



Agenda Item No. _____

File Code No. 550.08

CITY OF SANTA BARBARA

COUNCIL AGENDA REPORT

AGENDA DATE: April 24, 2012

TO: Mayor and Councilmembers

FROM: Engineering Division, Public Works Department

SUBJECT: Pavement Management Program Update

RECOMMENDATION:

That Council receive a staff report on the Pavement Management Program.

DISCUSSION:

BACKGROUND

The City has a roadway network consisting of approximately 238 miles of roadway pavement with an estimated replacement value of approximately \$335 million. The City has been tracking its road pavement maintenance conditions since 1985. At that time, the citywide pavement condition index (PCI) was an average of 59 out of a possible 100, with 100 being a new pavement surface, and 0 being essentially a dirt road. A PCI rating of 59 is slightly above the level where significant pavement maintenance is required. Since 1985, and with the passing of Measure D (a ½ percent transportation sales tax) in 1989, the City has implemented a strategic pavement maintenance system. This is based on the proven concept that it is far less costly to proactively maintain a street in advance of deterioration than to respond when the pavement is at a condition requiring significant rehabilitation. This proactive strategy has proved successful in raising the pavement quality of City streets.

The City has a longstanding goal to maintain a PCI of 70 or higher. The citywide PCI has dropped from a peak of 75 in 1996 to its current level of 68, which is slightly above the statewide PCI average of 66. With the current funding level, the Citywide PCI trend is projected to continue to decline. Considering current material costs, staff estimates that approximately \$4.7 million per year is needed to maintain an average citywide PCI of 70.

From 1985 to 1996, the City spent an average of approximately \$3.2 million per year from Capital Improvement Program (CIP) funds on pavement maintenance. Using the Consumer Price Index, the \$3.2 million in 1985 equates to approximately \$6.9 million in today's dollars. In comparison, since 1996, the City has been able to budget an average of \$2.3 million per year of CIP funds on pavement maintenance. This year's CIP pavement maintenance budget is approximately \$2.8 million. As a result of reduced funds available for this Pavement Management Program (Program) and increased material costs, less pavement maintenance work can be completed compared to previous years.

City pavement maintenance is addressed in both the Streets CIP and Streets Operations budgets. The Streets CIP budget includes the design and construction of the multi-million dollar annual pavement preparation and slurry seal work. The Streets Operations budgeted work is performed by the Public Works Streets crews, and includes pothole repair and complaint response work associated with roadways.

PAVEMENT MAINTENANCE STRATEGIES

Appropriately assigning pavement maintenance and rehabilitation treatment is a critical component of effective pavement management. One of the goals of pavement management is to bring streets and roads to a condition where best management practices can occur. It is important to determine both the type of treatment, as well as when to apply it.

Pavements that are in good to very good condition (PCI > 65) are best suited for pavement preservation techniques such as slurry seal. These are typically applied at intervals from five to eight years, depending on traffic volumes. As pavements significantly deteriorate, their structural foundation also deteriorates requiring more costly pavement treatments. In extreme situations, reconstruction of the pavement is necessary. Conventional preventative pavement maintenance (e.g., slurry seal) costs approximately 50 cents per square foot, while asphalt pavement overlay costs approximately \$3 per square foot. Pavement reconstruction costs can vary significantly, but for estimating purposes, can average approximately \$10 per square foot.

As part of the City's pavement management strategy, the City is currently divided into six Pavement Maintenance Zones (see Attachment). Pavement Maintenance Zone scheduling has proven to be a cost-effective pavement maintenance strategy. Scheduling roadwork by using maintenance zones is more convenient for those that use the roadway (including motorists, cyclists, and those using alternative modes of transportation); because it reduces the number of contractor mobilizations and concentrates construction activities in one general area, thereby allowing users to potentially avoid the construction zone. This method also assists in the ability to inform the public about the year in which the pavement maintenance work will be scheduled in their neighborhoods.

In the early to mid-1990s, the amount of funding allotted to the Program was adequate to provide pavement treatment to nearly every road within a pavement zone. At current program funding levels, only 50-60% of roads within a pavement zone can be treated.

The City has imposed a one-year moratorium prohibiting trenching through roads that have been slurry sealed to ensure that newly placed pavement resurfacing are not trenched through soon after placement. A three-year moratorium is placed on roads newly overlaid with asphalt pavement. Exceptions are made for emergencies such as utility failures.

COMMUNITY OUTREACH

The public and utility companies are notified of upcoming pavement maintenance work several months in advance of the annual pavement maintenance construction contract. The purpose of the notification is to inform the property owners of the upcoming work and alert the property owners of the pavement trenching moratoriums so that any required private lateral trenching can be scheduled in advance of the pavement maintenance work.

