

Agenda Item C.1 DISCUSSION/ACTION ITEM Meeting Date: November 5, 2020

- TO: Mayor and Councilmembers
- **FROM:** Charles W. Ebeling, Director of Public Works
- **CONTACT:** James Campero, Deputy Public Works Director
- **SUBJECT:** Pavement Management Program (PMP) Update and 2020/2021 Pavement Rehabilitation Project Priority List

RECOMMENDATION:

- A. Receive an update to the Pavement Management Program (PMP); and
- B. Approve the proposed paving priority list and direct staff to proceed with design for the combined 2020/2021 Pavement Rehabilitation Project.

BACKGROUND:

The City of Goleta owns approximately 85 centerline miles of roadways, which consist of paved surfaces primarily for vehicular traffic including cars, bicycles, buses and trucks. Pedestrians also use portions of the paved surfaces at intersections and when traveling along roadways without sidewalks. Roadways also consist of medians, curb, gutter and sidewalk, landscaped areas and traffic control devices such as traffic signs and signals. The City of Goleta's paved roadway surface, typically asphalt concrete, has a replacement value of \$221 million, making just the pavement itself the most valuable asset the City owns. To maintain this asset, the City uses a Pavement Management Program (PMP). The PMP consists of tracking the condition of the pavement and, based on the condition, developing periodic pavement maintenance activities and projects. Pavement maintenance ranges from pothole repair and crack sealing to slurry seals, overlays and reconstructions.

The primary purpose of the PMP is to maintain safe roadways in good condition while spending taxpayer funds as efficiently as possible. Underspending on maintenance increases safety concerns and, ultimately, costs will be significantly higher when the roadways receive maintenance. When regular maintenance has not been performed, paved surfaces will need to be reconstructed. The reconstruction of a roadway will typically cost several times that of the cost of having performed regular maintenance over a period of years. As will be further discussed in this report below, the PMP is based on creating a pavement condition index (PCI) of roadways segments and for the system as a whole. Typically, most public agencies that own roadways strive to have the system index

in the low to mid 70s on a scale of 0 to 100. The City of Goleta should strive to plan pavement maintenance using a PMP and budget enough to maintain the PCI goal set by the City Council, when adequate funds are available. Ultimately, the City needs to update the PMP every 2 to 3 years and consistently deliver pavement maintenance projects. The pavement maintenance projects should be based on the analytical approach using the PMP system.

As discussed with the City Council over the last two years or so, the Department of Public Works is in the process of updating and reorganizing its approach to many areas of its responsibilities and services. The Department has updated the PMP and is proposing a pavement rehabilitation project, as is further discussed herein. To prepare for this report, a review of past pavement maintenance practices and projects was performed. The review was informal in nature and consisted of reviewing pavement maintenance projects and reports back to Fiscal Year 2013/14. During that time, several pavement maintenance projects were completed by the City, including the four projects listed below as examples of work completed (amounts shown are representative of construction costs only specific to that project):

- Fiscal Year 2013/14 Pavement Rehabilitation Project Slurry Seal 42 Street Segments - \$312,050
- Fiscal Year 2014/15 Pavement Rehabilitation Project Slurry Seal 14 Street Segments - \$99,072
- Fiscal Year 2016/17 Pavement Rehabilitation Project Slurry Seal and Overlays on 12 Street Segments \$3,586,019
- Fiscal Year 2017/18 Pavement Rehabilitation Project Pavement Reconstruction Cathedral Oaks Road from Fairview Road to Los Carneros Road \$1,947,031

In addition to the four projects listed above, additional pavement rehabilitation work was included in various maintenance and capital improvement projects. The following table summarizes the actual dollars spent each fiscal year since FY 2013/14 through FY 19/20. Given the timing of pavement preparation and start and finish of pavement projects, some expenditures were experienced in the following fiscal year. For example, the FY 2016/17 Pavement Rehabilitation Project was combined with FY 2015/16 and the majority of work was completed in FY 2017/18.

