B14.A	Medium	2028-2032	165,000	75%	19%	7,781
B14.B	Medium	Unscheduled	62,000	0%	0%	-
B15	Medium	2028-2032	38,000	0%	19%	7,168
C01	Medium	Unscheduled	29,700	0%	0%	-
C02	Medium	2028-2032	231,000	75%	19%	10,893
C03	High	Unscheduled	6,600	0%	0%	-
C04.A	Medium	Unscheduled	3,300	0%	0%	-
C04.B	Medium	Unscheduled	1,500	0%	0%	-
C04.C	High	2022-2027	1,155,000	90%	19%	21,786
C05.A	High	Unscheduled	3,300	0%	0%	-
C05.B	High	Unscheduled	6,600	0%	0%	-
C05.C	Medium	Unscheduled	8,300	0%	0%	-
D01	Low	Unscheduled	396,000	0%	0%	-
D02	Low	Unscheduled	50,000	0%	0%	-
D03	Low	Unscheduled	6,600	0%	0%	-
E01.A	High	2022-2027	40,000	0%	19%	7,545
E01.B	Medium	2028-2032	106,000	0%	19%	19,994
E01.C	Medium	Unscheduled	206,000	0%	0%	-
E01.D	Medium	Unscheduled	990,000	0%	0%	-
E02.A	High	Unscheduled	1,200	0%	0%	-
E02.B	High	Unscheduled	500	0%	0%	-
E03	High	Unscheduled	9,100	0%	0%	-
E04.A	High	Unscheduled	4,100	0%	0%	-
E04.B	High	Unscheduled	2,500	0%	0%	-
E04.C	Medium	2033-2042	1,815,000	75%	19%	85,588
Total			\$ 7,506,800			\$ 200,530

Source: City staff, 2019 Transportation System Plan.

III.C. CALCULATED SDC

There is no capital investment in the City’s existing streets system eligible for reimbursement. In the absence of reimbursable capacity, the improvement fee cost basis is the only basis needed for finishing the transportation SDC calculation.

The remainder of this section applies some adjustments to the improvement fee cost basis, and then divides that by the expected growth. The result is a total SDC per PM peak hour person trip end, which can then be applied to each land use using *Trip Generation*, 10th edition, published by the Institute of Transportation Engineers.

III.C.1. Adjustments

No adjustments for outstanding improvement fee fund balance are necessary because the City does not currently charge a transportation SDC. However, the City estimates that \$35,840 should be added to the cost basis to collect the compliance costs allowed by statute.

III.C.2. Calculated SDC

Table 10 below summarizes the calculation of the transportation SDC. As shown, the full SDC is \$2,708 per PM peak hour person trip end.

Table 10: Calculated Transportation SDC

Cost Basis:	
Improvement Fee	\$ 200,530
Compliance Costs	35,840
Total Cost Basis	\$ 236,370
Growth in PM Peak Hour Person Trip Ends	87
Improvement Fee per PM Peak Hour Person Trip End	\$ 2,297
Compliance Fee per PM Peak Hour Person Trip End	411
Total SDC per PM Peak Hour Person Trip End	\$ 2,708

Source: City staff, previous tables

Table 11 below shows the transportation SDC schedule for select land uses. The full schedule is provided in **Table 12**. Questions about individual land uses should be addressed by consulting the latest edition of the *Trip Generation*, published by the Institute of Transportation Engineers. Please note that the PM peak hour person trip ends are adjusted from the vehicle trip data provided in the manual.

