Memorandum

Date: March 6, 2019

To: Jon Ruiz, City Manager

From: Street Repair Review Panel

Subject: 2018 Report of the Street Repair Review Panel

It is our pleasure to present the 2018 annual report of the Street Repair Review Panel, focusing on the fifth year of implementing the five-year 2012 bond measure to fix streets. The Street Repair Review Panel was initially formed in 2009 to review the implementation of the 2008 street repair bond. This year's report was written in response to the accountability provisions in Measure 20-197, the 2012 bond measure to fix streets.

The 10-member panel met three times over a four-month period in preparation of this report, which included a physical inspection of the projects completed in 2018. We reviewed and accepted the report prepared by the City's external auditor (Appendix D) with respect to the City's use of the bond proceeds through December 31, 2018.

Based on this limited review and all materials presented to us, we unanimously conclude that the bond proceeds were used for the authorized purposes and in compliance with the limitations and restrictions outlined in Council Resolution 5063. We are also providing a detailed report, prepared at our request and with our approval, from the Public Works staff on the bond projects constructed in 2018.

Highlights from our review of the 2018 street bond projects include the following:

- **Progress** –2018 was another successful year of completing projects. Additionally, Eugene's voters passed a third 5-year bond measure in November 2017 to continue this work and to enhance active transportation and safety. This will allow the City to continue to reduce the preservation backlog.
- **Current Conditions -** The projects funded in 2018 by the 2012 voter-approved bond measure resulted in the reconstruction or resurfacing of 16 streets and totaled more than 13 lane miles. The backlog of needed street repair projects in 2018 decreased to $68.4 million, a drop from $78.8 million in 2017. As noted in previous reports, the 2007 Pavement Management Report projected the anticipated backlog for rehabilitation needs would reach more than $282 million in 2016 if steps were not taken to reduce the backlog. In terms of miles, since the implementation of the 2008 bond, more than 158 lane miles of street work has been completed using bond funds. About 20% of the improved street system is in need of some level of treatment at this time.
- **Vision Zero –** In recognition of Council's Vision Zero resolution, which calls for eliminating traffic-related deaths or serious injuries on city streets, the improvements funded through the bond enhance safety for all road users. Specific examples include a "road diet" on 7th Place from Bailey Hill to Hwy 99, reducing conflicts for motorists and adding bike lanes, and the Safe Routes to School Infrastructure project, which built walking and bicycling projects in the areas of Howard Elementary and Gilham Elementary in partnership with the 4J School District.
- **Active Transportation -** The 2012 measure allocated funding for bicycle and pedestrian projects guided by the Pedestrian and Bicycle Master Plan, City staff and the Bicycle and Pedestrian Advisory Committee. In 2018, significant improvements for people who walk and bike continued, including the installation of sidewalk ramps and enhanced pedestrian crossings, improved bicycle lanes, and new school zone signs.

- **Cost Savings –** Due to project savings, project costs over the five years of the bond were lower than originally anticipated, and in 2018 City Council approved the addition of five streets to the list of bond-funded streets, using the estimated $3.5 million of remaining bond funds supplemented with local gas taxes if necessary. We want to highlight the excellent work staff do to prioritize rehabilitating streets before they need reconstruction, and to develop innovative treatment methods that complete more work for less money. Staff have saved a significant amount of money over the course of the three bond measures, allowing more work than originally expected to be completed in each of the bonds.
- **Collaborating with Partners and Leveraging Bond Funds –** Eugene's Pavement Preservation Program requires strong coordination with internal and external utility stakeholders to schedule and coordinate the street work with any needed upgrades and repairs to the nearby streets and utility facilities to avoid emergency repairs. The 2018 projects created opportunities to repair underground utilities including the water, wastewater and stormwater systems. We continue to be impressed by staff and their ability to incorporate funds from other sources to cost effectively make repairs on items not covered by the bond funds.
- **Communicating with Citizens and Businesses** – Construction, by nature, is disruptive. City staff work with residents and stakeholders to minimize inconveniences. We continue to encourage the department to coordinate projects and look for new and better ways to proactively coordinate communications and minimize impact to the public, impacted businesses and residents.
- **Climate Recovery Goals** –The City's paving program is designed to extend the life of city streets before they fall into the reconstruct category. This helps to extend the life of the streets, and when combined with recent paving techniques, greatly reduces the City's environmental footprint. Prioritizing rehabilitating streets over reconstruction projects generally results in less mining and production of virgin materials, less waste of construction materials, and less heavy construction operations, all of which result in lower costs and less greenhouse gas emissions.
    - For example, Eugene is a leader using warm asphalt pavement mixes over hot mixes, using reclaimed asphalt materials, and performing in-place recycling of existing roadbed materials. National research programs estimate that there is a CO_2 savings of 12 pounds per ton of pavement when using warm mix as compared to traditional hot mix asphalt. When combined with reclaimed asphalt pavement and in-place recycling, it is estimated that there were 700 tons less of asphalt cement and 9,000 tons less of rock than using traditional methods of materials production and construction techniques. That is a reduction of over 600 truck trips on rock delivery alone.
    - These construction techniques are excellent examples of the department's commitment to sustainability efforts, consistent with the City's Climate Recovery Ordinance.
- **Understanding the Process for Selecting Projects** – SRRP members often are asked what process is used to select streets for repairs. The streets chosen for bond funding were selected using the criteria listed on page 3 of the attached report. The selection of bicycle and pedestrian projects is guided by the Pedestrian and Bicycle Master Plan, City staff and the Active Transportation Advisory Committee. The memo in Appendix C explains in more detail how these safety improvement projects are selected.
- **Recognizing the Continued Economic Value of Street Bond Projects** – A functioning transportation system is important for the community and economy. The bond is essential to maintaining the City's infrastructure. Based on the Oregon Department of Transportation Highway Division jobs multiplier model, the bond measure projects completed in 2018 conservatively sustained approximately 100 - 150 full-time equivalent jobs during the period of construction.
- **Bottom Line** – We believe the community is getting a good return for its investment in street repairs, and the bond funds are being used wisely to meet the objectives of Ballot Measure 20-197. An upfront investment in repairing and maintaining Eugene's streets saves the community significant money.

We feel Public Works staff are doing an excellent job designing and constructing bond measure projects using innovative techniques. We see staff creating state of the art practices being adopted by other municipalities across the state. We appreciate the support they have given us in the course of our review. The committee also continues to express its appreciation to the voters and taxpayers of Eugene for their ongoing support of the bond measures that have made our community a better place to live and do business.

Additional information about the Street Repair Review Panel can be found at www.eugene-or.gov/gobonds. Please feel free to contact any of us for additional information.

SRRP Members

John Barofsky	John Quilter
Janet Calvert	Matt Roberts
Mel Damewood	Ollie Snowden
Allen Hancock	Gary Wildish
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Citizen Street Repair Review Panel
2018 Report
Implementation Update for Measure 20-197 Bonds to Fix Streets

GO Bonds
FIXING EUGENE'S STREETS

Eugene

2018 Report to the Citizen Street Repair Review Panel

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Cover photos from 2018 projects: Completed West Amazon Drive Paving (upper); Completed Paving on Garfield Street (lower)

INTRODUCTION

BACKGROUND

This report has been compiled for use by the Street Repair Review Panel (SRRP). It is intended to provide background on projects included in the 2012 voter-approved Bond Measure 20-197, the schedule for construction of these projects, and the details of bond projects constructed in 2018. The street repair measure approved $43 million in bonding authority over a five-year period, with construction of bond-funded projects starting in 2014 and completing in 2018.

KEY TERMS

Bond - Bond Measure 20-197, Bonds to Fix Streets, approved by Eugene voters in November 2012.

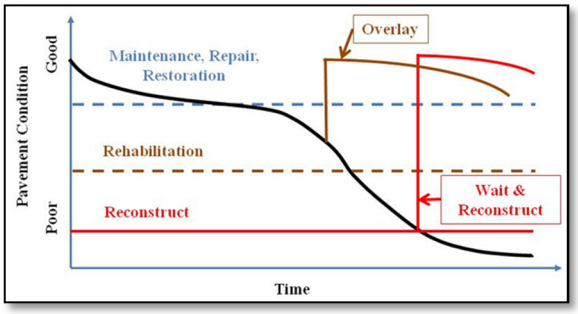
Inlay – An inlay treatment consisting of removing a specified depth of the existing pavement surface and repaving that same depth with a new pavement surface. This treatment works well where the pavement distress is isolated to the removed portion of the pavement. At times, the inlay treatment needs to be supplemented with an "overlay," which is when an additional thickness of pavement is placed over the inlaid pavement. An overlay is used when engineering analysis shows that the existing structure does not have sufficient strength to accommodate the projected traffic volume. The term "overlay" is commonly used to describe both the inlay and overlay practices.

