# **ATTACHMENT A**

# Citizen Street Repair Review Panel 2015 Report

Implementation Update for Measure 20-197 Bonds to Fix Streets















# Memorandum

Date: February 3, 2016

To: Jon Ruiz, City Manager

From: Street Repair Review Panel

Subject: 2015 Report of the Street Repair Review Panel

It is our pleasure to present the 2015 annual report of the Street Repair Review Panel, focusing on the second year of implementing the 2012 bond measure to fix streets. This panel initially was formed in 2009 to review the implementation of the 2008 road bond measure. This report was written in response to the accountability provisions in Measure 20-197, the 2012 bond measure to fix streets.

The 11-member panel met three times over a three-month period in preparation of this report, which included a physical inspection of the projects completed in 2015. 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, 2015.

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 2015.

Highlights from our review of the 2015 street bond projects include the following:

- **Progress** The projects funded in 2015 by the 2012 voter-approved bond measure resulted in the reconstruction or resurfacing of 17 streets totaling more than 13.2 lane miles. The backlog of street repair projects decreased by \$5 million in 2015 to \$79 million. The 2007 Pavement Management Report projected the anticipated backlog for rehabilitation needs would reach more than \$282 million in 2015 if steps were not taken to reduce the backlog. That's a difference of more than \$200 million. The 2012 measure also 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 2015, significant safety improvements for people who walk and bike include installing sidewalk ramps, adding new pedestrian crossing beacons, increasing buffer zones and adding shared lane markings.
- Acknowledging Variability in Funding Forecasts Preliminary estimates indicate the City came in under budget on the 2015 projects, but forecasting future costs remains a challenge. One reason for this is that estimates are based on surface observations while the actual treatment is determined by rigorous project-specific scientific testing. For the 2015 projects, as shown in Appendix A, the actual costs were \$323,000 less than programmed—but the actual costs could just as easily have turned out somewhat greater than programmed. Additionally, there could be other variables in the years ahead. While the price of oil hasn't proved to have a significant economic impact on the overall costs of the bond projects to date, the possibility remains. There are also other macro-economic factors such as competitive trends and an expected uptick in local construction projects this summer that could stretch contractors thin and drive up prices. We will let you know if we perceive any significant trends developing as the bond measure continues to be implemented. The pedestrian and bicycle improvement costs for the first two years continues to exceed the expected annual average of \$516,000, but it's our understanding that staff intentionally "front loaded" the cost of the bicycle and pedestrian projects to accommodate the scheduling of large grant projects in future years.
- **Collaborating with Partners and Leveraging Bond Funds** Eugene's Pavement Preservation Program (PPP) 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. The 2015 projects created opportunities to repair underground utilities including the wastewater and stormwater systems. This is a cost-effective way to avoid emergency repairs in the future. We also appreciate the effort to leverage bond funds with other sources of revenue, such as the use of transportation SDCs to pay for signal upgrades on bond-funded paving projects.

- Continuing to Communicate with Citizens and Businesses Construction, by nature, is disruptive. City staff continued to work with residents and stakeholders to minimize inconveniences. One potentially disruptive project included the work in the Friendly Area Neighborhood. Two schools were adjacent to the project. Unforeseen complications pushed the work into the school year. The City and contractors worked with the schools to reduce impacts to buses, parents, and teachers. We continue to encourage the department to coordinate projects as much as possible and to continue to look for new and better ways to proactively coordinate communications and minimize impact to the traveling public and impacted businesses and residents.
- Achieving Sustainability Goals The PPP is designed to extend the life of city streets before they fall into the reconstruct category. This helps to not only extend the life of the streets, but when combined with recent paving techniques, greatly reduces the City's environmental footprint. Eugene was recognized for its use of recycled asphalt pavement allowing for less asphalt waste in landfills. The continued use of warm mix asphalt saves energy, reduces emissions (as detailed in the attached report), and is an excellent example of the department's commitment to sustainability efforts, consistent with the City's Climate Recovery Ordinance.
- **Building Safe and Complete Streets** The bond projects are designed to improve safety for people of all ages and abilities, balance the needs of different modes, and support local land uses, economies, cultures, and natural environments. This ties into the Council's strategy of "Vision Zero," a resolution that calls for eliminating traffic-related deaths or serious injuries on city streets. The improvements funded through the bond enhance safety for all road users, whether driving, walking or bicycling.
- **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 report. Bicycle and pedestrian projects were not listed in the bond measure. Their selection is guided by the Pedestrian and Bicycle Master Plan, City staff and the Bicycle and Pedestrian Advisory Committee. The memo by Associate Transportation Planner Reed Dunbar (Appendix C) explains in more detail how these safety improvement projects are selected.
- **Recognizing the Continued Economic Value of Street Bond Projects** Based on the Oregon Department of Transportation Highway Division jobs multiplier model, the bond measure projects completed in 2015 conservatively sustained approximately 91 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 bonds 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 in the long run.