Table 11: Transportation SDC Fee Schedule for Selected Residential Land Uses

	ITE		PM Peak			New PM		Transportation SDC
			Hour Vehicle Trip Ends	New Trip Conversion Factor	Person Trip Conversion Factor	Peak Hour Person Trip Ends		
							Code	
Single-Family Detached Housing	210	Dwelling Units	0.99	1.00	1.68	1.67	\$ 4,514	
Multifamily Housing (Low-Rise)	220	Dwelling Units	0.56	1.00	0.95	0.53	\$ 1,435	
Multifamily Housing (Mid-Rise)	221	Dwelling Units	0.44	1.00	1.18	0.52	\$ 1,408	
Mobile Home Park	240	Dwelling Units	0.46	1.00	1.68	0.77	\$ 2,097	

Source : ITE, Trip Generation Manual, 10th edition; U.S. Department of Transportation, 2017 National Household Travel Survey (person trip conversion factor of 1.68). Abbreviations: ITE = Institute of Transportation Engineers.

Table 12: Full Transportation SDC Fee Schedule

Land Use	ITE		PM Peak			New PM		Transportation SDC
			Hour Vehicle Trip Ends	New Trip Conversion Factor	Person Trip Conversion Factor	Peak Hour Person Trip Ends		
							Code	
General Light Industrial	110	1,000 SFGFA	0.63	1.00	1.68	1.06	\$ 2,873	
Industrial Park	130	1,000 SFGFA	0.40	1.00	1.68	0.67	\$ 1,824	
Manufacturing	140	1,000 SFGFA	0.67	1.00	1.68	1.13	\$ 3,055	
Warehousing	150	1,000 SFGFA	0.19	1.00	1.68	0.32	\$ 866	
Mini-Warehouse	151	1,000 SFGFA	0.17	1.00	1.68	0.29	\$ 775	
Utility	170	1,000 SFGFA	2.27	1.00	1.68	3.82	\$ 10,351	
Specialty Trade Contractor	180	1,000 SFGFA	1.97	1.00	1.68	3.32	\$ 8,983	
Single-Family Detached Housing	210	Dwelling Units	0.99	1.00	1.68	1.67	\$ 4,514	
Multifamily Housing (Low-Rise)	220	Dwelling Units	0.56	1.00	0.95	0.53	\$ 1,435	
Multifamily Housing (Mid-Rise)	221	Dwelling Units	0.44	1.00	1.18	0.52	\$ 1,408	
Mid-Rise Residential with 1st-Floor Commercial	231	Occupied Dwelling Unit	0.37	1.00	5.14	1.90	\$ 5,145	
Mobile Home Park	240	Dwelling Units	0.46	1.00	1.68	0.77	\$ 2,097	
Senior Adult Housing - Detached	251	Dwelling Units	0.30	1.00	1.68	0.51	\$ 1,368	
Senior Adult Housing - Attached	252	Dwelling Units	0.26	1.00	1.68	0.44	\$ 1,186	
Congregate Care Facility	253	Dwelling Units	0.18	1.00	2.44	0.44	\$ 1,192	
Assisted Living	254	1,000 SFGFA	0.48	1.00	1.68	0.81	\$ 2,189	
Recreational Homes	260	Dwelling Units	0.28	1.00	1.68	0.47	\$ 1,277	
Timeshare	265	Dwelling Units	0.63	1.00	1.68	1.06	\$ 2,873	
Residential Planned Unit Development	270	Dwelling Units	0.69	1.00	1.68	1.16	\$ 3,146	
Hotel	310	Rooms	0.60	1.00	1.68	1.01	\$ 2,736	
Motel	320	Rooms	0.38	1.00	1.68	0.64	\$ 1,733	
Campground/Recreational Vehicle Park	416	Acres	0.98	1.00	1.68	1.65	\$ 4,469	
Multipurpose Recreational Facility	435	1,000 SFGFA	3.58	1.00	1.68	6.03	\$ 16,324	
Multiplex Movie Theater	445	Movie Screens	13.73	1.00	1.68	23.12	\$ 62,605	
Ice Skating Rink	465	1,000 SFGFA	1.33	1.00	1.68	2.24	\$ 6,064	
Soccer Complex	488	Fields	16.43	1.00	1.68	27.66	\$ 74,916	
Health/Fitness Club	492	1,000 SFGFA	3.45	1.00	1.68	5.81	\$ 15,731	
Recreational Community Center	495	1,000 SFGFA	2.31	1.00	1.51	3.49	\$ 9,451	
Elementary School	520	1,000 SFGFA	1.37	1.00	1.68	2.31	\$ 6,247	
Middle School/Junior High School	522	1,000 SFGFA	1.19	1.00	1.68	2.00	\$ 5,426	
High School	530	1,000 SFGFA	0.97	1.00	1.68	1.63	\$ 4,423	
Junior/Community College	540	1,000 SFGFA	1.86	1.00	1.68	3.13	\$ 8,481	
Church	560	1,000 SFGFA	0.49	1.00	1.68	0.83	\$ 2,234	
Day Care Center	565	1,000 SFGFA	11.12	1.00	1.68	18.72	\$ 50,704	
Prison	571	Beds	0.05	1.00	1.68	0.08	\$ 228	
Fire and Rescue Station	575	1,000 SFGFA	0.48	1.00	1.68	0.81	\$ 2,189	
Library	590	1,000 SFGFA	8.16	1.00	1.68	13.74	\$ 37,207	
Hospital	610	1,000 SFGFA	0.97	1.00	1.67	1.62	\$ 4,387	
Nursing Home	620	1,000 SFGFA	0.59	1.00	1.68	0.99	\$ 2,690	
Clinic	630	1,000 SFGFA	3.28	1.00	2.48	8.15	\$ 22,071	
Animal Hospital/Veterinary Clinic	640	1,000 SFGFA	3.53	1.00	1.68	5.94	\$ 16,096	
General Office Building	710	1,000 SFGFA	1.15	1.00	1.30	1.50	\$ 4,062	