One of the benefits of performing an inlay treatment is that the new pavement surface will match existing adjacent structures and not increase the street cross grade. Another benefit of an inlay is that in the removal of the existing pavement, contractors grind up the old pavement and stockpile the material to be recycled into new pavement.

In-Place Cement Treated Base (ICTB)/ **Full Depth Reclamation (FDR)** – A reconstruction treatment that utilizes and reuses existing road base materials. The existing surfacing is removed and cement slurry is added to strengthen the existing base. The base is pulverized to a specified depth and allowed to cure for 18-48 hours. Once cured, the roadway is repaved. This treatment works well on roadways where the existing base is primarily aggregate. Two of the benefits of performing an ICTB treatment are the savings in resources from reusing existing materials and the reduction in the duration of impact for the surrounding neighborhood.

FDR on West Amazon Drive

Pavement Preservation Program (PPP) - This is the current capital project program to preserve Eugene's improved street system. A priority for this program is to preserve streets that have not yet degraded to a point where reconstruction is required. Preserving a street through overlay or similar treatment is four to five times more cost effective than waiting to repair a street until after it requires reconstruction. This program was initiated in 2003 and, until passage of the 2008 and 2012 street repair bonds, was predominately funded with local fuel tax revenue and the reimbursement fee component of transportation system development charges.



Pavement Life Cycle – City of Eugene Transportation Service Profile Presentation

Reclaimed Asphalt Pavement (RAP) - Reclaimed asphalt pavement is the grindings from the existing pavement during the inlay process described above. The most common and effective use of this material is to supplement virgin materials used to make new asphalt pavement and reduce the use of costly asphalt binder. In Oregon, it is common to specify up to 30 percent of asphalt pavement can be made up of reclaimed asphalt pavement. Other reclaimed asphalt materials, such as shingles, can also be used to replace virgin asphalt binder in pavements. Reclaimed asphalt materials can be used as base rock. In 2017 the method of reusing RAP on-site as road base was used on several low volume residential streets. See below for more details.

Reconstruction – Once the street has deteriorated to the point that it can no longer be repaired with an inlay or overlay, it is repaired by reconstructing the pavement and underlying base. Traditional reconstruction involves digging up the existing pavement, any existing base rock, and subsurface soils to the depth that will accommodate a new pavement structure. As discussed above, in-place recycling may sometimes be used as an alternative to traditional reconstruction. Reconstruction is the most expensive of the repair options, which is why the City prioritizes preserving streets before they reach the point of needing reconstruction. Reconstruction may be four to five times more expensive than an inlay treatment.

Warm Mix Asphalt - Warm mix asphalt pavement is identical to conventional hot mix asphalt pavement, except that through a special mixing process it is produced at a temperature approximately 50 to 100 degrees cooler than conventional hot mix asphalt. In Eugene, all asphalt concrete producers have retrofitted their plants to produce warm mix asphalt using a water-foaming process. The foaming process allows temperature reductions of approximately 50 degrees. This reduction in temperature has several advantages:

Paving on Woodside Drive

1. It reduces energy consumption to produce asphalt concrete, lowering costs and greenhouse gas emissions.
2. It reduces off-gassing (smoke) of asphalt concrete by keeping the temperature under the boiling point of “light oils” in the liquid asphalt, benefiting construction workers and the public.
3. Because the light oils are not boiled off, the liquid asphalt coating the rock particles is slightly thicker, which slows the aging process of the asphalt.
4. It reduces the oxidation caused during high temperature production that causes premature aging of the asphalt, which should provide a longer life product.

The use of warm mix asphalt pavement is specified for all City of Eugene paving projects.

SRRP MISSION

Per Resolution No. 5063 the SRRP “will prepare an annual report, separate and distinct from the report prepared by the outside auditor, documenting the City’s use of the bond proceeds and noting whether the bond proceeds were used in compliance with the terms of this Resolution.”

CRITERIA FOR PROJECT SELECTION AND SCHEDULING

STREET PROJECTS

Street projects to be financed by the bond were specifically listed in the Bond (see Appendix A). All street projects were identified by the Public Works Maintenance Pavement Management System as priorities for repair. In addition, the following criteria were used to select streets for the bond measure:

1. Citizen input with respect to prioritizing major streets in need of reconstruction.
2. Scientific information about needed street rehabilitation and reconstruction from the pavement management system.
3. Geographic distribution throughout the community to ensure all areas of the City receive a benefit from the bond proceeds.

The City has a longstanding policy to use capital preservation funds on the improved street system. An improved street has been designed for the type of soils and traffic use of the street and includes a storm drainage system. Curb and gutter is the traditional mark of a storm drainage system, but can include roadside swales and planters. The bond measure street list consisted of improved streets in need of preservation as identified in the pavement management system.

The list of the street bond projects, with their estimated repair cost from the Pavement Management System and the year constructed or planned year of construction, is included in Appendix A of this report. In scheduling the street repair projects, the priorities were preserving streets prior to their needing reconstruction, grouping projects by location for cost savings, and coordinating with utility work. The list includes a comparison of programmed costs to actual costs with any difference noted. Differences in total project costs on individual projects may affect the funding available for future projects.

Bicycle and Pedestrian Improvement Projects

Buffered Bike Lane on West Amazon Drive

The 2012 bond measure stated that the City will allocate an annual average of $516,000 to support bicycle and pedestrian projects, also known as active transportation projects. These projects were not named in the bond measure; rather, the selection of the projects would be guided by the Pedestrian and Bicycle Master Plan, City staff and the Active Transportation Committee. In 2018, the practice continued and improvements were added to several paving projects. These improvements are further described in the project details, below, and included in Appendix C of this report.

Vision Zero

In November of 2015, the Eugene City Council joined a growing number of cities around the country in adopting a Vision Zero Resolution that states “no loss of life or serious injury on our transportation system is acceptable.” Vision Zero is a data-driven approach to educate the community and enable the City to prioritize resources based on evidence of the greatest need and impact.

The City regularly combines Vision Zero principles with ongoing pavement preservation projects. Cost effective intersection enhancements such as countdown pedestrian signals and audible pedestrian signals will continue to be a priority and standard practice on future projects. ODOT has shown that the inclusion of these types of enhancements can significantly reduce fatal and life-changing injury crashes.

ADA Transition Plan

As part of Title II of the Americans with Disabilities Act (ADA) of 1990, the City of Eugene conducted an evaluation of its public rights-of-way, and developed a transition plan that outlines in detail how the organization will ensure safe access to all of its facilities for all individuals. Public Works collected detailed data on over 15,000 ramps and 250 pedestrian signals to develop transition schedules specific to these facilities. The Public Works Director approved the ADA Transition Plan for the Public Rights-of-Way by Administrative Order in July 2015. All capital rehabilitation projects are evaluated for access compliance and potential improvements during scoping and preliminary design.

As part of the 2018 projects, the City constructed and upgraded 431 sidewalk ramps, 228 through capital improvement projects and 203 through private development construction.

Sustainability and Gains through Technical Developments

In 2010, Eugene created the Community Climate and Energy Action Plan (CEAP), joining a growing list of forward-thinking cities around the world that are addressing climate change and energy challenges by planning with vision and creativity. The Climate Recovery Ordinance (CRO), adopted in 2014 and updated in 2016, is our community's next step toward fulfilling these efforts. The 2016 update established the goal of reducing the 2010 levels of community fossil fuel use by 50 percent by the year 2030.

The City of Eugene continually strives to improve the quality, environmental footprint, and cost efficiency of its projects. In 2018, Eugene continued to use warm mix asphalt pavement and increased use of reclaimed binder to meet these sustainability criteria.

