

2016

# Pavement Maintenance Utility Fee Annual Report

*Preserving our past - building our future*

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# 2016 Pavement Maintenance Utility Fee Annual Report

## Purpose for an Annual Report

In accordance with Ordinance No. 08-1007, this established City Code 13.30, Transportation Utility Fees (TUF):

*“City staff shall prepare an annual report that presents how revenues were spent.”*

For consistency and to better align the name of the fee with the purpose, throughout the remainder of this report the TUF will be referred to as a Pavement Maintenance Utility Fee (PMUF).

## Background

Oregon City has 136 miles of surface streets with a reconstruction value of approximately \$1 million per mile. Transportation funding is one of the most challenging issues facing public agencies. In the past, Oregon City has used State gas taxes and road transfer revenues to provide limited maintenance of the City's street system. Historically, the City's pavement maintenance liability far exceeded the amount available for use from these revenue sources.

In 2007, the City Commission asked the Public Works Department and a Transportation Funding Study Citizens Committee to identify and establish a sustainable funding source for street maintenance. The Committee concluded that a PMUF is the most equitable and stable source for street funding.

They recommended an annual revenue goal of \$1.5 million to at least maintain the City's average Pavement Condition Index (PCI)<sup>1</sup>. The City Commission decided



*Public Works Department's Milling Machine*

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Pavement Condition Index (PCI), developed by the United States Army Corps of Engineers, is based on a visual survey of the pavement and a numerical value between 0 and 100 to define the condition with 100 representing excellent pavement.



*Micro Seal Application along Beavercreek Road*

that this target be gradually phased in over a 5-year period to allow customers time to incrementally budget for the fee. With this phased in fee scenario, first year fees provided a little over \$600,000 in revenue and jump-started the City's pavement maintenance program.

On May 21, 2008, the City Commission approved Ordinance No. 08-1007 establishing the PMUF. The purpose of the fee was to provide cost recovery for maintaining and operating Oregon City's transportation system. The fee was based on actual cost projections from the StreetSaver Pavement Management software (model). Like those in many other Oregon communities, the fee is also based on nationally recognized information developed by the Institute of Traffic Engineers that estimates the average number of vehicle trips generated by a property based on how that property is used.

### **A Billable Unit Rate**

In order to meet the annual revenue goal of \$1.5M, the residential monthly unit rate, applied to single family residential land uses, was established at \$1.15 per adjusted average daily trip. The monthly non-residential unit rate, applied to all other land uses, was established at \$0.189 per adjusted average

daily trip. For the first five years, this fee has been phased in to help ease the impact of this fee. The schedule of the phased in fee (with inflation included) can be seen in **Table 1**.

**Table 1 – PMUF Rates**

Time Period	Residential Monthly Rate	Residential Rate per Trip	Non-Residential Rate per Trip	Annual Total Revenue
July 1, 2008 through June 30, 2009	\$4.50	\$0.470	\$0.077	\$605,650
July 1, 2009 through June 30, 2010	\$6.00	\$0.627	\$0.103	\$972,044
July 1, 2010 through June 30, 2011	\$7.50	\$0.784	\$0.129	\$1,231,835
July 1, 2011 through June 30, 2012	\$9.00	\$0.940	\$0.154	\$1,569,587
July 1, 2012 through June 30, 2013	\$11.20	\$1.172	\$0.192	\$1,877,915
July 1, 2013 through June 30, 2014	\$11.56	\$1.207	\$0.198	\$2,043,166
July 1, 2014 through June 30, 2015	\$11.90	\$1.243	\$0.204	\$2,108,444
July 1, 2015 through June 30, 2016	\$12.23	\$1.281	\$0.210	\$2,199,836

## Rates and Rate Types

Adoption of the PMUF established a rate structure providing for a variety of parcel types. The rates for single family residences are a straight-forward unit rate per each parcel. Multi-family housing rates were a similar calculation. The monthly fee for schools is computed based on the number of students which varies based on enrollment. All other developed parcels have a monthly fee based on the non-residential unit rate and then considering factors of estimated daily trips and square footages of buildings. Currently, there are 519 non-residential customers.

## Oregon City's Pavement Condition Index

The Pavement Condition Index rates the condition of the surface of a road network. In July 2015, the City completed a 5-Year Pavement Maintenance Plan Update, which can be found on the City's website, with an updated review of the condition of portions of all Oregon City streets. The pavement condition survey is a detailed field assessment of a minimum 10% representative sample of each street segment. This survey information is compiled within the StreetSaver software system where a computation is run to establish a city-wide Pavement Condition Index (PCI).

