

AGENDA ITEM #: \_\_\_\_\_

DATE: August 29, 2016

COAC #: 16-5886

**CITY OF GOODYEAR  
CITY COUNCIL ACTION FORM**

**SUBJECT: Approve a budgeted expenditure not to exceed \$3,072,000 to complete pavement management projects at various locations throughout the city.**

**STAFF PRESENTER:** Ron Sievwright,  
Streets and Traffic Superintendent

**CASE NUMBER:** N/A

**OTHER PRESENTER:** N/A

**RECOMMENDATION:**

Approve a budgeted expenditure not to exceed \$3,072,000 to complete pavement management projects in various locations throughout the city.

**PURPOSE:**

Approval of this expenditure allows the city to enter into a contracts for micro surfacing, low volume cape seal, slurry seal, and Hot in Place Recycling in accordance with the city's procurement code. By approving this project, the pavement of city roadways will be preserved primarily with lower cost pavement preservation treatments and prolong the need for extensive rehabilitation or reconstruction. (Ron Sievwright, Streets and Traffic Superintendent)

**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.

On August 25, 2014 and March 16, 2015, City Council approved budgeted expenditures for FY 2014-15 Pavement Management projects. On October 26, 2015 City Council approved budgeted expenditures for FY 15-16 Pavement Management projects. There has been no Council action taken on FY 16-17 Pavement Management projects to date.

**STAFF ANALYSIS:**

During FY 2015-16, 88 lane-miles of neighborhood, collector and arterial streets were treated with high density mineral bond, slurry seal and micro seal products. These projects successfully preserved these roadways. Staff monitored the projects closely and provided assistance to residents as needed.

Proposed 2016-17 pavement management projects total 68 lane-miles of both preservation and rehabilitation projects (Exhibit 1). Preservation projects are performed on roadways in good condition, and preserve the condition of roadways with lower cost treatments. Rehabilitation is

more extensive than preservation and performed on roadways that have deteriorated to a point that a preservative treatment is no longer effective.

A description of each treatment type is provided below:

1. Micro-surfacing – is commonly used on arterial and collector roads, and is effective at correcting or inhibiting raveling and oxidation of the pavement surface, improving surface friction, sealing the pavement surface, and filling minor surface irregularities and wheel ruts up to 1.25 inches deep. Micro-surfacing typically lasts 5 to 7 years.
2. Slurry Seal – is commonly used in neighborhoods and is effective in sealing low-severity surface cracks, waterproofing the pavement surface, and improving skid resistance at speeds below 30 MPH. Slurry seal typically lasts 5 to 7 years.
3. Low Volume Cape Seal – is 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.
4. 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 the virgin hot mix 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.

Council approval is requested for 2016-17 Pavement Preservation Projects that include micro-surfacing, hot in place recycling, slurry seal, and low volume. The roadways that are recommended to be treated are as follows:

Micro Surfacing roadways:

- San Miguel from Elliot Road to Estrella Parkway
- Van Buren from Sarival Rd to Cotton Lane
- Bullard Ave from Yuma Road to Lower Buckeye Parkway
- Lower Buckeye Parkway from Village Parkway to Sarival Avenue
- Cornerstone Boulevard from McDowell Road to Dysart Road

Low Volume Cape Seals will be applied in the following neighborhoods:

- Palm Valley 2 and 3
  - Desert Vista
  - Travesia
  - Desert Breeze
- Sunrise at Wigwam

Slurry Seals will be applied in the following neighborhoods:

- Palm Valley 2 and 3
  - Paseo Verde
- Estrella Mountain Ranch
  - The Enclave
  - The Palisades
  - The Vistas
- Canyon Trails 3

Hot in place recycling roadways:

- Elliot Road from just east of Estrella to east of San Miguel
- Litchfield Rd from MC-85 to Yuma

Below is a summary of cost by project type:

**Recommended-2016-2017 Pavement Treatment Costs**

| <b>Treatment</b>       | <b>Cost</b>        |
|------------------------|--------------------|
| Micro Surfacing        | \$290,916          |
| Low Volume Cape Seal   | \$1,047,390        |
| Slurry Seal            | \$329,932          |
| Hot in Place Recycling | \$1,267,082        |
| <b>Total</b>           | <b>\$2,935,320</b> |

**FISCAL ANALYSIS:**

There is \$3,000,000 budgeted for FY 16-17 Pavement Management projects, and ADOT provided Goodyear \$72,000 for micro-surfacing of Van Buren Street between Sarival Avenue and Cotton Lane as part of the I-10/Loop 303 Phase 1 detour routes.

It is anticipated that \$100,000 will be spent on crack sealing and other roadway preparation, and \$25,000 will be spent on materials testing for pavement surface treatments. Below is a summary of budget and projected expenditures:

**2016-2017 Pavement Management Funding**

|                         | <b>Item</b>                           | <b>TOTAL</b>       |
|-------------------------|---------------------------------------|--------------------|
| <b>Budget</b>           | FY 16-17 Budget                       | \$3,000,000        |
|                         | ADOT Funding                          | \$72,000           |
|                         | <b>Total</b>                          | <b>\$3,072,000</b> |
|                         | Residual costs from FY 15-16 projects | \$11,680           |
|                         | Crack Sealing and Roadway Preparation | \$100,000          |
|                         | Materials Testing                     | \$25,000           |
|                         | 2016-2017 Pavement Treatments         | \$2,935,320        |
|                         | <b>Total</b>                          | <b>\$3,072,000</b> |
| <b>BUDGET REMAINING</b> |                                       | <b>\$0</b>         |

**ATTACHMENTS:**

Exhibit 1: FY 16-17 Recommended Pavement Management Projects