We feel Public Works Director Kurt Corey and his staff are doing an excellent job designing and constructing bond measure projects. 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 <a href="www.eugene-or.gov/gobonds">www.eugene-or.gov/gobonds</a>. Please feel free to contact any of us for additional information.

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# 2015 Report to the Citizen Street Repair Review Panel

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Photos on cover from 2015 projects: Completed paving on Brae Burn (left); Completed paving and shared lane bike markings on Fillmore Street (upper right); Construction of a median island crossing (lower right)

2015 SRRP REPORT iii

# 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 2015. 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 loading. 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.



Removing top layers of pavement on 40<sup>th</sup> Avenue for inlay treatment

**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.

Reclaimed Asphalt Pavement (RAP) - Reclaimed asphalt pavement is the grindings from the existing pavement during the inlay process described above. While reclaimed asphalt materials can be used as base rock and shoulder materials, 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% 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.



Paving on 19th Avenue

**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:

- 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 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 included in the bond were specifically listed (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

The 2012 bond measure stated that the City will allocate an annual average of \$516,000 to support bicycle and pedestrian 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 Bicycle and Pedestrian Advisory Committee. In 2015, the practice continued to add pedestrian and bicycle improvements to several paving projects and to complete a standalone project. These improvements are further described in the project details, below, and included in Appendix C of this report.

# **USE OF OTHER FUNDS IN CONJUNCTION WITH STREET BOND FUNDS**

The use of street-repair bond funds is limited to the overlay or reconstruction of the driving surface of streets as well as to preserve existing integral elements of the street such as curbs, gutters, sidewalks, on-street bike lanes, traffic signals, street lights, medians, traffic calming devices, and other integral parts of a street preservation project. In addition, the City will allocate an annual average of \$516,000 of the bond proceeds over a period of five years to fund bicycle and pedestrian projects. (Resolution 5063, Section D).



Installation of new stormwater pipe on 22<sup>nd</sup> Avenue

However, there is often a need or an opportunity to complete additional work as part of the construction contracts for street preservation. The additional work may be funded by wastewater and stormwater utility funds, local gas taxes, transportation system development charges, or state and federal grants.

Wastewater and stormwater utility funds are typically used to repair and rehabilitate the existing wastewater and stormwater systems, respectively, that underlie much of the city's street system. Making these repairs in coordination with the street bond projects is a cost-effective way to accomplish the work and precludes emergency repairs in the future that would require cutting new pavement.

Local gas taxes have been used to include adjacent streets in the street bond project contracts.

Transportation system development charges (SDCs) are often used to upgrade existing signal systems during pavement preservation projects. The work typically includes installing new conduit under the pavement to connect the traffic detection loops to the signal controllers and installing audible pedestrian devices for pedestrian crossing signals.

# Sustainability and Gains through Technical Developments

The City of Eugene continually strives to improve the quality, environmental footprint, and cost efficiency of its projects. In 2015, 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 2015 in place of conventional hot mix asphalt; nearly 42,000 tons of warm mix asphalt pavement was placed on capital



paving projects in 2015. 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<sub>2</sub> savings of 12 pounds per ton of pavement using warm mix as compared to 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% compared to hot mix asphalt.

Reclaimed asphalt pavement (RAP) has been used in Eugene for more than 20 years. Like the State of Oregon, Eugene's current standard specification allows up to 30% RAP, by weight, to be used in new asphalt pavement mixes. For several years, local asphalt producers have been supplying mixes that maximize the allowed RAP content.

Increasing the amount of reclaimed asphalt binder in pavement mixes potentially impacts the quality and longevity of the asphalt pavement, so increasing the allowed reclaimed asphalt binder in mixes needs to be done with consideration as RAP contents greater than 20% to 30% is an emerging technology without much research conducted on long-term impacts to the pavement quality. Nationally, multiple organizations are experimenting with increasing the reclaimed asphalt binder content, and Eugene provided pavement samples for research by the Asphalt Pavement Association of Oregon in 2013.

In Eugene, typical RAP materials result in a one-to-one replacement of the virgin asphalt cement needed for a typical Level 2, ½" dense graded asphalt pavement used on residential and collector streets in Eugene. Since the asphalt cement generally makes up about a quarter of the cost of asphalt pavement, reducing the amount of virgin asphalt cement used has the potential to decrease materials costs as well as conserving virgin resources.



#### City Leads State in Use of RAP

The City of Eugene is leading the state in the use of recycled asphalt pavement, according to a statewide industry group.

In an article titled "City of Eugene leads the way in RAP" in its spring 2015 Centerline newsletter, the Asphalt Pavement Association of Oregon credits Eugene with being the first entity in Oregon to exceed the standards specified by the Oregon Department of Transportation for the use of recycled asphalt pavement (RAP).

"One of the reasons we're exploring higher levels of RAP content is to meet City sustainability goals," says Jenifer Willer, P.E., manager of the City's pavement preservation program. "Using RAP means less asphalt waste in landfills. But there's also potential for economic benefit.

