EUGENE CITY COUNCIL
AGENDA ITEM SUMMARY

Work Session: Status Report on Local Gas Tax

Meeting Date: June 15, 2011 | Agenda Item: A
Department: Public Works | Staff Contact: Kurt Corey
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ISSUE STATEMENT

The purpose of this work session is to provide the council with an opportunity to discuss the motor vehicle fuel dealer's business license tax (local gas tax). The local gas tax is one component of a comprehensive, locally-controlled funding package to support operations, maintenance, preservation and reconstruction of Eugene's transportation system. This work session provides the council an opportunity to discuss the local gas tax and the unfunded needs in the City's transportation service system.

BACKGROUND

Previous Council Action and History

The City's first motor vehicle fuel tax was enacted in January 2003, and implemented in August 2003, based on the recommendation from the Council Subcommittee on Transportation Funding Solutions. The subcommittee's recommendation was for a combination local motor vehicle fuel tax and transportation system maintenance fee for the purpose of generating an additional $9.0 million annually to address the City's critical transportation system funding needs. That first fuel tax was implemented at three cents per gallon, and that portion has generated an average of $2 million per year since 2003. The other revenue mechanism in that funding recommendation, a street utility fee designed to generate an additional $6.5-$7 million per year, was adopted but later repealed before it could be fully implemented.

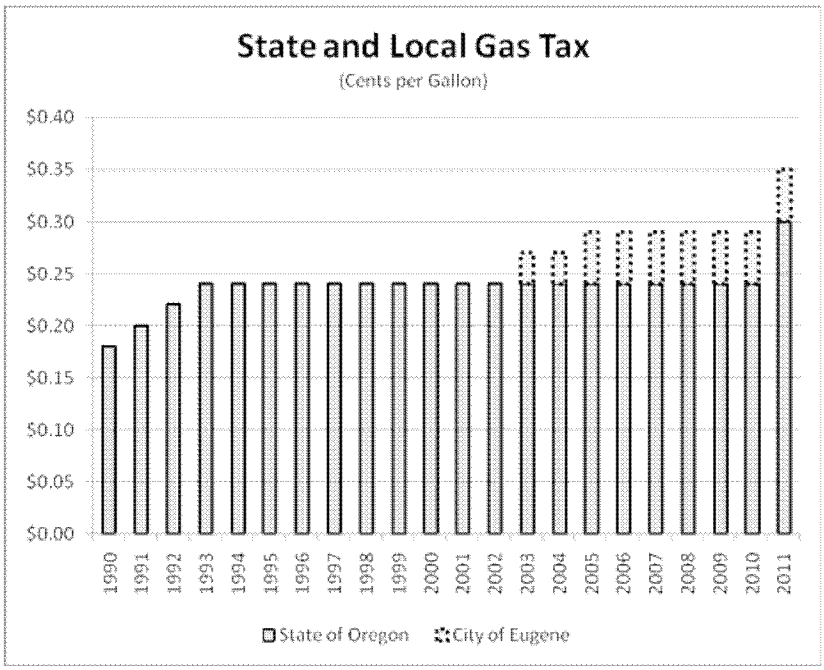
A two-cent increase to the motor vehicle fuel tax was approved on January 24, 2005, along with a sunset provision that would cause the tax to revert to three cents per gallon on February 29, 2008. On January 28, 2008, the council voted to extend the sunset provision for three additional years to February 28, 2011, to allow sufficient time to see what new funding might result from the State Legislature and also to allow for the development and implementation of other elements of the council's locally-controlled package funding strategy. One element of that strategy, raising the total local gas tax to eight cents per gallon, was not approved by the voters at the polls in November 2007. Additionally, in June 2009, the council considered but voted not to adopt a surcharge on solid waste fee collections to generate resources for street operations and maintenance services.

The Jobs and Transportation Act (JTA, and also known as House Bill 2001) passed by the State Legislature in 2009, increased the state gas tax by six cents per gallon, in addition to increasing vehicle title and license fees and weight-mile taxes on heavy trucks. A provision of the bill prevented local governments from approving new gas taxes or increasing existing ones until January 2, 2014, after which time voter approval would be needed for any new or increased local gas tax. These moratorium

provisions took effect September 28, 2009. In anticipation of the HB2001 deadline, on July 27, 2009, the council repealed the sunset provision on the two-cent fuel tax rate increase enacted in 2005, and later extended in 2008, with the effect of keeping the City's local gas tax rate at five cents per gallon indefinitely.

Funding Needs

As a point of reference, one cent of the local gas tax generates approximately $625,000 of revenue to the City of Eugene for Pavement Preservation Program (PPP) capital funds. One cent of the state gas tax generates approximately $125,000 of revenue to the City of Eugene for road operations and maintenance (operating funds).



Before 2011, the last state fuel tax increase occurred in 1993. In that time, inflation increased consumer prices by 51 percent, twice the current percentage increase in the state fuel tax. The purchasing power of the state's gas tax has steadily eroded over the years for several reasons: the gas tax has not kept pace with inflation; voters have opposed increases in the gas tax; and the fuel efficiency of new vehicles, especially hybrids and alternative-fuel vehicles, continues to increase, resulting in less gas tax paid. As part of the Jobs and Transportation Act, effective January 1, 2011, Oregon's fuel tax is increased by six cents, bringing it to 30 cents per gallon for passenger and light vehicles. The tax for commercial trucks and other heavy vehicles was raised proportionately effective Oct. 1, 2010.

Capital Pavement Preservation Needs - Following considerable study and discussion, including forming a Council Subcommittee on Transportation Funding Solutions and convening an ad hoc citizen Street Maintenance Task Force, the council on July 28, 2008, approved Resolution 4953, calling a City election on a measure authorizing the issuance of $35.9 million of general obligation bonds to fund street preservation projects. On November 4, 2008, voters handily approved the measure. The bonds will fund the 32 projects listed in the resolution, plus the additional street preservation projects approved by the council to use the remaining bond funds, and repair over 70 lane miles of streets and three miles of off-street bike and pedestrian paths. Even though there has been progress, the City still has not resolved its long-term street repair funding problem for major street repair projects. The 2011 Pavement Management Report listed the City's backlog of needed pavement preservation projects at over $139 million. Continuation of the City motor vehicle fuel tax at the five-cent level is a key component in a package strategy endorsed by the council to ensure a stable, locally-controlled revenue stream to allow the City to continue to make progress on the backlog of needed street repairs.

In May 2007, the Council Subcommittee on Transportation Funding Solutions recommended a total yearly pavement preservation funding target of $18 million which is currently being funded at about half

that amount. Specifically, the local motor vehicle fuel tax funds approximately $3 million annually and the five-year street bond funds approximately $6.5 million annually through FY14.

Road Operations and Maintenance (O&M) Needs – The Road Fund (O&M) provides for street operations services such as street lighting and signals, street signage and striping, pothole patching and crack sealing, concrete and asphalt street repairs, and snow and ice operations. Prior to the passage of HB 2001, the Road Fund had come to rely on service reductions and the use of reserves together with transfers from the General Fund and other sources to maintain a minimum level of service. The operating reserve balance was exhausted by FY10 and the annual deficit for street operation and maintenance services in the Road Fund was projected to exceed $3 million in FY11, growing to over $4 million by FY13. However, with the new state transportation bill, the City is expecting to receive approximately $3 million in additional state highway funding each year. This funding, combined with revenues from the utility systems for the use and occupancy of the City's right-of-way, will lessen the road operations funding gap reported in previous years. Even with the progress realized from the current funding levels, the six-year forecast ends with less than one month of balance available, an amount below the two-month target. This forecast includes continuing the pavement repair project on unimproved streets (aka the "Enhanced Pothole Repair Program") at the level of $200,000 per year for the next six years.

Pavement Preservation Progress

Since the local gas tax funded Pavement Preservation Program (PPP) was started in 2002, the City has completed nearly $18 million in street preservation project work funded through the local gas tax, and another $4.8 million in gas tax funded projects is scheduled in 2011. Through 2010, nearly 250 lane miles of streets – more than 20 percent of the City's total improved street system – have been repaired with PPP slurry seals, overlays and reconstruction. The PPP projects are in addition to bond measure, assessment, and grant-funded paving projects and the crack sealing, pothole patching, concrete panel replacement and other ongoing street repair services performed by Public Works Maintenance Division. Gas tax funded projects completed in 2010 include portions of 11th Avenue, 13th Avenue, 33rd Avenue, Goodpasture Island Road, Hawkins Lane, Oakway Road, Patterson and Valley River Drive. Projects planned for 2011 include portions of City View, Wilson Street, Conger Street, Jefferson Street, Washington Street and 13th Avenue. Attachment A provides a history of pavement preservation program projects from 2002 – 2011.

The 2011 Pavement Management Report (Attachment B) was compiled by the Public Works Maintenance Division's Surface Technical Team to provide updated information on the condition of asphalt paving in Eugene using 2010 rating and inventory data. The report includes an inventory of streets by improvement status and functional classification, details how a pavement management system is used to inspect and rate pavement surfaces, explains Eugene's pavement preservation program, and includes updated information about treatment types and costs. The updated report on the condition of Eugene's streets shows progress has been made but more work is needed to further reduce the backlog of needed repairs on the 1,324 lane miles of streets in the City.

RELATED COUNCIL GOALS AND POLICIES

The council's *Vision and Goals Statement* with respect to *Fair, Stable and Adequate Financial Resources* reaffirms commitment to "a local government whose ongoing financial resources are based on a fair and equitable system of taxation and other revenue sources and are adequate to maintain and deliver municipal services." The council's goals include "Transportation Initiative: Develop mechanisms to adequately fund our transportation system for cars, trucks, bikes and pedestrians including maintenance

and preservation and capital reconstruction." Additionally, the City's *Financial Management Goals and Policy, A.4*, states that the City's municipal service priority Level 2 (second only to the preservation of the public safety system) is to "maintain and replace the City's fixed assets, which includes… infrastructure…so as to optimize their life."

COUNCIL OPTIONS
For discussion only, no formal action is required.

CITY MANAGER'S RECOMMENDATION
No action is required on this item. Therefore, no recommendations are offered by the City Manager.

SUGGESTED MOTION
No action is required on this item. Therefore, no motions are suggested.

ATTACHMENTS
A. History of Pavement Preservation Program Projects as of May 2011
B. 2011 Pavement Management Report

FOR MORE INFORMATION
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History of Pavement Preservation Program Projects as of May 2011

Since the local gas-tax-funded Pavement Preservation Program (PPP) was started in 2002, the City has completed nearly $18 million in street preservation project work funded through the local gas tax, and another $4.8 million in gas-tax funded projects is scheduled in 2011. Through 2010, nearly 250 lane miles of streets – more than 20 percent of the City's total improved street system – have been repaired with PPP slurry seals, overlays and reconstruction. The PPP projects listed below are in addition to bond measure, assessment, and grant-funded paving projects and the crack sealing, pothole patching, concrete panel replacement and other ongoing street repair services performed by Public Works Maintenance Division.

2011

- City View (18th to 28th avenues)
- Jefferson and Washington street intersections
- Wilson Street (7th to 11th avenues)
- Conger Street (5th to 7th avenues)
- Jefferson Street (1st to 8th avenues)
- Washington Street (1st to 6th avenues)
- 13th Avenue (Alder to Kincaid streets)
- *Slurry seals*: portions of 36th and 39th Place, East 37th, 38th 39th and 44th avenues, Dillard Road, Fox Glen Avenue, Alder and Hilyard streets and Pinecrest in the west Amazon area; portions of Potter Street, 41st Avenue, Kincaid Street, Amazon cul de sac, Larch and Snell streets, Center Way, Whiteaker and Garnet streets, Nectar Way, Alpine Loop and Martin Way in the east Amazon area; portions of Thomason Lane, Cheshire and Sycamore avenues, Cross, Polk, Clark, Jackson, Van Buren, Cedar, Adams, Ash, Madison and Jefferson streets, and the Own Rose Garden parking lot in the Whiteaker area; and portions of Alexandra Court, Arrowhead Street, Barstow and Blackfoot avenues, Dahlia Lane (north), Dorchester Lane, Dry Creek Road, Hammer Lane, Hyacinth Street cul de sac, Leonards Way, Merlot Avenue, Piper Sonoma Street, Rhine Way, Risdon Place and cul de sac, Swenson Lane, and Willowbrook Street in a cooperative project with Lane County Public Works in the Santa Clara area.

