



Legislation Details (With Text)

File #: 2021-1113
Type: Regular Calendar Item **Status:** Filed
File created: 9/29/2021 **In control:** Transportation and Public Works
On agenda: 1/4/2022 **Final action:**
Title: Sonoma County Long Term Roads Plan Update - 2012 to 2023
Sponsors: Transportation and Public Works
Indexes:
Attachments: 1. Summary Report, 2. Attachment A - Pavement Preservation Program 2012-23, 3. Attachment B - 2012-2023 Pavement Preservation Cumulative Totals, 4. Attachment C - County Overall Pavement Condition, 5. Attachment D - Annual Pavement Condition by Functional Class, 6. Attachment E - County Comparison of General Fund Contribution, 7. Attachment F - PowerPoint Presentation Pavement Preservation Program 2012-2023

Date	Ver.	Action By	Action	Result
1/4/2022	1	Board of Supervisors	Information only	

To: Board of Supervisors

Department or Agency Name(s): Transportation and Public Works

Staff Name and Phone Number: Johannes J. Hoevertsz, 707-565-2231

Vote Requirement: Informational Only

Supervisory District(s): Countywide

Title:

Sonoma County Long Term Roads Plan Update - 2012 to 2023

Recommended Action:

Receive a presentation on the accomplishments of Sonoma County's Pavement Preservation Program

Executive Summary:

The Department of Transportation and Public Works (TPW) is sharing an update on the County's Long Term Roads Plan approved by the Board in 2014. The update highlights accomplishments of the Pavement Preservation Program since the Board began increasing local funding contributions in 2012.

Discussion:

Background

In response to increasing challenges relating to road maintenance and funding shortfalls, the Board of Supervisors began making annual contributions from the General Fund to bolster pavement preservation efforts in 2012. These contributions were over and above annual Maintenance Of Effort (MOE) contributions required to qualify for gas tax allocations from the State. On October 28, 2014, the Board formalized this program with the acceptance of the Long Term Road Plan. The Plan established a methodology for selecting candidate roads and outlined a realistic and sustainable funding strategy for the Plan. As a result, the Board has allocated \$128.8 million in discretionary dollars from FY 2012-13 through FY 2021-22. This investment has resulted in the completion of almost 413 miles of pavement preservation and rehabilitation projects

throughout Sonoma County.

In addition, on March 2, 2021, the Board approved a five-year Strategic Plan that established objectives for Resilient Infrastructure. Investments in on-going maintenance and capital improvements to the County's infrastructure support these objectives by reducing maintenance liabilities, maximizing use of taxpayer dollars, improving public safety, and improving access to services. As part of this strategic goal, the Board assigned a high priority to investing in transportation infrastructure through the annual Pavement Preservation Program (PPP). This program funds ongoing maintenance to streets and roads including large-scale paving and sealing projects, drainage improvements, vegetation removal, as well as upgrades to street signs and striping. On May 25, 2021, the Board approved the 2022/23 Pavement Preservation Program (PPP) allocating \$26 million of discretionary dollars to maintain and improve approximately 43 miles of roads in Sonoma County.

Following the implementation of the 2022/2023 program, the Board will have invested more than \$142 million of discretionary dollars in road infrastructure improvements, and completed almost 456 miles of pavement preservation and rehabilitation projects throughout the County. These improvements have focused on heavily traveled roads in each Supervisorial District that are vital to local economic development, agriculture, recreation, and tourism (Attachment A - Pavement Preservation Program 2012/23).

Roads Funding and Pavement Preservation Program (PPP)

Beginning in 2012 the Board of Supervisors began allocating money from the County's General Fund for maintenance and repair of County roads. This allocation was in addition to established Maintenance of Effort (MOE) contributions the County is obligated to make in order to receive annual apportionments of State gas taxes. Formalized in 2014 with the adoption of a Long Term Road Plan by the Board, the Board committed to continuing its annual General Fund investments. This investment consisted of \$8 million General Fund for the Pavement Preservation Program (PPP), \$375,000 in Aggregate Resource Management (ARM) road impact fees, and \$2.2 million in Refuse Franchise Fees.

