



- TO: Honorable Mayor & Members of the Fort Lauderdale City Commission
  FROM: Lee R. Feldman, ICMA-CM, City Manager
  DATE: February 17, 2015
- **TITLE**: Bridge Master Plan Presentation

The purpose of this presentation is to provide an update on the Bridge Master Plan, following the completion of 46 bridge assessments performed by TranSystems Corporation (TranSystems). It will outline the costs associated with repairing and replacing bridges Citywide, and to inform the Commission of staff's intention to adhere to the Bridge Master Plan.

In an effort to develop a Comprehensive Bridge Master Plan and to identify funding needs, on July 1, 2014, the City Commission approved the finalized agreement between the City and TranSystems, at which time it began the inspection, evaluation, and documentation of the 46 roadway bridges identified for the study. Five City owned bridges were not included in this study as they are currently being replaced by the Florida Department of Transportation (FDOT).

On November 17, 2014, TranSystems submitted a comprehensive bridge assessment plan, outlining the conditions of the 46 bridges and recommending a repair and replacement schedule. These recommendations are based on bridge deficiencies which are broken into six categories:

- 1. Concrete Pile Deterioration
- 2. Deteriorated Beam Concrete Superstructure
- 3. Concrete Delamination with Exposed Reinforcement
- 4. Concrete Delamination with Non-Exposed Reinforcement
- 5. Expansion Joint Deterioration
- 6. Non-Compliance Functionally Obsolete

Based on the findings, TranSystems has provided both short term and long term recommendations.

Short term recommendations are meant to address minor structural issues this year which, if unaddressed, will result in additional structural damage to the bridge. Short

term repairs have been recommended for seven bridges at a total budget of \$178,500, as presented in Exhibit 1.

Long term recommendations, to be completed over the course of the next 20 years, in five year increments, fall into two categories:

- 1. Repair: Significant structural repairs intended to extend the service life of the bridge over 20 years
- 2. Replacement: If necessary repairs cannot extend the service life of the bridge over 20 years, the bridge will be demolished and replaced

Long term repairs have been recommended for 25 bridges and replacement has been recommended for 17 bridges at a total cost of \$35,136,308.

Considering the short and long term recommendations for the initial five years of the master plan, 13 bridges have been identified for repair and two for replacement at a total cost of \$ 4,245,100. Currently, \$5,480,454 has been included in the Community Investment Plan (CIP) for bridge repair and replacement for Fiscal Years 2015-2019. As such, staff intends to move forward following the schedule outlined by TranSystems.

## Strategic Connection

This item is a Press Play Fort Lauderdale Strategic Plan 2018 initiative, included within the Infrastructure Cylinder of Excellence, specially:

- Goal 2: Be a sustainable and resilient community.
- Objective 1: Proactively maintain our water, waste water, road, bridge and facilities infrastructure.

This item advances the Fast Forward Fort Lauderdale 2035 Vision Plan: We are Ready

## Attachments

Exhibit 1 – Presentation Exhibit 2 – Bridge Replacement Master Plan 0-5 Year Recommendations

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