

### Monday, October 9, 2023

4:00 p.m.

### Council Chambers, City Hall 333 Broadalbin Street SW Watch on YouTube: <u>https://www.youtube.com/user/cityofalbany</u>

Please help us get Albany's work done. Be respectful and refer to the rules of conduct posted by the main door to the Chambers and on the website.

- 1. Call to order and roll call
- 2. Business from the public
- 3. Cumberland Community Events Center Emma Eaton [Verbal] Information
- 4. Ziply Fiber Jessica Epley [Verbal] Information
- 5. Storm drainage SDC discussion Rob Emmons and Deb Galardi [Pages 3-22] Discussion
- 6. Street funding discussion Staci Belcastro [Pages 23-33] Discussion
- License to occupy Oak Street right-of-way Staci Belcastro [Pages 34-38] Discussion
- 8. Business from the council
- 9. City manager report
- 10. Recess to executive session to consider matters relating to the safety of the governing body, public body staff, volunteers, and public body facilities in accordance with ORS 192.660 (2)(o).
- 11. Reconvene
- 12. Adjournment



This meeting is accessible to the public via video connection. The location for in-person attendance is accessible to people with disabilities. If you have a disability that requires accommodation, please notify city staff at least 48 hours in advance of the meeting at: <a href="mailto:cityclerk@citycfalbany.net">cityclerk@citycfalbany.net</a>.

Testimony provided at the meeting is part of the public record. Meetings are recorded, capturing both inperson and virtual participation, and are posted on the City website.



TO:	Albany City Council
VIA:	Peter Troedsson, City Manager Chris Bailey, Public Works Director $C\beta$
FROM:	Robert Emmons, P.E., Assistant City Engineer
DATE:	September 28, 2023, for the October 9, 2023, City Council Work Session

SUBJECT: Storm Drainage System Development Charge

Relates to Strategic Plan theme: A Safe City, An Effective Government

#### **Action Requested:**

Staff requests City Council consider and provide direction for developing a new Storm Drainage System Development Charge (SDC).

#### **Discussion:**

Albany Municipal Code (AMC) 15.16, establishes the provisions for creating, maintaining, and implementing System Development Charges (SDC) as governed by Oregon Revised Statutes 223.297 – 223.314. Albany currently has SDCs for the Water, Wastewater, Transportation, and Parks' systems but does not have a storm drainage SDC.

At the July 10, 2023, council work session, staff presented details of the draft Storm Drainage SDC, reviewed the SDC adoption process, and asked for input on how to proceed on implementation of the storm drainage SDC. As a result, council directed staff to bring to a future meeting additional information on how the draft SDC was developed and examples of proposed SDC fees for various types of development. Since the July 10 work session, the Storm Drainage SDC methodology report has been finalized and is attached to this memo for council review.

The Storm Drainage SDC Methodology report presents details of how the SDC fee is developed. The SDC fee includes two components: the Improvement Fee and the Reimbursement Fee. The Improvement Fee is based on the cost of future capacity-increasing improvements needed to serve growth. The Reimbursement Fee is based on the cost of existing storm drainage facilities with available capacity to serve growth. Both are charged per square foot of impervious area and are shown in the table below.

Storm Drainage SDC	SDC per SF of Imprevious Area
Improvement Fee	\$0.4372 = 43.7 Cents
Reimbursement Fee	\$0.0786 = 7.9 Cents
Total SDC Fee	\$0.516 = 51.6 Cents



The table below shows the proposed Storm Drainage SDC for various types of development. Since the SDC is based upon the square footage of impervious area, it is inherently scalable based solely upon the square footage of impervious area created by each type of development. The more impervious area created, the greater the SDC fee.

Development	Square Foot of Impervious Area	SDC per SF of Impervious Area	SDC
Single Family Dwelling	1,500	\$0.516	\$774
Single Family Dwelling	3,200	\$0.516	\$1,651
Multiple Family Dwelling	8,000	\$0.516	\$4,128
Medical Office	5,000	\$0.516	\$2,580
Retail Space	7,000	\$0.516	\$3,612
Gas Station	10,000	\$0.516	\$5,160
Warehouse	21,000	\$0.516	\$10,836

For comparative purposes, the table below shows Albany's proposed storm drainage SDC for a single dwelling unit compared to surrounding cities.

City	Storm Drain SDC Fee per Single Dwelling Unit
Stayton	\$3,216
Wilsonville	\$2,112
Brownsville	\$1,968
Philomath	\$1,801
Albany - Proposed	\$1,651
Salem	\$832
Eugene	\$733
Lebanon	\$317
Corvallis	\$226

Based on 3,200 SF of impervious area per Single Family Dwelling.

#### Direction Requested

Staff is requesting council provide input on the questions presented below and to be discussed in more detail during the upcoming October 9 council work session. If the council agrees with the recommendation to implement a storm drainage SDC, staff will then complete the process of public notification and review of the new SDC as required by state law and move forward with the adoption process.

There are three decisions council needs to make.

- 1) Does council want to implement a storm drainage SDC fee?
- 2) If council wants to implement a SDC fee, at what rate should the fee be implemented: at the rate recommended by the methodology report (as shown in the tables above) or implement a reduced fee?
- 3) Should the SDC fee be implemented all at once or phased in over a period of time?

#### **Budget Impact:**

If council decides to enact a storm drainage SDC, revenue received will vary based upon development activity.

RE:kc Attachment **Draft Methodology Report** 

# **Stormwater System Development Charges**

Prepared for City of Albany

September 8, 2023







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# **Section 1 Introduction**

Oregon legislation establishes guidelines for the calculation of system development charges (SDCs). Within these guidelines, local governments have some latitude in selecting technical approaches and establishing policies related to the development and administration of SDCs. A discussion of this legislation follows, along with the recommended methodology for calculating stormwater SDCs for the City of Albany ("City"), in accordance with state law and industry standard practices.

# **SDC Legislation in Oregon**

In the 1989 Oregon state legislative session, a bill was passed that created a uniform framework for the imposition of SDCs statewide. This legislation (Oregon Revised Statute [ORS] 223.297-223.316), which became effective on July 1, 1991, (with subsequent amendments), authorizes local governments to assess SDCs for the following types of capital improvements:

- Drainage and flood control
- Water supply, treatment, and distribution
- Wastewater collection, transmission, treatment, and disposal
- Transportation
- Parks and recreation

The legislation provides guidelines on the calculation and modification of SDCs, accounting requirements to track SDC revenues and expenditures, and the adoption of administrative review procedures.

## SDC Structure

SDCs can be developed around two concepts: (1) a reimbursement fee, and (2) an improvement fee, or a combination of the two. The **reimbursement fee** is based on the costs of capital improvements *already constructed or under construction*. The legislation requires the reimbursement fee to be established or modified by an ordinance or resolution setting forth the methodology used to calculate the charge. This methodology must consider the cost of existing facilities, prior contributions by existing users, gifts or grants from federal or state government or private persons, the value of unused capacity available for future system users, rate-making principles employed to finance the capital improvements, and other relevant factors. The objective of the methodology must be that future system users contribute no more than an equitable share of the capital costs of *existing* facilities. Use of reimbursement fee revenues are restricted only to capital expenditures for the specific system which they are assessed, including debt service.

The methodology for establishing or modifying an **improvement fee** must be specified in an ordinance or resolution that demonstrates consideration of the *projected costs of capital improvements identified in an adopted plan and list,* that are needed to increase capacity in the

system to meet the demands of new or expanded development. Use of revenues generated through improvement fees are dedicated to capacity-increasing capital improvements or the repayment of debt on such improvements. An increase in capacity is established if an improvement increases the level of service provided by existing facilities or provides new facilities.

In many systems, growth needs will be met through a combination of existing available capacity and future capacity-enhancing improvements. Therefore, the law provides for a **combined fee** (reimbursement plus improvement component).