"Our local contractors are as eager to do this as we are," Willer says. "They have huge stockpiles of RAP and this is a cost-effective way to reuse material and lower their production cost."

The full article is available online at the APAO web site (page 4).

Based on positive test results on pilot projects constructed in 2013 to increase RAP usage, Eugene continued to select projects to increase the reclaimed binder in asphalt pavements. In 2015, the City specified 35% binder replacement through the use of reclaimed asphalt materials on 19<sup>th</sup> Avenue, 22<sup>nd</sup> Avenue, Fillmore Street and Friendly Street. The specification allows flexibility for the contractors to meet the 35% binder replacement value using RAP or a combination of RAP and reclaimed asphalt shingles (RAS) depending on materials availability and plant capabilities.

By its nature, reclaimed asphalt binders are stiffer and pavements that contain higher contents of reclaimed asphalt binders are more susceptible to cracking. To compensate for this potential, the grade of virgin asphalt binder typically used for Eugene paving with higher than 30% binder replacement was replaced with a "softer" binder that should better resist cracking.

In the use of increased reclaimed binder content, Eugene is on the forefront of this technology and while we are being leaders, we are also proceeding with caution and choosing projects on a case by case basis. Typically, we are choosing streets with lower traffic volumes in order to minimize the chances of unintended consequences.

Nearly 13,000 tons of RAP was used on 2015 capital paving projects, reducing the need for nearly 750 tons of asphalt cement and 12,000 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 1,000 MT CO<sub>2</sub>e compared to using hot-mix asphalt pavement with no reclaimed pavement on 2015 capital paving projects.

# **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 2015 construction, the 2012 estimated cost with inflation was \$5,428,000. As of January 1, 2016, although not all project contracts have been closed out, the projected actual cost for the 2015 bond projects is \$5,105,000; a net difference of \$323,000 below the costs projected in 2012. Details on an annual project-by-project basis are provided in the following pages and summarized in Appendix A. As construction is completed each year, Appendix A will be updated and included in future reports to track the funding status of the overall bond funds.

The 2012 bond measure also allocated an average of \$516,000 for pedestrian and bicycle improvements each year. In 2015, the project expenditures on all pedestrian and bicycle improvements funded by the bond are estimated at \$481,200, which is \$34,800 under the annual average allocation. Future year distributions of bond-funded improvements will continue to be adjusted to maintain an annual average of \$516,000.

# 2015 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 2015 construction-related costs have been finalized as of January 1, 2016.



Installation of a shared lane pavement marking in 2015

# 15th Avenue and 17th Avenue

**Project Description:** This project consisted of rehabilitation of two streets in the Fairmount Neighbors neighborhood in Council Ward 3:

- 15<sup>th</sup> Avenue from Agate Street to Fairmount Boulevard
- 17th Avenue from Agate Street to Fairmount Boulevard

This project also included adding bicycle shared lane markings on 15<sup>th</sup> Avenue funded by the pedestrian and bicycle component of the bond.

# **Treatment Methodology:**

- 15<sup>th</sup> Avenue was partially rehabilitated by removing the top 2-inch-thick layer of existing asphalt pavement and repaving the pavement surface. The Portland cement concrete (PCC) section of 15<sup>th</sup> Avenue was reconstructed for its full depth.
- 17th Avenue was reconstructed for its full depth.

**Costs:** Total project costs, from all funding sources, are estimated at \$2,149,000.

Preliminary Estimate based on Pavement
Management System (PMS) Surface Evaluation = \$1,673,000
Total Projected/Actual Paving Bond Funds Used = \$1,908,000

Difference = \$(235,000)

Preliminary surface conditions indicated 17<sup>th</sup> Avenue could be rehabilitated. Upon more detailed pavement soils testing, 17<sup>th</sup> Avenue needed to be reconstructed, which increased the overall project costs.

Bond funds used for pedestrian and bicycle improvements on this project: \$38,000.

**Additional Sources of Funding:** Stormwater and wastewater utility funds paid for minor utility work.



17th Avenue post-project

# 19th Avenue, 22nd Avenue, Fillmore Street

**Project Description:** This project consisted of rehabilitation of four streets in the Friendly Area Neighbors neighborhood in Council Ward 1:

- 19<sup>th</sup> Avenue from Chambers Street to Fillmore Street
- 22<sup>nd</sup> Avenue from Polk Street to Friendly Street
- Fillmore Street from 19<sup>th</sup> Avenue to 24<sup>th</sup> Avenue

Shared lane bicycle markings and crosswalk markings were added to this project with funding from the bond for pedestrian and bicycle improvements. As part of the same construction contract, this project also completed gas tax funded portions of 22<sup>nd</sup> Avenue (Chambers to Fillmore) and Friendly Street (24<sup>th</sup> to 28<sup>th</sup> avenues).

**Treatment Methodology:** These sections were rehabilitated by removing the top layer(s) of existing asphalt pavement and repaving the streets.

