



# SAVE OUR STREETS 2009 YEAR END REPORT

---



A Street NE overlaid as part of the 2009 SOS Program

## Contents

About This Report .....	1
Background .....	1
About the SOS Program .....	1
About Auburn's Pavement Management.....	2
2009 SOS Projects .....	3
Projects .....	3
Revenues and Expenditures .....	5
Current Pavement Condition .....	5
Future SOS Projects .....	6
Map of Past, Present, and Future SOS Streets .....	7

## ABOUT THIS REPORT

---

The **Save Our Streets (or SOS) Program** was created in 2004 to preserve and improve the pavement of the local street system by funding yearly pavement preservation and improvement projects.

At the end of each year the Auburn Public Works Department produces a Year End Report to update the public on the accomplishments and future plans of the SOS Program. This is the fifth Year End Report produced for the SOS Program and includes:

- Background on the SOS Program and Auburn's pavement management strategy.
- A summary of the SOS projects completed and the expenditures spent during 2009.
- An update of the overall pavement condition of Auburn's local streets.
- An update on plans for future SOS Projects.

## BACKGROUND

---

### ABOUT THE SOS PROGRAM

The City maintains 211 centerline miles of streets, of which 114 centerline miles (or more than half the network) is made up of local streets. In 2004 the public was expressing concern over the condition of these local streets, but local street funding had dropped dramatically in the preceding years (see Figure 1) and the City could not afford to make the needed improvements.

In response to the situation, the City proposed a funding measure which was approved by Auburn citizens in the November 2004 General Election. This funding measure now allows the City's property tax levy to generate additional revenue for a **Dedicated Local Street Fund** which is used solely to fund a local street preservation and improvement program, called the Save Our Streets (or SOS) Program.

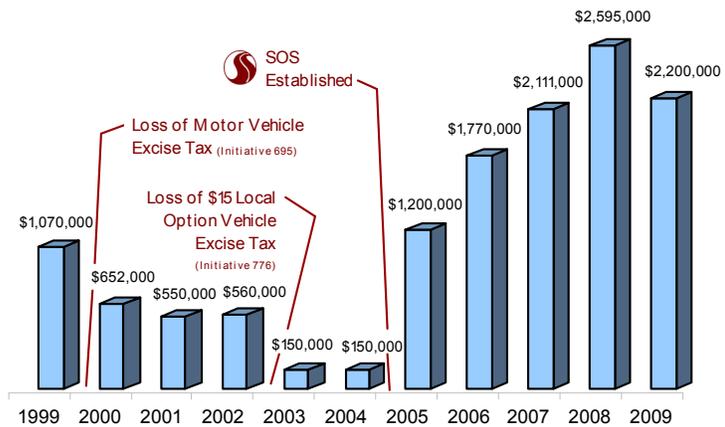
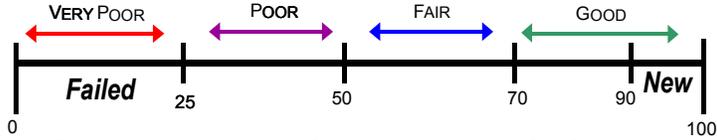


Figure 1: History of Funding for Local Streets

Since 2005, the SOS Program has funded local street pavement preservation projects each year which have improved and preserved the pavement on 33 miles of local streets.

## ABOUT AUBURN'S PAVEMENT MANAGEMENT

The City measures pavement condition using the **Pavement Condition Index (or PCI)**. As shown in Figure 2, PCI values represent pavement condition based on a scale from 0 to 100 with 100 being pavement in perfect condition and 0 indicating the pavement has completely failed.



**Figure 2: Pavement Condition Index (PCI) Scale**

PCI values generally indicate the best treatment for pavements in different conditions. For example, pavements with high PCI values typically require relatively inexpensive treatments that simply preserve the existing pavement; pavements with average to low PCI values typically require more expensive rehabilitative treatments; and pavements with really low PCI values are often unsalvageable and have to undergo very expensive rebuilds.

Figure 3 shows the general guidelines (called a **decision tree**) the City follows to select treatments for pavement in different PCI ranges as well as the typical costs of each treatment (although final treatment selection is ultimately an engineering decision).