### Credits

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

## **Update and Review**

The methodology for establishing or modifying improvement or reimbursement fees shall be available for public inspection. The local government must maintain a list of persons who have made a written request for notification prior to the adoption or amendment of such fees. The legislation includes provisions regarding notification of hearings and filing for reviews. "Periodic application of an adopted specific cost index or... modification to any of the factors related to the rate that are incorporated in the established methodology" are not considered "modifications" to the SDC methodology. As such, the local government is not required to adhere to the notification provisions under these circumstances. The criteria for making adjustments to the SDC rate, which do not constitute a change in the methodology, are further defined as follows:

- "Factors related to the rate" are limited to changes to costs in materials, labor, or real property as applied to projects in the required project list.
- The cost index must consider average change in costs in materials, labor, or real property and must be an index published for purposes other than SDC rate setting.

The notification requirements for changes to the fees that *do* represent a modification to the methodology are 90-day written notice prior to first public hearing, with the SDC methodology available for review 60 days prior to public hearing.

### **Other Provisions**

Other provisions of the legislation require:

• Preparation of a capital improvement program or comparable plan (prior to the establishment of an SDC), that includes a list of the improvements that the jurisdiction

intends to fund in whole or in part with SDC revenues and the estimated timing, cost, and eligible portion of each improvement.

- Deposit of SDC revenues into dedicated accounts and annual accounting of revenues and expenditures, including a list of the amount spent on each project funded, in whole or in part, by SDC revenues.
- Posting of information related to SDCs on the local government's website.
- Creation of an administrative appeals procedure, in accordance with the legislation, whereby a citizen or other interested party may challenge the expenditure of SDC revenues.

The methodology presented in the following section has been prepared in accordance with Oregon SDC requirements.

# Section 2 Stormwater SDC Methodology

The general methodology for developing stormwater system development charges ("SDCs") begins with an analysis of system planning and design criteria to determine growth's capacity needs, and how they will be met through existing system available capacity and future capacity expansion. Then, the existing and future facilities needed to serve growth over the planning period are valued to determine the "cost basis" for the SDCs. The cost basis is then spread over the total growth capacity needs to determine the system wide unit costs of capacity. The final step is to determine the SDC schedule, which identifies how different developments will be charged, based on their estimated capacity requirements.

## **Determine Capacity Needs**

The amount of impervious surface area is the most common method of measuring the volume of runoff, or demand, placed on a stormwater system by its users. Impervious areas are hard surfaces including (but not limited to) rooftops, driveways, walkways, parking lots, and concrete surface, asphalt paving, or compacted gravel that cause more runoff from an area than existed prior to the development. The greater the amount of impervious area on a lot, the greater the amount of runoff generated from that lot.

While several other factors can influence the amount of runoff, the amount of impervious surface area is generally considered the primary determinant of the volume of runoff and the primary cause of any increase in the rate of runoff. For this reason, impervious area is the most common billing method used in communities around the country for charging for stormwater service and SDCs.

System-wide capacity required by growth is measured by the additional impervious surface area anticipated in the service area through buildout based on the Stormwater Infrastructure Assessment & Preliminary CIP Recommendations report (September 30, 2019), prepared by Cardno. Existing and projected future system impervious area is presented in Table 2-1.

Table 2-1 Current and Projected Impervious Area								
				Growth Share				
Capacity Parameter	Current	Buildout <sup>1</sup>	Growth	of Future				
Impervious Area (SQ FT)	180,338,400	311,889,600	131,551,200	42%				

<sup>1</sup>Source: Assessment & Preliminary CIP Recommendations (September 30, 2019), Table 2-4.

# **Develop Cost Basis**

The stormwater SDC methodology is based on a combined reimbursement and improvement fee structure. As discussed in Section 1, the reimbursement fee is intended to recover the costs associated with available capacity in the existing system; the improvement fee is based on the costs of future capacity-increasing improvements needed to address the impacts of growth.

## **Reimbursement Fee**

The reimbursement fee is based on the inflation-adjusted acquisition cost of capital improvements previously constructed or under construction. **Table 2-2** shows the total acquisition cost and inflated cost for the existing stormwater system. Of the total \$68.5 million inflation-adjusted cost, approximately \$26.6 million was funded by the City and the remaining \$41.9 million was funded by developers and local assessments.

#### Table 2-2 Reimbursement Fee Cost Basis

					Gro	wth Share
Description	Acquisition Cost	Inflated Cost <sup>1</sup>	CIP Adjustments <sup>2</sup>	Net Value	%	\$
Storm Drains			-			
City-Funded Developer/	\$7,322,454	\$26,598,240	\$2,084,009	\$24,514,231	42%	\$10,339,801
Assessments	\$16,349,511	\$41,871,391	na	\$41,871,391	0%	
Total	\$23,671,965	\$68,469,631	\$2,084,009	\$66,385,622	16%	\$10,339,801

<sup>1</sup>Reflects Engineering News Record Construction Cost Index for Seattle April 2023 (15,031). <sup>2</sup>Assets replaced by capital improvement plan (CIP) projects.

The City-funded cost is reduced by \$2.1 million, for assets to be replaced by capital improvement plan (CIP) projects. The remaining City-funded system asset value (estimated to be \$24.5 million) will serve both existing and future development through buildout, of which growth is estimated to represent 42 percent of future system impact. The reimbursement fee cost basis is \$10.3 million.

## **Improvement Fee Cost Basis**

Table A-1 in the appendix shows the capital project list that forms the basis of improvement fee cost basis. For purposes of the SDC analysis, costs from the 2021 Stormwater Master Plan have been escalated to April 2023 values based on the Engineering News Record (ENR) Construction Cost Index (CCI) for Seattle (index = 15,031).

The cost basis includes stand-alone stormwater projects in each of the City's drainage basins, as well as projects to be constructed as part of road improvements identified in the Transportation System Plan (TSP). Each improvement was reviewed to determine the portion of costs that expand capacity for growth versus remedy an existing deficiency. An increase in system capacity may be established if a capital improvement increases the level of performance or service provided by existing facilities or provides new facilities.

2-2

Many improvements provide capacity for growth and for existing customers (through upgraded or replaced facilities). New system facilities needed to expand capacity or extend the system to new growth areas are allocated 100 percent to growth. A portion of the TSP project costs are anticipated to be funded directly by developers as part of individual development projects. The SDC eligible cost for those projects is net of the developer funding.

As shown in Table A-1, the total project costs (based on April 2023 costs) are projected to be \$170 million, of which the total growth share is \$91.4 million (54 percent). Direct developer contributions are estimated to be \$34.8 million, so the net improvement fee cost basis is \$57.5 million.

# **Unit Costs**

System-wide unit costs of capacity are determined by dividing the reimbursement fee and improvement fee cost bases by the aggregate growth-related capacity requirements from Table 2-1. **Table 2-3** shows these calculations.

Item	Value
Cost Basis	
Reimbursement	\$10,339,801
Improvement	\$57,511,863
Growth Capacity (SQ FT IA)	131,551,200
Unit cost (\$/SQ FT IA)	
Reimbursement	\$0.0786
Improvement	\$0.4372
SDC for Typical Residential Unit (3,200 SQ FT IA)	
Reimbursement Fee per EDU	\$251.52
Improvement Fee per EDU	\$1,398.98
Total SDC for Typical Residential Unit	\$1,650.50
SQ FT IA = Square feet impervious area	

#### **Table 2-3 Unit Cost Calculations**

**Table 2-3** also shows the calculated stormwater SDCs per for a typical single family residential unit (with 3,200 square feet of impervious area) based on the updated unit costs. The total SDC for a typical residential unit is \$1,650. The SDCs for all development types will be based on the unit costs and the measured impervious are for the development.

## **Future Project List and SDC Schedule Adjustments**

In accordance with Oregon statutes (223.304(8)), the SDC unit costs shown in Table 2-3 and adopted by resolution may be adjusted periodically based on a published inflationary index. Specifically, the City intends to use the Engineering News Record Construction Cost Index for Seattle as the basis for adjusting the SDCs. The SDCs shown in this report are based on the April 2023 index of 15,031.

Furthermore, as provided in ORS 223.309, after the City adopts the project list shown in Table A-1 by resolution, modifications to the list may be made at any time. However, if a change in the project list results in an increase to the SDCs, the City must provide notification to interested parties and if requested, provide additional review opportunities for the updated SDCs.

