



The City of San Diego

Staff Report

DATE ISSUED: 3/1/2024
TO: City Council
FROM: Transportation Department
SUBJECT: Transportation Department Pavement Management Plan

Primary Contact: Maggie McCormick Phone: (619) 527-8031

Secondary Contact: Patrick Hadley Phone: (619) 527-7504

Council District(s): Citywide

OVERVIEW:

The City of San Diego (City) maintains the second largest network of streets and alleys in the State of California with over 6,600 lane miles of street. For over the past decade, San Diego's street maintenance and rehabilitation funding has been insufficient to maintain a Pavement Condition Index (PCI) score of 70 or greater. Deferred maintenance has degraded the City's average street network condition from "Satisfactory" (average PCI score of 71 in 2016) to "Fair" (average PCI score of 63 in 2023) condition. Municipalities typically state a target goal of an average PCI score of 70 or greater.

Transportation Department (Department) analyses determined that to achieve and maintain an average street network PCI of 70 or higher, a total investment of \$1.9 billion over 10 years is needed. Dedicated year-over-year annual investments are required to improve and preserve San Diego's street assets and reduce long-term maintenance (O&M) and rehabilitation (CIP) costs. Hiring of additional City personnel is also needed to accomplish the approximately 760 annual average lane miles target associated with this implementation scenario.

The Department has developed a Pavement Management Plan (PMP), the first of its kind, to summarize the current citywide street network condition and to identify strategic investment needs that will ensure the network is efficiently maintained and improved. The PMP outlines the Department's functions and processes related to pavement management, historic and recent pavement condition assessment information, funding history, funding needs, scenarios for achieving a goal of an average network PCI 70, and implementation considerations including 5-Year Plan

identifying streets targeted for improvement. The 5-Year Plan is intended to inform the public and stakeholders on the specific streets and associated repair activities that will be conducted citywide if funding is identified. The 5-Year Plan is available on the City's website at <https://streets.sandiego.gov/>. The PMP can be found here: <https://www.sandiego.gov/transportation/programs/pavement-management-plan>

PROPOSED ACTIONS:

This item is for information only.

DISCUSSION OF ITEM:

The Department has developed a PMP to summarize the current City-wide street condition and to identify strategic investment needs that will ensure the network is efficiently maintained. It is the first plan of its kind for the City, as the Department aims to proactively identify funding needs and provide a reliable transportation network for the community. The PMP relies on the most recent pavement condition assessment (2023) conducted by the Department to create a comprehensive, data-driven strategy that answers key pavement management questions, including:

- **Current Street Conditions:** What is the current condition of the City's street network? How does this compare to similar municipalities?
- **Maintenance and Repair Strategies:** What maintenance and rehabilitation strategies are utilized by the City and similar municipalities to improve street conditions?
- **Prioritization and Inclusion of Equity in Street Selection Process:** What is the best way to prioritize streets for pavement rehabilitation and maintenance? How will equity be incorporated in that selection?
- **Funding Needs:** What current funding sources are in place and how much funding is needed to improve the City's street network?
- **Funding Strategy:** What is the most cost-effective way to implement a multi-year resurfacing program based on different levels of funding?
- **Optimal Operations:** Are there any options to optimize repair and maintenance operations?
- **Feasibility of In House Paving Program:** What is the cost and feasibility of implementing a City in house paving program?

Pavement Management Within the City of San Diego

The Transportation Department is comprised of a dedicated team of nearly 500 professionals including engineers, planners, equipment operators, electricians, technicians, field crews, and management staff to service the City's extensive public right of way (ROW). There are 110 staff within the Department who are dedicated to maintaining and improving the City's pavement condition, comprised of nine in-house teams that perform pothole repair, mill and paves, trench restoration, and engineering teams that perform planning, design, and construction oversight. The Department manages the single-most requested services City-wide and is frequently notified of street maintenance¹ and rehabilitation² needs through reports on the Get It Done application. In FY2023

¹ For the purposes of this report, "maintenance" is defined as activities that are not part of the Capital Improvement Program, such as crack seal, slurry seal, cape seal, and scrub seal

² For the purposes of this report, "rehabilitation" is defined as Capital Improvement Program activities, such as overlay and reconstruction

alone, more than 408,000 Get It Done requests were submitted City-wide. Nearly 136,000, or 33%, of the requests were received by the Department with 23% of these requests related to street maintenance and rehabilitation needs.

The Department coordinates with other City Departments to design pavement management projects, perform ROW maintenance and improvements, and inspect project installation to provide a functional and viable transportation network throughout the City. The Department coordinates with other asset managing departments such as the Stormwater and Public Utilities Departments as these departments are responsible for the planning of utility improvement projects that could impact the pavement condition during construction. The Department coordinates with Engineering & Capital Projects (ECP) for planning, design and construction oversight of pavement rehabilitation projects such as overlay and reconstruction, as well as paving for other City infrastructure projects. Sustainability and Mobility is developing the Mobility Master Plan which will focus on projects, programs and actions that help make walking, rolling, bicycling, and using transit more convenient, efficient, and affordable. Development Services Department manages private projects that involve paving and coordination with the Department. Combined, these departments support efforts to provide a functional and viable transportation network throughout the City.

Street Network Overview

San Diego has the second largest street network in California, serving over 1.37 million (M) residents and nearly 30M visitors³ annually. The Department maintains, operates, and repairs over 6,600 lane miles of street network and a multitude of other transportation related assets. The Department categorizes streets within the street network according to the following classifications: Prime Arterials, Major Streets, Collector Streets, Local Streets, and Residential Streets. Prime arterials and major streets convey the highest volumes of traffic throughout the City, serving as conduits for travel, tourism, and daily commutes and comprise 6% and 15% of the City network, respectively. Collector streets facilitate the distribution of traffic, preventing congestion on primary routes and enabling smooth access to local streets. Collector streets comprise 12% of the City network. Local streets comprise 5% of the City network and provide essential infrastructure for residents, allowing them to access their homes, schools, and local businesses. Residential streets comprise 52% of the City network and serve housing areas or neighborhoods where the primary purpose is to provide access to residences. Additionally, the City street network includes alleys, bike paths, and walkways which support critical services such as residential parking, waste removal, utility maintenance, and recreation.

