



SAVE OUR STREETS 2010 YEAR END REPORT



6th Street SE reconstructed as part of the 2010 SOS Program

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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 money spent during 2010.
- 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.

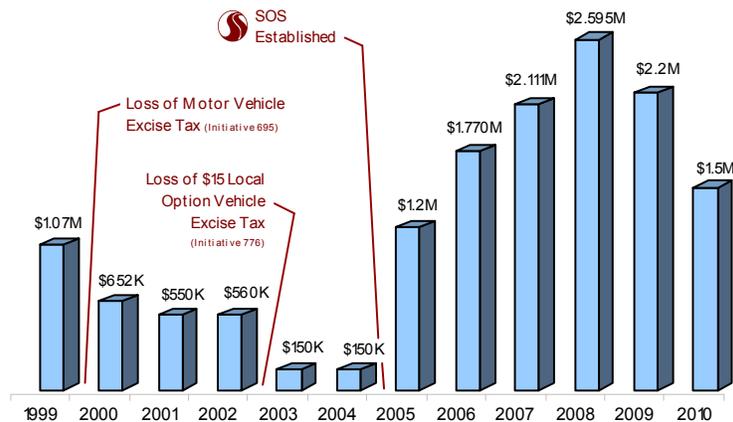


Figure 1: History of Funding for Local Streets

Since 2005, the SOS Program has funded local street pavement preservation projects each year which have improved and preserved the pavement on 34 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.

PCI values generally indicate the best treatment for pavements in different conditions. For example, pavements with high PCI

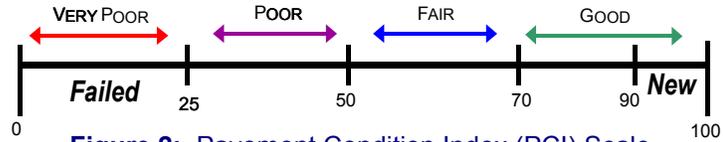


Figure 2: Pavement Condition Index (PCI) Scale

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 and can deviate from this decision tree).

Pavement Condition	Typical Treatment	Typical Cost
PCI 90 - 100 Like-New Condition	No Treatment Needed	\$0
PCI 70 - 90 Good Condition	Seal Cracks – 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.	\$0.75 per square yard
PCI 50 - 70 Fair Condition	Chip Seal – A thin layer of liquid asphalt is sprayed over the entire pavement surface and then covered with a thin layer of aggregates to preserve the existing pavement.	\$5.00 per square yard
	Patching and Thin Overlay – 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.	\$15.00 per square yard
PCI 25 - 50 Poor Condition	Extensive Patching and Thin Overlay – 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).	\$20.00 per square yard
PCI 0 - 25 Very Poor Condition	Rebuild Pavement – Existing pavement is completely removed and a new road is constructed.	\$95.00 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 2009, many of the fair to poor streets have now been treated and the City has also begun rebuilding streets in very poor condition. Since rebuilding streets is significantly more expensive than preserving streets, and since many future SOS projects will include rebuilding streets, less mileage will be complete each year compared to past years that only focused on preserving streets in fair to poor condition.

2010 SOS PROJECTS

PROJECTS

The 2010 SOS Program consisted of the following projects:

22ND STREET NE OVERLAY – 22nd St NE between I St NE and Riverview Dr (0.7 miles) was overlaid between May and July 2010. This work was completed under two separate projects; 22nd St NE between I and O PI NE was overlaid as part of the 2009 Local Street Pavement Preservation Project and 22nd St NE between O PI NE and Riverview Dr NE was overlaid as part of the 2007 Sewer Repair/Replacement Project. This overlay was originally scheduled to be complete in 2009 but was deferred due to levee work taking place on the Green River at the time (22nd St NE was on the haul route for some of the levee work). The money budgeted in 2009 to fund this overlay was carried over into 2010.



22nd St NE after overlay.



Wheelchair ramp installation at K St SE and East Main St.

2009 SIDEWALK REPAIR PROJECT – This project repaired damaged sidewalk throughout the City and was funded by the City's Capital Improvement Fund. This project also installed new wheelchair ramps on certain streets that were repaired by the 2009 SOS Program. These wheelchair ramp replacements were funded by the SOS Program and were installed between January and February 2010. The money budgeted in 2009 to fund these wheelchair ramp installations was carried over into 2010.