FY 13/14		FY 14/15	FY 15/16	FY 16/17	FY 17/18	FY 18/19	FY 19/20	
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Total
\$	947,997	\$ 639,944	\$296,014	\$368,250	\$6,259,646	\$ 2,138,623	\$ 209,215	\$ 10,859,689

During that same period, the Pavement Management Program was updated three times and on May 2, 2017 a Five-Year Pavement Rehabilitation Program was presented to the City Council. The Five-Year Pavement Rehabilitation Program was a recommendation to the City Council for setting annual budget amounts. At that time City Council approved a multi-level Pavement Condition Index (PCI) approach of 70 for arterials, 67 for collectors, and 65 for residential streets, however a significant increase in the PMP budget was required in order to meet and maintain the proposed PCI levels identified. Ultimately, the budgets were impacted by fluctuations in Measure A and Gas Tax revenues and available General Fund. These are the funds that are typically used by the City for pavement maintenance projects. Details of annual budgets for pavement maintenance including five-year strategies based on known funding trends have been presented during the City Budget Workshops.

In addition to the pavement rehabilitation projects, the City also budgets money under the street maintenance program which also includes street maintenance activities such as concrete repairs, sidewalk grinding to remove trip hazards, pavement pothole repairs, and several other street maintenance related items. In fiscal year 2019/20 the City spent approximately \$1.4 million on the street maintenance program, of that about \$210,000 was spent and another \$3 million was budgeted for the pavement rehabilitation project. This street maintenance program budget accounted for approximately 15 percent of the City's overall budget. In fiscal year 2020/21 the City budgeted approximately \$3.5 million for the street maintenance program, including about \$1.7 million budgeted for the pavement rehabilitation. This accounted for approximately 10 percent of the City's overall budget for fiscal year 2020/21.

The City has also used budgeted pavement maintenance funds for portions of capital improvement projects in the past. The funds were used for pavement work that was included in the project. This occurred most recently for the Hollister Class I Bike Path Project and the Old Town Sidewalks Project. Funding was used for the project improvements as well as the associated pavement replacement work. In addition to pavement rehabilitation projects and capital improvement projects with pavement work, the Department of Public Works continues to perform crack sealing and the repair of potholes on an as needed basis. The Department has also overlayed short segments of roadways as interim repairs when necessary. For example, a portion of Los Carneros Way was overlayed in September of 2019. The overlay project addressed citizen concerns regarding the condition of the roadway. While crack sealing, pothole repair, short overlays and pavement work with projects all help to maintain the City's paved roadways, these actions may not have a significant impact on the PMP condition index goal the City has set because other pavement segments may be in poorer condition and therefore significantly impact the index when they are addressed.

DISCUSSION:

In general, the City should perform a complete citywide roadway evaluation every 2-3 years to keep the roadway network current and track status of the recommendations and proposed scenarios of prior PMP evaluations and reports. The evaluation includes inspecting every roadway throughout the City, updating the City's roadway database network, and producing a PMP summary report with recommended treatments and budget scenarios. On September 17, 2019, City Council authorized the City's roadway network. In addition to providing an evaluation of the City's roadway network, PEI's

amendment also included a proposal to provide design for the City's annual pavement rehabilitation project.

PEI completed evaluation of the citywide roadway network and produced a final PMP report summarizing the findings of the evaluation and PMP recommendations. The full PMP report is available electronically for review upon request by contacting the Public Works Department. As shown in the attached presentation and the PMP report, the existing overall Citywide PCI is 62. The report identified the following four different budget scenarios for the Annual Pavement Rehabilitation Project over a five-year period:

- Scenario 1: Budget needed to meet Council goal of Arterial PCI 70, Collector PCI 67, Residential PCI 65 = \$5.8M/yr.
- Scenario 2: Current Budget/Budget needed to maintain overall PCI of 63 = Approx. \$4.7M/yr.
- Scenario 3: Baseline budget of \$2.5M/yr.
- Scenario 4: Zero-dollar budget

This information is shown in graph form in the presentation and shows the drastic differences between the scenarios. The baseline budget used in the report was for a total of \$2.5 million per year for the Annual Pavement Rehabilitation Projects which represents the annual average of new budget programmed, however a budget of \$5.8 million per year is needed to meet the PCI goals previously established by City Council. The annual \$5.8 million does not include future year inflation or increased construction costs. Based on the PMP report, the PCI will drop to 57 within the five-year period if we continue with the current budget allocation. Additionally, the deferred maintenance, or backlog of roadway improvement needs, will increase to \$60.8 million over that same five-year period if we continue with the current budget allocation. As the PCI drops and the deferred maintenance costs rise it will be very difficult and costly to raise the PCI back up to the PCI goals established by City Council.