Warm mix asphalt continued to be specified for all the paving projects in 2018 in place of conventional hot mix asphalt; approximately 42,000 tons of warm mix asphalt pavement was placed on capital paving projects in 2018. As explained in the Key Terms section of this report, warm mix asphalt provides environmental and human health benefits as well as a potentially longer lasting product. The National Cooperative Highway Research Program (NCHRP) estimates that there is a CO_2 savings of 12 pounds per ton of pavement when using warm mix as compared to traditional hot mix asphalt. The NCHRP also estimates that the use of warm mix asphalt reduces the energy used in the asphalt batch plant by about 30 percent compared to hot mix asphalt.

Nearly 12,000 tons of RAP was used on 2018 capital paving projects, reducing the need for nearly 700 tons of asphalt cement and 9,000 tons of aggregate to be mined, refined, processed and subsequently shipped to the pavement producers. Using warm mix asphalt with typical reclaimed asphalt pavement content resulted in an estimated reduction of 789 MT CO_2e compared to using hot-mix asphalt pavement with no reclaimed pavement on 2018 capital paving projects.

Sunset of the 2012 Bond Measure to Fix Streets

2018 was the fifth and final year of the 2012 road bond measure. It also completed the tenth consecutive year of bond funding to fix city streets. The community's commitment to investing in and maintaining its road and transportation system is evident and impressive.

In 2000, the capital budget didn't include funding for preservation of the street system. At that time it was estimated there was $53 million in needed street repairs. The City created the Pavement Preservation Program in 2003, utilizing a recently-approved local gas tax to fund the work. Despite the supplemental funding the amount of needed street repairs grew to $171 million in 2008.

Voters recognized and understood the looming issues. In 2008 they approved a five-year, $35.9 million road bond. The measure promised to fix 32 streets and committed funds for off-street bike path improvements. Because of economic factors and measured spending, staff were able to utilize unused funding from the bond measure to repair another 10 streets.

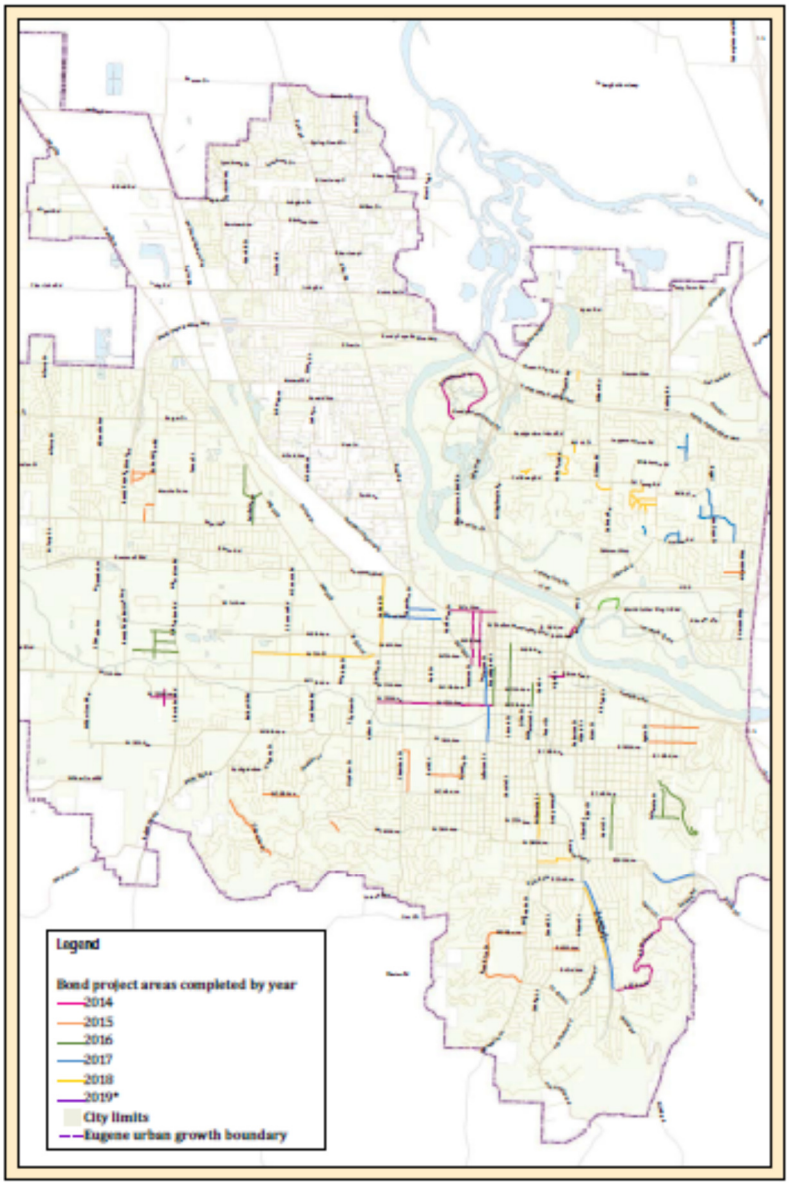
Voters approved a second five-year road bond measure in 2012. Staff have utilized the $43 million to fix 76 streets and fund dozens of improvements for people walking and biking. Because of continued favorable bids and resourceful spending, cost projections showed additional funds available to once again include additional street repairs. Staff will be able to fund an additional five streets in 2019 using the remaining money from the 2012 bond.

Paving on Carmel Avenue

As Eugene embarks on the third five-year bond measure, the amount of needed street repairs is now estimated at $68.4 million, a significant decrease from 2008. Staff will continue look to maximize and leverage funding from the road bond measure, striving to produce high-quality work and complete streets for people in Eugene.

Report on the 2012 Street Repair Bond

In 2012, voters approved a bond for $43 million to continue addressing the backlog of road repairs needed throughout the city. The bond also specified that $2.5 million of the total be used for pedestrian and bicyle infrastructure and safety improvements.



New practices save money and the environment

Since 2008, Eugene has been using a new **warm mix asphalt** that uses less energy to produce, reduces emissions of greenhouse gasses, and allows paving work to be continued for a longer season.

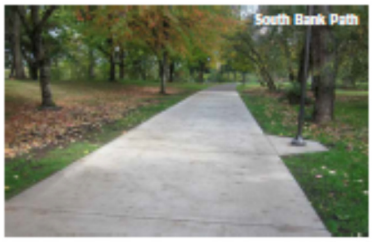
Public Works has also required reclaimed **asphalt shingles** be used as a binder in asphalt mixes, reducing the amount of these shingles entering the waste stream.

In-place recycling is done by large equipment that can break up, grind and mix existing base rock with cement and water to produce a new base for roadways. This reduces the amount of truck traffic and virgin materials needed to rebuild a roadway.

In-place road recycling

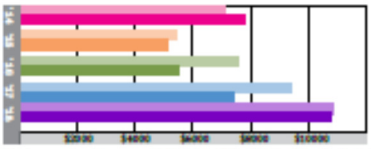
How are streets chosen?

Selecting streets for treatment involves analysis, testing, and staff knowledge of the road conditions and traffic demands. Ideally, streets are repaired using an overlay process before the underlying structure is compromised. Preserving with an overlay adds 15 to 20 years to the life of the street, and is significantly less costly than reconstruction.


South Bank Path

Budgeted vs. actual road project costs

$ in thousands, screened color = budgeted, solid color = actual



During construction years 2004–2018, of the $40.2 million budgeted for street repair, only $35.7 million was needed to complete work on the projects specified in the 2012 Bond Measure Request.

* At the end of the five-year period, substantial savings on many projects allowed additional street repairs to be funded in the 2019 construction season.

Learn more at eugene-or.gov/gobonds

Bicycle and pedestrian projects

Eugene has approximately 45 miles of shared use paths used by bicyclists, pedestrians, runners and skaters. In addition to structural repair of these concrete and asphalt paths, improvements include lighting, new connectors, and enhanced crosswalks and crossing devices. These projects are paid for with a combination of state and federal grants, local gas tax and bond funds.

Funding Status and Forecast

In 2012, project costs were estimated for each street for the purpose of selecting streets to be included in the bond measure. These cost estimates were based on the overall surface condition of each street as described in the City's Pavement Management System. A unit cost was assigned to each street based on whether the street rehabilitation treatment was assumed to be a reconstruct or an overlay. Approximately 18 months prior to construction, more detailed pavement testing is conducted to determine specific treatments to each street based on the existing pavement structure, subgrade soil conditions and traffic loading. Actual rehabilitation treatments may be different than the original assumptions, requiring more, less or a combination of rehabilitation techniques.

