



Legislation Text

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Receive and Approve the Public Works Five Year Capital Improvement Plan for FY2014/15 through FY2018/19 from the Department of Resource Management, Public Works Division

Published Notice Required? Yes No
Public Hearing Required? Yes No

DEPARTMENTAL RECOMMENDATION:

The Department of Resource Management, Public Works Division recommends that the Board of Supervisors receive and approve the Public Works Five Year Capital Improvement Plan for FY2014/15 through FY2018/19.

SUMMARY:

The Public Works Five Year Capital Improvement Plan is updated annually by the Department of Resource Management for the Board's consideration and approval. The Plan reflects a prioritized list of road and bridge projects that would maintain the County's road and bridge infrastructure at an acceptable level, and make improvements to selected roads. It includes the construction of bridge rehabilitation and replacements, improvements to existing roads, and major maintenance projects (overlays, chip seals and slurry seals) utilizing a mix of funding. It also includes the cost of replacing major construction equipment used by the Department's Operations Division, as well as maintenance projects at the Public Works Corporation Yards. Because the five year Plan is updated annually, there are generally minor changes from year to year. The changes from last year's Plan are highlighted in the discussion section. The cost of constructing all of the improvements contained in the Plan over the next five years totals \$66.5 million based on 2014 costs. Of these costs, \$58.6 million are funded and \$7.9 million remain unfunded. These costs do not include design, environmental, or right of way costs for the projects listed. (See Attachment A - Public Works Capital Improvement Plan).

If fully implemented, the Plan will treat or improve 273 miles of the County's 466 paved miles of roads. It places the County on a schedule for light surface treatment (chip seals and slurry seals) of a paved road every 10 years, with overlays/rehabilitation of a paved road every 47 years. This represents a reasonable level of maintenance; a good level of maintenance would provide a surface treatment every 7 years with an overlay every 20 years. The County's Pavement Condition Index (PCI) increased to 75, from 71, largely due to our dedicated chip seal program and improved pavement maintenance analysis (all discussed below).

The Department continues to upgrade various types of maintenance and construction equipment, as funding allows and opportunities arise, in order to increase the effectiveness and efficiency of the workforce.

FINANCIAL IMPACT:

The road, bridge, equipment and maintenance projects listed will be funded through a combination of sources, including the County Road Fund, federal road and bridge funds, and other sources as listed in the Capital Improvement Plan. Full implementation of the plan would cost \$66.5 million over five years. The \$7.9 million gap in unfunded project liabilities will be bridged with new federal reauthorizations, grant awards, or project

deferrals until funding is available. There is no potential General Fund impact at this time.

DISCUSSION:

Funding for the Capital Improvement Plan

The Capital Improvement Plan is based on a number of assumptions, including the availability of future funding, the ability to deliver projects in the face of environmental and other constraints, and the rising cost of construction materials. The assumptions become less reliable in years three through five of the Plan, and as such the plan for these years is more subject to future modification as part of the annual review of road and maintenance needs. The plan is updated and presented to the Board for adoption on an annual basis to incorporate new information.

The key source of ongoing Public Works annual funding (estimated at \$10.4 million in FY2014/15) is the Highway User's Tax Assessment (HUTA), commonly known as the gas tax. This consists of two parts. The first part consists of funds (\$6.7 million in FY2014/15) to be received as Solano County's share of an 18 cent per gallon federal gas tax. It should be noted that this tax has not been adjusted for inflation since 1995. It has historically provided a steady, reliable revenue source used primarily for road maintenance, though with decreasing purchasing power. The second part consists of funds (\$3.7 million in FY2014/15) to be received as Solano County's share of the state's gas tax. This part of the gas tax funding does have an adjustment to keep pace with inflation.

The federal transportation authorization in 2012 (MAP-21), and the Metropolitan Transportation Commission's One Bay Area Grant program (OBAG) have created new competitive grant opportunities for the County's application. While the County's options for future federal overlay funds remains limited, other options for safety and farm-to-market projects have opened up. In the last two years, the County has been awarded \$2.6 million in competitive safety grants to install guardrail and widen the shoulders on Cordelia Road, Hartley Road, Lake Herman Road, and Rockville Road. Additionally, the County was awarded \$1.1 million for farm-to-market improvements in the new Suisun Valley priority conservation area. Most of the overlay projects, beginning in FY2017/18, remain unfunded until a new federal reauthorization occurs in 2015.

In summary, the \$58.6 million in funded projects in the five-year Capital Improvement Plan represent similar funding levels in chip seals and light road maintenance, with slight decreases in road and bridge construction over last year's Plan. The most significant changes impacting the project backlog (reducing it) was a full year of construction work being completed on the Winters Bridge Replacement Project, as well as completion of a large overlay paving project.