The Department is also responsible for approximately 62 miles of unimproved alleys and streets, which are street segments that are part of the City's street network but were not originally built to City Construction Standards. These streets can be paved or unpaved and are costly to improve as they require upgrades other than paving, such as sidewalks and/or utility installation. In 2021, City Council Policy 200-01 was updated to allow City funds to be used to improve unimproved streets and alleys. Prior to this update, unimproved streets and alleys were not prioritized as part of the annual paving prioritization process since these projects typically require extensive work in addition to paving (e.g. grading, utility installation, sidewalk installation, etc.) and there has been no dedicated funding source. The Department will begin requesting dedicated funding for improvement of unimproved streets and alleys starting in the FY2025 budget development process.

Pavement Maintenance and Repair Types

The Department deploys a variety of pavement maintenance and rehabilitation treatment methods to

³ <https://www.sandiego.org/about/industry-research.aspx>

appropriately address the degradation of damaged streets (Figure 1). The lifecycle of pavement can be illustrated as follows: as pavement ages, the surface slowly degrades and the PCI score may decrease due to factors such as weather, traffic loads, and environmental conditions. Preventive maintenance measures for asphalt such as cape seal, scrub seal, and slurry seal may be applied once the street is between 5 and 10 years old in order to seal cracks, restore surface texture, protect against further deterioration, and improve the PCI score. As the pavement continues to age and undergoes further use, more extensive interventions such as overlay may be required as part of standard maintenance and repair. At the end of the pavement life cycle (approximately 30 years for asphalt; and 50 years for concrete), complete reconstruction may become necessary to ensure the structural integrity of the street network.

The choice of specific treatment to a given street segment depends on the severity of deterioration and the desired level of pavement performance. Proactive management of minor cracks and damage through crack sealing, mill and pave efforts, and surface seals are much less expensive treatment methods and can prolong the life of the street by up to eight years before major, more costly repairs are needed.

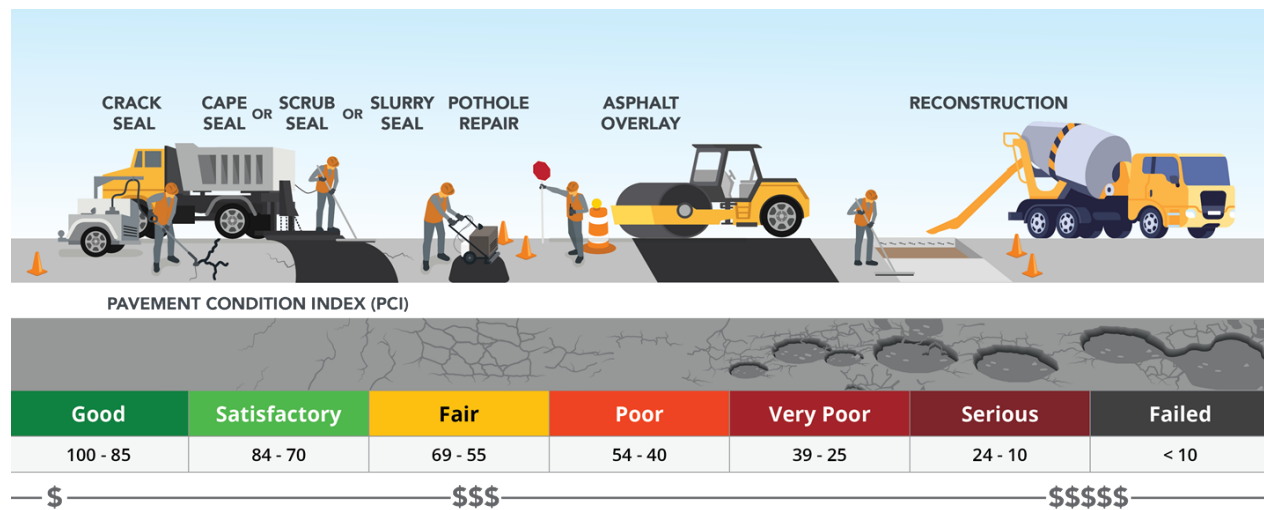


Figure 1. Transportation Department Range of Repair Options and Street Conditions

If the damage to the street is not proactively maintained, pothole repairs, overlay, and reconstruction are required to re-establish street integrity. Limited funding for proactive maintenance and rehabilitation has contributed to a large volume of requests for reactive repairs like pothole patching and spot mill and paves. In FY2023, the pothole repair team patched over 50,000 potholes, but pothole repairs are ongoing and may be a symptom of degraded street conditions.

Street Selection Process

The City’s PCI and other asset information for the street network is housed in Cartegraph, an asset management platform that enables the Department to develop pavement management strategies and recommendations. Pavement strategies and recommendations for street asset management include maintenance (i.e., activities that preserve pavement condition such as crack sealing, slurry and scrub seals, and cape seals) and rehabilitation (i.e., activities that resurface or reconstruct streets such as overlay, full-depth reclamation, and reconstruction).

Cartegraph’s Maintenance and Rehabilitation prioritization process for streets uses PCI to determine which streets are most in need of maintenance and rehabilitation efforts and which treatment is recommended. The Department applies a best value approach within Cartegraph to select streets for maintenance or rehabilitation before they degrade to a point where a more expensive treatment cost is needed. This approach provides the lowest investment needed to increase the PCI. In addition to

PCI, "tie-breaker" criteria (for streets with the same PCI) include prioritizing more frequently traveled street classifications, proximity to freeway on/offramps, schools, and shopping centers, and also considers if a street is part of the National Highway System. Beginning in FY2024, the Department is also incorporating an equity component to the existing criteria, which would consider the streets location within a census tract that is deemed eligible for Community Development Block Grant (CDBG) funds, in a Promise Zone, or located in a Community of Concern identified per the Climate Equity Index (very low, low, or moderate access to opportunity) as part of the prioritization score. Within each street classification category for streets with the same PCI, funding for streets would be allocated to a project in one of these areas first before a street that is not located in a CDBG, Promise Zone, or Community of Concern area.