In 2016, the overall citywide PCI was 76. This means the Oregon City transportation system is in "good" condition.

## Preventive Maintenance

Preventive pavement maintenance treatments are surface treatments that are applied early in the life of the roadway to prolong the life of the surface. The objective of preventive maintenance is to add a protective coating on top of the existing surface to keep surface water from seeping through the small cracks into the underlying base rock or native soil. Crack sealing, slurry sealing, and chip sealing are the traditional types of preventive maintenance used in our region. Preventive maintenance project locations and segment details for 2015 are included below in table form as **Tables 2** and **3**.



**Table 2 – Type II Slurry Seal @ \$1.45/sq. yd.**

Street	Beginning	Ending	Length (ft)	Total Area (sf)	Total Area (sy)	Total Cost
10 <sup>th</sup> Street	Washington Street	Madison Street	815	29,340	3,260	\$4,727
11 <sup>th</sup> Street	Main Street	Railroad tracks	272	5,984	665	\$965
11 <sup>th</sup> Street	Railroad tracks	Washington Street	380	13,680	1,520	\$2,204
11 <sup>th</sup> Street	Taylor Street	Polk Street	126	5,040	560	\$812
14 <sup>th</sup> Street	Jackson Street	JQ Adams Street	273	7,644	849	\$1,231
16 <sup>th</sup> Street	Main Street	Railroad tracks	240	8,640	960	\$1,392
3 <sup>rd</sup> Street	McLoughlin Promenade	High Street	129	4,902	545	\$790
6 <sup>th</sup> Street	McLoughlin Promenade	High Street	134	4,690	521	\$756
8 <sup>th</sup> Street	Center Street	Washington Street	270	7,830	870	\$1,262
Alderwood Place	Hartke Loop	Hartke Loop	951	30,432	3,381	\$4,902
Barclay Avenue	Cherry Avenue	Brighton Avenue	622	18,038	2,004	\$2,906
Brighton Avenue	Jersey Avenue	End (Promontory Avenue)	202	3,434	382	\$554
Caravatta Court	Entirety		193	7,974	886	\$1,285
Frederick Street	Beg of Pavement (North of Clear)	Cleveland Street	217	4,340	482	\$699
Gain Street	Harley Avenue	S Front Street	466	10,252	1,139	\$1,652
Gales Lane	Molalla Avenue	End	465	12,555	1,395	\$2,023
Hilda Street	Molalla Avenue	200 Ft E of Molalla Avenue	222	6,660	740	\$1,073
Monroe Street	Dead end	House #228	299	11,063	1,229	\$1,782
Myrtle Street	Pearl Street	South End Road	226	3,842	427	\$619
Polk Street	12 <sup>th</sup> Street	10 <sup>th</sup> Street	598	14,950	1,661	\$2,408
Rosebery Avenue	Caravatta Court	Fortuna Court	484	15,488	1,721	\$2,495
Summit Street	Brighton Avenue	Jersey Avenue	699	24,465	2,718	\$3,941
Telford Road	S Center Street	Ogden Drive	2,444	87,984	9,776	\$14,175
Telford Road	Ogden Drive	Holmes Lane	182	4,186	465	\$674

Street	Beginning	Ending	Length (ft)	Total Area (sf)	Total Area (sy)	Total Cost
Umber View Lane	Trail Drive	Summer View Lane	136	2,447	272	\$394
Van Buren Street	54' E/O 8 <sup>th</sup> Street	9 <sup>th</sup> Street	271	6,775	753	\$1,092
Warner Milne Road	50' E/O Molalla Avenue	Pizza Hut Driveway	177	6,372	708	\$1,027
Warner Street	Molalla Avenue	Prospect Street	255	7,650	850	\$1,233
Washington Street	Dead End S of 2 <sup>nd</sup>	2 <sup>nd</sup> Street	195	7,800	867	\$1,257
Pioneer Center Parking Lot	5 <sup>th</sup> Street	John Adams Street	125	14,500	1,611	\$2,336
<b>Totals</b>			<b>12,068</b>	<b>388,957</b>	<b>43,217</b>	<b>\$62,666</b>

**Table 3 - Type III Micro Seal @ \$3.00/sq. yd.**

Street	Beginning	Ending	Length (ft)	Total Area (sf)	Total Area (sy)	Total Cost
5 <sup>th</sup> Street	50' E of Monroe St	Jackson St	532	21,280	2,364	\$7,092
Molalla Ave	Division St	120' south of Holmes Lane	3,469	150,148	16,683	\$50,049
Singer Hill Rd	7th St	10th St	791	23,730	2,637	\$7,911
<b>Total</b>			<b>4,792</b>	<b>195,158</b>	<b>21,684</b>	<b>\$65,052</b>

### **In-House Pavement Maintenance and Street Reconstruction**

In-house pavement maintenance is work that the Oregon City Public Works Department (OCPW) performs using City equipment. In the summer months, staffing is augmented by seasonal workers and Street Division work can be anything from pothole repair or spot repair of small pavement failures to larger scale pavement failure repair using the same in-house resources. All in-house pavement maintenance projects focused on repairing the base of the road, adding additional strength and repairing failing pavement sections.

