

Attachment A
**Summary of Staff Reports on Pavement Management,
Bridge Maintenance, and Roads Maintenance**

Public Works has prepared several reports that each provide a needs assessment for different assets within the County road system. These are as follows:

Pavement Management

The Pavement Management Program (PMP) for our County maintained roads is described in the 2015 Pavement Management Report. A good PMP will allow the County to optimize the resources invested in maintaining paved roads. Our particular PMP applies the best available pavement preservation techniques with a focus first on preventative maintenance. Our PMP also relies on a four-tier system to prioritize the selection of roads that receive maintenance.

On a scale of 0-100 (with 100 being a new road), the County's average Pavement Condition Index (PCI) currently stands at 61 for all 1,092 paved road miles. In the past your Board has mandated that we improve this average to 65 or better.

By following the PMP, the Department plans to achieve the following in the next five years:

- Overlay about 20 miles next year and five miles each year after that
- Surface treat about 60 to 70 miles each year (chip seal, slurry seal, or micro seal)
- Within three years all of high demand roads (about 13 miles) will be in good condition.
- Within five years an additional 27 miles of medium demand roads will be in good condition.
- At the end of five years 793 of the 1,092 miles of road will be in good condition.
- About 105 miles of medium demand roads and 194 miles of rural low demand roads will remain in poor condition and will receive minimal maintenance.
- Overall, the PCI is estimated to improve from the current 61 to 62 by next year but will drop to 59 by the end of five years.
- Funding for pavement management is allocated at \$11.2M for this fiscal year; which includes a one-time increase of \$6M. The following years are anticipated to return to \$6.2M per year.

The complete 2015 Pavement Management Report can be found on the Department website at:

<http://www.slocounty.ca.gov/Assets/PW/Traffic/Road+Pavement+Report+2015.pdf>

Bridge Maintenance

There are 187 bridges within the County maintained system. Of these, 130 are routinely inspected by Caltrans. The remaining 50 bridges are between ten and twenty feet long and are routinely inspected by Public Works engineering staff. Some of the bridge maintenance work is performed by County crews while some specialized maintenance is performed under contract.

The overall condition of a bridge is usually characterized by a sufficiency rating (SR). The SR is determined by a bridge inspector and is a summary evaluation of the bridge's structural adequacy, safety, serviceability, and functional obsolescence. The SR can range from zero (a bridge that is closed and cannot carry traffic loads) to 100 (a new bridge with no deficiencies). A bridge typically becomes eligible for Federal funding for replacement or rehabilitation when the SR drops below 50.

Our Bridge Maintenance Program (BMP) has identified 17 bridges which are needing significant attention or replacement within the next seven years. Fourteen of these are eligible (the span is over 20 feet) for Federal funding. The Federal funding is estimated to cover approximately 90% (\$49M) of the total cost (\$54M). The remaining cost, about \$5M, must be covered by a local match. The impact to local funding varies from near zero in some years to as much as \$800K in a single year.

The complete 2014 Bridge Maintenance Program can be found on the Department website at:

<http://www.slocounty.ca.gov/Assets/PW/Traffic/Bridge+Maintenance+Program+Report.pdf>

Road Maintenance

The 2013-2014 Roads Maintenance Report (RMP) provides statistical support for the Department to better manage the many routine maintenance tasks that are performed by County crews. By using SAP, the County's asset management software, staff can assess both work performance and effectiveness on many of the facilities.

County road crews perform between 400 and 500 work orders each month. Many of these are requested by County residents, through our website or through community advisory committees. Typical tasks can include pothole repair, tree trimming, replacing road signage and striping, culvert cleaning, guardrail repair and numerous other road maintenance items. Increasing the road crew by two this year is estimated to reduce the typical response time on some of the requests from twelve weeks to eight weeks.

A significant portion of the crew work includes larger tasks such as prep work ahead of the pavement contracts and bridge repair work. Finally some of the crew work is for major maintenance tasks that do not lend themselves well to putting under private contract.

There is an increasing trend for the crews to perform tasks needed to comply with (Storm Water) NPDES permits and to protect local water quality. These tasks include monitoring and cleaning culverts and storm drains and street sweeping in the urban areas. The effort needed to maintain new mitigation sites and storm water facilities is expected to increase in the future, which may require dedicated full time personnel to achieve compliance.

As with the PMP and BMP mentioned above, the RMP also demonstrates the need for a greater emphasis on preventative maintenance rather than corrective maintenance. Staff anticipates expanding the effort on regular inspections on guardrail, retaining walls, cattleguards, and pedestrian crossings. Preventative maintenance promises to extend the life of these facilities, reduce the overall cost, and provide greater service to the public.

The complete 2013-2014 Roads Maintenance Report can be found on the Department website at:

http://www.slocounty.ca.gov/Assets/PW/Traffic/Road_Reports/2013-14+Road+Maintenance+Report.pdf

Bikeways Plan

The current Bikeways Plan was adopted by the Board in 2010. Staff is working with the Bicycle Advisory Committee (BAC) to develop a 2015 update. This is expected to be brought to the Board for adoption early next year.

The goals for the update are intended to make cycling a more viable mode of transportation. Therefore the plan calls for improving the existing system to be safer and friendlier to cyclists. There is also a need to expand the system to interconnect more areas and provide more accessibility.

In addition to better planning, one of the past benefits of the Bikeways Plan is that it made the County eligible to apply for Bicycle Transportation Account (BTA) grants. The County was successful in obtaining BTA grants several times. The last BTA grant constructed the bike lanes on Vineyard Drive; which closed a gap and connected the town center with the Vineyard Elementary School and with several residential areas in between.

This BTA grant program no longer exists and has been replaced by the Active Transportation Program (ATP). The ATP grant program combines several modes of non-motorized travel into a single program. To improve grant funding opportunities, it is anticipated that staff and the BAC will collaborate with the Trails Committee, school districts, and SLOCOG and develop a more comprehensive approach to transportation planning.

The current 2010 Bikeways Plan can be found at:

http://www.slocounty.ca.gov/PW/Bicycles/Bike_Plan.htm

Safety Analysis

Staff works with CHP and with school districts to review roadway safety on a continual basis. The CHP also provides traffic collision reports on County roads, so that staff can check for patterns or trends. With few exceptions, the collision rate on County roads is below State and Federal averages.

Often, discovered issues can be readily addressed with minimal changes in road signage or other means of traffic control. Where the correction needed is more significant, the County has been fairly successful in obtaining State Highway Safety Improvement Program (HSIP) grants. The latest of these will make improvements to River Road,

Buckley Road, and will place rumble strips on numerous key roads throughout the County later this year. The County has recently submitted for two more HSIP grants and expects to hear of the results in the next few months.

As other grant funding and funding in general becomes scarce, obtaining HSIP grants program will become increasingly competitive in the future.

Capital Projects

Capital projects are those projects that are intended to increase the capacity of the system or are intended to upgrade or provide a betterment to the road system. For the most part capital projects are not funded from the General Fund. These road improvements are usually provided directly with private development or may be indirectly provided by development through the payment of Road Improvement Fees (RIF). The County maintains a RIF program in Avila Valley, Los Osos, Cambria, San Miguel, South County, Nipomo and Templeton. Annual updates to these programs are required by State law and are anticipated to be brought to your Board in December and January.

Often capital projects can be funded by other State or Federal grants. These include Community Development Block Grants (CDBG), Active Transportation Programs (ATP), Proposition 1B, Proposition 40, Congestion Mitigation and Air Quality Improvement (CMAQ), Regional State Highway Account (RSHA) and others. SLOCOG play a critical role in the County obtaining most of these grants.