

City Council Memorandum

City of Arts & Innovation

TO: HONORABLE MAYOR AND CITY COUNCIL DATE: DECEMBER 6, 2022

FROM: PUBLIC WORKS DEPARTMENT WARDS: ALL

SUBJECT: MEASURE Z – PAVEMENT MANAGEMENT PROGRAM AND STREET FUNDING – SUPPLEMENTAL APPROPRIATION

ISSUES:

Receive an update on the Pavement Management Program and consider authorizing a \$3,500,000 supplemental appropriation from Measure Z funds to improve City streets.

RECOMMENDATIONS:

That the City Council:

1. Receive and file an update on the Pavement Management Program; and
2. With at least five affirmative votes, authorize the Chief Financial Officer, or designee, to record a supplemental appropriation from Measure Z unallocated reserves in the amount of \$3,500,000 to the Measure Z Capital Fund, Pavement Rehab/Pedestrian Facilities Improvements Project.

BACKGROUND:

The Public Works Department has engaged the Budget Engagement Commission (BEC) and City Council during the past five years to provide Pavement Management Program (PMP) updates, request Measure Z supplemental appropriations, and detail the City’s investment to address paving and maintenance needs. Table 1 includes Measure Z funding allocations and City Council actions supporting the Pavement Management Program.

Table 1: Measure Z Pavement Management Program Funding & City Council Actions

Date	Action
5/2017	City Council approved a 5-year spending plan for Measure Z. The plan included \$2,875,000 in annual funding for streets and road rehabilitation.
2/2019	The BEC received a report on the PMP and recommended that City Council allocate additional funding for roadway paving and maintenance

4/2019	City Council approved an annual Measure Z supplemental appropriation of \$1.5 million for the Pavement Management Program through FY 2022-23.
5/2019	City Council approved a \$3.5 million supplemental appropriation for the PMP and directed the Public Works and Finance Departments to return to City Council each year through FY 2022-23 to provide an annual progress report on pavement conditions and assessment of finances. The annual reports will consider appropriations of \$3.5 million for the continued support of the PMP.
10/2020	City Council approved a \$3.5 million appropriation for the PMP for FY 2020-21
11/2021	City Council approved a \$3.5 million appropriation for the PMP for FY 2021-22
5/2022	City Council approved an \$8 million annual appropriation with the adoption of FY 2022-24 Budget
9/2022	City Council approved extending the paving moratorium from 3 to 5 years

DISCUSSION:

In 2017 the Public Works Department completed a comprehensive pavement condition assessment of 875 centerline miles of roads and alleys and determined that the City’s overall Pavement Condition Index (PCI) score is 61, with a newly paved street corresponding to a PCI of 100. In 2021, a five-year program was approved to reassess the City’s roadway system (approximately 175 miles annually) to update the respective PCI scores and systematically recommend preventative and preservation strategies throughout the City. Based on recent survey data, the City’s overall PCI score has dropped to 58. Staff meets annually with respective Councilmembers and the Mayor to share updates, recommend paving and maintenance projects, share strategies to maximize roadway investment, and discuss priority paving needs.

Table 2 provides a five-year PCI and funding analysis comparing 2018 to 2022 that considers the average annual budget, corresponding PCI, and the percentage of roads rated as “Poor” and “Very Poor”. It is important to account for roads rated as “Poor” and “Very Poor” as once they exceed 20% of the total network, the ability to adequately fund the pavement management program and repair deteriorating roads becomes extremely difficult. Roads in the “Poor” and “Very Poor” categories require repaving and/or reconstruction and per the Federal Highway Administration, and it can cost six to ten times more to repave a street as it does to preserve it. For perspective, the cost to repave one mile on an arterial roadway is approximately \$1.8 million; \$650,000 to repave one mile of a local/collector road; and approximately \$50,000 to slurry seal one mile of a local residential street. As anticipated by the 2018 study, the City’s overall PCI dropped three points as the PMP has not operated with the recommended annual budget to maintain the PCI of 61.

Table 2: 5-Year PCI and Funding Analysis

2018 (Overall PCI of 61)			2022 (Overall PCI of 58)		
Annual Budget (Million)	PCI	“Poor” and “Very Poor” Roads (%)	Annual Budget (Million)	PCI	“Poor” and “Very Poor” Roads (%)
13.5	57	26.7	24.0	56	29.3
15.0	57	24.4	25.5	57	28.4
18.5	58	22.9	27.5	58	27.1
24.0	61	18.8	31.5	59	25.1
30.0	63	15.2	37.0	60	23.1
34.5	65	12.7	41.0	61	21.6

Funding

In 2013, the City used bond proceeds backed by the City’s Measure A revenue to secure approximately \$38 million for a three-year maintenance program with an annual debt service payment of \$3 million through 2033. Based on the terms of the agreement, the Finance Department recommended that the Public Works Department consider refinancing the debt in FY 2022/23 to decrease the annual obligation or payoff the debt sooner. Unfortunately, the interest rate has significantly increased, and this is no longer a viable option. Staff will continue working with the Finance Department and consider refinancing when the interest rate is lowered. Staff has aggressively applied for State and federal funding sources and has exhausted the grant funds allotted to the City. Nonetheless, we are tracking grant opportunities through the Infrastructure Investment and Jobs Act to pursue funding to improve road conditions.