Pavement Condition	Typical Treatment	Typical Current Cost
<b>PCI 90 - 100</b> <b>Like-New Condition</b>	<b>No Treatment Needed</b>	<b>\$0</b>
<b>PCI 70 - 90</b> <b>Good Condition</b>	<b>Seal Cracks</b> – Cracks are sealed with liquid asphalt to prevent water from penetrating the pavement and weakening the base material that forms the foundation for the pavement.	<b>\$1.00</b> per square yard
<b>PCI 50 - 70</b> <b>Fair Condition</b>	<b>Patching and Thin Overlay</b> – Broken pavement is replaced (patched) to renew the load carrying ability of the existing pavement. Then the road is overlaid with a thin layer of pavement (1½ inch or less in depth) to preserve the existing pavement and provide a smooth driving surface.	<b>\$15.00</b> per square yard
<b>PCI 25 - 50</b> <b>Poor Condition</b>	<b>Extensive Patching and Thin Overlay</b> – Same treatment as above only more extensive patching is typically required. (Some streets in this condition require a thicker overlay of 2 inches or greater).	<b>\$20.00</b> per square yard
<b>PCI 0 - 25</b> <b>Very Poor Condition</b>	<b>Rebuild Pavement</b> – Existing pavement is completely removed and a new road is constructed.	<b>\$95.00</b> per square yard

**Figure 3: Maintenance Decision Tree for Local Streets**

About every 4 years, the City surveys Auburn’s entire street system and calculates a PCI value for each street. With the help of **pavement management software**, the City uses the PCI values from the survey and the treatment costs from the decision tree (Figure 3 above) to determine the funding needs of the entire local street system. Since these needs are always a lot more expensive than the City can actually afford to fund in a single year, the City has to prioritize and select a limited number of streets to treat each year.

During the initial years of the SOS Program, the City focused on preserving streets in fair to poor condition. The reason for this was two fold; it addressed streets in need of repair and it prevented these streets from deteriorating to the point that a more expensive treatment (such as a total rebuild) would be needed. Since many of the fair to poor streets have now been treated, the City has also begun rebuilding streets in very poor condition in 2009.

## 2009 SOS PROJECTS

---

### PROJECTS

The 2009 SOS Program consisted of the following projects:

**LES GOVE NEIGHBORHOOD IMPROVEMENT PROJECT PHASE 1** – This project constructed roadway, storm drainage, sanitary sewer, and water system improvements in the neighborhood located to the northwest of Les Gove Park (see the map at the end of this report). The SOS Program funded only the roadway improvement portion of the project which consisted of overlaying 1.3 miles of streets and rebuilding 0.5 miles of streets. Construction of this project began in May 2009 and will be complete in the early 2010.



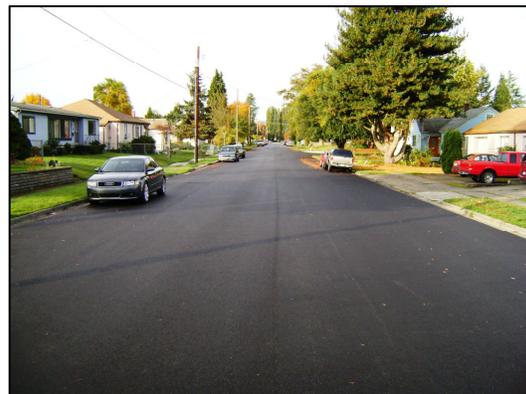
5<sup>th</sup> St SE before being rebuilt



7<sup>th</sup> St SE before being overlaid



5<sup>th</sup> St SE after being rebuilt



7<sup>th</sup> St SE after being overlaid

**2009 LOCAL STREET PAVEMENT PRESERVATION PROJECT**

– This project rebuilt the pavement on 0.1 miles of local streets and overlaid 0.7 miles of local streets in the City’s downtown area (see the map at end of this report for the specific streets). This project was completely funded by the SOS Program. Construction began in August 2009 and was completed in October 2009.



Riverview Dr SE after being rebuilt

This project was also scheduled to overlay 22<sup>nd</sup> St NE between I St NE and O PI NE since this work was deferred in 2008 due to levee work on the Green River (22<sup>nd</sup> St NE was on the haul route for some levee work on the Green River). However, this work has been deferred again to the spring of 2010 due to the additional levee work that is being done to prepare for potential flooding that may happen while the Howard Hansen dam is being repaired. Money budgeted in 2009 to fund this work will be carried over into 2010.



