TO: HONORABLE CITY COUNCIL

FROM: CITY MANAGER DEPARTMENT: PUBLIC WORKS

DATE: JUNE 7, 2004 CMR: 286:04

SUBJECT: INFORMATION REGARDING THE ANNUAL PAVEMENT MAINTENANCE PROGRAM, SELECTION OF STREETS AND PROJECT COORDINATION

This is an informational report and no Council action is required.

BACKGROUND
Staff has received numerous questions and concerns from residents regarding selection and coordination of City streets for the annual Street Maintenance Program. In addition, City Council Members have voiced concerns about coordination between Public Works Department annual street maintenance and Utilities Department maintenance and capital projects.

DISCUSSION
Annually, Public Works Engineering manages the resurfacing and reconstruction of various city streets. The candidate streets are surveyed and rated biannually by a computerized pavement management program. This program is a decision-making system that helps Public Works personnel make cost-effective decisions concerning the maintenance and rehabilitation of the City’s pavements in a systematic way. The pavement management program is certified annually by the Metropolitan Transportation Commission, the transportation planning, coordinating and financing agency for the nine-county San Francisco Bay Area.

The annual street maintenance project budget ranges from $1.8M - $2M and averages approximately eight lane miles of resurfacing, street reconstruction and concrete pavement repair and approximately eight lane miles of slurry sealing.
Streets selected for the annual street resurfacing program receive several types of treatments:

- preventative maintenance, such as slurry sealing and crack sealing
- asphalt concrete resurfacing
- concrete pavement replacement
- total street reconstruction

The annual maintenance program strikes a balance between repairing damaged streets and preserving streets in good condition. In the long term, the City benefits from this approach since slurry and crack sealing is by comparison 1/10 the cost of overlay and pavement replacement, and a slurry seal protects the streets from further damage by approximately 7 years. While the City cannot repair every damaged street in Palo Alto, the streets in relatively good condition receive a slurry seal at a low cost while most of the budget goes towards streets in the worst condition, to provide a 20 or 40 year life expectancy for asphalt concrete and portland cement concrete streets (PCC) respectively. For streets that are not selected as part of the annual maintenance program, Public Works Operations continues to repair potholes, patch rough pavement areas (skin patch) and provide crack sealing, as necessary to ensure a safe roadway.

Over the last two years, Public Works has focused on streets north of Oregon Expressway and has worked specifically on portland cement concrete (PCC) streets to address damaged streets in this area. In 2003, the repair of PCC streets totaled $500,000 (25% of the 2003 program). In 2004, the repair of PCC streets totaled $300,000 (over 15% of the 2004 program).

Since many of the PCC streets in north Palo Alto have a service life of approximately 40 years, rideability is the major concern rather than structural integrity. The additional expense to repair roads for a smoother riding surface would defer the maintenance needed for many streets within the City. The City works with the Palo Alto Bicycle Advisory Committee to prioritize and address rideability concerns within a limited budget.

In response to the concern that streets north of Oregon Expressway are deliberately avoided; Public Works staff compared this area to the rest of Palo Alto. Approximately 1/3 of the City streets are north of Oregon Expressway, and many are PCC streets requiring more expensive repairs (concrete is more expensive than asphalt). From 1999 to 2004, approximately 40% of the streets maintained were north of Oregon Expressway. Based on these figures, streets north of Oregon Expressway have received a fair share of the overall annual street maintenance including slurry seal, overlay and pavement replacement.
Coordination with Utilities Projects

Due to coordination efforts with City utility maintenance and capital projects, pavement maintenance may be deferred until completion of the utility project. This prevents street cuts that would otherwise undermine the new pavement surface. Public Works, Utility and Planning Department staff meet quarterly and with the assistance of a computerized project coordination program linked with the City’s Geographical Information System (GIS) continue to improve scheduling of City projects to reduce expenditures and disruption on City streets. The following streets are examples of this coordination:

- Harriet Street from Hopkins Street to Parkinson Avenue (across from the Children's Library) will be resurfaced after the Wastewater project in 2003/04 and Water Main Replacement project in 2005/06 is completed. In the mean time, Public Works Operations will perform a skin patch in this area to improve rideability.

- Forest Avenue from Center Drive to Boyce Avenue will be resurfaced after the Water Main Replacement project in 2006/07 is completed.

- Cowper Street from Churchill Avenue to Lowell Avenue, and Cowper Street from Hamilton Avenue to Forest Avenue are expected to be resurfaced this year.

- Hamilton Avenue from Fulton Street to Webster Street will be resurfaced after the Wastewater project in 2004/05 and after the Gas Main Replacement project in 2005/06 is competed.

Staff continues to preserve the City's street infrastructure by repairing the worst streets and by using preventative methods such as slurry seal and crack sealing as part of the annual maintenance project. Preventative maintenance along with on-going project coordination significantly reduces street deterioration of Palo Alto’s street network.

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