**Costs:** Total project costs, from all funding sources, are estimated at \$1,232,000.

Preliminary Estimate based on Pavement	
Management System (PMS) Surface Evaluation =	\$863,000
Total Projected/Actual Paving Bond Funds Used =	\$701,000
Difference =	\$162,000

Bond funds used for pedestrian and bicycle improvements on this project totaled \$10,000.

**Additional Sources of Funding:** Local gas taxes paid for paving on non-bond funded streets. Stormwater and wastewater utility funds paid for minor utility work. SDC's paid for traffic signal upgrades.

# **Project Photos:**



Fillmore Street post-construction



22<sup>nd</sup> Avenue post-construction

# 25th Avenue, City View Street and Timberline Drive

**Project Description:** This project consisted of rehabilitation of three streets in the Churchill Area Neighbors neighborhood in Council Ward 8:

- 25<sup>th</sup> Avenue from Hawkins Lane to Brittany Street
- City View Street from 28th Avenue to 29th Avenue
- Timberline Drive from Warren Street to Wintercreek Drive

**Treatment Methodology:** 25th Avenue was rehabilitated by removing the top layer(s) of the existing paved surface and repaving the street. City View Street was rehabilitated with a 1-inchthick overlay over the existing paved surface. Timberline Drive was rehabilitated with a 2-inchthick overlay over the existing paved surface. Spots of failed pavement were removed for their full depth and reconstructed prior to the rehabilitation treatments.

**Costs:** Total project costs, from all funding sources, are estimated at \$1,028,000.

Preliminary Estimate based on Pavement	
Management System (PMS) Surface Evaluation =	\$935,000
Total Projected/Actual Bond Funds Used =	\$958,000
Difference =	(\$23,000)

During construction, sections of 25<sup>th</sup> Avenue were not able to support the construction traffic resulting in a significant number of pavement failures that were not anticipated which increased the project cost.

**Additional Sources of Funding:** Stormwater and wastewater utility funds.

#### **Project Photo:**



Timberline Drive post-construction

# 39th Avenue, 40th Avenue and Brae Burn Street

**Project Description:** This project consisted of rehabilitation of four streets in the Southwest Hills Neighborhood Association neighborhood in Council Ward 2:

- 39th Avenue from Willamette Street to Brae Burn Drive
- Brae Burn Drive from 39<sup>th</sup> Avenue to Willamette Street
- 40<sup>th</sup> Avenue from Donald Street to Hilyard Street

This contract also included rehabilitation of Donald Street funded by the local gas tax.

**Treatment Methodology:** These street sections were rehabilitated by removing the top 2 to 3 inches of the existing asphalt pavement and repaving the streets.

**Costs:** Total project costs, from all funding sources, are estimated at \$2,164,000.

Preliminary Estimate based on Pavement	
Management System (PMS) Surface Evaluation =	\$899,000
Total Projected/Actual Paving Bond Funds Used =	\$836,000
Difference =	\$63,000

Bicycle and pedestrian bond funds were used on Donald Street to improve the pedestrian crossing at 39<sup>th</sup> Avenue to Tugman Park in the amount of \$19,000.

**Additional Sources of Funding:** Local gas taxes paid for non-bond funded street paving. Stormwater and wastewater utility funds were used for minor system repairs.

Project Photos: See cover for a photo of Brae Burn Street



39<sup>th</sup> Avenue post-construction



40th Avenue post-construction

# Avalon, Elizabeth and Juhl Streets, Cascade Drive, Knoop Avenue

**Project Description:** This project consisted of rehabilitation of five streets in the Active Bethel Citizens neighborhood in Council Ward 6:

- Avalon Street from Echo Hollow Road to Juhl Street
- Cascade Drive from Avalon Street to Juhl Street
- Elizabeth Street from Knoop Avenue to Royal Avenue
- Juhl Street from north of Avalon Street to Elizabeth Street
- Knoop Avenue from Echo Hollow Road to Elizabeth Street

**Treatment Methodology:** These streets were rehabilitated by removing existing pavement and repaying with a thicker pavement structure resulting in at least 4 inches of pavement structure.

**Costs:** Total project costs, from all funding sources, are estimated at \$722,000.

Preliminary Estimate based on Pavement
Management System (PMS) Surface Evaluation = \$826,000
Total Projected/Actual Paving Bond Funds Used = \$627,000

Difference = \$199,000

There were several street sections that were anticipated to require full depth reconstruction that were able to be rehabilitated at less expense.

Additional Sources of Funding: Stormwater and wastewater utility funds and Transportation

SDCs for traffic signal upgrades.

### **Project Photos:**

(Clockwise from upper right) post-project photos of the Intersection of Avalon Street and Cascade Drive, Knoop Avenue, and Elizabeth Street







# Mahlon Avenue (Garden Way to Honeysuckle Lane)

**Project Description:** This project consisted of rehabilitation of this street in the Harlow Neighbors neighborhood in Council Ward 4. This street was included in a local gas tax-funded project to repave Willakenzie Road and Garden Way.

**Treatment Methodology:** Mahlon was rehabilitated by removing the existing pavement and repaving the street with a thicker pavement structure resulting in at least 4 inches of pavement structure.