Future updates to the SDCs for inflation do not require revision to this Methodology Report (dated September 8, 2023).

# Appendix

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
BT-001	Burkhart Creek Bridges - Clover Ridge Road & Knox Butte	•					• •
	Apartments	Low	\$2,032,700	\$2,378,606	\$0	22%	\$533,481
BT-002	Burkhart Creek New Pipes - Earl Ave, Century Drive, &						
	Eleanor Dr	Low	\$289,963	\$339,306	\$0	0%	\$0
BT-003	Edgewater Dr & Breezy Way - Dunlap Ave to Clover Ridge Rd	High	\$329,085	\$385,086	\$0	0%	\$0
BT-004	Hummingbird Street, Windy Avenue, & Clover Ridge Road	High	\$195,642	\$228,935	\$0	0%	\$0
BT-005	Somerset Drive - Cameron Street to Fairmont Drive	Low	\$250,870	\$293,561	\$0	0%	\$0
BT-006	Truax Creek New Pipes - Bernard Ave, Century Dr, Dian Ave,						
	& David Ave	Low	\$1,769,557	\$2,070,684	\$0	0%	\$0
BT-007	Truax Creek New Pipes - Santa Maria Ave and Charlotte St	Low	\$554,029	\$648,309	\$0	0%	\$0
BT-008	Willamette Avenue - Empire Court to Timber Street	High	\$327,068	\$382,725	\$0	0%	\$0
BT-009	Windy Avenue - Stormy Street to Breezy Way	High	\$432,662	\$506,288	\$0	0%	\$0
BT-010	Burkhart Creek Bridge - Bob Barker Trucking	High	\$759,900	\$889,213	\$0	0%	\$0
CC-001	Airport Road	High	\$283,493	\$331,735	\$0	0%	\$0
CC-002	Columbus Street - 4th Avenue to Salem Avenue	High	\$498,486	\$583,314	\$0	69%	\$403,445
CC-003	Cox Creek New Pipes - Center Street	High	\$383,783	\$449,092	\$0	5%	\$23,158
CC-004	Heatherdale Mobile Home Park	High	\$1,492,921	\$1,746,973	\$0	43%	\$759,528
CC-005	South Shore Drive - Locust Place to Bain Street	High	\$421,986	\$493,796	\$0	67%	\$331,205
CC-006	Waverly Drive - 9th Avenue to Highway 20	Low	\$58,778	\$68,780	\$0	0%	\$0
CC-007	Albany Municipal Airport	High	\$421,389	\$493,097	\$0	0%	\$0
CC-008	Cox Creek - Albany Airport Bypass	High	\$4,672,960	\$5,468,162	\$0	0%	\$0

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
CC-009	Highway 99E - Burkhart Street to Cox Creek	High	\$320,775	\$375,362	\$0	100%	\$375,362
CC-010	Fescue Street SE	High	\$203,957	\$238,665	\$0	100%	\$238,665
CC-011	S Commercial Way SE	Low	\$92,460	\$108,194	\$0	100%	\$108,194
CC-012	Goldfish Farm Road - Mackinaw Ave to Maple Leaf Ave	Low	\$391,267	\$457,849	\$0	100%	\$457,849
NA-001	23rd Street & Broadway Street	High	\$934,897	\$1,093,989	\$0	0%	\$0
NA-002	Cluster Oak Avenue - East of Oak Glen Street	High	\$319,735	\$374,145	\$0	0%	\$0
NA-003	Dover Lane, Grandview Dr, 19th Avenue, & Whitmore Ave	High	\$1,063,026	\$1,243,922	\$0	5%	\$60,060
NA-005	North Albany New Pipes - 13th Ave, Cloverdale Drive, Springwood Ave, & Dogwood Ln	High	\$2,576,936	\$3,015,456	\$0	0%	\$0
NA-006	North Albany New Pipes - Fairway Drive & Cloverdale Dr	Low	\$732,517	\$857,170	\$0	0%	\$0
NA-007	North Albany New Pipes - South Nebergall Loop	Low	\$1,231,957	\$1,441,600	\$0	0%	\$0
NA-008	Penny Lane - South of Gibson Hill Road	Low	\$106,578	\$124,714	\$0	0%	\$0
NA-009	Ravenwood Drive - South of Dover Lane	High	\$299,150	\$350,057	\$0	55%	\$193,071
NA-010	Riverview Heights Park	High	\$274,013	\$320,642	\$0	62%	\$198,226
NA-012	Violet Avenue - Broadway Street to 21st Street	High	\$631,577	\$739,053	\$0	0%	\$0
NA-013	White Oak Avenue & Brianna Street	High	\$279,568	\$327,142	\$0	0%	\$0
NA-016	Gibson Hill Road - Pulver Lane to Thorn Drive	High	\$125,756	\$147,156	\$0	0%	\$0
NA-018	Hickory Street - North Albany Road to Highway 20	High	\$398,661	\$466,502	\$0	100%	\$466,502
NA-020	Red Oak Street - San Pedro Avenue to White Oak Ave	High	\$68,522	\$80,182	\$0	100%	\$80,182
NA-021	Scenic Drive - 23rd Avenue to Dover Lane	Low	\$213,696	\$250,061	\$0	0%	\$0
NA-024	Thorn Drive	High	\$55,568	\$65,024	\$0	100%	\$65,024
NA-025	West Thornton Lake Drive to Thornton Lake	High	\$550,234	\$643 <i>,</i> 868	\$0	100%	\$643,868
NA-026	North Albany Local Street System Plan	Low	\$1,081,788	\$1,265,877	\$953,789	100%	\$312,088
OC-001	36th Avenue - Highway 99E to Oak Creek	Low	\$505,474	\$591,491	\$0	0%	\$0
OC-002	37th Avenue - Highway 99E to Oak Creek	Low	\$419,766	\$491,198	\$0	6%	\$30,139

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
OC-003	39th Avenue - 37th Ave to Oak Creek	High	\$225,575	\$263,961	\$0	1%	\$2,162
OC-004	Drew Place - Bethel Loop to Oak Creek	High	\$220,529	\$258,057	\$0	21%	\$53,190
OC-005	Elm St & Umatilla Street Bridge - 22nd Avenue to Cathey Crk	High	\$1,208,030	\$1,413,602	\$0	0%	\$0
OC-006	Ferry Street - 30th Avenue to 34th Ave	High	\$729,344	\$853,457	\$0	61%	\$520,244
OC-007	Highway 99E - 29th Avenue to Cathey Creek	High	\$501,347	\$586,662	\$0	0%	\$0
OC-008	Liberty Street - Lakewood Drive to Park Place	High	\$151,998	\$177,864	\$0	0%	\$0
OC-009	Liberty Street & 24th Avenue - 24th Avenue to Cathey Creek	High	\$543 <i>,</i> 067	\$635,481	\$0	0%	\$15
OC-010	Marion Street - 38th Avenue to 34th Avenue	High	\$204,072	\$238,799	\$0	0%	\$0
OC-011	Takena Street & Liberty St - Lakewood Drive to Cathey Crk	High	\$1,516,541	\$1,774,612	\$0	13%	\$226,377
OC-012	Columbus Street Detention - 48th Avenue to Oak Creek	High	\$998,136	\$1,167,990	\$0	23%	\$272,107
OC-019	Oak Creek New Pipes - 40th Avenue to Oak Creek	Low	\$2,468,646	\$2,888,738	\$0	100%	\$2,888,738
CAI-PC-A	Central Albany Imp - Periwinkle Crk Basin: A - Geary St Trunk	High	\$12,661,919	\$14,816,609	\$0	74%	\$10,971,394
CAI-PC-B	Central Albany Imp Periwinkle Crk Basin: B - 19th Ave & Hill St Central Albany Imp Periwinkle Crk Basin: C - Oak St, 38th	High	\$1,670,976	\$1,955,328	\$0	0%	\$0
CAI-PC-C	Ave to 28th Ave	High	\$1,777,386	\$2,079,845	\$0	0%	\$0
CAI-PC-D	Central Albany Imp - Periwinkle Crk Basin: D - 28th Ave, Thurston St to Oak St	High	\$1,346,367	\$1,575,479	\$0	0%	\$0
CAI-PC-E	Central Albany Imp - Periwinkle Crk Basin: E - 38th Ave, Hill St, & Tudor Way	High	\$2,204,154	\$2,579,237	\$0	22%	\$575,834
CAI-PC-F	Central Albany Imp - Periwinkle Crk Basin: F - Madison St, 36th Ave to 28th Ave	High	\$1,400,120	\$1,638,380	\$0	8%	\$136,285
PC-001	12th Ave SE Neighborhood	Low	\$363,146	\$424,943	\$0	0%	\$0
PC-002	20th Avenue	Low	\$236,862	\$277,169	\$0	0%	\$0
PC-003	21st Avenue & Periwinkle Creek	High	\$148,416	\$173,672	\$0	0%	\$0
PC-004	22nd Avenue & 21st Place	High	\$296,279	\$346,697	\$0	0%	\$0

