Pavement Management Budget Options Report

CAPS
Capitol Asset & Pavement Services

January, 2022

City of Cotati

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Executive Summary

Capitol Asset & Pavement Services, Inc. was contracted by the Metropolitan Transportation Commission to perform visual inspections of all of the paved streets maintained by the City of Cotati (City) as part of the P-TAP 22 grant program. All 23.98 centerline miles of paved streets maintained by the City were evaluated in accordance with MTC standards and the Streetsaver Online 9.0 database was updated with the inspection data. Field inspections were completed in July, 2021.

The maintenance decision tree treatments and costs were reviewed and updated to reflect current pavement maintenance treatment prices. A budgetary needs analysis was performed based on the updated inspections and treatment costs and four budget scenarios were evaluated to compare the effects of various funding levels.

The City's street network consists of 23.98 centerline miles of streets. A detailed visual inspection of the City's streets resulted in a calculated average PCI of 68[1]. Using a 0-100 PCI scale, with 100 being the most favorable, a rating of 68 places the City's street network in the 'Fair' condition category.

Four scenarios were analyzed for various street maintenance funding levels. The budgets include preventative maintenance and rehabilitation work for existing paved street surfaces. The City's current strategy of street maintenance, along with current prices for the treatments, is represented in the Streetsaver decision tree matrix. This matrix defines what treatments need to be applied to streets in varying PCI conditions. Utilizing this decision matrix, it was determined that the City will need to spend $17.0 million over the next five years to bring the street network into 'optimal' condition, or an overall street network PCI of 84. At this level, the City should be able to maintain the street network in the future with primarily cost-effective preventative maintenance treatments (crack seals and surface seals). The City's current funding level of $17.3 million (Scenario #2) over the next five years is sufficient to achieve this goal. Scenario #3 determines the funding level required to increase the overall network PCI by five points over the next five years. Scenario analyses show that at current funding levels, the overall street condition should continue to improve. Table 1 summarizes the findings of the Scenarios.

[1] The report assumes the FDR treatments (westside project) planned for Q1 2022 are completed. The overall network PCI as reported includes the increase in PCI due the rehabilitation of these roads.

Table 1 – Summary of outcome of different funding levels (Scenarios)

Average yearly budget	$3.4 million (1-Unconstrained Needs)	$3.46 million (2-Current Budget)	$1.7 million (3-Increase PCI 5 points)	$0 (4-Zero Funding)
Total budget for 5 years	$17.0 million	$17.3 million	$8.5 million	$0
Current PCI	68	68	68	68
Current % in 'Good' condition	61.3%	61.3%	61.3%	61.3%
PCI after 5 years (change)	84 (+16)	85 (+17)	73 (+5)	59 (-9)
Backlog after 5 years	$0	$0	$8.0 million	$15.3 million
% 'Good' in 5 years	90.5%	90.5%	76.9%	51.1%
% 'Fair' in 5 years	8.9%	8.9%	9.4%	17.4%
% 'Poor' in 5 years	0.6%	0.6%	0.9%	9.0%
% 'Very Poor' in 5 years	0.0%	0.0%	12.7%	22.4%

Purpose

This report is intended to assist the City of Cotati with identifying street maintenance priorities specific to the City.

The report examines the overall condition of the street network and highlights the impacts of various funding levels on the network pavement condition and deferred maintenance funding shortfalls. The Metropolitan Transportation Commission, MTC, Streetsaver Pavement Management Program (PMP) was used for this evaluation. The intent of this program is to develop a maintenance strategy that will improve the overall condition of the street network to an optimal Pavement Condition Index (PCI) in the low to mid 80's and also to maintain it at that level.

The MTC Streetsaver program maximizes the cost-effectiveness of the maintenance treatment plan by recommending a multi-year street maintenance and rehabilitation plan based on the most cost-effective repairs available. A comprehensive preventative maintenance program is a critical component of this plan, as these treatments extend the life of good pavements at a much lower cost than rehabilitation overlay or reconstruction treatments. To this end, various 'what-if' analyses (scenarios) were conducted to determine the most cost-effective plan for maintaining the City's street network over five years and at various funding levels.

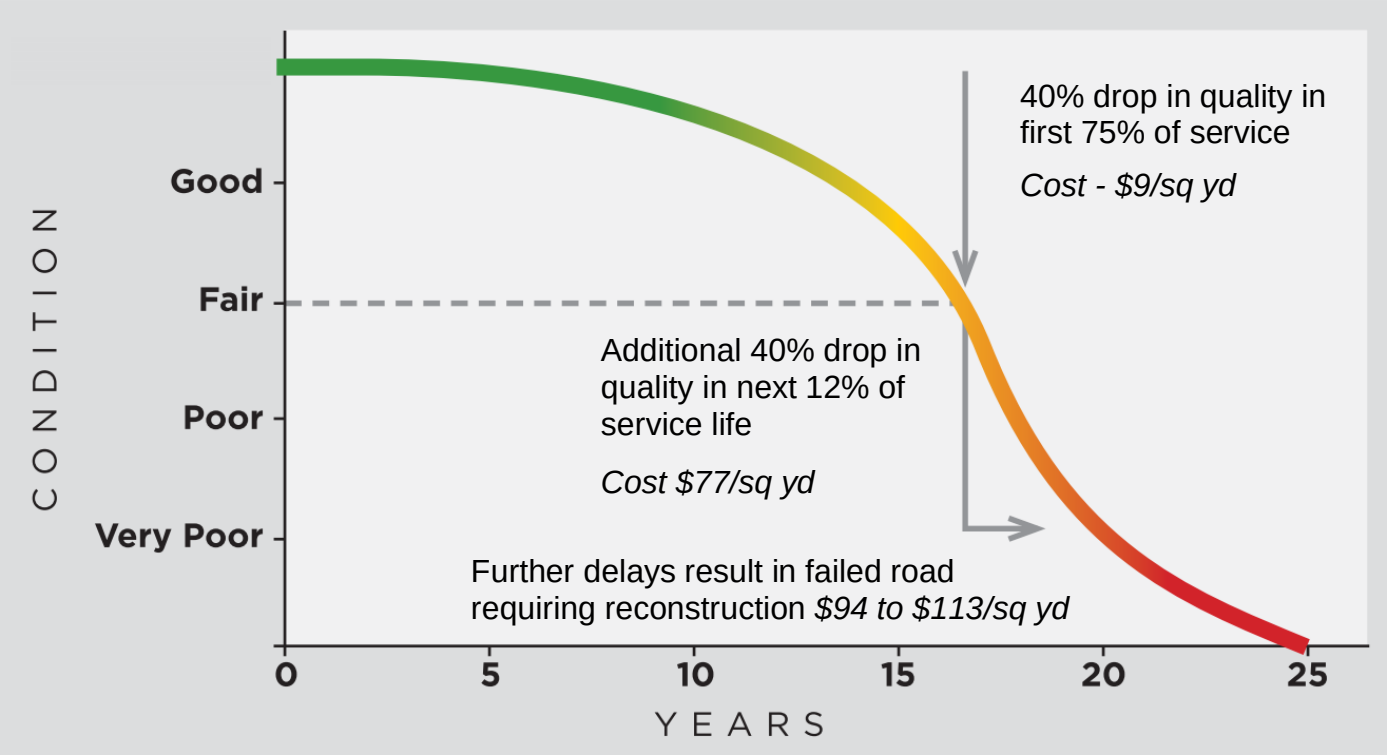
Pavement Management Strategy

Pavement Management is a set of tools and philosophies designed to manage the maintenance activities of asphalt concrete and Portland concrete pavements. A Pavement Management System consists of a module to keep track of existing and historical pavement condition data and a decision making process to help choose the most cost-effective maintenance strategies and which streets to treat when.

Conventional wisdom of most public works and street department agencies has been to treat streets in a "worst-first" philosophy. Under this "worst-first" policy, streets are allowed to deteriorate to a nearly failed condition before any rehabilitation (such as overlays or reconstructions), are applied. This can also be called the "don't fix if it isn't broke" mentality.

Pavement management systems are designed with a more cost-effective, "best-first" approach. The reasoning behind this philosophy, is that it is better to treat streets with lower-cost, preventative maintenance treatments, such as slurry seals, chip seals, and crack seals, and extend their life cycle before the street condition deteriorates to a state where it requires more costly rehabilitation and reconstruction treatments. Generally, paved streets spend about three-quarters of their life-cycle in fair to good condition, where the street shows little sign of deterioration and has a high service level. After this time, the street condition begins to deteriorate at a rapid rate and, if not maintained properly, will soon reach a condition where it will require costly overlays and reconstructions. If treated with a surface seal and other preventative measures, the street condition will remain at a good level for a longer period of time. Figure 1 shows a typical condition deterioration curve for a street.

Figure 1 – Street Condition over time



Existing Pavement Condition

The City is responsible for the repair and maintenance of 23.98 centerline miles of paved streets and 13,500 square yards of parking lots. The City's street network replacement value is estimated at $46.4 million.[2] This asset valuation assumes replacement of the entire street network in present day dollars (street base and surface only, not curbs or sidewalk). This represents a significant asset for City officials to manage.

The average overall network Pavement Condition Index (PCI) of the City's street network is 68, which indicates that the street network is in 'Fair' condition. The PCI is a measurement of pavement condition that ranges from 0 to 100. A newly constructed or overlaid street would have a PCI of 100, while a failed street (requiring complete reconstruction) would have a PCI under 25. Appendix B contains a report detailing the PCI information for each street.

Table 2 details the network statistics and pavement condition by functional class.

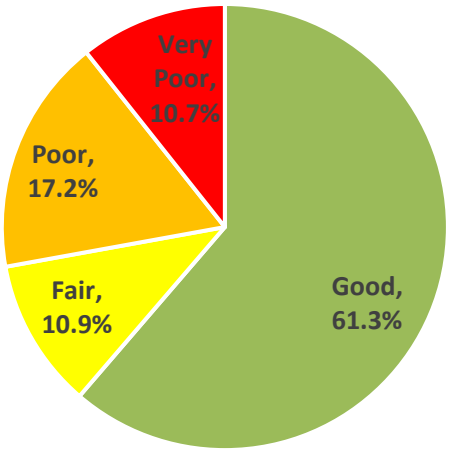
Table 2 – Street Network Statistics and Average PCI by Functional Class

Functional Class	# of Sections	Centerline Miles	Lane Miles	Average PCI
Arterial	26	4.30	10.67	74
Collector	19	3.22	6.45	50
Residential	138	16.46	32.51	68
Totals	183	23.98	49.63	68

Table 3 and Figure 2 details the percentage of the street network area by each PCI range or condition category.

Table 3 and Figure 2 – Percent Network Area by Functional Class and Condition

Condition Class	PCI Range	Arterial	Collector	Residential	Total
Good (I)	70-100	18.6%	3.6%	39.1%	61.3%
Fair (II/III)	50-70	0.7%	1.3%	8.8%	10.9%
Poor (IV)	25-50	4.8%	5.1%	7.3%	17.2%
Very Poor (V)	0-25	0.8%	2.0%	7.9%	10.7%
Totals		25.0%	12.0%	63.1%	



[2] Replacement value is calculated as the current cost to reconstruct each street in the network , based on the values in the Streetsaver decision tree. This does not include sidewalks or curb.

Present Cost to Repair the Street Network

The MTC Pavement Management Program (PMP) is designed to achieve an optimal network PCI somewhere between the low and mid 80's, which is in the middle of the good condition category. In other words, the system will recommend maintenance treatments in an attempt to bring all of the streets in the City to a 'Good' condition, with the majority of the streets falling in the low to mid 80's PCI range. Streets will remain in the 'Good' condition category for a longer period of time if relatively inexpensive preventive maintenance treatments are used. Once the PCI falls below 70, more expensive rehabilitation treatments will be needed.

The Budget Needs module of the PMP estimates a necessary funding level for the City's pavement preservation and rehabilitation program of $17.0 million[3] over the next five-year period (2022–2026) in order to improve and maintain the street network PCI at an optimal level in the lower to mid 80's. Of this total, approximately $6.3 million is needed in the first year alone. As mentioned earlier, the average PCI for the City's streets is 68, which is in the 'Fair' condition category. Why then, does it cost so much to repair the City's streets, and why bother improving them?

First, the cost to repair and maintain a pavement depends on its current PCI. In the 'Good' category, it costs very little to apply preventive maintenance treatments such as crack and surface seals (slurry seal), which can extend the life of a pavement by correcting minor faults and reducing further deterioration. Minor treatments are applied before pavement deterioration has become severe and typically costs less than $9 per square yard[4]. 61.3% of the City's total street network would benefit from these relatively inexpensive, life-extending treatments.

10.9% of the City's total street network falls into the 'Fair' condition category. Pavements in this range show some form of distress caused by traffic load related activity or environmental distress that requires more than a life-extending treatment. At this point, a well-designed pavement will have served at least 75 percent of its life, with the quality of the pavement dropping approximately 40 percent. The street surface may require a slurry with digouts or thin AC overlay at a cost from $12 to $36/square yard.

17.2% of the City's total street network falls into the 'Poor' condition category. These pavements are near the end of their service lives, and often exhibit major forms of distress such as potholes, extensive cracking, etc. At this stage, the street typically requires a thick overlay with digouts, at a cost of $77 per square yard depending on the functional class of the street.

10.7% of the City's total street network falls into the 'Very Poor' condition category. Streets in the 'Very Poor' condition category indicate that the street has failed. These pavements are at the end of their service lives and have major distresses, often indicating the failure of the sub base. Streets at this stage require major rehabilitation, usually the complete reconstruction of the street surface and sub-base. Reconstruction costs range approximately $94 to $113 per square yard.

One of the key elements of a pavement repair strategy is to keep streets that are in the 'Good' or 'Fair' categories from deteriorating. This is particularly true for streets in the 'Fair' range, because

[3] Treatment costs are based on this year's average costs per square yard, with future years including a 3% inflation adjustment per year after 2022.

[4] For detailed treatments and costs used in analysis for this report, see appendix C – Decision Tree report

they are at the point where pavement deterioration accelerates if left untreated. However, the deterioration rate for pavements in the 'Poor' to 'Very Poor' range is relatively flat and the condition of these streets will not decline significantly if repairs are delayed. As more 'Good' streets deteriorate into the 'Fair', 'Poor', and 'Very Poor' categories, the cost of deferred maintenance will continue to increase. The cost of the deferred maintenance backlog will stop increasing only when enough funds are provided to prevent streets from deteriorating into a worse condition category, or the whole network falls into the 'Very Poor' category (i.e. cannot deteriorate any further). The deferred maintenance backlog refers to the dollar amount of maintenance and rehabilitation work that should have been completed to maintain the street in 'Good' condition, but had to be deferred due to funding deficiencies for preventative maintenance and/or pavement rehabilitation programs. The actual repairs that are being deferred are often referred to as a "backlog."

Future Expenditures for Pavement Maintenance

Assuming projected funding is allocated for pavement maintenance; we anticipate that the City will spend $17.3 million on pavement maintenance rehabilitation during the next five years (2022-2026) as detailed on Table 4.

Table 4. Projected Pavement Budget for 2022 to 2026

2022	2023	2024	2025	2026	Total
$6,300,000	$4,236,000	$1,710,000	$2,216,000	$2,850,000	**$17.3 million**

Budget Needs

Based on the principle that it costs less to maintain streets in good condition than bad, the MTC PMP strives to develop a maintenance strategy that will first improve the overall condition of the network to an optimal PCI somewhere between the low and mid 80's, and then sustain it at that level. The average PCI for the City is 68, which is in the 'Fair' condition category.

The first step in developing a cost-effective maintenance and rehabilitation strategy is to determine, assuming unlimited revenues, the maintenance "needs" of the City's street network. Using the PMP budget needs module; street maintenance needs are estimated at $17.0 million over the next five years. If the City follows the strategy recommended by the program, the average network PCI will increase to 84. If, however, current pavement maintenance funding is exhausted and little or no maintenance is applied over the next five years, already distressed streets will continue to deteriorate, and the network PCI will drop to 59. The results of the budget needs analysis are summarized in Table 5.[5]

[5] Actual program outputs are included in Appendixes B through F

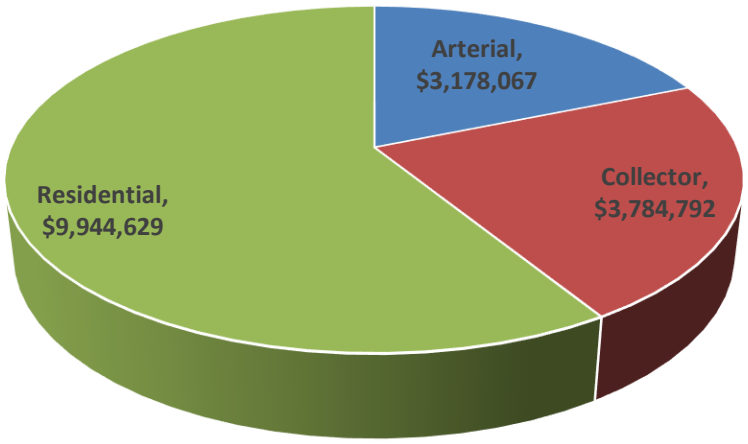
Table 5. Summary of Results from Needs Analysis

Fiscal Years	2022	2023	2024	2025	2026	Total
PCI with Treatment	83	81	82	83	84	---
PCI, no Treatment	68	65	63	61	59	---
Budget Needs Total	$6,300,000	$4,236,000	$1,710,000	$2,216,000	$2,550,000	**$17,012,000**
Rehabilitation Portion	$5,937,196	$3,717,769	$1,472,838	$1,681,287	$2,303,922	**$15,113,012**
Preventative Maintenance Portion	$361,668	$518,204	$236,330	$534,242	$240,121	**$1,890,565**

Table 5 shows the level of expenditure required to raise the City's pavement condition to an optimal network PCI of 84 and eliminate the current maintenance and rehabilitation backlog. The results of the budget needs analysis represent the ideal funding strategy recommended by the MTC PMP. Of the $17.0 million in maintenance and rehabilitation needs shown, approximately $15.1 million or 88.8% is allocated for the more costly rehabilitation and reconstruction treatments, while $1.9 million or 11.1% is earmarked for preventive maintenance or life-extending treatments**.**

Figure 4 is based on the budget needs predictive module. The pavement management program is recommending a funding level of $17.0 million over a five-year period. Figure 4 illustrates the funding distribution by street functional classification.