LES GOVE NEIGHBORHOOD IMPROVEMENT PROJECT PHASE 2

– Phase 1 of this project constructed roadway, water, sewer and storm system improvements on 1.8 miles of streets in the neighborhood located to the northwest of Les Gove Park between May 2009 and March 2010. Phase 2 of this project constructed roadway and water system improvements on the remaining streets in this neighborhood (see the map on page 7 for the specific streets). The phase 2 roadway improvements consisted of rebuilding 0.2 miles of street and overlaying 0.2 miles of streets. Construction of phase 2 began in May 2010 and was complete in September 2010. The SOS Program funded the roadway improvement portions of this project. The respective utilities funded the utility improvement portions of this project.



7th St SE after overlay.

2010 LOCAL STREET PAVEMENT PRESERVATION PROJECT

– This project replaced damaged concrete pavement panels on 0.5 miles of local streets in 2010. This project is also scheduled to rebuild the pavement on 0.1 miles of local streets, overlay 0.3 miles of local streets, replace damaged concrete pavement panel on an additional 0.2 miles of local streets, and replace a three water lines and a storm drainage line on project streets in early 2011 (see the map on page 7 for the specific streets). Construction began in September 2010 and is expected to be complete in the spring of 2011. The water and storm drainage portions of this project are funded by the respective utilities. The street improvements are funded by the SOS Program.



D St NE after damaged concrete pavement panels were replaced.

3RD ST SW RECONSTRUCTION – Originally, the 2010 Local Street Pavement Preservation Project was scheduled to reconstruct 0.1 miles of 3rd St SW between G and E St SW. However, this work was deferred to 2011 since the design work necessary to complete this reconstruction would have significantly delayed the rest of the project. This reconstruction will now be done as part of the 2011 SOS Program and the money budgeted in 2010 to fund this work has been carried over into 2011.



3rd St SW scheduled to be reconstructed in 2011.

REVENUES AND EXPENDITURES

Figure 4 shows revenues and the expenditures of the SOS Program during 2010.