Costs: Total project costs, from all funding sources, are estimated at \$1,013,000.

Preliminary Estimate based on Pavement	
Management System (PMS) Surface Evaluation =	\$232,000
Total Projected/Actual Bond Funds Used =	\$75,000
Difference =	\$157,000

Mahlon Avenue was anticipated to require full depth reconstruction, but was able to be rehabilitated at less expense.

Bicycle and pedestrian bond funds were used to remark the bicycle lanes on Garden Way to add a buffer zone between the parking lane and the bicycle lane and to remark bicycle lanes on Willakenzie Road as a buffered bike lane. The total amount of bond funds used for bicycle and pedestrian improvements on this project were \$20,000.

**Additional Sources of Funding:** Local gas taxes for non-bond street paving; stormwater and wastewater utility funds.

#### **Project Photo:**



Mahlon Avenue post-construction

# 2015 Pedestrian and Bicycle Improvement Projects

**Project Description:** In addition to the pedestrian and bicycle improvements incorporated into the paving projects described above, pedestrian and bicycle improvements were constructed at five locations for \$349,000:

- Install sidewalk ramps, median and rectangular rapid flashing beacon on Barger Drive.
- Install sidewalk ramps, median and rectangular rapid flashing beacon on Bailey Hill Road.
- Install sidewalk ramps, median and rectangular rapid flashing beacon on Oakway Road.
- Widen sidewalk at 29<sup>th</sup> Avenue near Amazon Parkway.
- Install bicycle shared lane markings on various streets.

See the Memo in Appendix C for additional projects that included bond funds for pedestrian and bicycling improvements.

**Pedestrian and Bicycle Improvements Funded in 2015:** The 2012 bond measure allocated a total of \$2,580,000 for pedestrian and bicycle improvements. This total amount averages out to \$516,000 per year over the five year bond. In the second year of construction, this project and expenditures on all pedestrian and bicycle improvements funded by the bond totaled \$481,200 which was less than the average allocation. Over the first two years of the bond-funded projects, the actual expenses are estimated to be \$191,200 over the allocated average. Future year distributions of bond-funded improvements will continue to be adjusted to maintain an annual average of \$516,000.