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
PC-005	7th Avenue - Main Street SE to Periwinkle Creek	Low	\$544,761	\$637,463	\$0	0%	\$0
PC-006	Bain Street - 28th Avenue to Westcott Avenue	Low	\$177,724	\$207,967	\$0	0%	\$0
PC-007	Columbus Street & Grand Prairie Road	Low	\$1,801,666	\$2,108,257	\$0	0%	\$0
PC-008	East Mountain View Drive	High	\$215,662	\$252,361	\$0	55%	\$137,755
PC-009	Geary Street - South of Queen Avenue	High	\$159,280	\$186,385	\$0	0%	\$0
PC-011	Lexington Street & Collingwood St - 29th Ave to 24th Ave	High	\$842,876	\$986,309	\$0	0%	\$0
PC-012	Main St SE - 6th Ave SE to 7th Ave SE	High	\$99,979	\$116,993	\$0	0%	\$0
PC-013	Oxford Ave	High	\$241,035	\$282,052	\$0	0%	\$0
PC-014	Periwinkle Creek - I5 Drainage through Edgewood Mobile Home Park	High	\$628,753	\$735,748	\$0	0%	\$0
PC-015	Periwinkle Creek New Pipes - Lehigh Way	Low	\$346,783	\$405,795	\$0	0%	\$0
PC-016	Queen Avenue & Tudor Way - Hill Street to Periwinkle Creek	High	\$912,628	\$1,067,931	\$0	0%	\$0
PC-017	SE Geary Street & Grand Prairie Road	High	\$1,041,979	\$1,219,294	\$0	0%	\$0
PC-018	Tudor Way SE & 27th Ave SE	High	\$119,566	\$139,913	\$0	0%	\$0
PC-019	20th Avenue - Lockwood Place to Breakwood Circuit	High	\$99,193	\$116,073	\$0	0%	\$0
PC-021	32nd Avenue East of Ermine Street	Low	\$104,343	\$122,099	\$0	0%	\$0
PC-023	Periwinkle Creek - Three Lakes Road SE	High	\$1,605,400	\$1,878,592	\$0	35%	\$666,880
PC-024	Highway 99E & Highway 20	Low	\$88,354	\$103,389	\$0	0%	\$0
PC-026	Waverly Drive - 14th Avenue to Queen Avenue	Low	\$366,734	\$429,141	\$0	79%	\$336,948
PC-027	Grand Prairie Rd ODOT Pond Outfall	Low	\$20,821	\$24,364	\$0	100%	\$24,364
PC-028	Chicago Street - 31st Avenue to 34th Avenue	Low	\$229,635	\$268,712	\$0	0%	\$0
CAI-WR-A	Central Albany Imp - Willamette River Basin: A - Trunk Line Ext. & Imp. Control Albany Imp. Willamette Biver Basin: B. Industrial	High	\$11,157,129	\$13,055,748	\$0	61%	\$7,923,042
CAI-WR-B	Central Albany Imp - Willamette River Basin: B - Industrial Way, Thurston Street, Jackson Street, & 13th Avenue	High	\$1,692,879	\$1,980,958	\$0	2%	\$45,366

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
CAI-WR-C	Central Albany Improvements - Willamette River Basin: C -						
CAPWINC	Howard Drive, 15th Avenue, & 14th Avenue	High	\$385,719	\$451,357	\$0	0%	\$0
CAI-WR-D	Central Albany Improvements - Willamette River Basin: D -						
0	Industrial Way, Southwest of Howard Drive	High	\$203,403	\$238,016	\$0	0%	\$0
CAI-WR-E	Central Albany Improvements - Willamette River Basin: E -		4074 004		40	201	400.007
	Jackson Street, 35th Avenue to 28th Avenue	High	\$971,291	\$1,136,576	\$0	2%	\$22,087
CAI-WR-F	Central Albany Improvements - Willamette River Basin: F - 29th Avenue & Thurston Street	High	\$329,936	\$386,082	\$0	0%	\$0
	Central Albany Improvements - Willamette River Basin: G -	High	<i>3329,93</i> 0	\$380,082	ŲÇ	070	ŞŪ
CAI-WR-G	Thurston Street, 22nd Avenue to 28th Avenue	High	\$900,453	\$1,053,684	\$0	0%	\$0
WR-001	12th Avenue - Takena Street to Broadway Street	High	\$832,708	\$974,411	\$0	51%	\$494,072
WR-002	3rd Street & 1st Street - Madison Street to Thurston Street	High	\$540,600	\$632,594	\$0	0%	\$0
WR-003	9th Avenue - West of Madison Street	High	\$79,616	\$93,164	\$0	0%	\$0
WR-004	Broadway Street New Pipe - North of 25th Avenue	High	\$281,714	\$329,654	\$0	42%	\$138,926
WR-005	Ferry Street - Trunk Line Pipe Connection	High	\$332,114	\$388,630	\$0	12%	\$47 <i>,</i> 897
WR-006	Front Avenue - Alco Street to Geary Street	High	\$230,285	\$269,473	\$0	8%	\$20,810
WR-007	Hill Street - 4th Avenue to Willamette River	High	\$1,080,005	\$1,263,790	\$0	0%	\$0
WR-008	Lyon Street & 19th Avenue	Low	\$290,053	\$339,412	\$0	74%	\$250,266
WR-009	Queen Ave & Elm St Maple St & Lawnridge St to 14th Ave	Low	\$1,442,860	\$1,688,393	\$0	0%	\$0
WR-010	Queen Avenue & Jackson St Jefferson St. to Industrial Way	High	\$1,349,578	\$1,579,237	\$0	22%	\$352,209
WR-011	Washington Street - 22nd Avenue to 9th Avenue	High	\$3,300,780	\$3,862,477	\$0	4%	\$166 <i>,</i> 423
WR-012	Willamette River New Pipes - Columbus Street & Front Ave	Low	\$260,066	\$304,322	\$0	0%	\$0
WR-013	Baker Street	Low	\$84,107	\$98,420	\$0	0%	\$0
TSP-L1	TSP Project L1 - 53rd Avenue Extension	Low	\$1,813,084	\$2,121,618	\$1,923,228	100%	\$198,390
TSP-L4	TSP Project L4 - Timber Street Extension	Low	\$553,587	\$647,791	\$496,569	100%	\$151,223
TSP-L8	TSP Project L8 - Lochner-Columbus Connector	Low	\$1,175,027	\$1,374,982	\$1,124,548	100%	\$250,435