Figure 4. Budget Needs Funding Distribution by Functional Classification



Budget Scenarios

Having determined the maintenance and rehabilitation needs of the City's street network, the next step in developing a cost-effective maintenance and rehabilitation strategy is to conduct 'what-if' analyses. Using the PMP budget scenarios module, the impact of various budget scenarios can be evaluated. The program projects the effects of the different scenarios on pavement condition PCI and deferred maintenance (backlog). By examining the effects on these indicators, the advantages and disadvantages of different funding levels and maintenance strategies become clear. For the purpose of this report, the following scenarios were run for five (5)-year periods (2022-2026). Scenarios 1-3 include the City's already planned treatments for 2022. A list of those streets planned for treatment under the can be found in Appendix F – Sections Selected for Treatment report. Treatment details can be found in Appendix F. The results of the scenarios are summarized in Table 6.

1. *Unconstrained (zero "deferred maintenance")* — The annual amounts, as identified in the budget needs analysis totaling $17.0 million, were input into the scenarios module. This scenario shows the effects of implementing the ideal investment strategy (as recommended by the MTC PMP Needs module).
2. *Current Investment Level* — An average annual budget of $3.46 million was evaluated over five years, for a total of $17.3 million, to determine the effects of continuing pavement maintenance at the current planned budget level. This The overall network PCI increases by seventeen points, to 85, under this funding level.
3. *Increase PCI 5* points — This scenario determines the funding required to increase the overall network PCI by 5 points over the next five years. It was determined that $8.5 million would be required over the next five years to achieve this goal. An annual funding level of $1.7 million per year, for a five year total of $8.5 million, should increase the overall network PCI of 68 by five points, to 73, over the duration of the five-year analysis period.
4. *Zero Funding* — This scenario was run to analyze the effects of ceasing all funding for street maintenance over the next five years. This would result in the overall network PCI decreasing by nine points, to 59 over the next five years.

Table 6. Scenario Summary

Scenario Name	5 Year Budget	2026 PCI *(change)*	2026 Deferred Maintenance	2026 % Good	2026 % Very Poor
1 – Unconstrained	$17.0 million	84 *(+16)*	$0	90.5%	0.0%
2 – Current Investment	$17.3 million	85 *(+17)*	$0	90.5%	0.0%
3 – Increase PCI 5 points	$8.5 million	73 *(+5)*	$8.0 million	76.9%	12.7%
4 – Zero Funding	$0	59 *(-9)*	$15.3 million	51.1%	22.4%

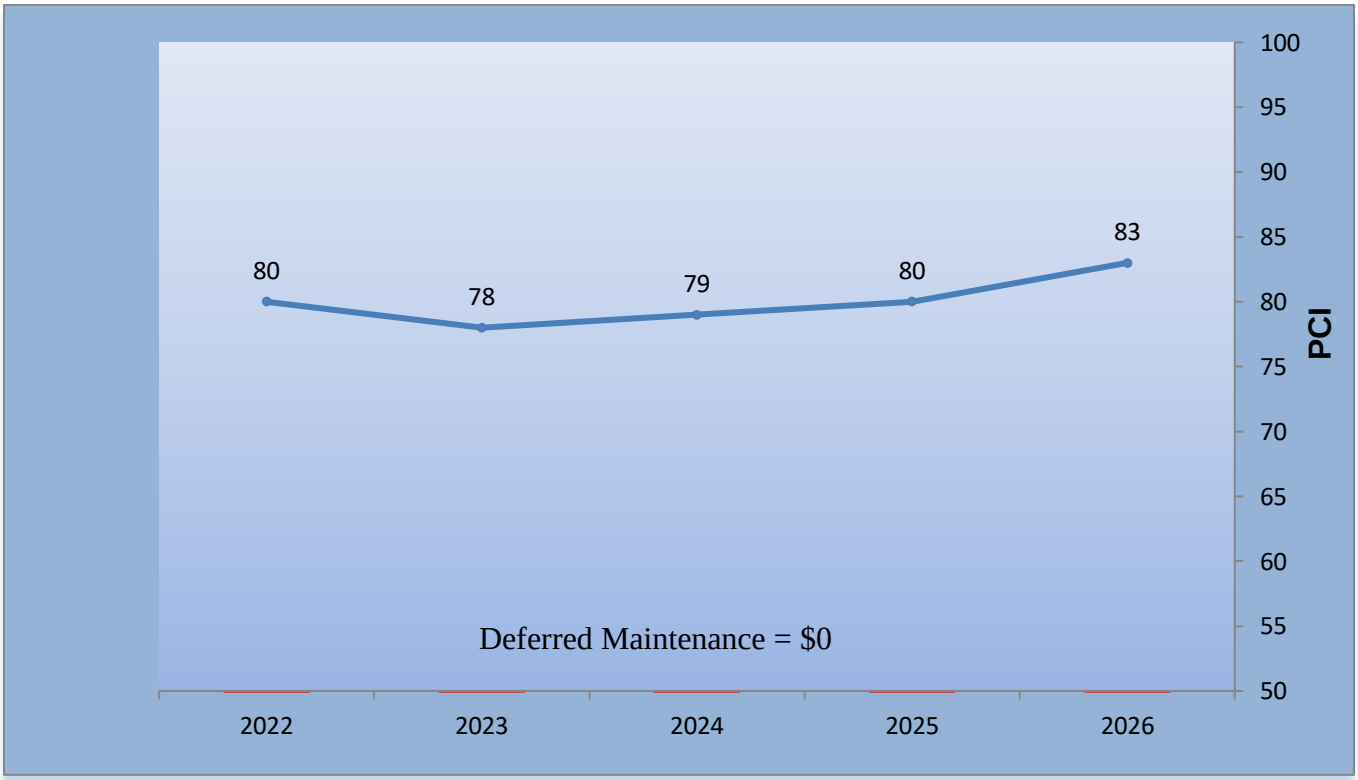
Scenario 1 — Unconstrained Needs *(zero deferred maintenance)*

This scenario shows the effects of implementing the ideal investment strategy (as recommended by the MTC PMP needs module). Because it is more cost-effective to eliminate the deferred maintenance backlog as quickly as possible, the bulk of the deferred maintenance needs are addressed in the first year of the five-year program, raising the overall average network PCI to 83. The PCI continues to increase over the entire time period, reaching 84 by 2026. By 2026, 90.5% of the network improves into the 'Good' condition category, a significant increase from the current level of 61.3% in 'Good' condition. These results are shown in both Table 7 and Figure 5.

Table 7. Summary of Results from Scenario 1 — Unconstrained Needs

	2022	2023	2024	2025	2026	Total
Budget Total	$6,300,000	$4,236,000	$1,710,000	$2,216,000	$2,550,000	**$17,012,000**
Rehabilitation budget	$5,937,196	$3,717,769	$1,472,838	$1,681,287	$2,303,922	**$15,113,012**
Preventative Maintenance budget	$361,668	$518,204	$236,330	$534,242	$240,121	**$1,890,565**
Deferred Maintenance	$3,202,922	$0	$0	$0	$0	---
PCI	83	81	82	83	84	

Figure 5. Summary of Results from Scenario 1 — Unconstrained Needs



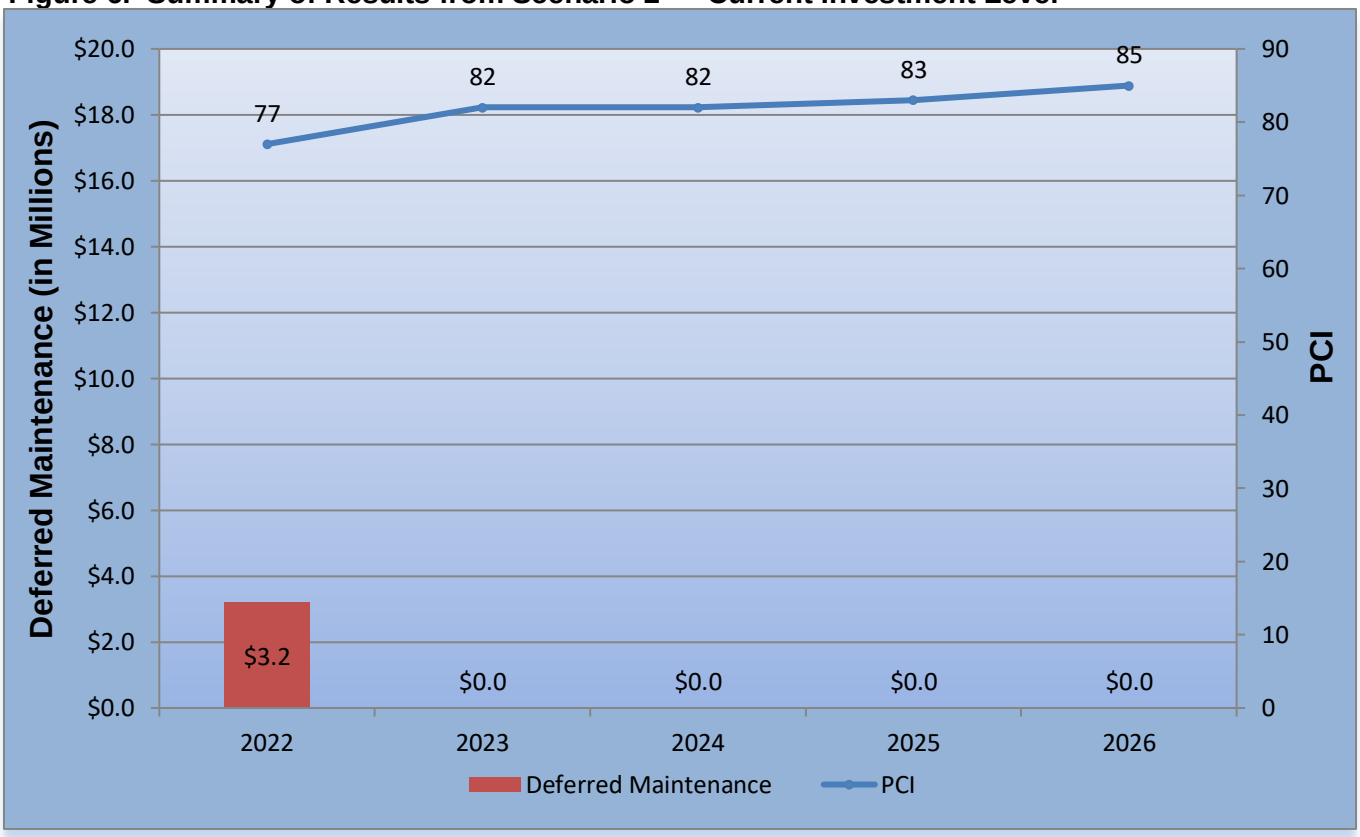
Scenario 2 — Current Investment Level

This scenario shows the effects of the City's current planned budget for street maintenance of $17.3 million over five years. Under this scenario, the overall network PCI increases by seventeen points, from 68 currently, to 85 by 2026. By 2023, the street network will be maintained in the ideal state similar to scenario 1. The deferred maintenance backlog is eliminated by 2023. The percentage of the street network in 'Good' condition increases, from 61.3% currently, to 90.5% in 2026. Results are illustrated in Table 8 and Figure 6.

Table 8. Summary of Results from Scenario 2 — Current Investment Level

	2022	2023	2024	2025	2026	Total
Budget Total	$6,300,000	$4,236,000	$1,710,000	$2,216,000	$2,850,000	**$17,312,000**
Rehabilitation budget	$5,937,196	$3,717,769	$1,472,838	$1,681,287	$2,303,922	**$15,113,012**
Preventative Maintenance budget	$361,668	$518,204	$236,330	$534,242	$240,121	**$1,890,565**
Deferred Maintenance	$3,202,922	$0	$0	$0	$0	---
PCI	77	82	82	83	85	

Figure 6. Summary of Results from Scenario 2 — Current Investment Level



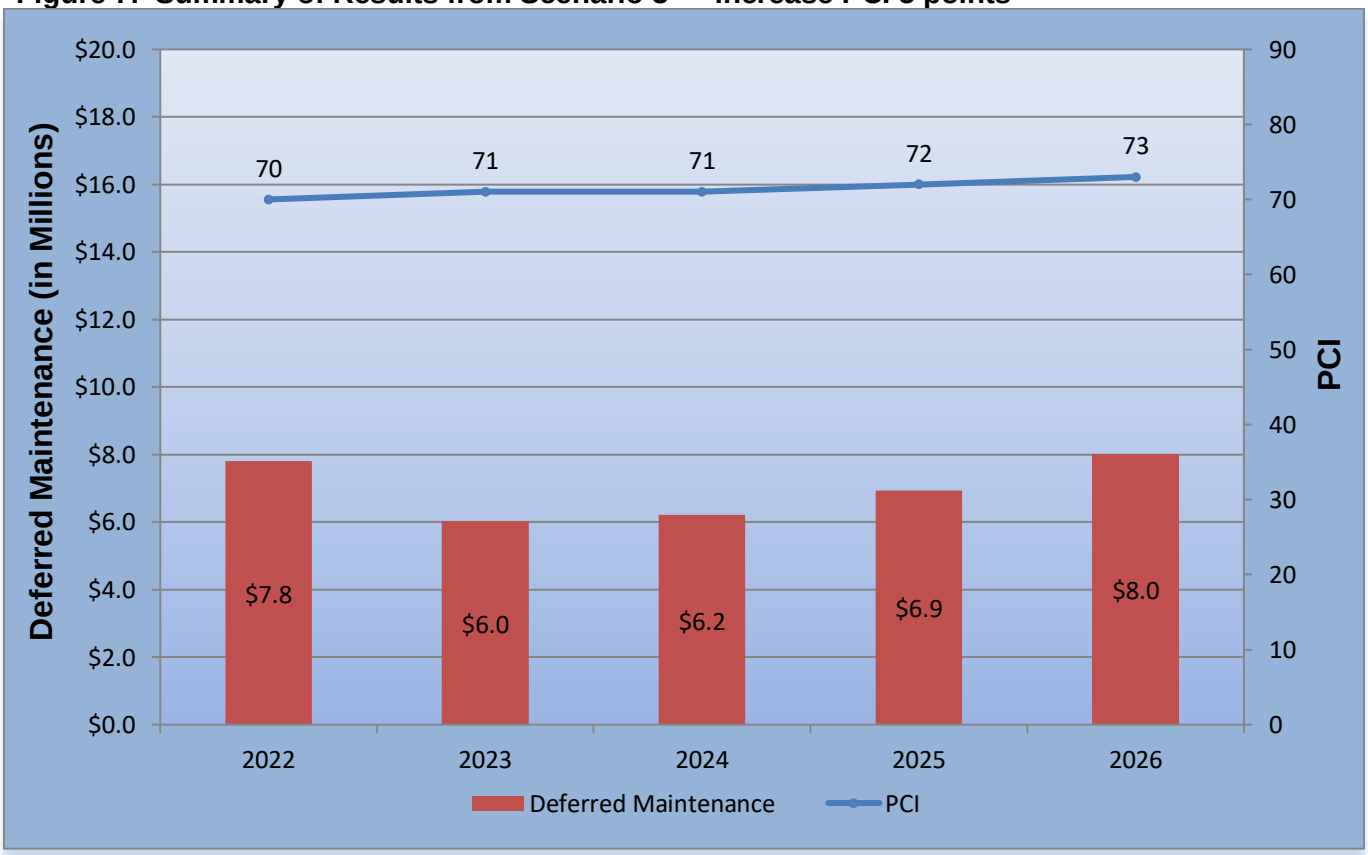
Scenario 3 — Increase PCI 5 points

This scenario analyzes the funding level that would be required to increase the overall network PCI by 5 points, to 73, over the next five years. An annual investment level of $1.7 million, for a total of $8.5 million over five years, would be needed to achieve this goal. At this funding level the deferred maintenance backlog remains level, reaching $8.0 million in 2026. The percentage of the street network in the 'Good' condition category increases to 76.9% in 2026, from the current level of 61.3%. The percentage of the street network in 'Poor' to 'Very Poor' condition decreases from 27.9% currently, to 13.6% in 2026. These results are illustrated in Table 9 and Figure 7.