2010

- 11th Avenue (Garfield to Tyinn streets)
- 13th Avenue (Alder to Washington streets)
- 33rd Avenue (Hilyard to Willamette streets)
- Goodpasture Island Road (Valley River Drive to culvert crossing)
- Hawkins Lane (18th Avenue to Videra)
- Oakway Road (Cal Young Road to Fairway Loop)
- Patterson (23rd to 24th avenues)
- Valley River Drive (Valley River Way to Goodpasture Island Road)
- *Slurry seals*: portions of 34th, 35th, 36th, 37th, 38th, 39th, 41st and 43rd avenues, 39th Place, Knob Hill, Oak, Patterson, Spencer, Southridge, Dana and Stafford courts, and Ferry, Oak, Pearl Street, High, Mill, Fillmore, Powell Tiara, Durbin, Garfield and Cleveland streets, Glen Oak and Emray drives, Heather Way, Lemery Lane, Ingalls Way and Whitbeck Boulevard in south Eugene; and portions of Applewood Lane, Balboa, Tulip, Acacia, Norkenzie, Holly, Crescent cul de sac, Elysium, Birchwood, Nirvana, Palmer, Providence , Valhalla, Azure Medina and Lillian streets and Rocky Lane in north Eugene.

2009

- Sixth Avenue (High to Washington streets)
- Seventh Avenue (High to Washington streets)
- 11th Avenue (Garfield to Tyinn streets)
- Bertelsen Road (11th to 18th avenues)
- Country Club (Willagillespie to Southwood)
- Crescent (Shadowview to Coburg Road)
- Danebo (Royal Avenue to 11th Avenue)
- Fox Hollow (East Amazon to Donald)
- McKinley (5th to 11th avenues)
- Royal (Waite to Terry)
- Seneca (Roosevelt to 7th Place)
- Roosevelt (Maple to Beltline)
- Slurry seals: portions of Wingate, Cheryl, Chuckanut, Erin Way, Lily Avenue, Snelling Drive, Benson Lane, Chad, Willona Drive and Gay Street in the Coburg/Crescent area; portions of 25th, 26th and 28th avenues, Ferry, High and Oak streets in the Willamette area; portions of 19th Place, 20th, 22nd, 23rd and 24th avenues, Cleveland, Garfield and Arthur streets in the Garfield area; portions of 21st, 22nd, 23rd, 27th and 28th avenues, Bowmont, Highland Oaks, Park Forest and Terrace View drives, TV Bulb, Trillium Street, Wilson Drive, City View Court, Hawkins Lane Court, Panorama Drive, and Rockwood Street in the City View area; portions of Concord, Cambon, Dola, Haven, Marshall, Souza and Avalon streets, Fuller Avenue, Laurelhurst Drive, Phillip Street, Liberty Street, and Woodsboro Street in the Danebo area; and portions of Sterling Drive, Dalton Drive, and Silver Lea in the Silver Lane area.

2008

- East 13th Avenue (Franklin Boulevard to Agate Street)
- 27th Avenue (Amazon Parkway to Jefferson Street)
- Barger Drive (Highway 99 to Altimont Street
- Barger Drive (Primrose Street to Terry Street)
- Chad Drive (Coburg Road to east end of Chad)
- Chambers Street (Railroad Boulevard to Eighth Avenue)
- Roosevelt Boulevard (Chambers Street to Maple Street)
- Slurry seals: portions of Almaden Street, Arthur Street, Fillmore Street, Grant Street, Hayes Street, Taylor Street, 10th Avenue, 12th Avenue,14th Avenue, and 15th Avenue in the west downtown area, Bethesda Street, Elizabeth Street, Fergus Avenue, Hawthorne Avenue, Hilton Drive, Knoop Lane, Marcum Lane, Nebraska Street, and Wood Avenue in the Echo Hollow area; Aldabra Street, Alphonse Avenue, Amirante Street, Astove Avenue, Burnett Avenue, Cody Avenue, Coetivy Avenue, Dakota Avenue, Lemuria Street, Minnesota Street, Ohio Street, Praslin Street, and Wisconsin Street in the west Barger area, and Creekside Way and Sterling Woods Drive in the north Gilham area.

2007

- Oakpatch Road (11th to 18th avenues)
- Chambers Street (24th Avenue to Lorane Highway)
- Monroe Street (8th to 13th avenues)
- West 18th Avenue (Bailey Hill Road to City View Street)
- Bailey Hill Road (11th to 18th avenues)
- East 18th Avenue (Agate to Hilyard streets)
- Agate Street (13th to 22nd avenues)
- Gilham Road (Crescent Avenue to Willona Drive)
- Norkenzie Road (Green Acres Road to Beltline)
- Willagillespie Road (Cal Young to Country Club roads)

- Slurry seals: portions of Foothill, Hillside Drive, Larch Street, Larkwood, Mahalo Drive Manzanita Street, Mimosa Street, Snell Street and Sprague Street in the west Amazon are; portions of East 25th Avenue, East 26th Avenue, East 27th Avenue, East 28th Avenue, East 29th Avenue, East 29th Place, Baker Boulevard, Elinor Street, Emerald Street, Kincaid Street, Nixon Street, Onyx Street, and University Street in east Eugene.

2006

- East 40th Avenue (Donald to Willamette)
- East 43rd Avenue (Fox Hollow to Donald)
- Arthur Street/Garfield Street (West 11th Avenue to 18th Avenue)
- Donald Street (40th to 46th avenues)
- Hilyard Street (13th to 24th avenues)
- Oakway Road (Fairway Loop to Coburg Road)
- Patterson Street (E. Broadway to 13th Avenue)
- Polk Street (12th to 18th avenues)
- Seneca Road (7th to 11th avenues)
- Washington Street (6th to 8th avenues)
- 10th Avenue (Pearl to High streets)
- Slurry seals: portions of Churchill Street, Cornell Way, Paget Street, Parliament, and Princeton Street in the Churchill area; and portions of Backlund, Clinton Drive, Lorella, Naomi Court, Robin Hood, Sherwood, and Valley Butte in the Willagillespie area. Terry Street (Barger Avenue to north end)

2005

- 28th Avenue (Friendly to City View)
- Crescent Avenue (Coburg Road to Tulip Street)
- Chambers Street (8th Avenue to 11th Avenue)
- Kevington Avenue (Brittany to Warren Street)
- City View Street (11th Avenue to 18th Avenue)
- Bertelsen Road (Royal Avenue to Roosevelt Boulevard)
- 11th Avenue (Pearl Street to Charnelton Street)
- Willakenzie Road (Coburg Road to Cal Young)

2004

- Cal Young Road (Coburg Road to Willagillespie)
- Gilham Road (Cal Young Road to Beltline)
- Bertelsen Road (railroad tracks to West 11th Avenue)
- Willamette Street (13th Avenue to 19th Avenue)

2003

- 18th Avenue (Bailey Hill Road to Josh Street)
- 29th Avenue (Willamette Street to Lorane Highway)
- Washington Street (28th Avenue to Lorane Highway)
- Lorane Highway (29th Avenue to Washington Street)
- 30th Avenue (Agate Street to Hilyard Street)
- Amazon Parkway (29th Avenue to Hilyard Street)
- Echo Hollow Road (Dove Lane to Royal Avenue)

2002

- River Road (Azalea to Maxwell Road)
- Bertelsen (Roosevelt Boulevard to railroad tracks)

2011 PAVEMENT MANAGEMENT REPORT

An Update on Asphalt Pavement Conditions and Programs
(2010 Rating & Inventory Data)

Prepared by:
Public Works Maintenance
Surface Technical Team
1820 Roosevelt Blvd.
Eugene, OR 97402

Cover Photos (top left – clockwise): Asphalt Reclaimer, Sheeps Foot Roller, Cement Spreader and Grader used during the Riverview St. Full Depth Reclamation (FDR) project.

EXECUTIVE SUMMARY

The annual Pavement Management Report is produced to update information and data regarding the City of Eugene's transportation system including improved streets, unimproved streets and off-street shared-use paths. This report provides surface descriptions and associated mileage, reviews current treatment programs and costs, and projects future treatment needs based on several funding scenarios.

The transportation system is conservatively estimated to represent a $500 million public asset. This asset is typically described in lane miles and/or centerline miles. Currently, Public Works manages 1,325 lane miles (531 centerline miles) of streets, and approximately 41 miles of off-street shared-use paths within the City limits. This report includes a breakdown of the street transportation system in terms of pavement type, level of improvement, and functional classification. Comparative statistical data includes both lane miles and centerline miles.

Street (and off-street shared-use path) condition data is collected by Public Works Maintenance staff through on-site inspections. An Overall Condition Index (OCI) score is then generated using CenterLine, the current Pavement Management System (PMS) used by the City. The CenterLine analysis helps establish efficient treatment requirements and identify financial implications of various response strategies. A PMS also provides street inventory and condition trends using 23 years of street condition information.

For some time, street repair funding levels have not kept pace with rehabilitation needs. To help address this need, the City established a local gas tax in 2003 for a pavement preservation program (PPP), and a $35.9 million, five-year bond measure was approved by voters in November 2008 to repair 32 specific streets in Eugene. The revenues from the local gas tax and the bond measure have helped reduce the backlog of street repair projects. Specifically, based on the 2009 ratings and reported in the 2010 report the calculated backlog was $151 million; as of the end of 2010 the current backlog has been calculated to be $139 million. Despite this short-term downward trend the backlog is projected to continue to grow unless funding levels are increased.

In addition to the infusion of local gas tax and bond funding, other factors have contributed to the current status of the backlog:

- Several projects previously defined as needing to be reconstructed have been redesignated for overlay treatment. An overlay treatment is much less expensive than a reconstruct treatment and can provide a comparable service life if the base is properly designed and undamaged.

- In recent years, the cost of projects has been lower than anticipated. The cost of fuel is a significant factor in bid prices. Ongoing fluctuations in costs for fuel, construction materials and labor are likely to affect long-term backlog estimates.

- In 2009 the City was awarded approximately $3 million federal American Recovery and Reinvestment Act (ARRA) funds that were earmarked for projects constructed in 2010. This "bought down" the backlog in the short term, but because the ARRA funds were one-time funding, they will not result in a significant ongoing or cumulative effect.

Overall, even though the backlog figure declined in 2010 the current level of funding - including the bond measure - is insufficient to stabilize the backlog long term.

The 2011 report used three funding scenarios to project treatment needs and costs over a 10-year period. The analyses for all three scenarios used costs updated by Engineering in 2006 and adjusted to include a 2% inflation factor. In summary, here's what the analyses found:

- Maintaining the current level of funding results in a total projected backlog of $248 million in 10 years.

- Increasing the funding level to $18 million annually reduces the total projected backlog to $83 million in 10 years. With this funding level, streets would be prevented from dropping into the reconstruct condition and arterials and collectors currently at a reconstruct condition would be repaired. Projections at this level of funding indicate the entire system (arterials, collectors, and residential streets) reconstruct backlog would be eliminated in 15 years.

- Increasing the funding level to $21.5 million annually reduces the total projected backlog to $43 million in 10 years. With this funding streets would be prevented from dropping into the reconstruct condition and the entire (arterials, collectors, and residential streets) reconstruct backlog would be eliminated within 10 years.

SCOPE

The street inventory is discussed including improvement status and functional classification definitions.

A brief history and description of the Pavement Management System (PMS) used by the City is discussed. Changes in the program that occurred in 2010 and the components of PMS, such as pavement inspection frequency, pavement conditions described by the Overall Condition Index (OCI), and reports produced by PMS are addressed.

The Pavement Preservation Program is highlighted in the report. Included this year are unimproved streets and off-street shared-use paths. The report outlines types of preservation treatments, associated costs, and OCI treatment ranges for improved and unimproved streets. Surface types and width of off-street shared-use paths and related projects are detailed. Current treatment needs cost analysis is given for the Improved Street System with the associated table detailing the current funding sources for PPP.

For an effective preservation program, a coordinated effort is required by the Maintenance and Engineering Divisions. Therefore, both roles are discussed in the report. Preservation project selection, interim maintenance prioritization, and ultimately project construction or deferral for future reconstruction is discussed in additional detail.

Proposed street and shared-use path project (2011) lists are included in the report as are maps of completed projects.