# **Project Photo:**



Rectangular rapid flashing beacon crossing installed on Bailey Hill Road

5-Year Street Bond Project List - Costs and Forecast

		J-Teal Stree	t Bond Project	<u> </u>	costs and i orec	ası			
Project Map #	Street name	From	То	Ward(s)	Proposed Treatment	Programmed Cost (2012) plus inflation	Projected/ Actual Cost	Diff	erence
Construc	ction Year 2014								
1	1st Avenue (C)	Washington St	Van Buren St	7	Overlay	\$ 544,000			
55	Madison Street (L)	1st Ave	8th Ave	1, 7	Reconstruction	\$ 969,000	\$ 2,154,000	\$	(95,000)
58	Monroe Street (L)	1st Ave	Blair Blvd	1, 7	PCC panel replacement	\$ 546,000	Ψ 2,134,000	Ψ	(33,000)
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	. , ,		,
44	Interior Street (L)	north end	south end	8	Reconstruction/Overlay	\$ 319,000	\$ 410,000	\$	78,000
	. ,		Dillard Rd	2	Pavement Removal and	\$ 165,000			
21	43rd Avenue (C)	North Shasta Lp			Replacement		¢ 4.040.000		(040,000)
40	Firland Blvd (C)	Spring Blvd	Agate St	2	Reconstruction	\$ 97,000	\$ 1,319,000	\$ (	(618,000)
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		l .	
33	Coburg Road (A)	south end of Ferry Street Bridge	north end of viaduct	3, 7	Pavement Removal and Replacement	\$ 188,000	\$ 854,000	\$ (	(482,000)
43	Goodpasture Loop (C)	Goodpasture Island Road		5	Overlay	\$ 1,103,000	\$ 925,000	\$	178,000
			(		ion Year 2014 Totals =		\$ 7,771,000		(656,000)
	tion Year 2015	Egirmourt Dh.d	Agoto Ct	2	Paganatrust	¢ 1000.000	T	1	1
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 Chambers St	3	Reconstruct	\$ 653,000		<u> </u>	
12	19th Avenue (L)	Fillmore St	Chambers St	1	Pavement Rem/Overlay	\$ 85,000			
13	22nd Avenue (L)	Friendly St	Polk St	1	Pavement Rem/Overlay	\$ 181,000	\$ 701,000	\$	162,000
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			
32	City View Street (L)	28th Ave	29th Ave	8	Reconstruct	\$ 278,000	\$ 958,000	\$	(23,000)
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			
20	40th Avenue (C)	Hilyard St	Donald St	2	Overlay	\$ 169,000	\$ 836,000	\$	63,000
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			
30	Cascade Drive (L)	Avalon St	Juhl St	6	Reconstruct	\$ 170,000			
37	Elizabeth Street (L)	Knoop Ave	Royal Ave	6	Overlay	\$ 120,000	<b>A</b> 007.000		199,000
48	Juhl Street (L)	north side of address 1424	south end	6	Reconstruct	\$ 160,000	\$ 627,000	\$	
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
Canatau	otion Voor 2046		(	Construct	ion Year 2015 Totals =	\$ 5,428,000	\$ 5,105,000	\$	323,000
	Stb Avenue (L)	Bertelsen Rd	west and	8	Reconstruct	\$ 664,000		\$	
4	5th Avenue (L)		west end			\$ 166,000			-
6	6th Avenue (L) 7th Avenue (L)		Commercial St Oscar St	8	Overlay Reconstruct			\$	-
15	27th Avenue (L)	Bertelsen Rd Columbia St	south end	3	Overlay	\$ 863,000 \$ 117,000		\$	-
28	Capital Drive (L)	Spring Blvd	50' north of Crest De	3	Reconstruct	\$ 418,000		\$	
	. ,		Ruta					·	
31	Centennial Loop (L)	MLK Jr Blvd		4	Reconstruct	\$ 678,000		\$	-
34	Commercial Street (L)	5th Ave	south end	8	Overlay	\$ 230,000		\$	-
38	Fairfield Avenue (C)	Hwy 99	Royal Ave	7	Reconstruct	\$ 701,000		\$	-
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		\$	-
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 71	Van Ness Street (L) Washington Street (A)	23rd Ave	27th Ave 13th Ave	3	Overlay Reconstruct	\$ 134,000 \$ 751,000		\$	-
75	Willamette Street (L)	8th Ave 10th Ave	13th Ave	1	Reconstruct	\$ 613,000		\$	-
73	Williamette Street (L)	TourAve		Construct	ion Year 2016 Totals =		\$ -	\$	-
-	ction Year 2017			_					
2	1st Avenue (L)	west end	Blair Blvd	7	Reconstruct	\$ 548,000		\$	-
	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		\$	-
23	Best Lane (L)	Willakenzie Rd	Kentwood Dr	4	Overlay	\$ 157,000		\$	-
27	Calvin Street (L)	Western Dr	Harlow Rd	4	Reconstruct	\$ 273,000		\$	-
36	East Amazon Drive (A)	Hilyard St	Dillard Rd	2	Reconstruct	\$ 1,322,000		\$	-
42	Garfield Street (C)	Roosevelt Blvd	6th Ave	7	Reconstruct	\$ 1,891,000		\$	-
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		\$	-
52	Leigh Street (L)	Western Dr	north end	4	Reconstruct	\$ 184,000		\$	-
54	Lydick Way (L)	Tomahawk Ln	Harlow Rd	4	Overlay	\$ 87,000		\$	-

5-Year Street Bond Project List - Costs and Forecast

Project Map #	Street name	From	То	Ward(s)	Proposed Treatment	Programmed Cost (2012) plus inflation	Projected/ Actual Cost	Difference
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 = \$ 11,274,000 \$ Construction Vear 2018

Construc	Ction fear 2016							
7	7th Place (C)	Hwy 99 (7th Ave)	Bailey Hill Rd	1, 7, 8	Reconstruct	\$ 3,417,000		\$ -
17/18	30th Avenue (L)	Willamette Street	Ferry Street	2	Reconstruct	\$ 437,000		\$ -
26	Buff Way (L)	Woodside Dr	Forrester Wy	4	Reconstruct	\$ 179,000		\$ -
29	Carmel Avenue (L)	Minda Dr	400' south	5	Reconstruct	\$ 132,000		\$ -
35	Corydon Street (L)	Forrester Wy	Tandy Turn	4	Reconstruct	\$ 41,000		\$ -
41	Forrester Way (L)	Coburg Rd	west side of	4	Reconstruct	\$ 248,000		\$ -
			driveway 1033					
50	Larkspur Avenue (L)	Norkenzie Rd	604' west	5	Reconstruct	\$ 211,000		\$ -
51	Larkspur Loop (L)	Norkenzie Rd		5	Reconstruct	\$ 171,000		\$ -
57	Mill Street (L)	30th Avenue		2	Reconstruct	\$ 49,000		\$ -
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		\$ -
65	Sharon Way (L)	Coburg Rd	east side of driveway	4	Reconstruct	\$ 376,000		\$ -
			1023					
69	Tulip Street (L)	Crescent Ave	Holly Ave	5	Reconstruct	\$ 118,000		\$ -
72	West Amazon Drive (A)	Hilyard St	Fox Hollow Rd	2	Reconstruct	\$ 1,463,000		\$ -
74	Willamette Street (A)	24th Ave	29th Ave	1, 2	Reconstruct	\$ 1,232,000		\$ -
76	Woodside Drive (L)	Cal Young Rd	Sharon Wy	4	Reconstruct	\$ 423,000		\$ -
	(x) Street Classification K	(ey: (L) = Local; (C) =	(	Construct	ion Year 2018 Totals =	\$ 8,909,000	\$ -	\$ -

