



Legislation Details (With Text)

File #:	2017-414	Version:	1	Name:	
Type:	Discussion	Status:		Agenda Ready	
File created:	5/17/2017	In control:		City Council	
On agenda:	6/6/2017	Final action:			
Title:	CONSIDER ADOPTING THE FINAL UPDATED PAVEMENT MANAGEMENT SYSTEM REPORT AND ALLOW A PRESENTATION BY NICHOLS CONSULTING ENGINEERS, CHTD. FOR PROJECT NO. 1483: CITYWIDE PAVEMENT MANAGEMENT SYSTEM (CITY COUNCIL)				
Sponsors:	Public Works				
Indexes:					
Code sections:					
Attachments:	1. Exhibit -1 Minutes Excerpt CC Item No. 16 2016-253 (02-16-2016).pdf				

Date	Ver.	Action By	Action	Result
------	------	-----------	--------	--------

Report to Mayor and City Council

Tuesday, June 06, 2017

Discussion

SUBJECT:

CONSIDER ADOPTING THE FINAL UPDATED PAVEMENT MANAGEMENT SYSTEM REPORT AND ALLOW A PRESENTATION BY NICHOLS CONSULTING ENGINEERS, CHTD. FOR PROJECT NO. 1483: CITYWIDE PAVEMENT MANAGEMENT SYSTEM (CITY COUNCIL)

I. SUMMARY

The City Council will review the Citywide Pavement Management System (PMS) update. The last pavement management plan was completed in 2007. The 2017 report found that Carson's paving is in "fair condition" and is expected to deteriorate substantially during the next ten years without a total annual investment of \$8-to-\$9 million in street repairs. The consultant engineer will provide a presentation on the PMS.

II. RECOMMENDATION

RECEIVE and FILE.

III. ALTERNATIVES

TAKE another action the City Council deems appropriate and consistent with the requirements of the law.

IV. BACKGROUND

Carson is responsible for the repair and maintenance of 203.1 centerline miles of streets. Specifically the City's road network includes 49.2 miles of major arterials, 5.7 miles of minor arterials, 18.1 miles of collectors, and 130.1 miles of residential streets. These assets are collectively valued at \$257 million, and the last Pavement Management study was conducted in 2007.

The PMS is designed to provide objective information and useful data for analysis so that consistent, cost-effective, and defensible decisions can be made related to the preservation of a pavement network.

The overall objectives for the Pavement Management Study were to:

- Implement a PMS to assist the City with maintaining an inventory of all street sections.
- Re-segment various streets to conform to the City's historical maintenance and rehabilitation (M&R) treatment work.
- Perform pavement condition inspections of the entire street network and determine the PCI.
- Develop appropriate M&R strategies.
- Perform budgetary analysis and determine funding needs.
- Assesses the adequacy of existing revenues to meet the maintenance needs.

On February 16, 2016, Nichols Consulting Engineers (NCE) was awarded a Professional Services Agreement by the City Council, to perform an update of the existing PMS and acquire StreetSaver® Software, which provides an interface to the City's Geographic Information System (GIS) (Exhibit No. 1).

NCE completed the PMS final report in January 2017, provided on-site training and user manuals for staff who will be involved in using and maintaining the system.

Paving Condition in Carson

Carson's overall paving score is 67 Paving Condition Index (PCI). This PCI is similar to the average in Los Angeles County. The PCI in the City of Long Beach is 57 and the PCI in Torrance is 62. Manhattan Beach has a PCI of 76 and Santa Monica has a PCI of 84 in ways of comparison. Generally the residential streets are in better condition than the arterial and industrial area streets. Unfortunately, Carson does have some street segments that are in poor condition and failing.

NCE will be providing a presentation that discusses the various options to maintain and repair our streets. These options include preventative maintenance to stretch out the life of

a street. Preventative maintenance is generally \$3.50 per square yard of paving (slurry seal). More expensive repaving includes grinding and overlay of new paving (\$13.00 - \$18.00 per square yard). When base repair is added into the construction, with thicker overlay, the costs range between \$18.00 and \$27.00 per square yard. The most expensive street projects are total reconstructions, which range between \$79.00 and \$95.00 per square yard in costs. It is generally more cost effective to perform periodic preventative maintenance of streets, instead of deferring maintenance until a street reconstruction is required.

Current Funding Sources

Carson currently budgets \$1.74 million from several sources of funds for our street maintenance program. The City funds \$500,000.00 annually in slurry seal and overlay from State Gas Tax Funds. The remaining balance of \$1.2 million is funded from METRO funds. The Governor recently signed AB-1 and SB-1, which will return Gas Tax funds to pre-2013 levels. We are estimating a total of \$3.7 million annual in State Gas Tax when the program is fully implemented. The City will receive \$2.6 million in Gas Tax funds this fiscal year. It should be noted that portions of the Gas Tax are used for compensation for the street crew, tree trimming, traffic signal operational costs, and for street sweeping.

Future Needs

The NCE study concluded that the City will require \$8 million annually over the next decade to maintain the current PCI of 67. This investment would keep the streets from further deterioration. In order to increase the PCI to 70, the City would need to invest \$9 million annually. The City's PCI will fall to 55 by FY 2022-2023 with the current investment of \$1.7 million annually.

V. FISCAL IMPACT

The City is currently facing a \$6.8 million deficit in the general fund budget. Although helpful, the increase in revenues from AB-1 and SB-1 will result in new revenues of approximately \$1 million. It is unknown how the City will fund \$7-to-\$8 million annually in the next decade to improve our streets.

VI. EXHIBITS

1. Minutes; February 16, 2016; Item No. 16. (pg. 4)

Prepared by: Rick Boutros, P.E., Associate Civil Engineer