EUGENE'S STREET INVENTORY

The City of Eugene has jurisdictional responsibility for many different types and classifications of transportation facilities. Many factors such as age, development type, traffic loads, use, and future transportation needs affect the maintenance and rehabilitation planning for the system. The segment inventory component of the PMS system allows a reporting of both centerline miles (intersection to intersection) and lane miles of each segment of the system. While commonly used in reporting distance, centerline miles do not relate equally across streets of different widths or different number of lanes. For this report, comparisons typically are shown both in centerline and 12-foot wide lane miles unless otherwise noted.

Improvement Status

For purposes of establishing budget allocations and rehabilitation priorities, and performing maintenance activities based on established maintenance policies, the City of Eugene divides the street inventory into two distinct categories:

Improved streets are those which have been fully designed for structural adequacy, have storm drainage facilities provided which include curbs and gutters, and have either an asphalt concrete (AC) or a Portland cement concrete (PCC) surface. Typically, these streets were either fully improved when the area was developed and paid for by the developer, or were improved through a local improvement district (LID) and paid for in part by the abutting property owners. In some cases a street may have been fully improved while under state or county jurisdiction and then surrendered to the City. Improved streets receive the highest level of ongoing maintenance and are eligible for rehabilitation funding through Eugene's Capital Improvement Program (CIP) and Pavement Preservation Program (PPP).

Unimproved streets are those with soil, gravel, or asphalt mat surfaces that have typically evolved to their existing state, have not been structurally designed, and have few if any, drainage facilities and no curbs or gutters. Typically, an unimproved street must be fully improved through a local improvement district, funded in part by the abutting property owners before a higher level of service will be provided (see "City of Eugene Street Maintenance Policy and Procedure Manual" for levels of maintenance service). Unimproved streets receive a low level of ongoing maintenance limited primarily to emergency pothole patching (three inches or greater in depth) and minimal roadside ditch maintenance. To address the growing number of potholes on City streets (75% of potholes repaired annually have been on unimproved streets), the City Council has augmented the street repair budget with General Fund allocations for a total of $2.35 million from FY 2009 through FY 2011. The Maintenance Division has addressed potholes by either filling individual potholes or by performing maintenance overlays over entire street segments. During the past three fiscal years dozens of unimproved streets have been resurfaced as a temporary treatment. In addition, several unimproved streets have been brought up to full urban street standards through assessment projects, attributed, in part to more flexible design standards. However, most unimproved streets are not considered eligible for funding in Eugene's Capital Improvement Program or the Pavement Preservation Program.

The following tables categorize Eugene's Improved and Unimproved Street System in Centerline Miles and 12-foot Lane Miles by Pavement Type and by Functional Class.

IMPROVED SYSTEM	Asphalt (ACP)		Asphalt over Concrete (APC)		Concrete (PCC)		Gravel		Undeveloped		Total	
	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles
Major Arterial	13.12	59.04	0.03	0.16	0.51	2.04	0	0	0	0	13.66	61.24
Minor Arterial	60.36	203	2.35	7.7	3.81	12.05	0	0	0	0	66.52	222.75
Major Collector	30.11	92.4	0.87	2.39	2.87	7.84	0	0	0	0	33.85	102.63
Neighborhood Collector	23.72	61.55	0.44	1.19	1.58	4.35	0	0	0	0	25.74	67.09
Residential	302.18	703.19	2.42	6.19	21.7	55.07	0	0	0	0	326.3	764.45
Total	429.49	1119.18	6.11	17.63	30.47	81.35	0	0	0	0	466.07	1218.16

UNIMPROVED SYSTEM	Asphalt (ACP)		Bituminous Surface (BST)		Concrete (PCC)		Gravel		Undeveloped		Total	
	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles	Miles	12' Lane Miles
Major Arterial	0	0	0	0	0	0	0	0	0	0	0	0
Minor Arterial	1.01	1.96	0	0	0	0	0	0	0	0	1.01	1.96
Major Collector	2.74	6.29	0	0	0	0	0	0	0	0	2.74	6.29
Neighborhood Collector	4.19	8.45	0.23	0.35	0	0	0	0	0	0	4.42	8.8
Residential	33.55	56.38	9.32	14.44	0.08	0.08	9.27	13.73	4.46	4.96	56.68	89.59
Total	41.49	73.08	9.55	14.79	0.08	0.08	9.27	13.73	4.46	4.96	64.85	106.64

Functional Classifications

The quantity and associated vehicle weight of traffic using streets is a critical factor affecting the rate at which pavement and roadbeds deteriorate. Eugene divides streets into five categories called functional classifications (FC), each representing a different volume and type of vehicular usage.

MAJOR ARTERIAL (FC-1) Major Arterials are usually four or more lanes and generally connect various parts of the region with one another within the city and with the "outside world". They serve as major access routes to regional destinations such as downtowns, universities, airports, and similar major focal points within the urban area. Major Arterials typically carry an average of more than 20,000 vehicles per day. Major Arterials receive high priority maintenance.

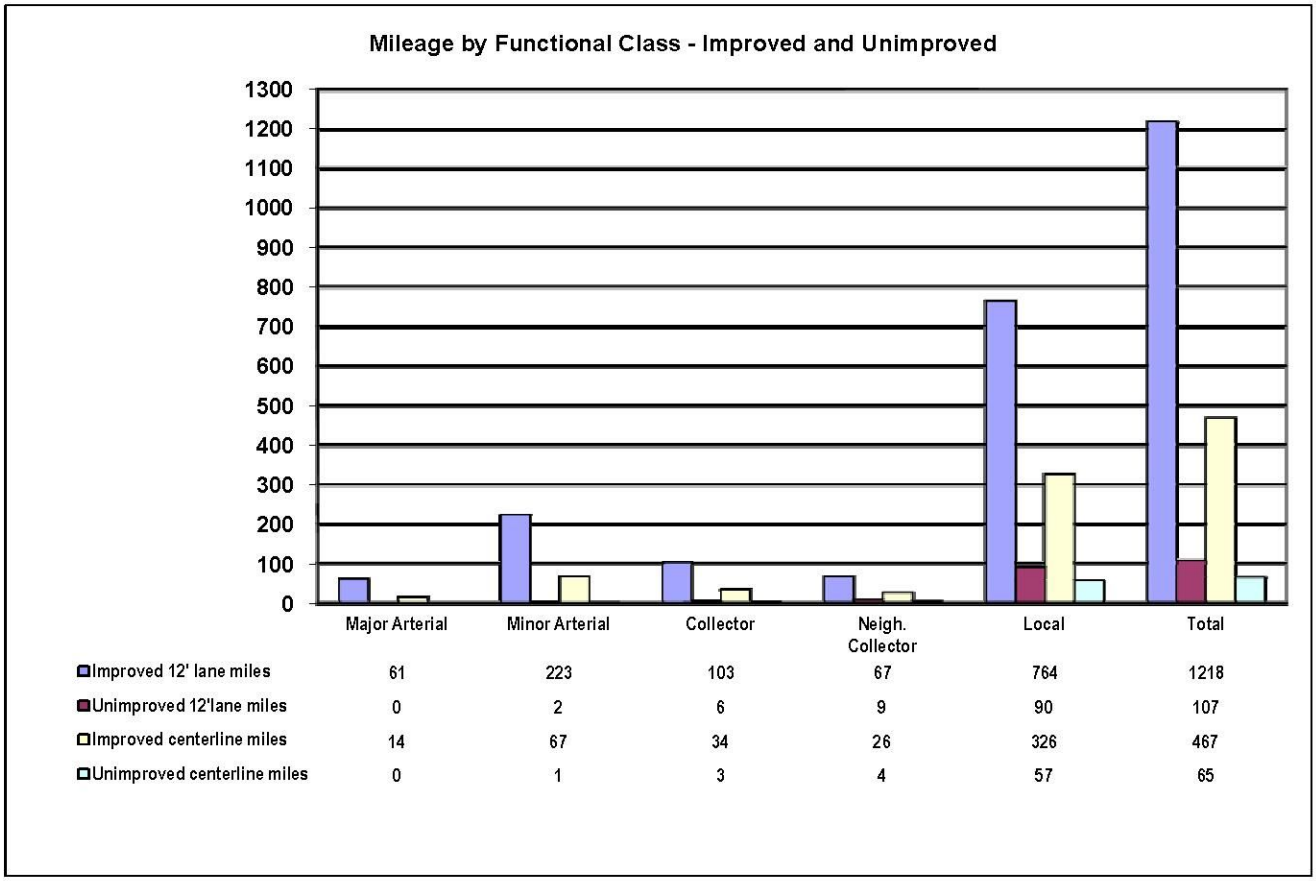
MINOR ARTERIAL (FC 2) Minor Arterials are typically two or three lanes. These streets provide the next level of urban connectivity below major arterials. In most cases their main role tends to be serving intra-city mobility. Minor Arterials carry between 7,500 and 20,000 vehicles per day. Minor Arterials receive priority maintenance.

MAJOR COLLECTOR (FC-3) Major Collectors can be found in residential, commercial, and industrial areas. They typically carry between 2,500 and 7,500 vehicles per day. Major Collectors have a higher priority for maintenance than local streets.

NEIGHBORHOOD COLLECTOR (FC-4) Neighborhood Collectors are found only in residential neighborhoods and provide a high degree of access to individual properties in a neighborhood. They typically carry between 1,500 and 2,500 vehicles per day.

LOCAL (FC-5) Local streets provide access to individual properties along the roadway. They are narrow, slow-speed, and low-volume service facilities. They typically carry fewer than 1,500 vehicles per day, and receive low priority maintenance.

The following graph illustrates both centerline miles and lane miles by improvement type and functional classes.



	Major Arterial	Minor Arterial	Collector	Neigh. Collector	Local	Total
Improved 12' lane miles	61	223	103	67	764	1218
Unimproved 12'lane miles	0	2	6	9	90	107
Improved centerline miles	14	67	34	26	326	467
Unimproved centerline miles	0	1	3	4	57	65

PAVEMENT MANAGEMENT SYSTEM

A Pavement Management System (PMS) performs analysis of collected rating data and reports on the current and projected conditions of the street system. In addition, it is used to evaluate the effectiveness of planning and funding priorities, and provides guidance in the decision making process. The goal of the decision making process is to prevent pavement failures through judicious maintenance.

The PMS used by the City of Eugene since 1987 is CenterLine. CenterLine was developed by Washington's League of Cities and Washington County Roads Administration Board (CRAB) in conjunction with the Washington Department of Transportation (WDOT). The PMS combines visual field inspection ratings, compiled under strict criteria, with computer tracking and condition analysis. The rating methodology for field inspections used prior to 2010 was the WSDOT Standard method. Beginning in 2010 the rating methodology was revised to the WDOT's Extended (WSEXT) method, keeping the program consistent with industry standards. Eugene's PMS contains 23 years of historical data and has the ability to estimate financial needs and road conditions 20 years into the future.

Pavement Inspection Frequency

Two predominant work efforts required to maintain the PMS are updating the street inventory and performing the annual inspection of surface conditions. City streets are divided into segments based on their Functional Classification (FC), pavement type, and geometric design. Segments are the basic unit for evaluating streets and surface conditions. A segment is defined as a portion of a street with a beginning and ending description. Changes in geometric features are used as a guide for determining segments. Examples of geometric differences are surface type, segment widths, surface age, and extent of past rehabilitations.

Field inspections are conducted by pavement raters who walk each individual street segment evaluating the pavement surface for signs of distress.

In 2010 **all** streets were inspected in order to transition to the new rating methodology. For an accurate base line of rating data, staff intends to complete another full inspection in 2011 as well. Once the baseline is completed the program will resume with standard annual inspection intervals; City arterial and collector streets are inspected annually. Residential streets inspections are completed in a three year cycle and off-street shared-use path inspections are completed in a two year cycle.

Overall Condition Index (OCI), Deduct Values, and Distresses

Pavement distresses are dependent on pavement type and are rated by severity and extent. A street with an OCI of 100 represents a new or recently rehabilitated street. This OCI value is the basis used to analyze the surface treatment needs. Distress data are collected using handheld computers (IPAQ's) and then uploaded to CenterLine The extended method (WSEXT), rates severities and all their extents, this information is then used to determine a deduct value. A segment's OCI is calculated by subtracting the deduct values from 100. As the condition of a street's surface begins to deteriorate the OCI decreases. Asphalt distresses typically observed are alligatoring, longitudinal and transverse cracks, rutting, raveling, and some maintenance procedures such as crack sealing and patching. Concrete distresses observed are cracks per panel, raveling, joint spalling, faulting, and crack sealing.