Collector; (A) = Arterial

Total Programmed Costs = \$ 40,290,000 \$ 12,876,000 \$ 27,414,000

**Pedestrian and Bicycle Improvements Project List** 

100001101101101101		nonto i roject zi			
Projects			Average Annual Allocation \$516,000	Projected I 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	
Cor	nstruction Year 2014	Pedestrian & Bicycle	Repairs Total =	\$ 742,000	\$ (226,000)
Construction Year 2015	1			<b>*</b> 040.000	
2015 Pedestrian & Bicycle Improvement Project  15th and 17th Avenues Markings				\$ 349,000 \$ 38,000	
Fillmore and Friendly Streets Markings				\$ 38,000 \$ 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	
Cor	nstruction Year 2015	Pedestrian & Bicycle	Repairs Total =	\$ 481,200	\$ 34.800

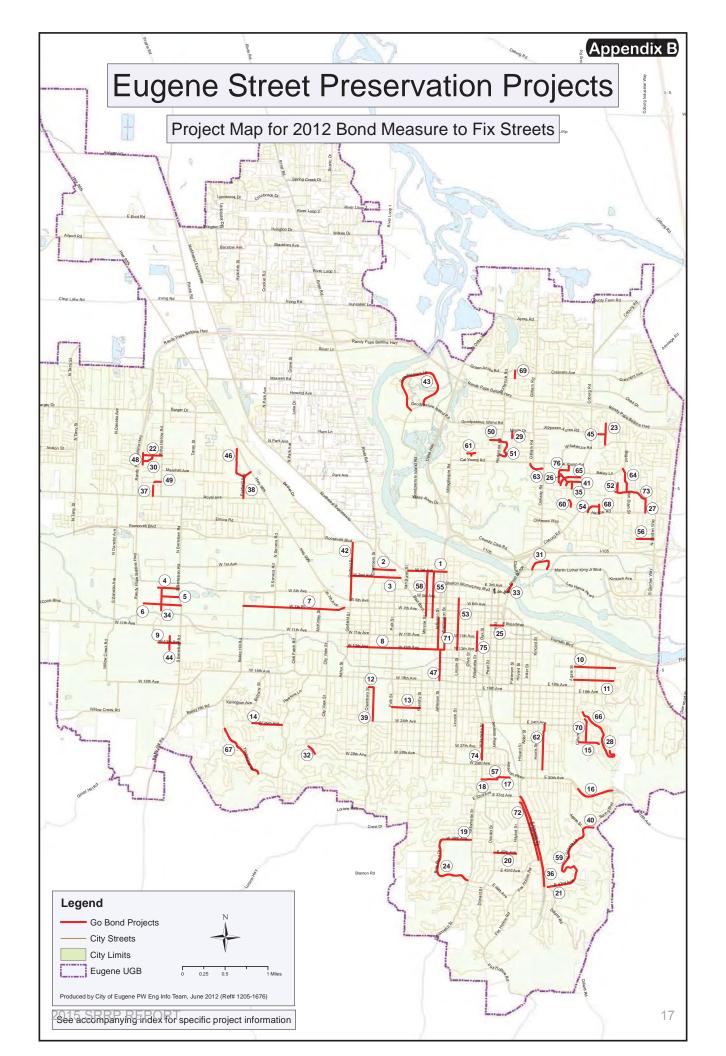
Construction Years 2016 - 2018 \$ 1,356,800

Total Pedestrian and Bicycle Improvement Project Costs = \$ 2,580,000 \$ 1,223,200 \$ 1,356,800

#### **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



# **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
75		(WEST INTERSECTION)
44	INTERIOR ST	NORTH END OF CUL DE SAC - SOUTH END OF IMPROVED SECTION
44	INTERIOR 31	I MONTH LIND OF COLUL SAC - SOUTH LIND OF HVIPNOVED SECTION

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



December 2015

Street Repair Review Panel,

This memo summarizes the process for determining street characteristics for people who walk and bike and how the Pavement Bond Measure (PBM) is used to enhance the environment for active transportation modes. In addition, project summaries for 2015 and a look ahead to 2016 have also been provided.

#### **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." Transportation Planning works with 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?

In 2012, City Council accepted the Pedestrian and Bicycle Master Plan as a resource for network improvements related to walking and bicycling. In 2016, the PBMP will be assimilated into the city's Transportation System Plan (TSP). The TSP, currently in process, is the city's transportation policy document and long-term vision for transportation resources. Policies, project tables, and maps for improving the walking and bicycling environment will be included in TSP and adopted by City Council.

For pavement preservation projects city staff consult the TSP to determine what, if any, changes should be explored during project planning. Pavement projects present an opportunity to implement some improvements, such as bike lane striping, because striping will be entirely replaced as part of the project. .

There are also projects developed based on community input, coordination with 4j and Bethel Safe Routes to School programs, and through site investigations by city staff.