The PMP report and City database provide important information and are critical planning tools to assist staff in establishing a list of priority roadways to be included in the City's annual pavement rehabilitation projects. In addition to the PMP recommendations, the paving priority list is developed based on public input and staff's experience and understanding of the City roadway network. The proposed priority list is shown in Attachment 1 and includes Cathedral Oaks Road, Glen Annie Road, Storke Road, Calle Real, Hollister Avenue, Kellogg Avenue, and various collector and residential roadways. The estimated combined cost of the priority list is \$6 million. Staff is proposing to design all of the roadways included in the priority list. After design is complete staff would include in the final construction bid package as many of the roadways on the list, in order of priority, as funding allows.

In the most current two-year budget plan, approximately \$2.5 million per year was budgeted for the pavement rehabilitation project from various funding sources. The City re-evaluated and revised the overall City budget earlier this year due to the COVID-19 situation and the associated fiscal impacts. The budget revisions included a reduction in the General Fund portion of the paving project for Fiscal Year 2019/20 and Fiscal Year 2020/21 in the amount of approximately \$730,000 per year. The City did not complete the Fiscal Year 2019/20 pavement rehabilitation project because staff were awaiting the results of the pavement evaluation report and there was not sufficient time to complete the project given the roadway selection process, a shortage in staffing, and the uncertainty associated with the unprecedented COVID-19 pandemic. City staff are proposing to combine the pavement carryover budget from fiscal year 2019/20 with the fiscal year 2020/21 pavement budget and construct a combined two-year pavement rehabilitation project. The revised combined project construction budget for fiscal year 2019/20 and 2020/21, is approximately \$4.69 million. Therefore, staff is proposing to initiate design based on the revised two-year budget and target construction in Summer 2021.

All of the roadways included in the priority list shown in Attachment 1 are in poor shape and in need of significant rehabilitation or full roadway reconstruction. The top two priority roadway segments are on Cathedral Oaks Road and include the segments from Calle Real to Winchester Canyon Road and Glen Annie Road to Alameda Avenue. At this time, staff are proposing to perform an interim repair on the segment from Calle Real to Winchester Canyon Road in-lieu of the full roadway reconstruction needed for the roadway. This interim repair will be further developed during design and is currently being proposed due to the pending Cathedral Oaks Crib Wall Repair Project and the existing subgrade and embankment issues. A majority of the Cathedral Oaks Road corridor is in poor shape and in need of full roadway reconstruction, however it is very costly to improve the corridor and rough costs are estimated at over \$15 million dollars as shown in Attachment 2.

The PMP is only a planning tool used during the conceptual design phase of the annual pavement rehabilitation projects to help establish the priority list for the design phase of the project. Once the priority list is established and approved by City Council then the design phase typically takes another 3 months to complete. This is followed by another 2-3 months to advertise for construction bids, including an agenda item for authority to advertise and a standard 30-day advertising period. Lastly, it typically takes another 2-3 months to award the project and start construction, including the construction management (CM) consultant selection process and another agenda item to award a CM agreement and a construction contract. This is a lengthy and rigorous annual process required for the annual pavement rehabilitation projects and staff is recommending Council approve the proposed paving priority list and direct staff to proceed with the design for the combined 2020/2021 Pavement Rehabilitation Project.

FISCAL IMPACTS:

Current Project

The 2020/2021 Pavement Rehabilitation Project is funded by various sources including Gas Tax, SB1 Road Maintenance and Rehabilitation Account (RMRA), Local Surface Transportation Program (LSTP), and Measure A funding. The General Fund portion was temporarily reduced from the project budget for fiscal years 2019/20 and FY 2020/21 due to the impacts of the COVID-19 pandemic.

The table below summarizes the adopted budget for FY 2020/21 and estimated carryover budget from FY 2019/20 for the proposed 2020/2021 Pavement Management Rehabilitation Project.

Fund Type	Account	FY 2019/20 Budget*	FY 2020/21 Budget	Total
General Fund	101-50-5800-51073	\$ 425,342	\$ 0	\$ 425,342
Gas Tax	201-50-5800-51073	\$ 1,505,619	\$ 740,000	\$ 2,245,619
RMRA	203-50-5800-51073	\$ 535,000	\$ 563,000	\$ 1,098,000
Measure A	205-50-5800-51073	\$ 386,250	\$ 300,000	\$ 686,250
LSTP	306-50-5800-51062	\$ 118,270	\$ 116,500	\$ 234,770
	Total	\$ 2,970,481	\$ 1,719,500	\$ 4,689,981

*Unencumbered Amount

Future Projects and PCI Goals

The existing annual budget for pavement maintenance is \$2.5 million per year. To achieve the PCI goals discussed above, an annual commitment of \$5.8 million per year over a 5-year period would be needed. This would be an increase of \$3.3 million per year or \$16.5 million total over the 5 years. With the \$16.5 million increase, the City would need to budget a total of \$29 million over that 5-year period. This does not include increases to construction costs and inflation.