Land Use	ITE		PM Peak	New Trip	Person Trip	New PM	Transportation
	Code	Unit of Measure	Hour Vehicle Trip Ends	Conversion Factor	Conversion Factor	Peak Hour Person Trip Ends	
Small Office Building	712	1,000 SFGFA	2.45	1.00	1.68	4.13 \$	11,171
Single Tenant Office Building	715	1,000 SFGFA	1.71	1.00	1.68	2.88 \$	7,797
Medical-Dental Office Building	720	1,000 SFGFA	3.46	1.00	1.14	3.96 \$	10,724
Government Office Building	730	1,000 SFGFA	1.71	1.00	1.68	2.88 \$	7,797
United States Post Office	732	1,000 SFGFA	11.21	1.00	1.68	18.87 \$	51,114
Office Park	750	1,000 SFGFA	1.07	1.00	1.68	1.80 \$	4,879
Research and Development Center	760	1,000 SFGFA	0.49	1.00	1.45	0.71 \$	1,923
Business Park	770	1,000 SFGFA	0.42	1.00	1.68	0.71 \$	1,915
Tractor Supply Store	810	1,000 SFGFA	1.40	1.00	1.68	2.36 \$	6,384
Construction Equipment Rental Store	811	1,000 SFGFA	0.99	1.00	1.68	1.67 \$	4,514
Building Materials and Lumber Store	812	1,000 SFGFA	2.06	1.00	1.68	3.47 \$	9,393
Free-Standing Discount Superstore	813	1,000 SFGFA	4.33	0.71	1.68	5.18 \$	14,018
Variety Store	814	1,000 SFGFA	6.84	0.66	1.68	7.60 \$	20,584
Free-Standing Discount Store	815	1,000 SFGFA	4.83	0.83	1.68	6.75 \$	18,279
Hardware/Paint Store	816	1,000 SFGFA	2.68	0.74	1.68	3.34 \$	9,043
Nursery (Garden Center)	817	1,000 SFGFA	6.94	1.00	1.68	11.69 \$	31,644
Nursery (Wholesale)	818	1,000 SFGFA	5.18	1.00	1.68	8.72 \$	23,619
Shopping Center	820	1,000 SFGFA	3.81	0.66	2.03	5.12 \$	13,852
Factory Outlet Center	823	1,000 SFGFA	2.29	1.00	1.68	3.86 \$	10,442
Automobile Sales (New)	840	1,000 SFGFA	2.43	1.00	2.11	5.13 \$	13,892
Automobile Sales (Used)	841	1,000 SFGFA	3.75	1.00	1.68	6.31 \$	17,099
Recreational Vehicle Sales	842	1,000 SFGFA	0.77	1.00	1.68	1.30 \$	3,511
Automobile Parts Sales	843	1,000 SFGFA	4.91	0.57	1.68	4.71 \$	12,761
Tire Store	848	1,000 SFGFA	3.98	0.72	1.68	4.82 \$	13,066
Tire Superstore	849	1,000 SFGFA	2.11	1.00	1.68	3.55 \$	9,621
Supermarket	850	1,000 SFGFA	9.24	0.64	2.88	17.05 \$	46,171
Convenience Market	851	1,000 SFGFA	49.11	0.49	1.76	42.38 \$	114,768
Convenience Market with Gasoline Pumps	853	1,000 SFGFA	49.29	0.34	1.68	28.22 \$	76,415
Discount Supermarket	854	1,000 SFGFA	8.38	0.79	1.68	11.15 \$	30,186