How PMS Information is Used

The primary purpose of maintaining a PMS is to collect and analyze information relating to street system condition and trends. With this vital information Public Works managers ensure the most cost effective maintenance or rehabilitation strategies are identified and performed at the optimum time.

Each year the PMS is used to generate several reports requested by other agencies as well as statistical data requested within our own agency. The following is a sample of reports produced with PMS data:

- Pavement Preservation Project List
- Crack Seal Program
- Five-Year Surface List – five-year moratorium for street cutting
- ODOT Oregon Mileage Report
- City of Eugene Public Infrastructure Table
- Annual Insurance Marketing Report
- Transportation Service Profile
- ICMA Survey

PAVEMENT PRESERVATION PROGRAM

Street preservation and rehabilitation, capital improvements, off-street shared-use path projects, and maintenance efforts make up the complete Pavement Preservation Program (PPP). The City Council has provided PW Maintenance additional funding for the purpose of repairing the street system (Enhanced Pothole Program) which includes unimproved streets. Both PW Maintenance and PW Engineering have important roles within the PPP.

PW Maintenance Roles

Maintenance Division staff from the Surface Technical team complete the pavement rating, budget and street life analysis, resulting in a proposed list of projects which is then forwarded to Engineering for field testing and final grouping. Operations staff is responsible for the preventative maintenance of all City streets (including concrete streets) and off-street shared-use paths. Preventative maintenance designed to extend the life of the transportation asset is of highest priority. Fully improved asphalt streets receive the highest level of maintenance. Maintenance activities are performed to mitigate hazardous conditions and to extend the useful life of the street. The goal of preventative maintenance is to prevent a street's OCI from slipping into a reconstruction category.

PW Engineering Roles

Engineering Division typically receives the grouped projects for preservation three years in advance of construction. Construction design and historical data are collected and reviewed, and field inspections are performed. Final determination of needed treatment results from core tests and recommendations by pavement consultants. If a street is determined to be a full reconstruct it is deferred until funding is identified and available.

Engineering Division is responsible for PPP project design, utility coordination, contract administration, and project construction.

Treatment Types and Costs

Based on historic and current construction costs provided by the Engineering Division, each functional class has an estimated unit cost for overlay and reconstruction treatments. For local streets (FC-5) an additional maintenance option was considered, slurry seals. The slurry seal option allows for a cost-effective treatment for local street segments, which do not carry high traffic loads.

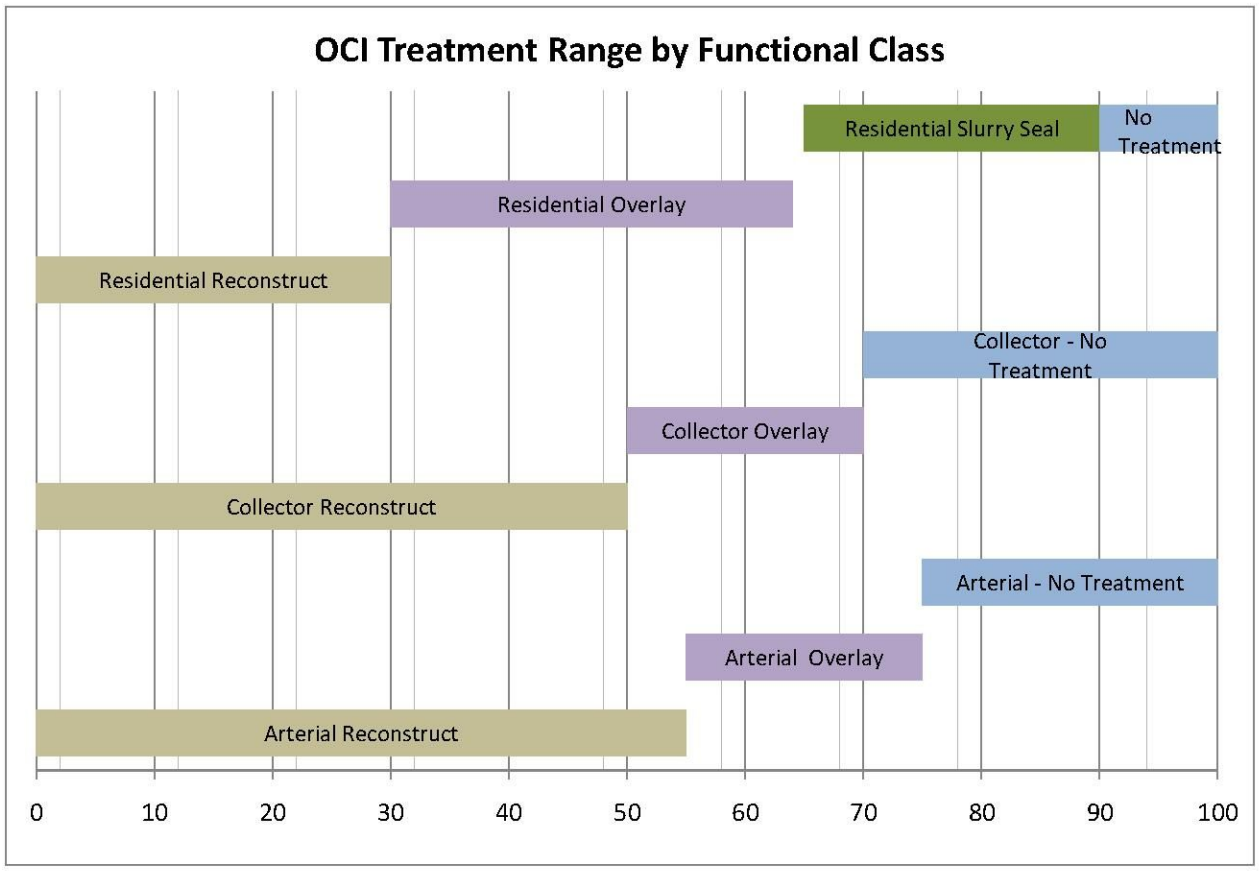
OVERLAY: Typical overlay rehabilitation costs include milling of existing pavement to a moderate depth to remove existing cracking and increase strength of the structural section. Isolated areas of severely distressed pavement are removed and replaced including a new aggregate base. Associated costs include replacement of striping and pavement markings, adjustment of manholes, and other work needed to return the street to normal operation.

RECONSTRUCT: Typical street reconstruction costs include removal of the existing pavement and base structural section and replacement with a new structural section which will meet a 20-year design life. Isolated areas of curb and gutter are replaced where they would not be suitable to contain new paving or have severe drainage problems. Associated costs include replacement of striping and pavement markings, adjustment of manholes, and other work needed to return the street to normal operation.

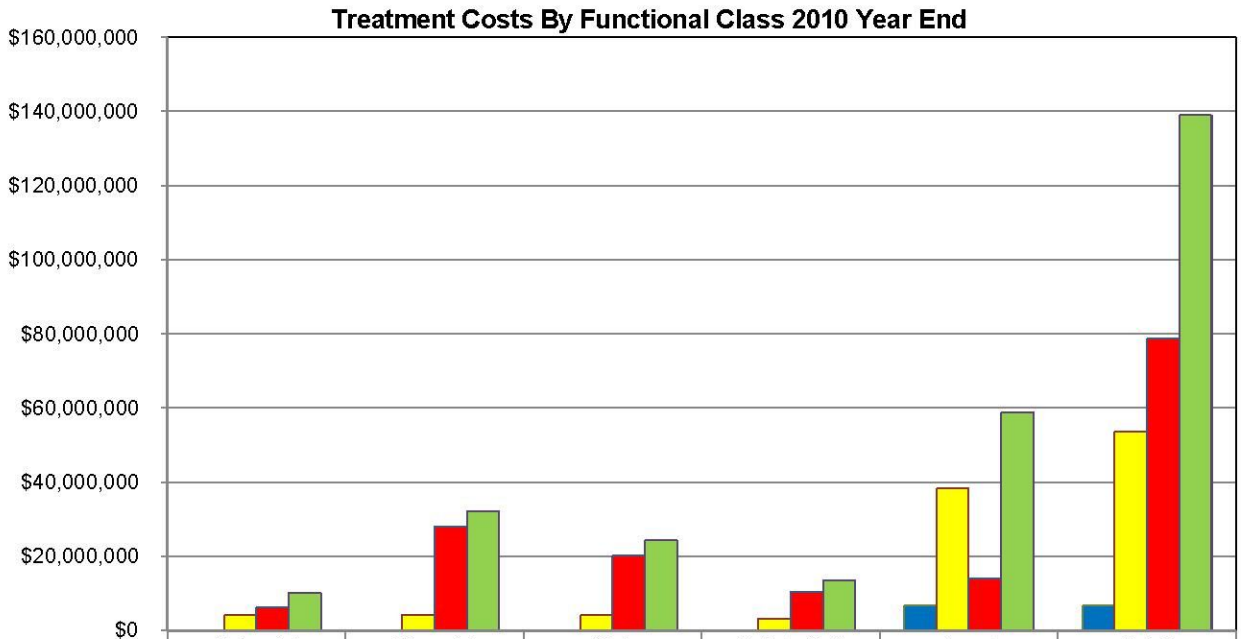
SLURRY SEAL: Typical slurry seal costs include street cleaning, removal of vegetation, sealing of cracks, and application of an emulsified asphalt aggregate mixture to the entire paved surface. Associated costs include replacement of striping and pavement markings, and other work needed to return the street to normal operation.

Treatment – Functional Class Improved System	12' Lane Mile Cost		
	2005 cost	Updated Eng. 2006 cost	2010 cost
Overlay - FC 1 & 2	$122,000	$215,000	$233,000
Overlay - FC 3 & 4	$156,000	$184,000	$200,000
Overlay - FC 5	$73,000	$169,000	$184,000
Re-Const - FC 1 & 2	$545,000	$765,000	$828,000
Re-Const - FC 3 & 4	$365,000	$677,000	$734,000
Re-Const - FC 5	$230,000	$505,000	$547,000
Slurry Seal - FC 5	$11,000	$19,000	$21,000

The following graph identifies the trigger points (OCI) for each treatment based on Functional Class.

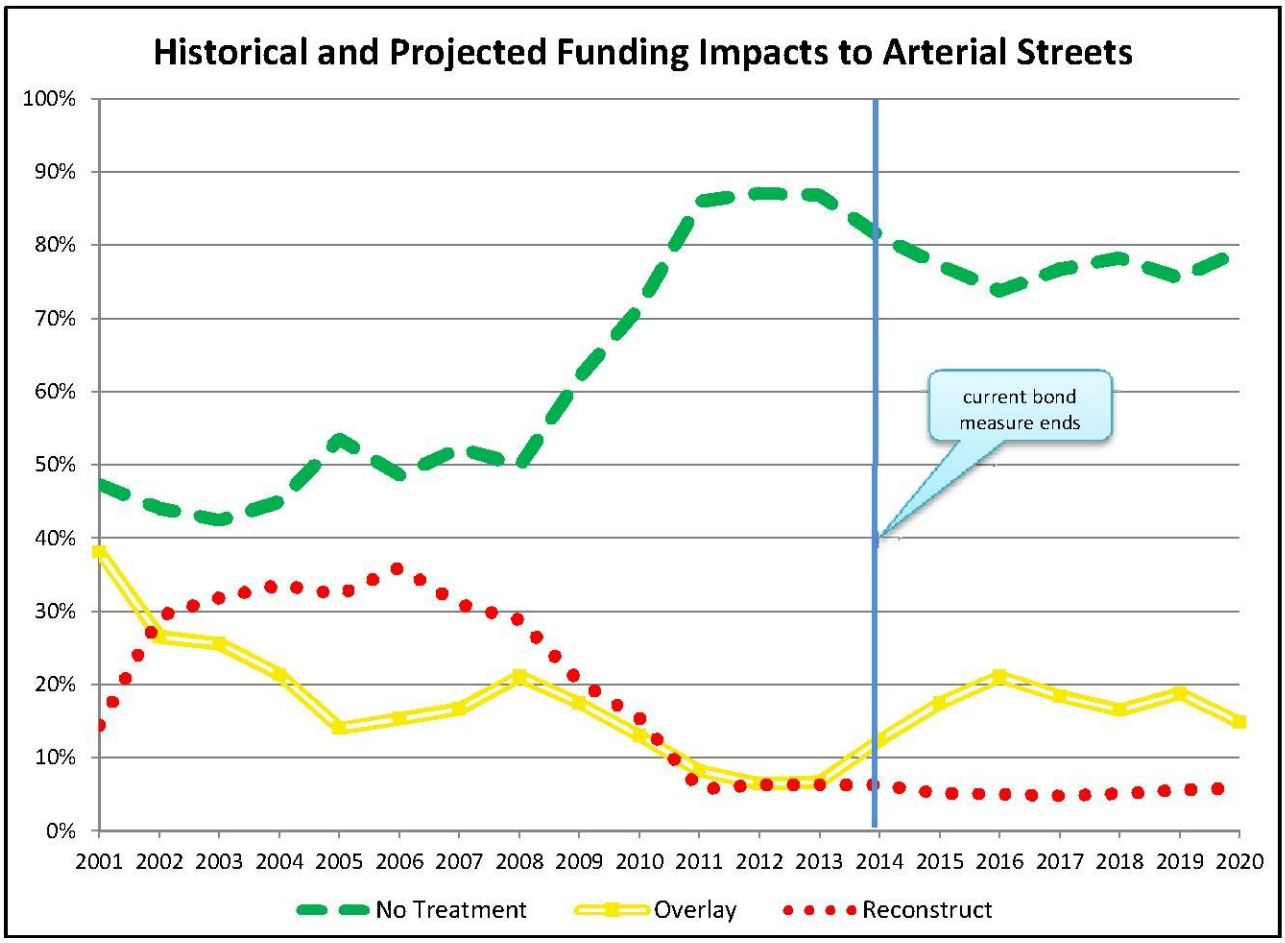


This chart provides detail of the current cost for treatment of the entire improved system excluding concrete streets at the end of the 2010 rating period. The total estimated treatment cost backlog at the end of 2010 is $139,021,000.