For the streets scheduled for 2018 construction, the 2012 estimated cost with inflation was $9,568,000. As of January 3, 2019, although not all project contracts have been closed out, the projected actual cost for the 2018 bond projects is $7,108,000; a net difference of $2,460,000 below the costs projected in 2012. Willamette Street was scheduled for construction in 2018 but because of the size and complexity of the partially federally funded project it has been approved for 2019 construction.

We have continued to see a steady increase in construction costs but not to the degree that we originally projected resulting in a large remaining balance. As noted above, in 2018 City Council approved five additional streets to be repaired with remaining bond funds, all of which will be constructed in 2019.

Details on an annual project-by-project basis are provided in the following pages and summarized in Appendix A. Estimated costs for the five additional 2019 streets have also been added to Appendix A.

The 2012 bond measure also allocated an average of $516,000 for pedestrian and bicycle improvements each year. In 2018, the project expenditures on all pedestrian and bicycle improvements funded by the bond were estimated at $194,000. Accounting for expenditures to date, approximately $50,000 is available for use on the additional five streets approved for construction in 2019.

Additional Streets Approved for 2019 Construction		
Ward	Street Name	Limits
7	JERRY STREET	Richard Ave to Royal Ave
7	LOUIS STREET	Hawthorne Ave to Drwy 715
7	RICHARD AVE	Fairfield Ave to Hwy 99
6	BARGER DR	100' east of Altimont to Primrose St
3	VILLARD ST	Franklin Blvd to 203' north of 15th Ave
1	19TH AVE	Jefferson St to Tyler St

2018 Bond Construction Projects

The following pages are reports on individual projects. The total costs for each project listed are estimated as not all of the 2018 construction-related costs have been finalized as of January 3, 2019.

Completed 2017 Paving on Jefferson Street

7TH PLACE PAVING

Project Description: This project consisted of rehabilitation of a street in the West Eugene Community Organization neighborhood in Council Ward 8:

- 7th Place from Bailey Hill Road to the 7th Ave (Hwy 99)

Treatment Methodology:

- 7th Place was reconstructed by removing the existing asphalt pavement, reconditioning the existing aggregate base using in place recycled millings as the base course, and repaving with 8 inches of asphalt. The intersection of 7th Place and Seneca Street was rehabilitated by removing and replacing 4 inches of the existing pavement.

Costs: Total project costs, from all funding sources, are estimated at $2,158,584.

Preliminary Estimate based on Pavement Management System (PMS) Surface Evaluation =	$3,417,367
Total Projected/Actual Paving Bond Funds Used =	$1,747,367
Difference =	$1,669,633

Additional Sources of Funding: Stormwater utility funds, wastewater utility funds, EWEB funds, Signal Improvement funds

Bicycling and Pedestrian Improvement funds were used for the addition of bike lanes.

Project Photo:

Completed Paving on 7th Place

30TH AVENUE AND MILL STREET PAVING

Project Description: This project consisted of rehabilitation of two streets in the Southeast Neighbors neighborhood in Council Ward 2:

- 30th Avenue from Willamette Street to Ferry Street
- Mill Street from 30th Avenue (North) to 30th Avenue (South)

Treatment Methodology:

- 30th Avenue and Mill Street were reconstructed using the FDR process to construct 12 inches of ICTB and were paved with 4 inches of asphalt.

Costs: Total project costs, from all funding sources, are estimated at $924,255.

Preliminary Estimate based on Pavement Management System (PMS) Surface Evaluation =	$486,000
Total Projected/Actual Paving Bond Funds Used =	$745,948
Difference =	-$259,948

During design it was found that the existing roadway could not be rehabilitated and required reconstruction resulting in a significant cost overrun.

Additional Sources of Funding: Stormwater and Wastewater utility funds, EWEB funds

Project Photo:

Completed 30th Ave Paving

GARFIELD STREET PAVING

Project Description: This project consisted of rehabilitation of a street in the Trainsong Neighbors Neighborhood in Council Ward 7:

- Garfield Street from Roosevelt Boulevard to 6th Avenue

Treatment Methodology:

- Garfield Street was rehabilitated by removing the existing asphalt, reconditioning the existing aggregate base material, and repaving with 8 inches of asphalt.
- The project included the improvements at 4 railroad crossings.

Costs: Total project costs, from all funding sources, are estimated at $1,345,393.

Preliminary Estimate based on Pavement Management System (PMS) Surface Evaluation =	$1,891,000
Total Projected/Actual Paving Bond Funds Used =	$1,114,949
Difference =	$776,051

Additional Sources of Funding: Stormwater and Wastewater utility funds, EWEB funds, Public Works Maintenance operations funds

Project Photo:

Completed Paving on Garfield Street

LARKSPUR AVENUE, LARKSPUR LOOP, PIPER LANE, ROLAND WAY, TULIP STREET, AND CARMEL AVENUE PAVING

Project Description: This project consisted of rehabilitation of six streets in the Cal Young Neighborhood Association neighborhood in Council Ward 5.

- Larkspur Avenue from Norkenzie Road to 640 feet West of Norkenzie Road
- Larkspur Loop from Norkenzie Road (North) to Norkenzie Road (South)
- Piper Lane from Chasa Street to Fir Acres Drive (Including CDS)
- Roland Way from Oakway Road to Cal Young Road
- Tulip Street from Crescent Avenue to Holly Avenue
- Carmel Avenue from Minda Drive to 400 feet South of Minda Drive

Treatment Methodology:

- Larkspur Avenue, Larkspur Loop, Piper Lane, Roland Way, Tulip Street, and Carmel Avenue were reconstructed utilizing the FDR process at a depth of 14 inches and were repaved with a 4 inch asphalt pavement surface.

Costs: Total project costs, from all funding sources, are estimated at $1,046,324.

Preliminary Estimate based on Pavement Management System (PMS) Surface Evaluation =	$1,044,000
Total Projected/Actual Bond Funds Used =	$960,065
Difference =	$83,935

Additional Sources of Funding: Stormwater and Wastewater utility funds

Project Photos:

Completed Paving on Larkspur Ave

WOODSIDE DRIVE, SHARON WAY, BUFF WAY, CORYDON STREET, AND FORRESTER WAY PAVING

Project Description: This project consisted of rehabilitation of five streets in the Cal Young Neighborhood Association neighborhood in Council Ward 4:

- Woodside Drive from Cal Young Road to Sharon Way
- Sharon Way from Coburg Road to East Side of 1023 Sharon Way Driveway
- Buff Way from Woodside Drive to Forrester Way
- Cordon Street from Forrester Way to Tandy Turn
- Forrester Way from Coburg Road to West Side of 1033 Forrester Way Driveway

Treatment Methodology:

- Woodside Drive, Sharon Way, Buff Way, Corydon Street, and Forrester Way were reconstructed using the FDR process and were repaved with 4 inches of asphalt pavement surface.

Costs: Total project costs, from all funding sources, are estimated at $1,266,166.

Preliminary Estimate based on Pavement Management System (PMS) Surface Evaluation =	$1,267,000
Total Projected/Actual Paving Bond Funds Used =	$1,127,679
Difference =	$139,321

Additional Sources of Funding: Stormwater and Wastewater utility funds, EWEB funds.

Project Photos:

Completed Paving on Woodside Drive

WEST AMAZON DRIVE

Project Description: This project reconstructed a street in the Southeast Neighbors neighborhood in Council Ward 2:

- West Amazon Drive from Hilyard Street to Fox Hollow Road

Treatment Methodology:

- West Amazon Drive was reconstructed using the FDR process and repaved with 9 inches of asphalt pavement surface.

Costs: Total project costs, from all funding sources, are estimated at $1,518,970.

Preliminary Estimate based on Pavement Management System (PMS) Surface Evaluation =	$1,463,000
Total Projected/Actual Paving Bond Funds Used =	$1,412,489
Difference =	$50,511

Additional Sources of Funding: Stormwater and Wastewater utility funds, EWEB funds

Bicycling and Pedestrian Improvement funds were used for the addition of buffered bike lanes and curb extensions that align with the future Amazon Creek bridge crossings.