Discount Club	857	1,000 SFGFA	4.18	0.63	1.68	4.43 \$	12,008
Farmers Market	858	Acres	179.84	1.00	2.16	389.09 \$	1,053,676
Wholesale Market	860	1,000 SFGFA	1.76	1.00	1.68	2.96 \$	8,025
Sporting Goods Superstore	861	1,000 SFGFA	2.02	1.00	1.68	3.40 \$	9,211
Home Improvement Superstore	862	1,000 SFGFA	2.33	0.58	2.03	2.74 \$	7,429
Electronics Superstore	863	1,000 SFGFA	4.26	0.60	1.68	4.30 \$	11,655
Toy/Children's Superstore	864	1,000 SFGFA	5.00	1.00	1.68	8.42 \$	22,799
Baby Superstore	865	1,000 SFGFA	1.82	1.00	1.68	3.06 \$	8,299
Pet Supply Superstore	866	1,000 SFGFA	3.55	1.00	1.68	5.98 \$	16,187
Office Supply Superstore	867	1,000 SFGFA	2.77	1.00	1.68	4.66 \$	12,630
Book Superstore	868	1,000 SFGFA	15.83	1.00	1.68	26.65 \$	72,180
Discount Home Furnishing Superstore	869	1,000 SFGFA	1.57	1.00	1.68	2.64 \$	7,159
Bed and Linen Superstore	872	1,000 SFGFA	2.22	1.00	1.68	3.74 \$	10,123
Department Store	875	1,000 SFGFA	1.95	1.00	1.68	3.28 \$	8,891
Apparel Store	876	1,000 SFGFA	4.12	1.00	1.05	4.32 \$	11,699
Arts and Crafts Store	879	1,000 SFGFA	6.21	1.00	1.68	10.46 \$	28,316
Pharmacy/Drugstore without Drive-Through Window	880	1,000 SFGFA	8.51	0.47	3.15	12.59 \$	34,098
Pharmacy/Drugstore with Drive-Through Window	881	1,000 SFGFA	10.29	0.51	1.68	8.84 \$	23,929
Marijuana Dispensary	882	1,000 SFGFA	21.83	1.00	1.68	36.76 \$	99,539
Furniture Store	890	1,000 SFGFA	0.52	0.47	1.68	0.41 \$	1,114
Beverage Container Recycling Depot	895	1,000 SFGFA	10.10	1.00	1.68	17.01 \$	46,053
Medical Equipment Store	897	1,000 SFGFA	1.24	1.00	1.68	2.09 \$	5,654
Liquor Store	899	1,000 SFGFA	16.37	1.00	1.78	29.16 \$	78,967
Walk-in Bank	911	1,000 SFGFA	12.13	1.00	1.68	20.42 \$	55,309
Drive-in Bank	912	1,000 SFGFA	20.45	0.65	0.42	5.53 \$	14,962
Hair Salon	918	1,000 SFGFA	1.45	1.00	1.68	2.44 \$	6,612
Copy, Print, and Express Ship Store	920	1,000 SFGFA	7.42	1.00	1.68	12.49 \$	33,833
Drinking Place	925	1,000 SFGFA	11.36	1.00	1.68	19.13 \$	51,798
Food Cart Pod	926	Food Carts	3.08	1.00	1.68	5.19 \$	14,044
Fast Casual Restaurant	930	1,000 SFGFA	14.13	1.00	1.68	23.79 \$	64,429
Quality Restaurant	931	1,000 SFGFA	7.80	0.56	1.68	7.35 \$	19,917
High-Turnover (Sit-Down) Restaurant	932	1,000 SFGFA	9.77	0.57	1.99	11.06 \$	29,946