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
TSP-L10	TSP Project L10 - New North Albany Connector	Low	\$620,684	\$726,306	\$643,835	100%	\$82,472
TSP-L13	TSP Project L13 - Goldfish Farm Road Extension	Low	\$220,068	\$257,517	\$226,347	100%	\$31,170
TSP-L14	TSP Project L14 - Dogwood Avenue Extension	Low	\$5,788,997	\$6,774,116	\$1,023,952	100%	\$5,750,164
TSP-L15	TSP Project L15 - New North/South Collector	Low	\$6,736,756	\$7,883,156	\$864,239	100%	\$7,018,917
TSP-L16	TSP Project L16 - New East/West Collector	Low	\$3,740,723	\$4,377,285	\$1,141,623	100%	\$3,235,662
TSP-L18	TSP Project L18 - Timber Street Extension to Somerset Ave	Low	\$2,184,870	\$2,556,671	\$937,546	100%	\$1,619,125
TSP-L19	TSP Project L19 - Somerset Avenue Extension	Low	\$2,059,641	\$2,410,132	\$361,863	100%	\$2,048,269
TSP-L20	TSP Project L20 - Santa Maria Avenue Extension	Low	\$368,096	\$430,735	\$374,747	100%	\$55 <i>,</i> 988
TSP-L22	TSP Project L22 - Knox Butte Road Widening	Low	\$504,140	\$589,930	\$464,919	100%	\$125,011
TSP-L23	TSP Project L23 - Knox Butte Road Widening	Low	\$172,841	\$202,254	\$177,773	100%	\$24,481
TSP-L24	TSP Project L24 - Knox Butte Road Widening	Low	\$3,173,647	\$3,713,709	\$2,369,330	100%	\$1,344,379
TSP-L25	TSP Project L25 - Dunlap Avenue Extension	Low	\$334,118	\$390,975	\$387,167	100%	\$3 <i>,</i> 808
TSP-L28	TSP Project L28 - Ellingson Road Extension	Low	\$1,085,264	\$1,269,944	\$1,249,621	100%	\$20 <i>,</i> 323
TSP-L31	TSP Project L31 - Fescue St to Three Lakes Road Connector	Low	\$277,016	\$324,156	\$225,430	100%	\$98,726
TSP-L32	TSP Project L32 - Fescue Street Extension	Low	\$1,509,654	\$1,766,553	\$1,144,657	100%	\$621,897
TSP-L34	TSP Project L34 - Looney Lane Extension	Low	\$246,593	\$288,556	\$288,556	100%	\$0
TSP-L37	TSP Project L37 - Springhill Drive	Low	\$1,517,087	\$1,775,251	\$1,707,265	100%	\$67 <i>,</i> 986
TSP-L38	TSP Project L38 - Scenic Drive	High	\$1,970,639	\$2,305,984	\$1,942,968	100%	\$363,016
TSP-L41	TSP Project L41 - Skyline Drive	Low	\$493,321	\$577,270	\$549,201	100%	\$28,069
TSP-L42	TSP Project L42 - Crocker Lane	Low	\$1,580,176	\$1,849,076	\$1,695,642	39%	\$0
TSP-L43	TSP Project L43 - Valley View Drive	Low	\$1,042,125	\$1,219,464	\$1,219,464	100%	\$0
TSP-L44	TSP Project L44 - West Thornton Lake Drive	Low	\$1,652,575	\$1,933,795	\$1,571,940	100%	\$361,855
TSP-L45	TSP Project L45 - Allen Lane	Low	\$1,093,897	\$1,280,046	\$785,542	100%	\$494,505
TSP-L46	TSP Project L46 - Columbus Street	Low	\$816,851	\$955,855	\$864,721	100%	\$91,135
TSP-L47	TSP Project L47 - Grand Prairie Road	Low	\$724,986	\$848,358	\$848,358	100%	\$0

Project No.	Project Type	Priority High (1-10 YR) Low (11- Buildout)	Project Cost	Inflated Cost	Est. Developer \$	% Growth	\$ SDC (Growth – Developer)
TSP-L49	TSP Project L49 - Scravel Hill Road	Low	\$1,446,735	\$1,692,927	\$1,609,894	100%	\$83,033
TSP-L50	TSP Project L50 - Quarry Road	Low	\$588,340	\$688,458	\$560,258	100%	\$128,201
TSP-L52	TSP Project L52 - Goldfish Farm Road	Low	\$844,104	\$987,746	\$981,766	100%	\$5 <i>,</i> 980
TSP-L53	TSP Project L53 - Ellingson Lane	Low	\$838,144	\$980,772	\$855,923	100%	\$124,849
TSP-L54	TSP Project L54 - Lochner Road	Low	\$2,286,952	\$2,676,125	\$1,707,034	100%	\$969,090
TSP-L55	TSP Project L55 - Three Lakes Road	Low	\$1,044,878	\$1,222,686	\$938,331	100%	\$284,354
TSP-L57	TSP Project L57 - Santa Maria Avenue	Low	\$534,641	\$625,621	\$357,330	100%	\$268,291
TSP-L61	TSP Project L61 - Three Lakes Road	Low	\$201,804	\$236,145	\$228,524	100%	\$7,621
		TOTAL	\$145,461,396	\$170,214,694	\$34,803,899	54%	\$57,511,863

Table A-2 SDC Schedule

	Reimbursement SDC	Improvement SDC	Total SDC
\$/SQ FT Impervious Area	\$0.0786	\$0.4372	\$0.5158



TO:	Albany City Council
VIA:	Peter Troedsson, City Manager Chris Bailey, Public Works Director $C\beta$
FROM:	Staci Belcastro, P.E., City Engineer & Chris Cerklewski, P.E., Civil Engineer III
DATE:	September 25, 2023, for the October 9, 2023, City Council Work Session

**SUBJECT:** Pavement: Condition, Assessment, Management, and Rehabilitation Relates to Strategic Plan theme: Great Neighborhoods and Effective Government

#### **Action Requested:**

No action is requested at this time.

#### **Discussion:**

At the August 7, 2023, council work session, Public Works Director Chris Bailey presented an overview of Albany's Transportation Network, to set a framework for a series of future discussions with the goal to focus on understanding the condition and financial need in the city's street system. Today's presentation is the first in this series and will focus on Pavement: Condition, Assessment, Management, and Rehabilitation.

The City is responsible for the repair and maintenance of approximately 190 miles of paved streets. Albany's streets are classified in one of three categories: arterial, collector, or local.

- Arterial streets are transportation corridors that generally have high traffic volumes. They carry the majority of traffic entering, leaving, and moving across the city; examples include Waverly Drive and Queen Avenue.
- Collector streets serve the critical role of gathering and channeling traffic from arterials to neighborhood streets; examples include Marion Street and Jackson Street.
- Local streets are neighborhood streets that have lower traffic volume compared to arterial and collector streets. They provide direct access to adjacent property and are not intended to be used for long distance through movements.

Street classification influences design standards and, often, funds available for street preservation improvements are restricted to use on a specific street classification. Currently there are approximately 21 miles of arterial streets, 25 miles of collector streets, and 144 miles of local streets. Attachment 1 is a vicinity map identifying arterial, collector, and local roads under Albany's jurisdiction.



The Pavement Management 101 White Paper included as Attachment 2 provides an overview of the topics that staff will discuss in today's presentation including:

