



## CITY COUNCIL MEMORANDUM

**FROM:** The Office of the City Manager    **DATE:** March 7, 2022  
**SUBJECT:** Consider the 2022 Preventive Street Maintenance Program  
**PRESENTER:** Boe Blankenship, Assistant Director of Public Works - Operations

### **SUMMARY:**

The Public Works Department is proposing to continue implementing a comprehensive recommendation for the annual Preventive Street Maintenance Program based on 2019 Pavement Assessment data. The program is comprised of six types of preventive maintenance techniques ranging in scope from full-depth subgrade stabilization and resurfacing to crack sealing, and incorporates 72 different streets into the program for the 2022 year.

### **GENERAL DESCRIPTION:**

The Preventive Street Maintenance Program was created to invest in proactively maintaining the City's streets to prolong their useful life. Prior to 2019, the priorities were set based on visual staff observations, and had proven successful for a number of years. Following Council approval of a Pavement Assessment project in the 2018/2019 budget, we were able to have the City's roadway network surveyed and assessed using an outside consultant. The assessment project produced a long-term plan of action that if followed, would make better use of available maintenance funds to improve overall condition rating.

The six types of preventive maintenance techniques include the three that staff has utilized for several years (Crack Seal, Slurry Seal and 2" Overlay) along with three newer techniques. Two of the newer techniques are a result of staff recommending preventive maintenance on some concrete streets in addition to the asphalt streets. Including concrete streets in the program was new in the 2019/2020 programs. All six techniques are summarized below:

Asphalt Streets:

1. Crack Seal – This is the technique where the large cracks in the pavement are sealed in order to prevent water and debris from getting to the subgrade. This extends the longevity of the pavement.
2. Slurry Seal – This is an application of asphalt and very small aggregate that is used to seal the fine cracks in the pavement. This process covers the entire surface of the roadway and is used for less traveled streets such as residential streets.
3. Micro Surfacing – This is a newer technique. It is similar to a Slurry Seal except the asphalt application consists of material that is more durable and will hold up on more traveled roadways such as collector streets.
4. 2" Asphalt Overlay – This technique is used to apply a new 2" thick asphalt surface over the existing pavement.

Concrete Streets:

5. Crack Seal – This technique serves the same purpose as the Crack Seal for asphalt streets but it is a different material and needs to be applied somewhat differently.
6. Partial Pavement Replacement – This technique involves replacing bad areas of concrete pavement. The size of the area replaced can range in size from a few square feet to a few panels.

The proposed 2022 Program is a single year program, representing the fourth year of recommendations from the Pavement Assessment project. The list of streets being recommended for each of the six different techniques along with location maps is included for reference.

Additionally, this program includes the rehabilitation of Onyx Drive South from Billy Faye Drive to Bonzer Street to be completed in partnership with Tarrant County Precinct #3. The City's Preventive Street Maintenance Program has utilized the Tarrant County's paving services through interlocal agreements on one or more streets per year since 2011. This partnership with Tarrant County has been successful for several years. Recent cooperative programs include streets like Meadow Road, Eden Road and Susan Lee Lane.

Staff presented this year's program to the Capital Improvement Projects (CIP) Committee on Monday, February 28, 2022 and the committee recommended it's approval.

Funding for this year's program is available in the FY 2021/22 Adopted Budget.



Exhibits of Streets Recommended for the Preventive Street Maintenance Program

- Asphalt Crack Seal (List & Map)
- Asphalt Slurry Seal (List & Map)
- Asphalt Microsurface (List & Map)
- Asphalt Overlay (List & Map)
- Concrete Crack Seal (List & Map)
- Concrete Partial Pavement (List & Map)

Recommendation:

Approve the 2022 Preventive Street Maintenance Program.