Unimproved streets and alleys are currently not included in the annual prioritization of pavement maintenance and rehabilitation activities as these projects are often more complex and do not consist solely of paving. However, the Department has developed a prioritization process to rank unimproved street and alley projects and will begin requesting budget for these projects in FY2025. The proposed prioritization criteria consists of the following: number of residents served by street/alley, safety considerations including flooding, conditions limiting public service delivery such as trash collection or accessibility, and proximal location within a census tract that is deemed eligible for Community Development Block Grant (CDBG) funds, in a Promise Zone, or located in a Community of Concern identified per the Climate Equity Index (very low, low, or moderate access to opportunity) as part of the prioritization score.

Inclusion of Equity in Street Selection

In FY2024 the Department worked closely with the City's Department of Race and Equity to incorporate Equity Factors into the street selection process. Equity Factors are a strategic approach used for the purpose of applying an equity lens to the City's operations at the departmental and organizational levels. Informed by the consistent and pervasive force of structural racism, Equity Factors appropriately frame policy, practice, and budget decisions with the goal of addressing racial disparities to produce equitable outcomes. The Equity Factors shown below provide an effective means to explore how equity currently operates within the context of each department's operations, and at a comprehensive citywide level to address the impact in the following areas:

- **Equity in Access:** Includes enhancing access to City services or programs like trash and recycling collection, parks and recreational programs, library services, and keeping our communities safe.
- **Equity in Infrastructure:** Includes addressing disparities in our infrastructure, which includes fixing broken streets and sidewalks, repairing miles of levees, fixing broken pipes, and cleaning our drainage channels. Equity in action includes providing miles of street sweeping annually and ensuring our watersheds and pump stations are working properly.
- **Equity in Communities of Concern:** Includes addressing disparities in Communities of Concern to improve the harmful impact of environmental injustice through a Climate Equity Fund that targets district 4,7,8, and 9 to prevent enduring underinvestment.
- **Equity in Processes:** Includes ensuring our processes like budget decisions and policies are being guided by an inclusive equity lens.

Equity Factors are never in competition with each other, they co-exist and need to be consciously considered as parts of a whole. The introduction of Equity Factors as a strategic approach to equity is provided notably in this PMP in the context of the "Equity in Infrastructure" as part of the street selection process for paving and improvement of unimproved streets and alleys. Applying an equity lens allows for analyzing the City's streets and communities through identified disparities and increases means to determine equity as both an outcome to aim for, and into a practice for how

departments can collaborate, operate, and serve.

2023 Pavement Condition Assessment

From February 2023 to August 2023 a comprehensive pavement condition survey was completed using an automated collection system for City-managed street and pavement assets. The 2023 condition data was processed in accordance with industry standards where each street segment was assigned a PCI score. The PCI scoring scale ranges from zero (failed) to 100 (good) and provides a common language for pavement practitioners to describe and communicate pavement conditions to both technical and non- technical individuals alike. The Department previously collected and reported pavement conditions in FY2011 and FY2015/FY2016 in terms of the Overall Condition Index (OCI). The OCI combined two indexes, PCI and the Ride Condition Index (RCI). The RCI index is challenging to measure for shorter street segments with low speeds and was determined not to be a factor that should be included in decision making for street paving selection. For this PMP and moving forward, the Department reports pavement condition data strictly based on PCI to align with current industry standards.

The City's overall network average PCI score was 63 at the time of the survey, which falls into the "Fair" category of the ASTM (formerly American Society for Testing and Materials) scoring scale. Note that the average PCI score of 63 for the City's street network means that some streets are in better condition ("Satisfactory" or "Good") and some streets are in worse condition ("Poor", "Very Poor", "Serious", or even "Failed") condition. The PCI score has dropped eight points from 71 since the next most recent City street network survey conducted in FY2015/FY2016 (Figure 2).

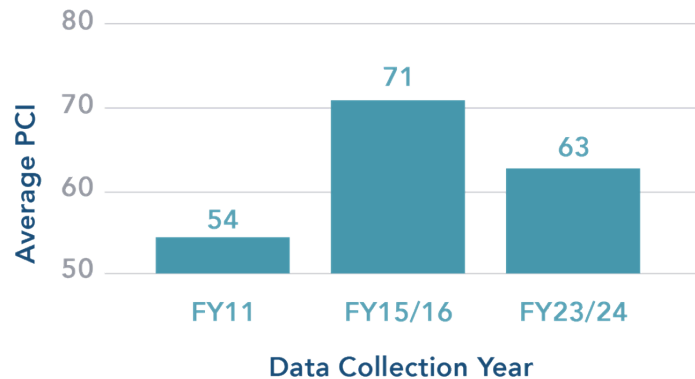


Figure 2. City of San Diego Street Network PCI Over Time

The PCI scale, recent City survey score results, and PCI of 63 condition examples are shown in Figure 3.

