

City of Culver City, California
City Council Agenda Item Report

Meeting Date: 10/10/05		Item Number: <u>A-5</u>	
AGENDA ITEM: Presentation of the Update to the Pavement Management System Program			
Contact Person/Dept: Mate Gaspar/PW		Phone Number: (310) 253-5602	
Fiscal Impact: Yes ☐ No ☒		General Fund: Yes ☐ No ☒	
Public Hearing: ☐		Action Item: ☒	Attachments: ☐
Public Notification: Master Notification List on October 5, 2005			
Department Approval: Charles D. Herbertson		CAO Approval: Scott Bixby for Jerry Fulwood	
City Controller Approval: N/A		9/29/05 10/4/05	

RECOMMENDATION:

Staff will conduct a presentation of the update to the Pavement Management Program and answer questions of the City Council and the public.

BACKGROUND:

The Public Works Department/Engineering Division is responsible for developing the rehabilitation strategies for the 86 miles of streets in Culver City. To prioritize the capital street projects, staff uses a pavement management system software program to develop a list of recommended projects to be funded by the available capital budget. In addition, the federal and state governments require that a PMS program be in place in order to be eligible for funding.

The pavement management system provides an inventory and analysis of the existing condition of all the City streets. Based on visual inspection, a street is rated with a pavement condition index number between zero (lowest rated) to one hundred (new street) as determined by the pavement program. The program also provides the recommended street rehabilitation strategy and construction cost estimates. An important component of the program is to identify the streets that are rated near the next costlier level of rehabilitation strategy. For example, a street may be rated as requiring a slurry seal but is close to requiring an overlay if further deterioration of its condition is allowed to occur. This provides an opportunity to improve the street before it deteriorates to the next costlier rehabilitation level. Therefore, focusing on these streets for pavement rehabilitation is economically advantageous to the City.

The existing Pavement Management program was created and installed by Chec (Consultants) Management Systems, Inc., in 1997. The program has been

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upgraded several times with improved versions and updates. Staff updates the construction cost estimates and changes the rating to the highest level for streets that have been rehabilitated.

On April 4, 2005 the City Council approved a professional services agreement with Chec Management Systems, Inc., to conduct the update to the Pavement Management program. All the City streets were visually inspected and rated.

DISCUSSION:

The update to the Pavement Management program is showing that the City street system is at a network pavement condition index (PCI) level of 77. In terms of a grade, a PCI of 77 can be referred to as a C+. In 1997 the PCI level was 82 and the maintenance backlog to bring the PCI to 100, (excellent A+ condition) was \$9.6 million. Currently, the maintenance backlog to bring the PCI to 100 is \$17.9 million. Based on the amount of annual funding allocated since 1997, the normal deterioration rate of asphalt, and increase in traffic, the street maintenance backlog is growing about \$1 million a year. An interesting note to mention is that the large amounts of rainfall experienced last year accelerated the deterioration of asphalt.

The pavement management system recommends which streets to seal with a slurry coat and grind and overlay before they fall into a costlier rehabilitation. This is the most efficient and economical way to choose streets for projects. For example, a street requiring a slurry seal now, may within a year deteriorate to a level requiring asphalt overlay. An overlay costs 4 times more than a slurry seal coat. Likewise, a street that may require a reconstruction within a year is 4 times more expensive than an overlay.

The system also recommends the level of funding required to maintain the backlog at the current level. The amount of funding required to maintain the current network PCI level at 77 is \$2.2 million a year. This amount is based on unit prices several months ago before the recent run up on petroleum costs.

A major concern of staff and other local agencies is the recent dramatic increase in costs of asphalt. Local agencies are reporting bids coming in 40% higher than estimated, mainly due to asphalt prices. The Redevelopment Agency recently rejected bids for the Washington Boulevard Resurfacing projects, due to higher bids caused by an increase in asphalt costs. In wake of Hurricanes' Katrina and Rita and oil and fuel market price volatility, the cost to maintain the pavement system at the current level and maintenance backlog, are currently much higher and can not be accurately determined for this report.

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Staff will continue to provide updates to the City Council on asphalt costs and recommendations.

FISCAL ANALYSIS:

This year's capital improvement budget includes \$325,000 and \$75,000 for the residential overlay program and residential slurry seal programs, respectively. Another project is the minor pavement improvement project funded in the amount of \$50,000. Also \$200,000 is budgeted for the Carson Street resurfacing project between Higuera to Ince. A total of \$650,000 is budgeted this year for new street projects. Based on the above discussion, an additional \$1,550,000 (or greater) per year is required to maintain the system at the current PCI level of 77.

We are very limited to the amount of funding sources for street projects. The City receives about \$750,000 a year from the State's Special Gas Tax account. Also the City receives about \$135,000 from the Federal Transportation Bill for work on arterial streets. The federal funds are drawn down after accumulating for several years to fund a large street arterial project. Also Redevelopment allocated about \$1 million four years ago for street projects. The remaining funds are New Development Impact Fee funds which vary year to year based on the amount of commercial developments in the City and also City General Funds which also vary every year based on many factors. Competitive grant funding is usually limited to use on arterial streets for the purpose of capacity enhancement as opposed to maintenance.

Based on the current backlog and trends in street maintenance, staff recommends the City Council direct staff to research and return with options to increase funding for street projects at a future City Council meeting.

MOTIONS:

That the City Council:

1. Receive and file the report, and
2. Direct staff to further research and return with options to increase funding for street rehabilitation projects.