

**CITY OF GOODYEAR
COUNCIL ACTION REPORT**

SUBJECT: FY 2019 Pavement Management Projects	STAFF PRESENTER: Ron Sievwright, Streets and Traffic Superintendent and Brian Harvel, Pavement Management Coordinator CASE NUMBER: None. OTHER PRESENTER: None.
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PROPOSED ACTION:

Approve a budgeted expenditure of up to \$3,250,000 to complete pavement management projects in various locations throughout the city.

BACKGROUND AND PREVIOUS ACTIONS:

On March 17, 2014 and August 25, 2014, the city's pavement management consultant, APT, presented an update on their pavement management project at which time treatment strategies and funding recommendations were discussed. During those presentations, the city's current pavement condition was presented to Council. Table 1 below shows the pavement condition in 2014 and the city's current overall pavement condition as well as the pavement condition for each classification of roadway.

Table 1: 2014 and 2018 Pavement Condition Index (PCI) by Roadway Classification

Functional Class	PCI Targets	Current Condition			
		Average		%>X	
		2014	2018	2014	2018
Arterial	80 (with 90 percent > 70)	70.4	77.6	57.8	74.4
Collector	75 (with 90 percent > 65)	70.1	77.2	70.2	84.6
Industrial	70 (with 90 percent > 55)	55	75.42	40.0	94.7
Residential	70 (with 90 percent > 55)	66.6	73.73	84.0	85.9
Rural	65 (with 90 percent > 50)	67.2	63.03	78.1	71.4
2014 Network Average PCI		68.1			
2018 Network Average PCI		74.5			

Green Shading = At or above target value.
Yellow shading = Within 5 points of target value.

During FY 2018, pavement management projects total 95.63 lane-miles of both preservation, rehabilitation, and reconstruction projects

STAFF ANALYSIS:

Proposed FY 2019 pavement management projects total 43.53 lane-miles of both preservation and rehabilitation projects (Exhibit 1).

A description of each preservation type is provided below, followed by a list of roadways recommended for the designated treatment:

1. **Hot In-Place Recycling** - A treatment that includes milling 1 to 1 ½ inches of the existing surface, heating the existing pavement, scarifying the existing pavement to a 1 inch depth, applying a recycling agent to the scarified material to restore viscosity of the aged pavement, mixing and laying the recycled material to form a leveling course, applying new asphalt while the temperature of the recycled mix is still 225 degrees Fahrenheit, and then final compaction. Hot in place recycled roadways typically last 10 to 12 years.
 - Estrella Parkway-Elliot Road to just south of Estrella Foothills High School
2. **High Volume Fractured Aggregate Surface Treatment (FAST)** – High volume FAST applications are typically performed on arterial, collector and rural roadways where cracking is moderate to severe and provides structural assistance to the pavement. FAST applications typically last 5 to 7 years.
 - Sarival Avenue from MC-85 to Yuma Road
 - Manzanita Drive from Van Buren Street to Via Villa Street
 - Via Villa Street from Manzanita Drive to Palo Verde Drive
3. **Low Volume Cape Seal** - Low Volume Cape Seal is a multi-layer surface treatment utilizing a low volume FAST as the first layer followed by the application of a rubberized slurry seal. Low volume cape seals are utilized on local streets where the cracking is moderate to severe and provides structural assistance to thin layer pavements. Low volume cape seals typically last 5 to 7 years.
 - The Classics
 - Las Palmas North
 - The Meadows South
 - Desert Greens
 - The Horizons
 - Paloma
 - The Mirage
 - The Meadows North
 - The Oasis
 - The Estates
 - Estrella Vista Southwest
 - The Trails

- The Summit
- Estrella Vista West

Below is a summary of cost by project type:

Table 2: Recommended FY 2018 Pavement Treatment Costs

Treatment	Cost¹
Hot in Place Recycle	\$1,400,500
High Volume FAST	\$136,600
Low Volume Cape Seal	\$1,179,400
Total	\$2,716,500

¹ Cost includes 5% contingency

Existing City contracts with the following companies will be used for pavement treatments, crack sealing, and ADA ramp repairs and replacements:

VSS International, Inc.
 Cutler Repaving, Inc.
 Cactus Asphalt
 Viasun Corporation
 DBA Construction, Inc.
 Vincon Engineering Construction, LLC
 Crafcro, Inc.

In addition, the City's on call list will be used for materials testing.

FISCAL ANALYSIS:

The base budget for pavement management is \$3,000,000. In addition \$250,000 was carried over last year because micro-surfacing of Litchfield Road was scheduled but conflicted with an upcoming installation of a gas line under Litchfield Road. Therefore, 3,250,000 is budgeted for FY 2019 Pavement Management projects.

Below is a summary of budget and projected expenditures.

Table 3: Pavement Management Funding

	Item	TOTAL
Budget	FY 18-19 Base Budget	\$3,000,000
	FY 17-18 Carry Over	\$250,000
	Total	\$3,250,000
Proposed Projects	Crack Sealing and Roadway Preparation	\$300,000
	Materials Testing	\$50,000
	ADA Ramp Repairs/Replacements	\$150,000
	2018-2019 Pavement Treatments ¹	\$2,716,500
	Total	\$3,166,500
BUDGET REMAINING²		\$83,500

¹ Treatment costs include 5% contingency for unforeseen costs.

² Remaining balance will be used to address unforeseen costs from the hot in place recycling, additional micro-surfacing or FAST projects, or for advance preparation for future pavement management projects.

RECOMMENDATION:

Staff recommends approval of a budgeted expenditure of \$3,250,000.

ATTACHMENT:

Exhibit 1: FY 2019 Recommended Pavement Management Projects