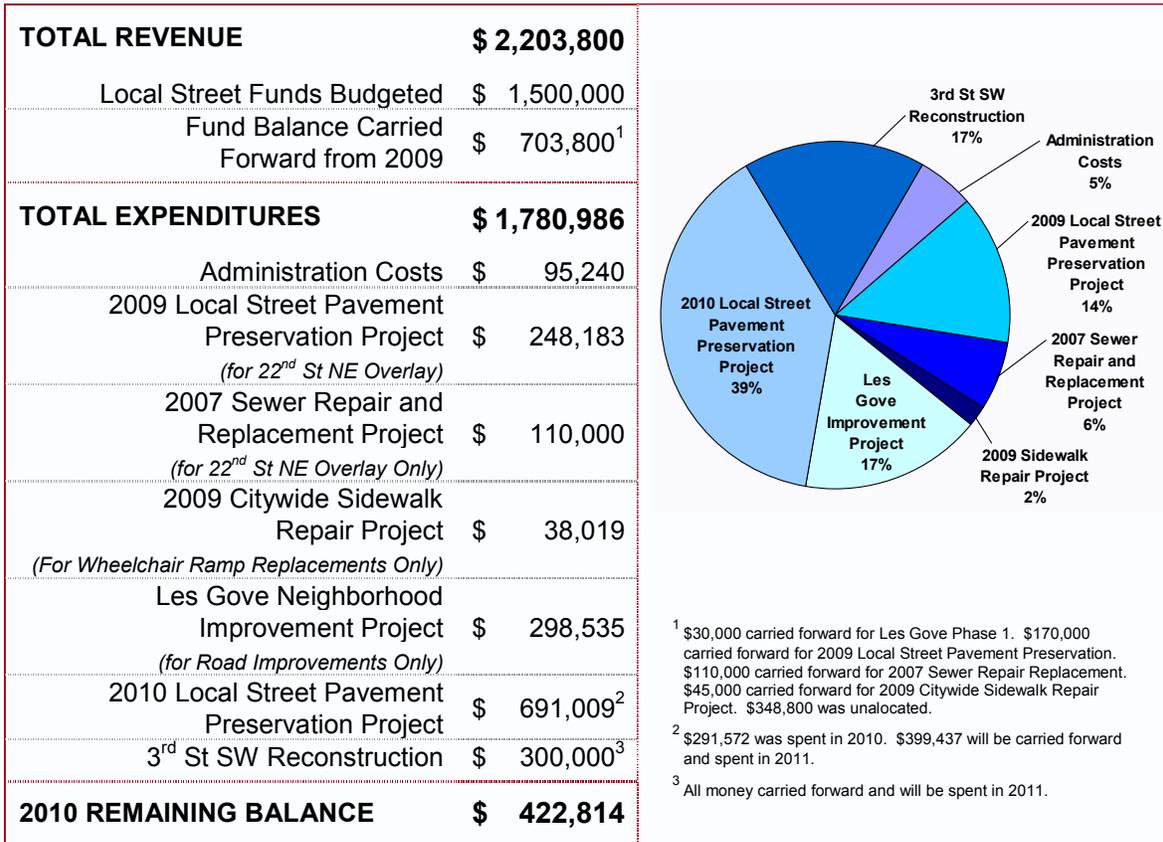


Figure 4: Revenue and Expenditures of Local Street Fund during 2010

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,

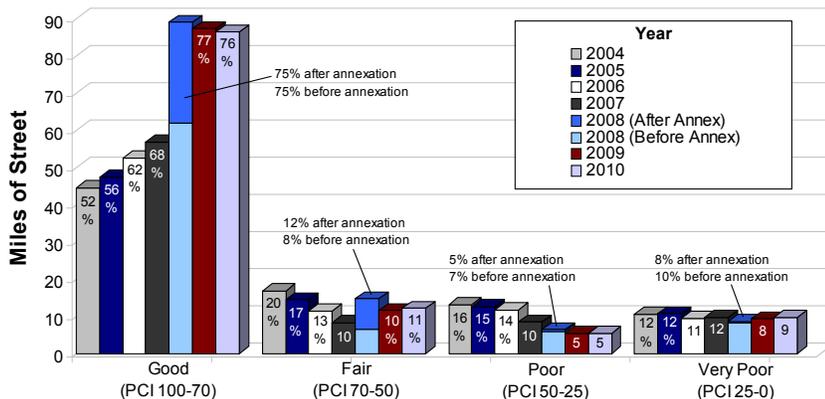


Figure 5: History of Pavement Condition for the Local Street System.

*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.

since the creation of the SOS Program in 2004 the number of streets in fair and poor condition have 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
2010	73

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

Figure 6: History of Average Local Street System PCI

Pavement Preservation Project streets (see map on page 8 for the specific streets) and \$300,000 will be carried forward to complete the reconstruction of 3rd St SW between E and G St SW. Additionally, \$2,000,000 is budgeted for the 2011 SOS Program which will be combined with the \$422,814 remaining 2010 SOS Program budget. This money will be used to overlay 2.7 miles of street, chip seal 3.0 miles of streets, perform pavement patching on 1.1 miles of streets, and rebuild 0.2 miles of streets (see map on page 8 for the specific streets).

\$399,437 of the 2010 SOS budget will be carried forward into 2011 to complete the 2010 Local Street