Land Use	ITE		PM Peak	New Trip	Person Trip	New PM	Transportation SDC
	Code	Unit of Measure	Hour Vehicle Trip Ends	Conversion Factor	Conversion Factor	Peak Hour Person Trip Ends	
Fast-Food Restaurant without Drive-Through Window	933	1,000 SFGFA	28.34	1.00	1.68	47.72 \$	129,223
Fast-Food Restaurant with Drive-Through Window	934	1,000 SFGFA	32.67	0.50	2.13	34.82 \$	94,294
Fast-Food Restaurant with Drive-Through Window and No Indoor Seating	935	1,000 SFGFA	42.65	1.00	1.68	71.81 \$	194,472
Coffee/Donut Shop without Drive-Through Window	936	1,000 SFGFA	36.31	1.00	2.18	79.09 \$	214,180
Coffee/Donut Shop with Drive-Through Window	937	1,000 SFGFA	43.38	1.00	0.69	29.97 \$	81,160
Coffee/Donut Shop with Drive-Through Window and No Indoor Seating	938	1,000 SFGFA	83.33	0.11	1.68	15.43 \$	41,796
Bread/Donut/Bagel Shop without Drive-Through Window	939	1,000 SFGFA	28.00	1.00	1.68	47.15 \$	127,672
Bread/Donut/Bagel Shop with Drive-Through Window	940	1,000 SFGFA	19.02	1.00	1.68	32.03 \$	86,726
Quick Lubrication Vehicle Shop	941	1,000 SFGFA	8.70	1.00	1.68	14.65 \$	39,670
Automobile Care Center	942	1,000 SFGFA	3.11	1.00	1.68	5.24 \$	14,181
Automobile Parts and Service Center	943	1,000 SFGFA	2.26	1.00	1.68	3.81 \$	10,305
Gasoline/Service Station	944	Vehicle Fueling Posi	14.03	0.58	1.68	13.70 \$	37,104
Gasoline/Service Station with Convenience Market	945	Vehicle Fueling Posi	13.99	0.44	1.68	10.36 \$	28,068
Self-Service Car Wash	947	Wash Stalls	5.54	1.00	1.68	9.33 \$	25,261
Automated Car Wash	948	Car Wash Tunnels	77.50	1.00	1.68	130.49 \$	353,378
Car Wash and Detail Center	949	Wash Stalls	13.60	1.00	1.68	22.90 \$	62,012
Truck Stop	950	Vehicle Fueling Posi	8.41	1.00	1.68	14.16 \$	38,347
Super Convenience Market/Gas Station	960	Vehicle Fueling Posi	22.96	1.00	1.68	38.66 \$	104,691
Winery	970	1,000 SFGFA	7.31	1.00	1.68	12.31 \$	33,332

Source : ITE, Trip Generation Manual, 10th edition; U.S. Department of Transportation, 2017 National Household Travel Survey (person trip conversion factor of 1.68). Abbreviations: ITE = Institute of Transportation Engineers.