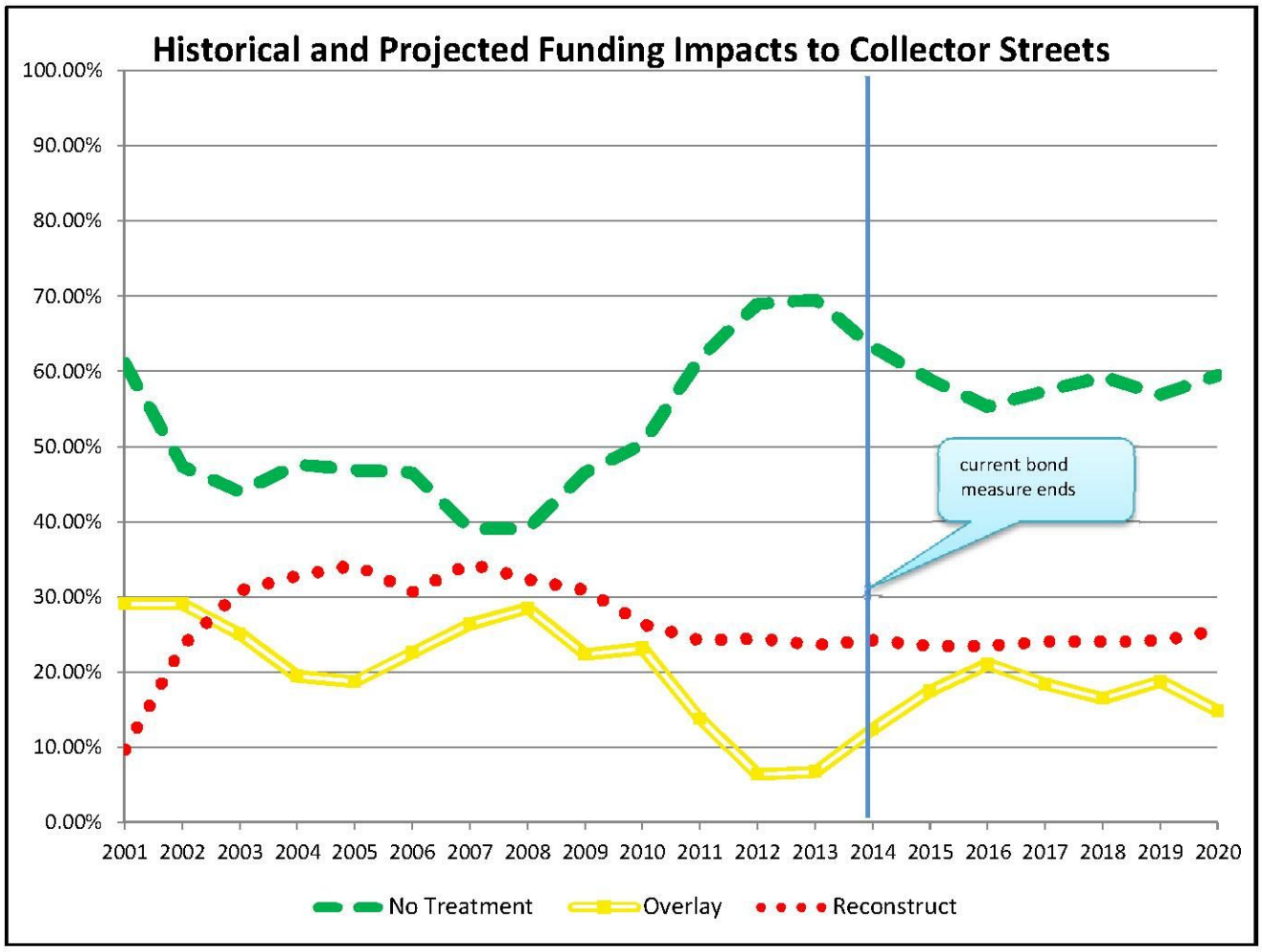


	Major Art	Minor Art	Coll	Neigh. Coll	Local	Total
Slurry	$0	$0	$0	$0	$6,624,000	$6,624,000
Overlay	$4,033,000	$4,171,000	$4,076,000	$3,236,000	$38,226,000	$53,742,000
Reconstruct	$6,171,000	$27,957,000	$20,224,000	$10,367,000	$13,936,000	$78,655,000
Total	$10,204,000	$32,128,000	$24,300,000	$13,603,000	$58,786,000	$139,021,000

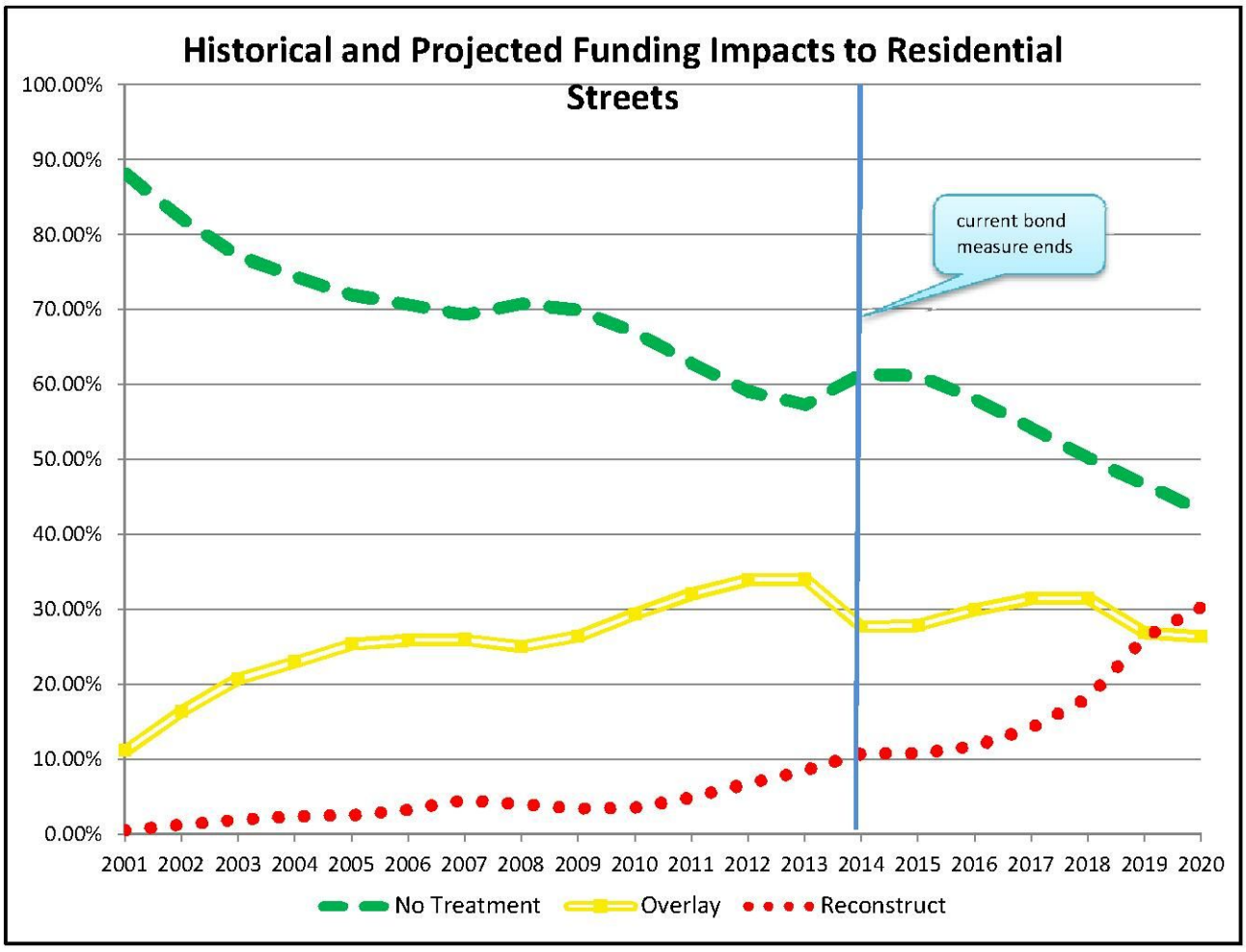
Using the PMS software, an analysis for a 10-year period (2011 through 2020) has been completed based on the current funding. The PMS software evaluates the deterioration of each segment based on individual OCI ratings. The software then projects when to apply the necessary treatment at the proper time. When possible, the system applies a less expensive treatment earlier in the degradation curve. In the following four graphs this projected evaluation has been shown with historical data to present a more comprehensive view of the street system. The graphs show the impact of past and current funding over a 20-year period (2001 to 2020). Each graph indicates the **percentage** of streets which fall within a specific treatment range (reconstruct, overlay and no treatment). Plotting the percentages of streets within a treatment range over time visually demonstrates the overall condition of streets within that class. This is useful when deciding how to allocate funds in future years. Graphs from previous years, which focused on funding scenarios without differentiating between the treatment types, are not included in this report.