Table 9. Summary of Results, Scenario 3 — Increase PCI 5 points

	2022	2023	2024	2025	2026	Total
Budget Total	$1,700,000	$1,700,000	$1,700,000	$1,700,000	$1,700,000	**$8,500,000**
Rehabilitation budget	$1,688,881	$1,611,955	$1,602,429	$1,562,700	$1,605,949	**$8,071,914**
Preventative Maintenance budget	$10,031	$85,192	$97,329	$136,352	$91,507	**$420,411**
Deferred Maintenance	$7,802,860	$6,021,922	$6,211,991	$6,931,726	$8,011,134	---
PCI	70	71	71	72	73	

Figure 7. Summary of Results from Scenario 3 — Increase PCI 5 points



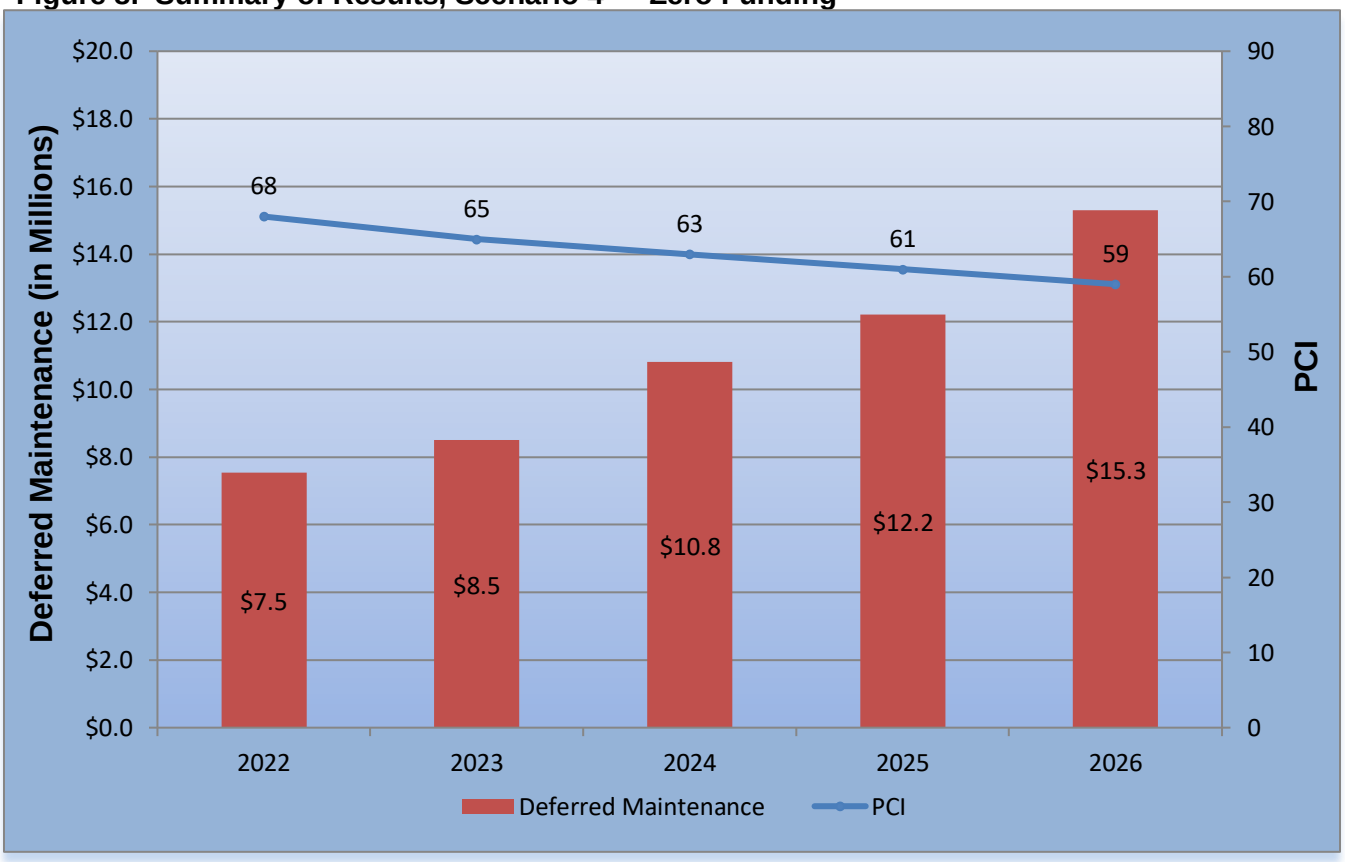
Scenario 4 — Zero Funding

This scenario analyzes the effects of ceasing all street maintenance over the next five years. Under this scenario the PCI decreases by nine points, from the current level of 68, to 59 in 2026. Additionally, the deferred maintenance backlog increases by $7.8 million, from $7.5 million in 2022, to $15.3 million in 2026. The percentage of the street network in the 'Good' condition category decreases to 51.1% in 2026, from the current level of 61.3%. The percentage of the street network in 'Very Poor' condition increases from 10.7% currently, to 22.4% in 2026. This highlights the importance of maintaining a well-funding street maintenance program. These results are illustrated in Table 10 and Figure 8.

Table 10. Summary of Results, Scenario 4 — Zero Funding

	2022	2023	2024	2025	2026	Total
Budget Total	$0	$0	$0	$0	$0	**$0**
Rehabilitation budget	$0	$0	$0	$0	$0	**$0**
Preventative Maintenance budget	$0	$0	$0	$0	$0	**$0**
Deferred Maintenance	$7,539,628	$8,504,305	$10,805,662	$12,216,085	$15,291,454	---
PCI	68	65	63	61	59	

Figure 8. Summary of Results, Scenario 4 — Zero Funding



A comparison of the four scenarios is summarized in Figures 9 and 10. Figure 9 depicts the deferred maintenance costs as they relate to PCI for the four scenarios evaluated. Figure 10 depicts the percent of the street network in the various condition categories for the four scenarios evaluated.

Figure 9 - Deferred Maintenance and PCI of Scenarios 1-4

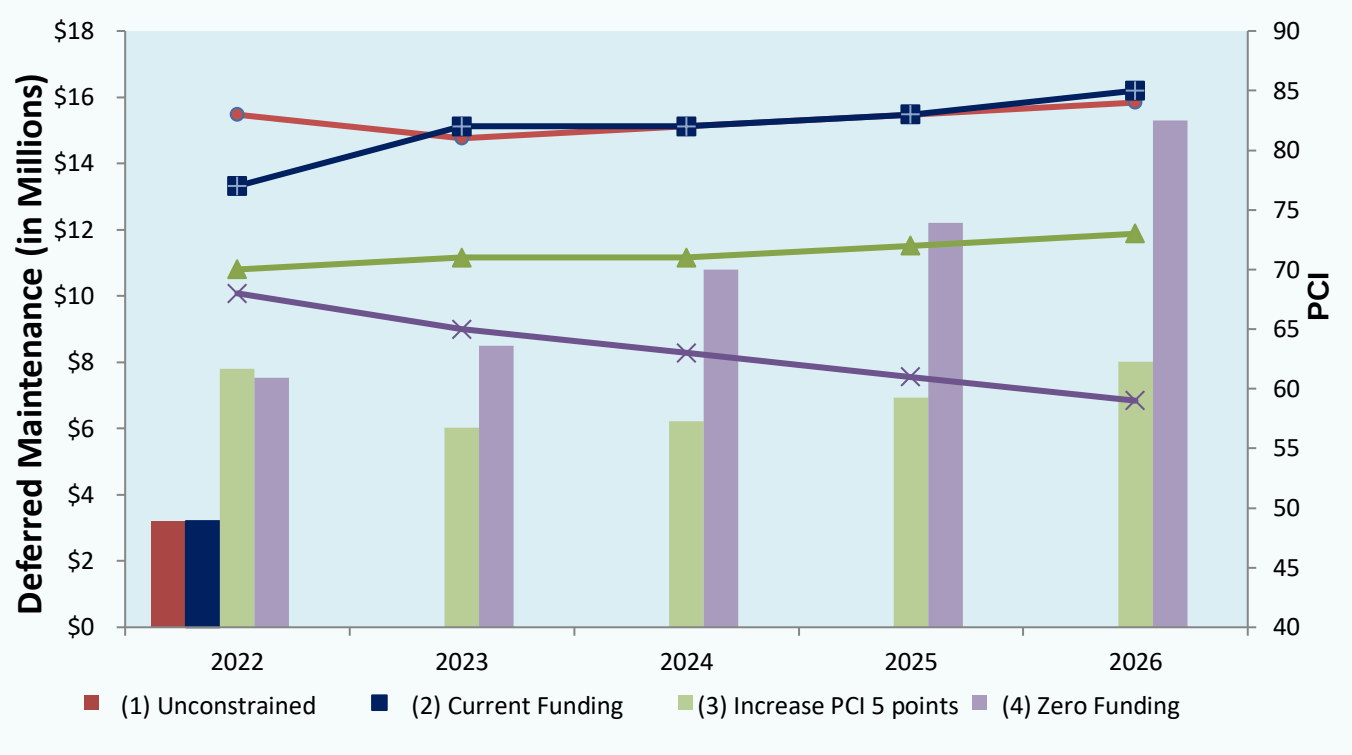
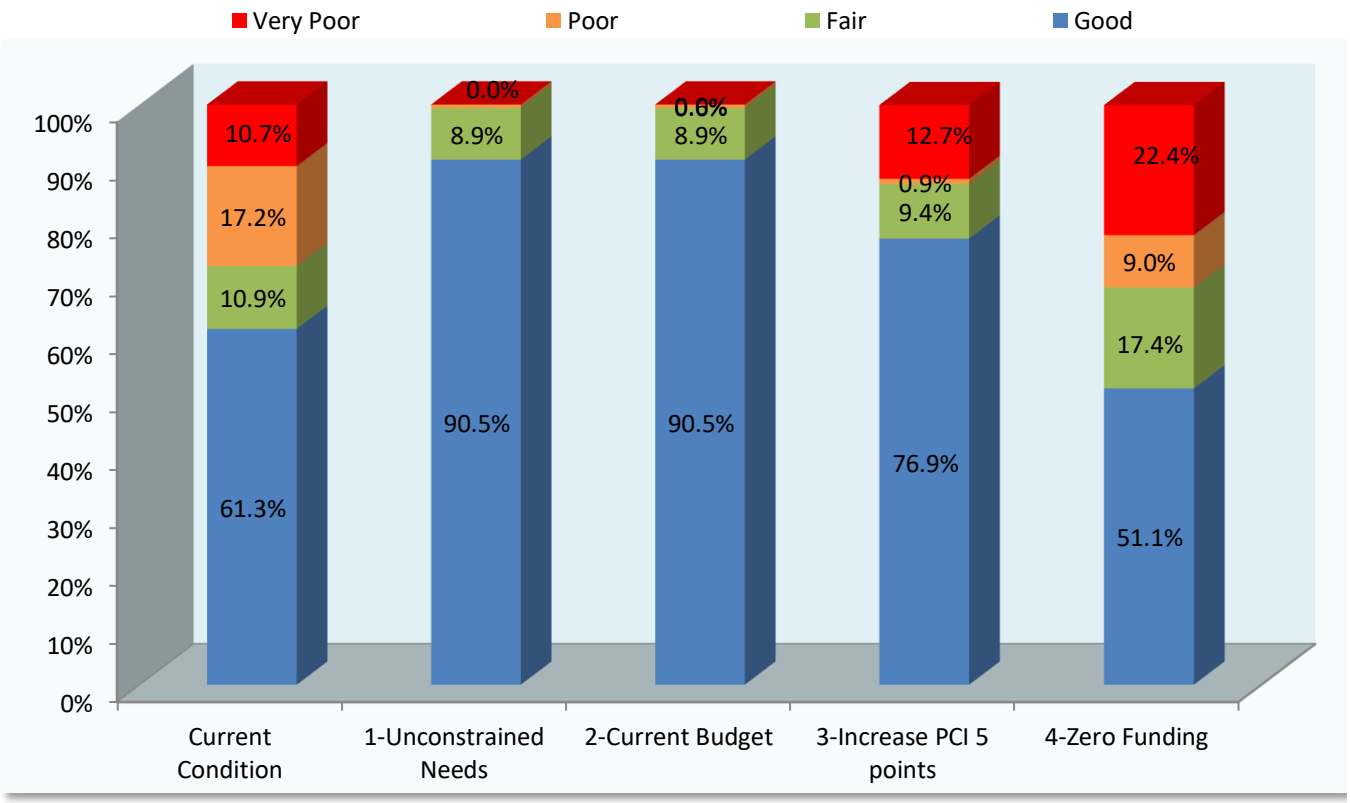


Figure 10 – Pavement Condition Category Percentages in 2026 – Scenarios 1-4



Recommendations

Of the various maintenance and funding options considered, the *ideal* strategy for the City is presented in Scenario 1 and Scenario 2 with a five-year expenditure total of $17.0 million. Not only does this surface management plan improve the network to an optimal level of 84, it also eliminates the entire deferred maintenance backlog in the first year.

The current five-year funding level totaling $17.3 million (Scenario 2) will result in the current network PCI of 68 increasing by seventeen point over the course of five. The deferred maintenance price tag is eliminated by 2023. By following this strategy through 2026, 90.5% of the City's street will be in the 'Good' condition category, an increase from the current level of 61.3% in 'Good' condition. At the City's current funding level, the street network condition should improve over the foreseeable future and the City should be able to maintain the street network in near optimal condition.

Scenario and Needs analyses assume that the City follows a good pavement management philosophy of prioritizing preventative maintenance over rehabilitation. By first ensuring that Good streets stay Good, through the use of a cost-effective slurry and crack seal program, the City will save money in the long run. The use of slurry seals or thin overlays to rehabilitate streets in Fair condition should be the second priority, followed by thick overlays on Poor streets. Failed streets should be the lowest priority, as the reconstruction (or full depth reclamation) that would be required to rehabilitate them are very expensive, and the money is better used on more cost-effective treatments to maintain and rehabilitate better streets.

As demonstrated in the different scenarios, the City needs to invest a significant amount of money on expensive rehabilitation and reconstruction projects. This will reduce the deferred maintenance backlog, increase the network PCI, and allow money to be spent for less capital-intensive treatments such as slurry seals, crack sealing, and thin overlays in the future.

Preparation of a budget options report is just one step in using the MTC PMP to build an effective street maintenance program. Recommendations for further steps are:

- Link major street repairs with utility maintenance schedules to prevent damage to newly paved street surfaces.

- Obtain detailed subsurface information on selected sections before major rehabilitation projects are contracted. Costs for large rehabilitation projects are extremely variable and estimates can sometimes be reduced following project-level engineering analysis. It is possible that only a portion of a street recommended for reconstruction actually requires such heavy-duty repair.

- Evaluate the specific treatments and costs recommended by the PMP, and modify them to reflect the actual repairs and unit costs that are expected to be used.

- Test other budget options with varying revenues and preventive maintenance and rehabilitation splits.

In addition to performing cyclic pavement condition inspections, unit cost information for the applications of various maintenance and rehabilitation treatments should be updated annually in the

PMP 'Decision Tree Module'. If this data is not kept current, the City runs the risk of understating actual funding requirements to adequately maintain the street network. A pavement inspection cycle that would allow for the inspection of streets every three years is recommended.

The City has completed the foundation work necessary to execute a successful pavement management plan. At the current investment level, the overall street condition should continue to improve, and the deferred maintenance backlog will likely decrease.

As more 'Fair' streets deteriorate into the 'Poor' and 'Very Poor' categories, the cost of deferred maintenance will continue to increase. The cost of the deferred maintenance backlog will stop increasing only when enough funds are provided to prevent streets from deteriorating into a worse condition category, or when the whole network falls into the 'Very Poor' category (i.e. cannot deteriorate any further). At that time, the network would have to be replaced at a cost of $46.4 million.

Appendix A

Definitions

Condition Categories

'Good' Condition Category – Streets in 'Good' condition have no to little distresses found on them. These streets may have some minor surface weathering or light cracking, but can generally be maintained with cost-effective preventative maintenance treatments (surface seals and crack seals).

'Fair' Condition Category' – Streets in 'Fair' condition show some form of distress caused by traffic load related activity or environmental distress that requires more than a life-extending treatment. The MTC Streetsaver program separates these into two condition categories for the purposes of the analysis. Category II – 'non-load' and Category III – 'load-related', based on whether a majority of the distresses found had load or environmental related causes

'Poor' Condition Category – Streets in 'Poor' condition are near the end of their service lives and often exhibit major forms of distress such as potholes, extensive alligator cracking, and/or pavement depressions.

'Very Poor' Condition Category - Streets in the 'Very Poor' condition category indicate that the street has failed. These pavements are at the end of their service lives and have major distresses, often indicating the failure of the sub base

Deferred Maintenance refers to the dollar amount of maintenance and rehabilitation work that should have been completed to maintain the street in "good" condition, but had to be deferred due to funding deficiencies for preventative maintenance and/or pavement rehabilitation programs. The actual repairs that are being deferred are often referred to as a "backlog."

Load related distress - . Load related distresses, such as alligator cracking, rutting, and depressions are usually a sign of a sub-base issue, caused by repeated traffic loads.

Network is defined as a complete inventory of all streets and other pavement facilities in which the City has jurisdiction and maintenance responsibilities. To facilitate the management of streets, they are subdivided into management sections identified as a segment of street, which has the same characteristics.

Non-load related distress - Non-load (or environmental), distresses typically have environmental causes related to the pavement becoming older and less elastic (brittle). Typical non-load distresses are longitudinal or transverse cracking, block cracking, and surface weathering and raveling.

The *Pavement Condition Index*, or PCI, is a measurement of the health of the pavement network or condition and ranges from 0 to 100. A newly constructed street would have a PCI of 100, while a failed street would have a PCI of 10 or less. The PCI is calculated based on pavement distresses identified in the field.

Preventive Maintenance refers to repairs applied while the pavement is in "good" condition. Such repairs extend the life of the pavement at relatively low costs, and prevent the pavement from deteriorating into conditions requiring more expensive treatments. Preventive maintenance treatments include slurry seals, crack sealing, and deep patching. Treatments of this sort are applied before pavement deterioration has become severe and usually cost less than $3.00/sq. yd.

Stop Gap refers to the dollar amount of repairs applied to maintain the pavement in a serviceable condition (e.g. pothole patching). These repairs are a temporary measure to stop resident complaints, and do not extend the pavement life. Stopgap repairs are directly proportional to the amount of deferred maintenance.

Surface Types – AC is an Asphalt Concrete street that has one year's asphalt, for example a street that has been newly constructed or reconstructed. In contrast AC/AC (in reports marked as O – AC/AC) is a street that has an overlay treatment over the original asphalt construction. Streets marked as ST do not have an asphalt concrete layer, only a surface composed of layers of oil and rock (macadam or chip seal). Portland Concrete Cement streets (PCC) are a mix of Portland cement, coarse aggregate, and sand.

Urban Arterial street system carries the major portion of trips entering and leaving the urban area, as well as the majority of through movements desiring to bypass the central City. In addition, significant intra-area-travel such as between central business districts and outlying residential areas exists.

Urban Collector Street provides land access service and traffic circulation within residential neighborhoods, commercial, and industrial areas. It differs from the arterial system in that facilities on a collector system may penetrate residential neighborhoods.

Urban Local Street system comprises all facilities not one of the higher systems. It serves primarily to provide direct access to abutting land and access to the higher systems.