The City's current unassigned fund balance in the General Fund for one-time use is currently approximately \$7.8 million. With the multitude of priorities and needs facing the City, it would not be prudent to use all of these funds to address the ongoing needs of the PMP, nor would it be sufficient to achieve the PCI goals. Given the ongoing funding required to meet the PCI goals, a different approach needs to be taken in identifying dedicated revenue streams or alternative financing options. One option is to consider reprogramming the annual \$776,000 General Fund payment related to the DOF settlement agreement. Once the DOF settlement payment is paid off by the end of FY 24/25, the annual \$776,000 may be available for programming and could be used as additional funding for the pavement program or utilized for debt financing and serve as a revenue stream for annual debt service payments. However, rather than consider this option on its own, staff recommends that Council consider costs of the long-term needs of the PMP alongside the costs

of other needs and commitments facing the City in order to ascertain which revenue enhancing efforts to pursue and which debt financing options may best fit. Further information about these options will be presented to Council during a workshop on December 10, 2020.

ALTERNATIVES:

Council could elect not to approve the priority list and not direct staff to proceed with the design of the 2020/2021 Pavement Rehabilitation Project. Doing so would delay the project schedule and construction.

Reviewed By:

Legal Review By:

City Attorney

Approved By:

Kristine Schmidt

Assistant City Manager

Michael Jenkins

ere

Michelle Greene City Manager

ATTACHMENTS:

- 1. 2020/2021 Pavement Rehabilitation Project Priority List
- 2. Cathedral Oaks Corridor Cost Summary
- 3. Presentation

ATTACHMENT 1

2020/2021 Pavement Rehabilitation Project Priority List

CITY OF GOLETA 2020/2021 PAVEMENT REHABILITATION PROJECT - PRIORITY LIST



<u>PRIORITY</u>	ROADWAYS	<u>LIMITS</u>	ES	TIMATE	TREATMENT
1	Cathedral Oaks Rd	Calle Real to Winchester Canyon Rd	\$	750,000 *	6" Grind / Overlay & Pavement Repairs
2	Cathedral Oaks Rd	Glen Annie Rd to Alameda Ave	\$ 1	1,000,000	Reconstruct Roadway
3	Glen Annie Rd	Highway 101 to Cathedral Oaks Rd	\$	650,000	6" Grind / Overlay
4	Storke Rd	Hollister Ave to Bollay Dr	\$	700,000	8" Grind / Overlay
5	Calle Real	Glen Annie Rd to Sonoma Dr	\$	700,000	Reconstruct Roadway
6	Coloma Dr Forest Dr	Carlo Dr to Vega Dr Limits to Evergreen Dr	\$ \$	150,000 150,000	2" Grind / Overlay & Pavement Repairs
7	Evergreen Dr Forest Dr Hillview Dr	Brandon Ave to Cathedral Oaks Rd Limits to Evergreen Dr Limits to Evergreen Dr	\$ \$ \$	650,000 200,000 150,000	2" Grind / Overlay & Pavement Repairs
8	Hollister Ave	Kinman Ave to Kellogg Ave	\$	400,000	Reconstruct Roadway
9	Kellogg Ave	Hollister Ave to Kellogg Way	\$	500,000	Reconstruct Roadway
		TOTAL	\$ (6,000,000	
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* Full roadway reconstruction needed. Interim repair proposed now until Cathedral Oaks Road Cribwall Repair is completed.