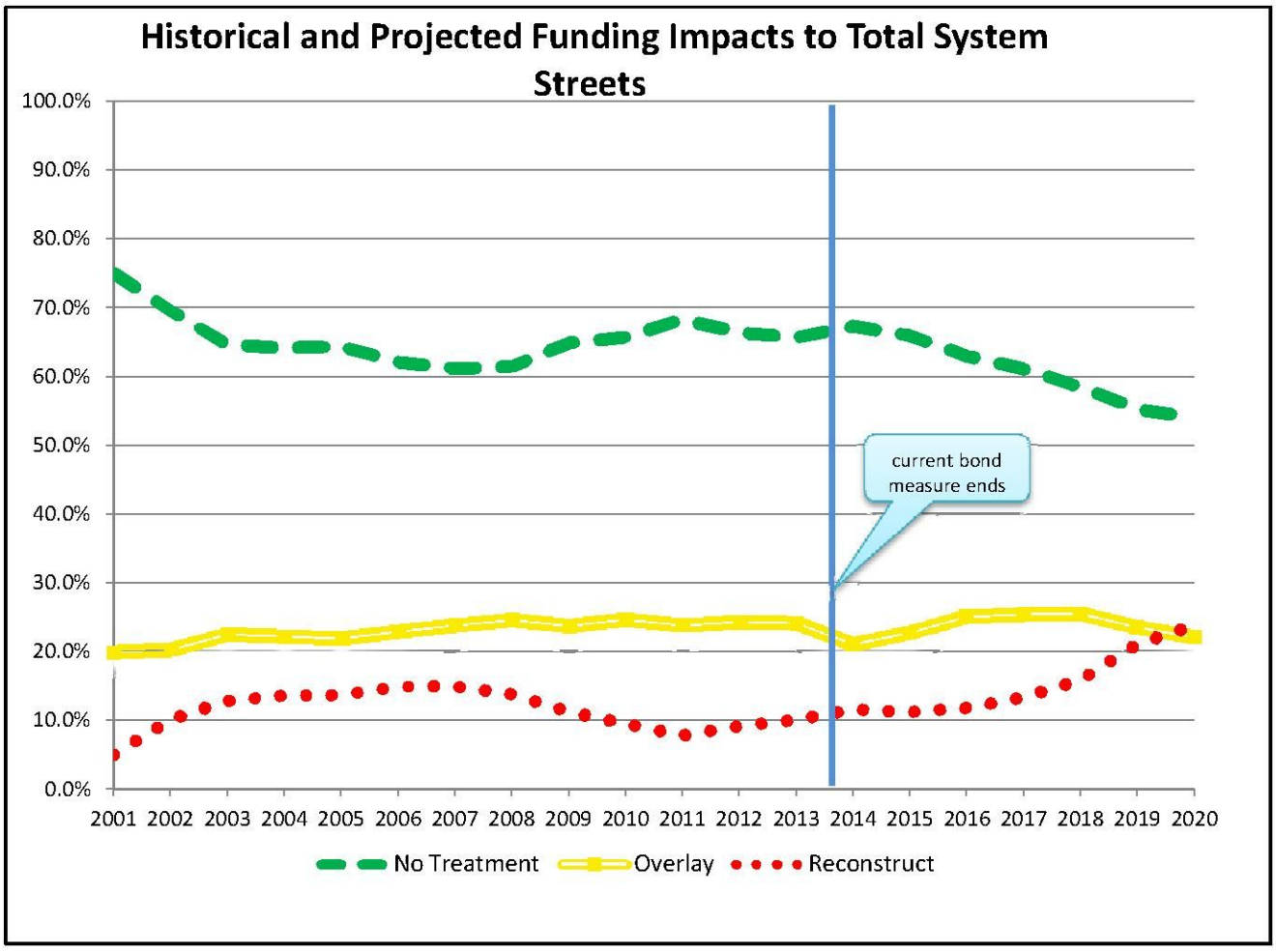
Arterial streets have been a major focus of the Pavement Preservation Program, and as a result the data indicates that after 2006 the percentage of arterial streets within the reconstruct treatment range has decreased approximately 30%. Beginning in 2011 it is projected the percentage of arterials deteriorating to a reconstruct level will stabilize. With ongoing funding focused on the busiest and lowest rated streets, the percentage of streets requiring an overlay treatment increases during those same years. The favorable outcome of future planning will be to keep those streets in the overlay range from dropping to the reconstruct range. The impact of this early focus on arterial streets is reflected in the continuing rise and stabilization of the percentage of arterial streets requiring no treatment even after the bond measure funding ends in 2014.



The number of collector streets requiring a reconstruct treatment has sharply increased in past years. However, in relation to the previous graph, the percentage is projected to stabilize in future years in part due to funding redirected from arterials and spent in this class of streets. The percentage of overlays in this class decreases sharply from 2008 to 2012 as a result of projects completed and proposed with the current funding. The graph indicates an increase in the overlay class after the bond funding ends in 2014. Again, collector streets requiring no treatment are projected to increase and stabilize in relation to the projected funding allocated to collector streets.



Residential streets to date have not been adequately funded to keep them from deteriorating, no bond measure funding has been allocated to residential streets. Residential streets requiring a reconstruct treatment accounted for a very small percentage of all residential streets in 2001. Although the percentage increases gradually to date, it is projected to climb at a much faster rate in the future, which reflects a street's lifecycle, aggravated by the lack of preventative treatment. The percentage of streets within the overlay treatment range has been increasing as well and is projected to continue with some stabilization in future years. Reflectively, the percentage of residential streets within the no-treatment range has been dropping and is projected to continue so that by 2020 approximately 45% of residential streets will require no treatment.



This graph of the combined arterial, collector and residential streets reflects the impact not providing treatment for residential streets has on the overall system. The percentage of streets needing "no treatment" declines, while streets requiring a "reconstruct" treatment increases, with the sharpest increase occurring after the bond measure funding ends in 2014.

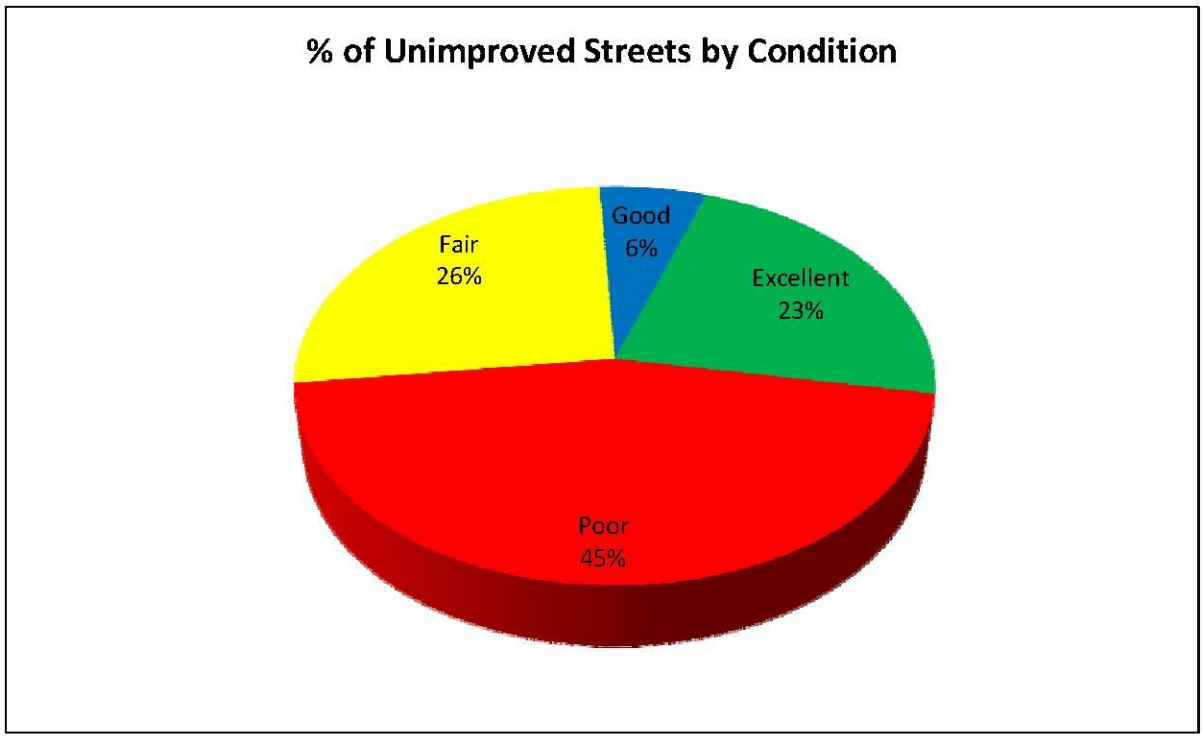
Unimproved Street System

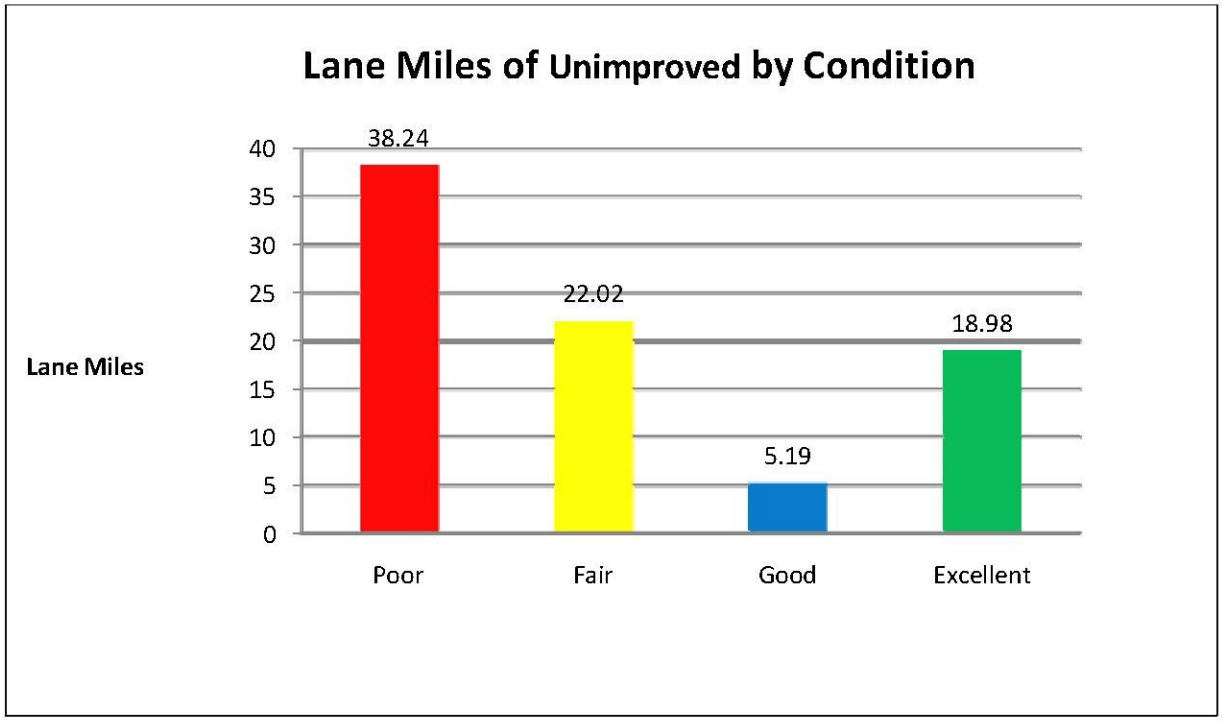
The City's transportation system consists of 531 centerline miles of improved and unimproved streets. The unimproved portion of this total includes 41 centerline miles (84 lane miles) of asphalt surface streets. This section of the report is intended to describe the overall condition of unimproved asphalt streets, potential treatment needs, associated unit costs, along with a projected total repair cost for addressing this classification. It is important to note that any treatment short of being brought up to full urban street standards should be considered temporary. The estimated cost to improve this classification to meet the urban street standards is approximately $60 million. In addition, the following backlog figure is separate from the improved street backlog figure.

Based on 2011 rating data of the unimproved streets system there is a backlog of repair projects totaling an estimated $12 million. The following charts and graphs indicate that 29 percent of the system falls into a no treatment category, due in large part to recent maintenance overlay and FDR treatments completed over the past three years. More than 50 unimproved streets have benefited from full or partial treatment since 2008. Forty five percent of the system falls into the "poor" category. Currently, Public Works Maintenance plans on spending $200,000 annually over the next six years to address a portion of these streets.

Unimproved Street System Current Treatment Needs & Cost Breakdown Year End 2010					
OCI	**Lane Miles**	**% of System**	**Condition**	**Rehabilitation Cost**	**Treatment ****
0-10	9.6	11.37%	Poor	$3,700,000	FDR
11 20	9.37	11.10%	Poor	$2,400,000	FDR or 2"HMAC
21-30	19.27	22.82%	Poor	$2,750,000	1.5"-2" HMAC
31-40	10.35	12.26%	Fair	$1,500,000	1.5"-2" HMAC
41-50	4.96	5.87%	Fair	$700,000	1.5"-2" HMAC
51-60	3.48	4.12%	Fair	$500,000	1.5"-2" HMAC
61-65	3.23	3.83%	Fair	$450,000	1.5"-2" HMAC
66-70	1.1	1.30%	Good	$0	No Treatment
71-80	2.25	2.66%	Good	$0	No Treatment
81-85	1.84	2.18%	Good	$0	No Treatment
86-90	5.05	5.98%	Excellent	$0	No Treatment
91-100	13.93	16.50%	Excellent	$0	No Treatment
			Total Rehabilitation	**$12,000,000**	
	84.43	100.00%			
				*Cost based on 2010 estimates.	** Example treatments. Actual treatment would need further analysis.

The following graphs are a visual representation of the information provided above.