Table 3 represents the Condition Index PCI Scoring Rating used to assess the roadway network. Lowering the City’s overall PCI score indicates that a higher percentage of roads will be classified as Fair, Marginal, Poor, and Very Poor and thus would create an increased financial burden as more streets would require paving improvements and preservation treatments. Table 4 reflects the various funding sources and annual budgets which reflect funding levels have exceeded \$20 million although they are not keeping pace with inflation and paving/maintenance demands.

To mitigate some of the impacts to roads, in September 2022, the City Council approved extending the paving moratorium from three to five years to reduce trenching operations on newly paved roads and encourage increased collaboration between utility companies and the City to reduce road repairs. Further, staff is considering City of Anaheim’s Pavement Trench Cut Fee assessed to utility companies and contractors who trench in the roadway and impact a roadway’s ride and useful life. Anaheim’s fee has generated a new funding stream and is allowing the City to recover costs associated with the respective damage to streets. The Public Works Department is also negotiating with SEIU to hire an on-call contractor to help expedite the permanent road repair associated with Riverside Public Utilities (RPU) waterline leak repairs and upgrades. These combined efforts are aimed to preserve our roads in a responsible manner that over time will contribute toward noticeable and positive results.

Table 3: Condition Index Rating and PCI Score

Condition	Pavement Condition Index Score
Very Poor	0-25
Poor	25-40
Marginal	40-50
Fair	50-60
Good	60-70
Very Good	70-85
Excellent	85-100

Table 4: Paving Fund Sources for Fiscal Years 2019-2021 & 2021-23
(Millions of dollars)

Fund Source	FY 2019-20	FY 2021-22	FY 2022-23
Measure A	\$2.4	\$2.0	\$2.4
Gas Tax	\$2.8	\$2.8	\$2.1
SB1 Gas Tax	\$5.4	\$6.4	\$7.2
CDBG Allocation	\$2.6	\$1.2	\$1.9
Measure Z – Base (5 years)	\$2.8	\$2.8	\$2.8
Measure Z – FY 20-23 Increase	\$1.5	\$1.5	\$1.5
Measure Z – Supp. Appropriation	\$3.5	\$3.5	TBD
Measure Z – FY 2022-24 Budget	\$0	\$0	\$8.0
Subtotal	\$21.0	\$20.2	\$25.9*

*Approximately \$1.9 million is allocated to Traffic Engineering Improvements

Based on projected funding levels, staff is recommending \$3.4 million in paving and maintenance preservation projects in each ward in FY 2022-23. Attachment 1 includes a Citywide list of recommended projects which excludes the requested \$3.5 million supplemental appropriation. The selected FY 2022-23 projects are anticipated to be constructed by early 2024 as selected streets need to be field reviewed, designed, and projects awarded and scheduled for construction.

Strategies to Help Preserve City Roads

The Public Works Department is working on a GIS map detailing the streets that have been paved in the past five years as well as planned paving projects. The GIS map would allow elected officials and the public to track progress on projects, encourage collaboration between utility companies and the City on planned street work, and help enforce the City’s pavement moratorium policy. Once completed, staff will work with the IT Department to publish the GIS map for the public’s use. The image below shows a preliminary layout of the GIS interactive map which would track sidewalk improvements, paving projects, and roadway maintenance efforts:

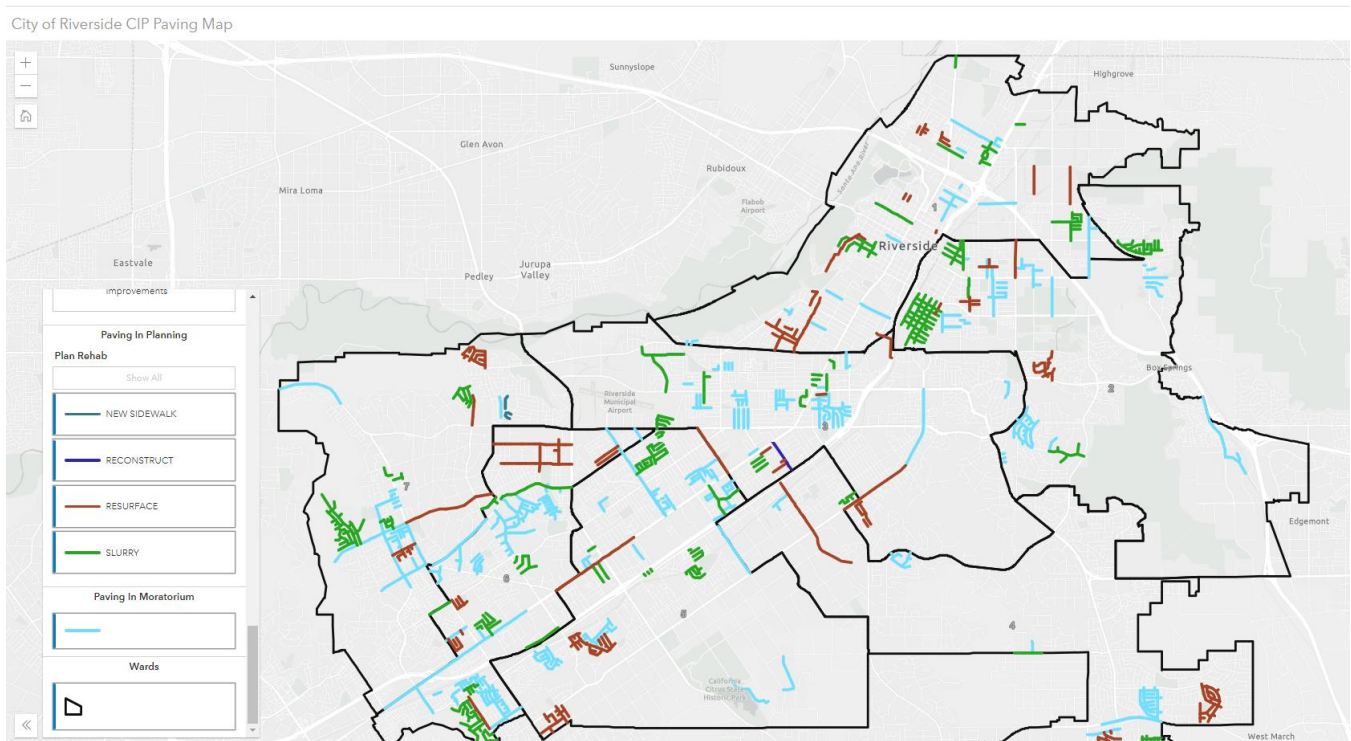


Figure 1 – Interactive GIS Paving, Maintenance, and Sidewalk Map

Extending the paving moratorium from three to five years is also expected to have positive results. Utility companies and contractors doing work on streets within the paving moratorium will be required to provide more extensive repairs to protect roadways. As these repairs are more entailed and costly to complete, it is expected that utility companies will work collaboratively with staff to better plan their projects to reduce impacts on newly paved streets.

The City of Anaheim conducted a comprehensive study to assess the impacts of trenching on the rideability and longevity of roads. Based on the study results, in September 2022, the City of Anaheim adopted a Pavement Cut Trench Fee to better protect their roadways and recover their costs associated with the pavement damage. Table 5 provides the adopted fee schedule on utility companies and contractor conducting trenching and pothole operations.

Table 5 – City of Anaheim Cut Trench Fee Schedule

PCI	Trench or Bore Pit (\$/SF)	Pothole (\$/EA)
> 65	\$8.40	\$69.30
55 to 65	\$11.60	\$95.70
< 55	\$3.60	\$29.70

Anaheim maintains 582 centerline miles and has an overall PCI of 70. Per their staff report (Attachment 2), the City expects to generate approximately \$500,000 annually from the Pavement Trench Cut Fee and those funds would be used to support pavement rehabilitation projects. The Public Works Department plans to engage the Mobility and Infrastructure Committee to share the study’s finding and recommendations to consider a similar study. Using Anaheim’s model and based solely on number of centerline miles, the City of Riverside would expect to generate approximately \$750,000 annually from this new fee.

The Public Works Department supports RPU - Water Division to replace the temporary asphalt patches with permanent repairs within the street and sidewalks. Unfortunately, the City’s paving crew has been unable to keep pace with the temporary repairs and we are negotiating with SEIU to recommend hiring an on-call contractor to address the temporary asphalt patches which recently surpassed 3,000 citywide. When waterlines are repaired, the street receives a temporary “cold” asphalt patch as the surrounding area is damp and it is not practical to require contractors to place hot asphalt immediately after a repair. Therefore, the paving crew comes in after the field conditions are dry and replace the temporary “cold” asphalt patches with hot asphalt to provide a more uniform ride and make the permanent repair. It is imperative that temporary patches be replaced with permanent repairs to limit water intrusion and keep repairs to a minimum, improve the quality of ride for motorists, and reduce 311 calls/requests when temporary patches begin to fail.