#### What Bike/Ped Projects Were Built in 2015 Using the PBM?

Some of the walking and bicycling projects occur on streets where there is a pavement project while others do not. Projects developed in 2015 are listed below. Pictures for some projects are located at the end of this memo.

#### Projects Occurring with Pavement Projects

- 15<sup>th</sup> Avenue (Fairmount to Agate): add shared lane markings; extend island on Villard using striping
- 18th Avenue (Josh to Bertelsen): move the bike lane at Bertelsen outside of the right turn only lane
- 22<sup>nd</sup> Avenue (Friendly to Polk): add shared lane markings; replace existing crosswalks (PIC #1)
- Fillmore Street (19<sup>th</sup> to 24<sup>th</sup>): add shared lane markings from 24<sup>th</sup> to 22<sup>nd</sup>; crosswalk at 22<sup>nd</sup>
- Donald Street (32<sup>nd</sup> to 40<sup>th</sup>): add bumpouts at 39<sup>th</sup> Avenue; move ramp to Tugman Park path; add sidewalk to Pearl Street (PIC #2)
- Friendly Street (24th to 28th): add shared lane markings
- Garden Way (Harlow to Sisters View): add a door zone buffer to the existing bike lane (PIC #3)
- Willakenzie Road (Bogart to Coburg): buffer the existing bike lanes (PIC #4)

# Discretionary Projects

- 29<sup>th</sup> at Amazon: widen the sidewalk on 29<sup>th</sup> Avenue from Ferry to Amazon Pkwy. Install radius from 29<sup>th</sup> Avenue sidewalk to shared use path and rebuild the failing shared use path. Replace ramps and remove failing trees and old bike shelters; replace tree wells and bike shelters with stormwater planters. (PIC #5)
- Bailey Hill RRFB: add a rectangular rapid flashing beacon (RRFB) across Bailey Hill Road at the Fern Ridge Path. (PIC #6)
- Barger Drive RRFB: add a pedestrian crossing island and RRFB across Barger west of Devos Street.
- Oakway RRFB: replace the existing crossing island and pedestrian ramps and add an RRFB across Oakway Road south of Westwood Lane.

## What Projects are you Exploring for 2016?

#### Anticipated 2016 projects include:

- Complete the sidewalk on the north side of Goodpasture Island Road east of the new bridge over Delta Hwy
- Install an RRFB on Division Avenue at Lone Oak
- Install a sidewalk on the east side of Fairfield Avenue by Fairfield Elementary School
- Buffer the existing bike lanes on Lincoln Street (11<sup>th</sup> to 5<sup>th</sup>) and study adding a new northbound bike lane from 13<sup>th</sup> to 11<sup>th</sup>
- Explore moving the bus shelter on Willamette Street (currently south of 12<sup>th</sup> Alley) off of the existing sidewalk by extending and building new sidewalk into the bus bay
- Study one-way to two-way conversion of 8<sup>th</sup> Avenue (Lincoln to Monroe)
- Contribute funding to the Willamette Street trial (23<sup>rd</sup> to 29<sup>th</sup> Avenues)

If you have any questions about planning for walking and bicycling projects, or use of PBM funds to deliver these projects, please contact me: <a href="mailto:reed.c.dunbar@ci.eugene.or.us">reed.c.dunbar@ci.eugene.or.us</a>, (541) 682-5727.

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

PIC #1: 22<sup>nd</sup> Avenue





PIC #3: Garden Way Door Zone Buffer



PIC #4: Willakenzie Bike Lane Buffer

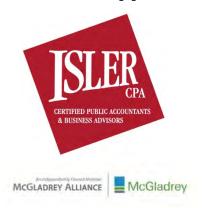


PIC #5: 29<sup>th</sup> at Amazon



PIC #6: Bailey Hill RRFB





# 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 the 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.

All procedures were performed for expenditures incurred from January 1, 2015 through December 31, 2015. All procedures we performed were limited to documentation and information supplied to us by the City, as follows:

- An Excel spreadsheet detailing all payments made, 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 associated findings are as follows:

(1) Expenditure testing. From January 1, 2015 through December 31, 2015, total expenditures for the projects funded by the 2012 bond proceeds were \$6,355,849 per the City's general ledger. We tested \$3,463,857 or 55%, 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.

- (2) We reviewed bids and contracts related to two of seven new construction projects during 2015. 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, 2015:

	From		From				
	Issuance to		1/1/2015				
	1	12/31/2014		12/31/2015		Total	
Bond proceeds	\$	8,500,000	\$	6,289,700	\$	14,789,700	
Project expenditures		8,445,638		6,355,849		14,801,487	

As of December 31, 2015, the City had \$1,700,000 outstanding on the line of credit facility. From January 1, 2015 through December 31, 2015, the City received \$6,289,700 in bond proceeds and was charged interest of \$34,081; the City repaid \$8,123,781 during the same period. At December 31, 2015, the City had \$28,210,300 in authorized borrowing remaining on the bonds (\$43,000,000 authorized less \$14,789,700 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 this specified party.

Isler CPA

Eugene, Oregon January 26, 2016