1<sup>st</sup> St NE after overlay



22<sup>nd</sup> St NE scheduled to be overlaid in 2010

**2007 SEWER REPAIR AND REPLACEMENT PROJECT**

– This project will repair and replace portions of defective sanitary sewer pipe throughout the City. This project also includes overlaying 22<sup>nd</sup> St NE between O PI NE and Riverview Dr which will be funded by the SOS Program. This overlay was scheduled to be complete in 2009 but has also been rescheduled to the spring of 2010 due to levee work on the Green River. Money budgeted in 2009 to fund the overlay will be carried over into 2010.

**2009 CITYWIDE SIDEWALK REPAIR PROJECT**

– This project will repair damaged sidewalk through the City. This project will also install ADA compliant wheelchair ramps on certain streets that were repaired by the 2009 SOS Program; as required by the Americans with Disabilities Act. These wheelchair ramp replacements will be funded by the SOS Program and the work is anticipated to take place in spring 2010. Money budgeted in 2009 to fund this work will be carried over into 2010.



ADA compliant ramp will be installed at this location on 1<sup>st</sup> St NE

## REVENUES AND EXPENDITURES

Figure 4 shows revenues and the expenditures of the SOS Program during 2009.

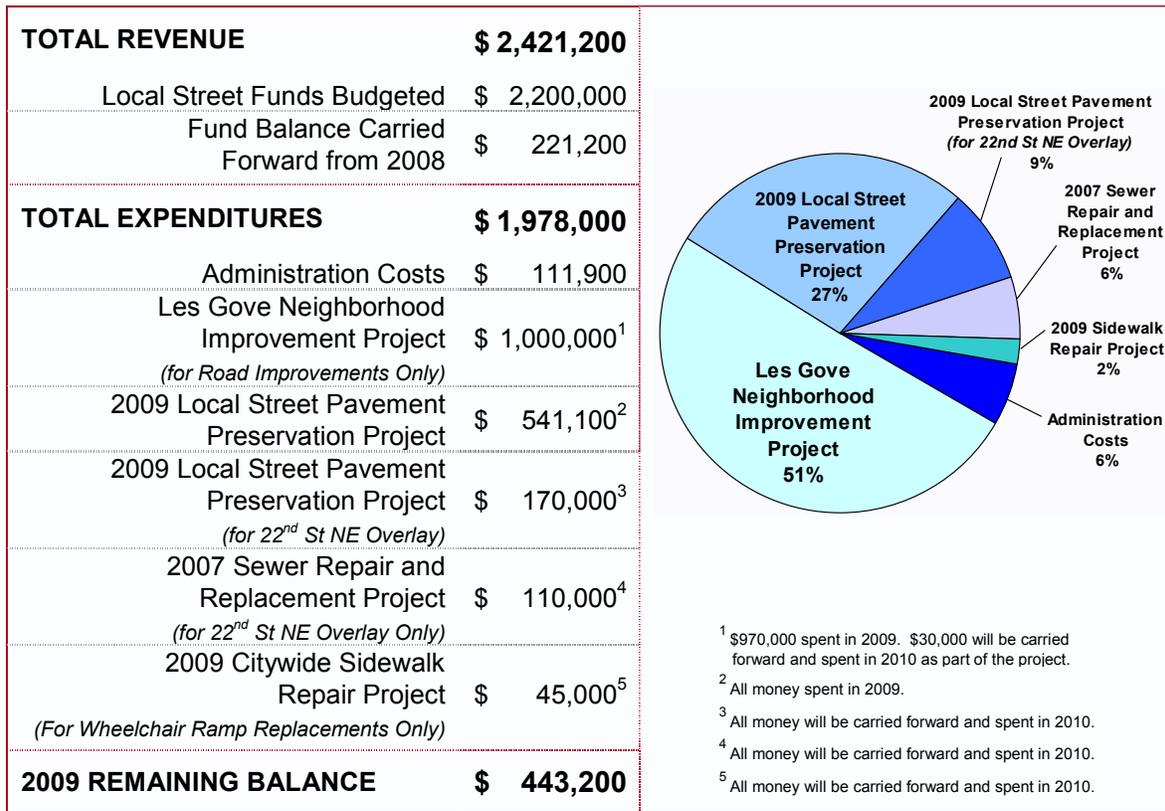


Figure 4: Revenue and Expenditures of Local Street Fund during 2009

## CURRENT PAVEMENT CONDITION

Figure 5 shows a breakdown of the past and current pavement condition of Auburn's local streets. At the beginning of 2008 the City annexed 36 miles of additional local streets, so the 2008 column shows the condition of Auburn's local streets before and after this annexation. As can be seen in the figure, since the creation of the SOS Program in 2004 the number of streets in fair and poor condition have

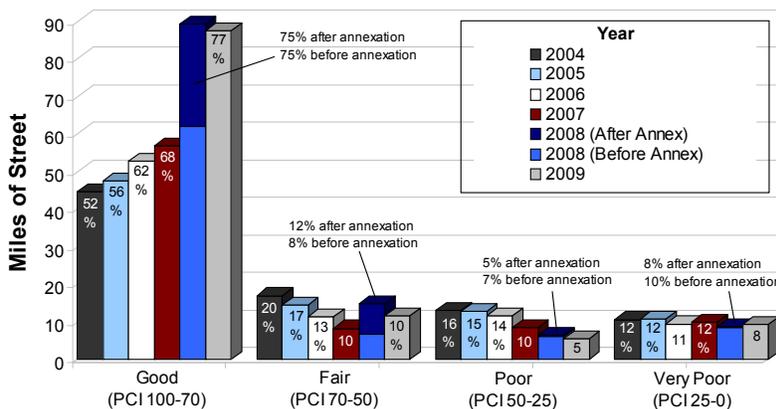