Appendix B

Network Summary Statistics

Network Replacement Cost

Network Summary Statistics

Printed: 1/19/2022

	Total Sections	Total Center Miles	Total Lane Miles	Total Area (sq. ft.)	PCI
Arterial	26	4.30	10.67	1,039,425	74
Collector	19	3.22	6.45	497,517	50
Residential/Local	138	16.46	32.51	2,625,525.5	68
Total	183	23.98	49.63	4,162,467.5	

Overall Network PCI as of 1/19/2022: 68

***** Combined Sections are excluded from totals. These Sections do not have a PCI Date - they have not been inspected or had a Treatment applied.***

Network Replacement Cost

Printed: 12/17/2021

Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area/ Square Feet	Cost To Replace/ (in thousands)
Arterial	AC	2.5	$12.56	254,020	$3,189
	AC/AC	7.1	$12.56	696,005	$8,739
	AC/PCC	1.0	$17.33	89,400	$1,550
Collector	AC	2.4	$8.52	169,079	$1,441
	AC/AC	4.1	$12.56	328,438	$4,124
Residential/Local	AC	25.3	$10.40	2,012,733	$20,932
	AC/AC	7.2	$10.40	612,793	$6,373
	Grand Total:	49.6		4,162,467	$46,348

Appendix C

Decision Tree

Decision Tree

Printed: 1/20/2022

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$12.00		6	
		III - Good, Load Related		THIN OVERLAY	$36.40			
		IV - Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
		V - Very Poor		FDR	$113.00			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$12.00		6	
		III - Good, Load Related		THIN OVERLAY	$36.40			
		IV - Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
		V - Very Poor		FDR	$113.00			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$9.10		6	
		III - Good, Load Related		THIN OVERLAY	$36.40			
		IV - Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
		V - Very Poor		FULL R&R+4IN OL/27IN AB	$156.00			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	5		
			Surface Treatment	DO NOTHING	$0.00		15	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

Decision Tree

Printed: 1/20/2022

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$12.00		6	
		III - Good, Load Related		THIN OVERLAY	$36.40			
		IV - Poor		EDGE GRD+25%DIG+FAB+3IN OL	$44.00			
		V - Very Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$12.00		6	
		III - Good, Load Related		THIN OVERLAY	$36.40			
		IV - Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
		V - Very Poor		FDR	$113.00			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	DO NOTHING	$0.00			
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	5		
			Surface Treatment	DO NOTHING	$0.00		15	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

Decision Tree

Printed: 1/20/2022

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$9.10		6	
		III - Good, Load Related		SLURRY SEAL W/MINOR DIGOUTS	$15.60		6	
		IV - Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
		V - Very Poor		FDR	$93.60			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$3.50	6		
			Surface Treatment	SLURRY SEAL	$9.10		6	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		SLURRY SEAL	$9.10		6	
		III - Good, Load Related		SLURRY SEAL W/MINOR DIGOUTS	$15.60		6	
		IV - Poor		EDGE GRD+20%DIG+FAB+3IN OL	$76.70			
		V - Very Poor		FDR	$93.60			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	DO NOTHING	$0.00			
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	5		
			Surface Treatment	DO NOTHING	$0.00		15	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

Appendix D

Scenario Analysis Reports

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 1/19/2022

Scenario: (1) Unconstrained Needs

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2022	$9,501,801	0%	2024	$1,709,168	0%	2026	$2,544,043	0%
2023	$936,947	0%	2025	$2,215,529	0%			

Projected Network Average PCI by Year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2022	68	83	12.33	24.70
2023	65	81	0.79	1.57
2024	63	82	2.03	3.77
2025	61	83	2.50	6.91
2026	59	84	2.35	4.70

Percent Network Area by Functional Class and Condition Category

Condition in base year 2022, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	18.6%	3.6%	39.1%	0.0%	61.3%
II / III	0.7%	1.3%	8.8%	0.0%	10.8%
IV	4.8%	5.1%	7.3%	0.0%	17.2%
V	0.8%	2.0%	7.9%	0.0%	10.7%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2022 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	23.0%	7.3%	55.1%	0.0%	85.4%
II / III	0.7%	0.8%	2.7%	0.0%	4.2%
IV	1.3%	3.9%	5.3%	0.0%	10.5%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	22.8%	10.9%	56.8%	0.0%	90.5%
II / III	2.2%	1.1%	5.6%	0.0%	8.9%
IV	0.0%	0.0%	0.6%	0.0%	0.6%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (1) Unconstrained Needs

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2022	0%	$9,501,801	II	$233,468	Non-Project	$864,779	$0	$0	Funded	$0
			III	$99,168					Unmet	$0
			IV	$996,578	Project	$0				
			V	$4,612,911						
			Total	$5,942,125						
			Project	$2,694,897						
2023	0%	$936,947	II	$5,343	Non-Project	$0	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$564,666	Project	$0				
			V	$366,938						
			Total	$936,947						
			Project	$0						
2024	0%	$1,709,168	II	$11,740	Non-Project	$236,330	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$35,442	Project	$0				
			V	$1,425,656						
			Total	$1,472,838						
			Project	$0						
2025	0%	$2,215,529	II	$0	Non-Project	$534,242	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$585,755	Project	$0				
			V	$1,095,532						
			Total	$1,681,287						
			Project	$0						
2026	0%	$2,544,043	II	$0	Non-Project	$240,121	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$182,245	Project	$0				
			V	$2,121,677						
			Total	$2,303,922						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$2,499,543	$678,524	$0	$0
Collector	$3,672,548	$112,244	$0	$0
Residential/Local	$8,859,925	$1,084,704	$0	$0
Grand Total:	$15,032,016	$1,875,472	$0	$0

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year	Budget	PM
2022	$6,300,000	10%
2023	$4,236,000	10%

Year	Budget	PM
2024	$1,710,000	10%
2025	$2,216,000	10%

Year	Budget	PM
2026	$2,550,000	9.5%

Projected Network Average PCI by Year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2022	68	77	7.53	15.12
2023	65	82	5.58	11.16
2024	63	82	2.03	3.77
2025	61	83	2.50	6.91
2026	59	85	2.35	4.70

Percent Network Area by Functional Class and Condition Category

Condition in base year 2022, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	18.6%	3.6%	39.1%	0.0%	61.3%
II / III	0.7%	1.3%	8.8%	0.0%	10.8%
IV	4.8%	5.1%	7.3%	0.0%	17.2%
V	0.8%	2.0%	7.9%	0.0%	10.7%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2022 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	23.0%	6.1%	50.3%	0.0%	79.4%
II / III	0.7%	0.8%	2.7%	0.0%	4.2%
IV	1.3%	3.9%	5.3%	0.0%	10.5%
V	0.0%	1.2%	4.8%	0.0%	6.0%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	22.8%	10.9%	56.8%	0.0%	90.5%
II / III	2.2%	1.1%	5.6%	0.0%	8.9%
IV	0.0%	0.0%	0.6%	0.0%	0.6%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2022	10%	$6,300,000	II	$233,468	Non-Project	$361,668	$0	$3,202,922	Funded	$0
			III	$99,168					Unmet	$0
			IV	$996,578	Project	$0				
			V	$1,913,085						
			Total	$3,242,299						
			Project	$2,694,897						
2023	10%	$4,236,000	II	$5,343	Non-Project	$518,204	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$564,666	Project	$0				
			V	$3,147,760						
			Total	$3,717,769						
			Project	$0						
2024	10%	$1,710,000	II	$11,740	Non-Project	$236,330	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$35,442	Project	$0				
			V	$1,425,656						
			Total	$1,472,838						
			Project	$0						
2025	10%	$2,216,000	II	$0	Non-Project	$534,242	$0	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$585,755	Project	$0				
			V	$1,095,532						
			Total	$1,681,287						
			Project	$0						
2026	10%	$2,550,000	II	$0	Non-Project	$240,121	$2,129	$0	Funded	$0
			III	$0					Unmet	$0
			IV	$182,245	Project	$0				
			V	$2,121,677						
			Total	$2,303,922						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$2,499,543	$678,524	$0	$0
Collector	$3,690,824	$112,244	$0	$0
Residential/Local	$8,922,645	$1,099,797	$0	$0
Grand Total:	$15,113,012	$1,890,565	$0	$0

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 1/19/2022

Scenario: (3) Increase PCI 5 points

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2022	$1,700,000	5%	2024	$1,700,000	5%	2026	$1,700,000	5%
2023	$1,700,000	5%	2025	$1,700,000	5%			

Projected Network Average PCI by Year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2022	68	70	1.51	2.82
2023	65	71	3.05	5.75
2024	63	71	1.70	3.10
2025	61	72	1.73	4.06
2026	59	73	1.65	3.72

Percent Network Area by Functional Class and Condition Category

Condition in base year 2022, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	18.6%	3.6%	39.1%	0.0%	61.3%
II / III	0.7%	1.3%	8.8%	0.0%	10.8%
IV	4.8%	5.1%	7.3%	0.0%	17.2%
V	0.8%	2.0%	7.9%	0.0%	10.7%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2022 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	21.6%	3.6%	40.8%	0.0%	66.0%
II / III	0.7%	1.3%	7.9%	0.0%	10.0%
IV	1.9%	5.1%	6.7%	0.0%	13.6%
V	0.8%	2.0%	7.6%	0.0%	10.4%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	22.5%	6.1%	48.3%	0.0%	76.9%
II / III	2.2%	1.6%	5.6%	0.0%	9.4%
IV	0.3%	0.0%	0.6%	0.0%	0.9%
V	0.0%	4.2%	8.5%	0.0%	12.7%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (3) Increase PCI 5 points

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2022	5%	$1,700,000	II	$19,591	Non-Project	$10,031	$0	$7,802,860	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$0						
			Total	$19,591						
			Project	$1,669,290						
2023	5%	$1,700,000	II	$225,636	Non-Project	$85,192	$0	$6,021,922	Funded	$0
			III	$13,412					Unmet	$0
			IV	$545,200	Project	$0				
			V	$827,707						
			Total	$1,611,955						
			Project	$0						
2024	5%	$1,700,000	II	$11,740	Non-Project	$97,329	$0	$6,211,991	Funded	$0
			III	$0					Unmet	$0
			IV	$999,747	Project	$0				
			V	$590,942						
			Total	$1,602,429						
			Project	$0						
2025	5%	$1,700,000	II	$125,020	Non-Project	$136,352	$0	$6,931,726	Funded	$0
			III	$0					Unmet	$0
			IV	$585,755	Project	$0				
			V	$851,925						
			Total	$1,562,700						
			Project	$0						
2026	5%	$1,700,000	II	$51,490	Non-Project	$91,507	$0	$8,011,134	Funded	$0
			III	$59,697					Unmet	$0
			IV	$182,245	Project	$0				
			V	$1,312,517						
			Total	$1,605,949						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$2,478,387	$305,729	$0	$0
Collector	$1,231,398	$46,640	$0	$0
Residential/Local	$4,362,129	$68,042	$0	$0
Grand Total:	$8,071,914	$420,411	$0	$0

Scenarios Criteria:

Criteria:

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 1/19/2022

Scenario: (4) Zero Funding

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2022	$0	0%	2024	$0	0%	2026	$0	0%
2023	$0	0%	2025	$0	0%			

Projected Network Average PCI by Year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2022	68	68	0	0
2023	65	65	0	0
2024	63	63	0	0
2025	61	61	0	0
2026	59	59	0	0

Percent Network Area by Functional Class and Condition Category

Condition in base year 2022, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	18.6%	3.6%	39.1%	0.0%	61.3%
II / III	0.7%	1.3%	8.8%	0.0%	10.8%
IV	4.8%	5.1%	7.3%	0.0%	17.2%
V	0.8%	2.0%	7.9%	0.0%	10.7%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2022 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	18.6%	3.6%	39.1%	0.0%	61.3%
II / III	0.7%	1.3%	8.8%	0.0%	10.8%
IV	4.8%	5.1%	7.3%	0.0%	17.2%
V	0.8%	2.0%	7.9%	0.0%	10.7%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	15.3%	2.5%	33.3%	0.0%	51.1%
II / III	3.3%	1.6%	12.5%	0.0%	17.4%
IV	2.8%	1.9%	4.3%	0.0%	9.0%
V	3.6%	5.9%	13.0%	0.0%	22.4%
Total	25.0%	12.0%	63.1%	0.0%	100.0%

Scenarios Criteria:

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (4) Zero Funding

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2022	0%	$0	II	$0	Non-Project	$0	$0	$7,539,628	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2023	0%	$0	II	$0	Non-Project	$0	$0	$8,504,305	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2024	0%	$0	II	$0	Non-Project	$0	$0	$10,805,662	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2025	0%	$0	II	$0	Non-Project	$0	$0	$12,216,085	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						
2026	0%	$0	II	$0	Non-Project	$0	$0	$15,291,454	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$0						
			Total	$0						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$0	$0	$0	$0
Collector	$0	$0	$0	$0
Residential/Local	$0	$0	$0	$0
Grand Total:	$0	$0	$0	$0

Scenarios Criteria:

Criteria:

Appendix E

Section PCI/Remaining Service Life (RSL) Listing Report

Section PCI/RSL Listing

Printed: 12/17/2021

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
AARON	10	AARON STREET	REDWOOD DR	PORTAL ST	1,520	36	54,720	R - Residential/Local	A - AC	19	0.00
AGIUCT	10	AGUIRRE COURT	AGUIRRE WY	END	240	32	7,680	R - Residential/Local	A - AC	86	30.02
AGUIWY	10	AGUIRRE WAY	MYRTLE AE	VERONDA AVE	560	32	17,920	R - Residential/Local	A - AC	84	28.88
AGUIWY	20	AGUIRRE WAY	LEBEC LN	VERONDA AVE	950	32	30,400	R - Residential/Local	A - AC	7	0.00
AHLSCI	10	AHLSTROM CIRCLE	WILFORD LN	WILFORD CIRCLE	532	32	17,024	R - Residential/Local	A - AC	81	26.99
AHLSDR	10	AHLSTROM DRIVE	WILFORD LN	GILBERT WAY	266	32	8,512	R - Residential/Local	A - AC	43	6.76
ALDER	10	ALDER AVENUE	HWY 116	CITY LIMITS	752	30	22,560	R - Residential/Local	A - AC	67	19.74
ALDER	20	ALDER AVENUE	HELMAN LN	BLODGETT	475	40	19,000	R - Residential/Local	A - AC	57	13.67
AMBER	10	AMBER LANE	WOODLAND HILLS	END	390	25	9,750	R - Residential/Local	A - AC	21	0.00
ARTHUR	05	ARTHUR STREET	E. Sierra	250ft east of E. Sierra	250	32	8,000	R - Residential/Local	A - AC	94	33.72
ARTHUR	15	ARTHUR STREET	250ft east of E. Sierra	E. Cotati Ave	350	24	8,400	R - Residential/Local	A - AC	94	33.72
BENSON	10	BENSON LANE	PARK AVE	BRIDGE	750	18	13,500	R - Residential/Local	O - AC/AC	94	37.95
BENSON	20	BENSON LANE	BRIDGE	LORETTO	160	23	3,680	R - Residential/Local	O - AC/AC	94	37.95
BLODGE	10	BLODGETT STREET	END	END	1,470	40	58,800	R - Residential/Local	O - AC/AC	65	20.10
BRADEN	10	BRADEN COURT	MAPLE AVE	END	143	27	3,861	R - Residential/Local	A - AC	3	0.00
CERVAN	10	CERVANTES COURT	WATER RD	CUL DE SAC	635	22	13,970	R - Residential/Local	A - AC	88	31.19
CHADWI	10	CHADWICK WAY	CUL DE SAC	CUL DE SAC	418	32	13,376	R - Residential/Local	A - AC	76	23.80
CHARLE	10	CHARLES STREET	OLD REDWOOD HWY	E COTATI AVE	698	34	23,732	R - Residential/Local	A - AC	94	33.70
CHRIST	10	CHRISTENSEN COURT	E SCHOOL ST	END	880	24	21,120	R - Residential/Local	A - AC	77	24.44
CLIFFO	10	CLIFFORD STREET	WEST SCHOOL ST	WEST COTATI AVE	589	25	14,725	R - Residential/Local	A - AC	97	34.10
CLOTHI	10	CLOTHIER LANE	OLD REDWOOD HWY	END	975	32	31,200	R - Residential/Local	A - AC	79	25.72
COMMER	10	COMMERCE BLVD	OLD REDWOOD HWY	CITY LIMITS	1,282	42	53,844	A - Arterial	O - AC/AC	79	22.51
CONDOR	10	CONDOR COURT	EAGLE DR	END	142	24	3,408	R - Residential/Local	A - AC	97	34.10
CYPRES	10	CYPRESS AVENUE	W SIERRA AVE	120 S/O LUND	2,010	30	60,300	C - Collector	O - AC/AC	37	3.07
CYPRES	15	CYPRESS AVENUE	120 S/O LUND	CITY LIMITS	1,400	15	21,000	C - Collector	O - AC/AC	14	0.00
DELANO	10	DELANO STREET	HENRY ST	PAGE ST	245	22	5,390	R - Residential/Local	A - AC	32	2.31
DERBY	10	DERBY LANE	HWY 116	CITY LIMITS	1,187	18	21,366	R - Residential/Local	A - AC	0	0.00
DORFDR	10	DORFMAN DRIVE	CLOTHIER	147' N/O HONOR PLACE	741	32	23,712	R - Residential/Local	A - AC	80	26.36
DORFDR	20	DORFMAN DRIVE	147' N/O HONOR PLACE	JAGLA ST	133	34	4,522	R - Residential/Local	O - AC/AC	94	38.05
DYQUIS	10	DYQUISTO WAY	E. COTATI AVE	END	420	26	10,920	R - Residential/Local	A - AC	81	26.99
EAGLE	10	EAGLE DRIVE	FALCON DR	WREN	1,000	24	24,000	R - Residential/Local	A - AC	85	29.51
ECOTAT	10	EAST COTATI AVENUE	OLD REDWOOD HWY	MATTERI LN	1,000	69	69,000	A - Arterial	O - AC/AC	91	28.59
ECOTAT	20	EAST COTATI AVENUE	MATTERI LN	BAYTREE CT	1,187	69	81,903	A - Arterial	O - AC/AC	90	28.01
ECOTAT	30	EAST COTATI AVENUE	BAYTREE CT	BEVERLY DR	1,092	69	75,348	A - Arterial	O - AC/AC	90	28.01
ECOTAT	35	EAST COTATI AVENUE	BEVERLY DR	RR TRACKS	1,173	69	80,937	A - Arterial	O - AC/AC	89	27.62