**Summer 2016** - OCPW used in-house staff and equipment to complete a total of 10 larger scale individual projects utilizing a total of 880.76 tons of asphalt at a cost of \$49,330. **Table 4** includes a summary of the 2016 in-house pavement repairs.

**Table 4 – 2016 In-House Work**

Street	Beginning	Ending	Material Cost	General Treatment Description
5 <sup>th</sup> Street	Center Street	Washington Street	\$2,452	Lane Repair
8 <sup>th</sup> Street	Center Street	Washington Street	\$1,174	Prep for slurry seal
16 <sup>th</sup> Street	Main Street	To end of street	\$3,312	Prep for slurry seal
Alderwood Place	Entirety		\$5,070	Prep for slurry seal
Caravatta Court	Entirety		\$1,671	Prep for slurry seal
Harriet Street	Entirety		\$6,077	Paving
Holmes Lane	Entirety		\$22,981	Rut patching
Molalla Avenue	at Holmes Lane		\$2,215	Prep for slurry seal
Rosebery Street	Fortuna Court	Caravatta Court	\$3,051	Prep for slurry seal
South End Road	Near Barker Avenue		\$1,327	Mill and pave

**Contracted Street Reconstruction**

Typically, this work includes asphalt overlays, cold plane pavement removal (milling) combined with an asphalt overlay, structural dig-outs and repairs, or a complete reconstruction of the entire street section. Costs for this kind of work vary widely based on the type of repairs, classification of the street, volume of traffic, anticipated vehicle loading, and complexity of temporary traffic control. Generally these kinds of projects include engineering, project administration, detailed plans, and contract specifications. The work performed is outlined in **Table 5**.



**Table 5 – 2016 Contracted Street Reconstruction**

Street	Beginning	Ending	Area (sf)	Treatment Unit Cost (\$/sf)	Estimated Project Allocation	General Treatment Description
5 <sup>th</sup> Street	Washington Street	50' beyond Monroe Street	49,869	\$7.07	\$352,573	2" mill and inlay
6th St	Washington Street	Jefferson Street	22,005	\$8.00	\$176,040	Reconstruct roadway
John Adams Street	5 <sup>th</sup> Street	7 <sup>th</sup> Street	24,759	\$2.85	\$70,563	2" mill and inlay
9th St	John Adams Street	Monroe Street	32,319	\$8.98	\$290,225	Reconstruct roadway
Madison Street	12 <sup>th</sup> Street	15 <sup>th</sup> Street	28,665	\$2.43	\$69,656	2" mill and inlay
Jackson Street	12 <sup>th</sup> Street	16 <sup>th</sup> Street	55,152	\$5.65	\$311,609	Reconstruct roadway
10th Street	Jackson Street	Van Buren Street	11,961	\$5.30	\$63,393	Reconstruct roadway
Trillium Park Drive	Canyon Court	Swordfern Court	1,683	\$20.75	\$34,922	AC Repair and Slurry Seal
Jefferson Street	5 <sup>th</sup> Street	125' short of 7 <sup>th</sup> Street	19,269	\$4.78	\$92,106	Reconstruct Roadway
Charman Street	180' west of Cherry Avenue	Cherry Avenue	684	\$36.10	\$24,692	2" mill and inlay
<b>Totals</b>					<b>\$1,485,779.00</b>	

## Conclusion

This is a program which we are committed to working into an already heavy workload. We know this program is important and valuable to the community. We continue to improve our in-house paving program and balance the demands on the department with the demands of the paving season. Our small paving crew and lightweight equipment continue to provide strong support for the more robust abilities of construction companies in the business of milling and paving.

Thus far, all pavement maintenance expenses have stayed within the City's PMUF budget allocation. The highly competitive bids have helped to ensure that the City continues to complete the planned projects with little in the way of deferred projects.