Project Photos:

Completed Paving on W. Amazon Drive

5-Year Street Bond Project List - Costs and Forecast

Project Map #	Street name	From	To	Ward(s)	Proposed Treatment	Programmed Cost (2012) plus inflation	*Projected* / Actual Cost	Difference
Construction Year 2014								
1	1st Avenue (C)	Washington St	Van Buren St	7	Overlay	$ 544,000	$ 2,154,000	$ (95,000)
55	Madison Street (L)	1st Ave	8th Ave	1, 7	Reconstruction	$ 969,000		
58	Monroe Street (L)	1st Ave	Blair Blvd	1, 7	PCC panel replacement	$ 546,000		
8	13th Avenue (C/A)	Washington St	Garfield St	1	Reconstruction/Overlay	$ 2,392,000	$ 2,109,000	$ 283,000
9	13th Avenue (C)	Bertelsen Rd	Commerce St	8	Reconstruction/Overlay	$ 169,000	$ 410,000	$ 78,000
44	Interior Street (L)	north end	south end	8	Reconstruction/Overlay	$ 319,000		
21	43rd Avenue (C)	North Shasta Lp	Dillard Rd	2	Pavement Removal and Replacement	$ 165,000	$ 1,319,000	$ (618,000)
40	Firland Blvd (C)	Spring Blvd	Agate St	2	Reconstruction	$ 97,000		
59	North Shasta Loop (C)	Firland Blvd	North Shasta Lp	2	Reconstruction/Overlay	$ 439,000		
25	Broadway (C)	Mill St	Pearl St	1, 3	Overlay	$ 184,000	$ 854,000	$ (482,000)
33	Coburg Road (A)	south end of Ferry Street Bridge	north end of viaduct	3, 7	Pavement Removal and Replacement	$ 188,000		
43	Goodpasture Loop (C)	Goodpasture Island Road		5	Overlay	$ 1,103,000	$ 925,000	$ 178,000
					Construction Year 2014 Totals =	**$ 7,115,000**	**$ 7,771,000**	**$ (656,000)**
Construction Year 2015								
10	15th Avenue (L)	Fairmount Blvd	Agate St	3	Reconstruct	$ 1,020,000	$ 1,908,000	$ (235,000)
11	17th Avenue (L)	Fairmount Blvd	Agate St	3	Reconstruct	$ 653,000		
12	19th Avenue (L)	Fillmore St	Chambers St	1	Pavement Rem/Overlay	$ 85,000	$ 701,000	$ 162,000
13	22nd Avenue (L)	Friendly St	Polk St	1	Pavement Rem/Overlay	$ 181,000		
39	Fillmore Street (L)	19th Ave	24th Ave	1	Pavement Rem/Overlay	$ 597,000		
14	25th Avenue (C)	Hawkins Ln	Brittany St	8	Overlay	$ 231,000	$ 958,000	$ (23,000)
32	City View Street (L)	28th Ave	29th Ave	8	Reconstruct	$ 278,000		
67	Timberline Drive (C)	Warren St	Wintercreek Dr	8	Reconstruction/Overlay	$ 426,000		
19	39th Avenue (C)	Willamette St	100' East of Densmore	2	Overlay	$ 215,000	$ 836,000	$ 63,000
20	40th Avenue (C)	Hilyard St	Donald St	2	Overlay	$ 169,000		
24	Brae Burn Drive (C)	39th Ave	Willamette St	2	Overlay	$ 515,000		
22	Avalon Street (L)	Echo Hollow Rd	Juhl St	6	Reconstruct	$ 298,000	$ 627,000	$ 199,000
30	Cascade Drive (L)	Avalon St	Juhl St	6	Reconstruct	$ 170,000		
37	Elizabeth Street (L)	Knoop Ave	Royal Ave	6	Overlay	$ 120,000		
48	Juhl Street (L)	north side of address 1424	south end	6	Reconstruct	$ 160,000		
49	Knoop Avenue (L)	Echo Hollow Rd	Elizabeth St	6	Overlay	$ 78,000		
56	Mahlon Avenue (L)	Garden Way	Honeysuckle Ln	4	Pavement Rem/Overlay	$ 232,000	$ 75,000	$ 157,000
					Construction Year 2015 Totals =	**$ 5,428,000**	**$ 5,105,000**	**$ 323,000**
Construction Year 2016								
4	5th Avenue (L)	Bertelsen Rd	west end	8	Reconstruct	$ 664,000	$ 992,000	$ 931,000
5	6th Avenue (L)	Bertelsen Rd	Commercial St	8	Overlay	$ 166,000		
6	7th Avenue (L)	Bertelsen Rd	Oscar St	8	Reconstruct	$ 863,000		
34	Commercial Street (L)	5th Ave	south end	8	Overlay	$ 230,000		
15	27th Avenue (L)	Columbia St	south end	3	Overlay	$ 117,000	$ 1,068,000	$ 598,000
28	Capital Drive (L)	Spring Blvd	50' north of Crest De Ruta	3	Reconstruct	$ 418,000		
62	Potter Street (L)	24th Ave	29th Ave	3	Reconstruct	$ 847,000		
66	Spring Boulevard (L)	Fairmount Blvd	Capital Dr	3	Overlay	$ 150,000		
70	Van Ness Street (L)	23rd Ave	27th Ave	3	Overlay	$ 134,000		
31	Centennial Loop (L)	MLK Jr Blvd		4	Reconstruct	$ 678,000	$ 347,000	$ 331,000
38	Fairfield Avenue (C)	Hwy 99	Royal Ave	7	Reconstruct	$ 701,000	$ 1,430,000	$ 111,000
46	Jacobs Drive (L)	Hwy 99	Fairfield Ave	6, 7	Reconstruct	$ 840,000		
53	Lincoln Street (L)	5th Ave	13th Ave	7	Overlay	$ 392,000	$ 1,210,000	$ (67,000)
71	Washington Street (A)	8th Ave	13th Ave	1	Reconstruct	$ 751,000		
75	Willamette Street (L)	10th Ave	13th Ave	1	Reconstruct	$ 613,000	$ 434,000	$ 179,000
					Construction Year 2016 Totals =	**$ 7,564,000**	***$ 5,481,000***	***$ 2,083,000***
Construction Year 2017								
2	1st Avenue (L)	west end	Blair Blvd	7	Reconstruct	$ 548,000	*$ 1,347,670*	$ 455,330
3	2nd Avenue (C)	Garfield St	Blair Blvd	7	Reconstruct	$ 1,255,000		
16	30th Avenue (A)	Spring Blvd overpass	Agate St	2, 3	Reconstruct	$ 2,871,000	*$ 525,887*	$ 2,345,113
36	East Amazon Drive (A)	Hilyard St	Dillard Rd	2	Reconstruct	$ 1,322,000	*$ 1,545,042*	$ (223,042)
23	Best Lane (L)	Willakenzie Rd	Kentwood Dr	4	Overlay	$ 157,000	*$ 351,303*	$ (117,303)
45	Ione Avenue (L)	Best Ln	Adkins St	4	Overlay	$ 77,000		
47	Jefferson Street (C)	8th Ave	18th Ave	1	Reconstruct	$ 1,237,000	*$ 2,586,800*	$ (1,349,800)
27	Calvin Street (L)	Western Dr	Harlow Rd	4	Reconstruct	$ 273,000	*$ 1,056,754*	$ 859,246
52	Leigh Street (L)	Western Dr	north end	4	Reconstruct	$ 184,000		
54	Lydick Way (L)	Tomahawk Ln	Harlow Rd	4	Overlay	$ 87,000		
60	Pioneer Court (L)	Pioneer Pike	north end	4	Reconstruct	$ 112,000		
64	Satre Street (C)	Bailey Ln	Western Dr	4	Overlay	$ 714,000		
68	Tomahawk Lane (L)	Harlow Rd	580' north of Harlow	4	Overlay	$ 92,000		
73	Western Drive (L)	Calvin St	west end	4	Reconstruct	$ 454,000		
					Construction Year 2017 Totals =	**$ 9,383,000**	***$ 7,413,456***	***$ 1,969,544***
Construction Year 2018								
7	7th Place (C)	Hwy 99 (7th Ave)	Bailey Hill Rd	1, 7, 8	Reconstruct	$ 3,417,000	$ 1,747,367	$ 1,669,633
17/18	30th Avenue (L)	Willamette Street	Ferry Street	2	Reconstruct	$ 437,000	$ 745,948	$ (259,948)
57	Mill Street (L)	30th Avenue		2	Reconstruct	$ 49,000		
26	Buff Way (L)	Woodside Dr	Forrester Wy	4	Reconstruct	$ 179,000	$ 1,127,679	$ 139,321
35	Corydon Street (L)	Forrester Wy	Tandy Turn	4	Reconstruct	$ 41,000		
65	Sharon Way (L)	Coburg Rd	east side of driveway 1023	4	Reconstruct	$ 376,000		
41	Forrester Way (L)	Coburg Rd	west side of driveway 1033	4	Reconstruct	$ 248,000		
76	Woodside Drive (L)	Cal Young Rd	Sharon Wy	4	Reconstruct	$ 423,000		
50	Larkspur Avenue (L)	Norkenzie Rd	604' west	5	Reconstruct	$ 211,000	$ 960,065	$ 83,935
51	Larkspur Loop (L)	Norkenzie Rd		5	Reconstruct	$ 171,000		
29	Carmel Avenue (L)	Minda Dr	400' south	5	Reconstruct	$ 132,000		
61	Piper Lane (L)	Chasa St	Fir Acres Dr	5	Reconstruct	$ 196,000		
63	Roland Way (L)	Oakway Rd	Cal Young Rd	5	Reconstruct	$ 216,000		
69	Tulip Street (L)	Crescent Ave	Holly Ave	5	Reconstruct	$ 118,000		