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
ECOTAT	45	EAST COTATI AVENUE	RR TRACKS	CITY LIMITS	679	69	46,851	A - Arterial	O - AC/AC	92	28.88
ESCHOO	05	EAST SCHOOL STREET	EL RANCHO	END	900	37	33,300	R - Residential/Local	O - AC/AC	78	28.38
ESCHOO	10	EAST SCHOOL STREET	EL RANCHO	W SIERRA	522	37	19,314	R - Residential/Local	O - AC/AC	83	31.91
ESIERR	10	EAST SIERRA AVENUE	LA PLAZA	ARTHUR ST	313	24	7,512	R - Residential/Local	A - AC	64	16.64
ESIERR	20	EAST SIERRA AVENUE	ARTHUR ST	CHADWICK WY	117	32	3,744	R - Residential/Local	A - AC	88	31.19
ELRANC	10	EL RANCHO DRIVE	E SCHOOL ST	W COTATI AVE	780	25	19,500	R - Residential/Local	O - AC/AC	31	2.42
EUCALY	10	EUCALYPTUS AVENUE	ORH	CITIY LIMIT	1,340	34	45,560	C - Collector	A - AC	68	10.83
FALCON	10	FALCON DRIVE	MYRTLE AVE	EAGLE DR	520	32	16,640	R - Residential/Local	A - AC	72	21.41
FEHLER	10	FEHLER LANE	VAL PARASIO AVE	JAGLE ST	807	25	20,175	R - Residential/Local	A - AC	90	32.18
FLAMIN	10	FLAMINGO ROAD	FALCON DR	EAGLE DR	580	32	18,560	R - Residential/Local	A - AC	86	30.08
FORNO	10	FORNO WAY	VALPARASIO AVE	VALPARASIO AVE	494	29	14,326	R - Residential/Local	A - AC	81	26.99
GEORGE	10	GEORGE STREET	OLD REDWOOD HWY	E SIERRA AVE	594	32	19,008	R - Residential/Local	A - AC	94	33.72
GILBCT	10	GILBERT COURT	WILFORD LN	END	171	32	5,472	R - Residential/Local	A - AC	80	26.35
GILBWY	10	GILBERT WAY	WILFORD LN	END	708	32	22,656	R - Residential/Local	A - AC	74	22.54
GILMANRD	10	GILMAN RANCH ROAD	W COTATI AVE	END	880	26	22,880	R - Residential/Local	A - AC	83	28.26
GRAVEN	10	GRAVENSTEIN WAY	OLD REDWOOD HWY	BRIDGE	998	30	29,940	R - Residential/Local	A - AC	79	25.71
GRAVEN	20	GRAVENSTEIN WAY	BRIDGE	BRIDGE	1,409	28	39,452	R - Residential/Local	A - AC	63	17.46
HAHNWY	10	HAHN WAY	END	VERONDA WY	1,120	32	35,840	R - Residential/Local	A - AC	92	32.87
HAHNWY	20	HAHN WAY	VERONDA WY	BARRICADE SOUTH	130	32	4,160	R - Residential/Local	A - AC	81	26.80
HELMAN	10	HELMAN LANE	REDWOOD DR	1300ft W of REDWOOD DR	1,300	24	31,200	C - Collector	A - AC	49	5.27
HELMAN	20	HELMAN LANE	1300ft W of REDWOOD	530ft W of ALDER	860	32	27,520	C - Collector	O - AC/AC	24	0.00
HELMAN	30	HELMAN LANE	530ft W of ALDER	1060ft W of ALDER	530	22	11,660	C - Collector	A - AC	28	0.52
HELMAN	40	HELMAN LANE	1060ft W of ALDER	CITY LIMITS	500	32	16,000	C - Collector	O - AC/AC	49	7.42
HENRY	10	HENRY STREET	OLD REDWOOD HWY	W SIERRA AVE	747	31	23,157	R - Residential/Local	A - AC	95	46.77
HONOR	10	HONOR PLACE	CUL DE SAC SW OF DORFMANN DR	850' NE OF DORFMAN DR	850	32	27,200	R - Residential/Local	A - AC	74	22.55
HONOR	20	HONOR PLACE	850' NE OF DORFMAN DR	JAGLA ST	189	34	6,426	R - Residential/Local	O - AC/AC	94	38.05
HOUSER	10	HOUSER STREET	REDWOOD	AARON ST	1,000	36	36,000	R - Residential/Local	O - AC/AC	14	0.00
ISSEL	10	ISSEL COURT	WATER RD	END	357	25	8,925	R - Residential/Local	A - AC	76	23.80
JAGLA	10	JAGLA STREET	LUND HILL LN	FEHLER LN	190	27	5,130	R - Residential/Local	A - AC	71	20.70
JAGLA	20	JAGLA STREET	FEHLER LN	VALPARAISO AVE	1,180	34	40,120	R - Residential/Local	O - AC/AC	94	38.05
JONROB	10	JOHN ROBERTS DRIVE	AGUIRE WY	100 E OF LEBEC LN	770	32	24,640	R - Residential/Local	A - AC	97	34.10
JONROB	20	JOHN ROBERTS	100 E OF LEBEC LN	MACKLIN DR	350	28	9,800	R - Residential/Local	A - AC	59	13.57

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
		DRIVE									
JORGEN	10	JORGENSEN STREET	MCGINNIS CIR	PARK AVE	312	20	6,240	R - Residential/Local	A - AC	80	26.35
KEPPEL	10	KEPPEL WAY	MYRTLE AVE	VERONDA WY	552	32	17,664	R - Residential/Local	A - AC	81	26.80
KEYTWY	10	KEYT WAY	HAHN WAY	BARRICADE SOUTH/CURB @ #150	815	32	26,080	R - Residential/Local	A - AC	76	23.50
LAPLAZ	05	LA PLAZA	ORH	W. Cotati Ave	225	48	10,800	R - Residential/Local	A - AC	19	0.00
LAPLAZ	15	LA PLAZA	W. Cotati Ave.	W. Sierra Ave	225	45	10,125	R - Residential/Local	A - AC	48	8.69
LAPLAZ	18	LA PLAZA	W. Sierra Ave	ORH	225	38	8,550	R - Residential/Local	A - AC	66	17.76
LAPLAZ	25	LA PLAZA	ORH	E. Cotati Ave	225	40	9,000	R - Residential/Local	A - AC	65	17.20
LAPLAZ	33	LA PLAZA	E. Cotati Ave	E. Sierra Ave	225	37	8,325	R - Residential/Local	O - AC/AC	34	3.24
LAPLAZ	35	LA PLAZA	E. Sierra Ave	ORH	225	37	8,325	R - Residential/Local	O - AC/AC	35	3.65
LASALL	10	LA SALLE AVENUE	E COTATI AVE	LARKSPUR CT	1,000	37	37,000	C - Collector	O - AC/AC	90	33.64
LASALL	20	LA SALLE AVENUE	LARKSPUR CT	LORETTO AVE	980	37	36,260	C - Collector	O - AC/AC	90	33.64
LAKEWD	10	LAKEWOOD AVENUE	LINCOLN AVE	LA SALLE AVE	1,800	33	59,400	R - Residential/Local	A - AC	93	33.47
LANCAS	10	LANCASTER DRIVE	E COTATI AVE	CITY LIMITS	440	37	16,280	C - Collector	A - AC	87	19.24
LARCH	10	LARCH AVENUE	LINCOLN AVE	LASALLE AVE	1,425	33	47,025	R - Residential/Local	A - AC	93	33.47
LARKDR	10	LARK DRIVE	MYRTLE AVE	EAGLE DR	500	24	12,000	R - Residential/Local	A - AC	88	31.19
LARKSP	10	LARKSPUR COURT	LA SALLE AVE	END	180	44	7,920	R - Residential/Local	A - AC	93	33.47
LASKER	10	LASKER LANE	OLD REDWOOD HWY	DORFMAN	370	32	11,840	R - Residential/Local	A - AC	37	4.24
LEBEC	10	LEBEC LANE	EUCALYPTUS AVE	JOHN ROBERTS DR	630	32	20,160	R - Residential/Local	A - AC	11	0.00
LINCOL	10	LINCOLN AVENUE	LORETTO AVE	LA SALLE AVE	840	37	31,080	R - Residential/Local	A - AC	94	33.62
LINCOL	20	LINCOLN AVENUE	LA SALLE AVE	CITY LIMITS	884	37	32,708	R - Residential/Local	O - AC/AC	94	37.95
LINDAV	10	LINDEN AVENUE	LINCOLN AVE	LARCH AVE	722	33	23,826	R - Residential/Local	A - AC	94	33.62
LINDCT	10	LINDEN COURT	LINDEN AVE	END	285	33	9,405	R - Residential/Local	A - AC	94	33.62
LIPTON	10	LIPTON STREET	LANCASTER DR	E COTATI AVE	692	26	17,992	R - Residential/Local	A - AC	83	28.25
LOCUST	10	LOCUST AVENUE	DERBY LN	END	850	14	11,900	R - Residential/Local	O - AC/AC	74	29.30
LOGANPL	10	LOGAN PLACE	CYPRESS AVE	END	625	27	16,875	R - Residential/Local	A - AC	79	25.72
LOMACT	10	LOMA LINDA COURT	LOMA LINDA DR	END	278	27	7,506	R - Residential/Local	A - AC	78	25.07
LOMADR	10	LOMA LINDA DRIVE	WATER RD	END	817	27	22,059	R - Residential/Local	A - AC	76	23.80
LORETT	10	LORETTO AVENUE	BENSON LN	LINCOLN AVE	741	33	24,453	R - Residential/Local	A - AC	93	43.66
LORETT	20	LORETTO AVENUE	BENSON LN	LA SALLE AVE	970	33	32,010	R - Residential/Local	A - AC	95	48.08
LUNDHI	10	LUND HILL LANE	VAL PARASIO AVE	JAGLE ST	494	27	13,338	R - Residential/Local	O - AC/AC	40	6.20
LUNDHI	20	LUND HILL LANE	JAGLE ST	CYPRESS AVE	1,026	24	24,624	R - Residential/Local	A - AC	50	10.02
MACKLI	10	MACKLIN DRIVE	MYRTLE AVE	JOHN ROBERTS DR	882	32	28,224	R - Residential/Local	A - AC	51	10.55
MADRON	10	MADRONE AVENUE	DERBY	CITY LIMITS	1,511	23	34,753	C - Collector	A - AC	0	0.00
MAPLE	05	MAPLE AVENUE	SCHOOL ST	W COTATI AVE	900	34	30,600	R - Residential/Local	O - AC/AC	75	26.27
MAPLE	20	MAPLE AVENUE	W COTATI AVE	END NEAR HWY 101	713	20	14,260	R - Residential/Local	O - AC/AC	75	26.27

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
MARSH	10	MARSH WAY	E COTATI AVE	END	574	20	11,480	R - Residential/Local	A - AC	52	10.51
MCGINN	10	McGINNIS CIRCLE	ORH	Park Ave	2,000	26	52,000	R - Residential/Local	A - AC	64	17.29
MENDEL	10	MENDELSOHN COURT	MACKLIN DR	END	494	32	15,808	R - Residential/Local	A - AC	78	25.07
MERCAN	10	MERCANTILE DRIVE	PORTAL ST	AARON ST	780	37	28,860	R - Residential/Local	A - AC	29	1.25
MIWOK	10	MIWOK COURT	HAHN WAY	END	210	32	6,720	R - Residential/Local	A - AC	86	30.08
MYRTLE	10	MYRTLE AVENUE	OLD REDWOOD HIGHWAY	50 FT W OF WREN	950	34	32,300	C - Collector	O - AC/AC	56	10.36
MYRTLE	20	MYRTLE AVENUE	50 FT W OF WREN	KEPPEL WAY	1,140	34	38,760	C - Collector	O - AC/AC	30	1.35
MYRTLE	30	MYRTLE AVENUE	KEPPLE WAY	CITY LIMITS	822	34	27,948	C - Collector	O - AC/AC	39	3.54
OLAFST	10	OLAF STREET	W SIERRA AVE	WILLIAM	589	34	20,026	R - Residential/Local	A - AC	94	33.72
ORH	10	OLD REDWOOD HWY	COMMERCE	ST JOSEPH	800	60	48,000	A - Arterial	A - AC	76	17.51
ORH	20	OLD REDWOOD HWY	ST JOSEPH	WILLIAM	1,000	60	60,000	A - Arterial	A - AC	79	18.92
ORH	30	OLD REDWOOD HWY	WILLIAM	W SIERRA	800	60	48,000	A - Arterial	C - AC/PCC	93	28.94
ORH	40	OLD REDWOOD HWY	W SIERRA	PAGE ST	1,150	36	41,400	A - Arterial	C - AC/PCC	89	30.77
ORH	50	OLD REDWOOD HWY	PAGE ST	VETERANS BLDG	800	32	25,600	A - Arterial	O - AC/AC	95	29.33
ORH	60A	OLD REDWOOD HWY	VETERANS BLDG	MYRTLE AVE	485	54	26,190	A - Arterial	O - AC/AC	95	29.33
ORH	60B	OLD REDWOOD HWY	MYRTLE AVE	LASKER LN	730	54	39,420	A - Arterial	A - AC	75	16.90
ORH	70	OLD REDWOOD HWY	LASKER	EUCALYPTUS	1,000	51	51,000	A - Arterial	A - AC	77	18.09
ORETSK	10	ORETSKY WAY	CYPRESS AVE	CYPRESS AVE	651	27	17,577	R - Residential/Local	A - AC	16	0.00
PAGEST	10	PAGE STREET	OLD REDWOOD HWY	DELANO CREEK ST	540	28	15,120	R - Residential/Local	O - AC/AC	80	29.80
PAGEST	20	PAGE STREET	50 FT W OF RAMBLE CREEK	W SIERRA AVE	429	26	11,154	R - Residential/Local	A - AC	22	0.00
PARKAV	10	PARK AVENUE	MYRTLE AVE	MCGINNIS CIR	503	34	17,102	R - Residential/Local	O - AC/AC	85	33.26
PINECT	10	PINEWOOD COURT	WILFORD LN	END	366	32	11,712	R - Residential/Local	A - AC	62	15.54
PINEWY	10	PINEWOOD WAY	GRAVENSTEIN WY	WILFORD LN	342	32	10,944	R - Residential/Local	A - AC	72	21.31
PORTAL	10	PORTAL STREET	REDWOOD DR	END	2,042	36	73,512	R - Residential/Local	A - AC	22	0.00
PRIMER	10	PRIMERO COURT	PORTAL ST	END	143	34	4,862	R - Residential/Local	A - AC	31	1.95
REDWOO	10	REDWOOD DRIVE	HWY 116	END	200	36	7,200	R - Residential/Local	A - AC	45	7.64
REDWOO	20	REDWOOD DRIVE	HWY 116	50 FTS OF HELMAN LN	900	34	30,600	A - Arterial	A - AC	58	9.90
REDWOO	30	REDWOOD DRIVE	50 FT S OF HELMAN LN	SANTA ROSA CREEK	1,140	25	28,500	A - Arterial	O - AC/AC	83	25.13
REDWOO	35	REDWOOD DRIVE	SANTA ROSA CREEK	300FT S OF HOUSER	400	50	20,000	A - Arterial	O - AC/AC	22	0.00
REDWNB	55	REDWOOD DRIVE NB	300FT S OF HOUSER	AARON ST	800	25	20,000	A - Arterial	O - AC/AC	36	2.76
REDWNB	60	REDWOOD DRIVE NB	AARON ST	PORTAL ST	500	25	12,500	A - Arterial	O - AC/AC	23	0.00
REDWNB	70	REDWOOD DRIVE NB	PORTAL	NORTHERN CITY LIMIT	500	25	12,500	A - Arterial	A - AC	48	6.38
REDWSB	55.1	REDWOOD DRIVE SB	300FT S OF HOUSER	AARON ST	800	25	20,000	A - Arterial	O - AC/AC	32	1.84
REDWSB	60.1	REDWOOD DRIVE SB	AARON ST	PORTAL	500	25	12,500	A - Arterial	O - AC/AC	32	1.84
REDWSB	70.1	REDWOOD DRIVE SB	PORTAL	NORTHERN CITY LIMIT	500	25	12,500	A - Arterial	A - AC	43	4.79

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
RICHAR	10	RICHARDSON LANE	SCHOOL ST	END	1,000	13	13,000	R - Residential/Local	A - AC	15	0.00
ROBIN	10	ROBIN AVENUE	LARK DR	WREN DR	589	24	14,136	R - Residential/Local	A - AC	97	34.10
ROSS	10	ROSS STREET	McGUINESS	OLSON	130	30	3,900	R - Residential/Local	A - AC	77	27.38
ROSS	20	ROSS STREET	OLSON	BRIDGE	295	25	7,375	R - Residential/Local	A - AC	68	20.04
ROSS	30	ROSS STREET	BRIDGE	CHARLES	245	16	3,920	R - Residential/Local	A - AC	54	10.96
STJOES	10	SAINT JOSEPH WAY	OLD REDWOOD HWY	END	950	26	24,700	R - Residential/Local	O - AC/AC	26	0.34
SANTER	05	SANTERO WAY	E. COTATI AVE	750ft S OF E. COTATI	750	36	27,000	R - Residential/Local	A - AC	63	16.09
SANTER	15	SANTERO WAY	750ft S OF E. COTATI	1575ft S OF E. COTATI	825	28	23,512.5	R - Residential/Local	O - AC/AC	81	34.96
SANTER	25	SANTERO WAY	1575ft S OF E. COTATI	CUL DE SAC	440	36	15,840	R - Residential/Local	A - AC	50	9.59
SKILLI	10	SKILLING COURT	MACKLIN DR	END	447	32	14,304	R - Residential/Local	A - AC	77	24.44
TREBIN	10	TREBINO COURT	BLODGETT ST	CUL-DE-SAC	300	40	12,000	R - Residential/Local	A - AC	67	20.33
VALPAR	10A	VAL PARASIO AVENUE	OLD REDWOOD HWY	FEHLER LN	335	30	10,050	C - Collector	O - AC/AC	91	29.23
VALPAR	10B	VAL PARASIO AVENUE	FEHLER LN	LUND HILL LN	710	30	21,300	C - Collector	O - AC/AC	60	12.19
VALPAR	15	VAL PARASIO AVENUE	LUND HILL LN	NINA CT	465	28	13,020	C - Collector	A - AC	36	2.17
VALPAR	25A	VAL PARASIO AVENUE	NINA CT	BRIDGE	502	23	11,546	C - Collector	A - AC	33	1.53
VALPAR	25B	VAL PARASIO AVENUE	BRIDGE	W. SIERRA AVE	220	23	5,060	C - Collector	A - AC	96	23.74
VEROND	10	VERONDA WAY	MYRTLE AVE	AGUIRRE WY (E INT)	1,028	32	32,896	R - Residential/Local	A - AC	84	28.99
VEROND	20	VERONDA WAY	AGUIRRE WY (E INT)	KEYT WY	945	32	30,240	R - Residential/Local	A - AC	76	23.50
WARD	01	WARD DRIVE	JOHN ROBERTS DRIVE	END	215	28	6,020	R - Residential/Local	A - AC	85	35.80
WATER	10	WATER ROAD	W SIERRA AVE	PAVE CHANGE 393' S/O W SIERRA	393	22	36,696	R - Residential/Local	O - AC/AC	32	2.79
WATER	15	WATER ROAD	PAVE CHANGE 393' S/O W SIERRA	PAVE CHANGE 1169' S/O W SIERRA	776	22	36,696	R - Residential/Local	O - AC/AC	76	26.97
WATER	18	WATER ROAD	PAVE CHANGE 1169' SO W SIERRA	LOMA LINDA	520	22	11,440	R - Residential/Local	O - AC/AC	45	9.01
WATER	20	WATER ROAD	CITY LIMITS	LOMA LINDA DR	513	22	11,286	R - Residential/Local	O - AC/AC	33	3.22
WCOTAT	10	WEST COTATI AVENUE	PLAZA	WILLIAM ST	475	29	13,775	R - Residential/Local	O - AC/AC	22	0.00
WCOTAT	20	WEST COTATI AVENUE	WILLIAM ST	EL RANCHO DR	426	27	11,502	R - Residential/Local	O - AC/AC	24	0.00
WCOTAT	30	WEST COTATI AVENUE	EL RANCHO DR	END AT E. SIDE OF 101	598	29	17,342	R - Residential/Local	O - AC/AC	18	0.00
WCOTAT	40	WEST COTATI AVENUE	END W. SIDE OF HWY 101	MAPLE AVE	285	34	9,690	R - Residential/Local	A - AC	97	34.10
WCOTAT	50	WEST COTATI AVENUE	MAPLE AVE	W COTATI OAKS CT	515	32	16,480	R - Residential/Local	A - AC	97	34.10
WCOTAT	60A	WEST COTATI AVENUE	W COTATI OAKS CT	COHEN CT	994	29	28,826	R - Residential/Local	A - AC	97	34.10
WCOTAT	60B	WEST COTATI AVENUE	COHEN CT	CREEK	407	29	11,803	R - Residential/Local	O - AC/AC	78	25.52
WCOTAT	70	WEST COTATI AVENUE	CREEK	HWY 116	700	20	14,000	R - Residential/Local	O - AC/AC	60	16.46
WSCHOO	10	WEST SCHOOL STREET	W SIERRA AVE	CLIFFORD ST	1,900	28	53,200	R - Residential/Local	A - AC	97	34.10
WSCHOO	20	WEST SCHOOL	CLIFFORD ST	300FT W OF CLIFFORD	300	17	5,100	R - Residential/Local	A - AC	97	34.10