Figure 5: History of Pavement Condition for the Local Street System.

\*Data is based on pavement condition surveys performed in 2002 and 2006 for the pre-annexed streets and a survey performed in 2008 for the annexed streets.

been significantly reduced while streets in very poor have remained fairly constant. This indicates the SOS Program has been doing an effective job of improving and preserving the pavement of Auburn’s local streets.

Year	Average Local Street System PCI
2004	66
2005	68
2006	70
2007	72
2008	74 (without annexed streets) 77 (with annexed streets)
2009	76

**Figure 6: History of Average Local Street System PCI**

Figure 6 shows the history of the average PCI value of the entire local streets system. This figure further confirms that the SOS Program has been doing an effective job of improving and preserving the pavement of Auburn’s local streets since the average PCI of the entire local street system has significantly increased since the SOS Program was created in 2004.

### FUTURE SOS PROJECTS

\$1,500,000 is budgeted for the SOS Program for 2010 which will be combined with \$443,200 that will be carried forward from the remaining 2009 SOS budget. Additionally, \$30,000 will be carried forward to finish phase 1 of the Les Gove Neighborhood Improvement Project, \$280,000 will

be carried forward to overlay 22<sup>nd</sup> St NE from I St NE to Riverview Dr, and \$45,000 will be carried forward to replace wheelchair ramps on certain 2009 SOS streets. Therefore, the total budget for the 2010 SOS Program will be \$2,298,200.

In addition to overlaying 22<sup>nd</sup> St NE, the 2010 SOS Program will overlay and replace concrete panels on 1.7 miles of local streets in fair and poor condition and rebuild 0.3 miles of local streets in very poor condition. The specific streets are shown on the map at the end of this report.