## **Attachments**

Exhibit A – Map - PMUF Major Accomplishments 2008-2016

Exhibit B – Map -2016 Street Repair Projects

# City of Oregon City

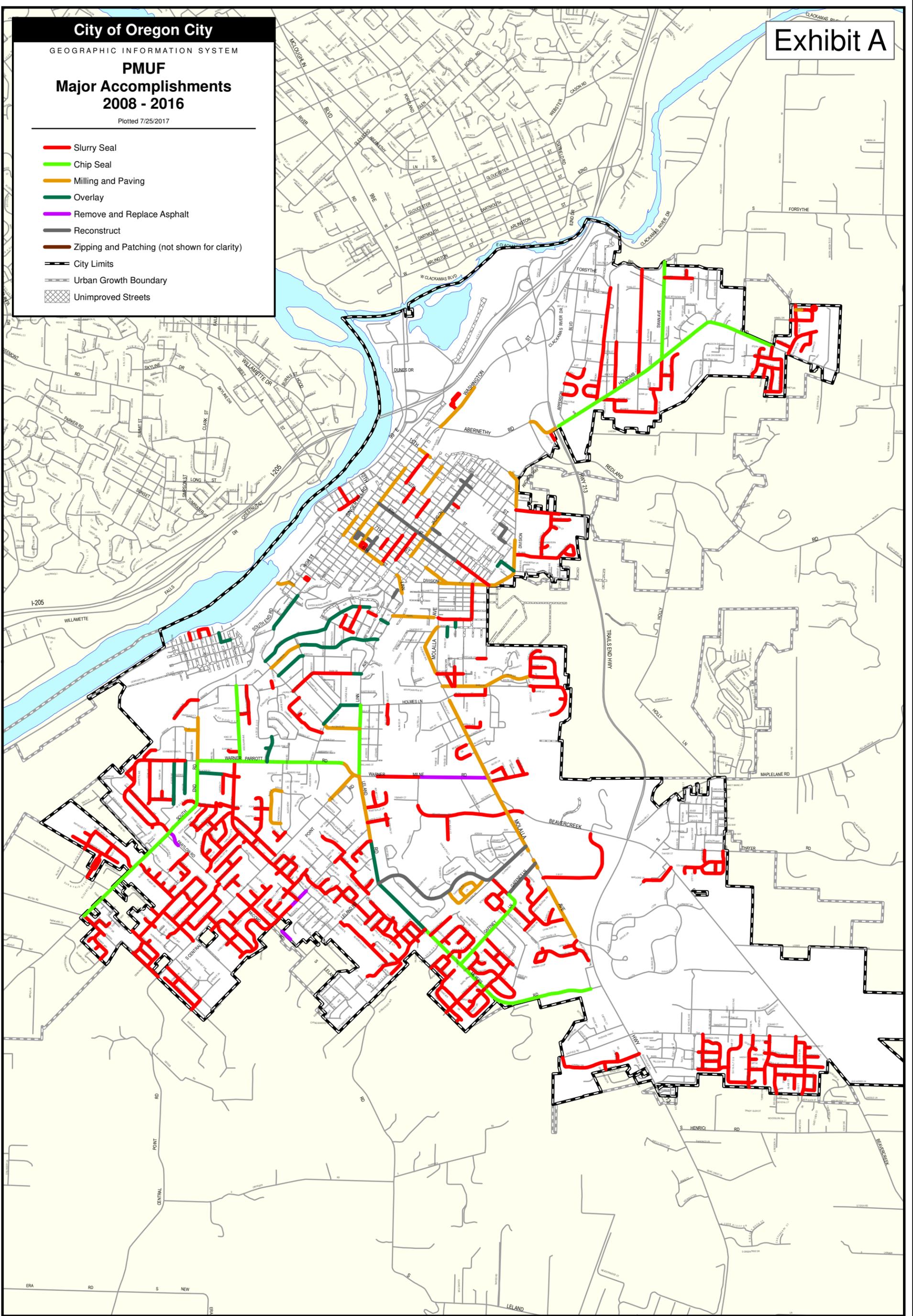
GEOGRAPHIC INFORMATION SYSTEM

## PMUF Major Accomplishments 2008 - 2016

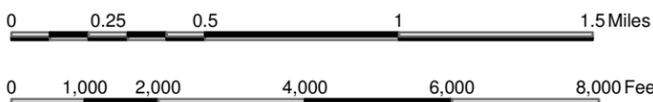
Plotted 7/25/2017

- Slurry Seal
- Chip Seal
- Milling and Paving
- Overlay
- Remove and Replace Asphalt
- Reconstruct
- Zippering and Patching (not shown for clarity)
- City Limits
- Urban Growth Boundary
- Unimproved Streets

# Exhibit A



The City of Oregon City makes no representations, express or implied, as to the accuracy, completeness and timeliness of the information displayed. This map is not suitable for legal, engineering, or surveying purposes. Notification of any errors is appreciated.