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
		STREET									
WSCHOO	30	WEST SCHOOL STREET	300FT W OF CLIFFORD	MAPLE AVE	712	21	14,952	R - Residential/Local	A - AC	97	34.10
WSCHOO	40	WEST SCHOOL STREET	MAPLE AVE	RICHARDSON RD	1,092	28	30,576	R - Residential/Local	A - AC	97	34.10
WSCHOO	50	WEST SCHOOL STREET	RICHARDSON LN	CITY LIMITS	530	28	14,840	R - Residential/Local	A - AC	97	34.10
WSIERR	10	WEST SIERRA AVENUE	OLD REDWOOD HWY	PAGE ST	950	36	34,200	A - Arterial	O - AC/AC	30	1.37
WSIERR	20	WEST SIERRA AVENUE	PAGE ST	WATER AVE	1,662	36	59,832	A - Arterial	O - AC/AC	48	6.54
WSIERR	30	WEST SIERRA AVENUE	WATER AVE	CITY LIMITS	900	32	28,800	A - Arterial	O - AC/AC	40	3.95
WILFCI	10	WILFORD CIRCLE	WILFORD LN	WILFORD LN	684	32	21,888	R - Residential/Local	A - AC	36	3.86
WILFLN	10	WILFORD LANE	COMMERCE AVE	MEADOW BROOK WY	1,187	35	41,545	R - Residential/Local	A - AC	36	3.82
WILFLN	20	WILFORD LANE	MEADOW BROOK WY	GRAVENSTEIN WY	456	33	15,048	R - Residential/Local	A - AC	48	9.07
WILFLN	30	WILFORD LANE	GRAVENSTEIN WAY	AHLSTROM CIR	587	30	17,610	R - Residential/Local	A - AC	78	25.07
WILLIA	10	WILLIAM STREET	OLD REDWOOD HWY	OLAF ST	637	33	21,021	R - Residential/Local	A - AC	94	33.72
WOODLD	10	WOODLAND HILLS DRIVE	E SCHOOL ST	END	426	25	10,650	R - Residential/Local	A - AC	80	26.36
WRENDR	10	WREN DRIVE	MYRTLE AVE	EAGLE DR	550	24	13,200	R - Residential/Local	O - AC/AC	95	38.08

Total Section Length:	126,630
Total Section Area:	4,162,468

Appendix F

Scenarios - Sections Selected for Treatment

Scenario - Current Funding - Sections Selected for Treatment

Scenarios - Sections Selected for Treatment Reports for each Scenario are available separate from this report. These reports show a list of all treatments selected in any given year for each Scenario.

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year	Budget	PM
2022	$6,300,000	10%
2023	$4,236,000	10%

Year	Budget	PM
2024	$1,710,000	10%
2025	$2,216,000	10%

Year	Budget	PM
2026	$2,550,000	9.5%

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
HELMAN LANE	REDWOOD DR	1300ft W of REDWOOD DR	HELMAN	10	1,300	24	31,200	C	AC		49	49	100	$152,534	11,669	EDGE GRD+25% DIG+FAB+3IN OL
												Treatment Total		$152,534		
AARON STREET	REDWOOD DR	PORTAL ST	AARON	10	1,520	36	54,720	R	AC		18	18	100	$569,088	4,745	FDR
AGUIRRE WAY	LEBEC LN	VERONDA AVE	AGUIWY	20	950	32	30,400	R	AC		7	7	100	$316,160	4,745	FDR
AMBER LANE	WOODLAND HILLS	END	AMBER	10	390	25	9,750	R	AC		20	21	100	$101,400	4,745	FDR
**BRADEN COURT	MAPLE AVE	END	BRADEN	10	143	27	3,861	R	AC		96	96	100	$40,155	29	FDR
DERBY LANE	HWY 116	CITY LIMITS	DERBY	10	1,187	18	21,366	R	AC		0	0	100	$222,207	4,745	FDR
REDWOOD DRIVE NB	AARON ST	PORTAL ST	REDWNB	60	500	25	12,500	A	AC/AC		23	23	100	$156,945	5,958	FDR
REDWOOD DRIVE	SANTA ROSA CREEK	300FT S OF HOUSER	REDWOO	35	400	50	20,000	A	AC/AC	S - Sampling	22	22	100	$251,112	5,958	FDR
**RICHARDSON LANE	SCHOOL ST	END	RICHAR	10	1,000	13	13,000	R	AC		96	96	100	$135,200	29	FDR
**WEST SCHOOL STREET	W SIERRA AVE	CLIFFORD ST	WSCHOO	10	1,900	28	53,200	R	AC		96	96	100	$553,280	29	FDR
**WEST SCHOOL STREET	CLIFFORD ST	300FT W OF CLIFFORD	WSCHOO	20	300	17	5,100	R	AC		96	96	100	$54,570	28	FDR
**WEST SCHOOL STREET	300FT W OF CLIFFORD	MAPLE AVE	WSCHOO	30	712	21	14,952	R	AC		96	96	100	$155,501	29	FDR
**WEST SCHOOL STREET	MAPLE AVE	RICHARDSON RD	WSCHOO	40	1,092	28	30,576	R	AC		96	96	100	$317,991	29	FDR
**WEST SCHOOL STREET	RICHARDSON LN	CITY LIMITS	WSCHOO	50	530	28	14,840	R	AC		96	96	100	$154,336	29	FDR
**WEST SIERRA AVENUE	OLD REDWOOD HWY	PAGE ST	WSIERR	10	950	36	34,200	A	AC/AC		30	30	100	$246,734	10,326	FDR
**WEST SIERRA AVENUE	PAGE ST	WATER AVE	WSIERR	20	1,662	36	59,832	A	AC/AC		48	48	100	$431,655	9,524	FDR
**WEST SIERRA AVENUE	WATER AVE	CITY LIMITS	WSIERR	30	900	32	28,800	A	AC/AC		39	39	100	$207,776	10,054	FDR
												Treatment Total		$3,914,110		
EAST SIERRA AVENUE	LA PLAZA	ARTHUR ST	ESIERR	10	313	24	7,512	R	AC		64	64	74	$13,021	7,130	SLURRY SEAL W/MINOR DIGOUTS
												Treatment Total		$13,021		
VAL PARASIO AVENUE	FEHLER LN	LUND HILL LN	VALPAR	10B	710	30	21,300	C	AC/AC		60	60	100	$86,147	11,953	THIN OVERLAY
												Treatment Total		$86,147		
AHLSTROM DRIVE	WILFORD LN	GILBERT WAY	AHLSDR	10	266	32	8,512	R	AC		43	43	100	$72,542	5,898	EDGE GRD+20% DIG+FAB+3IN OL

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
HELMAN LANE	1060ft W of ALDER	CITY LIMITS	HELMAN	40	500	32	16,000	C	AC/AC		49	49	100	$136,356	6,529	EDGE GRD+20% DIG+FAB+3IN OL
MADRONE AVENUE	DERBY	CITY LIMITS	MADRON	10	1,511	23	34,753	C	AC		0	0	100	$296,173	7,106	EDGE GRD+20% DIG+FAB+3IN OL
REDWOOD DRIVE NB	PORTAL	NORTHERN CITY LIMIT	REDWNB	70	500	25	12,500	A	AC	S - Sampling	47	48	100	$106,528	9,267	EDGE GRD+20% DIG+FAB+3IN OL
REDWOOD DRIVE	HWY 116	END	REDWOO	10	200	36	7,200	R	AC		45	45	100	$61,360	5,825	EDGE GRD+20% DIG+FAB+3IN OL
REDWOOD DRIVE SB	PORTAL	NORTHERN CITY LIMIT	REDWSB	70.1	500	25	12,500	A	AC	S - Sampling	42	42	100	$106,528	9,541	EDGE GRD+20% DIG+FAB+3IN OL
SANTERO WAY	1575ft S OF E. COTATI	CUL DE SAC	SANTER	25	440	36	15,840	R	AC		50	50	100	$134,992	5,633	EDGE GRD+20% DIG+FAB+3IN OL
WATER ROAD	PAVE CHANGE 1169' SO W SIERRA	LOMA LINDA	WATER	18	520	22	11,440	R	AC/AC		45	45	100	$97,495	5,765	EDGE GRD+20% DIG+FAB+3IN OL
WILFORD LANE	MEADOW BROOK WY	GRAVENSTEIN WY	WILFLN	20	456	33	15,048	R	AC		48	48	100	$128,243	5,699	EDGE GRD+20% DIG+FAB+3IN OL
											Treatment Total			$1,140,217		
**LA PLAZA	ORH	W. Cotati Ave	LAPLAZ	05	225	48	10,800	R	AC		18	18	100	$77,916	7,281	AC OVERLAY
**LA PLAZA	W. Cotati Ave.	W. Sierra Ave	LAPLAZ	15	225	45	10,125	R	AC		48	48	100	$73,047	6,761	AC OVERLAY
**LA PLAZA	W. Sierra Ave	ORH	LAPLAZ	18	225	38	8,550	R	AC		66	66	100	$61,684	5,294	AC OVERLAY
**LA PLAZA	ORH	E. Cotati Ave	LAPLAZ	25	225	40	9,000	R	AC		65	65	100	$64,930	5,409	AC OVERLAY
**LA PLAZA	E. Cotati Ave	E. Sierra Ave	LAPLAZ	33	225	37	8,325	R	AC/AC		34	34	100	$60,061	7,209	AC OVERLAY
**LA PLAZA	E. Sierra Ave	ORH	LAPLAZ	35	225	37	8,325	R	AC/AC		35	35	100	$60,061	7,190	AC OVERLAY
											Treatment Total			$397,699		
ALDER AVENUE	HWY 116	CITY LIMITS	ALDER	10	752	30	22,560	R	AC		67	67	77	$22,811	13,313	SLURRY SEAL
BLODGETT STREET	END	END	BLODGE	10	1,470	40	58,800	R	AC/AC		65	65	75	$59,454	13,444	SLURRY SEAL
CHADWICK WAY	CUL DE SAC	CUL DE SAC	CHADWI	10	418	32	13,376	R	AC		76	76	84	$13,525	12,726	SLURRY SEAL
COMMERCE BLVD	OLD REDWOOD HWY	CITY LIMITS	COMMER	10	1,282	42	53,844	A	AC/AC		79	79	87	$54,443	24,721	SLURRY SEAL
GRAVENSTEIN WAY	BRIDGE	BRIDGE	GRAVEN	20	1,409	28	39,452	R	AC		63	63	73	$39,891	14,294	SLURRY SEAL
LANCASTER DRIVE	E COTATI AVE	CITY LIMITS	LANCAS	10	440	37	16,280	C	AC		87	87	93	$16,461	13,688	SLURRY SEAL
LOCUST AVENUE	DERBY LN	END	LOCUST	10	850	14	11,900	R	AC/AC		73	74	82	$12,033	18,385	SLURRY SEAL
MAPLE AVENUE	W COTATI AVE	END NEAR HWY 101	MAPLE	20	713	20	14,260	R	AC/AC		75	75	84	$14,419	13,427	SLURRY SEAL
McGINNIS CIRCLE	ORH	Park Ave	MCGINN	10	2,000	26	52,000	R	AC		64	64	74	$52,578	12,892	SLURRY SEAL
OLD REDWOOD HWY	COMMERCE	ST JOSEPH	ORH	10	800	60	48,000	A	AC		76	76	84	$48,534	17,115	SLURRY SEAL
OLD REDWOOD HWY	ST JOSEPH	WILLIAM	ORH	20	1,000	60	60,000	A	AC		79	79	87	$60,667	16,596	SLURRY SEAL
OLD REDWOOD HWY	W SIERRA	PAGE ST	ORH	40	1,150	36	41,400	A	AC/PCC		88	89	94	$41,860	22,933	SLURRY SEAL
PINEWOOD COURT	WILFORD LN	END	PINECT	10	366	32	11,712	R	AC		62	62	72	$11,843	12,024	SLURRY SEAL

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
REDWOOD DRIVE	50 FT S OF HELMAN LN	SANTA ROSA CREEK	REDWOO	30	1,140	25	28,500	A	AC/AC		82	82	90	$28,817	27,158	SLURRY SEAL
ROSS STREET	McGUINESS	OLSON	ROSS	10	130	30	3,900	R	AC		76	76	85	$3,944	17,608	SLURRY SEAL
ROSS STREET	OLSON	BRIDGE	ROSS	20	295	25	7,375	R	AC		68	68	78	$7,457	14,359	SLURRY SEAL
SANTERO WAY	E. COTATI AVE	750ft S OF E. COTATI	SANTER	05	750	36	27,000	R	AC		63	63	73	$27,300	12,152	SLURRY SEAL
SANTERO WAY	750ft S OF E. COTATI	1575ft S OF E. COTATI	SANTER	15	825	28	23,513	R	AC/AC		80	81	88	$23,774	16,851	SLURRY SEAL
TREBINO COURT	BLODGETT ST	CUL-DE-SAC	TREBIN	10	300	40	12,000	R	AC		67	67	77	$12,134	15,692	SLURRY SEAL
WARD DRIVE	JOHN ROBERTS DRIVE	END	WARD	01	215	28	6,020	R	AC		85	85	91	$6,087	16,293	SLURRY SEAL
WATER ROAD	PAVE CHANGE 393' S/O W SIERRA	PAVE CHANGE 1169' S/O W SIERRA	WATER	15	776	22	36,696	R	AC/AC		76	76	85	$37,104	13,356	SLURRY SEAL
													Treatment Total	$595,136		
							Year 2022 Area Total	1,244,615					Year 2022 Total	$6,298,864		

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CYPRESS AVENUE	120 S/O LUND	CITY LIMITS	CYPRES	15	1,400	15	21,000	C	AC/AC		14	9	100	$271,577	4,534	FDR
HELMAN LANE	1300ft W of REDWOOD	530ft W of ALDER	HELMAN	20	860	32	27,520	C	AC/AC		24	20	100	$355,895	4,534	FDR
HOUSER STREET	REDWOOD	AARON ST	HOUSER	10	1,000	36	36,000	R	AC/AC		13	11	100	$385,632	4,607	FDR
LEBEC LANE	EUCALYPTUS AVE	JOHN ROBERTS DR	LEBEC	10	630	32	20,160	R	AC		11	8	100	$215,954	4,607	FDR
ORETSKY WAY	CYPRESS AVE	CYPRESS AVE	ORETSK	10	651	27	17,577	R	AC		15	12	100	$188,285	4,607	FDR
PAGE STREET	50 FT W OF RAMBLE CREEK	W SIERRA AVE	PAGEST	20	429	26	11,154	R	AC		21	18	100	$119,482	4,607	FDR
PORTAL STREET	REDWOOD DR	END	PORTAL	10	2,042	36	73,512	R	AC		21	18	100	$787,461	4,607	FDR
SAINT JOSEPH WAY	OLD REDWOOD HWY	END	STJOES	10	950	26	24,700	R	AC/AC		26	23	100	$264,587	4,607	FDR
WEST COTATI AVENUE	PLAZA	WILLIAM ST	WCOTAT	10	475	29	13,775	R	AC/AC		22	19	100	$147,558	4,607	FDR
WEST COTATI AVENUE	WILLIAM ST	EL RANCHO DR	WCOTAT	20	426	27	11,502	R	AC/AC		24	21	100	$123,210	4,607	FDR
WEST COTATI AVENUE	EL RANCHO DR	END AT E. SIDE OF 101	WCOTAT	30	598	29	17,342	R	AC/AC		18	15	100	$185,768	4,607	FDR
													Treatment Total	$3,045,409		
HELMAN LANE	530ft W of ALDER	1060ft W of ALDER	HELMAN	30	530	22	11,660	C	AC		27	22	100	$102,351	6,899	EDGE GRD+20% DIG+FAB+3IN OL