In subsequent years the Board increased its commitment to the PPP by taking the following actions:

1. In FY 2015/16 increasing the General Fund contribution to the PPP by \$1 million annually (\$9 million total) to address segments of roads considered in need of exigent maintenance.
2. Directing indexing of the annual General Fund base contribution of \$9 million by up to 2% beginning in FY 2016-17.
3. Augmenting the summer 2017 PPP with \$10.6 million of one time, discretionary sources of funding.
4. Allocating 20% of revenue from the County's Transit Occupancy Tax (Measure L) to the Program in FY 2017-18.

In addition to General Fund contributions, the County began receiving apportionments from the Road Maintenance and Rehabilitation Account (SB1) in FY 2017-18. Annual SB1 funding of approximately \$10 million, are divided equally between Road Maintenance and Road Capital budgets enabling TPW to augment the General Fund PPP projects and standard road maintenance efforts. Standard road maintenance efforts include County road maintenance crews performing pavement repair tasks such as patch paving, crack sealing, and overlays. While these maintenance treatments are not as robust as that of the PPP, the work is responsive to community needs and contributes to improvements in the Pavement Condition Index (PCI) rating. In

addition to SB1, Road Maintenance pavement preservation efforts are supported by General Fund contributions to TPW tied to State mandated MOE requirements.

Taken together TPW expects the sources of revenue outlined above to fund the PPP in the fiscal year 2021-22 and 2022-23.

Summary of funding for 2-Year Pavement Preservation Program:

General Fund Contribution to Roads	\$12,710,462
(\$10,135,462 GF contribution/\$2,200,000 GF Refuse FF/\$375,000 GF Aggregate Mining Fees)	
State Gas Tax Funding (SB1)	\$ 6,784,000
Measure L Transit Occupancy Tax	\$ 780,293
Graton Mitigation Funds	\$ 600,000
Less 5th Payment for Roseland Annexation Road Improvements	(\$ 662,000)
Total Projected FY 2021-22 PPP Funding	\$20,212,755
Projected General Fund Contribution to Roads	\$12,913,171
(\$10,338,171 GF contribution/\$2,200,000 GF Refuse FF/\$375,000 GF Aggregate Mining Fees)	
Projected New State Gas Tax Funding (SB1)	\$ 7,088,000
Projected Measure L Transit Occupancy Tax	\$ 1,000,000
Less 6th Payment for Roseland Annexation Road Improvements	(\$ 662,000)
Total Projected FY 2022-23 PPP Funding	\$20,339,171
TOTAL AVAILABLE FOR NEW PROJECTS IN 2-YEAR PROGRAM	\$40,551,926

Infrastructure Resiliency is one of five pillars currently established by the Board of Supervisors to guide our County's future and in response to a priority community concern: improving the condition of our County roads. The generous annual General Fund contributions from the Board towards the PPP, made every year since 2012, far exceeds those of any other county across the State of California (Attachment E), demonstrating this Board's strong commitment to successfully meet the goal of improving pavement conditions (Attachment B - 2012 - 2023 Pavement Preservation Cumulative Totals).

TPW has added treatments to improve the resiliency of roads by addressing drainage improvements and included paving driveway conforms (adjustments to the height of private driveway to ensure smooth transitions to newly paved/sealed road) within the road right-of-way as part of the paving projects. The drainage improvements support the longevity of the pavement segments and the paved driveways conforms may increase safety by enhancing visibility during an evacuation.

2021 Pavement Management Program Update

In order to make the most efficient use of financial resources, TPW utilizes consulting engineers to prepare a Pavement Management Program Update that is consistent with the Metropolitan Transportation Commission's (MTC) protocols. In 2021 the survey included a comprehensive field evaluation of the County maintained road network, thorough review of the inputs to the Streetsaver® modeling system, and presentation of a series of budget scenarios to define the ongoing cost to maintain the County's road network.