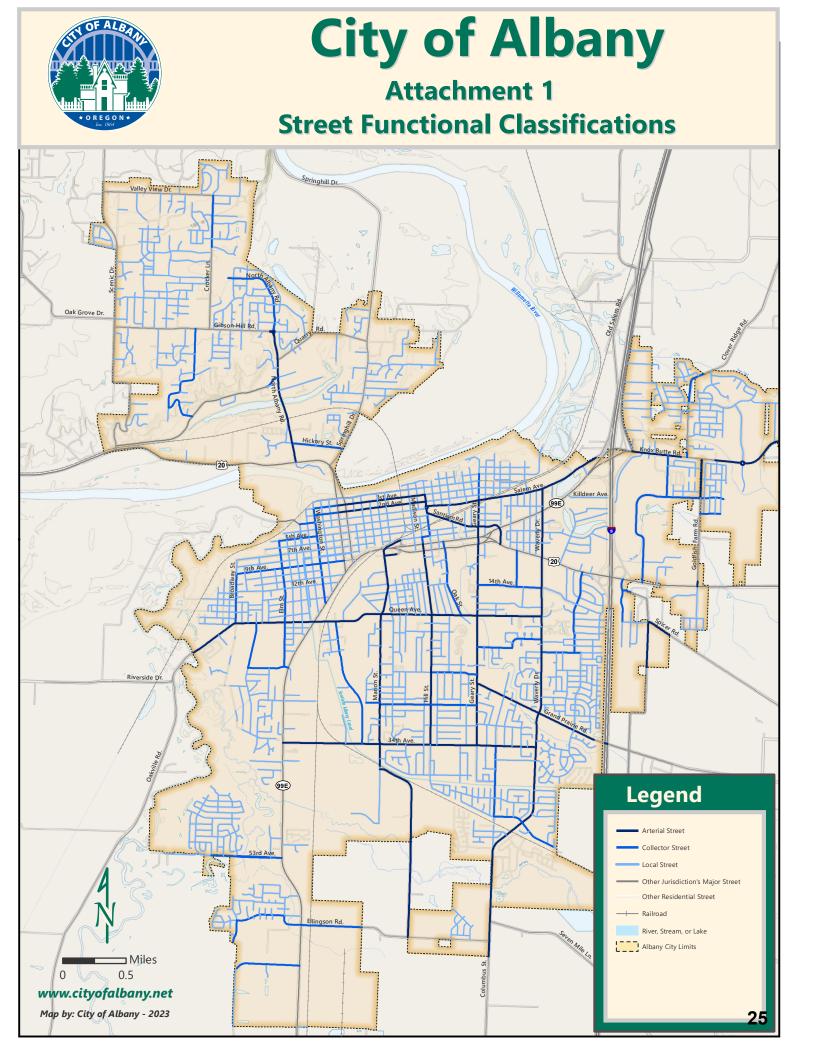
- Pavement asset management
- Types of pavement failures
- Pavement Condition Index (PCI)
- Level of Service
- Pavement preservation techniques
- Least life cycle cost strategies.

This memo and staff report will lay the foundation necessary for a detailed discussion in November on current funding available for street maintenance and the funding necessary to bring streets to the desired level of service.

#### **Budget Impact:**

This memorandum is for discussion only.

SLB:CLC:kc Attachment 2 c: Chris Bailey, Public Works Director



#### Pavement Management 101 White Paper

#### **Executive Summary:**

Communities throughout the U.S. are challenged to meet funding needs for maintaining, operating, and improving their roadway systems. The most cost-effective way to manage these investments is through a comprehensive pavement asset management approach. Under such an approach, investment decisions are driven by strategic policies and criteria including pavement condition, roadway classification, level of service and safety, and others. The investment philosophy of "keeping good roads good" results in lowest overall life-cycle costs; however, this often does not resonate with users who may think a "worst road first" approach is the best way to manage the system.

Similar to other communities throughout the country, Albany relies on street specific condition ratings and pavement management software programs to identify and prioritize the condition related needs of our street system. These software programs are important tools as they help to provide accurate, fact-based, transparent, and unbiased information to policy makers and pavement managers. All pavements deteriorate in a similar and predictable way and these programs help predict when pavements need treatment, which repair methods are most appropriate, and what pavement management approaches are most cost effective over the long term.

The needs of Albany's street system far exceed current funding available for street improvements. Albany is not alone; communities across the country face a similar challenge. The solution is to secure additional resources to fund investment needs. This is not a simple task, yet it needs to be considered in the context of future economic and social viability as well as community livability for current and future residents.

#### Purpose of this document:

It is important to note that effective pavement management is paramount to achieving sustainable and lowest lifecycle cost investment in our local transportation system infrastructure network. This whitepaper is intended to provide a fundamental overview of pavement management. It provides the foundation necessary for future discussions about the condition of Albany's streets and strategies for preserving the community's investments in pavement infrastructure.

#### What is pavement (asset) management?

The following definition is from the American Association of State Highway and Transportation Officials (AASHTO):

"Transportation asset management (TAM) is a strategic and systematic process of operating, maintaining, upgrading, and expanding physical assets effectively throughout their lifecycles. It focuses on business and engineering practices for resource allocation and utilization, with the objective of better decisions-making based upon quality information and welldefined objectives."

In other words, the objective of an effective pavement management program is to provide good roadways (at the community's defined level of service) at the lowest sustainable lifecycle cost possible.

#### "Pavement Management Primer"<sup>1</sup> from the Federal Highway Administration (FHWA):

"Pavements represent the largest capital investment in any modern roadway system. Maintaining and operating pavements on a large roadway system typically involves complex decisions about how and when to resurface or apply other treatments to keep the roadway performing and operating costs at a reasonable level. Traditional methods, used since Roman times, left these decisions up to a road supervisor who would select treatments based on his extensive knowledge and experience. This system is still widely practiced and works well in low traffic areas or where repair/restoration funds are not limited. In most cases, however, this is not the situation. First, rarely are there enough funds to complete all identified road repairs, and second, high traffic levels severely restrict when roads can be closed for maintenance.

Pavement management brings more science into this process. A pavement management system consists of three major components:

- 1. a system to regularly collect roadway condition data
- 2. a computer database to sort and store the collected data
- 3. an analysis program to evaluate repair or preservation strategies and suggest cost-effective projects to maintain roadway conditions

In most agencies, these components are then combined with planning needs and political considerations to develop annual highway repair/preservation programs.

Data collection ranges from simple "windshield surveys" to the use of elaborate testing vehicles that measure smoothness, skid resistance, faulting, and cracking in the road surface. Some agencies own and operate their own vehicles; others contract out the data collection. To make fair comparisons between potential projects, the highways are divided into segments that are more or less equal in length. The data from each segment is stored as one record in the database. The length of a typical segment ranges from 0.1 mile to 1 mile.

The database and analysis are usually set up using commercially available software. The size of the database will vary depending on the number of highways and the length of segment used for analysis. Most pavement management software vendors provide customized input screens, analysis packages, and reports as needed by the agency.

The analysis part of a pavement management system attempts to predict how long a pavement segment will last with a certain kind of repair under the given traffic loads, climate, and other factors. This analysis is based primarily on the collective experience of roadway experts (road supervisors) and on the historical costs incurred for repairs or reconstruction. More sophisticated analysis packages also predict annual repair costs, overall system performance, and expected pavement conditions on related routes within planning corridors. Overall, the intent of the analysis is to identify the most cost-effective ways to maintain a roadway system in satisfactory condition. Many systems provide a kind of learning process to the analysis program based on the actual performance trends of the highway system. After a few cycles of data collection, these systems can predict the local conditions with remarkable accuracy.

The most common uses of the pavement management information are by planning departments in roadway agencies for scheduling repair and reconstruction projects. In addition, pavement management information is used by road supervisor's departments for evaluating repair methods and by engineering groups for evaluating pavement designs."

#### How are Pavements Evaluated?

As noted in the FHWA Pavement Management Primer, there are many ways to assess pavement condition (and anticipated remaining life). The City of Albany uses visual inspection as the primary technique employed. This is an appropriate system-wide evaluation technique for goal setting, prioritization, and financial planning. Through this technique, each street is assigned a Pavement Condition Index (PCI) rating. The Oregon

<sup>&</sup>lt;sup>1</sup> <u>https://www.fhwa.dot.gov/infrastructure/asstmgmt/pmprimer.pdf</u>

Department of Transportation uses the "Good-Fair-Poor" classification system for pavement condition, which corresponds to the following PCI values:

Good80 to 100Fair50 to 79Poor0 to 49

The following photographs provide examples of pavement condition ratings for roadways in Albany:

Good Condition - PCI = 80 to 100 N. Albany Road near bridge – PCI = 90



Poor Condition - PCI = 0 to 49 Del Rio Ave. west of Columbus St. – PCI = 34



Fair Condition – PCI = 50 to 79 34th Ave near Columbus – PCI = 65



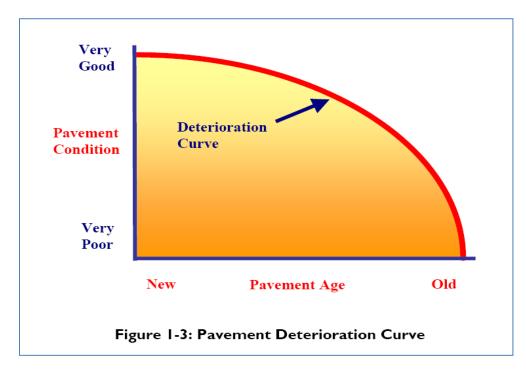
Poor Condition - PCI = 0 to 49 38th Ave. west of Thurston St. – PCI = 4



The City of Albany utilizes the StreetSaver® pavement management software as the roadway condition assessment data repository and investment decision tool. StreetSaver® is the most widely used pavement management software program by Oregon cities and counties. The City of Albany completes a pavement condition assessment every three to five years, and includes approximately 1,700 individual roadway segments within the City's 190 road-mile network. This information is used to prioritize roadway pavement restoration projects within the City's five-year Capital Improvement Program (CIP). In addition, this software provides recommendations regarding which type of pavement restoration treatment (i.e. slurry seal, overlay, reconstruction, etc.) should be utilized for each roadway pavement being addressed. As roads are considered for improvement, staff will conduct additional testing when visual inspection alone is not adequate or additional information is necessary for pavement structural design.