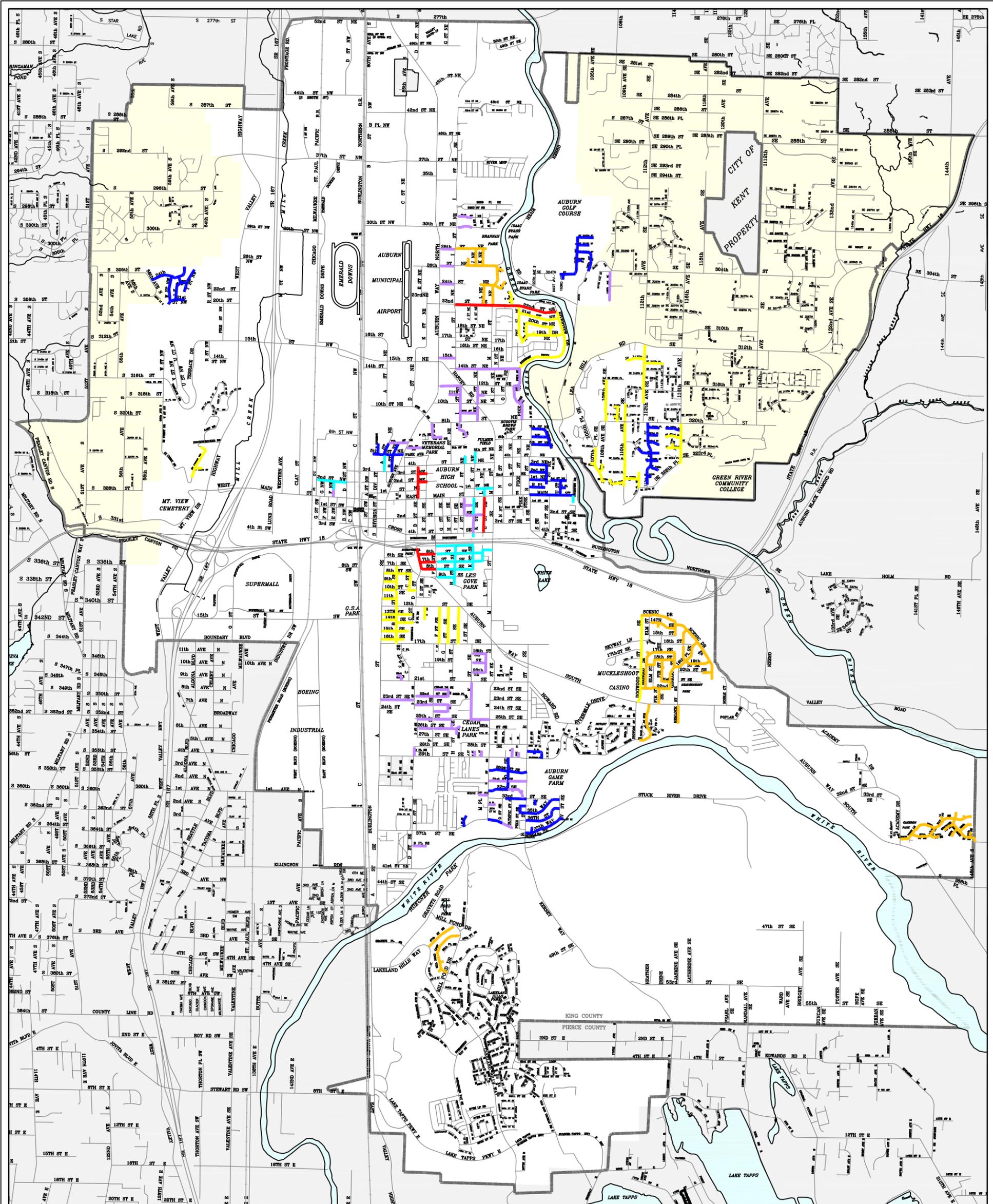
Damaged concrete pavement panels on E St NE scheduled to be replaced in 2011.

The specific streets that will be treated in 2012 will be determined during the City’s 2012 budget process. Many of the streets that are currently in very poor condition need to be rebuilt and have



H St SE scheduled to be reconstructed in 2011.

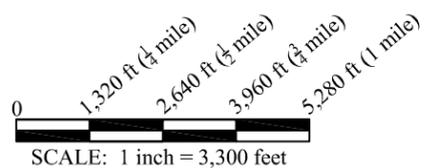
water, sewer, and/or storm lines underneath them that are also in need of improvement. Care must be taken to ensure that the utilities can afford to make these improvements in concurrence with the rebuilding of the street by the SOS Program. Therefore, as in past years the City will continue to assess the pavement maintenance needs of the entire City to prioritize and select the best streets to treat in 2012, and will also take into account the needs and budgets of the underlying utilities when considering rebuilding streets in very poor condition.