Streetsaver® is a software-based tool for analyzing pavement conditions and recommending rehabilitation strategies based on funding levels. The software focuses on providing cost effective recommendations that enhance the overall system Pavement Condition Index (PCI). PCI is a numerical index between 0 and 100, used to classify the condition of a specific section of road pavement. The index includes five classifications, Very Poor (0-24), Poor (25-49), Good/Fair (50-69), Very Good (70-89) and Excellent (90-100). In general, asphalt pavement deteriorates over time by both traffic loading and weathering. It is recommended that 20% of the budget be allocated to preventative maintenance treatments such as slurry seals or crack seal. The remaining budget is programmed for more expensive asphalt overlays and reconstruction.

The 2021 survey concluded that recently completed maintenance work combined with the input adjustments to Streetsaver,® resulted in an 8 point increase in the County's overall network (PCI) since 2012 from 44 to 52 (See Attachment C - County Overall Pavement Condition). A more detailed review of the data reveals that our Primary Road Network, consisting of the County's Minor Arterials and Major Collectors, is in generally good condition with an average PCI of 76. In contrast, the minor collectors and local roads are generally in poor to very poor condition, with PCIs of 55 and 39, respectively.

In addition, the inputs and decision tree in Streetsaver® have been reviewed and updated to reflect proper roadway classifications, realistic and regionally appropriate pavement treatments, current unit prices based on recent contracts in our area, and more reasonable and achievable treatment frequencies. With updated data this report provides an accurate assessment of the funding commitments over the next ten years to achieve the following outcomes.

Increase System PCI to 70 - \$830M over the next 10 years, or \$83M annually

Increase System PCI to 55 - \$372M over the next 10 years, or \$37.2M annually

Maintain System PCI at current level - \$243M over next 10 years, or \$24.3M annually

The 2014 Long Term Roads Plan stated that "without a minimal annual investment of \$20 million per year, the entire network will continue to decline, creating long-term economic costs". The updated minimal investment required to prevent further road network decline over the next ten years is \$24.3M annually. Given the Board's current annual allocation toward pavement preservation of \$20M, in discretionary funding and SB 1 revenues, to achieve this the annual allocation would need to increase by an additional \$4.3M.

In addition, this report offers staff the ability to run and evaluate financial scenarios to discuss with the Long-Term Road Ad Hoc Committee to refine and develop a long-term strategy (Attachment D - Annual Pavement Condition By Functional Class).

Prior Board Actions:

5/25/21 Board approved 2022/2023 Pavement Preservation Program and Tier 2 PG&E Settlement Funds List of Projects;

12/15/20 Board approved Allocation of Pacific Gas and Electric Settlement Funds for Transportation, Utilities Undergrounding, Communications, Safety, and Preparedness Infrastructure Investments;

5/21/19 Board approved 2-year 2019/2020 Pavement Preservation Program;

9/26/17 Board approved 2-year 2018/2019 Pavement Preservation Program;

6/14/16: Board approved 2017 Pavement Preservation Program of projects

3/17/15: Board approved the 2015 and 2016 Pavement Program of projects

10/28/14: Board adopted the Long-Term Road Plan report.

3/25/14: Board approved the 2014 Pavement Preservation Program funded with \$9.8 Million allocation.

FISCAL SUMMARY

Narrative Explanation of Fiscal Impacts:

This Board Item is informational only and there are no associated fiscal impacts. Pavement Preservation contributions from the Board of Supervisors as well as corresponding expenditures are included in annual budget recommendations.

Narrative Explanation of Staffing Impacts (If Required):

None.

Attachments:

Attachment A - Pavement Preservation Program 2012/23

Attachment B - 2012 - 2023 Pavement Preservation Cumulative Totals

Attachment C - County Overall Pavement Condition

Attachment D - Annual Pavement Condition by Functional Class

Attachment E - County Comparison of General Fund Contribution

Attachment F - PowerPoint Presentation

Related Items "On File" with the Clerk of the Board:

2014 Road Ahead Report