Projected Funding for Pavement Preservation Program FY10 through FY16

From the inception of the Pavement Preservation Program (PPP), Eugene has been faced with the challenge of securing adequate, sustainable funding for this program. Currently there are several sources that contribute funding for pavement rehabilitation and reconstruction projects. The primary source is the City's local motor vehicle fuel tax ("gas tax"), which is currently levied at five cents per gallon. The reimbursement component of Transportation System Development Charges (SDCs) have historically generated close to $800,000 per year for PPP projects, but in the current dampened economic environment, building permit activity continues to be low, along with the level of this funding stream. Under an intergovernmental agreement, Lane County made a one-time transfer in FY09 of $4.5 million in County Road Fund money to Eugene, the majority of which the City Council earmarked for pavement preservation projects. The cumulative effect of these factors is that PPP annual revenues, which were once projected at $4.2 million per year, are now projected to level out at approximately $3 million per year

On November 4, 2008, voters approved a $35.9 million dollar bond measure dedicated to 32 preservation projects plus annual bike path rehabilitation work. The $35.9 million, five-year plan is funded by general obligation bonds and is estimated to cost a typical homeowner an average of $102 a year for five years. The bond proceeds will fix approximately 70 lane miles of streets and 3 miles of off-street bike and pedestrian paths. The measure will generate approximately $6.5 million annually for five years. Of that, at least $350,000 will be used annually to fix off-street bicycle and pedestrian paths; the remainder would be used to fix streets, as well as pay bond issuance costs. No bond money can be used to expand the capacity of the street system.

Projected Funding Sources Pavement Preservation Projects
FY10 through FY16

Fiscal Year	Local Gas Tax Note 1	SDC Note 2	Bond Note 3	Other Note 4	Total Funding
FY10 (actual)	$1,738,296	$309,587	$6,015,000	$1,452,244	$9,515,127
FY11 (est.)	$3,060,000	$228,035	$6,810,000	$41,000	$10,139,035
FY12 (est.)	$3,060,000	$219,689	$7,140,000	$41,513	$10,461,202
FY13 (est.)	$3,060,000	$219,689	$7,480,000	$42,239	$10,801,928
FY14 (est.)	$3,060,000	$219,689	$7,840,000	$43,189	$11,162,878
FY15 (est.)	$3,060,000	$219,689		$43,189	$3,322,878
FY16 (est.)	$3,060,000	$219,689		$43,189	$3,322,878

Notes:

1) Local Motor Vehicle Fuel Tax (gas tax) revenues are assumed at the 5-cent level throughout the forecast period. FY10 $1.4 million was diverted allocated to Road Operations
2) SDC reimbursement revenue is projected to maintain low level of activity through the forecasted period.
3) November 2008 voters passed a five-year bond measure for pavement preservation backlog.
4) "Other" revenue generally includes investment interest, permit fees and other miscellaneous resources.

Project Prioritization

Selecting streets or street segments for treatment is done through a process involving analysis, testing, and staff experience. Using the data produced by CenterLine, and combining this information with estimated revenues allows staff to approximate backlogs and group potential street segments for consideration for treatment under the Pavement Preservation Program.

Streets are not prioritized on a "worst first" basis. Public Works' main objective is to keep street segments from slipping into the reconstruction category, which typically costs four to five times more per lane mile than rehabilitation. By rehabilitating (overlaying) a street before it significantly deteriorates, 15 to 20 years of useful life can be added to a street at a substantial cost savings over reconstruction. Once a street has deteriorated to the point that it must be reconstructed, the opportunity for preventive street maintenance (overlay) is lost. For these reasons, streets that are categorized as overlay projects receive the highest priority for corrective treatment. If at some point in the future there are additional funds available, or if the majority of overlay projects have been addressed, reconstruction projects will be scheduled

A prioritized list of 32 street repair projects to be funded by a local bond measure was approved by Eugene voters in November 2008. The prioritized list was developed by staff based on citizen input, information about needed street rehabilitation and reconstruction from the pavement management system, and equitable geographic distribution of projects throughout the community. Council reviewed the list and sized it to fit a bond total of $35.9 million over five years. Subsequently, a 12-member citizen review panel was formed to document the use of the bond proceeds. This citizen panel, with information provided by staff, will also advise the City Council on any additional projects to be added to the list of approved bond projects

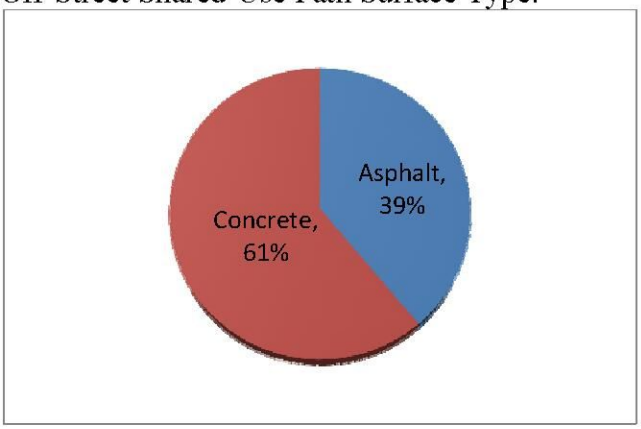
Off Street Shared-Use Paths

Shared-use paths are used by a variety of non-motorized users, including pedestrians, cyclists, skaters, and runners. Shared-use paths are typically paved (asphalt or concrete) but may also consist of an unpaved smooth surface as long as it meets Americans with Disabilities Act (ADA) standards. Shared-use paths are typically wider than an average sidewalk.

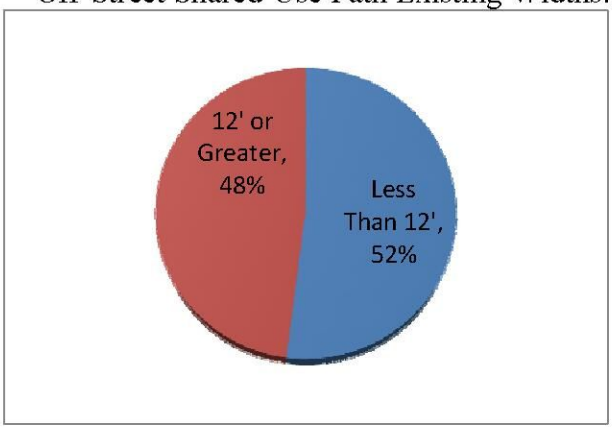
There are approximately 41 miles of shared-use paths identified in the Pavement Management Program. These paths were last surveyed and rated in 2009 and are scheduled to be rated during the 2011 season using the new rating methodology. With updated project information an analysis will be performed using CenterLine to project the condition and funding needs of this infrastructure. The City standards for shared-use paths require a concrete structure no less than six inches deep and 12 feet wide. Paths designed, constructed or reconstructed to current standards are expected to have a 50-year life.

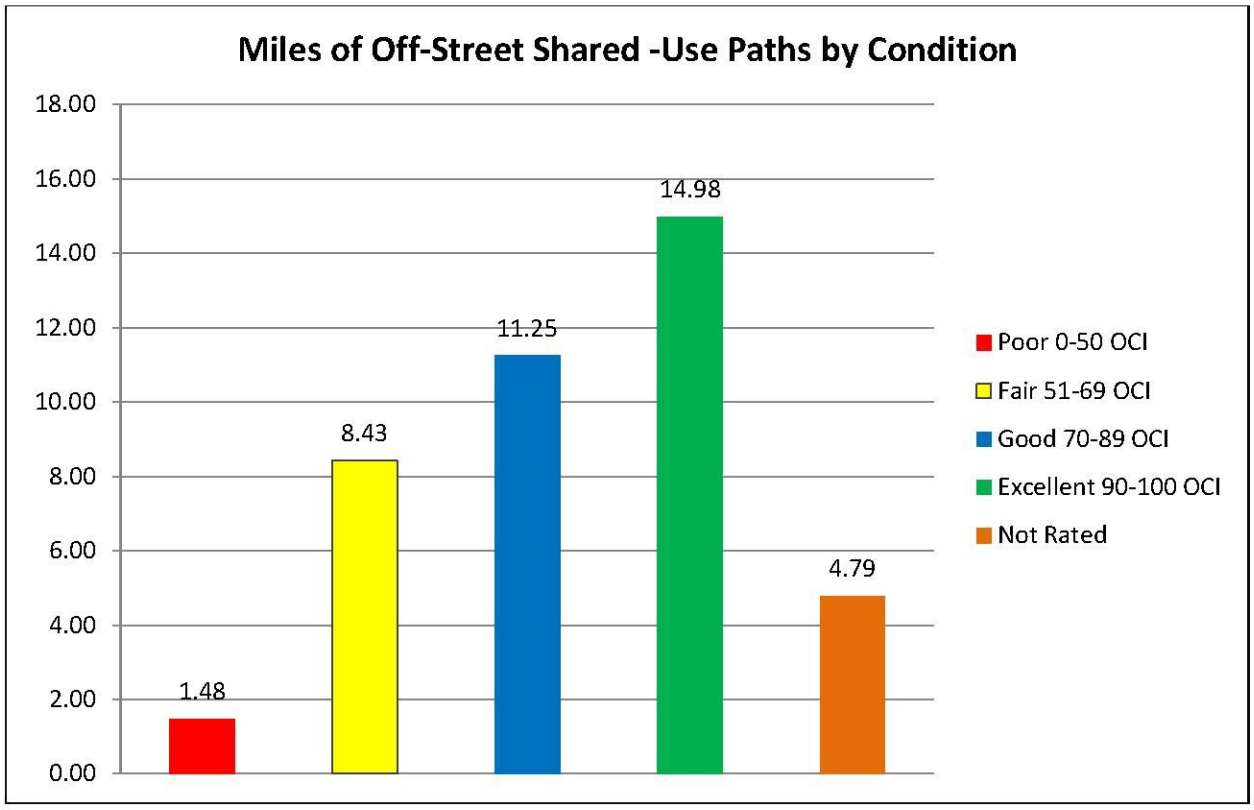
The following graphs show the division of current surface types and widths within the system.

Off-Street Shared-Use Path Surface Type:



Off-Street Shared-Use Path Existing Widths:





Funding and Prioritization of Off-Street Shared-Use Paths

Shared-use path projects have been historically funded by State and Federal grants and more recently the bond measure (at least $350,000 annually). There is currently no long term funding identified specifically for shared-use paths. The following is a list of completed, current (funded) and proposed projects

Name	Fiscal Year	Funding
Fern Ridge Chambers - City View	2004	STP-U
Garden Way Bike Path	2005	STP-U
Monroe Bikeway	2006	STP-U
N Bank Path Club Rd 3000'W	2006	STP-U
West Bank Trail	2007	Transportation Enhancement Funds
Delta Ponds Bridge	2007	Various Federal Funds
Amazon: SEHS - 31st Bike Path	2009	PBM
Fern Ridge Path Rehab/Westmoreland Connector	2010	PBM
South Bank Path Rehab	2011	PBM
Fern Ridge: Chambers - Arthur	2011	STP - Project readiness grant
West Bank Trail	2011	STP-U/MWMC
Alder Street: Broadway - 18th	2012	State Bike and Ped Program
W Bank: Greenway - Copping	2012	PBM
Amazon/Willamette River Path Connectors	2012	State Urban Trail Funds

Scheduled Street Projects for 2011

Project Name	Lane Miles	Funding
18th Ave. (Patterson St. to Washington) (Jefferson St. Intersection)	2.63	PBM
Alder St. (Broadway to E. 18th Ave.)	1.37	PBM/LGT
13th Ave. (Kincaid St. to Alder St.)	0.23	LGT
City View St. (18th Ave. to 28th Ave.)	2.83	LGT
Coburg Rd. (850' north of Cal Young Rd. to I-105)	6.61	PBM
Conger St. (W. 5th Ave. to W. 11th Ave.)	1.39	PBM/LGT
Hilyard St. (24th Ave. to 34th Ave.)	3.97	PBM
Jefferson St. (W. 1st Ave. to W. 8th Ave.)	1.36	LGT
Jefferson St./Washington St. Intersections (Jefferson St. at 8th, Broadway, 10th, and spot repairs at 11th) (Washington St. at Broadway, 10th, and spot repairs at 11th)		LGT
Pearl St. (E. 4th Ave. to Broadway)	1.03	PBM
River Rd. (Horn Ln. to Railroad Blvd.)	6.91	PBM
Washington St. (W. 1st Ave. W. 6th Ave.)	1.01	LGT
Willamette St. (29th Ave. to 46th Ave.)	3.87	PBM
Wilson St. (W. 5th Ave. W. 11th Ave.)	1.39	PBM/LGT

