

To the Mayor and Members of the City Council**May 3, 2016****Page 1 of 2****SUBJECT: STREET PAVEMENT MARKINGS - PROGRAM UPDATE**

The purpose of this informal report is to provide a status update on the maintenance of street pavement markings.

The pavement marking program is responsible for the installation of new and maintenance of existing street pavement markings and includes Lane Lines, School Crosswalks, Intersection Crosswalks, RR X-ings, Bike Lanes and Speed Humps.

Financial resources for the pavement making program is available through the General Fund and for FY 2016 consists of \$289,000 in operating funds and for the first time, \$800,000 in Pay-as-you-go (PAYG) capital - \$1,089,000 total. In FY 2016, 63 lane miles of roadway will be restriped with these funds along with inclusive crosswalks and symbols. Replacement and new pavement markings consist of thermal plastic material and raised reflective markers. This combination is the most cost effective application and has an expected life of 3 to 4 years depending on traffic and pavement conditions. Some locations will have a shorter life if traffic is heavy, sand/dirt collects on the roadway, travel lanes are narrow, or there is considerable lane changing.

The City's street system consists of 7,439 lane miles of roadway, of which 2,662 lane miles are classified as arterials or collectors. These roadways are the primary facilities that are equipped with pavement markings and vary in lane configuration, divided and undivided from 6 to 2 lanes. Consequently, the amount of lane line pavement markings varies greatly based on the configuration and the number of crosswalks or symbols such as turn arrows, RR X-ings, and bicycle markings. An exact quantity of all the pavement markings throughout the street system is currently not available, but will be collected as part of an overall asset management system planned for implementation in the coming year. The new system will allow for the collection and ongoing assessment of this detailed information.

The addition of new PAYG capital funds has allowed staff to better estimate the level of magnitude of costs for maintaining pavement markings throughout the City. Overall costs vary depending on the size of the street and travel lane configuration. Typically, a 5-lane section costs \$25,000/mile, a 4-lane divided section costs \$14,000 and a 2-lane roadway costs \$10,000/mile. These costs include lane lines, crosswalks and symbols but do not included facilities equipped with on-street bicycle lanes. Estimating that there are 500 miles of equivalent 4-lane roadway in the city and using a cost of \$20,000/mile as an average, the cost to restripe city wide would be approximately \$10,000,000. Total costs to maintain the entire system would be greater when 2-lane roadways, bicycle lanes, school zones, speed humps and crosswalks in neighborhood areas are included. In essence, an annual maintenance/replacement budget of \$2.5 million to \$3.0 million is needed to fully meet this need.

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As illustrated, the existing system of pavement markings is substantial and continues to grow with new development and the expanding roadway system. Additionally the emphasis on Safe Routes to Schools (more crosswalks) along with the maturation of the City-wide bicycle network further increases the demand for maintenance. As the City moves forward, it becomes essential that a long term financial plan be developed that matches priorities. Implementing a competent maintenance management system will be key to meeting these needs.

If you should have questions, please contact Alonzo Linan, Assistant TPW Director, at 817-392-7861 or alonzo.linan@fortworthtexas.gov.

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