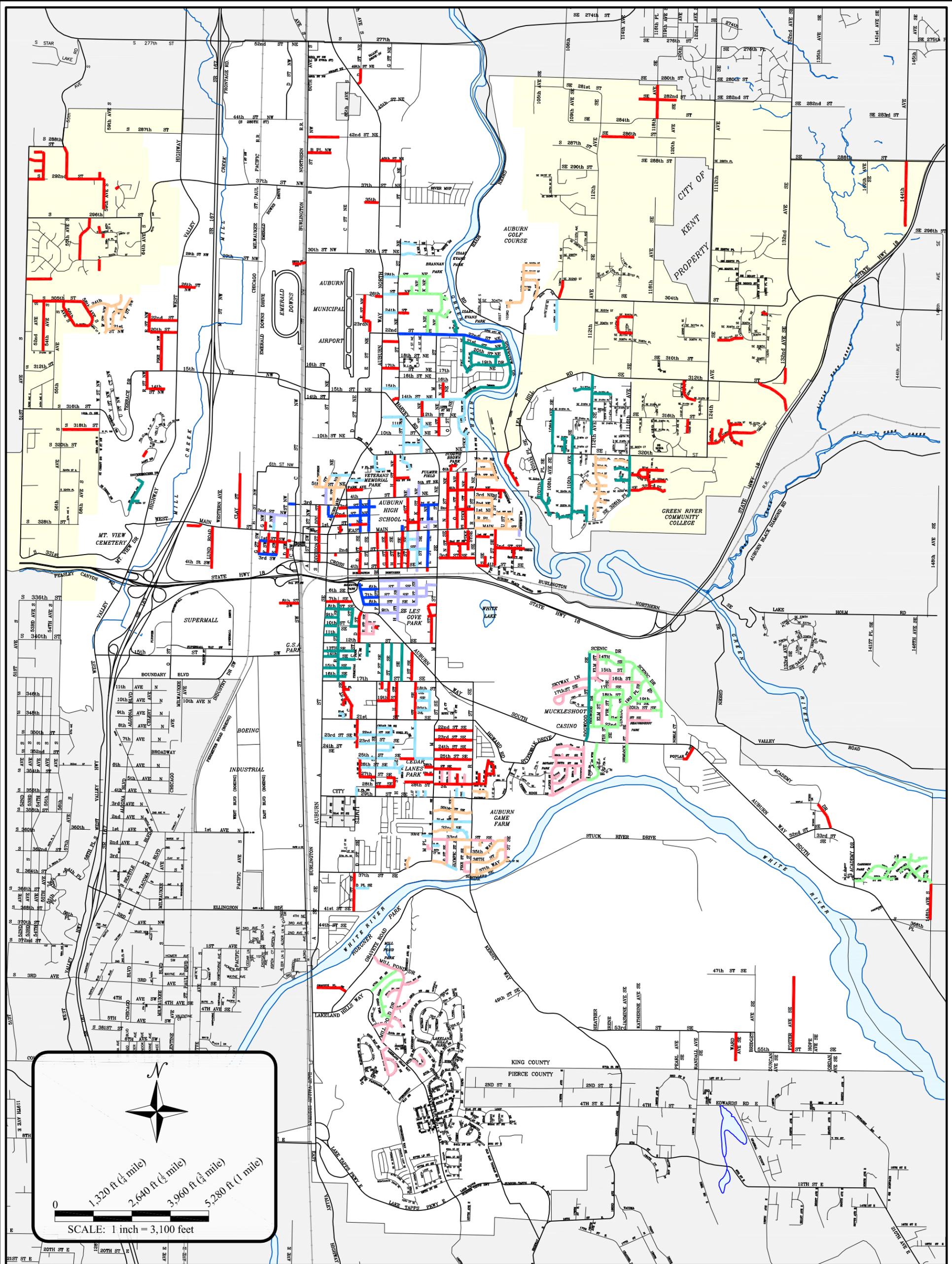
3<sup>rd</sup> St SW scheduled to be rebuilt in 2010



22<sup>nd</sup> St NE scheduled to be overlaid in 2010

The specific streets that will be treated after the 2010

SOS Program have not yet been selected. As in past years, future SOS streets will be selected during the budget process of the preceding year (so the 2011 SOS streets will be selected during the winter of 2010 for example).



# PAST, PRESENT, AND FUTURE SOS STREETS

- 2003 AND 2004 CHIP SEAL COMPLETED (NOT SOS PROJECTS)
  - 2005 PATCHING/THIN OVERLAY COMPLETED
  - 2006 PATCHING/THIN OVERLAY COMPLETED
  - 2007 PATCHING/THIN OVERLAY COMPLETED
  - 2008 PATCHING/THIN OVERLAY COMPLETED
- 2009 OVERLAY AND REBUILD COMPLETED
  - 2010 OVERLAY, REBUILD, AND CONCRETE PANEL REPLACEMENT PLANNED**
  - LOCAL STREET IN NEED OF WORK AFTER 2010
  - 2008 ANNEXATION AREAS