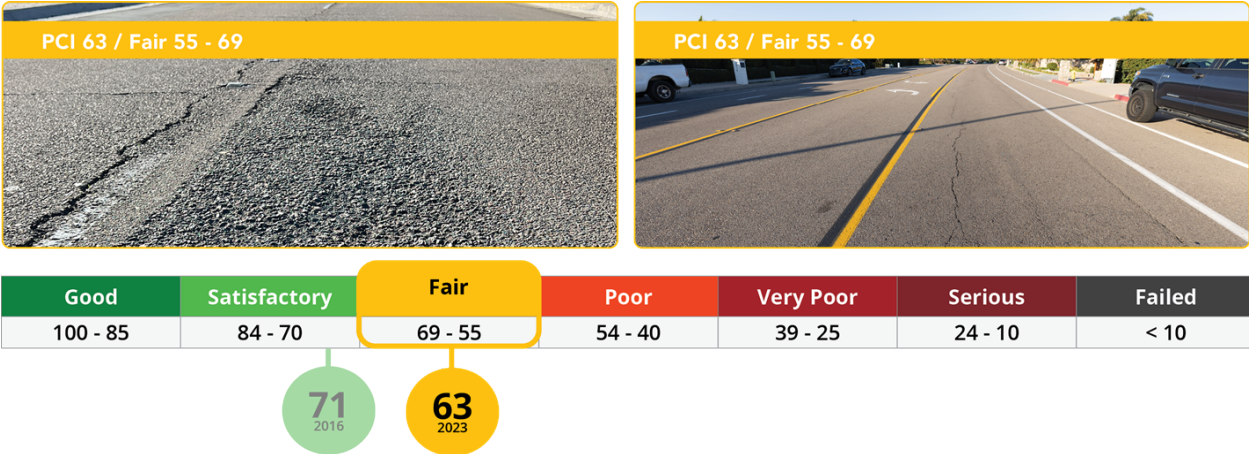


Figure 3. PCI Scale, Recent City Survey Scores, and Street Network Examples

A PCI score of 63 suggests a street that is in a fair condition with signs of low to medium distress. Streets in this condition are considered generally satisfactory but have visible signs of stress and cracking and could benefit from repairs to cracking. The ride quality may be acceptable, but there would be noticeable signs of wear and aging.

Street condition PCI scores vary for the City’s six major street classifications that include Prime, Major, Collector, Local, Residential, and Alleys (Table 1). When broken down by street type, the PCIs of each range from 48 to 70 with alleys (PCI=48) ranking the worst street type followed by major (PCI=61) and prime (PCI=62) streets (Figure 4). Local streets were ranked the highest. Prime and Major streets make up 21% of the classified street network. These two street types are most frequently traveled each day, and the condition of these street types are essential to a functional transportation network.

Table 1: Street Classification Summary

Street Classification	% of Network ¹
Prime	6%
Major	15%
Collector	12%
Local	5%
Residential	52%
Alley	8%

¹Other City street network types not shown: Bike Paths, Unpaved Streets and Walkways

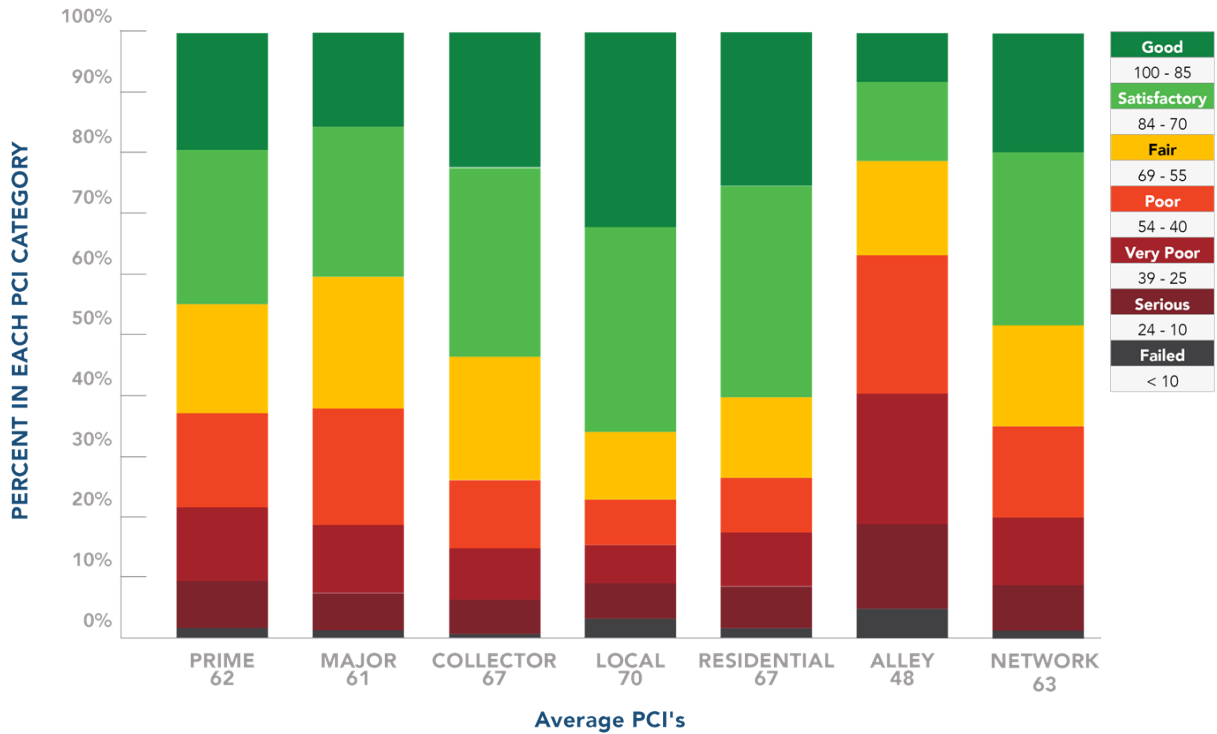


Figure 4. 2023 PCI by Street Classifications

The 2023 assessment indicates that there is not significant disparity in street conditions between Council Districts (CD) which ranged from a PCI of 57 (CD 2) to 69 (CD 5) and all remain within the Fair category (Figure 5).