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Treatment Current PCI	Treatment PCI Before	Treatment PCI After	Treatment Cost	Treatment Rating	Treatment
LUND HILL LANE	JAGLE ST	CYPRESS AVE	LUNDHI	20	1,026	24	24,624	R	AC		50	48	100	$216,147	5,538	EDGE GRD+20% DIG+FAB+3IN OL
MACKLIN DRIVE	MYRTLE AVE	JOHN ROBERTS DR	MACKLI	10	882	32	28,224	R	AC		51	49	100	$247,748	5,486	EDGE GRD+20% DIG+FAB+3IN OL
MARSH WAY	E COTATI AVE	END	MARSH	10	574	20	11,480	R	AC		52	50	100	$100,771	5,476	EDGE GRD+20% DIG+FAB+3IN OL
											Treatment Total			$667,017		
AHLSTROM CIRCLE	WILFORD LN	WILFORD CIRCLE	AHLSCI	10	532	32	17,024	R	AC		81	80	87	$17,730	11,795	SLURRY SEAL
CERVANTES COURT	WATER RD	CUL DE SAC	CERVAN	10	635	22	13,970	R	AC		88	86	93	$14,549	9,056	SLURRY SEAL
CHRISTENSEN COURT	E SCHOOL ST	END	CHRIST	10	880	24	21,120	R	AC		77	76	84	$21,996	12,396	SLURRY SEAL
CLOTHIER LANE	OLD REDWOOD HWY	END	CLOTHI	10	975	32	31,200	R	AC		79	78	86	$32,494	12,179	SLURRY SEAL
DORFMAN DRIVE	CLOTHIER	147' N/O HONOR PLACE	DORFDR	10	741	32	23,712	R	AC		80	79	87	$24,695	12,007	SLURRY SEAL
DYQUISTO WAY	E. COTATI AVE	END	DYQUIS	10	420	26	10,920	R	AC		81	80	87	$11,373	11,624	SLURRY SEAL
EAST SCHOOL STREET	EL RANCHO	END	ESCHOO	05	900	37	33,300	R	AC/AC		78	77	85	$34,681	11,791	SLURRY SEAL
EAST SCHOOL STREET	EL RANCHO	W SIERRA	ESCHOO	10	522	37	19,314	R	AC/AC		83	82	89	$20,115	10,493	SLURRY SEAL
EAST SIERRA AVENUE	ARTHUR ST	CHADWICK WY	ESIERR	20	117	32	3,744	R	AC		88	86	93	$3,900	8,607	SLURRY SEAL
FORNO WAY	VALPARASIO AVE	VALPARASIO AVE	FORNO	10	494	29	14,326	R	AC		81	80	87	$14,920	11,788	SLURRY SEAL
GILBERT COURT	WILFORD LN	END	GILBCT	10	171	32	5,472	R	AC		80	79	87	$5,699	12,008	SLURRY SEAL
GILBERT WAY	WILFORD LN	END	GILBWY	10	708	32	22,656	R	AC		74	73	81	$23,595	12,463	SLURRY SEAL
GILMAN RANCH ROAD	W COTATI AVE	END	GILMANRD	10	880	26	22,880	R	AC		83	82	89	$23,829	10,020	SLURRY SEAL
GRAVENSTEIN WAY	OLD REDWOOD HWY	BRIDGE	GRAVEN	10	998	30	29,940	R	AC		79	78	86	$31,181	12,180	SLURRY SEAL
HONOR PLACE	CUL DE SAC SW OF DORFMANN DR	850' NE OF DORFMAN DR	HONOR	10	850	32	27,200	R	AC		74	73	81	$28,328	12,464	SLURRY SEAL
ISSEL COURT	WATER RD	END	ISSEL	10	357	25	8,925	R	AC		76	75	83	$9,295	12,445	SLURRY SEAL
JAGLA STREET	LUND HILL LN	FEHLER LN	JAGLA	10	190	27	5,130	R	AC		71	70	79	$5,343	12,321	SLURRY SEAL
JORGENSEN STREET	MCGINNIS CIR	PARK AVE	JORGEN	10	312	20	6,240	R	AC		80	79	87	$6,499	11,843	SLURRY SEAL
LIPTON STREET	LANCASTER DR	E COTATI AVE	LIPTON	10	692	26	17,992	R	AC		83	82	89	$18,738	11,172	SLURRY SEAL
LOGAN PLACE	CYPRESS AVE	END	LOGANPL	10	625	27	16,875	R	AC		79	78	86	$17,575	11,055	SLURRY SEAL
LOMA LINDA COURT	LOMA LINDA DR	END	LOMACT	10	278	27	7,506	R	AC		78	77	85	$7,818	12,314	SLURRY SEAL
LOMA LINDA DRIVE	WATER RD	END	LOMADR	10	817	27	22,059	R	AC		76	75	83	$22,974	12,445	SLURRY SEAL
MAPLE AVENUE	SCHOOL ST	W COTATI AVE	MAPLE	05	900	34	30,600	R	AC/AC		75	74	82	$31,869	12,053	SLURRY SEAL
MENDELSOHN COURT	MACKLIN DR	END	MENDEL	10	494	32	15,808	R	AC		78	77	85	$16,464	12,313	SLURRY SEAL
PAGE STREET	OLD REDWOOD HWY	DELANO CREEK ST	PAGEST	10	540	28	15,120	R	AC/AC		80	79	87	$15,747	12,543	SLURRY SEAL
PARK AVENUE	MYRTLE AVE	MCGINNIS CIR	PARKAV	10	503	34	17,102	R	AC/AC		85	84	91	$17,811	10,696	SLURRY SEAL

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
SKILLING COURT	MACKLIN DR	END	SKILLI	10	447	32	14,304	R	AC		77	76	84	$14,897	12,384	SLURRY SEAL
WILFORD LANE	GRAVENSTEIN WAY	AHLSTROM CIR	WILFLN	30	587	30	17,610	R	AC		78	77	85	$18,340	12,320	SLURRY SEAL
WOODLAND HILLS DRIVE	E SCHOOL ST	END	WOODLD	10	426	25	10,650	R	AC		80	79	87	$11,092	12,014	SLURRY SEAL
												Treatment Total		$523,547		
					Year 2023 Area Total		852,929					Year 2023 Total		$4,235,973		

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
MERCANTILE DRIVE	PORTAL ST	AARON ST	MERCAN	10	780	37	28,860	R	AC		28	23	100	$318,423	4,472	FDR
MYRTLE AVENUE	50 FT W OF WREN	KEPPEL WAY	MYRTLE	20	1,140	34	38,760	C	AC/AC		30	22	100	$516,291	4,402	FDR
PRIMERO COURT	PORTAL ST	END	PRIMER	10	143	34	4,862	R	AC		31	25	100	$53,645	4,472	FDR
REDWOOD DRIVE SB	300FT S OF HOUSER	AARON ST	REDWSB	55.1	800	25	20,000	A	AC/AC	S - Sampling	32	24	100	$266,404	5,616	FDR
REDWOOD DRIVE SB	AARON ST	PORTAL	REDWSB	60.1	500	25	12,500	A	AC/AC	S - Sampling	32	24	100	$166,503	5,616	FDR
												Treatment Total		$1,321,266		
ROSS STREET	BRIDGE	CHARLES	ROSS	30	245	16	3,920	R	AC		54	49	100	$35,442	5,358	EDGE GRD+20% DIG+FAB+3IN OL
VAL PARASIO AVENUE	NINA CT	BRIDGE	VALPAR	25A	502	23	11,546	C	AC		33	22	100	$104,390	6,698	EDGE GRD+20% DIG+FAB+3IN OL
												Treatment Total		$139,832		
LAKEWOOD AVENUE	LINCOLN AVE	LA SALLE AVE	LAKEWD	10	1,800	33	59,400	R	AC		93	89	94	$63,718	7,279	SLURRY SEAL
LARCH AVENUE	LINCOLN AVE	LASALLE AVE	LARCH	10	1,425	33	47,025	R	AC		93	89	94	$50,444	7,279	SLURRY SEAL
LARKSPUR COURT	LA SALLE AVE	END	LARKSP	10	180	44	7,920	R	AC		93	89	94	$8,496	6,627	SLURRY SEAL
LA SALLE AVENUE	E COTATI AVE	LARKSPUR CT	LASALL	10	1,000	37	37,000	C	AC/AC		90	88	94	$39,690	15,193	SLURRY SEAL
LA SALLE AVENUE	LARKSPUR CT	LORETTO AVE	LASALL	20	980	37	36,260	C	AC/AC		90	88	94	$38,896	15,193	SLURRY SEAL
LINCOLN AVENUE	LA SALLE AVE	CITY LIMITS	LINCOL	20	884	37	32,708	R	AC/AC		94	90	95	$35,086	6,843	SLURRY SEAL
PINEWOOD WAY	GRAVENSTEIN WY	WILFORD LN	PINEWY	10	342	32	10,944	R	AC		72	69	78	$11,740	11,929	SLURRY SEAL
												Treatment Total		$248,070		
					Year 2024 Area Total		351,705					Year 2024 Total		$1,709,168		

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year: 2025

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
DELANO STREET	HENRY ST	PAGE ST	DELANO	10	245	22	5,390	R	AC		32	23	100	$61,254	4,342	FDR
EL RANCHO DRIVE	E SCHOOL ST	W COTATI AVE	ELRANC	10	780	25	19,500	R	AC/AC		31	23	100	$221,606	4,342	FDR
REDWOOD DRIVE NB	300FT S OF HOUSER	AARON ST	REDWNB	55	800	25	20,000	A	AC/AC	S - Sampling	35	24	100	$274,396	5,452	FDR
WATER ROAD	W SIERRA AVE	PAVE CHANGE 393' S/O W SIERRA	WATER	10	393	22	36,696	R	AC/AC		32	24	100	$417,027	4,342	FDR
											Treatment Total			$974,283		
MYRTLE AVENUE	OLD REDWOOD HIGHWAY	50 FT W OF WREN	MYRTLE	10	950	34	32,300	C	AC/AC		56	49	100	$300,793	5,988	EDGE GRD+20% DIG+FAB+3IN OL
REDWOOD DRIVE	HWY 116	50 FTS OF HELMAN LN	REDWOO	20	900	34	30,600	A	AC		58	49	100	$284,962	8,386	EDGE GRD+20% DIG+FAB+3IN OL
VAL PARASIO AVENUE	LUND HILL LN	NINA CT	VALPAR	15	465	28	13,020	C	AC		36	20	100	$121,249	6,503	EDGE GRD+20% DIG+FAB+3IN OL
											Treatment Total			$707,004		
BENSON LANE	PARK AVE	BRIDGE	BENSON	10	750	18	13,500	R	AC/AC		94	88	94	$14,916	7,837	SLURRY SEAL
BENSON LANE	BRIDGE	LORETTO	BENSON	20	160	23	3,680	R	AC/AC		94	88	94	$4,066	7,837	SLURRY SEAL
EAST COTATI AVENUE	OLD REDWOOD HWY	MATTERI LN	ECOTAT	10	1,000	69	69,000	A	AC/AC		91	85	92	$76,236	13,740	SLURRY SEAL
EAST COTATI AVENUE	MATTERI LN	BAYTREE CT	ECOTAT	20	1,187	69	81,903	A	AC/AC		90	84	91	$90,493	15,066	SLURRY SEAL
EAST COTATI AVENUE	BAYTREE CT	BEVERLY DR	ECOTAT	30	1,092	69	75,348	A	AC/AC		90	84	91	$83,250	18,338	SLURRY SEAL
EAST COTATI AVENUE	BEVERLY DR	RR TRACKS	ECOTAT	35	1,173	69	80,937	A	AC/AC		89	84	91	$89,425	19,037	SLURRY SEAL
EAST COTATI AVENUE	RR TRACKS	CITY LIMITS	ECOTAT	45	679	69	46,851	A	AC/AC		92	86	92	$51,765	15,610	SLURRY SEAL
LINCOLN AVENUE	LORETTO AVE	LA SALLE AVE	LINCOL	10	840	37	31,080	R	AC		93	87	93	$34,340	8,023	SLURRY SEAL
LINDEN AVENUE	LINCOLN AVE	LARCH AVE	LINDAV	10	722	33	23,826	R	AC		93	87	93	$26,325	8,023	SLURRY SEAL
LINDEN COURT	LINDEN AVE	END	LINDCT	10	285	33	9,405	R	AC		93	87	93	$10,392	8,023	SLURRY SEAL
OLD REDWOOD HWY	WILLIAM	W SIERRA	ORH	30	800	60	48,000	A	AC/PCC		92	86	92	$53,034	15,486	SLURRY SEAL
											Treatment Total			$534,242		
							Year 2025 Area Total		641,036		Year 2025 Total			$2,215,529		

Year: 2026

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CYPRESS AVENUE	W SIERRA AVE	120 S/O LUND	CYPRES	10	2,010	30	60,300	C	AC/AC		36	21	100	$852,123	4,150	FDR
MYRTLE AVENUE	KEPPLE WAY	CITY LIMITS	MYRTLE	30	822	34	27,948	C	AC/AC		38	23	100	$394,945	4,150	FDR
WATER ROAD	CITY LIMITS	LOMA LINDA DR	WATER	20	513	22	11,286	R	AC/AC		33	23	100	$132,106	4,216	FDR
WILFORD CIRCLE	WILFORD LN	WILFORD LN	WILFCI	10	684	32	21,888	R	AC		36	24	100	$256,206	4,216	FDR

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 1/19/2022

Scenario: (2) Current Funding Level

Year: 2026

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surface Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
WILFORD LANE	COMMERCE AVE	MEADOW BROOK WY	WILFLN	10	1,187	35	41,545	R	AC		36	24	100	$486,297	4,216	FDR
												Treatment Total		$2,121,677		
ALDER AVENUE	HELMAN LN	BLODGETT	ALDER	20	475	40	19,000	R	AC		57	49	100	$182,245	5,009	EDGE GRD+20% DIG+FAB+3IN OL
												Treatment Total		$182,245		
ARTHUR STREET	E. Sierra	250ft east of E. Sierra	ARTHUR	05	250	32	8,000	R	AC		94	86	92	$9,105	9,016	SLURRY SEAL
ARTHUR STREET	250ft east of E. Sierra	E. Cotati Ave	ARTHUR	15	350	24	8,400	R	AC		94	86	92	$9,560	9,016	SLURRY SEAL
CHARLES STREET	OLD REDWOOD HWY	E COTATI AVE	CHARLE	10	698	34	23,732	R	AC		94	86	92	$27,008	9,039	SLURRY SEAL
DORFMAN DRIVE	147' N/O HONOR PLACE	JAGLA ST	DORFDR	20	133	34	4,522	R	AC/AC		94	86	93	$5,147	7,981	SLURRY SEAL
FEHLER LANE	VAL PARASIO AVE	JAGLE ST	FEHLER	10	807	25	20,175	R	AC		90	83	90	$22,960	9,669	SLURRY SEAL
GEORGE STREET	OLD REDWOOD HWY	E SIERRA AVE	GEORGE	10	594	32	19,008	R	AC		94	86	92	$21,632	9,016	SLURRY SEAL
HONOR PLACE	850' NE OF DORFMAN DR	JAGLA ST	HONOR	20	189	34	6,426	R	AC/AC		94	86	93	$7,313	7,981	SLURRY SEAL
JAGLA STREET	FEHLER LN	VALPARAISO AVE	JAGLA	20	1,180	34	40,120	R	AC/AC		94	86	93	$45,658	7,981	SLURRY SEAL
LORETTO AVENUE	BENSON LN	LINCOLN AVE	LORETT	10	741	33	24,453	R	AC		93	89	95	$27,828	11,133	SLURRY SEAL
OLAF STREET	W SIERRA AVE	WILLIAM	OLAFST	10	589	34	20,026	R	AC		94	86	92	$22,790	9,016	SLURRY SEAL
VAL PARASIO AVENUE	OLD REDWOOD HWY	FEHLER LN	VALPAR	10A	335	30	10,050	C	AC/AC		91	83	90	$11,438	12,016	SLURRY SEAL
VAL PARASIO AVENUE	BRIDGE	W. SIERRA AVE	VALPAR	25B	220	23	5,060	C	AC		96	88	94	$5,759	12,697	SLURRY SEAL
WILLIAM STREET	OLD REDWOOD HWY	OLAF ST	WILLIA	10	637	33	21,021	R	AC		94	86	92	$23,923	9,016	SLURRY SEAL
												Treatment Total		$240,121		
						Year 2026 Area Total	392,960					Year 2026 Total		$2,544,043		
						Grand Total Section Area:	3,483,245					Grand Total		$17,003,577		

** - Treatment from Project Selection

Scenarios Criteria:

Appendix G

Maps

Map – Current PCI
Scenario Maps – PCI Condition after Treatments (all Scenarios)
Scenario Maps – Section Selected for Treatment (all Scenarios)

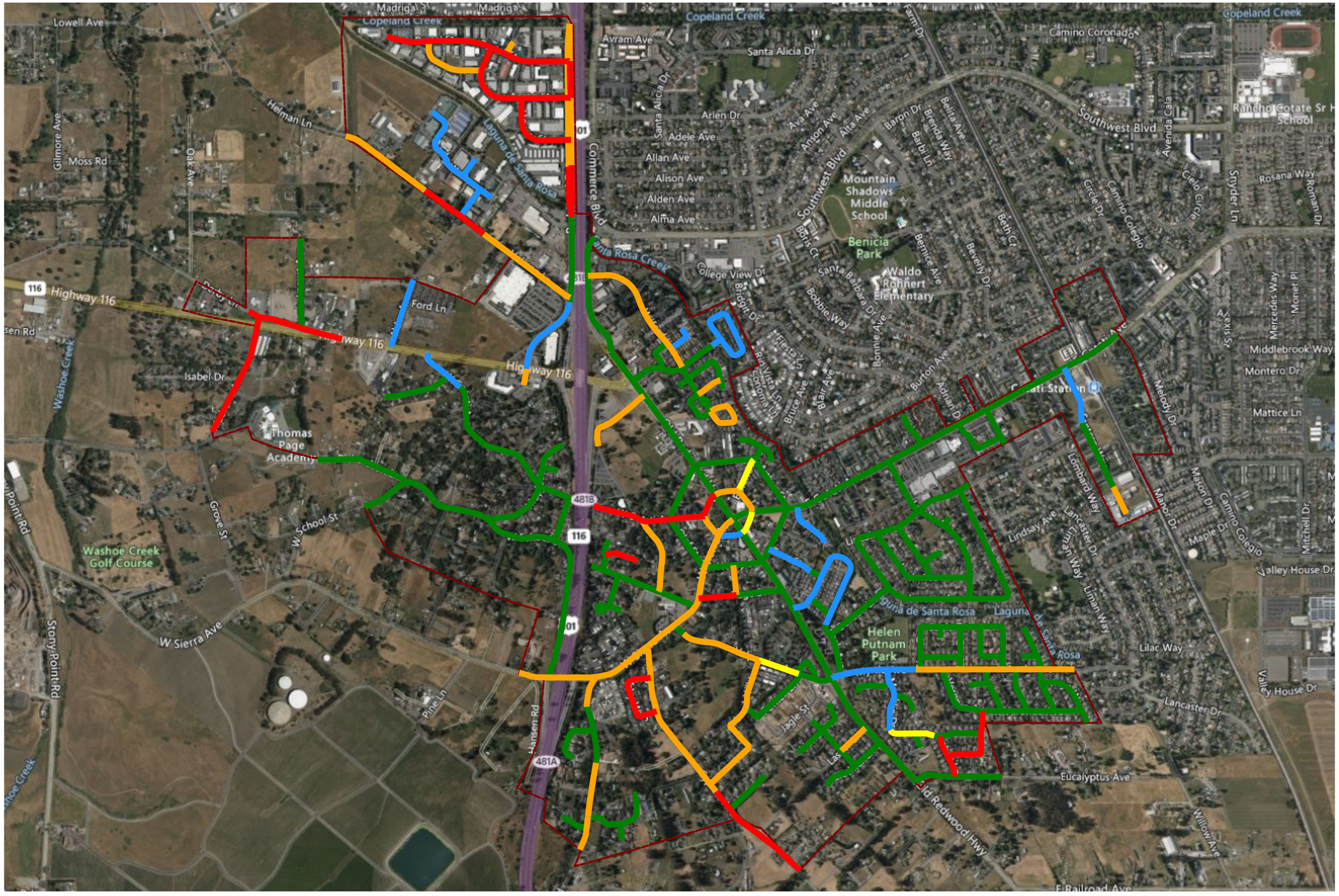
CITY OF COTATI

Current PCI Condition

Printed: 1/19/2022

Feature Legend

- Category I - Very Good
- Category II - Good (Non-Load)
- Category III - Good (Load)
- Category IV - Poor
- Category V - Very Poor



