



Meeting Date: January 9, 2017

Report No. CC-17-08

Agenda Item No. 9-f

Status: General Orders

Purpose: Revised FY17 Pavement Management Program Project Recommendations

Background Summary: The pavement management program is a systematic process for inspection, evaluation, planning, maintenance and rehabilitation of the City's street paving network. The recommendations are based on engineering analysis of available strategies for a street segment given the pavement condition, coordination with other projects (utility and road) and field inspections. In short, it is the right treatment at the right place at the right time.

The City of Stillwater's Pavement Management Program includes four primary strategies: Preventative Maintenance, Rehabilitation, Reconstruction and Deferred Maintenance.

The Pavement Management Program has been active over the last 4 years touching approximately 40% of the City's street network (177 lane miles) as described below and as shown on Attachment #1:

- Preventive maintenance or sealing techniques on very good-quality pavement occurred on 149 lane miles at an average cost of \$20,000 per lane mile;
- Rehabilitation techniques on good-quality pavement occurred on 19 lane miles at an average cost of \$220,000 per lane mile;
- Reconstruction on fair to poor pavement occurred on 9 lane miles at an average cost of \$600,000 per lane mile.

The techniques utilized as part of the pavement management program include:

- Preventive maintenance: the application of a sealant to protect the surface of the pavement from degradation from UV rays and water intrusion and extends the service life of the pavement.
- Rehabilitation: the application of structural pavement overlays, full depth patching and other treatments to repair and extend the service life of pavement;
- Reconstruction: the replacement of existing pavement and base material with new pavement and base material that renews the service life of pavement;
- Deferred maintenance: rehabilitation and reconstruction in smaller, localized areas where the pavement has failed and is necessary to extend the service life until full reconstruction is required.

The revised FY17 budget for pavement management includes \$2,380,910 in the General Fund, which was carried-forward to pay for the completion of the remaining FY15 and FY16 projects that were underway prior to the beginning of FY17 and \$2,396,174 in the ½-cent sales tax Transportation Fund. Staff recommends the following program allocations for the FY17 pavement management program:

Strategy	Allocation Recommendation	% of Total \$	Lane (LM)	Miles	Original FY17 (LM)
Preventative					
Maintenance:	\$503,903	21%	11		17
Rehabilitation:	\$240,252	10%	0.7		6
Reconstruction:	\$552,019	23%	0.8		3
Deferred Maintenance:	\$550,000	23%	1		1
Crack Sealing:	\$150,000	6%			
Design, Test & Inventory:	\$400,000	17%			
Total Program Allocation:	\$2,396,174	100%	13.5		27

The recommended allocation for this year’s program includes work on 13.5 lane miles of pavement. The proposed street segments targeted for inclusion in the revised FY17 program are listed in Attachment #2 and shown on the map in Attachment #3. The basis for selecting the proposed street segments is the current pavement condition and coordination with other city projects. The list may be adjusted to fit available funding as design information is obtained, engineering estimates are developed and actual bids are received.

Upon Council approval of the revised FY17 pavement management program, staff will proceed with implementation. Implementation will include the development of engineering plans for the reconstruction and rehabilitation projects, development of five separate bid packages for the different pavement repair strategies and implementation of a continuation contract with IMS to update the inventory and condition assessment of the City’s pavement assets. The “design, test & inventory” category also includes a funding allocation for construction testing that is needed to ensure project specifications are met.

Budget Impact: The current approved budget for the revised FY17 pavement management program includes \$2,396,174 from the Transportation Sales Tax Fund (Construction Contracts account 2604035-54009 and Professional Services account 2604035-54020).

Prior Council Action or Part of an Approved Project: Yes **Related Items:** [CC-16-112 PMS Rec.pdf](#)

Recommendation: It is recommended that the Council approve the proposed revised FY17 pavement management program and direct staff to begin implementation.

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Reviewed by: Sharla Lovern, Interim Transportation Director

Reviewed by: Dan Blankenship, Deputy City Manager

Submitted by: Norman McNickle, City Manager

Attachments: Program Map 2014-2017; Project List; Project Map