Pavement Management Program Budget Options Report

July, 2013

City of Pendleton

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Executive Summary

Capitol Asset & Pavement Services, Inc. was contracted by The City of Pendleton Public Works Department to perform visual inspections of all of the paved streets maintained by The City of Pendleton. All 74.0 centerline miles of streets were evaluated in accordance with MTC standards and the Streetsaver Online 9.0 database was updated with the inspection data. Pavement inspections were completed in April, 2013.

The maintenance decision tree treatments and costs were reviewed and updated to reflect current pavement maintenance treatment prices in central Oregon. A Budgetary Needs analysis was performed based on the updated inspections and treatment costs and four budget scenarios were evaluated to compare the effects of various funding levels.

The City's street network consists of 74.0 centerline miles of paved streets. A detailed visual inspection of the City's streets resulted in a calculated average PCI of 68. Using a 0-100 PCI scale, with 100 being the most favorable, a rating of 68 places the City's street network in the upper range of the 'Fair' condition category.

Four scenarios were analyzed for various street maintenance funding levels. The budget includes preventative maintenance and rehabilitation work for existing paved street surfaces. The City's current strategy of street maintenance, along with current prices for the treatments, was entered into a decision tree matrix. This matrix defines what treatments need to be applied to streets in varying PCI condition. Utilizing this decision matrix, it was determined that the City will need to spend $35.7 million over the next ten years to bring the street network into 'optimal' condition, or an overall street network PCI of about 83. At this level, the City should be able to maintain the street network in the future with mostly cost-effective preventative maintenance treatments (crack seals and chip seals). Comparing this with the current funding level of $3.0 million over the next ten years shows that the network PCI decreasing by 7 points, to 61 by 2023. Scenarios were also run to determine the funding level required to maintain the overall network PCI at the current value, as well as increase the PCI by 5 points over the next ten years.

Table 1 – Summary of Outcome of Different Funding Levels (Scenarios)

Scenario #	1	2	3	4
Average yearly budget	$3.17 million *Unconstrained*	$300,000 *Current Funding*	$700,000 *Maintain PCI*	$1.7 million *Increase PCI 5pts*
Total budget for 10 years	$35.7 million	$3.0 million	$7.0 million	$17.0 million
Current PCI	68	68	68	68
Current % in 'Good' condition	61.4%	61.4%	61.4%	61.4%
PCI after 10 yrs (change)	83 (+15)	61 (-7)	68 (0)	73 (+5)
Backlog after 10 years	$0	$39.5 million	$34.3 million	$25.7 million
% 'Good' In 10 years	99.2%	62.8%	81.7%	85.6%