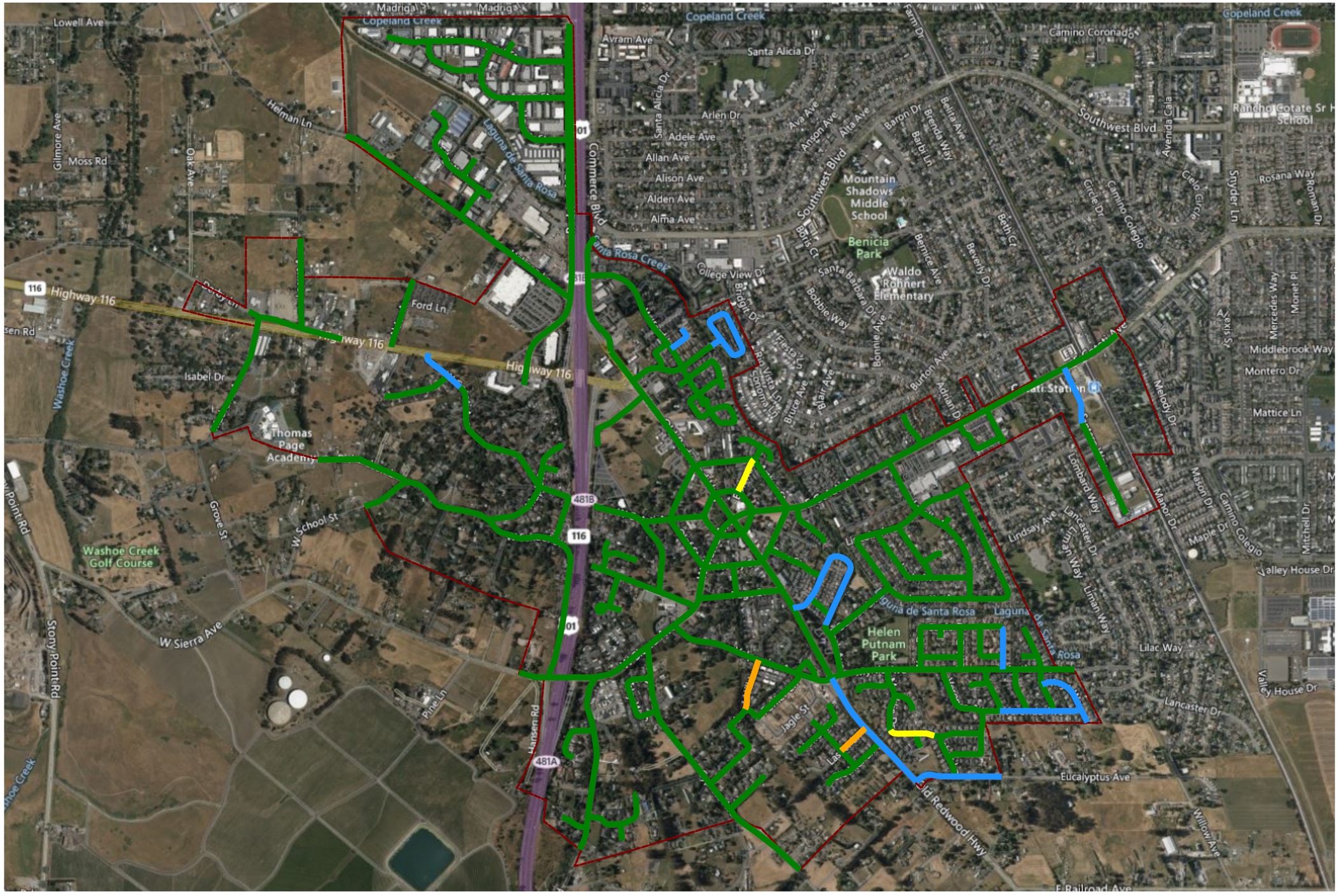
CITY OF COTATI

Scenario PCI Condition

(1) Unconstrained Needs - 2026 Project Period - Printed: 1/19/2022

Feature Legend

- Category I - Very Good
- Category II - Good (Non-Load)
- Category III - Good (Load)
- Category IV - Poor



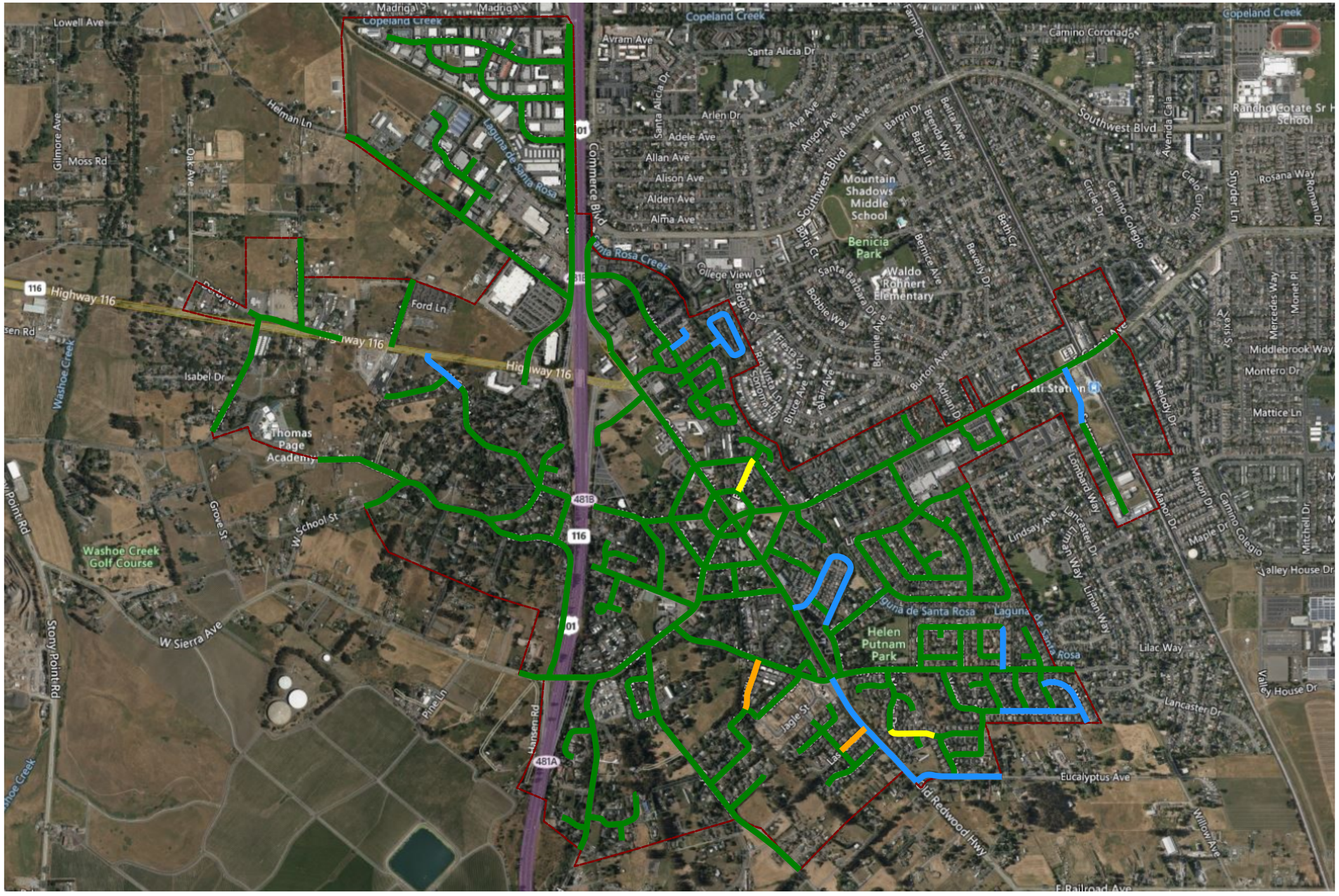
CITY OF COTATI

Scenario PCI Condition

(2) Current Funding Level - 2026 Project Period - Printed: 1/19/2022

Feature Legend

- Category I - Very Good
- Category II - Good (Non-Load)
- Category III - Good (Load)
- Category IV - Poor



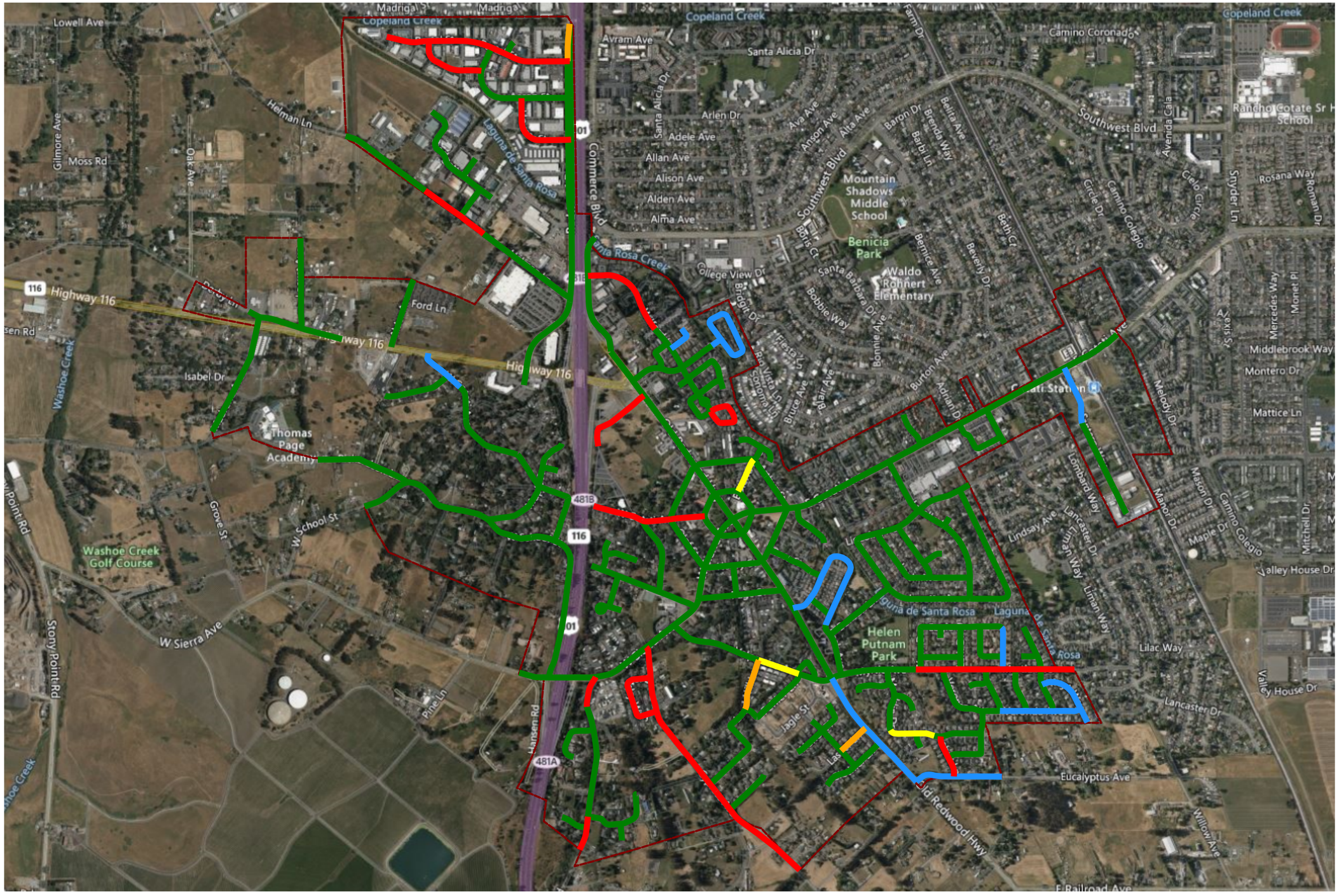
CITY OF COTATI

Scenario PCI Condition

(3) Increase PCI 5 points - 2026 Project Period - Printed: 1/19/2022

Feature Legend

- Category I - Very Good
- Category II - Good (Non-Load)
- Category III - Good (Load)
- Category IV - Poor
- Category V - Very Poor



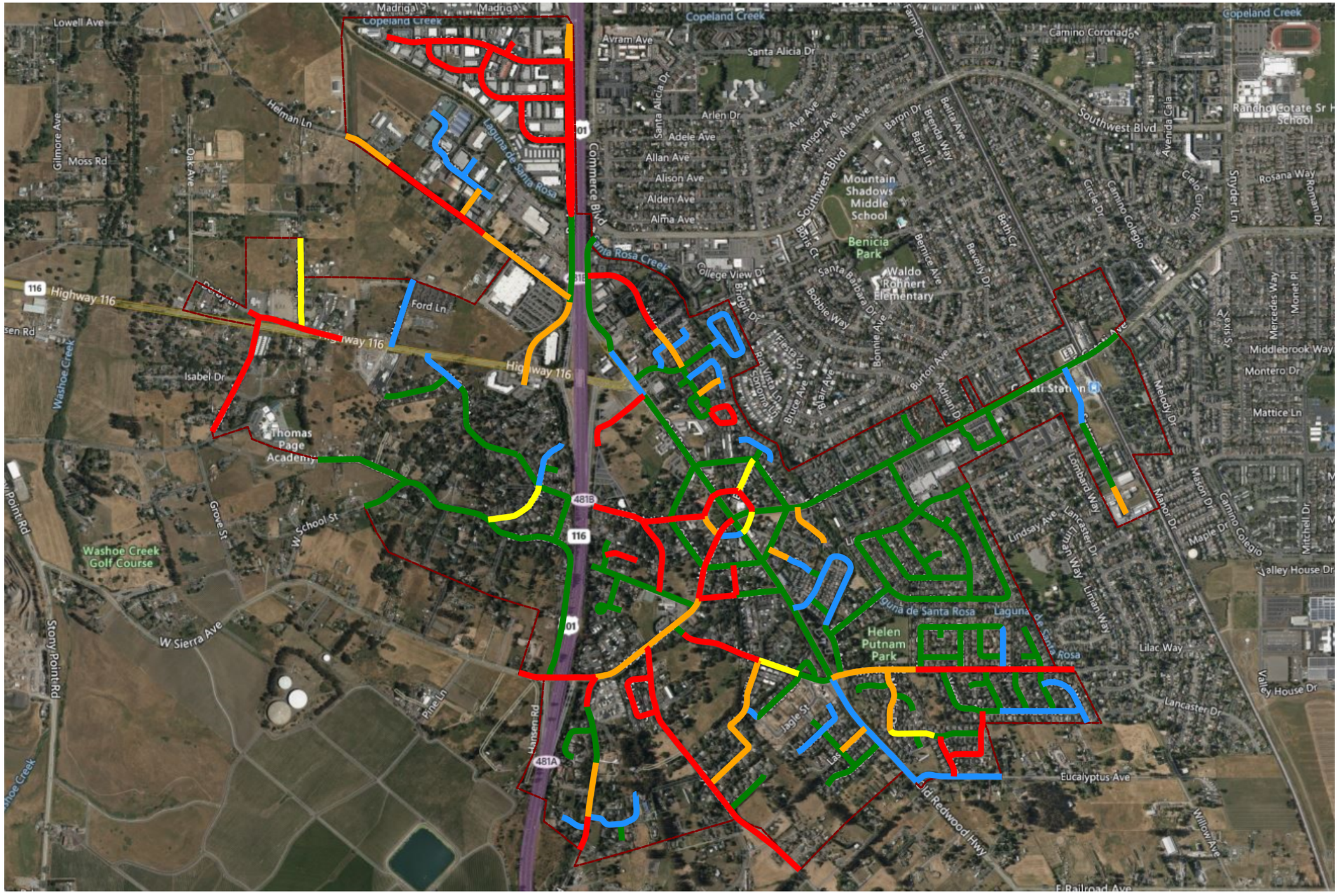
CITY OF COTATI

Scenario PCI Condition

(4) Zero Funding - 2026 Project Period - Printed: 1/19/2022

Feature Legend

- Category I - Very Good
- Category II - Good (Non-Load)
- Category III - Good (Load)
- Category IV - Poor
- Category V - Very Poor



CITY OF COTATI

Scenario Treatments

(1) Unconstrained Needs - All Project Periods - Total Rehab for 2022: $5,942,125 - Printed: 1/19/2022

Feature Legend

- AC OVERLAY
- EDGE GRD+20%DIG+FAB+3IN OL
- EDGE GRD+25%DIG+FAB+3IN OL
- FDR
- SLURRY SEAL
- SLURRY SEAL W/MINOR DIGOUTS
- THIN OVERLAY

CITY OF COTATI

Scenario Treatments

(2) Current Funding Level - All Project Periods - Printed: 1/19/2022

Feature Legend

- AC OVERLAY
- EDGE GRD+20%DIG+FAB+3IN OL
- EDGE GRD+25%DIG+FAB+3IN OL
- FDR
- SLURRY SEAL
- SLURRY SEAL W/MINOR DIGOUTS
- THIN OVERLAY

CITY OF COTATI

Scenario Treatments

(3) Increase PCI 5 points - All Project Periods - Printed: 1/19/2022

Feature Legend

- AC OVERLAY
- EDGE GRD+20%DIG+FAB+3IN OL
- EDGE GRD+25%DIG+FAB+3IN OL
- FDR
- SLURRY SEAL
- SLURRY SEAL W/MINOR DIGOUTS