ATTACHMENT 2

Cathedral Oaks Corridor Cost Summary

CITY OF GOLETA CATHEDRAL OAKS CORRIDOR COST ESTIMATE AND MAP



SEGMENT	LIMITS	AREA	ESTIMATE	TREATMENT
1	Calle Real to Winchester Canyon Rd	95,000 SF	\$ 1,400,000	Full Roadway Reconstruction
2	Winchester Canyon Rd to Evergreen Dr	290,000 SF	\$ 4,250,000	Full Roadway Reconstruction
3	Evergreen Dr to Alameda Ave	125,000 SF	\$ 1,850,000	Remove and Replace 6" of Roadway Pavement
4	Alameda Ave to Glen Annie Rd	100,000 SF	\$ 1,200,000	Full Roadway Reconstruction
5	Glen Annie Rd to PCC Bridge Deck	250,000 SF	\$ 3,700,000	Full Roadway Reconstruction
6	Los Carneros Rd to West of Carlo Dr	200,000 SF	<u>\$ 2,800,000</u>	Full Roadway Reconstruction
		TOTAL	\$ 15,200,000	

ATTACHMENT 3

PowerPoint Presentation PMP update and 2020/21 Pavement Rehabilitation Project Priority List



Pavement Management Program (PMP) Update And 2020/2021 Pavement Rehabilitation Project November 5, 2020

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PMP Update and 2020/2021 Pavement Rehabilitation Project

PMP PROCESS

- 1. Select paving consultant and award agreement.
- 2. Inspect and rate all City roadways (every 2-3 years).
- 3. Enter data info into StreetSaver database.
- 4. Update info and construction costs.
- 5. Run scenarios and prepare budget/PCI report.

PMP Update and 2020/2021 Pavement Rehabilitation Project

City of Goleta System Data

- o System Size
 - 84.93 centerline miles
 - 17,406,455 square feet of pavement
- o Systemwide average weighted PCI of 62
- o Replacement value of \$221,100,000

PMP Update and 2020/2021 Pavement Rehabilitation Project

Maintained Road System

Functional Classification	Centerline Miles	Lane Miles	Percent of System	2020 Average PCI	Average PCI Goal
Arterial	25.70	67.74	35.3%	66	70
Collector	16.95	34.87	19.1%	58	67
Residential	42.28	84.68	45.6%	60	65
Totals	84.93	187.29	100%	62	67

PMP Update and 2020/2021 Pavement Rehabilitation Project



PMP Update and 2020/2021 Pavement Rehabilitation Project



PMP Update and 2020/2021 Pavement Rehabilitation Project



Scenario 1 - 5 Year Art 70, Col 67, Res 65

PMP Update and 2020/2021 Pavement Rehabilitation Project



PMP Update and 2020/2021 Pavement Rehabilitation Project



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PMP Update and 2020/2021 Pavement Rehabilitation Project

CITY OF GOLETA CATHEDRAL OAKS CORRIDOR COST ESTIMATE AND MAP



SEGMENT	LIMITS	AREA	ESTIMATE	TREATMENT
1	Calle Real to Winchester Canyon Rd	95,000 SF	\$ 1,400,000	Full Roadway Reconstruction
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5	Glen Annie Rd to PCC Bridge Deck	250,000 SF	\$ 3,700,000	Full Roadway Reconstruction
6	Los Carneros Rd to West of Carlo Dr	200,000 SF	\$ 2,800,000	Full Roadway Reconstruction
		TOTAL	\$ 15,200,000	22

PMP Update and 2020/2021 Pavement Rehabilitation Project

PMP UPDATE QUESTIONS?

PMP Update and 2020/2021 Pavement Rehabilitation Project 2020/21 Pavement Rehabilitation Project

- o Priority list based on the following:
 - PMP recommendations
 - Public input
 - Staff's experience & understanding of roadways
 - City Council

PMP Update and 2020/2021 Pavement Rehabilitation Project 2020/21 Pavement Rehabilitation Project

- o Annual Project delivery process:
 - Consultant selection & <u>award design agreement</u> (3 months)
 - Preliminary design & <u>establish priority list</u> (3 months)
 - Staff and consultant finalize design (3 months)
 - Advertise for construction bids (2-3 months)
 - Award and start construction (2-3 months)
 - Construction and <u>Notice of Completion</u> (3-4 months)

PMP Update and 2020/2021 Pavement Rehabilitation Project





PMP Update and 2020/2021 Pavement Rehabilitation Project

PRIORITY	ROADWAYS	LIMITS	ES	TIMATE	TREATMENT
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PMP Update and 2020/2021 Pavement Rehabilitation Project

Recommendations:

- Receive an Update to the Pavement Management Program (PMP).
- Approve the Proposed Paving Priority List and Direct Staff to Proceed with Design for a combined 2020/2021 Pavement Rehabilitation Project.