5-Year Street Bond Project List - Costs and Forecast

Project Map #	Street name	From	To	Ward(s)	Proposed Treatment	Programmed Cost (2012) plus inflation	*Projected* / Actual Cost	Difference
42	Garfield Street (C)	Roosevelt Blvd	6th Ave	7	Reconstruct	$ 1,891,000	$ 1,114,949	$ 776,051
72	West Amazon Drive (A)	Hilyard St	Fox Hollow Rd	2	Reconstruct	$ 1,463,000	$ 1,412,489	$ 50,511
74	Willamette Street*	24th Ave	29th Ave	1, 2	Reconstruct	$ 1,232,000	$ 3,900,000	$ (2,668,000)

**Willamette Street will be constructed in 2019; the total shown is a projection*

Construction Year 2018 Totals = $ 10,800,000 $ 11,008,497 $ (208,497)

Additional Streets Authorized for Construction in 2019 (estimated costs)

	Jerry Street	Richard Ave	Royal Ave	7	Reconstruct	$ 100,000	$ 397,000	$ 30,000
	Louis Street	Hawthorne Ave	Drwy 715	7	Reconstruct	$ 127,000		
	Richard Avenue	Fairfield Ave	Hwy 99	7	Reconstruct	$ 200,000		
	Barger Drive	Primrose St	100' E of Altimont St	6	Overlay	$ 1,600,000	$1,856,000	$ (256,000)
	Villard Street	Franklin Blvd	203' N of 15th Ave	3	Overlay	$ 500,000	$167,000	$ 333,000
	W 19th Ave	Jefferson St	Tyler St	1	Reconstruct	$ 830,000	$1,307,500	$ (477,500)
		fuel tax funds will be used to supplement any project expenses that exceed the available Bond funds						$ 370,500

(x) Street Classification Key: (L) = Local; (C) = Collector; (A) = Arterial

Projected Construction Year 2019 Totals = $ 3,357,000 $ 3,727,500 $0.00

Total Programmed Costs = *$ 40,290,000* *$ 40,506,453* *$ (216,453)*

Pedestrian and Bicycle Improvements Project List

Projects			Average Annual Allocation $516,000	*Projected* / Actual Cost	Difference
Construction Year 2014					
2014 Pedestrian & Bicycle Repairs				$ 410,000	
Acorn Park Sidewalks				$ 128,000	
1st, Madison, Monroe				$ 92,000	
13th Avenue (Washington to Garfield)				$ 25,000	
Goodpasture Island Loop Pedestrian Signals				$ 29,000	
Roosevelt Blvd Pedestrian Signals and Sidewalk Infill				$ 58,000	
Construction Year 2014 Pedestrian & Bicycle Repairs Total =				$ 742,000	**$ (226,000)**
Construction Year 2015					
2015 Pedestrian & Bicycle Improvement Project				$ 349,000	
15th and 17th Avenues Markings				$ 38,000	
Fillmore and Friendly Streets Markings				$ 10,000	
Donald Street Crossing				$ 19,000	
Garden Way and Willakenzie Markings				$ 20,000	
Valley River Way Pedestrian Signal Upgrades				$ 20,000	
South Willamette Street Improvements				$ 12,700	
Tugman Bridge and Sidewalk Improvements				$ 12,500	
Construction Year 2015 Pedestrian & Bicycle Repairs Total =				$ 481,200	**$ 34,800**
Construction Year 2016					
2016 Pedestrian & Bicycle Improvement Project				$ 683,000	
Fairfield Avenue Sidewalk Infill				$ 44,000	
Willamette Street Markings & Sidewalk Improvements				$ 71,000	
Lincoln Ave Bike Buffer				$ 12,000	
Construction Year 2016 Pedestrian & Bicycle Repairs Total =				$ 810,000	**$ (294,000)**
Construction Year 2017					
2017 Pedestrian & Bicycle Improvement Project				$ 290,531	
1st & 2nd Ave Paving Bike Legends				$ 1,042	
3rd Ave Paving Sharrow Markings				$ 2,969	
Jefferson St Paving Signage				$ 3,364	
Construction Year 2017 Pedestrian & Bicycle Repairs Total =				$ 297,906	**$ 218,094**
Construction Year 2018					
7th Place bike lanes				$ 6,514	
West Amazon Curb extensions				$ 51,230	
4J Safe Routes to School				$ 113,462	
Commercial Street Bridge Counter				$ 12,500	
Match for Electronic Bike Lockers				$ 10,700	
Construction Year 2018 Pedestrian & Bicycle Repairs Total =				$ 194,406	**$ 321,594**
Additional Streets Authorized for Construction in 2019 (estimated costs)					
Barger Drive separated bike lanes				$ 54,488	
Construction Year 2019 Pedestrian & Bicycle Repairs Total =				$ 54,488	

Total Pedestrian and Bicycle Improvement Project Costs = $ 2,580,000 $ 2,580,000 $0.00