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Plot date: 7/25/17  
Map: 2008 - 2016 Street Repair Projects - 11x17P.mxd  
Plot: 2008 - 2016 Street Repair Projects - 11x17P - 20170725.pdf

# City of Oregon City

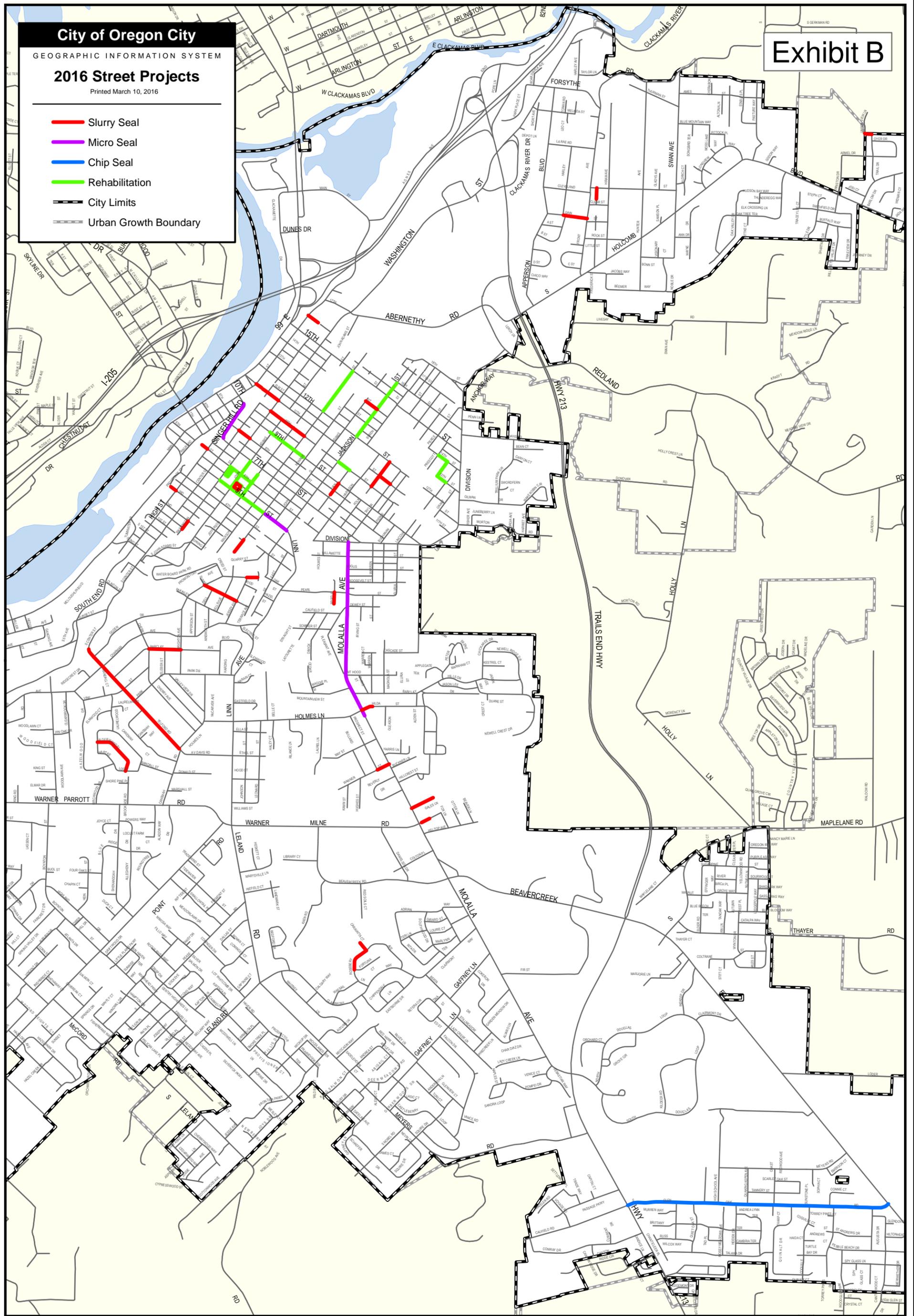
GEOGRAPHIC INFORMATION SYSTEM

## 2016 Street Projects

Printed March 10, 2016

-  Slurry Seal
-  Micro Seal
-  Chip Seal
-  Rehabilitation
-  City Limits
-  Urban Growth Boundary

# Exhibit B



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Plot date: March 10, 2016  
Plot name: PMUF - 2016 Projects Map - 20160310 - 11x17P.pdf  
Map name: PMUF - 2016 Projects Map - 20160310 - 11x17P.mxd

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