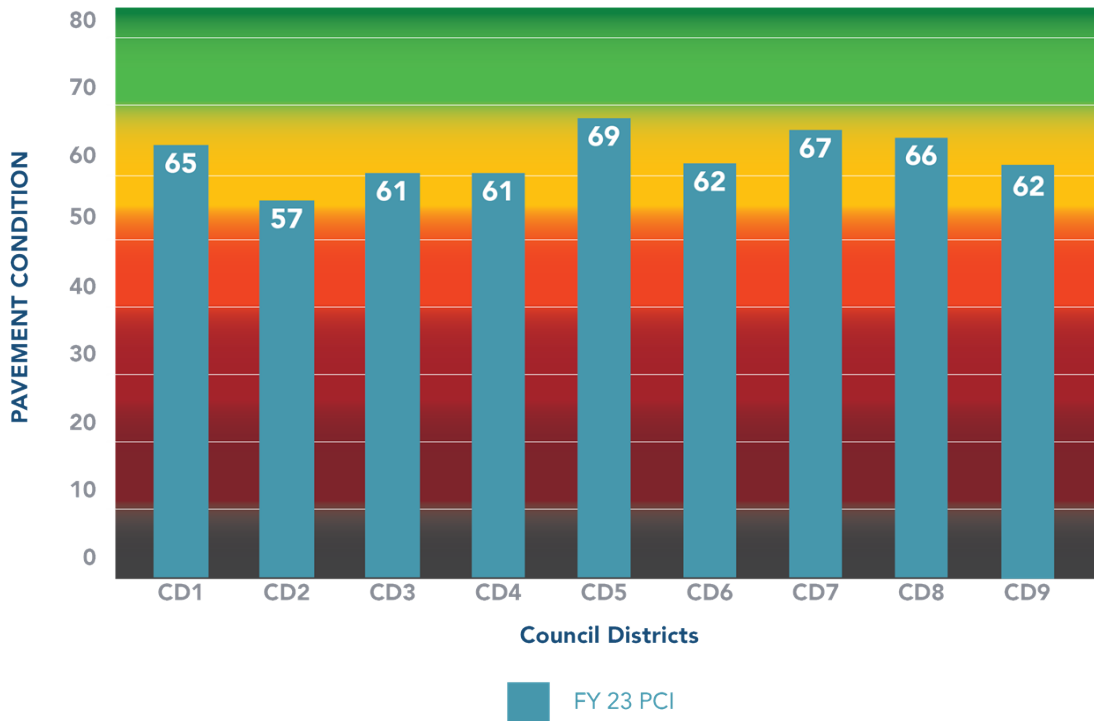


Figure 5. FY2023 Average Area-Weighted Council District PCI

PCI benchmarking was conducted against 13 cities throughout the United States (Figure 6). It should be noted that the benchmarked cities vary in population density or street network size. The

benchmarked cities had an average PCI score of 64.3 (and median PCI of 65). The City’s 2023 network PCI score of 63 ranks below both the average and the median of the 13 cities evaluated. Five of the 13 benchmarked cities currently have average street network PCI greater than or equal to the City’s PCI target of 70.

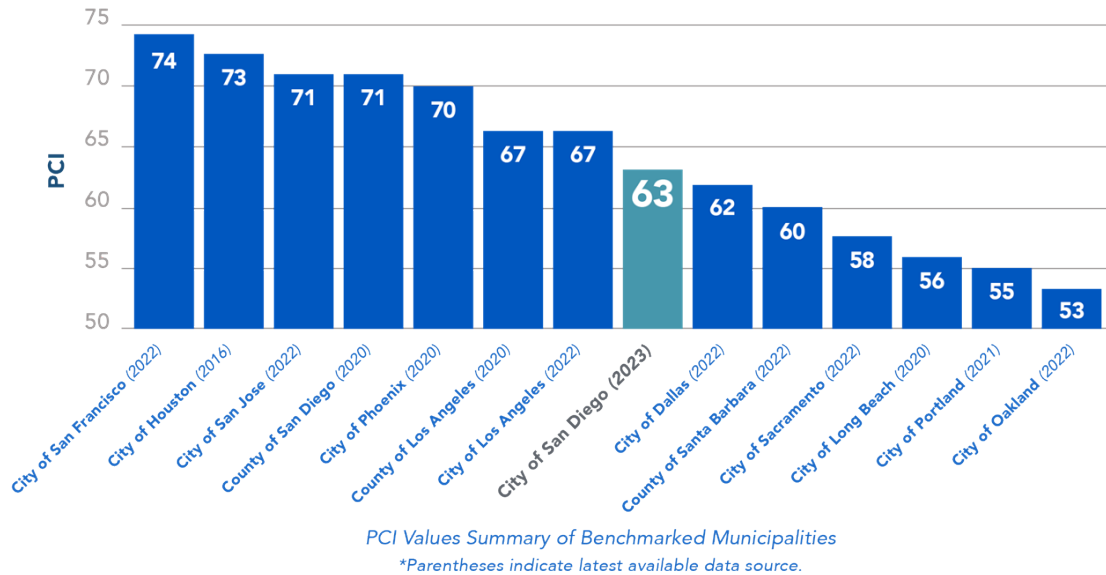


Figure 6. PCI Score Summary of Benchmarked Municipalities

Some notable highlights from the 2023 condition assessment data include:

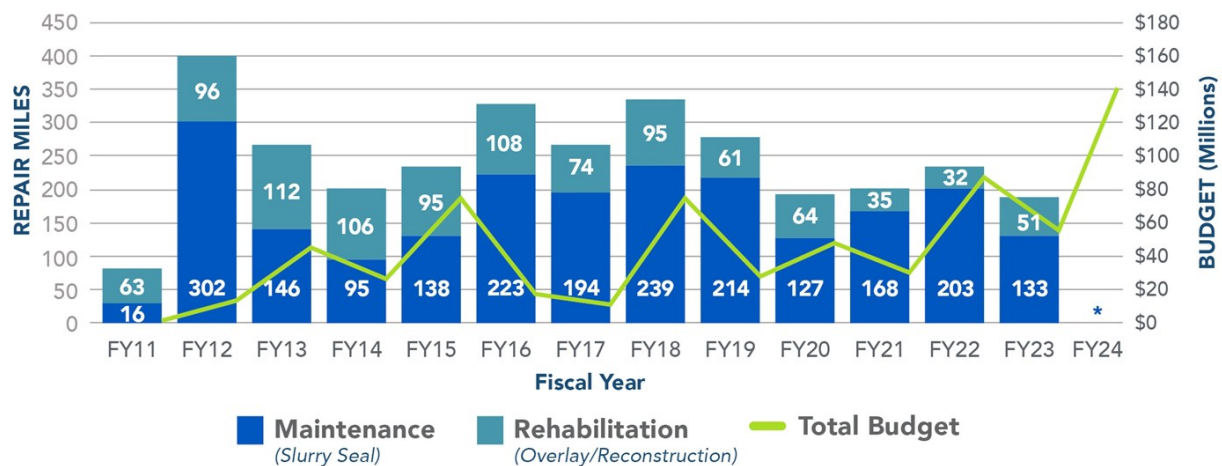
1. The new data allows the City to make strategically informed decisions when prioritizing street segments for rehabilitation, repair, and reconstruction.
2. The PCI score of the City’s street network has decreased since the last assessment conducted in 2016 due to deferred maintenance resulting from a lack of consistent funding for the Department. 35% of the City’s street network has been identified as “Poor”, “Very Poor”, “Serious” and “Failed” conditions.
3. The average PCI within the nine City Council Districts range between 57-69 and are all considered “Fair” condition, indicating that street conditions are relatively consistent throughout the City and do not significantly differentiate by Council District.
4. The City’s overall PCI score ranked 8th out of 13 agencies/municipalities benchmarked as part of this PMP. The benchmarked municipalities included large populations hubs such as the County and City of Los Angeles.

The 2023 PCI assessment serves as a valuable tool for residents to stay informed about the City’s infrastructure conditions, and was utilized to develop the PMP, which establishes a strategic plan to address and improve pavement conditions. The condition assessment was used to assess and prioritize pavement maintenance and rehabilitation projects for the next five years, pending funding availability. Results of the PCI assessment and planned pavement maintenance and rehabilitation projects (pending funding) identified in the PMP can be viewed at <https://streets.sandiego.gov/>. Regardless of funding availability, the information available at <https://streets.sandiego.gov/> will continue to be updated based on received funding.

Historic Funding and Future Funding Needs

To evaluate and improve upon previous pavement management strategies, the PMP examines the historical funding trends, funding sources, and pavement repair and maintenance activities to optimize pavement management within the City. Since FY2013, budgeted funding for street maintenance and rehabilitation has averaged \$46.4M annually with an average of \$19.8M allocated for maintenance (based on available data FY2013-FY2023) and \$26.6M allocated for rehabilitation (based on available

data FY2011-FY2023), respectively (Figure 7). While funding in FY2024 was the highest since FY2011 and over three times the average annual allocation, this amount is still not enough to proactively maintain the network to an average PCI of 70. The annual budgeted amounts do not represent the budget ask from the Department, which has consistently requested funding to maintain an average network PCI of 70. However, due to limited resources throughout the City, Department allocations have remained significantly lower than the request and have been inadequate to fully support needed maintenance and rehabilitation. Consequently, the City street network condition has declined with time.



*FY24 miles will be reported at the end of the fiscal year

Figure 7. Budgeted Funding Amounts vs. Repair Miles for Pavement Maintenance and Rehabilitation FY2011- FY2024

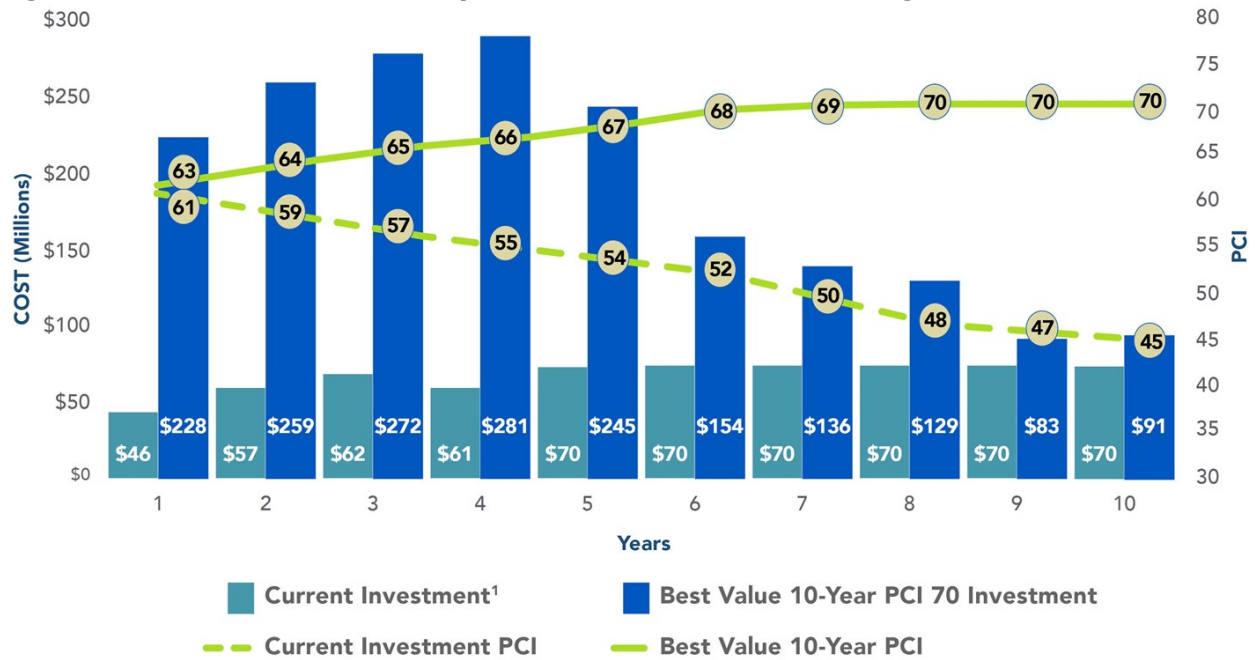
The funding for maintenance and rehabilitation activities comes from various sources, including Gas Tax, TransNet, Road Maintenance and Rehabilitation Account (RMRA), Trench Cut/Excavation Fee, debt financing, and Infrastructure funds. As the condition of the City’s street network deteriorates over time, investing in proactive maintenance and repairs can extend the lifetime of existing pavement assets and reduce long-term costs. An analysis of the City’s maintenance and rehabilitation costs determined that the streets in “good” condition (PCI of 70 or higher), on average cost less to repair per mile as opposed to streets with worse PCI. The average cost to repair a street segment with a PCI of 70 or higher is \$220k per mile to maintain, while a street segment with a PCI of less than 70 costs \$1.7M per mile to rehabilitate based on recent bid price information and Department analyses.