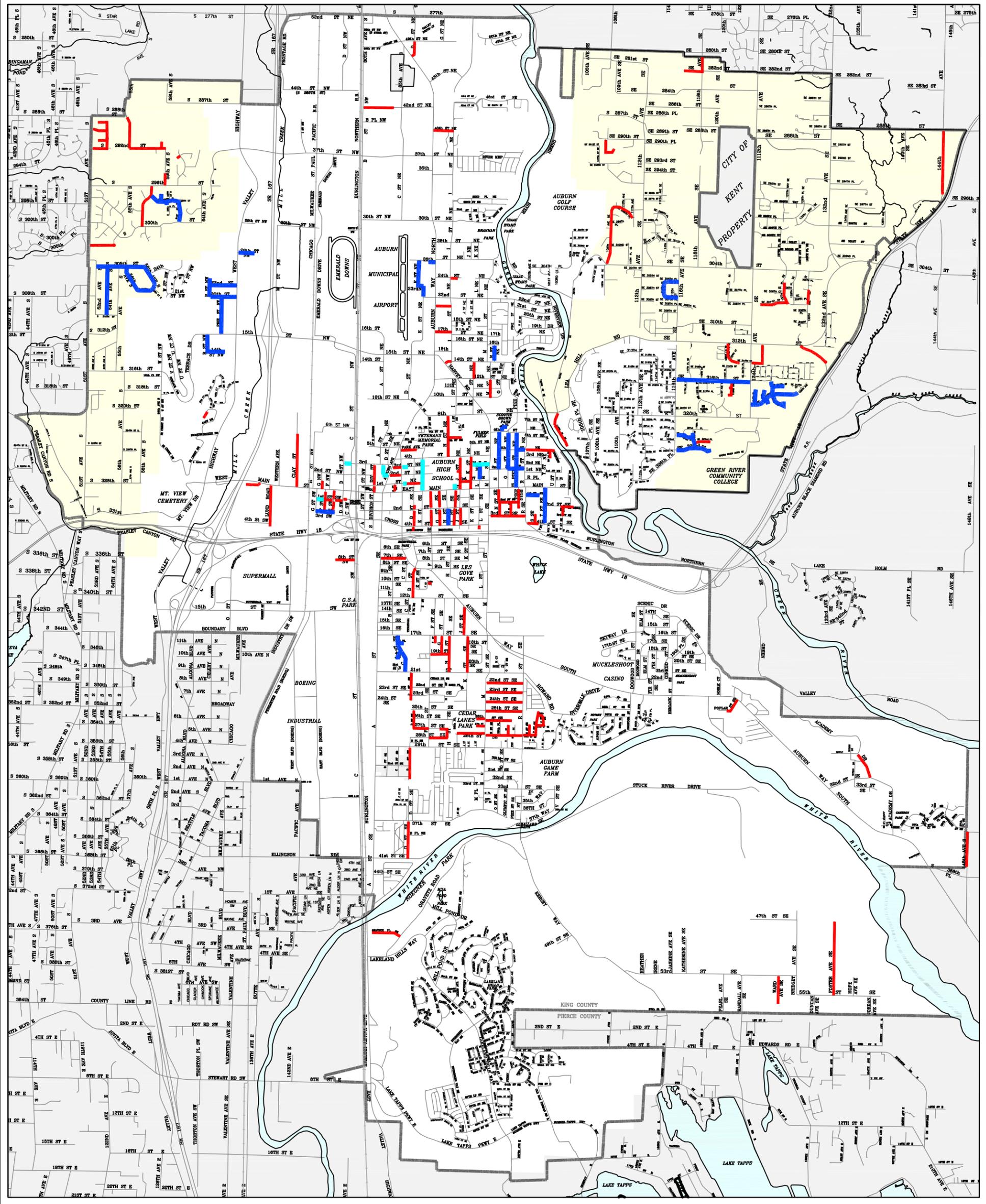


COMPLETED SOS PROJECTS

2005 THROUGH 2010

- 2005 PATCHING/THIN OVERLAY COMPLETED (6.7 miles)
- 2006 PATCHING/THIN OVERLAY COMPLETED (10.3 miles)
- 2007 PATCHING/THIN OVERLAY COMPLETED (6.7 miles)
- 2008 PATCHING/THIN OVERLAY COMPLETED (6.6 miles)
- 2009 OVERLAY AND REBUILD COMPLETED (3.3 miles)
- 2010 OVERLAY, REBUILD, AND CONCRETE PANEL REPLACEMENT COMPLETED (1.7 miles)
- AREAS ANNEXED IN 2008





FUTURE SOS PROJECTS

- 2011 OVERLAY, REBUILD, AND CONCRETE PANEL REPLACEMENT SCHEDULED (0.6 miles)
(Will be done as part of the 2010 Local Street Pavement Preservation Project)
- 2011 OVERLAY, CHIP SEAL, PAVEMENT PATCHING, AND REBUILD SCHEDULED (7.1 miles)
- LOCAL STREET IN NEED OF WORK AFTER 2011 (17.9 miles)
- AREAS ANNEXED IN 2008