Finally, the City is incorporating the PCI data into *Lucity*, pavement management software, which allows us to align our budget with pavement rehabilitation and the respective rehabilitation techniques to help us maximize maintenance projects to best serve the community. Using this recommended approach, the FY 2022-23 budget will support the projects listed in Table 6.

Table 6- FY 2022-23 Citywide Paving and Maintenance Improvement Miles

Roadway Classification	Resurfacing	Slurry
Arterial	2.3 Miles	0
Collector	5.8 Miles	0.6 miles
Minor / Residential	22.1 Miles	38.5 miles
Alleys	0.8 miles (reconstruct)	0
Total	70.1 miles	

The 70.1 miles represent approximately 8% of the City’s total roadways which is a significant figure. If a similar number of roadway miles can be impacted each year, we expect to make a positive difference over time.

The City has made significant financial contributions to improve roadways and the Public Works Department continues to study best practices and programs from other agencies to help preserve our roadway system. In May 2022, the City Council supported additional Measure Z funding for roadway preservation efforts but staff were also requested to return to City Council through FY 2022-23 to consider an additional \$3.5 million Measure Z appropriation to continue addressing paving requests and needs. If additional funding is appropriated, it will be used to account for inflation and the added cost to repave roads.

STRATEGIC PLAN ALIGNMENT:

This item contributes to **Strategic Priority 6 - Infrastructure, Mobility and Connectivity** and **Goal 6.2** – Maintain, protect, and improve assets and infrastructure within the City’s built environment to ensure and enhance reliability, resiliency, sustainability, and facilitate connectivity.

This item aligns with each of the five Cross-Cutting Threads as follows:

1. **Community Trust** – The proposed improvements are part of a more significant endeavor to improve the City’s roadway network and quality of life for residents and visitors. The Public Works Department (Public Works) has provided numerous presentations to the City Council, Transportation Committee, and Budget Engagement Commission as part of the City’s Pavement Management Program. This project delivers the rehabilitation to streets undertaken by Resolution No 23622 adopted by City Council on September 15, 2020.
2. **Equity** – Public Works strives to improve the City’s roadway network to provide safe and reliable transportation to all areas of the City. Additionally, staff meets with each City Councilmember to discuss goals, budgets, recommendations for street improvements, and obtain feedback on the requests received from their constituents. This project encompasses street maintenance in all Wards and includes work within alleys, local, collector, and arterial roadways.
3. **Fiscal Responsibility** – Public Works responsibly manages a variety of funding sources to complete projects included in the City’s Capital Improvement Program. Public Works is a prudent steward of public funds and construction projects are always awarded to the

lowest responsive bidders.

4. **Innovation** –This project utilizes Fiber Reinforced Asphalt Concrete, a synthetic fiber technology used to increase the strength, durability, and performance of a resurfaced street. This project will also utilize an Asphalt Rubber Aggregate Membrane interlay that has proven to extend the life of a street by creating an impenetrable barrier blocking rainwater from penetrating into the subgrade.
5. **Sustainability & Resiliency** – The construction materials specified for these projects are considered best practices in the industry. The use of rubberized and recycled material greatly benefits the environment, reducing wasted storage, providing extra layers of protection, and adding longevity to our resurfaced streets.

FISCAL IMPACT:

The total fiscal impact of this action is \$3,500,000. Upon City Council approval, a supplemental appropriation in the amount of \$3,500,000 will be recorded in the Measure Z Capital Fund, Pavement Rehab/Pedestrian Facilities Improvements Project Account 9902709-470734.

There are sufficient funds in Measure Z unallocated reserves to accommodate this request. With the adoption of the FY 2022-2024 Biennial Budget, the City Council directed the draw-down on Measure Z unallocated reserves for numerous programming purposes. As a result, the Measure Z Spending Plan projects ending unallocated reserves at the end of the five-year plan (FY 2026/27) to be \$6.3 million. An additional \$6.5 million of contingency funding in FY 2020/21 for a Library Infrastructure Grant will be relieved and returned to unallocated reserves because the grant was not awarded to the City.

Prepared by: Gilbert Hernandez, Public Works Director
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availability of funds: Edward Enriquez, Interim Assistant City Manager/Chief Financial Officer/City Treasurer
Approved by: Kris Martinez, Assistant City Manager
Approved as to form: Phaedra A. Norton, City Attorney

Attachments:

1. Fiscal Year 2022-23 List of Planned Paving Projects by Ward
2. City of Anaheim Trench Cut Fee Staff report
3. Measure Z Spending Plan
4. Presentation