The consideration of historical funding levels and street condition based on the PCI provides important context for developing future funding scenarios. In FY2024, the City allocated \$35.6 million for maintenance and \$104.3 million for rehabilitation, but future projections based on 2023 PCI data highlight the need for comprehensive funding scenarios to meet the city’s street network needs and objectives. Not receiving adequate funding can lead to deferred maintenance, which results in rapidly escalating repair costs, negatively impacting street conditions and reducing overall quality of life for residents and visitors due to deteriorating street conditions.

A financial analysis was conducted using multiple street selection approaches in Cartegraph to assess cost-effective and operationally viable options to achieve an average network PCI 70 score. The funding scenario options evaluated by the Department include street selection approaches based on best value (funding streets at optimum PCI conditions to maximize cost-efficiency of treatment type), worst streets first (funding streets in the worst condition first), and most people impacted (funding streets with high Average Daily Traffic (ADT) volume first). The Department’s comprehensive assessment approach appraised the short- and long-term costs, street network improvement impact and timing, and operations considerations for each of the various evaluated funding scenario options.

Analyses determined that in order to maintain an average network condition of PCI of 70 or higher in 10 years, a total investment of \$1.9B is needed (hereafter Best Value Approach PCI 70 10-Year Implementation Scenario; Figure 8). The annual average investment for the Best Value Approach PCI 70 10-Year Implementation Scenario is \$188M/year, noting that this number is higher in the first 5 years. In contrast, the City's overall street network PCI will continue to degrade over the next 10 years to a PCI score of 45 ("Poor" condition) if projected funding levels based on historic sources remain the same.

Figure 8. Current Investment Comparison to Recommended Funding Scenario Investment



¹ Current investment includes projected Road Maintenance and Rehabilitation Account, TransNet, Gas Tax, and Street Damage Fee based on historic funding amounts. The current investment scenario assumes the funding in year five will carry forward through year 10.

The recommended Best Value Approach PCI 70 10-Year Implementation Scenario constitutes a total funding gap of \$1.2B over the next 10 years and an average annual funding gap of \$111M, noting that the funding gap in years 1 through 5 are higher than the average (Table 2). A dedicated funding source will likely be needed to bridge this gap.

Table 2. Funding Summary – Best Value Approach PCI 70 10-Year Implementation Scenario

Year	Maintenance Funding Need	Rehabilitation Funding Need	Total Investment Need ¹	Projected Funding Gap ²	Lane Miles
1	\$60M	\$168M	\$228M	\$182M	608
2	\$96M	\$163M	\$259M	\$201M	816
3	\$81M	\$191M	\$272M	\$211M	705
4	\$73M	\$208M	\$281M	\$219M	643
5	\$85M	\$160M	\$245M	\$175M	692
6	\$154M	\$-	\$154M	\$84M	1098
7	\$135M	\$1M	\$136M	\$65M	952
8	\$129M	\$-	\$129M	\$59M	904
9	\$83M	\$-	\$83M	\$14M	571
10	\$90M	\$1M	\$91M	\$21M	615
Total	\$986M	\$891M	\$1.9B	\$1.2B	7,603

¹Total investment need is based on projected funding need to achieve and maintain PCI 70

²Projected Funding Gap represents difference between investment need and projected Road Maintenance and Rehabilitation Account, TransNet, Gas Tax, and Street Damage Fee fund based on historic funding amounts

The Department is requesting separate dedicated funding for improvement of unimproved streets and alleys starting in FY2025. A unique prioritization process has been developed in FY2024 to prioritize unimproved streets and alleys for funding that considers pavement condition, number of people impacted, safety, impacted serviced, including street sweeping and trash collection, and location within a census tract that is deemed eligible for Community Development Block Grant (CDBG) funds, in a Promise Zone, or located in a Community of Concern identified per the Climate Equity Index (very low, low, or moderate access to opportunity) as part of the prioritization score. Given the significant costs associated with rehabilitation for unimproved streets and alleys but also recognizing the importance of providing equitable services City-wide, one strategy is to fund improvement of two unpaved unimproved street or alley segments per year at approximately \$4.3M annually, which results in all 17 miles of unpaved unimproved streets and alleys being improved within 85 years. Other funding options to improve the 17 miles of unpaved unimproved streets and alleys are presented in Table 3.

Table 3. Unpaved Unimproved Streets and Alleys Scenarios

Scenario	FY2025 Investment	Costs Through FY2029	Total Cost ¹	Years to Complete
0.1 Miles/Year	\$2.2M	\$11.4M	\$10.9B	170
0.2 Miles/Year	\$4.3M	\$22.9M	\$1.12B	85

0.3 Miles/Year	\$6.5M	\$34.3M	\$928M	57
0.4 Miles/Year	\$8.6M	\$45.7M	\$716M	43
0.5 Miles/Year	\$10.8M	\$57.2M	\$617M	34
¹ Total cost assumes 3% annual inflation				

Pavement Management Plan Implementation Considerations

The PMP has been produced in close consultation with City staff and pavement management experts. With the development of this PMP, the Department is actively taking major strides in strategically prioritizing future pavement maintenance and rehabilitation activities by evaluating the condition of all street segments in the street network, determining funding needs to maintain a network PCI of 70, and evaluating potential options for operational efficiencies, such as performing some paving work in-house and working with other municipalities in the region to establish common Reclaimed Asphalt Pavement (RAP) standards to improve material and supply availability.