Solano County Road Conditions and Projects

Solano County's PCI rating of 75 places the pavement condition of Solano County's roads as "good" and first out of the nine counties in the Bay Area (Contra Costa is closest with a 74). Within Solano County, the roads in Dixon score higher than unincorporated Solano County, while all other cities have roads with a lower rating. The County's preceding 4 years of Pavement Condition Indices have been 2009 - 64, 2010 - 67, 2011 - 68, and 2012 - 71). The County's pavement inventory has substantially improved from 2006, when it was considered to be "at risk." The regional goal is for an agency's pavement to have a PCI of at least 75. The improved conditions of the County's roads, likely to improve again next year, allows the Department to focus more resources towards chip seals and light maintenance versus the higher costs of major rehabilitation and reconstruction. Our long-term commitment of using the newer polymer-modified rejuvenating chip seals, with Operations Division placing approximately 40 miles per year, is now paying a significant dividend toward improving the County's PCI and reducing long-term maintenance costs. These chip seals typically cost only 30-40% of a full overlay, but last up to 50% of the equivalent maintenance time.

In preparing the current Capital Improvement Plan, all County roads with significant deterioration were inspected, and based on engineering judgment a course of action is recommended which best addresses the deficiencies of each road within the limits of available funding. The Department continues to improve its ability to analyze and report pavement conditions, with enhanced use of the Streetsaver program and better reporting from Operations crews. The road maintenance projects proposed in the plan are prioritized, with the more deficient roads generally receiving attention first, although other factors, such as traffic volumes, safety and the availability of funding are also considered. Better analysis and reporting is allowing the Department to select the most effective maintenance treatment, which is also resulting in improvements to the County's PCI.

Reducing the rate of accidents on some of our roads is not only one of our local priorities, but is also a significant priority in the federal MAP-21 authorization. Our Plan allows for the minor widening of County roads as part of safety improvement grants, or as they are being overlaid. This is a continuation of our recent practice under which two to four feet is added to the paved width of many substandard-width roads during the overlay process, bringing them to or near County standards for width. This minor widening has significantly improved safety on those roads, with average accident rates dropping by 20 to 70 percent (depending on the road). The Plan also includes two curve improvements that will enhance safety on Solano County roads.

The Plan includes the replacement of one structurally deficient bridge and the rehabilitation of 6 bridges, which continues the County's efforts to keep its inventory of 93 bridges in good condition by replacing them as they become deficient. The Plan also provides funding for replacing key pieces of road maintenance and construction equipment that are past their useful life, and in many cases do not comply with new air quality standards for emissions. Finally, the Plan also provides for maintenance of the Public Works corporation yards.

Some highlighted projects for the remainder of FY2014/15 and for FY2015/16 include:

1. Continue multi-year construction of the Winters Road Bridge at Putah Creek with federal Highway Bridge Program funds;
2. Finish constructing 3 miles of bike lanes on Hawkins Road from Fox Road to Leisure Town Road with federal CMAQ funds and TDA Article 3 funds;
3. Construct a truck stacking lane for the South Gate approach to Travis Air Force Base (Petersen Road) with federal High Priority Project funding;
4. Construct curve improvements on Vaca Valley Road, north of Vacaville, with funding from in lieu fees and Road fund;
5. Repair and replace various large culverts that have come into disrepair;
6. Widen the shoulders for safety on Sievers Road and Midway Road with federal High Risk Rural Road funds;
7. Widen the shoulders for safety on Putah Creek Road and Dixon Avenue West with federal High Risk Rural Road funds;
8. Overlay 11 miles of roads with funding from the Road Fund, to the extent that funding is available;
9. Chip seal (oiled gravel) 64 miles of roads with funding from the Road Fund and some federal Surface Transportation Program funds; and
10. Purchase or retrofit 20 pieces of major equipment to replace existing equipment, utilized for road, bridge

and channel maintenance, and road construction use, to be primarily funded from the Road Fund.

Department Workload

The \$66.5 million in planned projects represents a significant backlog of funded projects. The unprecedented size of the \$12.2 million Winters Road Bridge, \$4.6 million in federal grants towards six safety projects, \$2 million Travis AFB South Gate Improvement project, \$2.1 million towards completion of the Vacaville-Dixon Bike Route, and \$1.1 million in farm-to-market improvements in Suisun Valley are valuable projects that carry mandates for timely delivery. All of the federally funded projects require intensive staff time to deliver the environmental clearance requirements within funding agreement deadlines. Public Works Engineering Division continues to evolve its structure to better handle project delivery demands over day-to-day maintenance detail. The Department is currently evaluating staffing levels and service delivery options in both the Engineering and Operations Divisions in order to address expected near term project demands as well as future funded projects.

ALTERNATIVES:

The Capital Improvement Plan provides a recommended list of priorities for the construction of County roads and bridges, as well as replacement equipment and building maintenance, for FY2014/15 through FY2018/19. Within the limitations of available revenues from local, state and federal sources, the Board may make changes to the plan as it wishes.

OTHER AGENCY INVOLVEMENT:

County Counsel's Office has reviewed and approved this item as to form.

CAO RECOMMENDATION:

APPROVE DEPARTMENTAL RECOMMENDATION