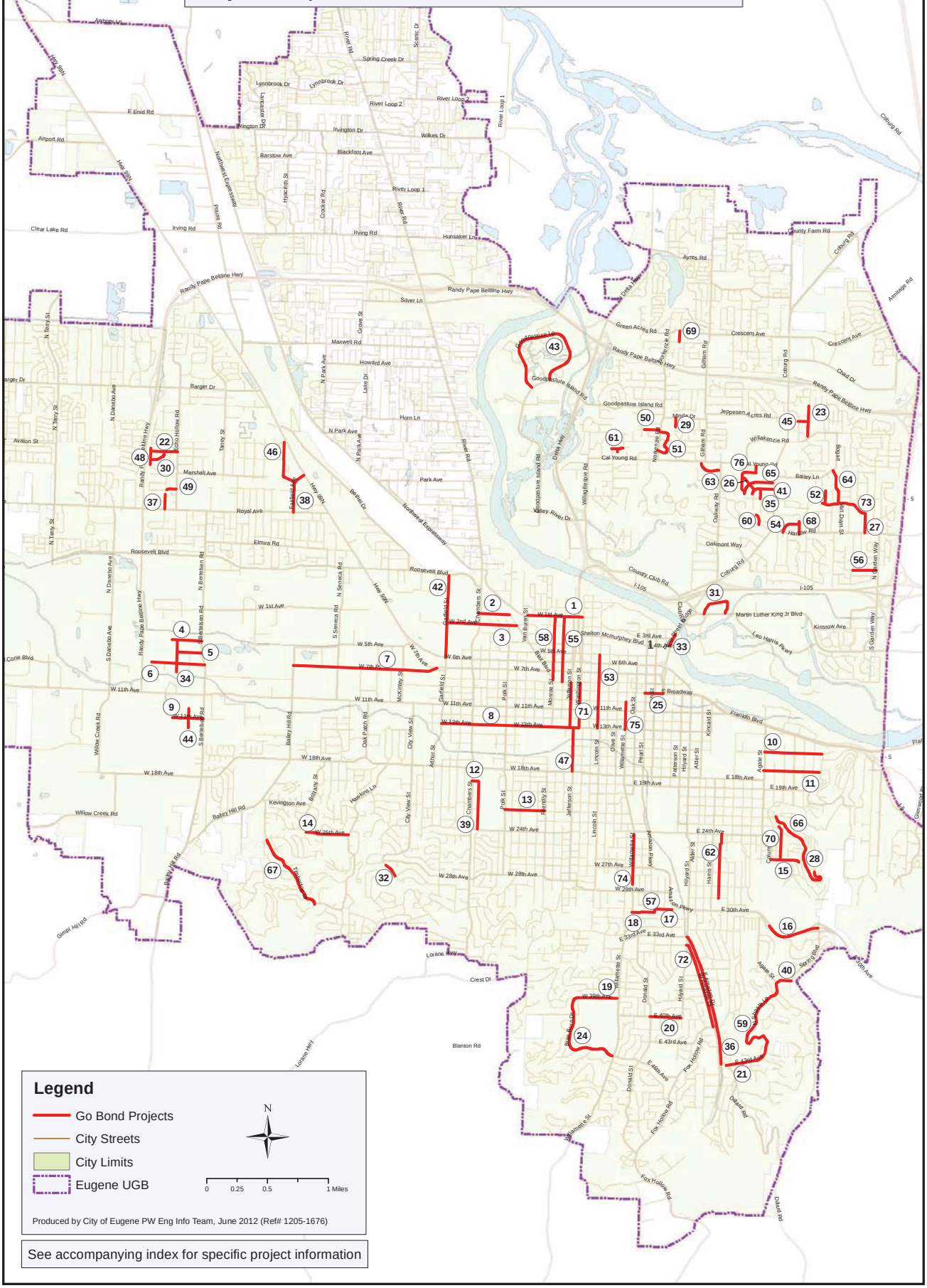
Summary of Bond Costs

Total Street Projects in 2012 Dollars with inflation = $ 40,290,000
Total Pedestrian & Bicyclist Improvements = $ 2,580,000
Bond Issuance Costs = $ 130,000
Total Bond Costs = $ 43,000,000

Appendix B

Eugene Street Preservation Projects

Project Map for 2012 Bond Measure to Fix Streets



See accompanying index for specific project information

Map #	Street Name	Limits
45	IONE AVE	BEST LN - ADKINS ST
46	JACOBS DR	HWY 99N - FAIRFIELD AVE
47	JEFFERSON ST	8TH AVE - 18TH AVE
48	JUHL ST	NS ADDR 1424 - SOUTH END
49	KNOOP AVE	ECHO HOLLOW RD - ELIZABETH ST
50	LARKSPUR AVE	NORKENZIE RD - 640 FEET WEST OF NORKENZIE RD
51	LARKSPUR LOOP	NORKENZIE RD (N) - NORKENZIE RD (S)
52	LEIGH ST	NORTH END - WESTERN DR
53	LINCOLN ST	5TH AVE - 13TH AVE
54	LYDICK WAY	TOMAHAWK LN - HARLOW RD
55	MADISON ST	1ST AVE - 8TH AVE
56	MAHLON AVE	GARDEN WAY - HONEYSUCKLE LN
57	MILL ST	30TH AVE (NORTH) - 30TH AVE (SOUTH)
58	MONROE ST	1ST AVE - BLAIR BLVD
59	NORTH SHASTA LOOP	FIRLAND - 43RD AVE
60	PIONEER CT	PIONEER PIKE - NORTH END
61	PIPER LN	CHASA ST - FIR ACRES DR (INCL CUL-DE-SAC)
62	POTTER ST	24TH AVE - 29TH AVE
63	ROLAND WAY	OAKWAY RD - CAL YOUNG RD
64	SATRE ST	BAILEY LN - WESTERN DR
65	SHARON WAY	COBURG RD - ES DRWY 1023
66	SPRING BLVD	FAIRMOUNT BLVD - CAPITAL DR
67	TIMBERLINE DR	WARREN ST - WINTERCREEK DR
68	TOMAHAWK LN	HARLOW RD - 580' NORTH OF HARLOW RD
69	TULIP ST	CRESCENT AVE - HOLLY AVE
70	VAN NESS ST	23RD AVE - 27TH AVE
71	WASHINGTON ST	8TH AVE - 13TH AVE
72	WEST AMAZON DR	ES HILYARD - SS FOX HOLLOW
73	WESTERN DR	CALVIN ST - WEST END/MONROE MIDDLE SCHOOL
74	WILLAMETTE ST	24TH AVE - 29TH AVE
75	WILLAMETTE ST	10TH AVE - 13TH AVE
76	WOODSIDE DR	CAL YOUNG RD - SHARON WAY

Project List for 2012 Bond Measure to Fix Streets

Map #	Street Name	Limits
1	01ST AVE	WASHINGTON ST - VAN BUREN ST
2	01ST AVE	BLAIR BLVD - WEST END
3	02ND AVE	BLAIR BLVD - GARFIELD ST
4	05TH AVE	BERTELSEN RD - WEST END
5	06TH AVE	BERTELSEN RD - COMMERCIAL ST
6	07TH AVE	BERTELSEN RD - OSCAR ST
7	07TH PL	7TH AVE/HWY 99 - BAILEY HILL RD
8	13TH AVE	WASHINGTON ST - GARFIELD ST
9	13TH AVE	BERTELSEN RD - COMMERCE ST
10	15TH AVE	FAIRMOUNT BLVD - AGATE ST
11	17TH AVE	FAIRMOUNT BLVD - AGATE ST
12	19TH AVE	FILLMORE ST - CHAMBERS ST
13	22ND AVE	FRIENDLY ST - POLK ST
14	25TH AVE	HAWKINS LN - BRITTANY ST
15	27TH AVE	COLUMBIA ST - SPRING BLVD
16	30TH AVE	SPRING OVERPASS - AGATE ST
17	30TH AVE	MILL ST (WEST) - FERRY ST (EAST)
18	30TH AVE	MILL ST - WILLAMETTE ST
19	39TH AVE	WILLAMETTE ST - 100' EAST OF DENSMORE RD
20	40TH AVE	HILYARD ST - DONALD ST
21	43RD AVE	N SHASTA - DILLARD RD
22	AVALON ST	ECHO HOLLOW RD - JUHL ST
23	BEST LN	WILLAKENZIE RD - KENTWOOD DR
24	BRAE BURN DR	39TH AVE - WILLAMETTE ST
25	BROADWAY	MILL ST - PEARL ST
26	BUFF WAY	WOODSIDE DR - FORRESTER WAY
27	CALVIN ST	WESTERN DR - HARLOW RD
28	CAPITAL DR	SPRING BLVD - 50' N OF CRESTA DE RUTA ST
29	CARMEL AVE	MINDA DR - 400' SOUTH OF MINDA DR
30	CASCADE DR	AVALON ST - JUHL ST
31	CENTENNIAL LP	MLK, JR BLVD (EAST) - MLK, JR BLVD/CLUB RD
32	CITY VIEW ST	28TH AVE - 29TH AVE
33	COBURG RD	SS FERRY ST BRIDGE - 50' S OF EWEB ON/OFF RAMP
34	COMMERCIAL ST	5TH AVE - SOUTH END
35	CORYDON ST	FORRESTER WAY - TANDY TURN
36	EAST AMAZON DR	HILYARD ST - DILLARD RD
37	ELIZABETH ST	KNOOP AVE - ROYAL AVE
38	FAIRFIELD AVE	WS HWY 99 - ROYAL AVE
39	FILLMORE ST	19TH AVE - 24TH AVE
40	FIRLAND BLVD	SPRING BLVD - AGATE ST
41	FORRESTER WAY	COBURG RD - WS DRWY 1033
42	GARFIELD ST	ROOSEVELT - 6TH AVE
43	GOODPASTURE LOOP	GOODPASTURE IS RD (EAST INTERSECTION) - GOODPASTURE IS RD (WEST INTERSECTION)
44	INTERIOR ST	NORTH END OF CUL DE SAC - SOUTH END OF IMPROVED SECTION

Eugene Public Works
Engineering

December 2018

Street Repair Review Panel,

This memo summarizes walking and bicycling projects built in 2018 using Pavement Bond Measure (PBM) funds and offers a look ahead to projects anticipated for construction in 2019.