Street Project Funding Abbreviations

PBM - Paving Bond Measure

LGT - Local Gas Tax/SDC/Other

Federal-Surface Transportation Funds-Urban

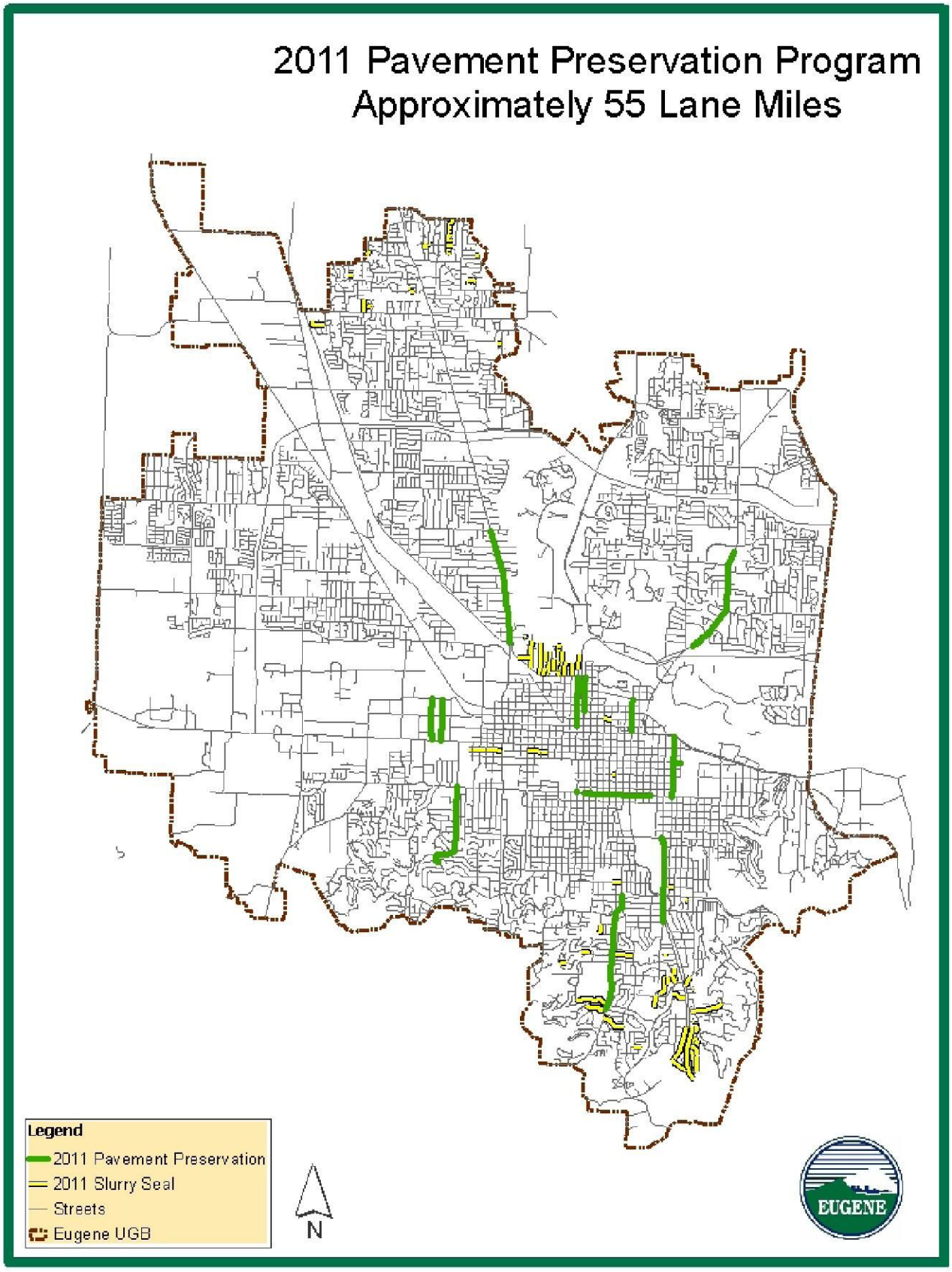
Slurry Seal Group 1 - Whitaker Area	LnMiles	Funding
Adams St. (Sycamore to W. 1st)	0.71	LGT
Ash St. (Lewis to Clark)	0.34	LGT
Cedar St. (Cheshire to Clark)	0.34	LGT
Cheshire Ave. (Jefferson to N. Jackson)	0.51	LGT
Clark St. (Jefferson to Grand)	1.09	LGT
Cross St. (Polk to Railroad Blvd.)	0.39	LGT
Grand St. (North End to Railroad Blvd.)	0.93	LGT
Jackson St. (Lewis to W. 1st)	0.69	LGT
Jefferson St. (North End to Clark)	0.34	LGT
Madison St. (North End to W. 1st)	0.38	LGT
Monroe St. (Cheshire to W. 1st)	0.44	LGT
Polk St. (North End to Railroad Blvd)	1.08	LGT
Sycamore Ave. (Ash to Adams)	0.11	LGT
Thomason Ln. (CDS)	0.04	LGT
Thomason Ln. (CDS)	0.05	LGT
Thomason Ln. (River Rd. to East End)	0.13	LGT
Van Buren St. (Lewis to W. 1st)	0.47	LGT

Slurry Seal Group 2 - W Amazon Area	LnMiles	Funding
E 36th Pl. (W. Amazon to Hilyard)	0.35	LGT
E 37th Ave. (W. Amazon to Hilyard)	0.30	LGT
E 38th Ave. (W. Amazon to Hilyard)	0.46	LGT
E 38th Ave. (CDS)	0.06	LGT
E 39th Ave. (W. Amazon to Dillard)	0.41	LGT
E 39thPl. (W. Amazon to Dillard)	0.26	LGT
44th Ave. (Pinecrest to Hilyard)	0.22	LGT
Alder St. (Foxglenn to 43rd)	0.47	LGT
Dillard Rd. (CDS)	0.05	LGT
Dillard Rd. (Foxglenn to South End)	0.21	LGT
Foxglenn Ave. (Dillard to Alder)	0.16	LGT
Foxglenn Ave. (CDS)	0.15	LGT
Hilyard St. (Alder to 43rd.)	0.22	LGT
Hilyard St. (E 43rd south CDS)	0.27	LGT
Pinecrest Dr. (E 43rd to Hilyard)	0.45	LGT

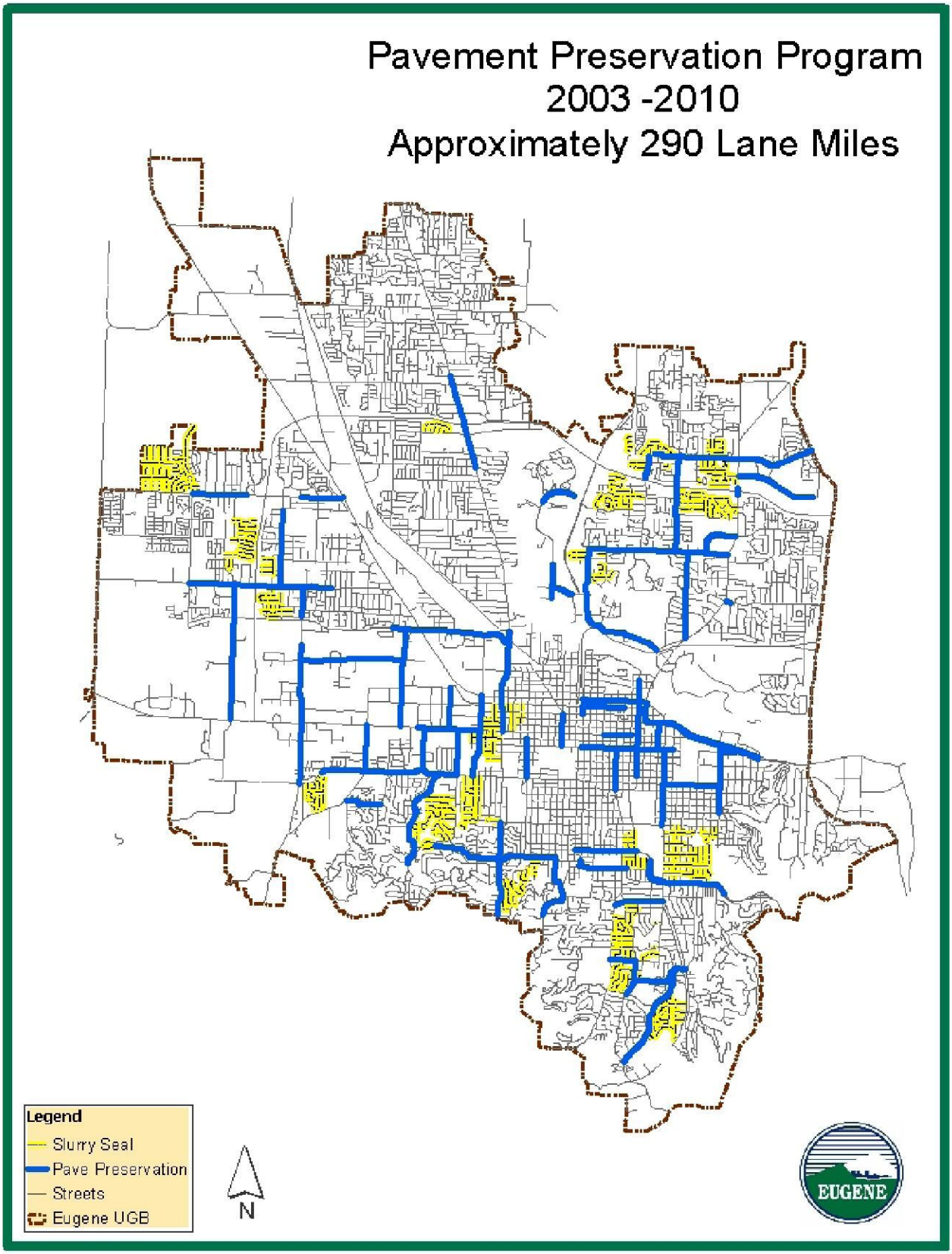
Slurry Seal Group 3 - E Amazon Area	LnMiles	Funding
41st Ave. (Snell to South End)	0.17	LGT
Alpine Lp. (End to End)	0.30	LGT
Center Way (Snell to South End)	1.54	LGT
Center Way (CDS)	0.06	LGT
E. Amazon Dr. (CDS)	0.10	LGT
Garnet St. (Dillard to Nectar)	0.25	LGT
Kincaid St. (CDS)	0.22	LGT
Larch St. (E. Amazon to East End)	0.11	LGT
Martin St. (Center Way to W. Amazon)	0.40	LGT
Nectar Way (Center Way to South End)	0.94	LGT
Potter St. (E. Amazon to Barricade)	0.25	LGT
Snell St. (Dillard to E. Amazon)	0.35	LGT
Snell St. (CDS)	0.11	LGT
Whiteaker St. (Nectar to South End)	0.25	LGT

Slurry Seal Group 4 - Santa Clara Area	LnMiles	Funding
Calumet Way (Beacon Dr to Calumet Way)	0.75	LGT
Calumet Way (Calumet to Emily)	0.22	LGT
Calumet Way (CDS)	0.06	LGT
Calumet Way (CDS)	0.06	LGT
Calumet Way (CDS)	0.06	LGT
Calumet Way (CDS)	0.06	LGT
Calument Ave. (East & West of Calumet Way)	0.11	LGT
Dublin Ave. (Banner to West End)	0.22	LGT
Edwards Dr. (Scenic to Wendover)	0.39	LGT
Hammer Ln. (Willowbrook to East End)	0.07	LGT
Hyacinth St. (Kingsbury to South End (CDS)	0.11	LGT
Leonards Way (Willowbrook to East End)	0.15	LGT
Mahonia Ln. (Herman to Calumet)	0.10	LGT
Risden Pl. (Lancaster to Dorchester)	0.48	LGT
Risden Pl. (CDS)	0.08	LGT
Swenson Ln. (Willowbrook to East End)	0.07	LGT
Watson Dr. (Wendover to West)	0.07	LGT
Wendover St. (Edwards to Watson)	0.10	LGT
Willowbrook St. (Argon to Irvington)	0.21	LGT

The following map illustrates the Pavement Projects scheduled for 2011.



The following map illustrates Pavement Preservation Projects since inception of the program.



The following map illustrates the Enhanced Pothole Program 2008-2010.