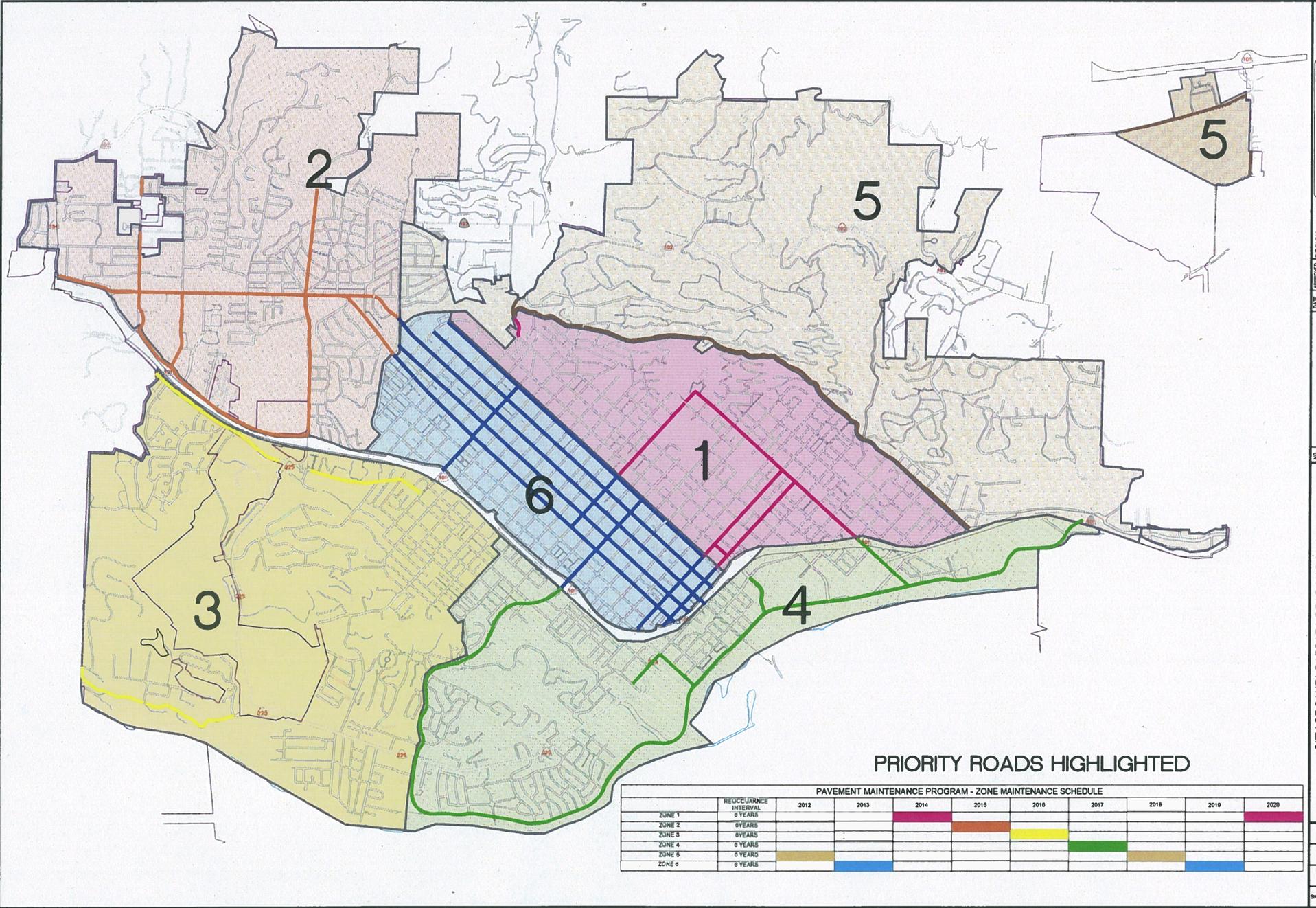
An additional notice is sent to tenants and property owners approximately one month prior to construction, and door hangers are distributed three days prior to construction.

The public can access and review the Pavement Maintenance Program information, including when work is scheduled in their neighborhood, online at www.SantabarbaraCA.gov/Engineering.

FUNDING

The Pavement Management Program is funded by Measure A, Utility User Tax and grant funds. Additionally, the City receives an annual allocation of Local State Transportation Program funds in an approximate value of \$340,000 per year.

ATTACHMENT(S)	Pavement Maintenance Zone Map
PREPARED BY:	John Ewasiuk, Principal Civil Engineer/sk
SUBMITTED BY:	Christine F. Andersen, Public Works Director
APPROVED BY:	City Administrator's Office



PRIORITY ROADS HIGHLIGHTED

PAVEMENT MAINTENANCE PROGRAM - ZONE MAINTENANCE SCHEDULE										
	REGULARANCE INTERVAL 6 YEARS	2012	2013	2014	2015	2016	2017	2018	2019	2020
ZONE 1	6 YEARS									
ZONE 2	6 YEARS									
ZONE 3	6 YEARS									
ZONE 4	6 YEARS									
ZONE 5	6 YEARS									
ZONE 6	6 YEARS									



PUBLIC WORKS
DEPARTMENT
ENGINEERING DIVISION

APPROVED: _____ DATE: ____/____/____
 CITY ENGINEER
 ORIGINAL DRAWN DATE: ____/____/____
 CHECKED: _____
 DATE APPROVED: ____/____/____

NO.	DATE	APPROVED	DESIGN	DRAWN	CHECKED

CITY OF SANTA BARBARA ROAD MAP 2012
PAVEMENT ZONE MAP
 UPDATED OCTOBER 2011

PBW NO. _____
 SD NO. _____ SHL DES. _____
 DWG. NO. _____
 SH. 1 of 1

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