#### How Pavements Fail:

Pavements typically deteriorate slowly during the first few years after installation and at a much-accelerated rate thereafter. Although pavement designs and materials vary, the "deterioration curve" for all pavements is similar. The National Center for Pavement Preservation provides the following condition versus age pavement deterioration curve:





Pavement distresses or failure modes include (and are not limited to):

#### **Overview of Typical Pavement Treatment/Restoration Options:**

There are several options to rehabilitating/renewing pavements including:

- Crack Sealing
- Slurry Sealing and Chip Sealing
- Grind and Overlay
- Full Depth Reclamation with Cement
- Reconstruction

# For existing roadways in "good" condition with a PCI of 80 and above, the following treatments are typically utilized:

**Crack Sealing** – A maintenance procedure that involves placement of specialized materials into working cracks to prevent intrusion of water into the underlying pavement layers. Working cracks are defined as those that experience significant horizontal movements, generally greater than about 2 mm (0.1 in.).

**Slurry Seal** – A mixture of emulsified asphalt, well-graded sand, and water. It is used to fill cracks and seal areas of pavements, to restore a uniform surface texture, to seal the surface to prevent moisture and air intrusion into the pavement, and to provide skid resistance.

# For existing roadways in "fair" condition with a PCI between 50 and 79, the following treatments are typically utilized:

**Chip Seal** – A rehabilitation treatment in which a pavement surface is sprayed with liquid asphalt and then immediately covered with aggregate and rolled. Chip seals are used primarily to seal the surface of a pavement with non-load associated cracks and to improve surface friction, although they also are commonly used as a wearing course on low volume roads. Chips seals are typically only used on unimproved streets due to a rougher pavement surface and difficulty matching to concrete curbs.

**Grind and Overlay** – A pavement rehabilitation treatment, typically 2-inches in thickness, in which the top layer of existing asphalt is ground off and then new well graded asphalt pavement is thoroughly compacted into a smooth, uniform, and dense layer over the underlying pavement.

# For existing roadways in "poor" condition below a PCI of 50, the following treatments are typically utilized:

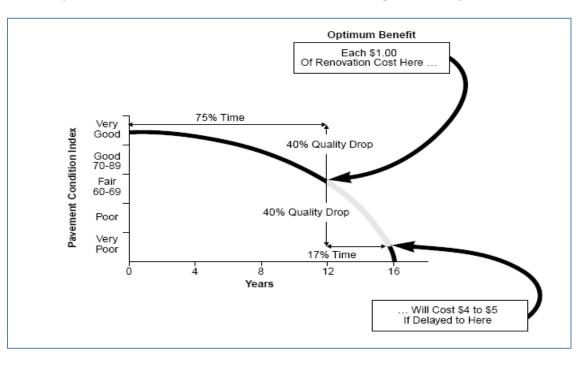
**Full Depth Reclamation with Cement** – A pavement reconstruction technique in which the existing asphalt pavement, crushed rock base and underlying soils are uniformly pulverized and blended together with cement to produce a new stabilized road base which is then covered with a minimum of 2-inches of asphalt pavement. Full depth reclamation is typically more cost effective than reconstruction (see below) but may be difficult to construct due to the need for specialized construction equipment and variations in existing road materials and underlying soils.

**Reconstruction** – A pavement renewal technique in which the existing pavement as well as underlying materials are removed and replaced with new materials (including crushed rock and asphalt or concrete pavement) in accordance with new pavement installation requirements.

The selection of the most appropriate pavement preservation/renewal treatment option is primarily dependent upon the overall pavement condition, type of pavement failures, and pavement age relationship.

It should be noted that the categorization of the treatment options (based on existing PCI ranges) provides general guidance for determining system-wide maintenance strategies, and subsequent financial needs, and is not the sole criterion used by staff to determine the appropriate treatment or repair method for a given street at the time of construction.

The diagram below represents the relationship of the value of the needed investment to maintain or restore the pavement to a good condition from where the current condition of the pavement might be (i.e. costs vs. PCI):



The table below provides a cost comparison between the types of pavement restoration treatments based on local and regional project examples:

Type of Treatment	Unit Cost*
Crack Sealing	\$1.00 to \$1.50 per lin. Ft.
Slurry Sealing and Chip Sealing	\$4.00 to \$5.00 per sq. yd.
Grind and Overlay	\$60 to \$70 per sq. yd.
Full Depth Reclamation with Cement	\$275 to \$400 per sq. yd.
Reconstruction	\$300 to \$500 per sq. yd.

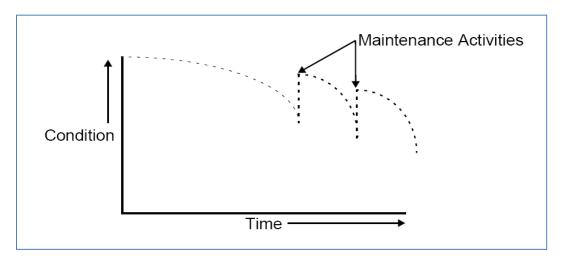
1. These unit costs are approximate (will vary based on project scope/size) and are intended to illustrate the comparative magnitude of treatment type versus cost.

2. Grind and Overlay, Full Depth Reclamation with Cement, and Reconstruction costs include replacement of curb ramps as required by the Americans with Disabilities Act.

Pavements in poor condition are typically associated with curbs, sidewalks and storm drain inlets that are also in poor condition and replacement of these associated non-pavement street elements is included in the typical costs provided above. For specific projects where some of these non-pavement items are in good or fair condition, cost savings may be realized.
Costs for associated water, sewer and storm drain pipe replacement is not included.

Based on these factors, the most cost-effective investment strategy is to renovate/renew pavements while in good and fair condition rather than wait until they have deteriorated to poor condition. This approach leads towards achieving the lowest life-cycle investment costs possible for providing effective transportation services.

This pavement renovation investment strategy, whereby smaller, incremental improvements are deployed to increase pavement condition is illustrated in the following diagram:



What this discussion demonstrates is the most economically viable way (i.e. resulting in lowest lifecycle costs) to manage roadways is to "keep good roads good." At those junctures for strategic investment (identified as "Maintenance Activities" above), a corresponding increase in the PCI resulted. This is contrary to a "worst roads first" investment philosophy, which is often the perception of roadway users and unfortunately practiced by some roadway authorities.

The Oregon Department of Transportation published a recent report (Rough Roads Ahead: The Cost of Poor Highway Conditions to Oregon's Economy) which highlights the following:

#### "Bringing deteriorated roads and bridges back to good condition costs significantly more than keeping them in good condition."

In addition, this report makes good arguments regarding how poor roadway conditions negatively impact other economic, social, and environmental factors (i.e. commerce, livability, air quality, safety, etc.) within our communities.