Background

The 2012 Pavement Bond Measure includes the following language, "…Council determined that an annual average of $516,000 should be allocated over a period of five years to support bicycle and pedestrian projects guided by the Pedestrian and Bicycle Master Plan, City staff, and the Bicycle and Pedestrian Advisory Committee (BPAC)." Transportation Planning staff works with the Active Transportation Committee (formerly BPAC) to develop a list of bicycle and pedestrian projects for review. The projects include additions to pavement projects and stand-alone improvements for people who walk and bike.

Where do the Walking and Biking Projects Come From?

Staff uses the Transportation System Plan (TSP) to identify network improvements for walking and bicycling. The TSP is the city's transportation policy document and long-term vision for transportation improvements.

For pavement preservation projects city staff consult the TSP to determine what network improvements should be made based on long-term system needs. Pavement projects present an opportunity to implement some improvements, such as bike lane striping, because striping will be entirely replaced as part of the pavement project.

There are also projects developed based on community input (ATC, etc.), coordination with 4j and Bethel Safe Routes to School programs, and through site investigations by city staff. The Vision Zero Action Plan is also used to evaluate project locations to improve safety outcomes for people walking and bicycling.

How Were PBM Walking/Biking Funds Spent in 2018?

Some of the walking and bicycling projects occur on streets where there is a pavement project while others do not. Projects developed in 2018 are listed below. Pictures for some projects are located at the end of this memo.

Projects Occurring with Pavement Projects

- 7th Place (HWY 99 to Bailey Hill Rd): bike lanes were added to 7th Place from Bailey Hill Road to HWY 99. The project narrowed existing travel lanes to make room for the bike lanes. See PIC #1.
- West Amazon (Fox Hollow to Hilyard): buffered bike lanes were added for northbound travel. Curb extensions were added on West Amazon Drive in alignment with where future bridges across Amazon Creek will be installed in 2019/2020.

Discretionary Projects

- 4j Safe Routes to School Infrastructure: the 2013 Eugene School District 4J bond measure included money for safe routes to school projects at or near 4j schools. In 2018, the City of Eugene partnered with 4J to develop the following walking and bicycling projects for Howard Elementary and Gilham Elementary. An IGA was developed to outline the terms of the cost sharing.

    - Sidewalk infill on the east side of Park Avenue from Hatton Avenue to Howard Avenue (see PIC #2);
    - A crosswalk across Park Avenue at Hatton Avenue;
    - Speed cushions on Park Avenue from Kelly Lane to Howard Avenue;
    - Sidewalk infill on Grove Street from Howard Avenue to Maxwell Road (coordinated with Lane County Public Works);
    - A pedestrian crossing island and crosswalk across Gilham Road at Elkhorn Drive; and,
    - The addition of two crosswalks on Honeywood Street near Gilham Elementary.
- Commercial Street Bridge Automatic Counter: walking and bicycling counters were added to the Fern Ridge Path just east of the new Commerce Street Bridge. Counters will be added to all new path segments if none are located nearby.
- Funding Match for Electronic Bicycle Lockers: an ODOT grant was acquired for purchase of electronic bike lockers for long-term bicycle parking in downtown Eugene. There are 24 lockers: 4 at the Diamond Express Stop, 8 at Amtrak, 12 at LTD Eugene Station.

<u>What Projects are you Exploring for 2019?</u>
The 2017 Pavement Bond Measure included an increase in spending for walking and bicycling projects from an annual average of $516,000 per year to $1,000,000 per year. Through discussions with staff and the Active Transportation Committee, it has been decided that about half of the money should be spent on shared use path maintenance with the other half used for discretionary walking and bicycling projects throughout Eugene. Currently, scoping is underway to light and repave the West Bank Path. Discretionary projects are likely to include a pedestrian crossing of Chad Drive at Shadow View, and contributions to pavement preservation projects. For example, funding will be added to the Alder Street repaving (24th Avenue to 27th Avenue) to develop a neighborhood greenway that prioritizes walking and bicycling.

If you have any questions about planning for walking and bicycling projects, or use of PBM funds to deliver these projects, please contact me: RDunbar@eugene-or.gov, (541) 682-5727.

Sincerely,
Reed Dunbar, AICP
Associate Transportation Planner (Bicycle and Pedestrian Planner)

PIC #1: Bike Lanes were added to 7th Place

PIC #2: Sidewalk Infill and Crosswalk on N. Park Avenue by Howard Elementary

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INDEPENDENT ACCOUNTANT'S REPORT ON APPLYING AGREED-UPON PROCEDURES

To Jon Ruiz, City Manager
City of Eugene
Eugene, Oregon

We have performed the procedures enumerated below, which were agreed to by the City of Eugene ("City"), solely to assist you in connection with the determination of whether expenditure of the 2012 general obligation bond funds approved for issuance through voter's approval of Ballot Measure 20-197 were expended in accordance with the purposes and limitations outlined in City Council Resolution No. 5063; namely that such expenditures were: a) used only for costs related to street preservation projects, fund bicycle and pedestrian projects and payment of bond issuance costs and not to expand the motor vehicle capacity of the street system; and, b) limited to projects included in Exhibit A to the Resolution unless upon completion of all of the projects listed in Exhibit A the Council adds other street preservation projects to the list in order to utilize unspent bond proceeds. Management is responsible for the accounting records pertaining to the use of the bond proceeds. This agreed-upon procedures engagement was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of these procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below either for the purpose for which this report has been requested or for any other purpose.

The City provided the following documents and information in connection with our agreed-upon procedures testing:

- An Excel spreadsheet detailing all charges allocated and/or invoices received by the City for expenditures related to the use of the bond proceeds
- Copies of Resolution No. 5063 and Ballot Measure 20-197
- Copies of bids and contracts issued by the City for any projects to be completed using the bond proceeds
- Copies of supporting documentation including, but not limited to, invoices, cancelled checks, payroll records, certifications of payments and bank statements; and
- Copies of the City's general ledger detail for the bond fund accounts.

The procedures we performed and the related findings are as follows:

(1) *Expenditure testing*. From January 1, 2018 through December 31, 2018, total expenditures for the projects funded by the 2012 bond proceeds were $7,130,935 per the City's general ledger. We tested $4,534,930 or 63.60% of those expenditures. All tested expenditures were supported by appropriate documentation such as vendor invoices, certifications of payment, payroll records, signed contracts, and photographs of the work in progress. All tested expenditures were recorded in the proper account, fund and period and were spent on street projects included in Exhibit A of City Council Resolution No. 5063 or other street preservation projects approved by City Council, as permitted under Resolution 5063. No exceptions were noted.

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(2) We reviewed bids and contracts related to two of five new construction projects during 2018. The bidding and contracting process for the two projects complied with the City's procurement policies and procedures.

(3) We recalculated the amount of unspent bond proceeds and compared that amount to the actual amount of bond proceeds remaining. The following is a summary of the 2012 bond proceeds and project expenditures from inception of the Street Bond project to December 31, 2018:

	From Issuance to 12/31/2014	From 1/1/2015 12/31/2015	From 1/1/2016 12/31/2016	From 1/1/2017 12/31/2017	From 1/1/2018 12/31/2018	Total
Bond proceeds	$ 8,500,000	6,289,700	6,690,000	8,750,000	6,280,000	$ 36,509,700
Project expenditures	8,445,638	6,355,849	6,378,148	8,386,719	7,130,935	36,697,289

As of December 31, 2018, the City had $200,000 outstanding on the line of credit facility. From January 1, 2018 through December 31, 2018, the City received $6,280,000 in bond proceeds and was charged interest of $14,305; the City repaid $7,094,305 during the same period. At December 31, 2018, the City had $6,490,300 in authorized borrowing remaining on the bonds ($43,000,000 authorized less $36,509,700 in proceeds received to date).

Based on our limited testing, we noted that the City followed the purpose and limitation of the City Council Resolution 5063.

We were not engaged to and did not conduct an audit, the objective of which would be the expression of an opinion on the financial records. Accordingly, we do not express such an opinion. Had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

This report is intended solely for the information and use of the City Manager of the City of Eugene, and is not intended to be and should not be used by anyone other than the City Manager.

Isler CPA

Isler CPA

Eugene, Oregon
February 4, 2019