With increased funding, the Department would need to increase staffing to effectively execute the recommended funding scenario to reach and maintain a PCI of 70 over the next 10 years. As part of the Department's effort to evolve and optimize pavement maintenance and rehabilitation projects, the PMP also includes a feasibility assessment that evaluates the potential benefits of performing paving projects in-house utilizing City equipment and personnel in tandem with the possibility of a City owned and managed asphalt materials plant. This strategy was considered as means of combating current challenges related to paving, which include lack of consistent funding, rising contractor and contracted project costs, limited contractor availability, and limited material availability.

The in-house paving assessment evaluated the cost and feasibility of establishing a full-scale in-house paving operation that would decrease the City's reliance on contracting out paving operations. The evaluation determined the cost for in house crews to perform the four pavement treatments projected in the Best Value Approach PCI 70 10-Year Implementation Scenario (slurry seal, cape seal, scrub seal, and overlay), and compared it to the cost of contractors to perform the work. The results of the assessment determined that the Department could perform overlay at a lower cost than contractors, but that specialized treatments like slurry, cape, and scrub seal, should remain outsourced to contractors. The Department recommends adding two mill and pave teams to perform 20 miles of overlay annually, provided the teams are fully staff and equipment is available. Maintenance yard space for equipment/vehicles, materials, and staff is also needed as the current Chollas maintenance yard is in need of repairs and space is fully utilized with limited room for expansion/growth.

5-Year Paving Plan

In addition to this PMP, the Department has prepared a 5-Year Plan that can be found on the City's website at <https://streets.sandiego.gov/>. This plan provides a description of the streets that could be targeted for improvements in the next five fiscal years, in the event the Department will be provided the necessary funding to successfully execute this plan. This online platform also features updates on ongoing and planned maintenance and rehabilitation projects, empowering residents to stay informed about the City's efforts to enhance street quality. This plan will be updated on an annual basis once funding is known for any given fiscal year.

The Department is committed to ensuring transparency and accessibility of information for residents regarding the City's street infrastructure. The Department encourages residents to actively participate in the maintenance process through the Get It Done app to quickly and efficiently report potholes and other street hazards directly. Additionally, the Department encourages the public to provide feedback

on street paving needs at <https://streets.sandiego.gov/>. To further address infrastructure needs, the Department has proactively sought additional funding by submitting budget requests, with the aim of expanding investments to align with this PMP and to achieve a targeted average network PCI of 70.

Conclusion

In summary, the Department recommends implementing a Best Value Approach PCI 70 10-Year Implementation Scenario in which the City's overall street network achieves an average PCI of 70 or higher by investing approximately \$1.9B in total over 10 years. While this strategy requires a higher average annual investment compared to previous years, it provides an opportunity for the City to ramp up resources and secure the necessary funding for successful implementation. The City's overall street network PCI will continue to degrade over the next 10 years to an estimated average PCI score of 45 ("Poor" condition) if projected funding levels based on historic sources remain the same. More information on the Pavement Management Plan can be found here: <https://www.sandiego.gov/transportation/programs/pavement-management-plan>

City of San Diego Strategic Plan:

This action relates to the Strategic Plan's Priority Area: Advance Mobility & Infrastructure by improving the quality of the City's street network, which helps reach the outcomes of allowing San Diegans to travel on high-quality infrastructure that creates safe and comfortable spaces for people to walk, roll, ride, or drive.

This action also relates to the Strategic Plan's Priority Area: Protect & Enrich Every Neighborhood by improving the quality of streets, which helps reach the outcome of providing sustainable infrastructure that better supports safe and comfortable for every San Diegan.

Fiscal Considerations:

Implementation of the PMP will require additional funding for pavement management in the Operational budget and CIP budget. For the duration of the 10-year implementation period, a total of \$1.9B is needed to achieve and maintain a PCI of 70. Based on current projections this need results in a total funding gap of \$1.2B over the 10-year period. The highest annual investments will be needed in Years 1 through Years 5 where an average of over \$250M will be needed annually. In addition to the maintenance and rehabilitation costs, it is estimated that an additional 46.00 full time equivalent positions totaling \$6.5M per fiscal year and one-time non-personnel expenditures totaling \$3M would be needed. These positions are fully cost recoverable. Additional dedicated revenue sources or reallocation of the City's existing expenditure allocations would be needed to implement the PMP. Financing options can be considered to meet the capital investment needs.

Charter Section 225 Disclosure of Business Interests:

N/A; there is no contract associated with this action.

Environmental Impact:

Not applicable

Climate Action Plan Implementation:

Maintenance and replacement of deteriorated streets will help achieve the mode share targets of the CAP under Strategy 3 by prioritizing and prioritizing safety of vulnerable modes such as walking and biking and enhancing public transit for improved efficiency and performance. The leading priority order also includes shared, commercial, and personal electric vehicles.

Equal Opportunity Contracting Information (if applicable):

N/A

Previous Council and/or Committee Actions:

In October 2023, City Council adopted Resolution #315170 approving the City Council's Response to the

2022/2023 San Diego County Grand Jurt Report titled 'When Will My Street be Paved? City of San Diego's Street Paving Challenges'.

Planning Commission Action:

N/A

Key Stakeholders and Community Outreach Efforts:

Key stakeholders include City of San Diego residents, businesses, and visitors.

Bethany Bezak

Transportation Department Director

Kris McFadden

Deputy Chief Operating Officer