The "keep good roads good" investment strategy has already been adopted by the City of Albany. **Strategic Plan** *Theme I. Great Neighborhoods* **Goal 2** documents the City's intention to maintain the City's roadway network. This objective prioritizes collector and arterial streets above local streets. In general, collector and arterial streets have been maintained at fair condition; however, local streets have been maintained below this level of condition for many years to this point.

#### Conclusion:

Communities across the country are faced with deteriorating infrastructure and inadequate funds to maintain and/or restore that infrastructure to desired levels. By utilizing a pavement asset management approach for street systems, communities can conduct system wide evaluations to prioritize improvements and establish strategies for infrastructure investments that achieve the lowest lifecycle cost possible. These strategies typically rely on the "keep good roads good" approach. In addition, a separate strategy needs to be implemented to make progress in addressing the significant backlog of local streets that have already dropped down into "poor" condition. As described above, addressing these streets will come at a significant and disproportionate cost. As these poor condition streets are addressed, they can move back into the "keep good roads good" strategy at a much lower long-term cost.

Lastly, an effective pavement management program provides a comprehensive and transparent synopsis of the "state of the streets," and clearly articulates City Council policies and goals to efficiently manage, operate, and maintain the community's vital surface transportation system. As noted, clearly articulated, attainable, and sustainable investment and funding strategies are crucial for managing stakeholder expectations (i.e. tax and rate payers), and establishing trust in policy makers and transportation system managers to deliver effective and efficient roadway system services.



TO:	Albany City Council
VIA:	Peter Troedsson, City Manager Chris Bailey, Public Works Director $C\beta$
FROM:	Staci Belcastro, P.E., City Engineer & Gramma Gordon Steffensmeier, P.E., PLS, Engineering Manager/Assistant City Engineer GPS
DATE:	September 26, 2023, for the October 9, 2023, City Council Work Session

SUBJECT: Request for a License to Occupy Oak Street Right-of-Way

#### **Action Requested:**

Staff requests council approve, by motion, a License to Occupy a portion of Oak Street Right-of-way adjacent to 1207 9th Avenue SE.

#### **Discussion:**

Ron Brockman owns the property at 1207 9th Street SE. The property is located at the northwest corner of Oak Street and 9th Avenue, as shown on Attachment A. For the past few years, the building on the property has been undergoing a major renovation/remodel.

In July 2021, the City of Albany sold a portion of a parcel that contained Oak Street between 8th and 9th avenues to Mr. Brockman. At the same time, the City also converted the rest of that parcel of land to Oak Street right-of-way. Subsequently, Mr. Brockman purchased approximately 7 feet of property from the property to the north. Mr. Brockman would like to pave within the requested 7 x 10-foot License area so that he can better utilize the property he purchased in 2021.

Per Albany Municipal Code (AMC) 14.04 on encroachments (Attachment B), council has the authority to issue licenses to occupy public property, including right-of-way, as long as certain conditions are met. A draft License to Occupy document is included as Attachment C. Staff recommends approval of the License to Occupy Public Right-of-Way.

#### **Budget Impact:**

None.

GPS:kc Attachments 3



# Attachment A - Map of License to Occupy request



### Attachment B

#### Chapter 14.04 ENCROACHMENTS

Sections:

14.04.010 Conditions of license.

14.04.020 Limitations.

14.04.030 Notices.

14.04.040 Liens.

#### 14.04.010 Conditions of license.

The City Council shall have authority to issue license to occupy public property, including rights-of-way, subject to the following conditions:

(1) The Council shall find that the occupation of the public property or right-of-way shall not constitute unreasonable obstruction for public use at the time the license is granted;

(2) A property owner receiving the license shall assume all liability arising from use of the public rights-of-way or public properties;

(3) All licenses issued under this chapter shall be subject to revocation without cause after 90 days' written notice by the City to the licensee;

(4) All licenses issued under this chapter may be revoked for failure to comply with the terms of the license, after the City has given the licensee 10 days' notice or revocation. (Ord. 3079 § 1, 1963).

#### 14.04.020 Limitations.

Any license issued under this chapter shall include any terms or conditions deemed to be in the public interest within the following limits:

(1) No encroachment onto any existing public sidewalk shall exceed five inches;

(2) In areas where no sidewalks are existing at the time the license shall be granted, the encroachment shall not extend over the established curb line of the street;

(3) No encroachment into a public alley shall exceed four feet. (Ord. 3079 § 2, 1963).

#### 14.04.030 Notices.

All notices provided to be given in this chapter shall be in writing addressed to the licensee as his/her address appears at the assessor's records of the county in which the property is located. For the purpose of this chapter only, a license issued hereunder shall be to the owner of the property abutting the proposed encroachment upon public way and the license shall be one that runs with the land and the obligations of this chapter and the conditions of license shall attach to the land and succeed to each owner of the land abutting the encroachment. (Ord. 5026 § 1, 1993; Ord. 3079 § 3, 1963).

#### 14.04.040 Liens.

Upon notice to remove an encroaching structure from public rights-of-way or public property, the licensee shall remove the encroachment within 10 days after receipt of notice. In the event the licensee shall fail to remove the encroachment within 10 days after receipt of notice, the City shall have the authority to remove the encroachment and the cost of removal shall become a lien against the real property abutting the encroachment. The lien so created shall be subject to foreclosure pursuant to the foreclosure laws of the State in the same manner as foreclosure of mechanic's liens. (Ord. 3079 4, 1963).

#### LICENSE TO OCCUPY PUBLIC RIGHT OF WAY

#### ENCROACHMENT PERMIT # E-XXXX-23

The City of Albany ("Licensor") hereby authorizes Ron Brockman ("Licensee") to encroach upon the Licensor's public right-of-way under the terms and specifications set forth herein.

- Location and Nature of Encroachment: This License shall apply to Licensee and shall allow all reasonable and necessary access for the installation and subsequent alteration, modification, repair, and maintenance of a paved surface and drainage pipes in public right-of-way thereof, as shown in Exhibits "A" and "B" attached hereto, under, upon, and over the Licensor's public right-of-way and other improvements located thereon at 1207 Ninth Avenue SE in Albany, Linn County, Oregon. A more particular description of the area within the Licensor's public right-of-way this License encompasses is attached hereto as Exhibits "A" and "B."
- 2. Conditions of License:
  - a. The Licensee agrees to indemnify and hold harmless the City of Albany, its agents, officers, and employees from all damages, claims, or liability arising from their use of the public right-of-way pursuant to the terms of the license.
  - b. The Licensee agrees to repair and maintain all of Licensee's private improvements within the public right-of-way.
  - c. This License shall be subject to revocation without cause after 90 days written notice by the Licensor as provided by Albany Municipal Code (AMC) 14.04.010.
  - d. This License may be revoked at any time for failure of the Licensee to comply with the terms of this License after 10 days' notice of revocation.
- 3. Notices: Notices shall be given as provided in AMC 14.04.030.
- 4. Liens: Licensor shall have the authority to impose a lien upon the property as provided for in AMC 14.04.040.
- 5. Binding Upon Heirs and Assigns: Unless earlier terminated by either party, the terms of this License shall inure to the benefit of and be binding upon, the parties, their heirs, devisees, successors, and assigns. The terms of an encroaching structure pursuant the terms of AMC 14.04.040 and of this License shall constitute a covenant running with all of the land described in Exhibits "A" and "B" attached hereto.

#### LICENSEE:

Ron Brockman

#### SIGNATURE

STATE OF OREGON County of \_\_\_\_\_

The foregoing instrument was acknowledged before me on this \_\_\_\_\_ day of \_\_\_\_\_, 2023, by Ron Brockman, as a voluntary act and deed.

NOTARY PUBLIC FOR OREGON My commission Expires:

#### **CITY OF ALBANY:**

I, Peter Troedsson, as City Manager of the City of Albany, Oregon, hereby accept on behalf of the City of Albany, the above instrument pursuant to the terms thereof this \_\_\_\_\_day of \_\_\_\_\_, 2023.

City Manager

STATE OF OREGON County of \_\_\_\_\_

This instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_ 2023, by Peter Troedsson, as City Manager of City of Albany.

NOTARY PUBLIC FOR OREGON My commission Expires: