



JG3

PAVEMENT MANAGEMENT SIMPLIFIED

**BUDGET OPTIONS REPORT—FINAL
P-TAP 17**

Town of Fairfax, CA
April 29, 2017



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EXECUTIVE SUMMARY

JG3 CONSULTING, LLC. (JG3) was contracted through the Metropolitan Transportation Commission's (MTC) P-TAP program to provide an update to the Town's pavement management program (PMP). This update involved the following 4 main tasks:

- Task 1 - Establish the work scope, schedule and budget for the project.
- Task 2 – Provide visual inspection of all streets to determine current condition.
- Task 3 - Establish the budget needs of the roadway network and create 3 budget scenarios.
- Task 4 - Create a final report to present the condition and budget scenario results.

The Town of Fairfax is responsible for the maintenance of 201 pavement sections totaling 27.5 centerline miles. In August of 2016 an inspection was performed on the roadway network following ASTM D6433 and MTC's PMP (Street Saver) standards. The distress data was entered into the PMP to produce a Pavement Condition Index (PCI) score for each section as well as the overall roadway network. The PCI is a condition scale ranging from 0 – 100 with 0 considered to be of failed condition and 100 considered to be of excellent condition.

Through the ASTM D6433 inspection performed by JG3 and updated maintenance improvements completed for the year, the current average PCI score of the Town's roadway network is a 63. Historical records and reports show that the network average PCI in 2014 was an 65 resulting in a 2 point PCI decrease from the previous P-TAP 15 program.

As part of task 4 of the project, JG3 ran 7 different budget scenarios to identify the impact of various budgets:

- Scenario 1 – Do Nothing over the Next Five Years
- Scenario 2 - Estimated Annual Budget of \$100 thousand over the Next Five Years
- Scenario 3 - Estimated Annual Budget of \$150 thousand over the Next Five Years
- Scenario 4 - Estimated Annual Budget of \$200 thousand over the Next Five Years
- Scenario 5 – Maintain the Network at the Current PCI Level of 63 over the Next 5 Years
- Scenario 6 – Increase the PCI Five Points from the Current PCI 63 to a PCI of 68 in Five Years
- Scenario 7 – Average Annual Budget of the PMP Determined Needs over the Next Five Years

In the case of the current funding level of \$100 thousand over the next 5 years, the condition of the roadway network is projected to drop 8 PCI point from the current 63 down to a 55 with an estimated \$7.6 million of backlog at the end of five years (2021).

JG3's budgetary recommendation is to increase the current expected annual budget from \$100 thousand annually to \$600 thousand, while continuing the existing program of preventive maintenance, crack seals, surface seals, overlays and surface construction as maintenance and rehabilitation strategies over the next 5 years. This will provide for a maintained annual average PCI of a 63 each year, while reducing the expected backlog of \$7.6 million under the current funding scenario to \$6.0 million.

In addition to the recommended program mentioned above, JG3 also recommends maintaining the dedication toward periodic PMP updates. These updates provide the necessary pavement management distress, condition,

maintenance and budget data required to analyze, forecast and model the state of the network. The PMP update also adjusts variables such as inflation rates, interest rates and maintenance costs that are critical to establishing a successful, accurate and objective long term pavement management plan.

PURPOSE

The purpose of this report is to assist Town staff and decision makers in utilizing the results of the MTC's PMP. Specifically, this report links the PMP recommended repair program costs to the Town of Fairfax's current and projected budget alternatives to improve overall maintenance and rehabilitation strategies. This report assesses the adequacy of ideal and projected revenues to meet the maintenance needs recommended by the PMP program. It also maximizes the return from expenditures by:

- (1) Implementing a multi-year road rehabilitation and maintenance program;
- (2) Developing a preventative maintenance program; and
- (3) Selecting the most cost effective repairs.

This report assists the Town of Fairfax with identifying maintenance priorities specific to its needs. This study examines the overall condition of the road network and highlights options for improving the current network level pavement condition index (PCI). These options are developed by conducting various budget and/or target driven scenarios. By varying the budget amounts available for pavement maintenance and repair, one can show how different funding strategies can impact the Town's roads over time.

PAVEMENT MANAGEMENT STRATEGY

Pavement Management is a system of tools, criteria and methodologies designed to manage the maintenance and rehabilitation activities Asphalt Concrete and Portland Concrete pavements. Through historical condition data, pavement models and a decision-making process the pavement management system identifies the most cost effective maintenance strategy for each section over time to optimize the conditions of the network.

All too often many public works and street department agencies utilize the conventional "worst to first" approach to fixing their streets. Under this approach, streets deteriorate to a near failed condition before rehabilitation is scheduled. Typically, these involve expensive repairs such as Overlays and Reconstruction while the road is in a state of poor condition for a considerable period of time.

The Pavement Management strategy focuses on cost effective treatments to good roads to maintain their condition and serviceability throughout their lifespan. The emphasis on this strategy is to use preventive maintenance treatments such as Slurry Seals, Chip Seals and Crack Seal to ultimately extend the life cycle of the street, while stabilizing the overall condition at the same time.

MAINTENANCE AND REHABILITATION

Historically, the Town has utilized a program of surface seals, overlays and surface reconstruction as maintenance and rehabilitation strategies. All available data from past historical records were entered into the PMP database and the new PCI's calculated. Surface treatments, such as slurry seals, have been usually utilized as a preventive maintenance technique when the pavements are in "Good" condition or above. When the pavement condition deteriorates to lower levels, asphalt concrete overlays have been placed. Base repairs and milling are typical surface preparation prior to overlays. These treatments are formalized in the maintenance and rehabilitation decision tree shown in Appendix B.

Figure 1 below demonstrates that pavement maintenance follows the old colloquial saying of "pay me now, or pay me more later." History has shown that it costs much less to maintain roads in good condition than to repair roads that have failed. By allowing pavements to deteriorate, roads that once cost \$4.00-\$7.00 Sq Yd to seal may soon cost \$24.00-\$40.00 Sq Yd to overlay or even \$30 - \$80.00 Sq Yd to reconstruct. In other words, delays in repair can result in rehabilitation costs that are several times more.

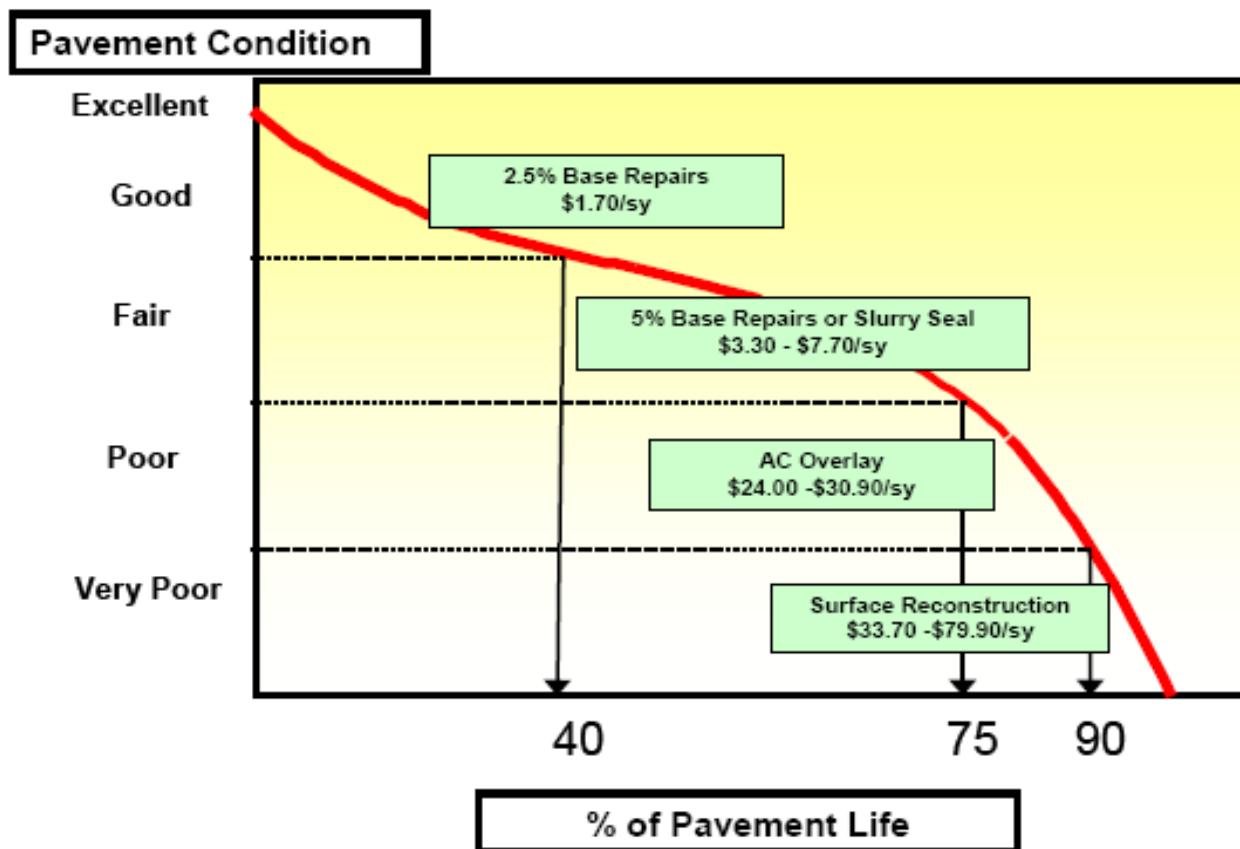


Figure1. Costs of Maintaining Pavements over Time

NETWORK DESCRIPTION

The Town of Fairfax is responsible for the maintenance and repair of approximately 27.5 centerline miles of streets (201 sections) within the Town corporation limits. A detailed street inventory can be found in Appendix E. Table 1 summarizes the network by functional class. Figure 1 illustrates the total lane miles and condition by functional class.

Network Summary Statistics

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	Total Sections	Total Center Miles	Total Lane Miles	PCI
Arterial	29	4.79	9.57	61
Collector	65	10.05	20.02	65
Residential/Local	107	12.71	25.09	62
** Combined	0	0.00	0.00	N/A
Total	201	27.55	54.69	
Overall Network PCI as of 2/3/2017:				63

Table 1. Network Summary by Functional Class



Figure 2 Lane Miles by Functional Class

The network replacement cost is defined as the reconstruction of all the pavement sections in the Town. The network replacement cost of the Town's roadways is estimated at \$27.3 million. Table 2 summarizes the network replacement cost by functional class.

FUNCTIONAL CLASS	SURFACE TYPE	LANE MILES	COST/SQ FT	AREA/SQ FT	COST TO REPLACE
Arterial	AC	4.7	\$8.89	336,517	\$2,991,000.00
	AC/AC	4.8	\$8.89	357,145	\$3,175,000.00
Collector	AC	6.3	\$8.89	372,648	\$3,312,000.00
	AC/AC	12.6	\$8.89	684,460	\$6,081,000.00
	AC/PCC	1.2	\$8.89	43,120	\$383,000.00
Residenital/local	AC	10.6	\$8.89	554,455	\$4,928,000.00
Residenital/local	AC/AC	14.5	\$8.89	719,276	\$6,394,000.00
TOTAL NETWORK REPLACEMENT COST					\$27,264,000

Table 2. Network Replacement Cost by Functional Class

CURRENT PAVEMENT CONDITION

The PCI is a measurement of the pavement condition, and ranges from 0 to 100 with 0 considered “Failed” and 100 considered “Excellent”. A newly constructed road would have a PCI of 100, while a failed road would have a PCI of 25 or less. The average PCI of the entire roadway network of the Town is 63. The network average PCI has decreased two points since the last inspection through P-TAP 15.

Figure 3 illustrates the definitions of the pavement condition categories.

Figure 4 illustrates the weighted average PCI over the last 5 years.

Figure 5 illustrates the current weighted PCI by functional class.

Figure 6 illustrates the current condition summary by category.



Figure 3 Pavement Condition Categories by PCI

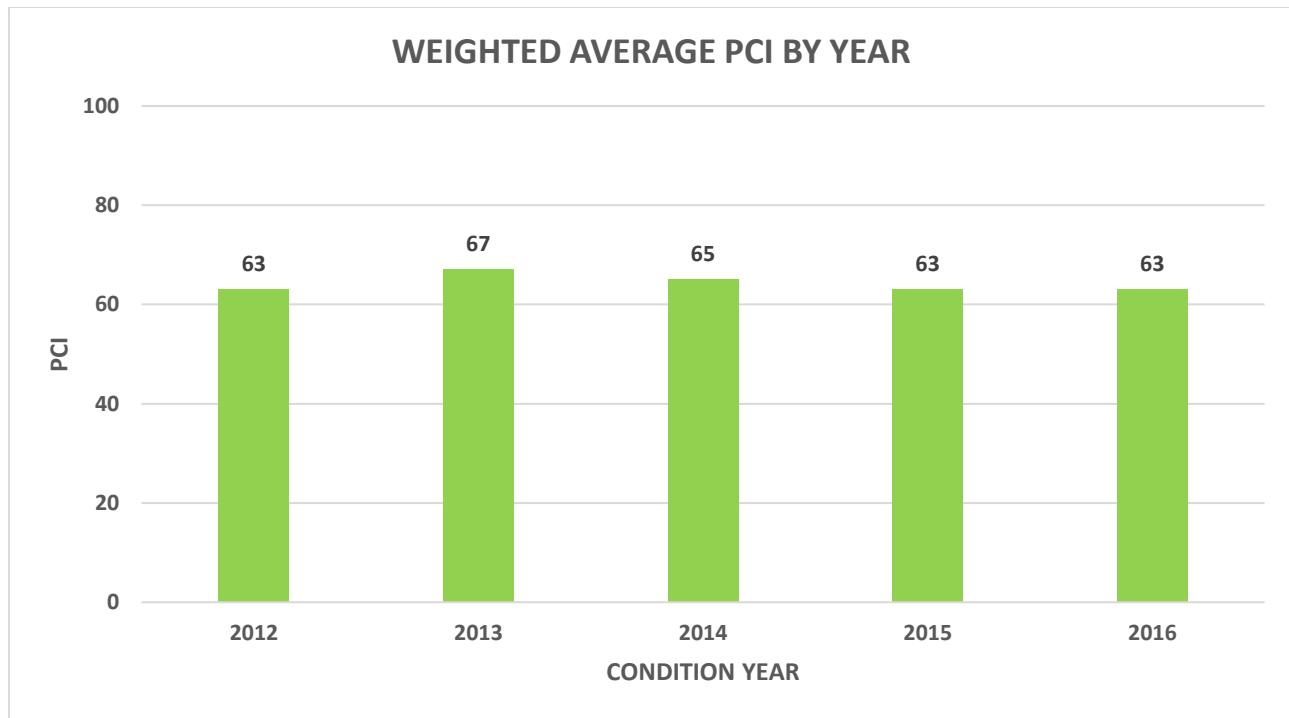


Figure 4 Weighted Average PCI over the Years

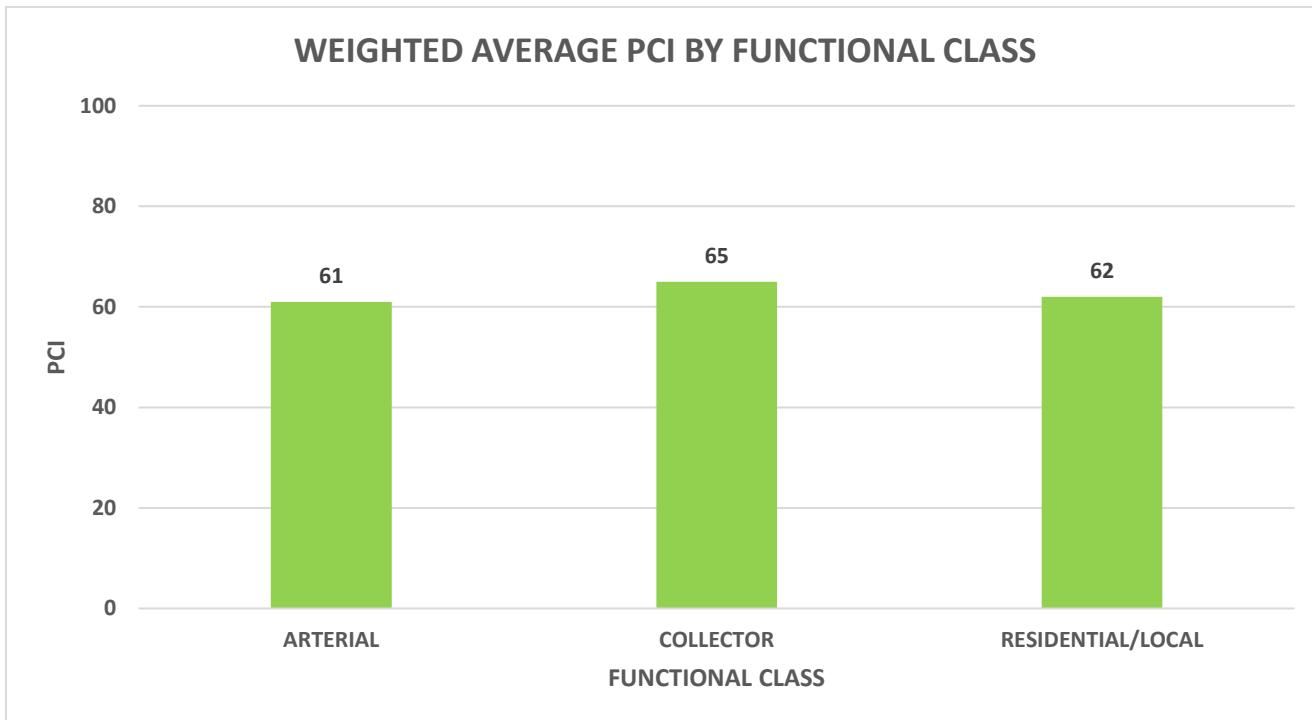


Figure 5 Current Weighted PCI by Functional Class

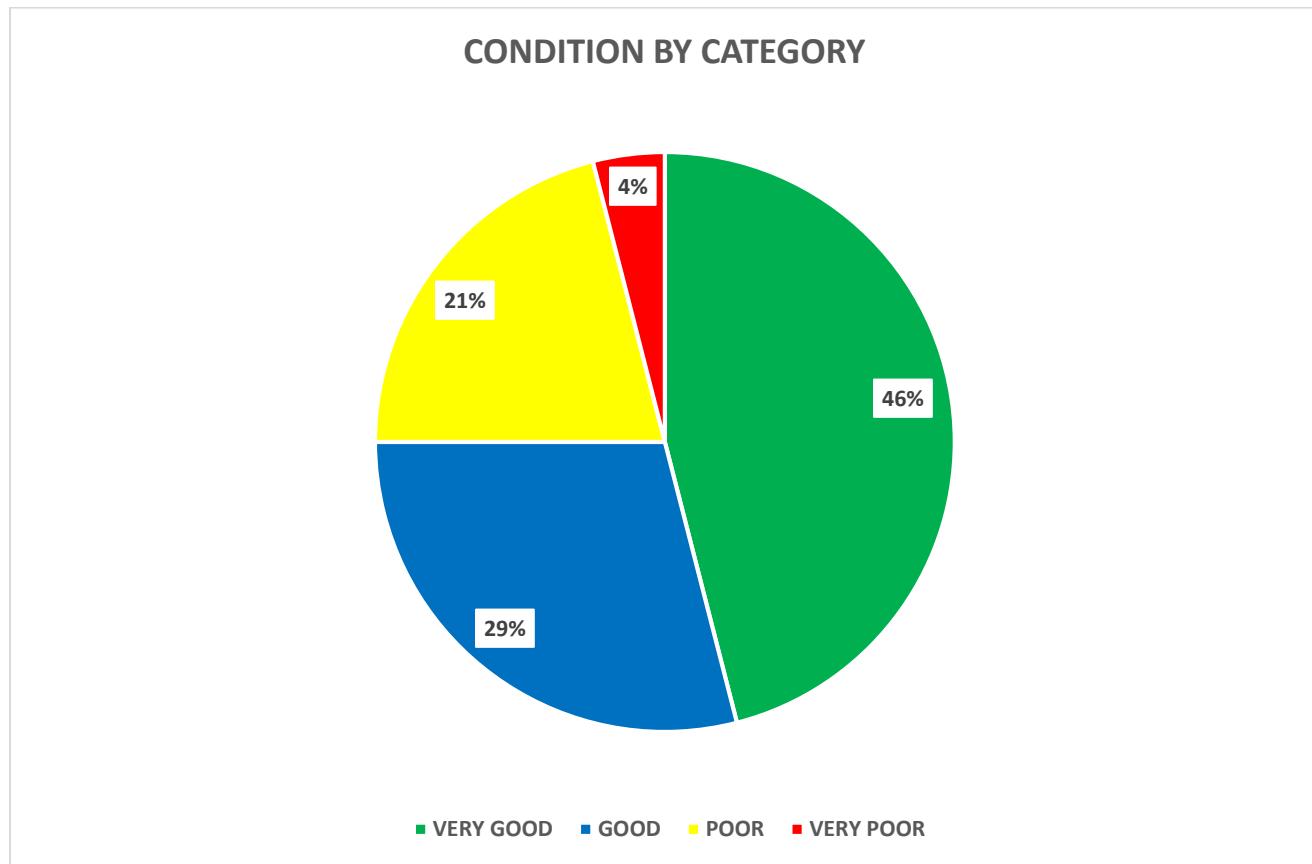


Figure 6. Current Condition Summary by Category

UNCONSTRAINED BUDGET NEEDS

Based on the principle that it costs less to maintain roadways in good condition than those in bad conditions, the PMP strives to develop a maintenance strategy that will improve the overall condition of the network to an optimal PCI and then sustain it at that level. The optimal PCI is determined by StreetSaver and has been calculated to be an 84. The first step in developing a cost-effective maintenance and rehabilitation strategy is to determine the maintenance "needs" of the roadway network. Using the StreetSaver budget needs module, maintenance needs over the next five years were estimated at approximately \$10.0 million for the entire Town network. If the Town of Fairfax follows the strategy recommended by the program, the average network PCI will increase to a 79 in year one and ultimately land at an 84 by year five. If, however, no maintenance is applied over the next five years, already distressed roads will continue to deteriorate, and the network PCI Will drop to 53. The results of the budget needs analysis are summarized in table 3 below.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI TREATED	79	80	83	84	84	
PCI UNTREATED	63	60	58	56	53	
PREVENTATIVE COSTS	\$379,898	\$12,473	\$8,514	\$35,827	\$714	\$437,426
REHAB COSTS	\$4,324,243	\$1,611,222	\$1,853,232	\$1,046,509	\$779,733	\$9,614,939
TOTAL NEEDS	\$4,704,141	\$1,623,695	\$1,861,746	\$1,082,336	\$780,447	\$10,052,365

Table 3 Summary of 5 Year Needs Analysis

Table 3 illustrates the level of expenditures required to raise the pavement condition to a network PCI goal of 84 and eliminate the current maintenance backlog. The results of the budget needs analysis represent the ideal funding strategy recommended by the StreetSaver PMP. Of the \$10.0 million in maintenance needs shown, approximately \$437 Thousand (4.3%) is earmarked for preventative maintenance or life-extending treatments, while approximately 9.6 million (95.7%) is allocated for the more costly rehabilitation and reconstruction treatments.

BUDGET SCENARIOS – RESULTS SUMMARY

Having determined the maintenance needs of the road network, the next step in developing a cost-effective maintenance and rehabilitation strategy is to conduct various budget scenarios. Using MTC's PMP budget scenario module, the impacts or consequences of various budgets can be evaluated. The program projects the effects of the different scenarios on pavement condition index (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. The following budget scenarios were examined for the purposes of this report, and are summarized in Table 4.

1. Do Nothing (5 Years)

An average annual budget of \$0 was used to determine the effects of not funding the pavement network over the next five years. The network average PCI is expected to drop a total of 10 points in five years (2021) from the current 63 to 53 under this scenario.

2. Estimated Funding Level of \$100,000 (5 Years)

An average annual budget of \$100 thousand was evaluated over the next five years, for a total of \$500 thousand, to determine the effects of continuing pavement maintenance at the current budget level. The network average PCI is expected to drop a total of 8 points in five years (2021) from the current 63 to 55 under this scenario.

3. Estimated Funding Level of \$150,000 (5 Years)

An average annual budget of \$150 thousand was evaluated over the next five years, for a total of \$750 thousand, to determine the effects of continuing pavement maintenance at the current budget level. The network average PCI is expected to drop a total of 7 points in five years (2021) from the current 63 to 56 under this scenario.

4. Estimated Funding Level of \$200,000 (5 Years)

An average annual budget of \$200 thousand was evaluated over the next five years, for a total of \$1.0 million, to determine the effects of continuing pavement maintenance at the current budget level. The network average PCI is expected to drop a total of 6 points in five years (2021) from the current 63 to 57 under this scenario.

5. Maintain Current Network Condition (5 Years)

An annual funding level of \$600 thousand per year over 5 years, for a total of \$3.0 million, was deemed necessary by the PMP to maintain the current network average PCI of 63 over the next five years (2021).

6. Increase Network Condition Five Points (5 Years)

An annual funding level of \$900 thousand per year over 5 years, for a total of \$4.5 million, was deemed necessary by the PMP to increase the current network average PCI of 63 five points to 68 over the next five years (2021).

7. Average of PMP Determined Needs (5 Years)

The PMP determined a total budget of \$10.0 million necessary to achieve the optimal PCI over the next five years. A scenario of the average needs budget annually (2.0 million), was evaluated to determine the effects at this investment level. The results show that the current network condition of 63 increases 21 points to 84 by year 2021 over the five-year period at this investment level.

BUDGET SCENARIO	TERM BUDGET	2021 PCI (CHANGE FROM CURRENT PCI)	2021 DEFERRED MAINT	2021 % GOOD CONDITION & ABOVE	2021 % POOR CONDITION & BELOW
DO NOTHING (5 YEARS)	\$0 MIL	53 (-10)	\$7.9 MIL	60.2%	39.8%
ESTIMATED FUNDING \$100K (5 YEARS)	\$0.5 MIL	55 (-8)	\$7.6 MIL	60.2%	39.8%
ESTIMATED FUNDING \$150K (5 YEARS)	\$0.75 MIL	56 (-7)	\$7.5 MIL	60.2%	39.8%
ESTIMATED FUNDING \$200K (5 YEARS)	\$1.0 MIL	57 (-6)	\$7.4 MIL	60.2%	39.8%
MAINTAIN CURRENT PCI (5 YEARS)	\$3.0 MIL	63 (+0)	\$6.0 MIL	66.2%	33.8%
INCREASE PCI 5 POINTS (5 YEARS)	\$4.5 MIL	68 (+5)	\$5.4 MIL	73.2%	26.8%
AVERAGE OF BUDGET NEEDS (5 YEARS)	\$10.0 MIL	84 (+21)	\$7.4 MIL	94.8%	5.2%

Table 4 Budget Scenario Summary

Budget Scenario 1. Do Nothing (5 Years)

This scenario shows the effects of spending nothing (\$0) annually for maintenance and rehabilitation over a five-year period. Under this scenario, the PCI is expected to decrease a total of 10 points from the current 63 PCI to a 53 PCI by year five. The expected deferred maintenance amount at the end of year five is \$7.9 million. The scenario results are displayed below in Table 5, Figure 7 and Figure 8.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	63	60	58	56	53	
PREVENTIVE COSTS	\$0	\$0	\$0	\$0	\$0	\$0
REHAB COSTS	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL COSTS	\$0	\$0	\$0	\$0	\$0	\$0

Table 5. Budget Scenario Summary

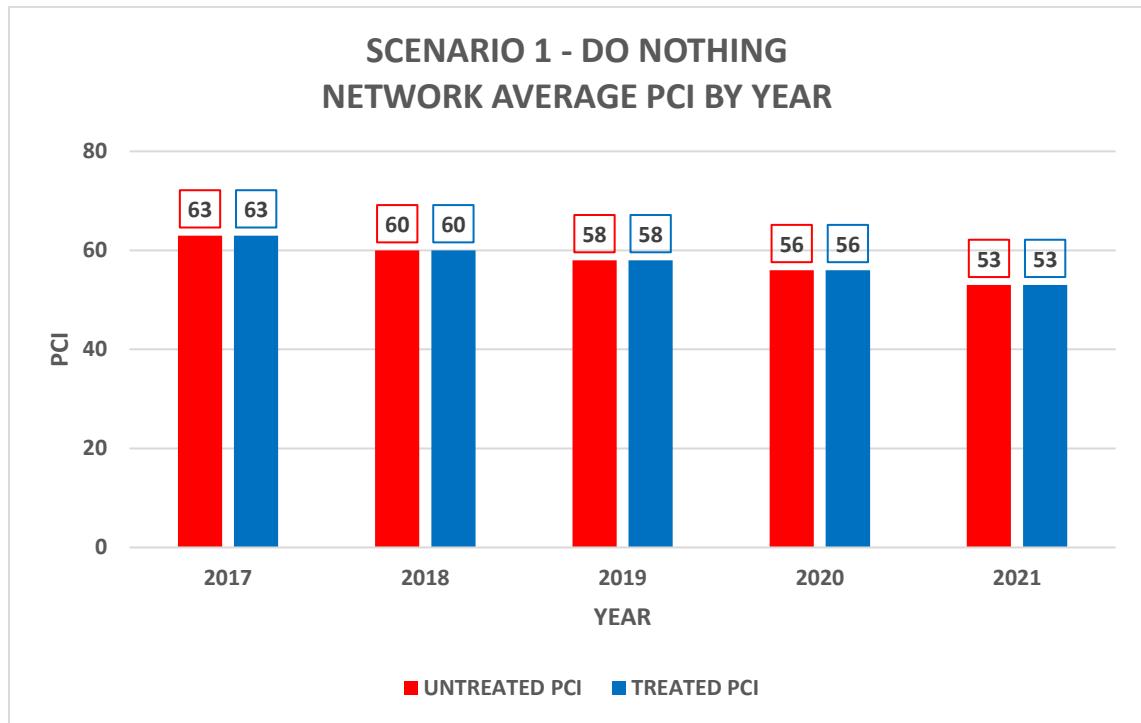


Figure7. Scenario 1 Average Treated and Untreated PCI

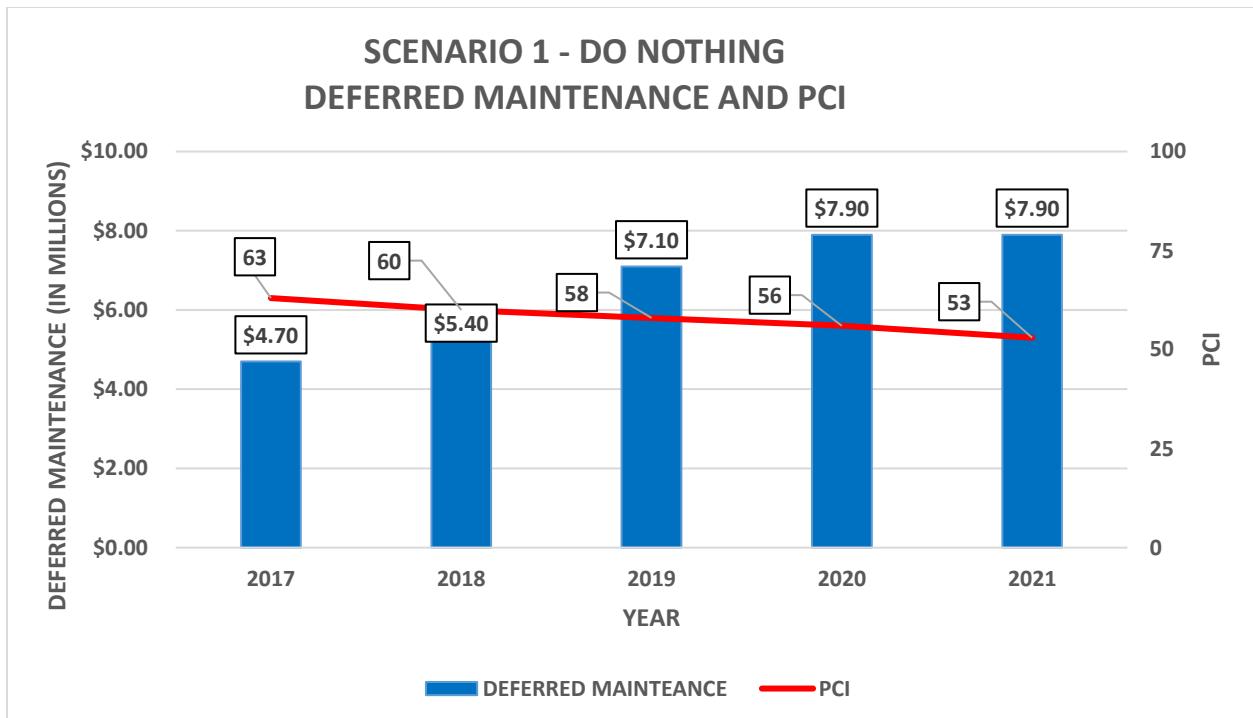


Figure8. Scenario 1 Average Treated and Untreated PCI

Budget Scenario 2. Estimated Annual budget of \$100,000 (5 Years)

This scenario shows the effects of Town spending an estimated annual budget of \$100 thousand for maintenance and rehabilitation over a five-year period, totaling \$500 thousand. Under this scenario, the PCI is expected to remain a 63 in year one, while ultimately decreasing 8 points overall by year five to a 55. The expected deferred maintenance amount at the end of year five is \$7.6 million. The scenario results are displayed below in Table 6, Figure 9 and Figure 10.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	63	61	59	57	55	
PREVENTIVE COSTS	\$11,681	\$16,045	\$19,585	\$15,246	\$10,657	\$73,214
REHAB COSTS	\$88,322	\$83,855	\$79,915	\$84,583	\$88,703	\$425,378
TOTAL COSTS	\$100,003	\$99,900	\$99,500	\$99,829	\$99,360	\$498,592

Table 6 Budget Scenario 2 Summary

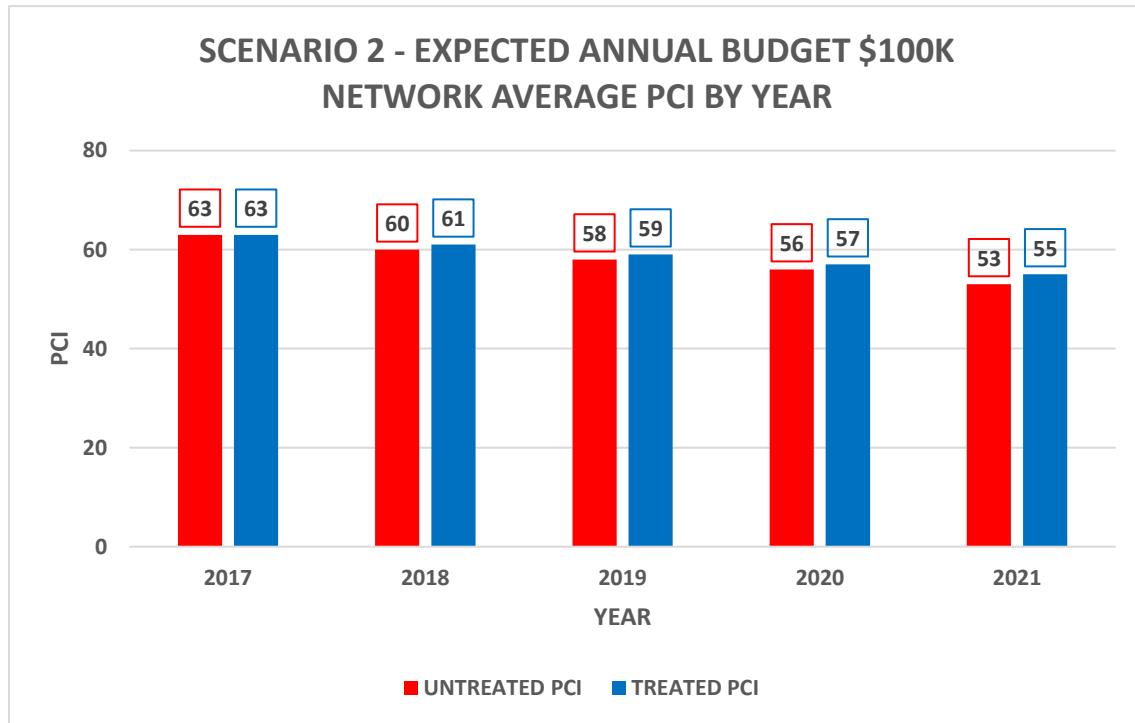


Figure 9. Scenario 2 Average Treated and Untreated PCI

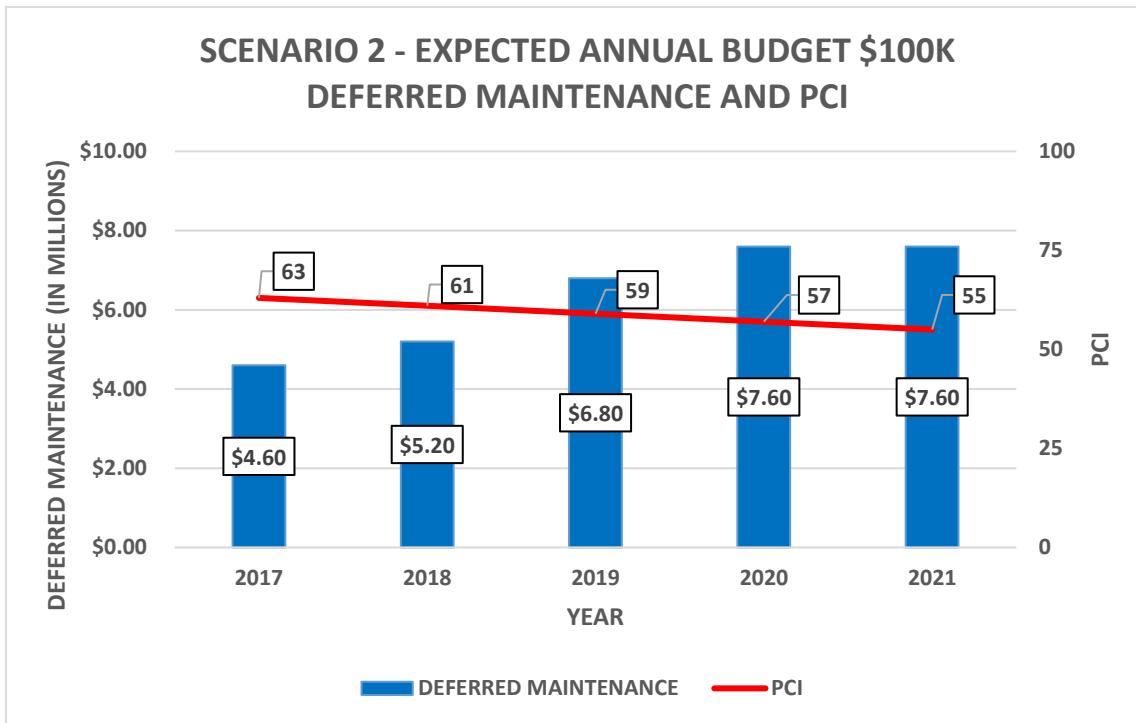


Figure1Q Scenario Treated PCI and Deferred Maintenance

Budget Scenario 3. Estimated Annual budget of \$150,000 (5 Years)

This scenario shows the effects of Town spending an estimated annual budget of \$150 thousand for maintenance and rehabilitation over a five-year period, totaling \$750 thousand. Under this scenario, the PCI is expected to remain a 63 in year one, while ultimately decreasing 7 points overall by year five to a 56. The expected deferred maintenance amount at the end of year five is \$7.5 million. The scenario results are displayed below in Table 7, Figure 11 and Figure 12.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	63	62	60	58	56	
PREVENTIVE COSTS	\$23,849	\$21,503	\$16,984	\$25,503	\$16,797	\$104,636
REHAB COSTS	\$126,154	\$128,413	\$132,574	\$124,058	\$133,139	\$644,338
TOTAL COSTS	\$150,003	\$149,916	\$149,558	\$149,561	\$149,936	\$748,974

Table 7. Budget Scenario Summary

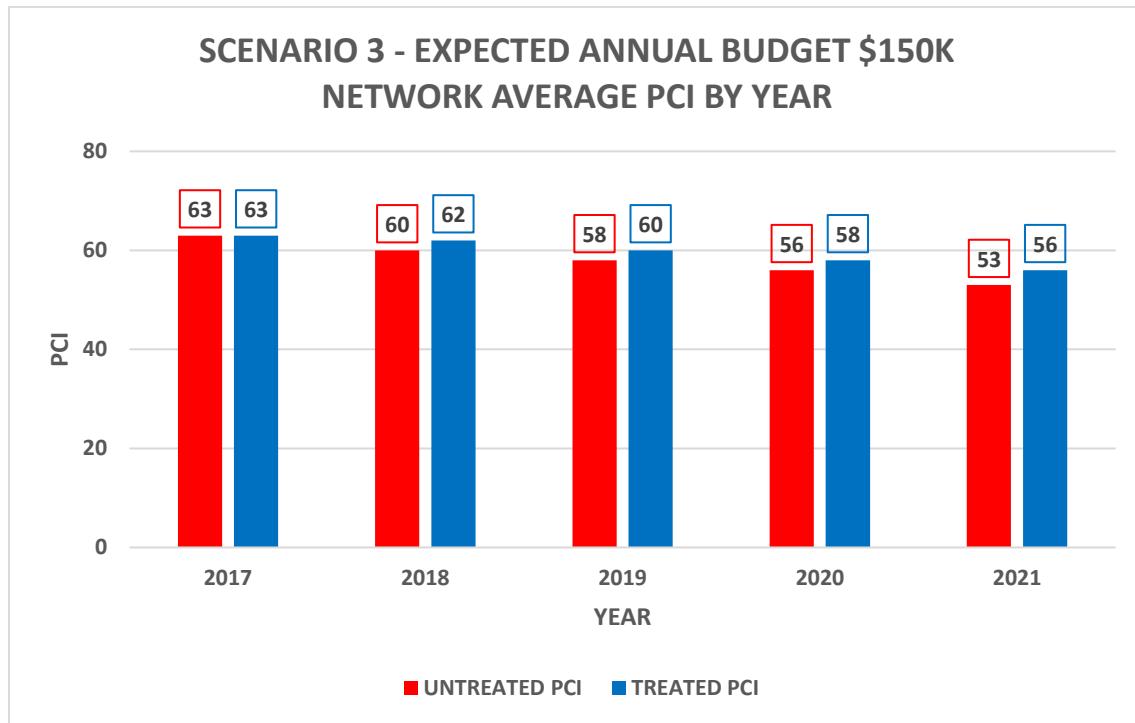


Figure11. Scenario 3 Average Treated and Untreated PCI

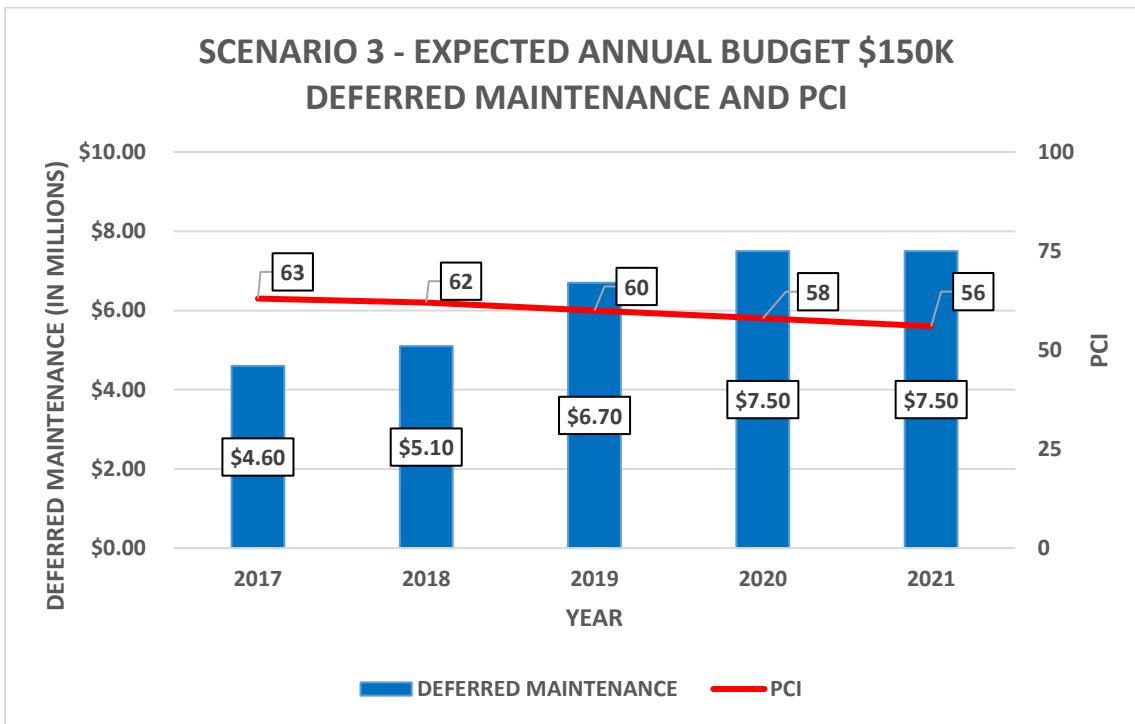


Figure12 Scenario 3 Treated PCI and Deferred Maintenance

Budget Scenario 4. Estimated Annual budget of \$200,000 (5 Years)

This scenario shows the effects of Town spending an estimated annual budget of \$200 thousand for maintenance and rehabilitation over a five-year period, totaling \$1 million. Under this scenario, the PCI is expected to increase one point to a 64 in year one, while ultimately decreasing 6 points overall by year five to a 57. The expected deferred maintenance amount at the end of year five is \$7.4 million. The scenario results are displayed below in Table 8, Figure 13 and Figure 14.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	64	62	60	59	57	
PREVENTIVE COSTS	\$20,516	\$26,690	\$25,799	\$19,636	\$29,021	\$121,662
REHAB COSTS	\$179,488	\$173,128	\$173,750	\$179,997	\$170,789	\$877,152
TOTAL COSTS	\$200,004	\$199,818	\$199,549	\$199,633	\$199,810	\$998,814

Table 8. Budget Scenario 4 Summary

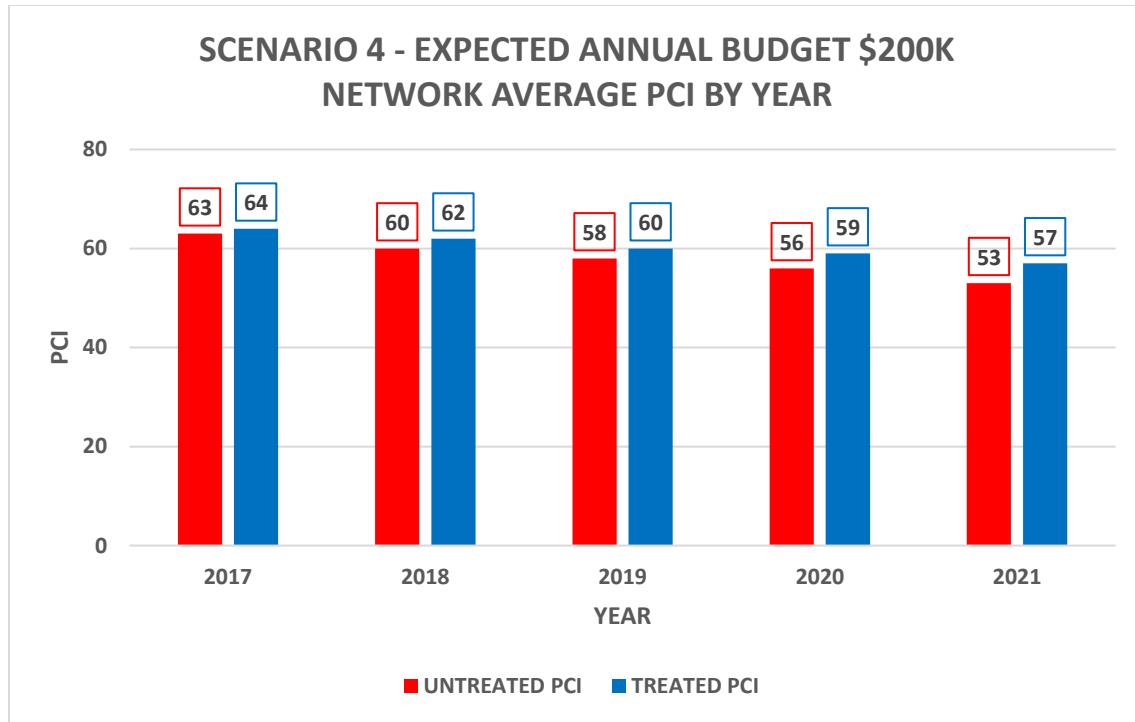


Figure 13 Scenario 4 Average Treated and Untreated PCI

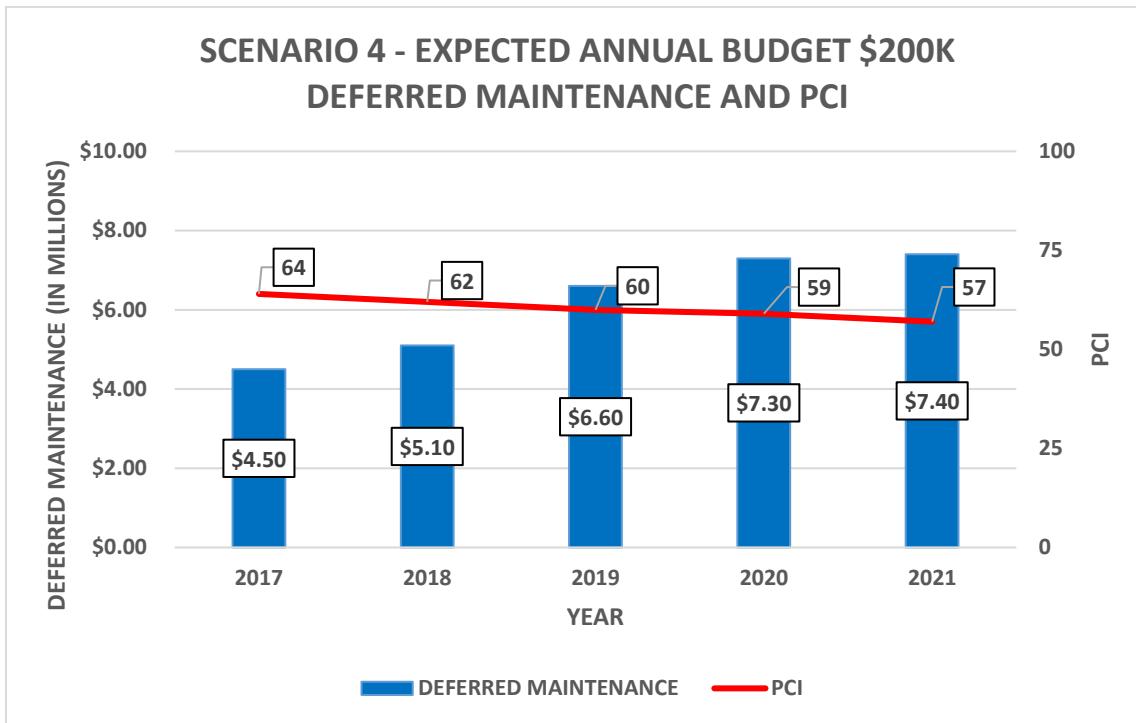


Figure 14. Scenario 4 Treated PCI and Deferred Maintenance

Budget Scenario 5. Maintain Current PCI (5 Years)

This scenario shows the effects of increasing the current funding level to \$600 thousand annually to effectively maintain the current PCI of 63 each year over a five-year period (through 2021). The expected deferred maintenance amount at the end of year five is \$6.0 million and the scenario results are displayed below in Table 9, Figure 15 and Figure 16.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	65	64	64	64	63	
PREVENTIVE COSTS	\$68,237	\$61,170	\$73,102	\$66,786	\$66,393	\$335,688
REHAB COSTS	\$531,734	\$537,458	\$526,658	\$533,160	\$533,584	\$2,662,594
TOTAL COSTS	\$599,971	\$598,628	\$599,760	\$599,946	\$599,977	\$2,998,282

Table 9. Budget Scenario Summary

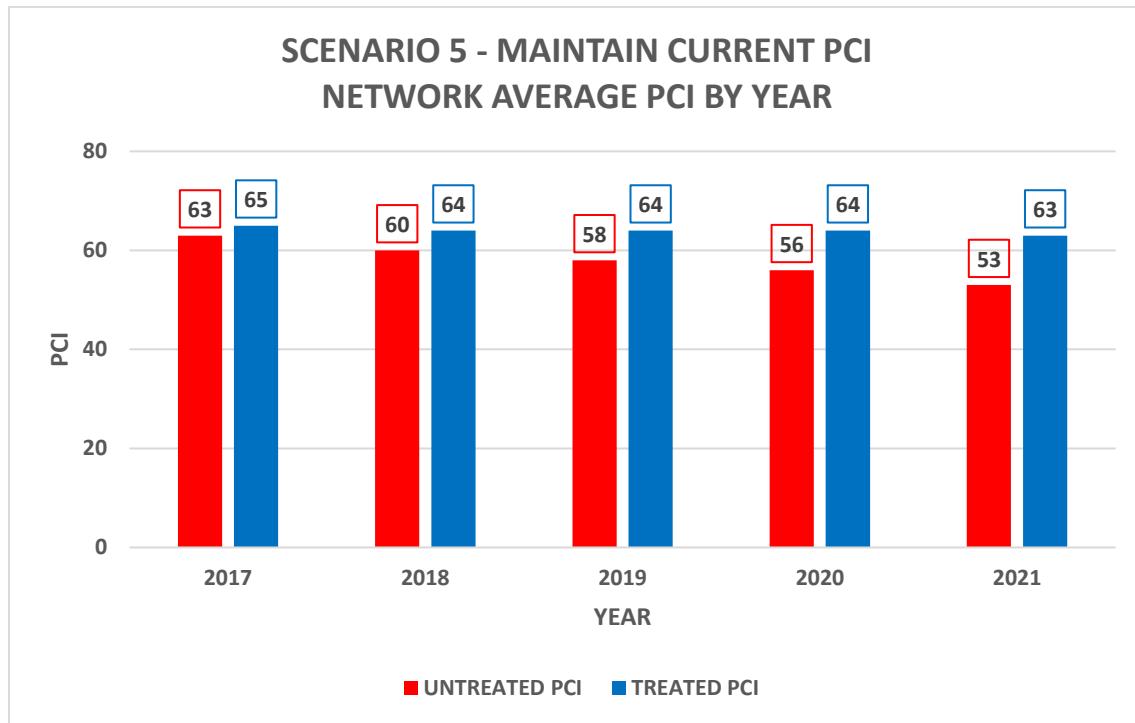


Figure11. Scenario Average Treated and Untreated PCI

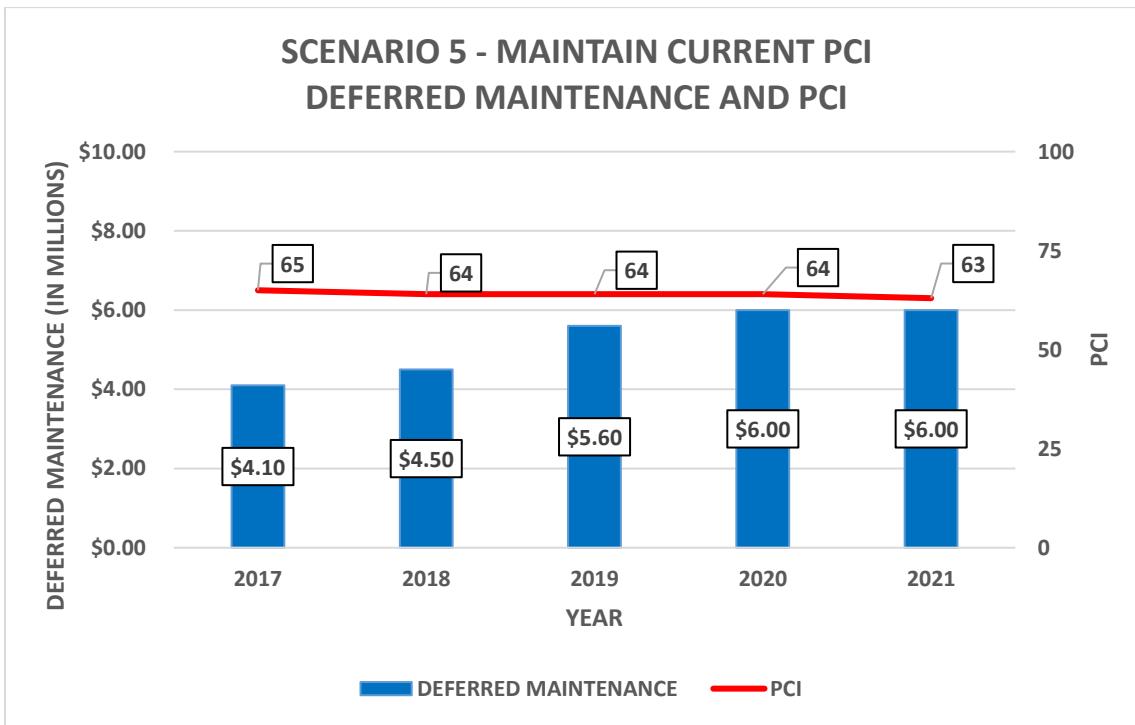


Figure12 Scenario Treated PCI and Deferred Maintenance

Budget Scenario 6. Increase Network Condition Five Points (5 Years)

This scenario shows the effects of increasing the current funding level to \$900 thousand annually to effectively increase the network PCI five points from the current PCI of 63 to a PCI of 68 over a five-year period (through 2021). The expected deferred maintenance amount at the end of year five is \$5.4 million and the scenario results are displayed below in Table 10, Figure 13 and Figure 14.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	66	66	67	68	68	
PREVENTIVE COSTS	\$89,884	\$97,142	\$100,082	\$95,505	\$94,003	\$476,616
REHAB COSTS	\$809,937	\$802,061	\$799,491	\$804,511	\$803,441	\$4,019,441
TOTAL COSTS	\$899,821	\$899,203	\$899,573	\$900,016	\$897,444	\$4,496,057

Table 10. Budget Scenario Summary

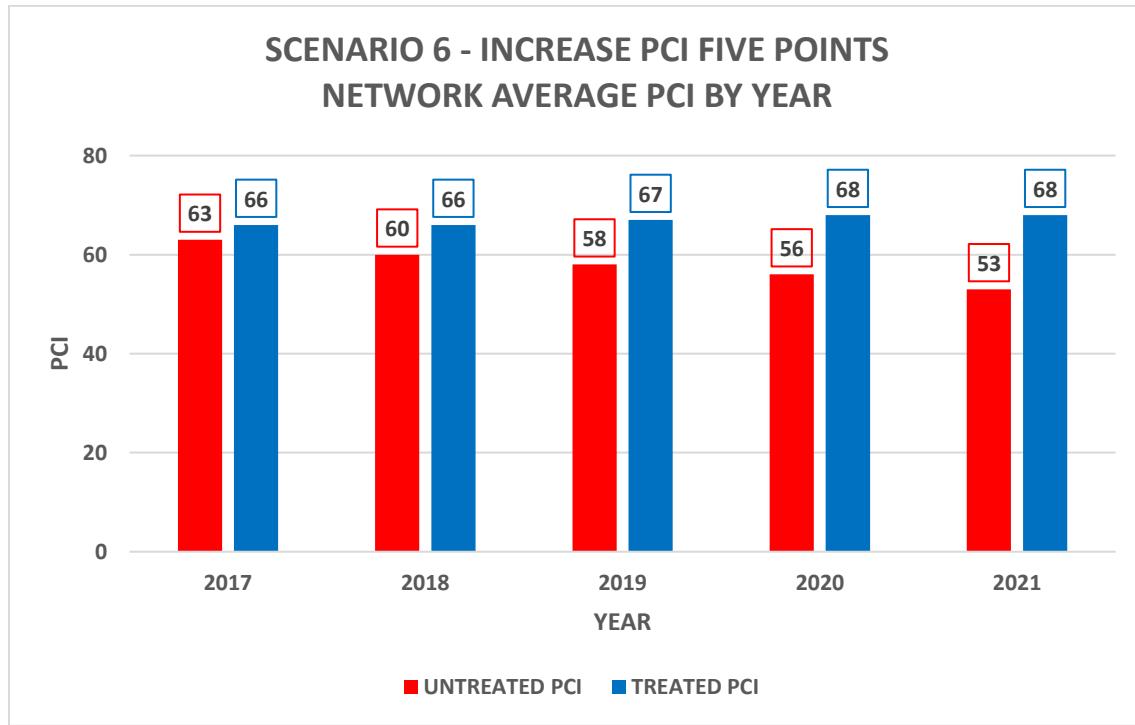


Figure 13 Scenario 6 Average Treated and Untreated PCI

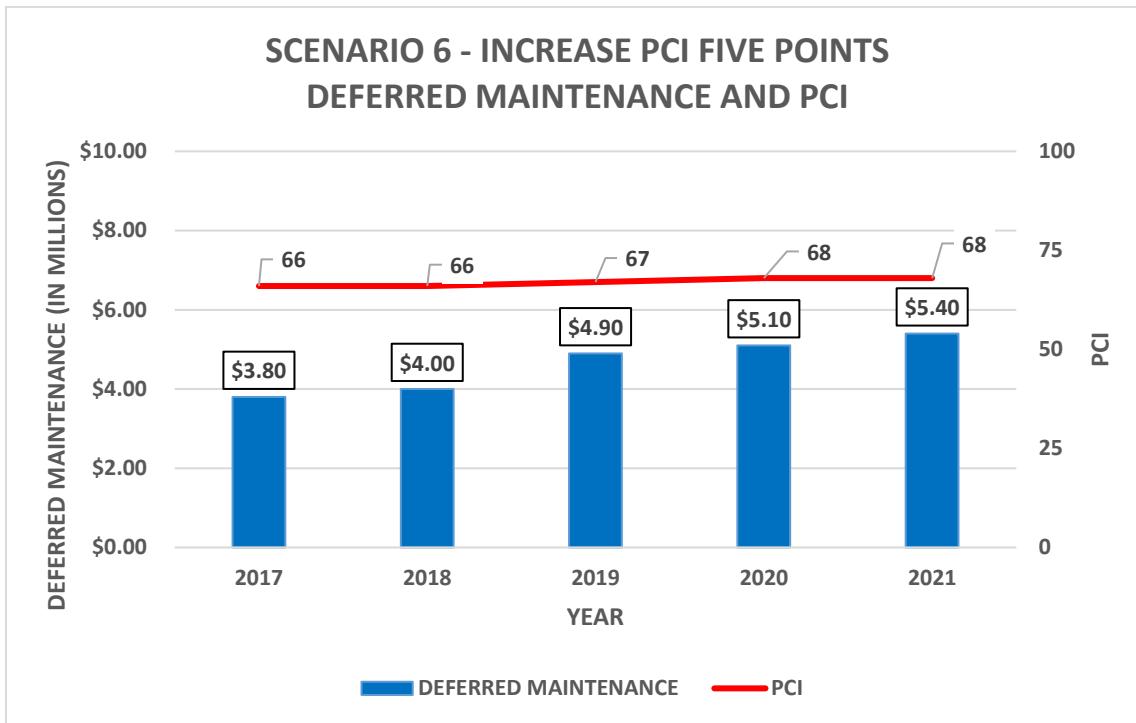


Figure 14. Scenario 4 Treated PCI and Deferred Maintenance

Budget Scenario 7. Average of PMP Determined Needs (5 Years)

The PMP determined a total budget of \$10.0 million necessary to achieve the optimal PCI over the next five years. A scenario of the average needs budget annually (2.0 million), was evaluated to determine the effects at this investment level. The results show that the current network condition of 63 increases nineteen points to 82 with an expected deferred maintenance amount of just \$740 thousand million at the end of year five (through 2021). The scenario results are displayed below in Table 11, Figure 15 and Figure 16.

YEAR	2017	2018	2019	2020	2021	TOTAL
PCI UNTREATED	63	60	58	56	53	
PCI TREATED	70	74	76	79	82	
PREVENTIVE COSTS	\$209,392	\$200,184	\$200,000	\$200,000	\$200,000	\$1,009,576
REHAB COSTS	\$1,789,757	\$1,799,146	\$1,778,477	\$1,788,944	\$1,764,852	\$8,921,176
TOTAL COSTS	\$1,999,149	\$1,999,330	\$1,978,477	\$1,988,944	\$1,964,852	\$9,930,752

Table 11.Budget Scenario 7 Summary

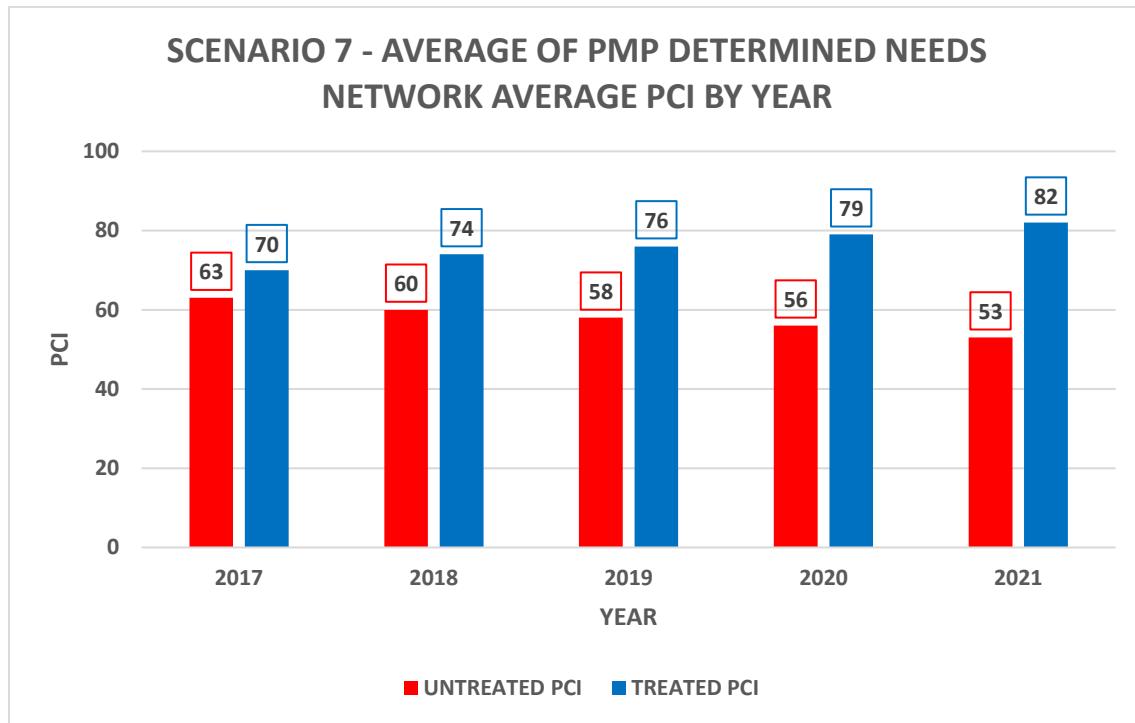


Figure15 Scenario 7 Average Treated and Untreated PCI

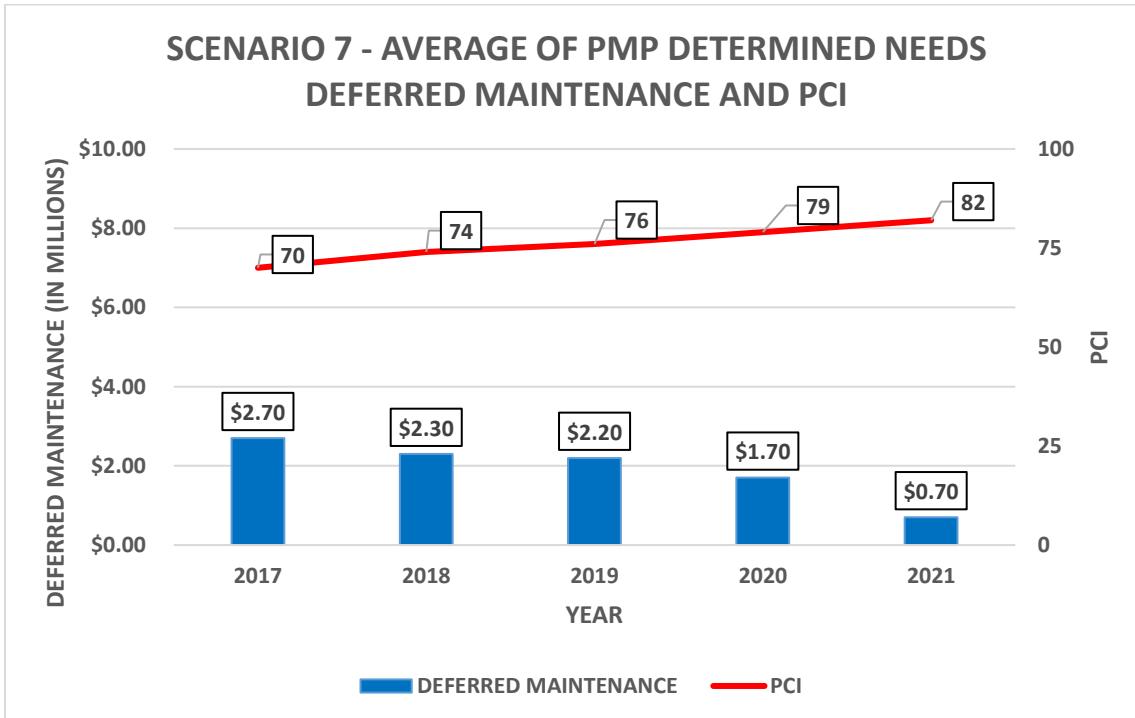


Figure 1.6Scenario 7 Treated PCI and Deferred Maintenance

DISCUSSIONS

Figure 17 illustrates the change in the annual deferred maintenance backlog as while Table 13 summarizes the change in annual deferred maintenance backlog for the five-year budget scenarios.

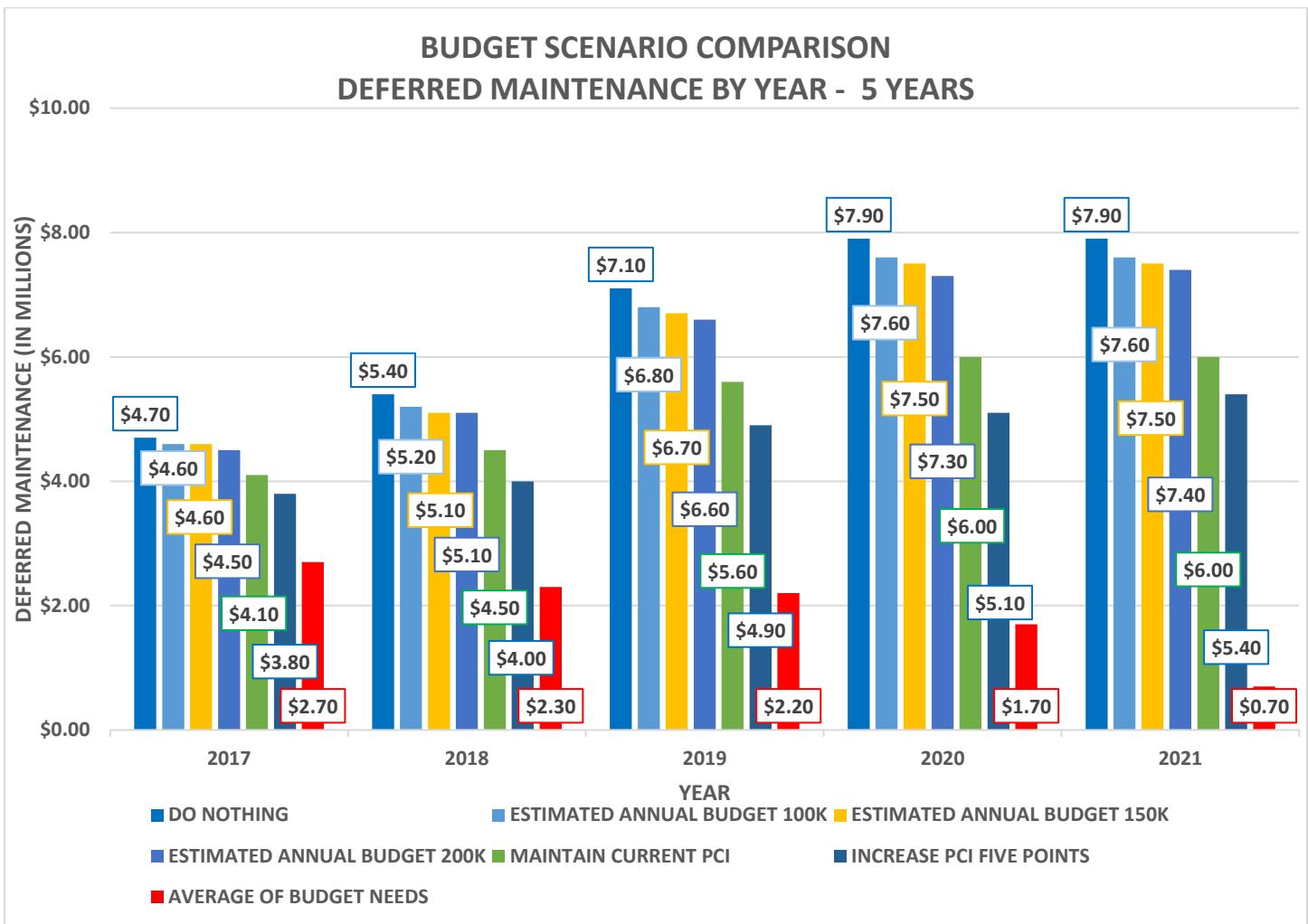


Figure 1.7 Annual Deferred Maintenance Backlog by Budget Scenario

SCENARIOS	2017	2018	2019	2020	2021
DO NOTHING	\$4.70	\$5.40	\$7.10	\$7.90	\$7.90
ESTIMATED ANNUAL BUDGET 100K	\$4.60	\$5.20	\$6.80	\$7.60	\$7.60
ESTIMATED ANNUAL BUDGET 150K	\$4.60	\$5.10	\$6.70	\$7.50	\$7.50
ESTIMATED ANNUAL BUDGET 200K	\$4.50	\$5.10	\$6.60	\$7.30	\$7.40
MAINTAIN CURRENT PCI	\$4.10	\$4.50	\$5.60	\$6.00	\$6.00
INCREASE PCI FIVE POINTS	\$3.80	\$4.00	\$4.90	\$5.10	\$5.40
AVERAGE OF BUDGET NEEDS	\$2.70	\$2.30	\$2.20	\$1.70	\$0.70

Table 13. Summary of Annual Deferred Maintenance Backlog by Scenario

Figure 18 illustrates the change in the annual PCI while Table 14 summarizes the change in annual PCI for the five-year budget scenarios.

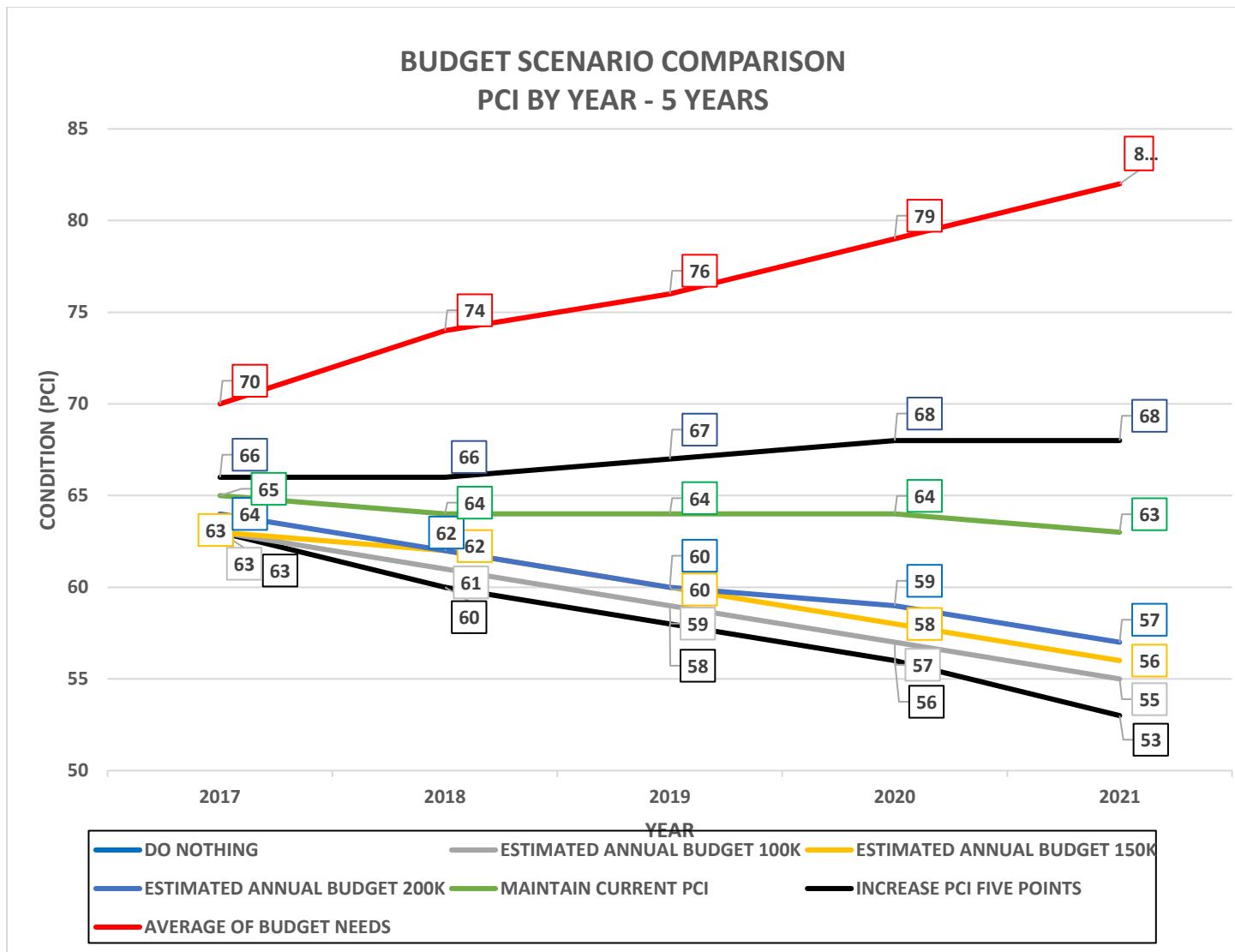


Figure 18 Annual PCI by Budget Scenario

SCENARIOS	2017	2018	2019	2020	2021
DO NOTHING	63	60	58	56	53
ESTIMATED ANNUAL BUDGET 100K	63	61	59	57	55
ESTIMATED ANNUAL BUDGET 150K	63	62	60	58	56
ESTIMATED ANNUAL BUDGET 200K	64	62	60	59	57
MAINTAIN CURRENT PCI	65	64	64	64	63
INCREASE PCI FIVE POINTS	66	66	67	68	68
AVERAGE OF BUDGET NEEDS	70	74	76	79	82

Table 14. Summary of Annual PCI by Budget Scenario

RECOMMENDATIONS

If in-sufficient funding remains available for the street maintenance determined by the PMP's budgetary Needs, the average PCI of the network is expected to stay in the "Fair" condition category with a large maintenance backlog. The analyses provided by the PMP indicates that the Town needs to spend on average \$2.0 million annually in maintenance and rehabilitation over the next five years, to essentially repair all streets. By doing so, streets can be maintained in the upper limits of the "Good" condition category with on-going preventive maintenance. This will eventually save money by avoiding reaching the level of major rehabilitation (such as reconstruction).

Pavement Budget

The Town's Current Annual Funding Level for pavement maintenance and rehabilitation is \$100 thousand. At this budget level, the network average PCI is expected to fall approximately 8 points from the current network PCI of 63 to 55 by 2021. This level of funding will not provide sufficient funding to maintain the current PCI and will result in a deferred maintenance backlog of \$7.6 million by 2021. At a minimum, we recommend that the Town of Fairfax continue with their current maintenance strategies with an increased budget of \$600 thousand annually. The following will be achieved by following this recommended pavement management strategy:

- Maintain the current network average PCI condition of 63 each year over the next five years
- Maintain overall network condition category of "Fair"
- Reduce percentage of pavements in the "Poor" and "Failed" condition categories
- Reduce the deferred maintenance costs in 2021.
- Allows for the preservation and improvement to pavements in the "Good" condition category

In light of the substantial financial commitment that is required to maintain and/or improve Town wide street conditions and the increase in construction and raw material costs, it is relevant to discuss the various possible financing alternatives to help fund pavement rehabilitation and preventative maintenance for the Town. The following examples are some of the possible ways that the Town should consider (if not already done so) to generate additional revenue to fund needed rehabilitation and maintenance of Town streets.

- Parking Enforcement Program – Generate revenue with parking violation fees.
- Truck Route Permit Fee – Leverages a surcharge fee on trucks for use of Town streets to help recoup the costs of heavy wheel loads imposed by truck traffic.
- Residential Waste Collection Fee – Surcharge is leveraged on waste companies to account for damage to pavement incurred by heavy waste collection trucks.
- Development Repairs – Fees assessed to new developments to account for increased traffic associated with new residential and commercial tenants.
- Establish Utility Cut Impact Fee – Fee is leveraged against utility to provide compensation for reduced pavement life due to utility cuts and patches.
- Pursue Local Transportation Sales Tax Measures
- Devote More Local Sales Tax/Revenues to Road Maintenance
- Establish Down and Business Improvement Districts
- Establish Town wide Assessment Districts

Pavement Maintenance Strategies

The Town's pavement maintenance strategies include surface seals, crack seals, overlays and reconstruction. Since a large percentage of pavements are in "Poor" condition, it is important to continue providing stop gap preventive maintenance such as patching of potholes and high severity alligatorated areas to keep the network intact until funding increases to warrant rehabilitation. Crack sealing, one of the least expensive treatments, can help keep moisture out of pavements and prevent the underlying aggregate base from premature failures for pavements at the higher end of the "Good" condition category. Life-extending surface seals, such as slurry seal, and cape seals, are also cost-effective for pavements currently in the "Good" condition category.

Re-inspection Strategies

In order to properly maintain the pavement management database and have the pavement management program certified, it is recommended that arterial and collectors be re-inspected every two years and residential streets every 3 years.

Maintenance and Rehabilitation Decision Tree

The maintenance and rehabilitation decision tree treatments and the associated unit costs should be reviewed and updated annually to reflect new construction techniques/repairs and changing costs so the budget analysis results can be reliable and accurate.

MTC PMP Database

MTC requires cities submitting pavement maintenance and rehabilitation projects for funding to utilize a Pavement Management Program (PMP) in accordance with section 2108.1 of the Streets and Highway Code. Specifically, the minimum requirements are:

- Review and update the inventory information for all arterials and collectors every two years.
- Re-inspect arterial and collector routes every two years and residential routes every five years.
- Calculate budget needs for rehabilitating or replacing deficient pavement sections for the current year and the next four years.

We recommend that the Town of Fairfax comply with the above requirements so as not to jeopardize the loss of any federal or state transportation funds. This is particularly critical since significant funding increases are needed to improve the pavement network.

Next Steps

To summarize, we recommend that the Town undertake the following steps:

- Update the pavement management program regularly
- Maintain its current preventive maintenance strategy
- Consider rehabilitation alternatives that will "stretch the maintenance dollar"
- Direct staff to determine additional funding sources

SUMMARY

To summarize, the Town of Fairfax has a significant investment of \$27.2 million in their entire roadway network. Overall, the network is in “Fair” condition with a network PCI of 63. Of the 27.5 centerline miles, 46 percent of the streets are in “Good to Excellent” condition, 21 percent are in “Poor” condition and the remaining 33 percent are in Very Poor” to “Failed” condition. The recommended scenario for the Town of Fairfax is presented in Scenario 5, with an annual budget of \$600 thousand over the next five years. Not only does this plan maintain the network PCI of 63 each year over the next five years and keep the overall network status in the “Fair” condition category, but the deferred maintenance costs will be reduced as well.

APPENDIX A

Definitions

The Pavement Condition Index, or PCI is a measurement of the health of the pavement network or condition and ranges from 0 – 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 from a visual survey.

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.

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 system 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 that are not one of the higher systems mentioned above. They primarily serve to provide direct access to abutting land and access to higher street systems.

Preventative 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, chip and seals, cape seals, crack seals, and deep patching. Treatments of this sort are applied before pavement deterioration has become severe and usually costs less than \$2.00/sq. yd.

Deferred Maintenance refers to the dollar amount of maintenance and rehabilitation work that should have been completed to maintain the streets in “Good” condition, but had to be deferred due to funding deficiencies for preventive maintenance and/or rehabilitation projects. The actual repairs that are being deferred are often referred to as “Backlog”.

Stop Gap refers to the dollar amount of repairs applied to maintain the pavement in a serviceable condition (e.g. pothole patching). These are a temporary measure to stop resident complaints, and do not extend the life of the pavement. Stop gap 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. In contrast AC/AC (in reports marked as O-AC/AC) is a street that has an Asphalt 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 (slurry seal, chip seal, cape seal).

APPENDIX B

Network Summary Statistics

Network Replacement Cost

Decision Tree

Network Summary Statistics

Printed: 02/03/2017

	Total Sections	Total Center Miles	Total Lane Miles	PCI
Arterial	29	4.79	9.57	61
Collector	65	10.05	20.02	65
Residential/Local	107	12.71	25.09	62
** Combined	0	0.00	0.00	N/A
Total	201	27.55	54.69	
Overall Network PCI as of 2/3/2017:				63

**** Combined Sections are those without a PCI Date - they have not been inspected or had a Treatment applied.**

Network Replacement Cost

Printed: 02/03/2017

Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area/ Square Feet	Cost To Replace (in thousands)
Arterial	AC	4.7	\$8.89	336,517	\$2,991
	AC/AC	4.8	\$8.89	357,145	\$3,175
Collector	AC	6.3	\$8.89	372,648	\$3,312
	AC/AC	12.6	\$8.89	684,160	\$6,081
	AC/PCC	1.2	\$8.89	43,120	\$383
Residential/Local	AC	10.6	\$8.89	554,455	\$4,928
	AC/AC	14.5	\$8.89	719,276	\$6,394
Grand Total:		54.7		3,067,321	\$27,265

Decision Tree

Printed: 02/03/2017

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	\$3.00	3		
		Surface Treatment	SLURRY SEAL		\$3.50		5	
		Restoration Treatment	DO NOTHING		\$0.00			2
	II - Good, Non-Load Related		MICROSURFACING		\$5.00			6
		III - Good, Load Related	THICK AC OL/RUBBERIZED ASPHALT		\$32.00			
		IV - Poor	MILL AND THICK OVERLAY		\$48.00			
	V - Very Poor		RECONSTRUCT STRUCTURE (AC)		\$80.00			
		I - Very Good	Crack Treatment	SEAL CRACKS	\$3.00	3		
		Surface Treatment	SLURRY SEAL		\$3.50		5	
AC/AC	V - Very Poor	Restoration Treatment	DO NOTHING		\$0.00			2
		II - Good, Non-Load Related	MICROSURFACING		\$5.00			6
		III - Good, Load Related	THICK AC OL/RUBBERIZED ASPHALT		\$32.00			
	IV - Poor	IV - Poor	MILL AND THICK OVERLAY		\$60.00			
		V - Very Poor	RECONSTRUCT STRUCTURE (AC)		\$80.00			
			Crack Treatment	SEAL CRACKS	\$3.00	3		
	V - Very Poor	Surface Treatment	SLURRY SEAL		\$3.50		5	
		Restoration Treatment	MILL AND THIN OVERLAY		\$38.00			2
		VI - Poor	MICROSURFACING		\$5.00			6
AC/PCC	VI - Poor	VI - Poor	MILL AND THICK OVERLAY		\$60.00			
		VII - Poor	MILL AND THICK OVERLAY		\$48.00			
		VIII - Very Poor	RECONSTRUCT STRUCTURE (AC)		\$80.00			
	VII - Very Poor	Crack Treatment	DO NOTHING		\$0.00			4
		Surface Treatment	DO NOTHING		\$0.00		99	
		Restoration Treatment	DO NOTHING		\$0.00			100
	VIII - Very Poor	IX - Very Poor	DO NOTHING		\$0.00			
		X - Poor	DO NOTHING		\$0.00			
		XI - Very Poor	DO NOTHING		\$0.00			

 Functional Class and Surface combination not used

Decision Tree

Printed: 02/03/2017

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	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	5	5	99
			Surface Treatment	DO NOTHING	\$0.00			100
			Restoration Treatment	DO NOTHING	\$0.00			
		II - Good, Non-Load Related	DO NOTHING	DO NOTHING	\$0.00			
		III - Good, Load Related	DO NOTHING	DO NOTHING	\$0.00			
		IV - Poor	DO NOTHING	DO NOTHING	\$0.00			
		V - Very Poor	DO NOTHING	DO NOTHING	\$0.00			

 Functional Class and Surface combination not used

Decision Tree

Printed: 02/03/2017

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	\$3.00	5	5	5
		Surface Treatment	SLURRY SEAL		\$3.50			
		Restoration Treatment	DO NOTHING		\$0.00			3
	II - Good, Non-Load Related		MICROSURFACING		\$5.00			6
		III - Good, Load Related	MILL AND THIN OVERLAY		\$32.00			
		IV - Poor	MILL AND THICK OVERLAY		\$48.00			
	V - Very Poor		RECONSTRUCT STRUCTURE (AC)		\$80.00			
		I - Very Good	Crack Treatment	SEAL CRACKS	\$3.00	5	5	5
		Surface Treatment	SLURRY SEAL		\$3.50			
AC/AC	V - Very Poor	Restoration Treatment	DO NOTHING		\$0.00			3
		II - Good, Non-Load Related	MICROSURFACING		\$5.00			7
		III - Good, Load Related	MILL AND THIN OVERLAY		\$32.00			
	IV - Poor	IV - Poor	MILL AND THICK OVERLAY		\$48.00			
		V - Very Poor	RECONSTRUCT STRUCTURE (AC)		\$80.00			
			Crack Treatment	SEAL CRACKS	\$3.00	5	5	5
	AC/PCC	Surface Treatment	SLURRY SEAL		\$3.50			
		Restoration Treatment	MILL AND THIN OVERLAY		\$38.00			3
			MICROSURFACING		\$5.00			7
PCC	V - Very Poor	II - Good, Non-Load Related	MILL AND THIN OVERLAY		\$35.00			
		III - Good, Load Related	MILL AND THICK OVERLAY		\$48.00			
		IV - Poor	RECONSTRUCT STRUCTURE (AC)		\$80.00			
	V - Very Poor	V - Very Poor	DO NOTHING		\$0.00			7
		Crack Treatment	DO NOTHING		\$0.00			
		Surface Treatment	DO NOTHING		\$0.00			
	PCC	Restoration Treatment	DO NOTHING		\$0.00			100
		II - Good, Non-Load Related	DO NOTHING		\$0.00			
		III - Good, Load Related	DO NOTHING		\$0.00			
	IV - Poor	IV - Poor	DO NOTHING		\$0.00			
		V - Very Poor	DO NOTHING		\$0.00			

 Functional Class and Surface combination not used

Decision Tree

Printed: 02/03/2017

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	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	5	5	99
			Surface Treatment	DO NOTHING	\$0.00			
			Restoration Treatment	DO NOTHING	\$0.00			
		II - Good, Non-Load Related	DO NOTHING	DO NOTHING	\$0.00			
		III - Good, Load Related	DO NOTHING	DO NOTHING	\$0.00			
		IV - Poor	DO NOTHING	DO NOTHING	\$0.00			
		V - Very Poor	DO NOTHING	DO NOTHING	\$0.00			

 Functional Class and Surface combination not used

Criteria:

Decision Tree

Printed: 02/03/2017

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	\$3.00	5	5	7
		Surface Treatment	SLURRY SEAL		\$3.50			
		Restoration Treatment	DO NOTHING		\$0.00			
		II - Good, Non-Load Related	MICROSURFACING		\$5.00			
		III - Good, Load Related	MILL AND THIN OVERLAY		\$32.00			
	IV - Poor	IV - Poor	MILL AND THICK OVERLAY		\$48.00			
		V - Very Poor	RESTRUCT STRUCTURE (AC)		\$80.00			
		I - Very Good	Crack Treatment	SEAL CRACKS	\$3.00	5	5	7
		Surface Treatment	SLURRY SEAL		\$3.50			
		Restoration Treatment	DO NOTHING		\$0.00			
AC/AC	II - Good, Non-Load Related	II - Good, Non-Load Related	MICROSURFACING		\$5.00			
		III - Good, Load Related	MILL AND THIN OVERLAY		\$32.00			
		IV - Poor	MILL AND THICK OVERLAY		\$48.00			
		V - Very Poor	RESTRUCT STRUCTURE (AC)		\$80.00			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	\$3.00	5	5	7
		Surface Treatment	SLURRY SEAL		\$3.50			
		Restoration Treatment	MILL AND THIN OVERLAY		\$38.00			
		II - Good, Non-Load Related	MICROSURFACING		\$5.00			
		III - Good, Load Related	MILL AND THIN OVERLAY		\$35.00			
PCC	IV - Poor	IV - Poor	MILL AND THICK OVERLAY		\$48.00			
		V - Very Poor	RESTRUCT SURFACE (AC)		\$80.00			
		I - Very Good	Crack Treatment	DO NOTHING	\$0.00	5	5	99
		Surface Treatment	DO NOTHING		\$0.00			
		Restoration Treatment	DO NOTHING		\$0.00			
	II - Good, Non-Load Related	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

Decision Tree

Printed: 02/03/2017

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	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	5	5	99
			Surface Treatment	DO NOTHING	\$0.00			
			Restoration Treatment	DO NOTHING	\$0.00			
		II - Good, Non-Load Related	DO NOTHING	DO NOTHING	\$0.00			
		III - Good, Load Related	DO NOTHING	DO NOTHING	\$0.00			
		IV - Poor	DO NOTHING	DO NOTHING	\$0.00			
		V - Very Poor	DO NOTHING	DO NOTHING	\$0.00			

 Functional Class and Surface combination not used

Criteria:

Decision Tree

Printed: 02/03/2017

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
Other	AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$1.60	5		
			Surface Treatment	SINGLE CHIP SEAL	\$1.74		7	
			Restoration Treatment	MILL AND THIN OVERLAY	\$5.04			3
		II - Good, Non-Load Related		SINGLE CHIP SEAL	\$1.11			
		III - Good, Load Related		THIN AC OVERLAY(1.5 INCHES)	\$3.99			
	IV - Poor			THICK AC OVERLAY(2.5 INCHES)	\$5.97			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	\$8.75			
		I - Very Good	Crack Treatment	SEAL CRACKS	\$1.60	5		
			Surface Treatment	SINGLE CHIP SEAL	\$1.74		7	
			Restoration Treatment	MILL AND THIN OVERLAY	\$5.04			3
AC/AC	II - Good, Non-Load Related			DOUBLE CHIP SEAL	\$1.52			
		III - Good, Load Related		HEATER SCARIFY & OVERLAY	\$5.95			
		IV - Poor		HEATER SCARIFY & OVERLAY	\$6.14			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	\$8.75			
		I - Very Good	Crack Treatment	SEAL CRACKS	\$1.60	5		
	IV - Poor		Surface Treatment	SINGLE CHIP SEAL	\$1.74		7	
		V - Very Poor	Restoration Treatment	MILL AND THIN OVERLAY	\$5.04			3
		II - Good, Non-Load Related		DOUBLE CHIP SEAL	\$1.52			
		III - Good, Load Related		HEATER SCARIFY & OVERLAY	\$5.95			
		IV - Poor		HEATER SCARIFY & OVERLAY	\$6.14			
PCC	V - Very Poor			RECONSTRUCT STRUCTURE (AC)	\$8.75			
		I - Very Good	Crack Treatment	DO NOTHING	\$0.00	5		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$1.11			
	IV - Poor	III - Good, Load Related		DO NOTHING	\$1.51			
		IV - Poor		DO NOTHING	\$0.00			
		V - Very Poor		DO NOTHING	\$0.00			

 Functional Class and Surface combination not used

Decision Tree

Printed: 02/03/2017

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
Other	ST	I - Very Good	Crack Treatment	DO NOTHING	\$0.00	5	5	99
			Surface Treatment	DO NOTHING	\$0.00			
			Restoration Treatment	DO NOTHING	\$0.00			
		II - Good, Non-Load Related	DO NOTHING	DO NOTHING	\$0.00			
		III - Good, Load Related	DO NOTHING	DO NOTHING	\$0.00			
		IV - Poor	DO NOTHING	DO NOTHING	\$0.00			
		V - Very Poor	DO NOTHING	DO NOTHING	\$0.00			

 Functional Class and Surface combination not used

APPENDIX C

Needs Analysis Reports

Needs - Projected PCI/Cost SummaryInflation Rate = **3.00 %** Printed: 02/03/2017

Year	PCI Treated	PCI Untreated	PM Cost	Rehab Cost	Cost	
2017	79	63	\$379,898	\$4,324,243	\$4,704,141	
2018	80	60	\$12,473	\$1,611,222	\$1,623,695	
2019	83	58	\$8,514	\$1,853,232	\$1,861,746	
2020	84	56	\$35,827	\$1,046,509	\$1,082,336	
2021	84	53	\$714	\$779,733	\$780,447	
			% PM	PM Total Cost	Rehab Total Cost	Total Cost
			4.35%	\$437,426	\$9,614,939	\$10,052,365

Needs - Preventive Maintenance Treatment/Cost Summary

Inflation Rate = **3.00 %** Printed: 02/03/2017

Treatment	Year	Area Treated	Cost
SEAL CRACKS	2019	5.02 ft.	\$18
	2020	355.25 ft.	\$1,170
	2021	210.71 ft.	\$714
	Total	570.98	\$1,902
SLURRY SEAL	2017	108,536.56 sq.yd.	\$379,898
	2018	3,459.56 sq.yd.	\$12,473
	2019	2,287.56 sq.yd.	\$8,496
	2020	9,060.44 sq.yd.	\$34,657
	Total	123,344.11	\$435,524
	Total Quantity	123,915.09	\$437,426

Needs - Rehabilitation Treatment/Cost Summary

Inflation Rate = 3.00 % Printed: 02/03/2017

Treatment	Year	Area Treated	Cost
MICROSURFACING	2017	17,663.89 sq.yd.	\$88,322
	2018	2,233.56 sq.yd.	\$11,503
	2019	15,065.11 sq.yd.	\$79,915
	2020	722.67 sq.yd.	\$3,949
	Total	35,685.22 sq.yd.	\$183,689
THICK AC OL/RUBBERIZED ASPHALT	2017	12,674.33 sq.yd.	\$405,580
	Total	12,674.33 sq.yd.	\$405,580
RECONSTRUCT STRUCTURE (AC)	2017	14,865 sq.yd.	\$1,189,204
	2018	7,254.67 sq.yd.	\$597,786
	2019	9,842.78 sq.yd.	\$835,379
	2020	7,309.22 sq.yd.	\$638,962
	2021	6,340.56 sq.yd.	\$570,910
	Total	45,612.22 sq.yd.	\$3,832,241
MILL AND THIN OVERLAY	2017	25,107.89 sq.yd.	\$803,458
	2018	6,189.56 sq.yd.	\$204,010
	2019	4,283.67 sq.yd.	\$145,427
	Total	35,581.11 sq.yd.	\$1,152,895
MILL AND THICK OVERLAY	2017	38,284.89 sq.yd.	\$1,837,679
	2018	16,139.11 sq.yd.	\$797,923
	2019	15,562.78 sq.yd.	\$792,511
	2020	7,379.44 sq.yd.	\$403,598
	2021	3,865.33 sq.yd.	\$208,823
	Total	81,231.56 sq.yd.	\$4,040,534
Total Cost			\$9,614,939

Needs - Sections Selected for Treatment

Interest: 3.00%

Printed: 02/03/2017

Inflation: 3.00%

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
Year: 2017									
CRESCENT CIRCLE	OAK TREE LANE	DEAD END	CRESCE	10	R	AC/AC	73	\$5,333	MICROSURFACING
DOMINGA AVENUE	BRIDGE COURT	NAPA AVENUE	DOMING	20	C	AC/AC	76	\$5,245	MICROSURFACING
GLEN DRIVE	SIR FRANCIS DRAKE BOULEVARD	1260' NORTH OF SFD BLVD	GLENDR	10	C	AC/AC	71	\$24,500	MICROSURFACING
KENT AVENUE	BELMONT AVENUE	SIR FRANCIS DRAKE BLVD	KENTAV	10	R	AC	73	\$6,414	MICROSURFACING
MANZANITA ROAD	991 FRMWREN DEN FRUSTRUCK INT	FRUSTUCK AVENUE	MANZAR	20	R	AC/AC	76	\$4,620	MICROSURFACING
NAPA AVENUE	PACHECO AVENUE	DOMINGA AVENUE	NAPAAV	10	R	AC/AC	76	\$3,334	MICROSURFACING
OAK TREE LANE	SIR FRANCIS DRAKE BOULEVARD	DEAD END	OAKTRE	10	R	AC/AC	75	\$7,959	MICROSURFACING
OLEMA ROAD	SIR FRANCIS DRAKE BOULEVARD	MARIN ROAD	OLEMAR	10	C	AC	75	\$14,000	MICROSURFACING
SIR FRANCIS DRAKE BOULEVARD	SAN MIGUEL COURT	OAK TREE LANE	SIRFRA	50	A	AC	76	\$16,917	MICROSURFACING
SCENIC ROAD	ACACIA ROAD	TAMALPIAS ROAD	SCENIC	10	A	AC	100	\$53,334	THICK AC OL/RUBBERIZED ASPHALT
SIR FRANCIS DRAKE BOULEVARD	TOWN LIMITS	PACHECO AVENUE	SIRFRA	10	A	AC/AC	100	\$195,328	THICK AC OL/RUBBERIZED ASPHALT
SIR FRANCIS DRAKE BOULEVARD	BROADWAY	SAN MIGUEL COURT	SIRFRA	40	A	AC	100	\$156,918	THICK AC OL/RUBBERIZED ASPHALT
ARROYO ROAD	LOWER SCENIC ROAD	SPRUCE ROAD	ARROYO	10	R	AC/AC	89	\$3,015	SLURRY SEAL
AZALEA AVENUE	SIR FRANCIS DRAKE BLVD	SEQUOIA RD	AZALEA	10	R	AC/AC	89	\$6,137	SLURRY SEAL
BARKER AVENUE	PORTEOUS AVENUE	DEAD END	BARKER	10	R	AC/AC	88	\$2,415	SLURRY SEAL
BOTHIN ROAD	MARIN AVENUE	OLEMA ROAD	BOTHIN	10	C	AC/AC	90	\$4,652	SLURRY SEAL
BOTHIN ROAD	OLEMA ROAD	1041' WEST OF OLEMA ROAD	BOTHIN	20	C	AC/AC	88	\$10,526	SLURRY SEAL
BROADWAY	CLAUS	BANK	BROADW	10b	C	AC/AC	87	\$3,617	SLURRY SEAL
BROADWAY	AZALEA AVENUE	50 FT. NW AZALEA AVE.	BROADW	35A	C	AC/AC	90	\$428	SLURRY SEAL
CANYON ROAD	CASCADE DRIVE	1017" WEST OF CASCADE DRIVE	CANYON	10	C	AC/AC	91	\$5,537	SLURRY SEAL

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
CASCADE DRIVE	BOLINAS DRIVE	1285' WEST OF BOLINAS DRIVE	CASCAD	10	C	AC/AC	85	\$15,992	SLURRY SEAL
CASCADE DRIVE	1285' WEST OF BOLINAS DR	LAUREL DRIVE	CASCAD	20	C	AC/AC	84	\$6,967	SLURRY SEAL
CASCADE DRIVE	LAUREL DRIVE	MEADOW WAY	CASCAD	30	R	AC/AC	90	\$10,073	SLURRY SEAL
CASCADE DRIVE	MEADOW WAY	690' WEST OF MEADOW WAY	CASCAD	40	R	AC/AC	90	\$6,440	SLURRY SEAL
CASCADE DRIVE	690' WEST OF MEADOW WAY	CANYON ROAD	CASCAD	50	R	AC/AC	89	\$7,620	SLURRY SEAL
CASCADE DRIVE	CANYON ROAD	890' WEST OF CANYON ROAD	CASCAD	60	R	AC/AC	87	\$6,230	SLURRY SEAL
CASCADE DRIVE	1770' WEST OF CANYON ROAD	DEAD END	CASCAD	80	R	AC/AC	91	\$4,860	SLURRY SEAL
CENTER BOULEVARD	TOWN LIMITS	PASTORI AVENUE	CENTER	10	R	AC	83	\$12,569	SLURRY SEAL
CENTER BOULEVARD	PASTORI AVENUE	727' NORTH OF PASTORI AVENUE	CENTER	20	R	AC	86	\$14,419	SLURRY SEAL
CYPRESS DRIVE	CASCADE DRIVE	760' WEST OF HICKORY ROAD	CYPRES	10	C	AC/AC	88	\$16,713	SLURRY SEAL
CYPRESS DRIVE	1700' NORTH OF LAUREL DRIVE	935' NORTH OF LAUREL DRIVE	CYPRES	40	C	AC/AC	82	\$4,760	SLURRY SEAL
CYPRESS DRIVE	935' NORTH OF LAUREL	LAUREL DRIVE	CYPRES	50	C	AC/AC	84	\$10,578	SLURRY SEAL
FORREST AVENUE	MEERNAA AVENUE	SUMMER AVENUE	FORREA	10	C	AC/AC	88	\$5,880	SLURRY SEAL
FORREST AVENUE	1230' EAST OF SUMMER AVENUE	2230' EAST OF SUMMER AVENUE	FORREA	30	C	AC/PCC	83	\$5,445	SLURRY SEAL
FRUSTUCK AVENUE	MANZANITA ROAD	WILLIS LANE	FRUSTU	30	C	AC	85	\$5,603	SLURRY SEAL
GLEN DRIVE	1260' NORTH OF SFD BLVD	TOWN LIMIT	GLENDR	20	C	AC/AC	83	\$18,667	SLURRY SEAL
HILLSIDE DRIVE	CREST ROAD	DEAD END	HILLSI	50	C	AC/AC	83	\$4,628	SLURRY SEAL
IRON SPRINGS ROAD	ROCK RIDGE ROAD	DEAD END	IRONSP	10	R	AC/AC	85	\$4,135	SLURRY SEAL
LANSDALE AVENUE	PASTORI AVENUE	TOWN LIMITS	LANSDA	10	R	AC/AC	87	\$5,558	SLURRY SEAL
LAUREL DRIVE	CASCADE DRIVE	PINE ROAD	LAUREL	10	C	AC	89	\$5,173	SLURRY SEAL
LIVE OAK AVENUE	MAPLE AVENU	1027' WEST OF MAPLE AVENUE	LIVEOA	10	R	AC/AC	85	\$7,189	SLURRY SEAL
MAIN COURT	PACHECO AVENUE	DEAD END	MAINC	10	R	AC/AC	94	\$1,618	SLURRY SEAL
MANOR ROAD	MARIN AVENUE	OLEMA ROAD	MANORR	10	R	AC/AC	89	\$3,974	SLURRY SEAL
MANOR ROAD	LOWER SCENIC ROAD	TAMALPIAS ROAD	MANORR	25	C	AC	89	\$4,473	SLURRY SEAL
MANOR ROAD	OLEMA ROAD	MANOR ROAD (AROUND CIRCLE)	MARINR	10	C	AC/AC	90	\$3,870	SLURRY SEAL
MARIN ROAD	MANOR ROAD (TOP OF CIRCLE)	SIR FRANCIS DRAKE BLVD	MARINR	20	C	AC	89	\$2,614	SLURRY SEAL
MEERNA AVENUE	IVY LANE	HILLSIDE DRIVE	MEERNA	20	C	AC/AC	89	\$6,594	SLURRY SEAL

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
MEERNA AVENUE	HILLSIDE DR	PORTEOUS AV	MEERNA	30	R	AC	83	\$7,352	SLURRY SEAL
MONO AVENUE	PACHECO AVE	INYO AVE	MONOAV	20	R	AC/AC	85	\$4,963	SLURRY SEAL
MURIEL PLACE	LOWER SCENIC ROAD	DEAD END	MURIEL	10	R	AC/AC	82	\$3,961	SLURRY SEAL
PINE DRIVE	1900' WEST OF LAUREL DRIVE	2760' WEST OF LAUREL DRIVE	PINEDR	30	C	AC/AC	89	\$4,683	SLURRY SEAL
REDWOOD ROAD	1240' WEST OF SCENIC ROAD	1800' WEST OF SCENIC ROAD	REDWOO	30	C	AC/AC	84	\$3,049	SLURRY SEAL
RIDGEWAY AVENUE	LIVE OAK AV	END	RIDGEW	10	R	AC/AC	85	\$8,400	SLURRY SEAL
SCENIC ROAD	BAY ROAD	200 FT W. BAY ROAD	SCENIC	20B	A	AC/AC	82	\$1,089	SLURRY SEAL
SCHOOL STREET	400' NORTH OF REDWOOD ROAD	REDWOOD ROAD	SCENIC	40	A	AC/AC	89	\$2,494	SLURRY SEAL
SHEMRAN COURT	PARK ROAD	DEAD END	SCHOOL	20	R	AC	92	\$1,459	SLURRY SEAL
SIR FRANCIS DRAKE BOULEVARD	SIR FRANCIS DRAKE BOULEVARD	NORTH TO DEAD END	SHEMRC	10	R	AC	88	\$3,399	SLURRY SEAL
SIR FRANCIS DRAKE BOULEVARD	GLEN DRIVE	TOWN LIMITS	SIRFRA	100	A	AC/AC	90	\$22,785	SLURRY SEAL
SIR FRANCIS DRAKE BOULEVARD	1003' WEST OF OAK MANOR DRIVE	455' NORTH OF JUNE COURT	SIRFRA	80	A	AC/AC	93	\$14,333	SLURRY SEAL
SIR FRANCIS DRAKE BOULEVARD	455' NORTH OF JUNE COURT	GLEN DRIVE	SIRFRA	90	A	AC/AC	92	\$18,550	SLURRY SEAL
SPRING LANE	HILLSIDE DRIVE	DEAD END	SPRING	10	R	AC/AC	92	\$8,027	SLURRY SEAL
SPRUCE ROAD	PARK ROAD	610 FT WEST OF PARK ROAD	SPRUCE	15	C	AC/AC	89	\$2,847	SLURRY SEAL
SPRUCE ROAD	610 FT WEST OF PARK ROAD	TAMALPIAS ROAD	SPRUCE	25	C	AC/AC	87	\$3,570	SLURRY SEAL
SUMMER AVENUE	FOREST AVENUE	DEAD END	SUMMER	10	R	AC/AC	92	\$1,657	SLURRY SEAL
TAMALPAIS ROAD	SPRUCE ROAD	INT. 60 FT W. OF SCENIC	TAMALP	10B	A	AC/AC	93	\$2,303	SLURRY SEAL
TAMALPAIS ROAD	SCENIC ROAD	1050' SOUTH OF SCENIC ROAD	TAMALP	20	A	AC/AC	85	\$6,125	SLURRY SEAL
TAMALPAIS ROAD	BERRY TRAIL	BERRY TRAIL	TAMALP	30	A	AC/AC	82	\$5,053	SLURRY SEAL
TAMALPAIS ROAD	BERRY TRAIL	MOUNTAIN VIEW ROAD	TAMALP	40	A	AC/AC	89	\$4,871	SLURRY SEAL
VALLEY ROAD	WILLIS LANE	DEAD END	VALLEY	10	R	AC/AC	88	\$1,797	SLURRY SEAL
WOODLAND ROAD	LAUREL DRIVE	OAK ROAD	WOODRO	10	R	AC/AC	82	\$4,994	SLURRY SEAL
WREDEN AVENUE	FRUSTUCK AVENUE	MANZANITA ROAD	WREDEN	20	R	AC/AC	83	\$3,168	SLURRY SEAL
BLACKBERRY LANE	CREEK ROAD	FORREST AVE	BLACKB	10	R	AC/AC	100	\$12,160	MILL AND THIN OVERLAY
BOTHIN ROAD	1041' WEST OF OLEMA ROAD	TOWN LIMITS	BOTHIN	30	C	AC/AC	100	\$91,645	MILL AND THIN OVERLAY
							Treatment Total	\$379,898	

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
CHESTER AVENUE	LIVE OAK AVENUE	556' NORTH OF LIVE OAK AVENUE	CHESTE	20	R	AC/AC	100	\$27,677	MILL AND THIN OVERLAY
LAUREL DRIVE	PINE ROAD	WOODLAND ROAD	LAUREL	20	C	AC/AC	100	\$88,448	MILL AND THIN OVERLAY
OLEMA ROAD	MARIN ROAD	TOWN LIMITS	OLEMAR	20	C	AC	100	\$121,032	MILL AND THIN OVERLAY
PACHECO AVENUE	SIR FRANCIS DRAKE BLVD	DEAD END	PACHEC	10	R	AC/AC	100	\$42,383	MILL AND THIN OVERLAY
PARK ROAD	BOLINAS ROAD	SCHOOL STREET DRIVE	PARKRO	10	R	AC/AC	100	\$50,176	MILL AND THIN OVERLAY
PINE DRIVE	635' WEST OF LAUREL DRIVE	1900' WEST OF LAUREL DRIVE	PINEDR	20	C	AC/AC	100	\$62,969	MILL AND THIN OVERLAY
RIDGE ROAD	SCENIC ROAD	CUL-DE-SAC	RIDGER	10	R	AC/AC	100	\$65,536	MILL AND THIN OVERLAY
SEQUOIA ROAD	LOWER SCENIC ROAD	SPRUCE ROAD	SEQUOI	10	R	AC/AC	100	\$65,800	MILL AND THIN OVERLAY
VANNILN	RIDGEWAY AV	CHESTER AV	VANNI	10	R	AC	100	\$37,832	MILL AND THIN OVERLAY
WESTBRAE DRIVE	OLEMA ROAD	OLEMA ROAD	WESTBR	10	R	AC/AC	100	\$67,556	MILL AND THIN OVERLAY
WILLOW AVENUE	912' NORTH OF MAPLE AVENUE	CHESTER AVENUE	WILLOW	30	C	AC/AC	100	\$37,476	MILL AND THIN OVERLAY
WREDEN AVENUE	PARK ROAD	FRUSTUCK AVENUE	WREDEN	10	R	AC/AC	100	\$32,768	MILL AND THIN OVERLAY
BAY ROAD	SCENIC ROAD	DEAD END	BAYROA	10	R	Treatment Total		\$803,458	
BOLINAS ROAD	BROADWAY	PARK ROAD	BOLINA	10	A	AC	100	\$75,712	MILL AND THICK OVERLAY
BROADWAY	SIR FRAN. DRK. BL. AT BANK	MERWIN AVENUE	BROADW	20	C	AC	100	\$174,443	MILL AND THICK OVERLAY
BROADWAY	MERWIN AVENUE	AZALEA AVENUE	BROADW	25	C	AC/AC	100	\$55,382	MILL AND THICK OVERLAY
CREEK ROAD	PORTEOUS AVENUE	BLACKBERRY LANE	CREEKR	10	C	AC/AC	100	\$47,168	MILL AND THICK OVERLAY
DOMINGA AVENUE	CREEK ROAD	BRIDGE COURT	DOMING	10	C	AC/AC	100	\$72,192	MILL AND THICK OVERLAY
FRUSTUCK AVENUE	WRENDEN AVENUE	MANZANITA ROAD	FRUSTU	20	C	AC	100	\$90,347	MILL AND THICK OVERLAY
GEARY AVENUE	TAYLOR DRIVE	TAYLOR DRIVE	GEARYA	10	R	AC/AC	100	\$95,424	MILL AND THICK OVERLAY
MADRONE COURT	LAUREL DRIVE	DEAD END	MADROC	10	R	AC	100	\$46,176	MILL AND THICK OVERLAY
MADRONE ROAD	LAUREL DRIVE	895' NORTH OF LAUREL DRIVE	MADROR	10	R	AC	100	\$32,928	MILL AND THICK OVERLAY
MANOR ROAD	OLEMA ROAD	LOWER SCENIC ROAD	MANORR	15	C	AC	100	\$66,827	MILL AND THICK OVERLAY
MAPLE AVENUE	WILLOW AVENUE	LIVE OAK AVENUE	MAPLEA	10	R	AC/AC	100	\$82,187	MILL AND THICK OVERLAY
MEADOW WAY (2)	NE END	GATE (SW END)	MEADOW	20	R	AC/AC	100	\$30,960	MILL AND THICK OVERLAY
MERWIN AVENUE	BROADWAY	PARK ROAD	MERWIN	10	R	AC	100	\$85,867	MILL AND THICK OVERLAY
OAK ROAD	LAUREL DRIVE	TOYON DRIVE	OAKROA	10	R	AC	100	\$72,912	MILL AND THICK OVERLAY
PORTEOUS AVENUE	IVY LANE	WOOD LANE	PORTEO	20	C	AC/AC	100	\$99,920	MILL AND THICK OVERLAY
PORTEOUS AVENUE	WOOD LANE	TOWN LIMITS	PORTEO	30	C	AC/AC	100	\$25,056	MILL AND THICK OVERLAY
SAN GABRIEL COURT	SAN GABRIEL DRIVE	DEAD END	SANGAC	10	R	AC	100	\$105,174	MILL AND THICK OVERLAY
								\$28,320	MILL AND THICK OVERLAY

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
SAN GABRIEL DRIVE	1148' EAST OF MARINDA DRIVE	DEAD END	SANGAD	20	C	AC	100	\$101,280	MILL AND THICK OVERLAY
SIR FRANCIS DRAKE BOULEVARD	DEAD END		SANMIG	10	R	AC/AC	100	\$50,171	MILL AND THICK OVERLAY
AZALEA AVENUE	ACACIA ROAD		SCENIC	05	R	AC	100	\$111,840	MILL AND THICK OVERLAY
TAMALPIAS ROAD	UPPER SCENIC ROAD		SCENIC	60	A	AC	100	\$91,600	MILL AND THICK OVERLAY
OAK ROAD	SOUTH DEAD END		TOYONR	20	R	AC	100	\$106,667	MILL AND THICK OVERLAY
780' WEST OF PORTEOUS AVENUE	DEAD END		WOODLA	20	R	AC	100	\$89,126	MILL AND THICK OVERLAY

BRIDGE COURT	DOMINGA AVENUE	DEAD END	BRIDGE	10	R	AC	100	\$1,837,679	Treatment Total
CREST ROAD	HILLSIDE DRIVE	1422' SO.EAST OF HILLSIDE DR.	CRESTR	10	R	AC	100	\$13,796	RECONSTRUCT STRUCTURE (AC)
FORREST TERRACE	MEERNA AVENUE	FORREST AVENUE	FORRES	50	R	AC	100	\$119,094	RECONSTRUCT STRUCTURE (AC)
HAWTHORNE CT	OLEMA RD	END	HAWTHORNE	10	R	AC	100	\$37,334	RECONSTRUCT STRUCTURE (AC)
HICKORY ROAD	CYPRESS DRIVE	DEAD END	HICKOR	10	R	AC	100	\$201,245	RECONSTRUCT STRUCTURE (AC)
MONO AVENUE	BOLINAS RD	BANK ST	MONOAV	05	R	AC	100	\$22,489	RECONSTRUCT STRUCTURE (AC)
MONO AVENUE	BOLINAS RD	PACHECO AV	MONOAV	10	R	AC	100	\$74,667	RECONSTRUCT STRUCTURE (AC)
MOUNTAIN VIEW ROAD	MANZANITA ROAD	TAMALPIAS ROAD	OUNTA	10	R	AC	100	\$128,800	RECONSTRUCT STRUCTURE (AC)
ROCK RIDGE ROAD	MANOR ROAD	BOTHIN ROAD	ROCKRI	10	R	AC	100	\$247,778	RECONSTRUCT STRUCTURE (AC)
TAMALPAIS ROAD	MOUNTAIN VIEW ROAD	SCENIC ROAD	TAMALP	50	A	AC/AC	100	\$62,934	RECONSTRUCT STRUCTURE (AC)
VISTA WAY	SAN GABRIEL DRIVE	DEAD END	VISTAW	10	R	AC	100	\$104,107	RECONSTRUCT STRUCTURE (AC)

Treatment Total \$1,189,204
Year 2017 Total \$4,704,141

Year: 2018

MANZANITA ROAD	543 FROM WRENDEN FRUSTRUCK INT	991 FIRM WRENDEN FRUSTRUCK INT	MANZAR	10	R	AC/AC	78	\$3,589	MICROSURFACING
SCENIC ROAD	200' WEST OF BAY ROAD	400' NORTH OF REDWOOD ROAD	SCENIC	30	A	AC/AC	77	\$7,914	MICROSURFACING
HICKORY ROAD	CASADE DR	CYPRESS DR	HICKOR	05	R	AC	94	\$11,503	
PASTORI AVENUE	SIR FRANCIS DRAKE BOULEVARD	DEAD END	PASTOR	10	R	AC	94	\$1,426	SLURRY SEAL
SCENIC ROAD	REDWOOD ROAD	TAMALPIAS ROAD	SCENIC	50	A	AC	95	\$7,794	SLURRY SEAL
									Treatment Total \$12,473

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
CASCADE DRIVE	890' WEST OF CANYON ROAD	1770' WEST OF CANYON ROAD	CASCAD	70	R	AC/AC	100	\$48,342	MILL AND THIN OVERLAY
CENTER BOULEVARD	727' NORTH OF PASTORI AVENUE	PACHECO AVENUE	CENTER	30	R	AC/AC	100	\$118,459	MILL AND THIN OVERLAY
PINE DRIVE	635' WEST OF LAUREL DRIVE	635' WEST OF LAUREL DRIVE	PINEDR	10	C	AC/AC	100	\$37,209	MILL AND THIN OVERLAY
					A	AC	100	\$242,652	MILL AND THICK OVERLAY
BOLINAS ROAD	PARK ROAD	CASCADE DRIVE	BOLINA	20	R	AC/AC	100	\$117,668	MILL AND THICK OVERLAY
ELSIE LANE	BOLINAS ROAD	BANK ST	ELSIEL	10	C	AC/PCC	100	\$65,371	MILL AND THICK OVERLAY
FORREST AVENUE	2230' EAST OF SUMMER AVENUE	TOWN LIMITS	FORREA	40	R	AC	100	\$27,160	MILL AND THICK OVERLAY
JUNE COURT	SIR FRANCIS DRAKE BOULEVARD	DEAD END	JUNECO	10	R	AC	100	\$204,010	Treatment Total
MADRONE ROAD	895' NORTH OF LAUREL DRIVE	1625' NORTH OF LAUREL DRIVE	MADROR	20	R	AC	100	\$56,142	MILL AND THICK OVERLAY
MARINDA COURT	MARINDA DRIVE	DEAD END	MARINC	10	R	AC	100	\$29,632	MILL AND THICK OVERLAY
MARINDA DRIVE	SIR FRANCIS DRAKE BOULEVARD	SAN GABRIEL DRIVE	MARIND	10	C	AC	100	\$112,888	MILL AND THICK OVERLAY
PORTEOUS AVENUE	BOLINAS ROAD	IVY LANE	PORTEO	10	C	AC/AC	100	\$71,194	MILL AND THICK OVERLAY
REDWOOD ROAD	SCENIC ROAD	420' WEST OF SCENIC ROAD	REDWOO	10	C	AC/AC	100	\$27,687	MILL AND THICK OVERLAY
TAYLOR DRIVE	SIR FRANCIS DRAKE BOULEVARD	CLAUS DRIVE	TAYLOR	10	R	AC	100	\$47,529	MILL AND THICK OVERLAY
					A	AC	100	\$797,923	Treatment Total
BOLINAS ROAD	1120' SO. OF CASCADE DRIVE	2200' SO OF CASCADE DRIVE	BOLINA	40	C	AC	100	\$197,760	RECONSTRUCT STRUCTURE (AC)
FRUSTUCK AVENUE	WILLIS LANE	500' WEST OF BOLINAS ROAD	FRUSTU	40	C	AC	100	\$50,759	RECONSTRUCT STRUCTURE (AC)
REDWOOD ROAD	420' WEST OF SCENIC ROAD	1240' WEST OF SCENIC ROAD	REDWOO	20	C	AC/AC	100	\$90,091	RECONSTRUCT STRUCTURE (AC)
SIR FRANCIS DRAKE BOULEVARD	OAK TREE LANE	OAK MANOR DRIVE	SIRFRA	60	A	AC/AC	100	\$231,361	RECONSTRUCT STRUCTURE (AC)
WILLIS LN	FRUSTUCK AV	END	WILLIS	10	R	AC	100	\$27,815	RECONSTRUCT STRUCTURE (AC)
								\$597,786	Treatment Total
								\$1,623,695	Year 2018 Total
Year: 2019									
BROADWAY	SIR FRAN. DRK. BL. AT PACHECO	CLAU	BROADW	10a	C	AC	78	\$29,281	MICROSURFACING
CHESTER AVENUE	WILLOW AVENUE	402' WEST OF WILLOW AVENUE	CHESTE	10	R	AC/AC	78	\$3,318	MICROSURFACING

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
FRUSTUCK AVENUE	500' WEST OF BOLINAS ROAD	BOLINAS ROAD	FRUSTU	50	C	AC	77	\$4,126	MICROSURFACING
MEERNA AVENUE	CREEK ROAD	IVY LANE	MEERNA	10	C	AC/AC	78	\$9,230	MICROSURFACING
ROCCA DRIVE	TAYLOR DRIVE	TAYLOR DRIVE AT SADY LANE	ROCCAD	20	R	AC/AC	77	\$14,036	MICROSURFACING
SIR FRANCIS DRAKE BOULEVARD	BANK STREET	BROADWAY	SIRFRA	30	A	AC	78	\$19,924	MICROSURFACING
					R	AC	94	\$1,543	SLURRY SEAL
COREE LANE	FRUSTUCK AVENUE	DEAD END	COREEL	10	R	AC	94	\$508	SLURRY SEAL
MANZANITA COURT	MANZANITA ROAD	DEAD END	MANZAC	10	R	AC	94	\$6,445	SLURRY SEAL
TOYON DRIVE	OAK ROAD	NORTH DEAD END	TOYONR	10	R	AC	94		
					R	AC/AC	89	\$2	SEAL CRACKS
COOLIDGE AVENUE	BELMONT AVENUE	COOLID	10	R	AC/AC	89	\$4	SEAL CRACKS	
PIPER COURT	PIPER LANE	DEAD END	PIPERC	10	R	AC/AC	89	\$12	SEAL CRACKS
PIPER LANE	OAK MANOR DRIVE	DEAD END	PIPERL	10	R	AC/AC	89		
					C	AC/AC	100	\$92,149	MILL AND THIN OVERLAY
CANYON ROAD	1017' WEST OF CASCADE DRIVE	2454' WEST OF CASCADE DRIVE	CANYON	20	C	AC/AC	100	\$35,488	MILL AND THIN OVERLAY
CANYON ROAD	2428' WEST OF CASCADE DRIVE	DEAD END	CANYON	30	R	AC/AC	100	\$17,790	MILL AND THIN OVERLAY
SHERMAN AVENUE	BOLINAS ROAD	DOMINGA AVENUE	SHERMA	10	R	AC/AC	100		
					R	AC	100	\$145,427	
CLAUS CIRCLE	CLAUS DRIVE	CLAUS DRIVE	CLAUSC	10	R	AC	100	\$47,223	MILL AND THICK OVERLAY
CLAUS DRIVE	SIR FRANCIS DRAKE BOULEVARD	TAYLOR DRIVE	CLAUSD	10	R	AC	100	\$72,674	MILL AND THICK OVERLAY
MARINDA DRIVE	SAN GABRIEL DRIVE	DEAD END	MARIND	20	C	AC	100	\$237,303	
PARK ROAD	SCHOOL STREET	SPRUCE ROAD	PARKRO	20	R	AC	100	\$69,511	MILL AND THICK OVERLAY
SAN GABRIEL DRIVE	MARINDA DRIVE	1148' EAST OF MARINDA DRIVE	SANGAD	10	C	AC	100	\$194,867	MILL AND THICK OVERLAY
TAYLOR DRIVE	CLAUS DRIVE	PARKER LANE	TAYLOR	20	R	AC/AC	100	\$67,728	MILL AND THICK OVERLAY
WILLOW AVENUE	MAPLE AVENUE	912' NORTH OF MAPLE AVENUE	WILLOW	20	C	AC/AC	100	\$103,205	MILL AND THICK OVERLAY
					R	AC	100	\$792,511	RESTRUCT STRUCTURE (AC)
BOLINAS ROAD	CASCADE DRIVE	1120' SO. OF CASCADE DRIVE	BOLINA	30	A	AC	100	\$211,237	RESTRUCT STRUCTURE (AC)
HILLSIDE DRIVE	770' NORTH OF MEERNA AVENUE	1275' NORTH OF MEERNA AVENUE	HILLSI	30	C	AC	100	\$57,148	RESTRUCT STRUCTURE (AC)

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
HILLSIDE DRIVE	1275' NORTH OF MEERNA AVENUE	CREST ROAD	HILLSI	40	C	AC	100	\$70,727	RECONSTRUCT STRUCTURE (AC)
SCENIC ROAD	TAMALPAIS ROAD	BAY ROAD	SCENIC	20A	A	AC	100	\$70,633	RECONSTRUCT STRUCTURE (AC)
SIR FRANCIS DRAKE BOULEVARD	OAK MANOR DRIVE	1003' WEST OF OAK MANOR DRIVE	SIRFRA	70	A	AC/AC	100	\$425,634	RECONSTRUCT STRUCTURE (AC)
				Treatment Total		\$835,379			
Year: 2020				Year 2019 Total		\$1,861,746			
BELMONT AVENUE	PASTORI AVENUE	KENT AVENUE	BELMON	10	R	AC/AC	72	\$3,949	MICROSURFACING
ALDER COURT	LANDSDALE AVE	DEAD END	ALDERC	10	R	AC/AC	93	\$3,949	
BAYWOOD COURT	LANDSDALE AVENUE	DEAD END	BAYWOO	10	R	AC/AC	93	\$995	SLURRY SEAL
BELLE AVENUE	PASTORI AVENUE	KENT AVENUE	BELLEA	10	R	AC/AC	93	\$3,596	SLURRY SEAL
BELLE AVENUE	KENT AVENUE	TOWN LIMITS	BELLEA	20	R	AC/AC	94	\$2,257	SLURRY SEAL
BELMONT AVENUE	KENT AVENUE	TOWN LIMITS	BELMON	20	R	AC/AC	94	\$3,940	SLURRY SEAL
COLIDGE AVENUE	BELMONT AVENUE	BELLE AVENUE	COOLID	10	R	AC/AC	94	\$3,231	SLURRY SEAL
PIPER COURT	PIPER LANE	DEAD END	PIPERC	10	R	AC/AC	93	\$1,351	SLURRY SEAL
PIPER LANE	OAK MANOR DRIVE	DEAD END	PIPERL	10	R	AC/AC	93	\$4,809	SLURRY SEAL
				Treatment Total		\$14,478		SLURRY SEAL	
BOLINAS ROAD	BROADWAY	PARK ROAD	BOLINA	10	A	AC	87	\$34,657	
SCENIC ROAD	ACACIA ROAD	TAMALPIAS ROAD	SCENIC	10	A	AC	87	\$100	SEAL CRACKS
SCENIC ROAD	BAY ROAD	200 FT W. BAY ROAD	SCENIC	20B	A	AC/AC	79	\$46	SEAL CRACKS
SCENIC ROAD	400' NORTH OF REDWOOD ROAD	REDWOOD ROAD	SCENIC	40	A	AC/AC	86	\$33	SEAL CRACKS
SCENIC ROAD	TAMALPIAS ROAD	UPPER SCENIC ROAD	SCENIC	60	A	AC	87	\$31	SEAL CRACKS
SIR FRANCIS DRAKE BOULEVARD	TOWN LIMITS	PACHECO AVENUE	SIRFRA	10	A	AC/AC	87	\$53	SEAL CRACKS
SIR FRANCIS DRAKE BOULEVARD	GLEN DRIVE	TOWN LIMITS	SIRFRA	100	A	AC/AC	87	\$167	SEAL CRACKS
SIR FRANCIS DRAKE BOULEVARD	BROADWAY	SAN MIGUEL COURT	SIRFRA	40	A	AC	87	\$196	SEAL CRACKS
SIR FRANCIS DRAKE BOULEVARD	455' NORTH OF JUNE COURT	GLEN DRIVE	SIRFRA	90	A	AC/AC	89	\$134	SEAL CRACKS
SIR FRANCIS DRAKE BOULEVARD	SCENIC ROAD	1050' SOUTH OF SCENIC ROAD	TAMALP	20	A	AC/AC	82	\$143	SEAL CRACKS
TAMALPAIS ROAD	1050' SOUTH OF SCENIC ROAD	BERRY TRAIL	TAMALP	30	A	AC/AC	79	\$153	SEAL CRACKS
				Treatment Total		\$34,657			

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
TAMALPAIS ROAD	BERRY TRAIL	MOUNTAIN VIEW ROAD	TAMALP	40	A	AC/AC	86	\$55	SEAL CRACKS
TAMALPAIS ROAD	MOUNTAIN VIEW ROAD	SCENIC ROAD	TAMALP	50	A	AC/AC	87	\$45	SEAL CRACKS
BANK STREET	BROADWAY	ELSE LANE	BANKST	10	R	AC	100	\$52,218	MILL AND THICK OVERLAY
BROADWAY	50 FT NW AZALEA AVE.	SIR FRANCIS DRAKE BLVD.	BROADW	35B	C	AC	100	\$43,593	MILL AND THICK OVERLAY
INYO AVENUE	PACHECO AVENUE	END	INYOAV	10	R	AC/AC	100	\$58,046	MILL AND THICK OVERLAY
SIR FRANCIS DRAKE BOULEVARD	PACHECO AVENUE	BANK STREET	SIRFRA	20	A	AC	100	\$167,057	MILL AND THICK OVERLAY
TAMALPAIS ROAD	SCENIC ROAD	DEAD END	TAMALP	60	A	AC/AC	100	\$82,684	MILL AND THICK OVERLAY
CREEK ROAD	BLACKBERRY LANE	BOLINAS ROAD	CREEKR	20	C	AC/AC	100	\$92,275	RECONSTRUCT STRUCTURE (AC)
HILLSIDE DRIVE	MEERNA AVENUE	770' NORTH OF MEERNA AVENUE	HILLSI	20	C	AC	100	\$89,750	RECONSTRUCT STRUCTURE (AC)
MAPLE AVENUE	LIVE OAK AVENUE	DEAD END	MAPLEA	20	R	AC/AC	100	\$99,803	RECONSTRUCT STRUCTURE (AC)
MEADOW WAY (3)	MEADOW WAY (2)	E END	MEADOW	30	R	AC	100	\$112,245	RECONSTRUCT STRUCTURE (AC)
SPRUCE ROAD	AZALEA ROAD	PARK ROAD	SPRUCE	10	C	AC	100	\$149,311	RECONSTRUCT STRUCTURE (AC)
TAMALPAIS ROAD	SEQUOIA ROAD	SPRUCE ROAD	TAMALP	10A	A	AC	100	\$95,578	RECONSTRUCT STRUCTURE (AC)
						Treatment Total		\$638,962	
						Year 2020 Total		\$1,082,336	
Year: 2021									
BOLINAS ROAD	PARK ROAD	CASCADE DRIVE	BOLINA	20	A	AC	87	\$138	SEAL CRACKS
BOLINAS ROAD	1120' SO. OF CASCADE DRIVE	2200' SO OF CASCADE DRIVE	BOLINA	40	A	AC	87	\$142	SEAL CRACKS
SCENIC ROAD	200' WEST OF BAY ROAD	400' NORTH OF REDWOOD ROAD	SCENIC	30	A	AC/AC	73	\$212	SEAL CRACKS
SCENIC ROAD	REDWOOD ROAD	TAMALPIAS ROAD	SCENIC	50	A	AC	87	\$56	SEAL CRACKS
SIR FRANCIS DRAKE BOULEVARD	OAK TREE LANE	OAK MANOR DRIVE	SIRFRA	60	A	AC/AC	87	\$166	SEAL CRACKS
						Treatment Total		\$714	
FORREST AVENUE	SUMMER AVENUE	1230' EAST OF SUMMER AVENUE	FORREA	20	C	AC/PCC	100	\$103,367	MILL AND THICK OVERLAY
IVY LANE	PORTEOUS AVENUE	MEERNA AVENUE	IVYLAN	10	R	AC/AC	100	\$12,750	MILL AND THICK OVERLAY
LIVE OAK AVENUE	1027' WEST OF MAPLE AVENUE	DEAD END	LIVEOA	20	R	AC/AC	100	\$92,706	MILL AND THICK OVERLAY
						Treatment Total		\$208,823	

Street Name	Begin Location	End Location	Street ID	Section ID	FC	Surface	PCI	Cost	Treatment
ACACIA ROAD	SCENIC RD	DEAD END	ACACIA	10	R	AC	100	\$117,654	RECONSTRUCT STRUCTURE (AC)
BOLINAS ROAD	2200' SO OF CASCADE DRIVE	TOWN LIMITS	BOLINA	50	A	AC	100	\$209,695	RECONSTRUCT STRUCTURE (AC)
FRUSTUCK AVENUE	PARK ROAD	WRENDEN AVENUE	FRUSTU	10	C	AC/AC	100	\$125,907	RECONSTRUCT STRUCTURE (AC)
TAYLOR DRIVE	TAYLOR DRIVE INTERSECTION	ROCCA DRIVE AT SADY LANE	TAYLOR	30	R	AC/AC	100	\$117,654	RECONSTRUCT STRUCTURE (AC)
				Treatment Total		\$570,910			
		Year 2021 Total		\$780,447					
Grand Total		\$10,052,365							

APPENDIX D

Scenario Analysis Reports

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 01 - DO
NOTHING

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$0	0%	2019	\$0	0%	2021	\$0	0%
2018	\$0	0%	2020	\$0	0%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	63	0	0
2018	60	60	0	0
2019	58	58	0	0
2020	56	56	0	0
2021	53	53	0	0

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	6.3%	8.4%	14.2%	0.0%	28.9%
II / III	6.8%	13.7%	10.9%	0.0%	31.4%
IV	4.4%	10.2%	10.7%	0.0%	25.3%
V	5.2%	3.6%	5.7%	0.0%	14.5%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 01 - DO NOTHING

Year	PM	Budget	Rehabilitation	Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	0%	\$0	II III IV V <hr/> Total <hr/> Project	\$0 \$0 \$0 \$0 <hr/> \$0 <hr/> \$0	\$0 Non-Project Project	\$0 \$0	\$4,704,103	Funded Unmet \$26,460
2018	0%	\$0	II III IV V <hr/> Total <hr/> Project	\$0 \$0 \$0 \$0 <hr/> \$0 <hr/> \$0	\$0 Non-Project Project	\$0 \$0	\$5,395,647	Funded Unmet \$10,281
2019	0%	\$0	II III IV V <hr/> Total <hr/> Project	\$0 \$0 \$0 \$0 <hr/> \$0 <hr/> \$0	\$0 Non-Project Project	\$0 \$0	\$7,063,925	Funded Unmet \$14,116
2020	0%	\$0	II III IV V <hr/> Total <hr/> Project	\$0 \$0 \$0 \$0 <hr/> \$0 <hr/> \$0	\$0 Non-Project Project	\$0 \$0	\$7,930,768	Funded Unmet \$9,166
2021	0%	\$0	II III IV V <hr/> Total <hr/> Project	\$0 \$0 \$0 \$0 <hr/> \$0 <hr/> \$0	\$0 Non-Project Project	\$0 \$0	\$7,937,021	Funded Unmet \$8,836

Summary		Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Functional Class					
Arterial		\$0	\$0	\$0	\$20,824
Collector		\$0	\$0	\$0	\$20,782
Residential/Local		\$0	\$0	\$0	\$27,252
Grand Total:		\$0	\$0	\$0	\$68,858

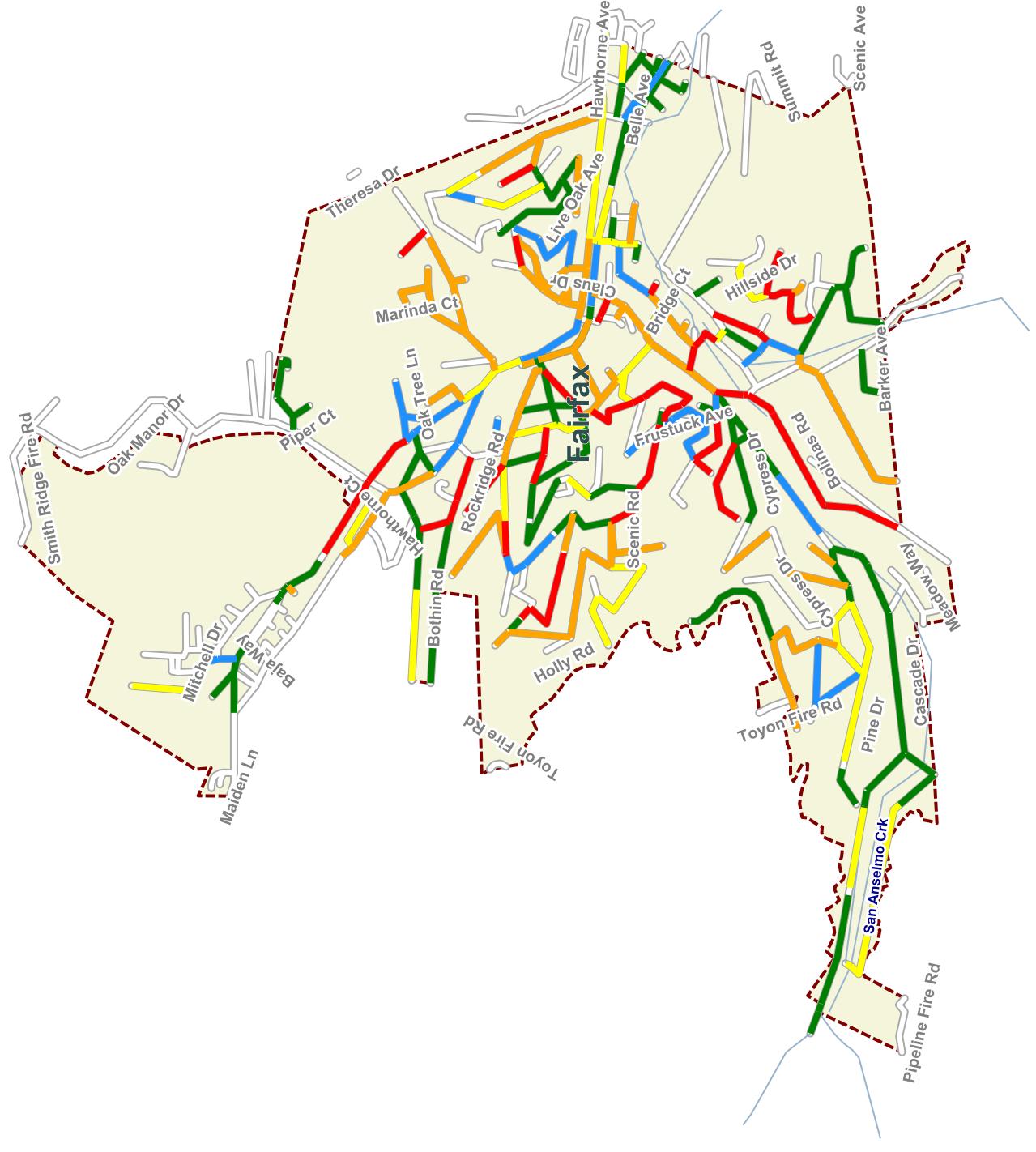
Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 01 - DO NOTHING - 2021 Project Period - Total Rehab: \$0 - Printed: 2/3/2017

Feature Legend

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



0 0.5 Miles

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 02 - EAB 1 -
\$100,000

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$100,000	10%	2019	\$100,000	10%	2021	\$100,000	10%
2018	\$100,000	10%	2020	\$100,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	63	1.11	2.22
2018	60	61	0.66	1.33
2019	58	59	1.55	3.19
2020	56	57	1.10	1.96
2021	53	55	1.40	2.69

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	9.3%	19.5%	20.7%	0.0%	49.5%
II / III	6.5%	9.2%	8.7%	0.0%	24.4%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	13.9%	18.4%	0.0%	40.6%
II / III	4.7%	8.2%	6.8%	0.0%	19.7%
IV	4.4%	10.2%	10.6%	0.0%	25.2%
V	5.2%	3.6%	5.7%	0.0%	14.5%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 02 - EAB 1 -
\$100,000

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	10%	\$100,000	II	\$88,322	Non-Project	\$0	\$0	\$4,615,784	Funded Unmet
			III	\$0					\$12,483
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$88,322</u>					
			Project	\$0					
2018	10%	\$100,000	II	\$11,503	Non-Project	\$6,063	\$0	\$5,239,998	Funded Unmet
			III	\$72,352					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$83,855</u>					
			Project	\$0					
2019	10%	\$100,000	II	\$79,915	Non-Project	\$7,547	\$0	\$6,843,465	Funded Unmet
			III	\$0					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$79,915</u>					
			Project	\$0					
2020	10%	\$100,000	II	\$34,105	Non-Project	\$7,216	\$0	\$7,665,696	Funded Unmet
			III	\$50,478					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$84,583</u>					
			Project	\$0					
2021	10%	\$100,000	II	\$62,266	Non-Project	\$3,493	\$0	\$7,632,885	Funded Unmet
			III	\$13,687					\$0
			IV	\$12,750	Project	\$0			
			V	\$0					
			Total	<u>\$88,703</u>					
			Project	\$0					

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	\$95,233	\$18,213	\$18,797	\$614
Collector	\$178,122	\$3,658	\$17,154	\$0
Residential/Local	\$152,023	\$2,448	\$12,943	\$11,869
Grand Total:	\$425,378	\$24,319	\$48,894	\$12,483

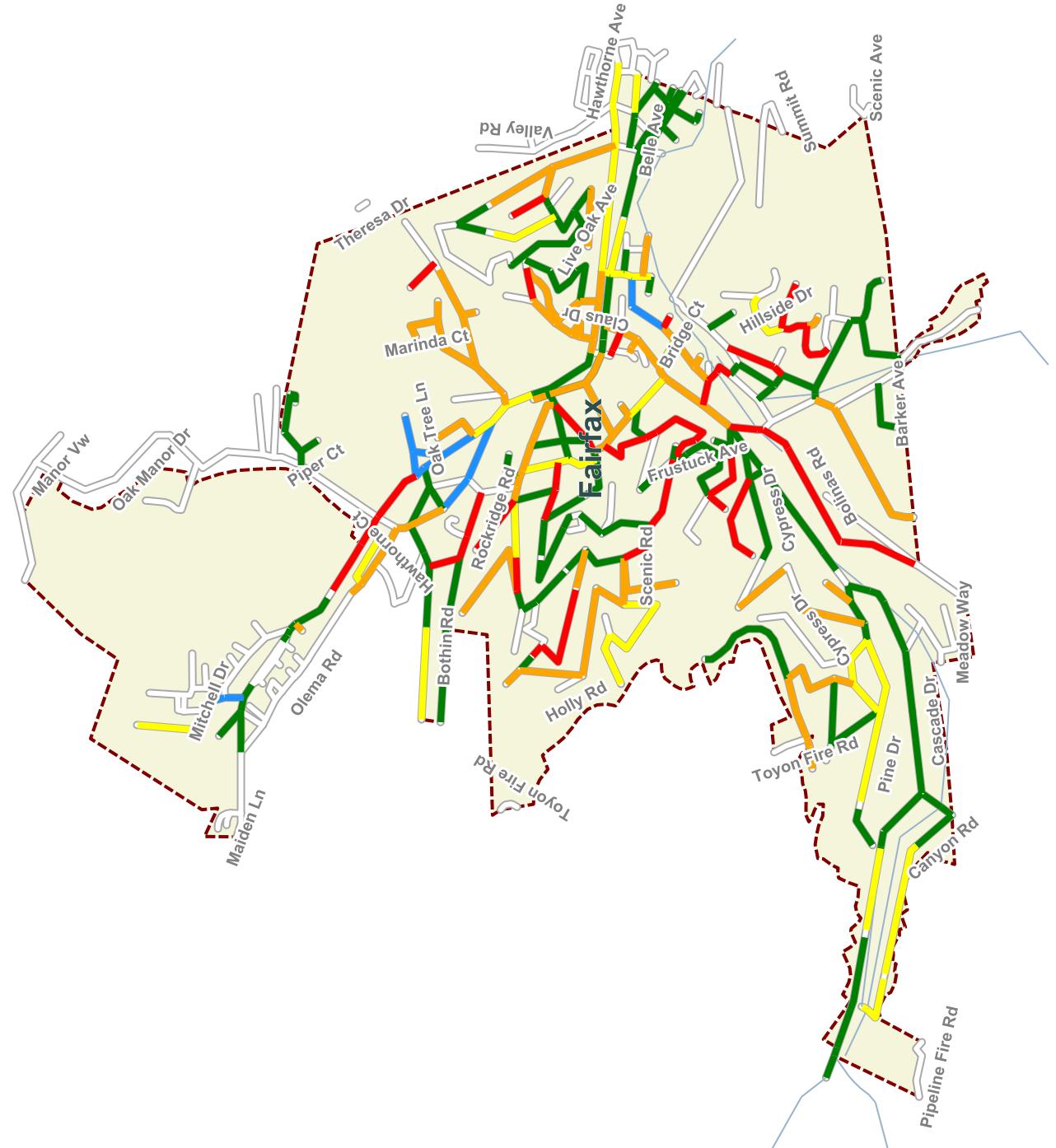
Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 02 - EAB 1 - \$100,000 - 2021 Project Period - Total Rehab: \$88,703 - Printed: 2/3/2017

Feature Legend

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



0 Miles

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 03 - EAB 2 -
\$150,000

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$150,000	10%	2019	\$150,000	10%	2021	\$150,000	10%
2018	\$150,000	10%	2020	\$150,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	63	1.25	2.50
2018	60	62	0.93	1.87
2019	58	60	1.63	3.24
2020	56	58	1.25	2.26
2021	53	56	1.88	3.76

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	9.3%	19.5%	21.0%	0.0%	49.9%
II / III	6.5%	9.2%	8.4%	0.0%	24.1%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	15.8%	18.4%	0.0%	42.5%
II / III	4.7%	6.5%	6.7%	0.0%	17.9%
IV	4.4%	10.1%	10.7%	0.0%	25.1%
V	5.2%	3.6%	5.7%	0.0%	14.5%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 03 - EAB 2 -
\$150,000

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	10%	\$150,000	II	\$88,322	Non-Project	\$0	\$0	\$4,577,953	Funded Unmet
			III	\$37,832					\$160
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$126,154</u>					
			Project	\$0					
2018	10%	\$150,000	II	\$11,503	Non-Project	\$11,521	\$0	\$5,189,982	Funded Unmet
			III	\$91,102					\$0
			IV	\$25,808	Project	\$0			
			V	\$0					
			Total	<u>\$128,413</u>					
			Project	\$0					
2019	10%	\$150,000	II	\$79,915	Non-Project	\$4,946	\$0	\$6,741,891	Funded Unmet
			III	\$52,659					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$132,574</u>					
			Project	\$0					
2020	10%	\$150,000	II	\$34,105	Non-Project	\$17,473	\$0	\$7,502,918	Funded Unmet
			III	\$89,953					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$124,058</u>					
			Project	\$0					
2021	10%	\$150,000	II	\$62,266	Non-Project	\$9,580	\$0	\$7,514,322	Funded Unmet
			III	\$70,873					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$133,139</u>					
			Project	\$0					

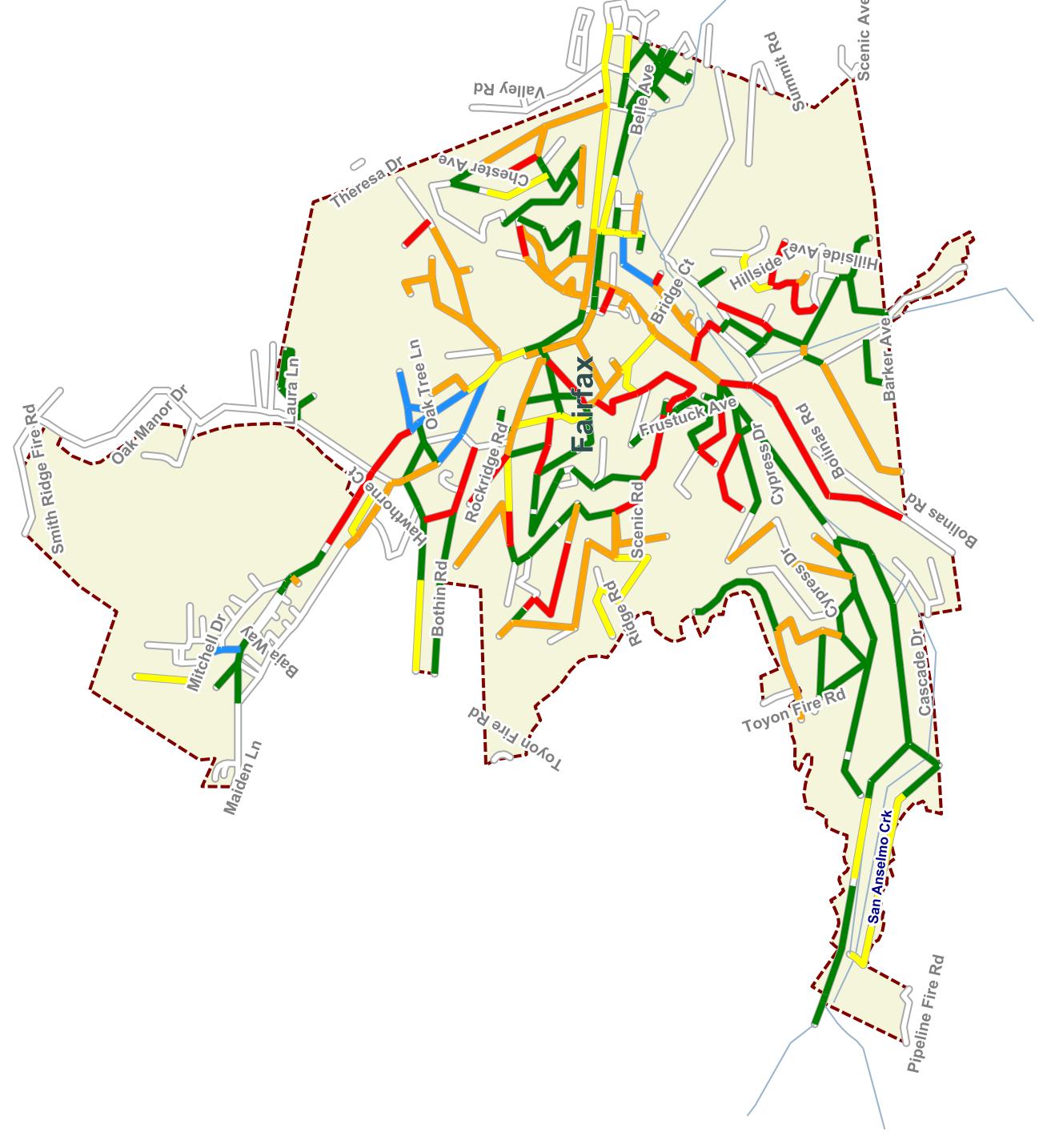
Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	\$95,233	\$33,997	\$19,411	\$0
Collector	\$406,538	\$3,462	\$17,154	\$0
Residential/Local	\$142,567	\$6,061	\$24,551	\$160
Grand Total:	\$644,338	\$43,520	\$61,116	\$160

Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 03 - EAB 2 - \$150,000 - 2021 Project Period - Total Rehab: \$133,139 - Printed: 2/3/2017



Feature Legend

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



0 Miles

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 04 - EAB 3 -
\$200,000

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$200,000	10%	2019	\$200,000	10%	2021	\$200,000	10%
2018	\$200,000	10%	2020	\$200,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	64	1.37	2.74
2018	60	62	0.96	1.92
2019	58	60	1.99	4.13
2020	56	59	1.68	2.99
2021	53	57	2.47	4.80

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	9.8%	19.5%	21.0%	0.0%	50.4%
II / III	6.0%	9.2%	8.4%	0.0%	23.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	10.3%	15.9%	18.4%	0.0%	44.6%
II / III	2.8%	6.2%	6.7%	0.0%	15.7%
IV	4.4%	10.2%	10.7%	0.0%	25.3%
V	5.2%	3.6%	5.7%	0.0%	14.5%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 04 - EAB 3 -
\$200,000

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	10%	\$200,000	II	\$88,322	Non-Project	\$0	\$0	\$4,524,619	Funded Unmet
			III	\$91,166					\$3,277
			IV	\$0	Project	\$0			
			V	\$0					
			Total	\$179,488					
			Project	\$0					
2018	10%	\$200,000	II	\$11,503	Non-Project	\$16,708	\$0	\$5,140,079	Funded Unmet
			III	\$161,625					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	\$173,128					
			Project	\$0					
2019	10%	\$200,000	II	\$79,915	Non-Project	\$13,761	\$0	\$6,640,500	Funded Unmet
			III	\$93,835					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	\$173,750					
			Project	\$0					
2020	10%	\$200,000	II	\$35,805	Non-Project	\$11,606	\$364	\$7,321,591	Funded Unmet
			III	\$144,192					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	\$179,997					
			Project	\$0					
2021	10%	\$200,000	II	\$62,266	Non-Project	\$21,804	\$0	\$7,454,562	Funded Unmet
			III	\$108,523					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	\$170,789					
			Project	\$0					

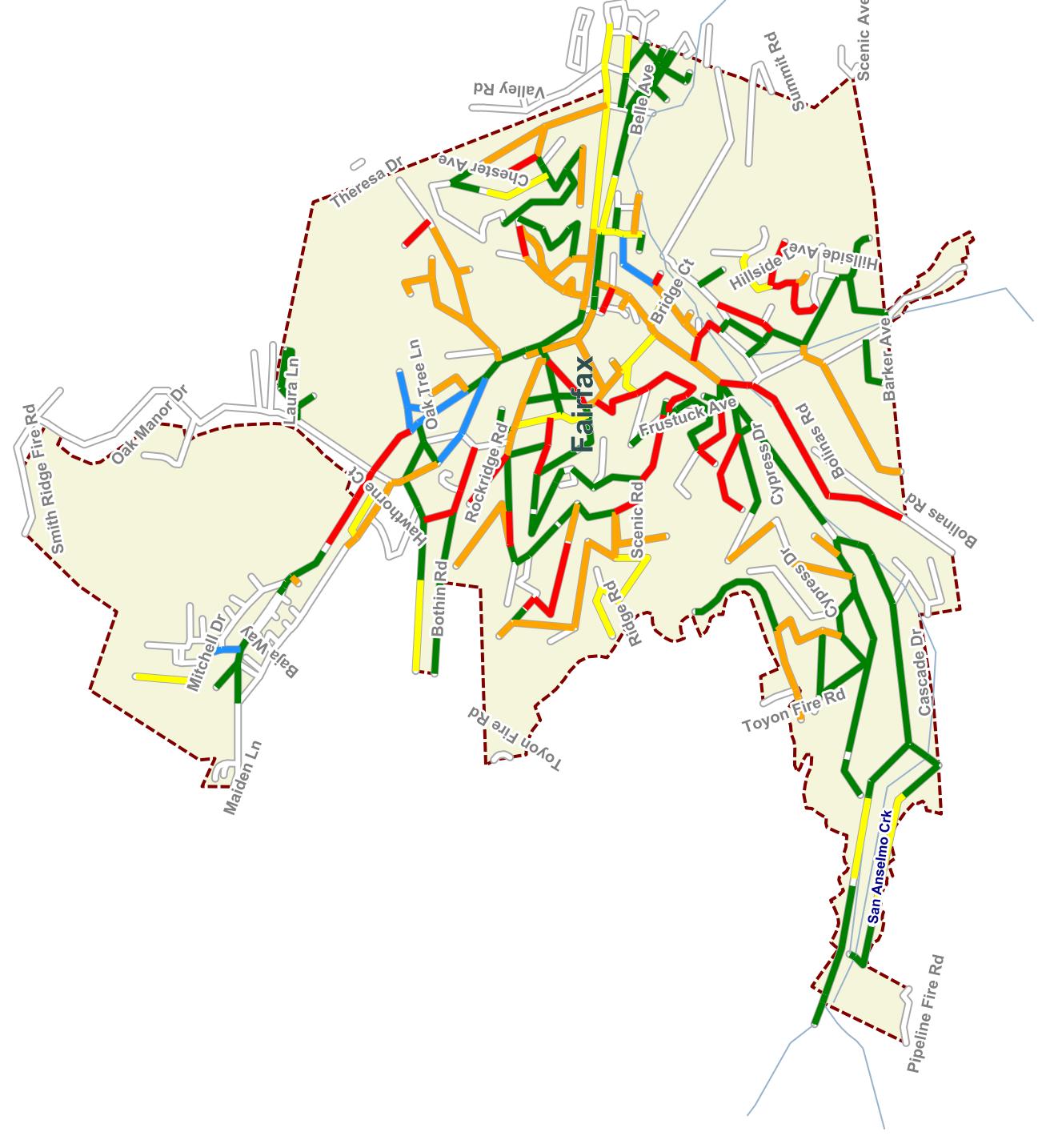
Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	\$311,892	\$33,073	\$19,194	\$0
Collector	\$422,306	\$29,255	\$17,154	\$0
Residential/Local	\$142,954	\$1,551	\$21,434	\$3,277
Grand Total:	\$877,152	\$63,879	\$57,783	\$3,277

Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 04 - EAB 3 - \$200,000 - 2021 Project Period - Total Rehab: \$170,789 - Printed: 2/3/2017



Feature Legend

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



0 Miles

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 05 -
MAINTAIN CURRENT PCI

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$600,000	10%	2019	\$600,000	10%	2021	\$600,000	10%
2018	\$600,000	10%	2020	\$600,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	65	3.06	6.00
2018	60	64	1.71	3.28
2019	58	64	3.62	7.34
2020	56	64	4.25	8.28
2021	53	63	3.65	7.30

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	13.0%	19.5%	21.0%	0.0%	53.6%
II / III	2.7%	9.2%	8.4%	0.0%	20.4%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	15.9%	21.7%	21.5%	0.0%	59.0%
II / III	1.0%	2.6%	3.6%	0.0%	7.2%
IV	0.6%	8.1%	10.7%	0.0%	19.3%
V	5.2%	3.6%	5.7%	0.0%	14.5%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 05 -
MAINTAIN CURRENT PCI

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	10%	\$600,000	II	\$88,322	Non-Project	\$45,875	\$0	\$4,126,501	Funded Unmet
			III	\$443,412					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$531,734</u>					
			Project	\$0					
2018	10%	\$600,000	II	\$11,503	Non-Project	\$52,199	\$0	\$4,531,386	Funded Unmet
			III	\$103,627					\$0
			IV	\$422,328	Project	\$0			
			V	\$0					
			Total	<u>\$537,458</u>					
			Project	\$0					
2019	10%	\$600,000	II	\$79,915	Non-Project	\$61,064	\$0	\$5,613,341	Funded Unmet
			III	\$446,743					\$0
			IV	\$0	Project	\$0			
			V	\$0					
			Total	<u>\$526,658</u>					
			Project	\$0					
2020	10%	\$600,000	II	\$34,105	Non-Project	\$59,915	\$0	\$6,043,639	Funded Unmet
			III	\$249,314					\$0
			IV	\$249,741	Project	\$0			
			V	\$0					
			Total	<u>\$533,160</u>					
			Project	\$0					
2021	10%	\$600,000	II	\$42,311	Non-Project	\$59,957	\$0	\$6,005,820	Funded Unmet
			III	\$92,931					\$0
			IV	\$398,342	Project	\$0			
			V	\$0					
			Total	<u>\$533,584</u>					
			Project	\$0					

Summary				
Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	\$1,122,404	\$84,139	\$15,781	\$0
Collector	\$1,028,825	\$127,124	\$16,186	\$0
Residential/Local	\$511,365	\$67,747	\$24,711	\$0
Grand Total:	\$2,662,594	\$279,010	\$56,678	\$0

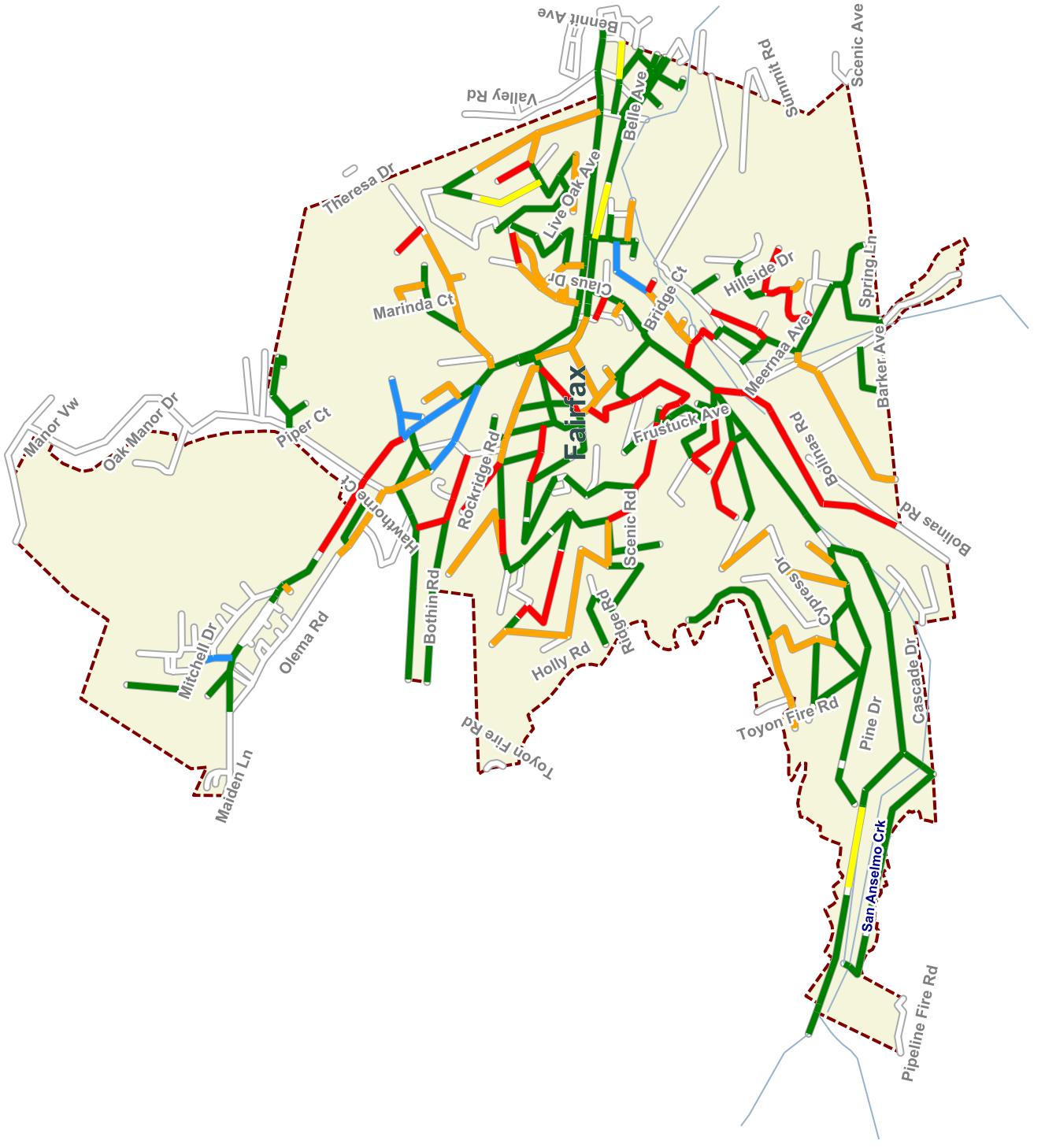
Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 05 - MAINTAIN CURRENT PCI - 2021 Project Period - Total Rehab: \$533,584 - Printed: 2/3/2017

Feature Legend

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



0 Miles

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 06 -
INCREASE PCI 5 POINTS

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$900,000	10%	2019	\$900,000	10%	2021	\$900,000	10%
2018	\$900,000	10%	2020	\$900,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	66	3.80	7.48
2018	60	66	3.70	7.23
2019	58	67	4.54	9.24
2020	56	68	5.49	10.73
2021	53	68	3.94	7.88

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	14.7%	19.5%	21.2%	0.0%	55.3%
II / III	2.7%	9.2%	8.3%	0.0%	20.2%
IV	5.0%	7.1%	8.0%	0.0%	20.1%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	16.4%	28.0%	23.0%	0.0%	67.4%
II / III	1.0%	2.6%	2.1%	0.0%	5.7%
IV	0.0%	1.8%	10.7%	0.0%	12.4%
V	5.2%	3.6%	5.7%	0.0%	14.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 06 -
INCREASE PCI 5 POINTS

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	10%	\$900,000	II	\$88,322	Non-Project	\$68,680	\$116	\$3,825,494	Funded Unmet
			III	\$455,572					\$0
			IV	\$266,043	Project	\$0			
			V	\$0					
			Total	<u>\$809,937</u>					
			Project	\$0					
2018	10%	\$900,000	II	\$11,503	Non-Project	\$88,322	\$0	\$4,014,979	Funded Unmet
			III	\$403,569					\$0
			IV	\$372,779	Project	\$0			
			V	\$14,210					
			Total	<u>\$802,061</u>					
			Project	\$0					
2019	10%	\$900,000	II	\$79,915	Non-Project	\$88,563	\$0	\$4,888,562	Funded Unmet
			III	\$322,067					\$0
			IV	\$397,509	Project	\$0			
			V	\$0					
			Total	<u>\$799,491</u>					
			Project	\$0					
2020	10%	\$900,000	II	\$34,105	Non-Project	\$88,446	\$0	\$5,136,840	Funded Unmet
			III	\$0					\$0
			IV	\$770,406	Project	\$0			
			V	\$0					
			Total	<u>\$804,511</u>					
			Project	\$0					
2021	10%	\$900,000	II	\$20,210	Non-Project	\$87,567	\$0	\$5,358,550	Funded Unmet
			III	\$322,820					\$0
			IV	\$460,411	Project	\$0			
			V	\$0					
			Total	<u>\$803,441</u>					
			Project	\$0					

Summary				
Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	\$1,208,771	\$83,492	\$14,672	\$0
Collector	\$2,112,693	\$149,316	\$15,704	\$0
Residential/Local	\$697,977	\$188,770	\$24,662	\$0
Grand Total:	\$4,019,441	\$421,578	\$55,038	\$0

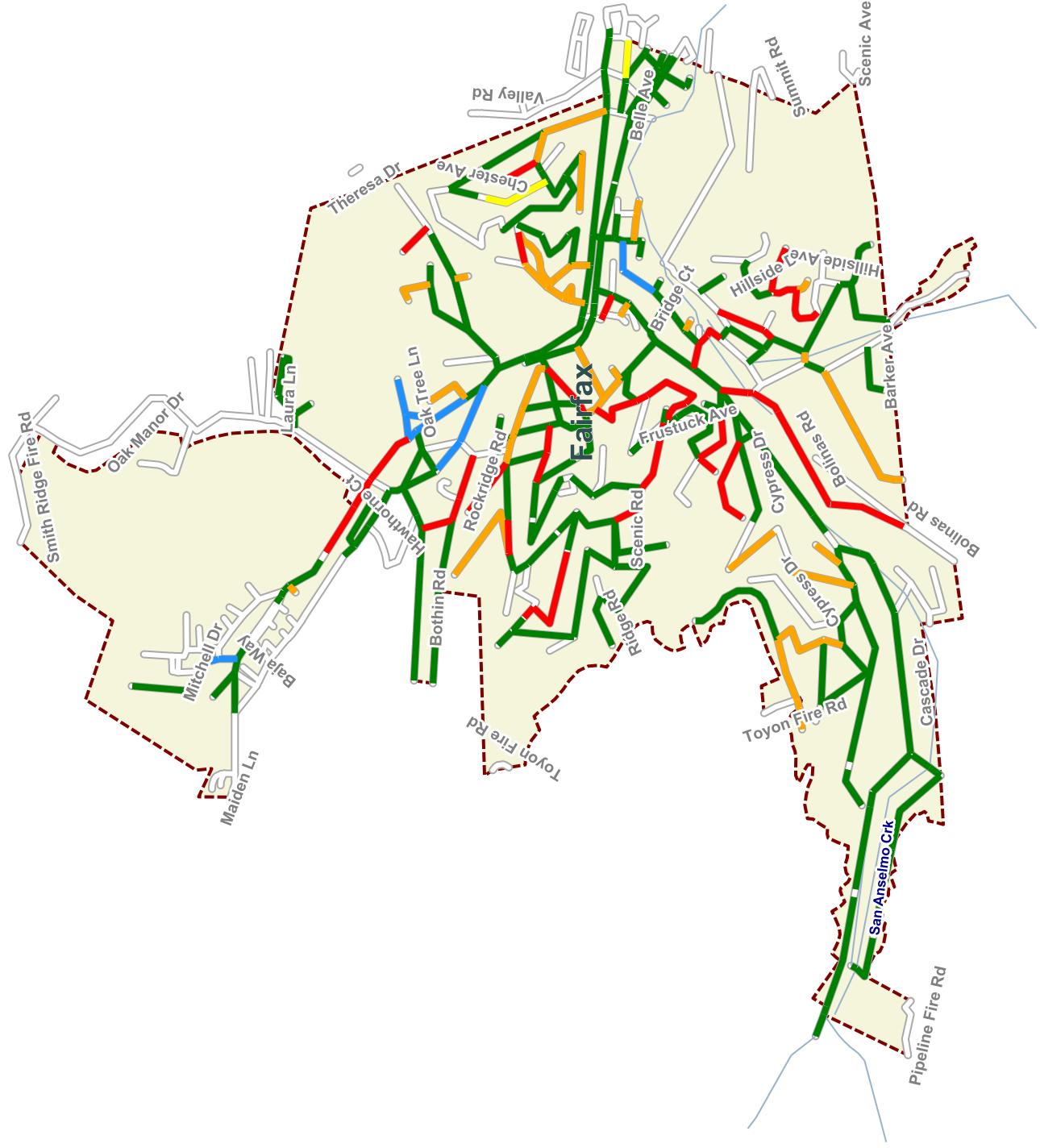
Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 06 - INCREASE PCI 5 POINTS - 2021 Project Period - Total Rehab: \$803,441 - Printed: 2/3/2017

Feature Legend

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



0 Miles

Scenarios - Network Condition Summary

Interest: 3%

Inflation: 3%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 07 -
AVERAGE OF BUDGET NEEDS

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	\$2,000,000	10%	2019	\$2,000,000	10%	2021	\$2,000,000	10%
2018	\$2,000,000	10%	2020	\$2,000,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	63	70	8.46	16.62
2018	60	74	8.37	16.50
2019	58	76	4.47	9.10
2020	56	79	4.57	9.15
2021	53	82	2.66	5.32

Percent Network Area by Functional Class and Condition Category**Condition in base year 2017, prior to applying treatments.**

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.3%	16.9%	19.1%	0.0%	44.3%
II / III	7.5%	11.8%	10.4%	0.0%	29.6%
IV	6.6%	7.1%	8.0%	0.0%	21.7%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	14.7%	25.5%	22.6%	0.0%	62.7%
II / III	2.7%	6.4%	6.8%	0.0%	16.0%
IV	5.0%	4.0%	8.0%	0.0%	16.9%
V	0.2%	0.0%	4.1%	0.0%	4.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	21.6%	32.7%	35.1%	0.0%	89.4%
II / III	1.0%	2.6%	1.9%	0.0%	5.4%
IV	0.0%	0.5%	2.2%	0.0%	2.7%
V	0.0%	0.0%	2.4%	0.0%	2.4%
Total	22.6%	35.9%	41.5%	0.0%	100.0%

Interest: 3.00%

Inflation: 3.00%

Printed: 02/03/2017

Scenario: P-TAP 17 - SCENARIO 07 -
AVERAGE OF BUDGET NEEDS

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred	Stop Gap	
2017	10%	\$2,000,000	II	\$88,322	Non-Project	\$192,222	\$0	\$2,722,142	Funded Unmet
			III	\$923,721					\$0
			IV	\$777,714	Project	\$0			
			V	\$0					
			Total	\$1,789,757					
			Project	\$0					
2018	10%	\$2,000,000	II	\$11,503	Non-Project	\$193,310	\$0	\$2,220,907	Funded Unmet
			III	\$497,888					\$0
			IV	\$1,289,755	Project	\$0			
			V	\$0					
			Total	\$1,799,146					
			Project	\$0					
2019	10%	\$2,000,000	II	\$79,915	Non-Project	\$21,362	\$173,241	\$2,349,446	Funded Unmet
			III	\$145,427					\$0
			IV	\$1,189,863	Project	\$0			
			V	\$363,272					
			Total	\$1,778,477					
			Project	\$0					
2020	10%	\$2,000,000	II	\$3,949	Non-Project	\$35,782	\$160,695	\$1,677,496	Funded Unmet
			III	\$0					\$0
			IV	\$403,598	Project	\$0			
			V	\$1,381,397					
			Total	\$1,788,944					
			Project	\$0					
2021	10%	\$2,000,000	II	\$0	Non-Project	\$350	\$198,503	\$742,706	Funded Unmet
			III	\$0					\$0
			IV	\$208,823	Project	\$0			
			V	\$1,556,029					
			Total	\$1,764,852					
			Project	\$0					

Summary				
Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	\$2,756,338	\$82,429	\$8,947	\$0
Collector	\$3,039,837	\$158,572	\$5,125	\$0
Residential/Local	\$3,125,001	\$202,025	\$20,039	\$0
Grand Total:	\$8,921,176	\$443,026	\$34,111	\$0

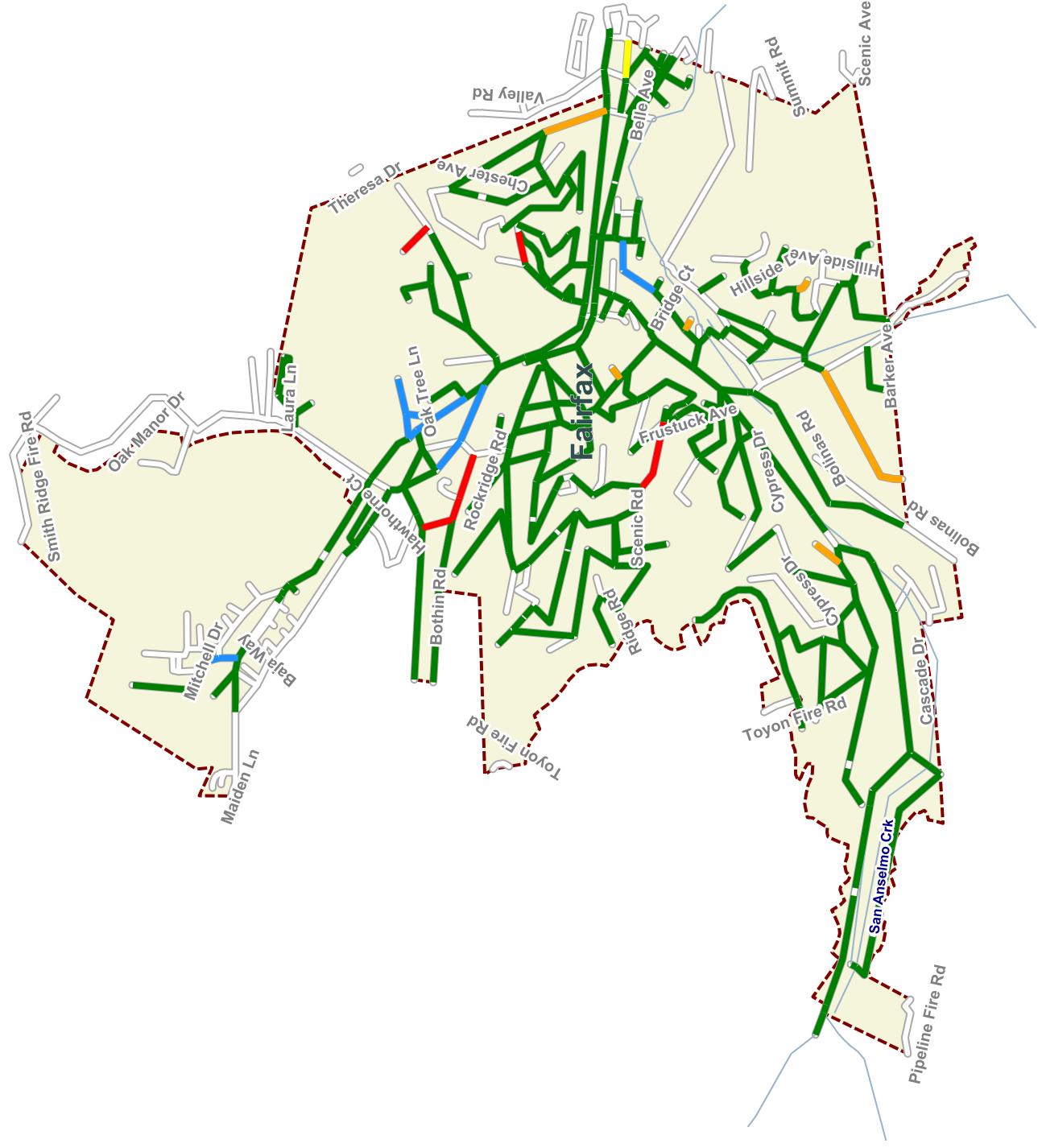
Town of Fairfax

Scenario PCI Condition

P-TAP 17 - SCENARIO 07 - AVERAGE OF BUDGET NEEDS - 2021 Project Period - Total Rehab: \$1,764,852 - Printed: 2/3/2017

Feature Legend

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



0 Miles

APPENDIX E

Section PCI/RSL Listing

Map – Current PCI Condition

Section PCI/RSL Listing

Printed: 02/03/2017

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface	Type	Current	PCI	Remaining Life
ACACIA	10	ACACIA ROAD	SCENIC RD	DEAD END	980	12	11,760	R - Residential/Local	A - AC		35	3.3	
ALDERC	10	ALDER COURT	LANDSDALE AVE	DEAD END	195	12	2,340	R - Residential/Local	O - AC/AC		94	37.85	
ARROYO	10	ARROYO ROAD	LOWER SCENIC ROAD	SPRUCE ROAD	646	12	7,752	R - Residential/Local	O - AC/AC		82	36.92	
AZALEA	10	AZALEA AVENUE	SIR FRANCIS DRAKE BLVD	SEQUOIA RD	789	20	15,780	R - Residential/Local	O - AC/AC		82	36.93	
BANKST	10	BANK STREET	BROADWAY	ELSIE LANE	280	32	8,960	R - Residential/Local	A - AC		55	11.82	
BARKER	10	BARKER AVENUE	PORTEOUS AVENUE	DEAD END	345	18	6,210	R - Residential/Local	O - AC/AC		81	35.75	
BAYROA	10	BAY ROAD	SCENIC ROAD	DEAD END	1,014	14	14,196	R - Residential/Local	A - AC		46	7.71	
BAYWOO	10	BAYWOOD COURT	LANDSDALE AVENUE	DEAD END	470	18	8,460	R - Residential/Local	O - AC/AC		94	37.85	
BELLEA	10	BELLE AVENUE	PASTORI AVENUE	KENT AVENUE	295	18	5,310	R - Residential/Local	O - AC/AC		92	48.73	
BELLEA	20	BELLE AVENUE	KENT AVENUE	TOWN LIMITS	515	18	9,270	R - Residential/Local	O - AC/AC		92	48.73	
BELMON	10	BELMONT AVENUE	PASTORI AVENUE	KENT AVENUE	271	24	6,504	R - Residential/Local	O - AC/AC		67	20.79	
BELMON	20	BELMONT AVENUE	KENT AVENUE	TOWN LIMITS	543	14	7,602	R - Residential/Local	O - AC/AC		92	48.73	
BLACKB	10	BLACKBERRY LANE	CREEK ROAD	FORREST AVE	190	18	3,420	R - Residential/Local	O - AC/AC		69	21.15	
BOLINA	10	BOLINAS ROAD	BROADWAY	PARK ROAD	962	34	32,708	A - Arterial	A - AC		47	6.28	
BOLINA	20	BOLINAS ROAD	PARK ROAD	CASCADE DRIVE	1,227	36	44,172	A - Arterial	A - AC		51	7.63	
BOLINA	30	BOLINAS ROAD	CASCADE DRIVE	1120' SO. OF CASCADE DRIVE	1,120	20	22,400	A - Arterial	A - AC		31	1.52	
BOLINA	40	BOLINAS ROAD	1120' SO. OF CASCADE DRIVE	2200' SO OF CASCADE DRIVE	1,080	20	21,600	A - Arterial	A - AC		28	0.73	
BOLINA	50	BOLINAS ROAD	2200' SO OF CASCADE DRIVE	TOWN LIMITS	1,048	20	20,960	A - Arterial	A - AC		37	3.19	
BOTHIN	10	BOTHIN ROAD	MARIN AVENUE	OLEMA ROAD	460	26	11,960	C - Collector	O - AC/AC		84	25.62	
BOTHIN	20	BOTHIN ROAD	OLEMA ROAD	1041' WEST OF OLEMA ROAD	1,041	26	27,066	C - Collector	O - AC/AC		81	23.83	
BOTHIN	30	BOTHIN ROAD	1041' WEST OF OLEMA ROAD	TOWN LIMITS	1,031	25	25,775	C - Collector	O - AC/AC		70	17.63	
BRIDGE	10	BRIDGE COURT	DOMINGA AVENUE	DEAD END	97	16	1,552	R - Residential/Local	A - AC		1	0	
BROADW	10a	BROADWAY	SIR FRAN. DRK. BL. AT	CLAUS PACHECO	828	60	49,680	C - Collector	A - AC		75	13.46	
BROADW	10b	BROADWAY	CLAUS BANK	BANK	155	60	9,300	C - Collector	O - AC/AC		80	24.5	
BROADW	20	BROADWAY	SIR FRAN. DRK. BL. AT	MERWIN AVENUE BANK	472	22	10,384	C - Collector	A - AC		49	5.17	
BROADW	25	BROADWAY	MERWIN AVENUE	AZALEA AVENUE	402	22	8,844	C - Collector	O - AC/AC		48	6.98	
BROADW	35A	BROADWAY	AZALEA AVENUE	50 FT. NW AZALEA AVE.	50	22	1,100	C - Collector	O - AC/AC		84	28.75	

Section PCI/RSL Listing

Printed: 02/03/2017

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface	Type	Current	PCI	Remaining Life
BROADW	35B	BROADWAY	50 FT NW AZALEA AVE.	SIR FRANCIS DRAKE BLVD.	340	22	7,480	C - Collector	A - AC		58	7.73	
CANYON	10	CANYON ROAD	CASCADE DRIVE	1017" WEST OF CASCADE DRIVE	1,017	14	14,238	C - Collector	O - AC/AC		85	29.93	
CANYON	20	CANYON ROAD	1017' WEST OF CASCADE DRIVE	2454' WEST OF CASCADE DRIVE DEAD END	1,437	17	24,429	C - Collector	O - AC/AC		73	18.53	
CANYON	30	CANYON ROAD	2428' WEST OF CASCADE DRIVE	BOLINAS DRIVE	672	14	9,408	C - Collector	O - AC/AC		74	19.29	
CASCAD	10	CASCADE DRIVE	BOLINAS DRIVE	1285" WEST OF BOLINAS LAUREL DRIVE DR	1,285	32	41,120	C - Collector	O - AC/AC		78	23.39	
CASCAD	20	CASCADE DRIVE	1285' WEST OF BOLINAS LAUREL DRIVE DR	LAUREL DRIVE MEADOW WAY	853	21	17,913	C - Collector	O - AC/AC		76	21.81	
CASCAD	30	CASCADE DRIVE	MEADOW WAY	690' WEST OF MEADOW WAY	1,295	20	25,900	R - Residential/Local	O - AC/AC		84	38.02	
CASCAD	40	CASCADE DRIVE	690' WEST OF MEADOW WAY	CANYON ROAD	690	24	16,560	R - Residential/Local	O - AC/AC		84	38.02	
CASCAD	50	CASCADE DRIVE	690' WEST OF MEADOW WAY	890' WEST OF CANYON ROAD	933	21	19,593	R - Residential/Local	O - AC/AC		82	36.26	
CASCAD	60	CASCADE DRIVE	CANYON ROAD	890' WEST OF CANYON ROAD	890	18	16,020	R - Residential/Local	O - AC/AC		80	33.04	
CASCAD	70	CASCADE DRIVE	890' WEST OF CANYON ROAD	1770' WEST OF CANYON ROAD	880	15	13,200	R - Residential/Local	O - AC/AC		72	23.05	
CASCAD	80	CASCADE DRIVE	1770' WEST OF CANYON DEAD END ROAD	TOWN LIMITS	833	15	12,495	R - Residential/Local	O - AC/AC		85	39.89	
CENTER	10	CENTER BOULEVARD	PASTORI AVENUE	808	40	32,320	R - Residential/Local	A - AC		75	23.07		
CENTER	20	CENTER BOULEVARD	727' NORTH OF PASTORI AVENUE	727' NORTH OF PASTORI AVENUE	727	51	37,077	R - Residential/Local	A - AC		79	25.67	
CENTER	30	CENTER BOULEVARD	727' NORTH OF PASTORI PACHECO AVENUE AVENUE	WILLOW AVENUE	599	54	32,346	R - Residential/Local	O - AC/AC		71	23.43	
CHESTE	10	CHESTER AVENUE	402' WEST OF WILLOW AVENUE	402	14	5,628	R - Residential/Local	O - AC/AC		73	25.16		
CHESTE	20	CHESTER AVENUE	LIVE OAK AVENUE	556' NORTH OF LIVE OAK AVENUE	556	14	7,784	R - Residential/Local	O - AC/AC		63	16.21	
CLAUSC	10	CLAUS CIRCLE	CLAUS DRIVE	SIR FRANCIS DRAKE BOULEVARD	321	26	8,346	R - Residential/Local	A - AC		53	10.88	
CLAUSD	10	CLAUS DRIVE	BELMONT AVENUE	BELLE AVENUE	494	26	12,844	R - Residential/Local	A - AC		53	10.88	
COOLID	10	COOLIDGE AVENUE	FRUSTUCK AVENUE	DOMINGA AVENUE	227	14	3,178	R - Residential/Local	O - AC/AC		93	37.67	
COREEL	10	COREE LANE	DEAD END	DEAD END	267	14	3,738	R - Residential/Local	A - AC		92	33.15	
COURTL	10	COURT LANE	DOMINGA AVENUE	DEAD END	141	14	1,974	R - Residential/Local	A - AC		38	4.44	

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CREEKCR	10	CREEK ROAD	PORTEOUS AVENUE	BLACKBERRY LANE	752	18	13,536	C - Collector	O - AC/AC	O - AC/AC	52	8.13	
CREEKCR	20	CREEK ROAD	BLACKBERRY LANE	BOLINAS ROAD	475	20	9,500	C - Collector	O - AC/AC	O - AC/AC	37	3.49	
CRESCCE	10	CRESCENT CIRCLE	OAK TREE LANE	DEAD END	331	29	9,599	R - Residential/Local	O - AC/AC	O - AC/AC	64	17.87	
CRESTR	10	CREST ROAD	HILLSIDE DRIVE	1422' SO.EAST OF HILLSIDE DR.	1,422	14	19,908	R - Residential/Local	A - AC	A - AC	15	0	
CYPRES	10	CYPRESS DRIVE	CASCADE DRIVE	760' WEST OF HICKORY ROAD	1,264	34	42,976	C - Collector	O - AC/AC	O - AC/AC	82	26.12	
CYPRES	40	CYPRESS DRIVE	1700' NORTH OF LAUREL DRIVE	935' NORTH OF LAUREL DRIVE	765	16	12,240	C - Collector	O - AC/AC	O - AC/AC	75	19.56	
CYPRES	50	CYPRESS DRIVE	935' NORTH OF LAUREL	LAUREL DRIVE	1,700	16	27,200	C - Collector	O - AC/AC	O - AC/AC	77	21.24	
DEERP	10	DEER PARK DR	HILLSIDE DR	END (E)	565	16	9,040	R - Residential/Local	A - AC	A - AC	39	4.83	
DOMING	10	DOMINGA AVENUE	CREEK ROAD	BRIDGE COURT	847	20	16,940	C - Collector	O - AC/AC	O - AC/AC	51	8.16	
DOMING	20	DOMINGA AVENUE	BRIDGE COURT	NAPA AVENUE	472	20	9,440	C - Collector	O - AC/AC	O - AC/AC	68	15.94	
ELSIEL	10	ELSIE LANE	BOLINAS ROAD	BANK ST	595	36	21,420	R - Residential/Local	O - AC/AC	O - AC/AC	51	10.73	
FORREA	10	FORREST AVENUE	MEERNA AVENUE	SUMMER AVENUE	1,080	14	15,120	C - Collector	O - AC/AC	O - AC/AC	81	25.97	
FORREA	20	FORREST AVENUE	SUMMER AVENUE	1230' EAST OF SUMMER AVENUE	1,230	14	17,220	C - Collector	C - AC/PCC	C - AC/PCC	59	11.42	
FORREA	30	FORREST AVENUE	1230' EAST OF SUMMER AVENUE	2230' EAST OF SUMMER AVENUE	1,000	14	14,000	C - Collector	C - AC/PCC	C - AC/PCC	75	21.06	
FORREA	40	FORREST AVENUE	2230' EAST OF SUMMER AVENUE	TOWN LIMITS	850	14	11,900	C - Collector	C - AC/PCC	C - AC/PCC	54	9.12	
FORRES	50	FORREST TERRACE	MEERNA AVENUE	FOREST AVENUE	957	14	13,398	R - Residential/Local	A - AC	A - AC	5	0	
FRUSTU	10	FRUSTUCK AVENUE	PARK ROAD	WRENDEN AVENUE	839	15	12,585	C - Collector	O - AC/AC	O - AC/AC	39	4.14	
FRUSTU	20	FRUSTUCK AVENUE	WRENDEN AVENUE	MANZANITA ROAD	1,278	14	17,892	C - Collector	A - AC	A - AC	41	3.19	
FRUSTU	30	FRUSTUCK AVENUE	MANZANITA ROAD	WILLIS LANE	1,029	14	14,406	C - Collector	A - AC	A - AC	77	14.32	
FRUSTU	40	FRUSTUCK AVENUE	WILLIS LANE	500' WEST OF BOLINAS ROAD	396	14	5,544	C - Collector	A - AC	A - AC	29	0.82	
FRUSTU	50	FRUSTUCK AVENUE	500' WEST OF BOLINAS ROAD	BOLINAS ROAD	500	14	7,000	C - Collector	A - AC	A - AC	74	13.05	
GEARYA	10	GEARY AVENUE	TAYLOR DRIVE	TAYLOR DRIVE	666	13	8,658	R - Residential/Local	O - AC/AC	O - AC/AC	49	10.42	
GLENDR	10	GLEN DRIVE	SIR FRANCIS DRAKE BOULEVARD	1260' NORTH OF SFD BLVD	1,260	35	44,100	C - Collector	O - AC/AC	O - AC/AC	63	13.33	
GLENDR	20	GLEN DRIVE	1260' NORTH OF SFD BLVD	TOWN LIMIT	1,200	40	48,000	C - Collector	O - AC/AC	O - AC/AC	76	21.78	
HAWTHOR	10	HAWTHORNE CT NE	OLEMA RD	END	210	20	4,200	R - Residential/Local	A - AC	A - AC	1	0	

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HICKOR 05	HICKORY ROAD	CASADE DR	CYPRESS DR	DEAD END	178	20	3,560	R - Residential/Local	A - AC	91	32.5		
HICKOR 10	HICKORY ROAD	CYPRESS DRIVE	TOWN LIMITS	TOWN LIMITS	1,132	20	22,640	R - Residential/Local	A - AC	14	0		
HILLAV 10	HILL AVENUE	BELLE AVENUE	MEERNA AVENUE	770' NORTH OF MEERNA AVENUE	475	18	8,550	R - Residential/Local	O - AC/AC	60	16.47		
HILLSI 20	HILLSIDE DRIVE	HILLSIDE DRIVE	770' NORTH OF MEERNA AVENUE	MEERNA AVENUE	770	12	9,240	C - Collector	A - AC	39	2.73		
HILLSI 30	HILLSIDE DRIVE	1275' NORTH OF MEERNA AVENUE	CREST ROAD	DEAD END	505	12	6,060	C - Collector	A - AC	30	1.02		
HILLSI 40	HILLSIDE DRIVE	1275' NORTH OF MEERNA AVENUE	CREST ROAD	END	625	12	7,500	C - Collector	A - AC	30	1.02		
HILSII 50	HILLSIDE DRIVE	INYO AVENUE	PACHECO AVENUE	DEAD END	850	14	11,900	C - Collector	O - AC/AC	76	20.38		
IRONSP 10	IRON SPRINGS ROAD	ROCK RIDGE ROAD	DEAD END	DEAD END	498	20	9,960	R - Residential/Local	O - AC/AC	56	14.16		
IVYLAN 10	IVY LANE	PORTEOUS AVENUE	MEERNA AVENUE	DEAD END	886	12	10,632	R - Residential/Local	O - AC/AC	77	31.07		
JUNECO 10	JUNE COURT	SIR FRANCIS DRAKE BOULEVARD	DEAD END	DEAD END	118	18	2,124	R - Residential/Local	O - AC/AC	58	15.3		
KENTAV 10	KENT AVENUE	BELMONT AVENUE	SIR FRANCIS DRAKE BLVD	DEAD END	309	16	4,944	R - Residential/Local	A - AC	52	10.41		
LANSDA 10	LANSDALE AVENUE	PASTORI AVENUE	TOWN LIMITS	TOWN LIMITS	794	18	14,292	R - Residential/Local	O - AC/AC	80	34.84		
LAUREL 10	LAUREL DRIVE	CASCADE DRIVE	PINE ROAD	WOODLAND ROAD	950	14	13,300	C - Collector	A - AC	82	16.62		
LAUREL 20	LAUREL DRIVE	PINE ROAD	MAPLE AVENU	1027' WEST OF MAPLE AVENUE	1,382	18	24,876	C - Collector	O - AC/AC	68	15.95		
LIVEOA 10	LIVE OAK AVENUE	1027' WEST OF MAPLE AVENUE	DEAD END	DEAD END	1,027	18	18,486	R - Residential/Local	O - AC/AC	78	31.28		
LIVEOA 20	LIVE OAK AVENUE	1027' WEST OF MAPLE AVENUE	DEAD END	DEAD END	858	18	15,444	R - Residential/Local	O - AC/AC	59	13.46		
MADROC 10	MADRONE COURT	LAUREL DRIVE	DEAD END	DEAD END	343	18	6,174	R - Residential/Local	A - AC	41	5.63		
MADROR 10	MADRONE ROAD	LAUREL DRIVE	895' NORTH OF LAUREL DRIVE	DRIVE	895	14	12,530	R - Residential/Local	A - AC	48	8.59		
MADROR 20	MADRONE ROAD	895' NORTH OF LAUREL DRIVE	1625' NORTH OF LAUREL DRIVE	DEAD END	730	14	10,220	R - Residential/Local	A - AC	52	10.41		
MAINC 10	MAIN COURT	PACHECO AVENUE	DEAD END	OLEMA ROAD	208	20	4,160	R - Residential/Local	O - AC/AC	90	36.17		
MANOR 10	MANOR ROAD	MARIN AVENUE	LOWER SCENIC ROAD	LOWER SCENIC ROAD	393	26	10,218	R - Residential/Local	O - AC/AC	82	36.92		
MANOR 15	MANOR ROAD	OLEMA ROAD	LOWER SCENIC ROAD	TAMALPIAS ROAD	670	23	15,410	C - Collector	A - AC	41	3.19		
MANOR 25	MANOR ROAD	MANZANITA ROAD	MANZANITA ROAD	FRUSTRUCK INT	500	23	11,500	C - Collector	A - AC	82	16.62		
MANZAC 10	MANZANITA COURT	543 FROM WRENDE	991 FIRM WRENDE	FRUSTRUCK INT	123	10	1,230	R - Residential/Local	A - AC	93	33.37		
MANZAR 10	MANZANITA ROAD	FRUSTRUCK INT	FRUSTRUCK INT	FRUSTRUCK INT	448	14	6,272	R - Residential/Local	O - AC/AC	71	23.67		

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MANZAR	20	MANZANITA ROAD	991 FRM WRENDEN FRUSTRUCK INT	FRUSTUCK AVENUE	594	14	8,316	R - Residential/Local	O - AC/AC		68	20.82	
MAPLEA	10	MAPLE AVENUE	WILLOW AVENUE	LIVE OAK AVENUE	387	15	5,805	R - Residential/Local	O - AC/AC		51	11.46	
MAPLEA	20	MAPLE AVENUE	LIVE OAK AVENUE	DEAD END	685	15	10,275	R - Residential/Local	O - AC/AC		34	3.46	
MARINR	10	MARIN ROAD	OLEMA ROAD	MANOR ROAD (ROUND CIRCLE)	398	25	9,950	C - Collector	O - AC/AC		84	25.62	
MARINR	20	MARIN ROAD	MANOR ROAD (TOP OF CIRCLE)	SIR FRANCIS DRAKE BLVD	140	48	6,720	C - Collector	A - AC		83	17.11	
MARINC	10	MARINDA COURT	MARINDA DRIVE	DEAD END	186	29	5,394	R - Residential/Local	A - AC		52	10.41	
MARIND	10	MARINDA DRIVE	SIR FRANCIS DRAKE BOULEVARD	SAN GABRIEL DRIVE	685	30	20,550	C - Collector	A - AC		53	6.26	
MARIND	20	MARINDA DRIVE	SAN GABRIEL DRIVE	DEAD END	1,398	30	41,940	C - Collector	A - AC		56	7.13	
MEADOW	10	MEADOW WAY (1)	CASCADE DR	MEADOW WAY (2) "T"	380	20	7,600	R - Residential/Local	A - AC		59	13.86	
MEADOW	20	MEADOW WAY (2)	N E END	GATE (SW END)	805	20	16,100	R - Residential/Local	O - AC/AC		42	7.01	
MEADOW	30	MEADOW WAY (3)	MEADOW WAY (2)	E END	642	18	11,556	R - Residential/Local	A - AC		35	3.3	
MEERNA	10	MEERNA AVENUE	CREEK ROAD	IVY LANE	870	18	15,660	C - Collector	O - AC/AC		73	19.54	
MEERNA	20	MEERNA AVENUE	IVY LANE	HILLSIDE DRIVE	942	18	16,956	C - Collector	O - AC/AC		82	26.97	
MEERNA	30	MEERNA AVENUE	HILLSIDE DR	PORTEOUS AV	995	19	18,905	R - Residential/Local	A - AC		75	25.68	
MERWIN	10	MERWIN AVENUE	BROADWAY	PARK ROAD	651	21	13,671	R - Residential/Local	A - AC		43	6.44	
MONOAV	05	MONO AVENUE	BOLINAS RD	BANK ST	230	11	2,530	R - Residential/Local	A - AC		17	0	
MONOAV	10	MONO AVENUE	BOLINAS RD	PACHECO AV	525	16	8,400	R - Residential/Local	A - AC		22	0	
MONOAV	20	MONO AVENUE	PACHECO AVE	INYO AVE	638	20	12,760	R - Residential/Local	O - AC/AC		78	26.39	
MOUNTA	10	MOUNTAIN VIEW ROAD	MANZANITA ROAD	TAMALPIAS ROAD	1,035	14	14,490	R - Residential/Local	A - AC		23	0	
MURIEL	10	MURIEL PLACE	LOWER SCENIC ROAD	DEAD END	485	21	10,185	R - Residential/Local	O - AC/AC		74	27.37	
NAPAAV	10	NAPA AVENUE	PACHECO AVENUE	DOMINGA AVENUE	300	20	6,000	R - Residential/Local	O - AC/AC		68	19.28	
OAKROA	10	OAK ROAD	LAUREL DRIVE	TOYN DRIVE	1,249	15	18,735	R - Residential/Local	A - AC		49	9.03	
OAKTRE	10	OAK TREE LANE	SIR FRANCIS DRAKE BOULEVARD	DEAD END	494	29	14,326	R - Residential/Local	O - AC/AC		66	19.5	
OLEMAR	10	OLEMA ROAD	SIR FRANCIS DRAKE BOULEVARD	MARIN ROAD	1,050	24	25,200	C - Collector	A - AC		65	10.02	
OLEMAR	20	OLEMA ROAD	MARIN ROAD	TOWN LIMITS	1,480	23	34,040	C - Collector	A - AC		62	9	
PACHEC	10	PACHECO AVENUE	SIR FRANCIS DRAKE BLVD	DEAD END	596	20	11,920	R - Residential/Local	O - AC/AC		67	18.43	
PARKRO	10	PARK ROAD	BOLINAS ROAD	SCHOOL STREET	588	24	14,112	R - Residential/Local	O - AC/AC		66	20.15	
PARKRO	20	PARK ROAD	SCHOOL STREET	SPRUCE ROAD	585	21	12,285	R - Residential/Local	A - AC		53	10.88	

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PASTOR	10	PASTORI AVENUE	SIR FRANCIS DRAKE BOULEVARD	DEAD END	608	32	19,456	R - Residential/Local	A - AC		92		32.86
PINEDR	10	PINE DRIVE	LAUREL DRIVE	635' WEST OF LAUREL DRIVE	635	16	10,160	C - Collector	O - AC/AC		71		17.91
PINEDR	20	PINE DRIVE	635' WEST OF LAUREL DRIVE	1900' WEST OF LAUREL DRIVE	1,265	14	17,710	C - Collector	O - AC/AC		70		17.23
PINEDR	30	PINE DRIVE	1900' WEST OF LAUREL DRIVE	2760' WEST OF LAUREL DRIVE	860	14	12,040	C - Collector	O - AC/AC		82		26.98
PIPERC	10	PIPER COURT	PIPER LANE	DEAD END	492	23	11,316	R - Residential/Local	O - AC/AC		93		37.67
PIPERL	10	PIPER LANE	OAK MANOR DRIVE	DEAD END	1,002	34	34,068	R - Residential/Local	O - AC/AC		93		37.67
PORTEO	10	PORTEOUS AVENUE	BOLINAS ROAD	IVY LANE	720	18	12,960	C - Collector	O - AC/AC		53		8.55
PORTEO	20	PORTEOUS AVENUE	IVY LANE	WOOD LANE	261	18	4,698	C - Collector	O - AC/AC		48		6.98
PORTEO	30	PORTEOUS AVENUE	WOOD LANE	TOWN LIMITS	1,160	17	19,720	C - Collector	O - AC/AC		45		5.87
REDWOO	10	REDWOOD ROAD	SCENIC ROAD	420' WEST OF SCENIC ROAD	420	12	5,040	C - Collector	O - AC/AC		53		8.79
REDWOO	20	REDWOOD ROAD	420' WEST OF SCENIC ROAD	1240' WEST OF SCENIC ROAD	820	12	9,840	C - Collector	O - AC/AC		29		1.09
REDWOO	30	REDWOOD ROAD	1240' WEST OF SCENIC ROAD	1800' WEST OF SCENIC ROAD	560	14	7,840	C - Collector	O - AC/AC		76		21.79
RIDGER	10	RIDGE ROAD	SCENIC ROAD	CUL-DE-SAC	1,536	12	18,432	R - Residential/Local	O - AC/AC		68		21.44
RIDGEW	10	RIDGEWAY AVENUE	LIVE OAK AV	END	1,350	16	21,600	R - Residential/Local	O - AC/AC		78		31.28
ROCCAD	20	ROCCA DRIVE	TAYLOR DRIVE	TAYLOR DRIVE AT SADY LANE	1,701	14	23,814	R - Residential/Local	O - AC/AC		72		23.65
ROCKRI	10	ROCK RIDGE ROAD	MANOR ROAD	BOTHIN ROAD	1,115	25	27,875	R - Residential/Local	A - AC		16		0
SANGAC	10	SAN GABRIEL COURT	SAN GABRIEL DRIVE	DEAD END	177	30	5,310	R - Residential/Local	A - AC		43		6.44
SANGAD	10	SAN GABRIEL DRIVE	MARINDA DRIVE	1148' EAST OF MARINDA DRIVE	1,148	30	34,440	C - Collector	A - AC		55		6.83
SANGAD	20	SAN GABRIEL DRIVE	1148' EAST OF MARINDA DRIVE	DEAD END	633	30	18,990	C - Collector	A - AC		46		4.4
SANMIG	10	SAN MIGUEL COURT	SIR FRANCIS DRAKE BOULEVARD	DEAD END	409	23	9,407	R - Residential/Local	O - AC/AC		47		9.42
SCENIC	05	SCENIC ROAD	AZALEA AVENUE	ACACIA ROAD	1,165	18	20,970	R - Residential/Local	A - AC		49		9.03
SCENIC	10	SCENIC ROAD	ACACIA ROAD	TAMALPIAS ROAD	625	24	15,000	A - Arterial	A - AC		62		11.34
SCENIC	20A	SCENIC ROAD	TAMALPIAS ROAD	BAY ROAD	535	14	7,490	A - Arterial	A - AC		29		0.99
SCENIC	20B	SCENIC ROAD	BAY ROAD	200 FT W. BAY ROAD	200	14	2,800	A - Arterial	O - AC/AC		75		19.21
SCENIC	30	SCENIC ROAD	200 WEST OF BAY ROAD	400' NORTH OF REDWOOD ROAD	922	15	13,830	A - Arterial	O - AC/AC		71		16.16

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SCENIC	40	SCENIC ROAD	400' NORTH OF REDWOOD ROAD	REDWOOD ROAD	458	14	6,412	A - Arterial	O - AC/AC		82	24.83	
SCENIC	50	SCENIC ROAD	REDWOOD ROAD	TAMALPIAS ROAD	580	14	8,120	A - Arterial	A - AC		93	24.66	
SCENIC	60	SCENIC ROAD	TAMALPIAS ROAD	UPPER SCENIC ROAD	1,145	15	17,175	A - Arterial	A - AC		40	4.07	
SCHOOL	10	SCHOOL STREET	BROADWAY	PARKING LOT	120	25	3,000	R - Residential/Local	A - AC		39	4.45	
SCHOOL	20	SCHOOL STREET	PARK ROAD	DEAD END	150	25	3,750	R - Residential/Local	A - AC		87	30.55	
SEQUOI	10	SEQUOIA ROAD	LOWER SCENIC ROAD	SPRUCE ROAD	974	19	18,506	R - Residential/Local	O - AC/AC		70	21.67	
SHEMRC	10	SHEMRC COURT	SIR FRANCIS DRAKE BOULEVARD	NORTH TO DEAD END	380	23	8,740	R - Residential/Local	A - AC		81	26.89	
SHERMA	10	SHERMAN AVENUE	BOLINAS ROAD	DOMINGA AVENUE	262	18	4,716	R - Residential/Local	O - AC/AC		73	24.1	
SIRFRA	10	SIR FRANCIS DRAKE BOULEVARD	TOWN LIMITS	PACHECO AVENUE	1,526	36	54,936	A - Arterial	O - AC/AC		62	12.11	
SIRFRA	100	SIR FRANCIS DRAKE BOULEVARD	GLEN DRIVE	TOWN LIMITS	1,302	45	58,590	A - Arterial	O - AC/AC		84	26.26	
SIRFRA	20	SIR FRANCIS DRAKE BOULEVARD	PACHECO AVENUE	BANK STREET	819	35	28,665	A - Arterial	A - AC		57	9.42	
SIRFRA	30	SIR FRANCIS DRAKE BOULEVARD	BANK STREET	BROADWAY	939	36	33,804	A - Arterial	A - AC		74	16.49	
SIRFRA	40	SIR FRANCIS DRAKE BOULEVARD	BROADWAY	SAN MIGUEL COURT	939	47	44,133	A - Arterial	A - AC		69	14.25	
SIRFRA	50	SIR FRANCIS DRAKE BOULEVARD	SAN MIGUEL COURT	OAK TREE LANE	870	35	30,450	A - Arterial	A - AC		67	13.4	
SIRFRA	60	SIR FRANCIS DRAKE BOULEVARD	OAK TREE LANE	OAK MANOR DRIVE	722	35	25,270	A - Arterial	O - AC/AC		29	0.94	
SIRFRA	70	SIR FRANCIS DRAKE BOULEVARD	OAK MANOR DRIVE	1003' WEST OF OAK MANOR DRIVE	1,003	45	45,135	A - Arterial	O - AC/AC		34	2.28	
SIRFRA	80	SIR FRANCIS DRAKE BOULEVARD	1003' WEST OF OAK MANOR DRIVE	455' NORTH OF JUNE COURT	1,053	35	36,855	A - Arterial	O - AC/AC		88	30.11	
SIRFRA	90	SIR FRANCIS DRAKE BOULEVARD	455' NORTH OF JUNE COURT	GLEN DRIVE	795	60	47,700	A - Arterial	O - AC/AC		86	28.55	
SPRING	10	SPRING LANE	HILLSIDE DRIVE	DEAD END	1,376	15	20,640	R - Residential/Local	O - AC/AC		86	38.71	
SPRUCE	10	SPRUCE ROAD	AZALEA ROAD	PARK ROAD	732	21	15,372	C - Collector	A - AC		39	2.73	
SPRUCE	15	SPRUCE ROAD	PARK ROAD	610 FT WEST OF PARK ROAD	610	12	7,320	C - Collector	O - AC/AC		82	27	
SPRUCE	25	SPRUCE ROAD	610 FT WEST OF PARK ROAD	TAMALPIAS ROAD	765	12	9,180	C - Collector	O - AC/AC		80	25.12	
SUMMER	10	SUMMER AVENUE	FOREST AVENUE	DEAD END	284	15	4,260	R - Residential/Local	O - AC/AC		87	41.46	

Section PCI/RSL Listing

Printed: 02/03/2017

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface	Type	Current	PCI	Remaining Life
TAMALP	10A	TAMALPAIS ROAD	SEQUOIA ROAD	SPRUCE ROAD	615	16	9,840	A - Arterial	A - AC	A - AC/AC	36	2.9	
TAMALP	10B	TAMALPAIS ROAD	SPRUCE ROAD	INT. 60 FT W. OF SCENIC	370	16	5,920	A - Arterial	O - AC	O - AC/AC	88	30.11	
TAMALP	20	TAMALPAIS ROAD	SCENIC ROAD	1050' SOUTH OF SCENIC ROAD	1,050	15	15,750	A - Arterial	O - AC	O - AC/AC	78	21.52	
TAMALP	30	TAMALPAIS ROAD	1050' SOUTH OF SCENIC ROAD	BERRY TRAIL	812	16	12,992	A - Arterial	O - AC	O - AC/AC	75	19.21	
TAMALP	40	TAMALPAIS ROAD	BERRY TRAIL	MOUNTAIN VIEW ROAD	835	15	12,525	A - Arterial	O - AC	O - AC/AC	82	24.98	
TAMALP	50	TAMALPAIS ROAD	MOUNTAIN VIEW ROAD	SCENIC ROAD	590	12	7,080	A - Arterial	O - AC	O - AC/AC	22	0	
TAMALP	60	TAMALPAIS ROAD	SCENIC ROAD	DEAD END	1,135	10	11,350	A - Arterial	O - AC	O - AC/AC	58	10.4	
TAYLOR	10	TAYLOR DRIVE	SIR FRANCIS DRAKE BOULEVARD	CLAUS DRIVE	618	14	8,652	R - Residential/Local	A - AC	A - AC	51	9.94	
TAYLOR	20	TAYLOR DRIVE	CLAUS DRIVE	PARKER LANE	855	14	11,970	R - Residential/Local	O - AC	O - AC/AC	54	13.06	
TAYLOR	30	TAYLOR DRIVE	TAYLOR DRIVE INTERSECTION	ROCCA DRIVE AT SADY LANE	840	14	11,760	R - Residential/Local	O - AC	O - AC/AC	36	4.31	
TOYONR	10	TOYON DRIVE	OAK ROAD	NORTH DEAD END	710	22	15,620	R - Residential/Local	A - AC	A - AC	93	33.37	
TOYONR	20	TOYON DRIVE	OAK ROAD	SOUTH DEAD END	1,000	20	20,000	R - Residential/Local	A - AC	A - AC	43	6.44	
VALLEY	10	VALLEY ROAD	WILLIS LANE	DEAD END	330	14	4,620	R - Residential/Local	O - AC	O - AC/AC	82	36.41	
VANNILN	10	VANNILN	RIDGEWAY AV	CHESTER AV	760	14	10,640	R - Residential/Local	A - AC	A - AC	61	12.75	
VISTAW	10	VISTA WAY	SAN GABRIEL DRIVE	DEAD END	366	32	11,712	R - Residential/Local	A - AC	A - AC	23	0	
WESTBR	10	WESTBRAE DRIVE	OLEMA ROAD	OLEMA ROAD	760	25	19,000	R - Residential/Local	O - AC	O - AC/AC	66	19.5	
WILLIS	10	WILLIS LN	FRUSTUCK AV	END	217	14	3,038	R - Residential/Local	A - AC	A - AC	27	0.81	
WILLOW	10	WILLOW AVENUE	SIR FRANCIS DRAKE BOULEVARD	MAPLE AVENUE	837	20	16,740	C - Collector	O - AC	O - AC/AC	41	4.81	
WILLOW	20	WILLOW AVENUE	MAPLE AVENUE	912' NORTH OF MAPLE AVENUE	912	20	18,240	C - Collector	O - AC	O - AC/AC	56	9.86	
WILLOW	30	WILLOW AVENUE	912' NORTH OF MAPLE AVENUE	CHESTER AVENUE	527	20	10,540	C - Collector	O - AC	O - AC/AC	68	16.22	
WOODLA	10	WOOD LANE	PORTEOUS AVENUE	780' WEST OF PORTEOUS AVENUE	780	17	13,260	R - Residential/Local	A - AC	A - AC	38	4.44	
WOODLA	20	WOOD LANE	780' WEST OF PORTEOUS AVENUE	DEAD END	983	17	16,711	R - Residential/Local	A - AC	A - AC	42	6.03	
WOODRO	10	WOODLAND ROAD	LAUREL DRIVE	OAK ROAD	1,284	10	12,840	R - Residential/Local	O - AC	O - AC/AC	74	25.2	
WRDEN	10	WRDEN AVENUE	PARK ROAD	FRUSTUCK AVENUE	576	16	9,216	R - Residential/Local	O - AC	O - AC/AC	65	18.27	
WRDEN	20	WRDEN AVENUE	FRUSTUCK AVENUE	MANZANITA ROAD	543	15	8,145	R - Residential/Local	O - AC	O - AC/AC	75	28.08	

Total Section Length:

145,445

Section PCI/RSL Listing

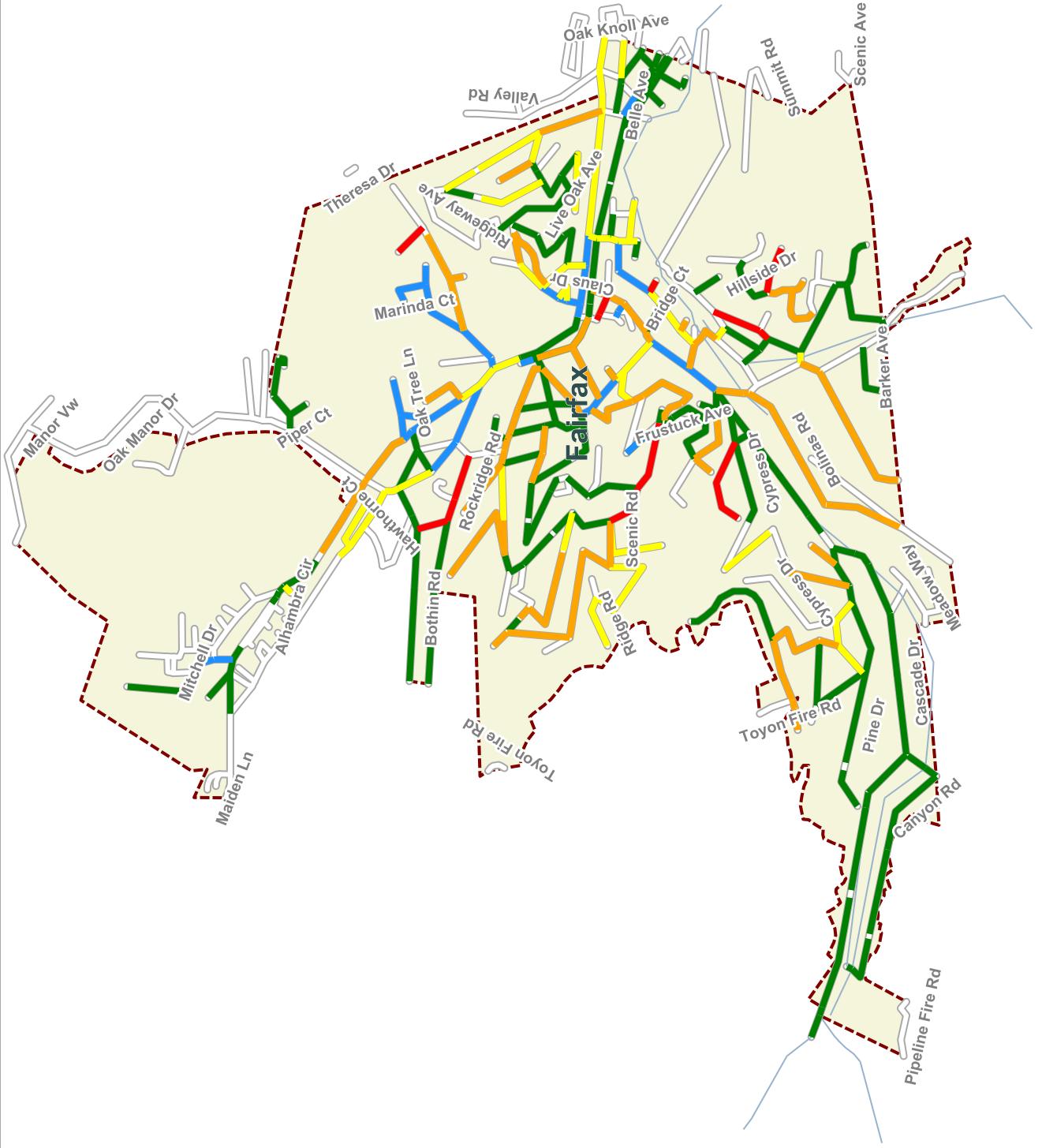
Printed: 02/03/2017

Street ID	Section ID	Street Name	From	To	Length	Width	Area	Functional Class	Surface Type	Current PCI	Remaining Life
Total Section Area:											<u>3,067,321</u>

Town of Fairfax

Current PCI Condition

Printed: 2/3/2017



Feature Legend

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



0 0.5 Miles

APPENDIX F

Scenario Maps – Sections Selected for Treatment

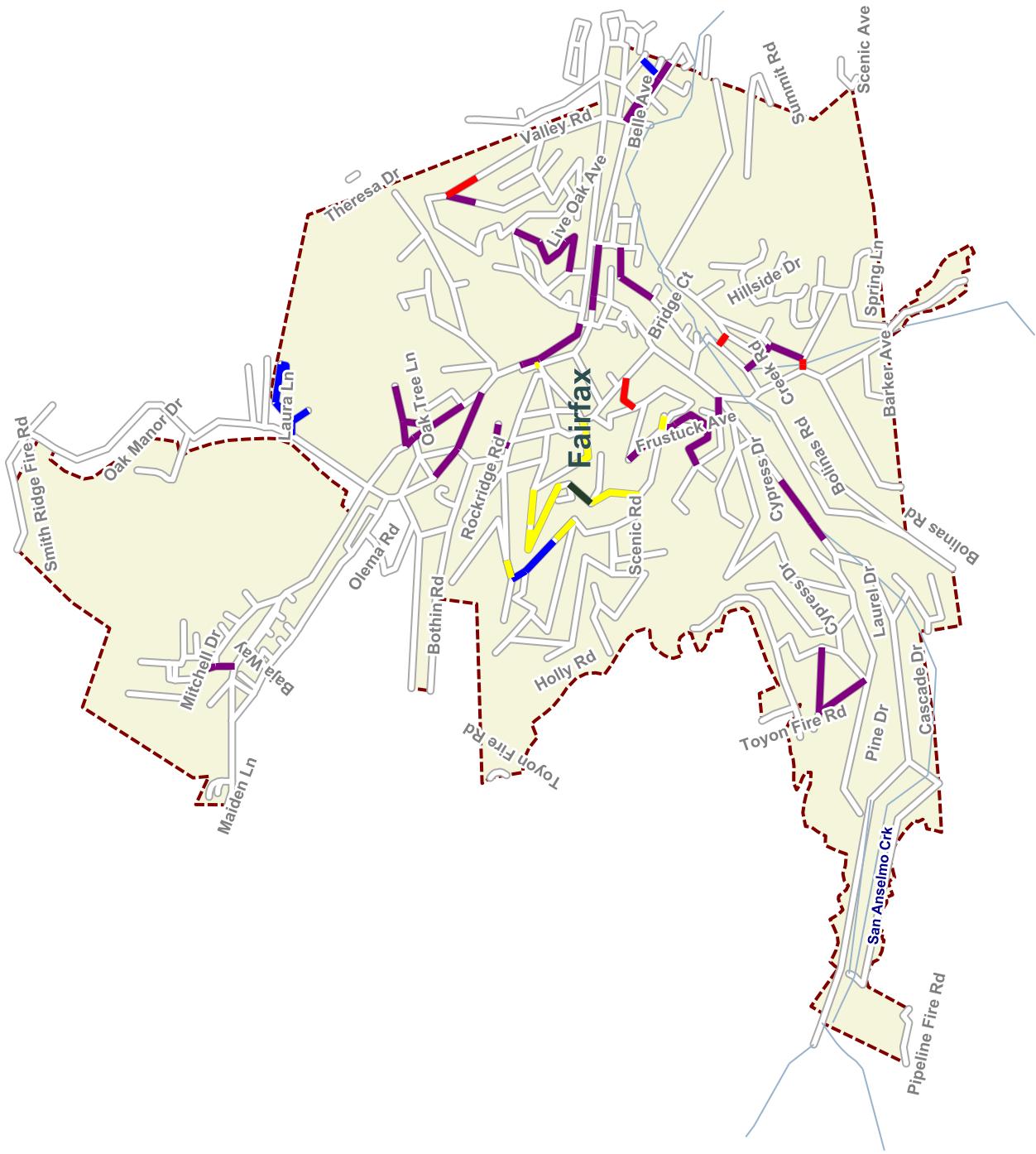
Town of Fairfax

Scenario Treatments

P-TAP 17 - SCENARIO 02 - EAB 1 - \$100,000 - All Project Periods - Printed: 2/3/2017

Feature Legend

- MICROSURFACING
- MILL AND THICK OVERLAY
- SEAL CRACKS
- SLURRY SEAL
- THICK AC OL/RUBBERIZED ASPHALT



0 0.5 Miles

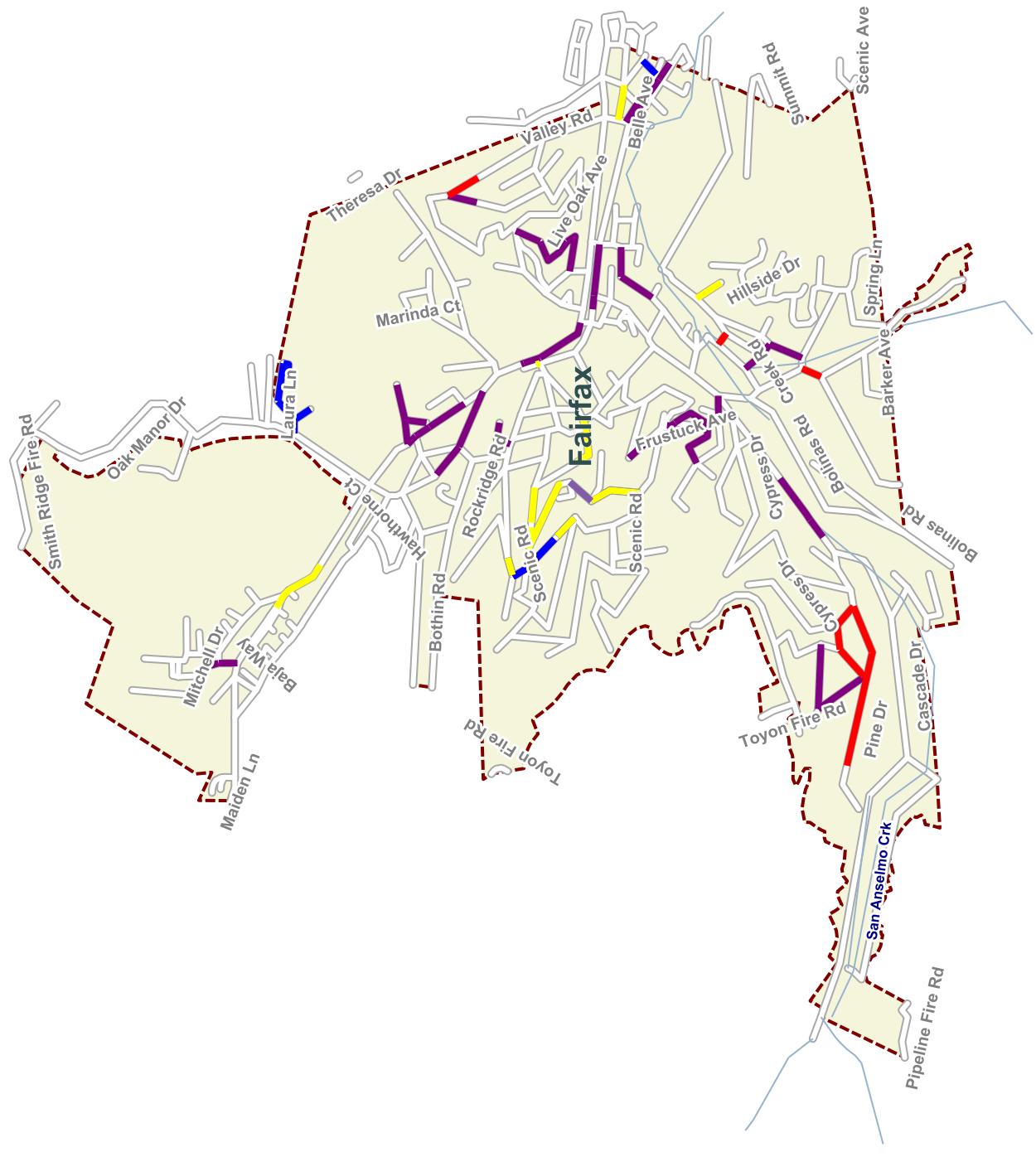
Town of Fairfax

Scenario Treatments

P-TAP 17 - SCENARIO 03 - EAB 2 - \$150,000 - All Project Periods - Printed: 2/3/2017

Feature Legend

- MICROSURFACING
- MILL AND THICK OVERLAY
- SEAL CRACKS
- SLURRY SEAL
- THICK AC OL/RUBBERIZED ASPHALT

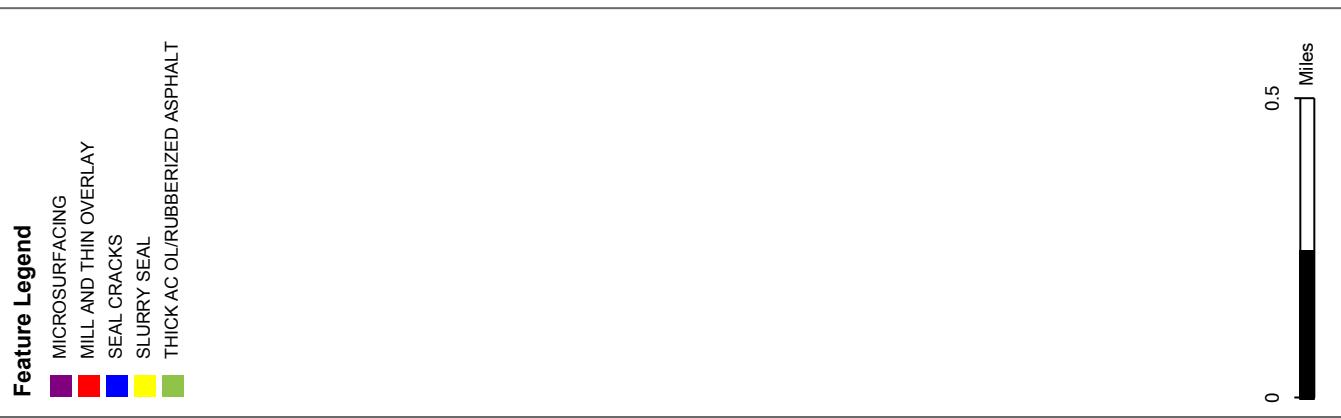


0 0.5 Miles

Town of Fairfax

Scenario Treatments

P-TAP 17 - SCENARIO 04 - EAB 3 - \$200,000 - All Project Periods - Printed: 2/3/2017



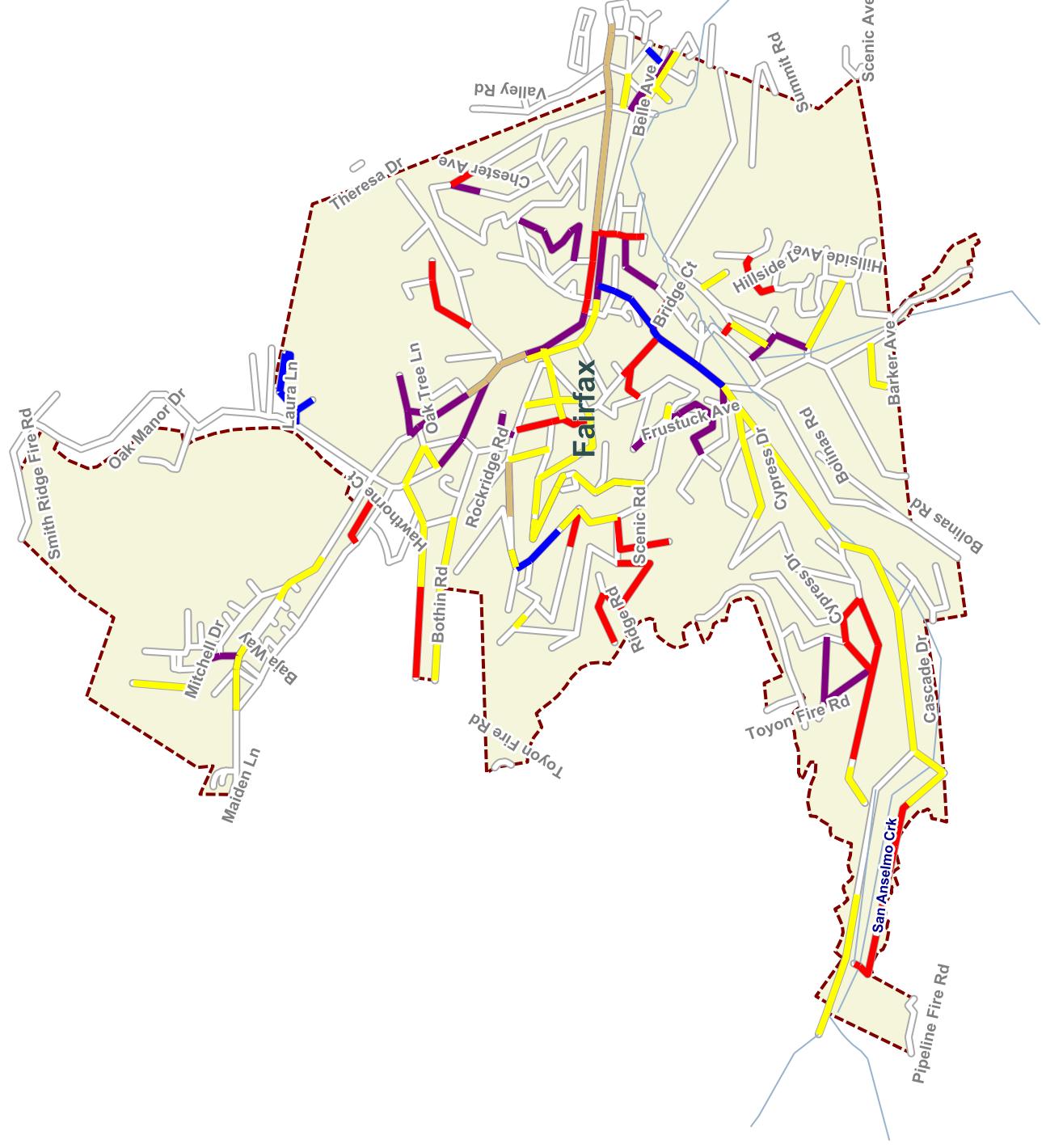
Feature Legend

- MICROSURFACING
- MILL AND THIN OVERLAY
- SEAL CRACKS
- SLURRY SEAL
- THICK AC OL/RUBBERIZED ASPHALT

Town of Fairfax

Scenario Treatments

P-TAP 17 - SCENARIO 05 - MAINTAIN CURRENT PCI - All Project Periods - Printed: 2/3/2017



Feature Legend

- MICROSURFACING
- MILL AND THICK OVERLAY
- SEAL CRACKS
- SLURRY SEAL
- THICK AC OL/RUBBERIZED ASPHALT

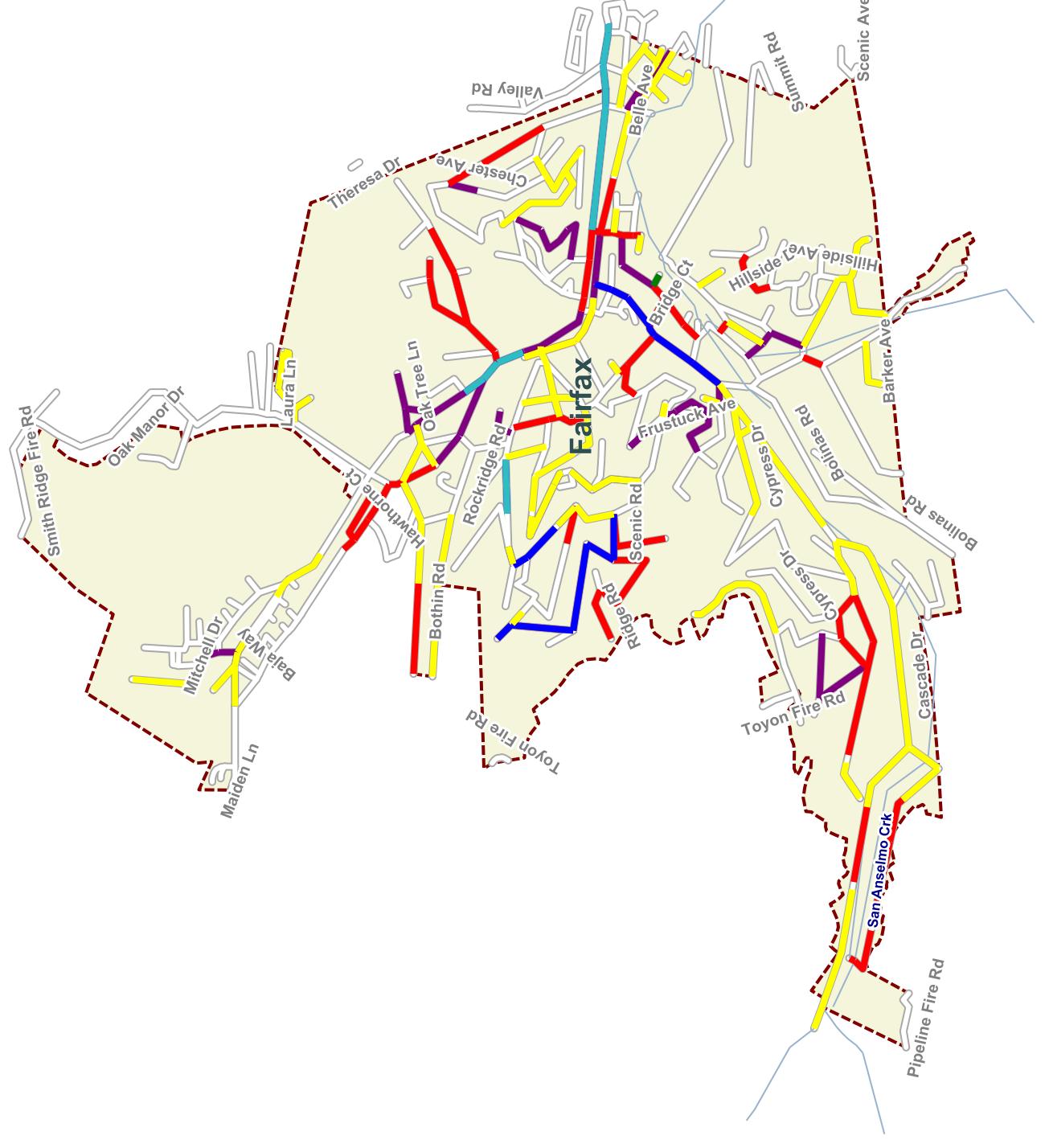


0 Miles

Town of Fairfax

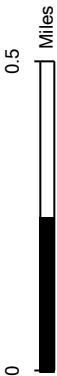
Scenario Treatments

P-TAP 17 - SCENARIO 06 - INCREASE PCI 5 POINTS - All Project Periods - Printed: 2/3/2017



Feature Legend

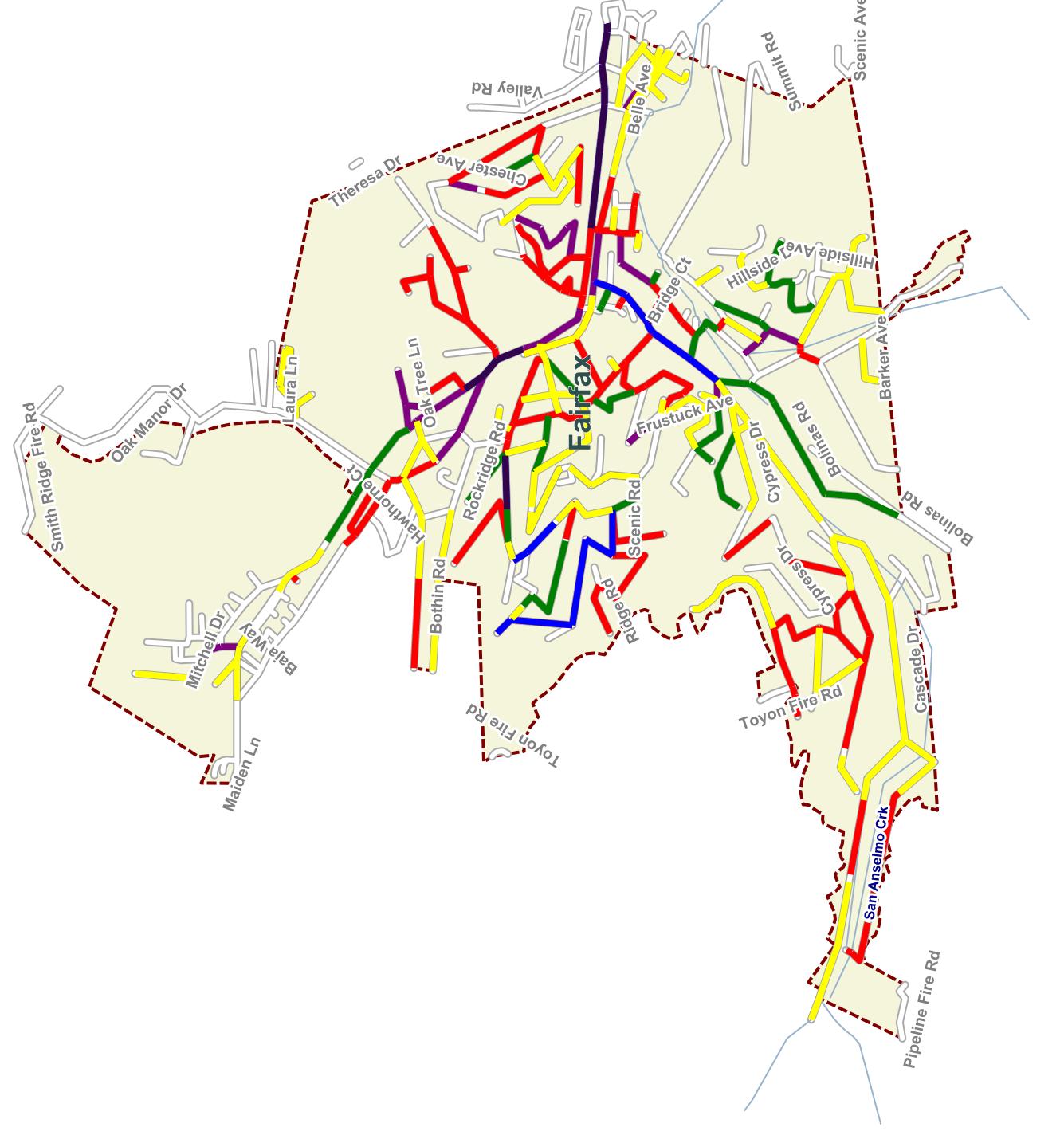
- MICROSURFACING
- MILL AND THICK OVERLAY
- RECONSTRUCT STRUCTURE (AC)
- SEAL CRACKS
- SLURRY SEAL
- THICK AC OL/RUBBERIZED ASPHALT



Town of Fairfax

Scenario Treatments

P-TAP 17 - SCENARIO 07 - AVERAGE OF BUDGET NEEDS - All Project Periods - Printed: 2/3/2017



Feature Legend

- MICROSURFACING
- MILL AND THICK OVERLAY
- RECONSTRUCT STRUCTURE (AC)
- SEAL CRACKS
- SLURRY SEAL
- THICK AC OL/RUBBERIZED ASPHALT

0 Miles

APPENDIX G

Street Images

Regional Streets at Various Condition Levels

Typical Distresses

RANGE 90 – 100

PAVEMENT IS NEW

NO VISIBLE SIGNS OF DISTRESS

LIGHT SEVERITY AND VERY LOW QUANTITY (IF ANY) WEATHERING 0- 5%



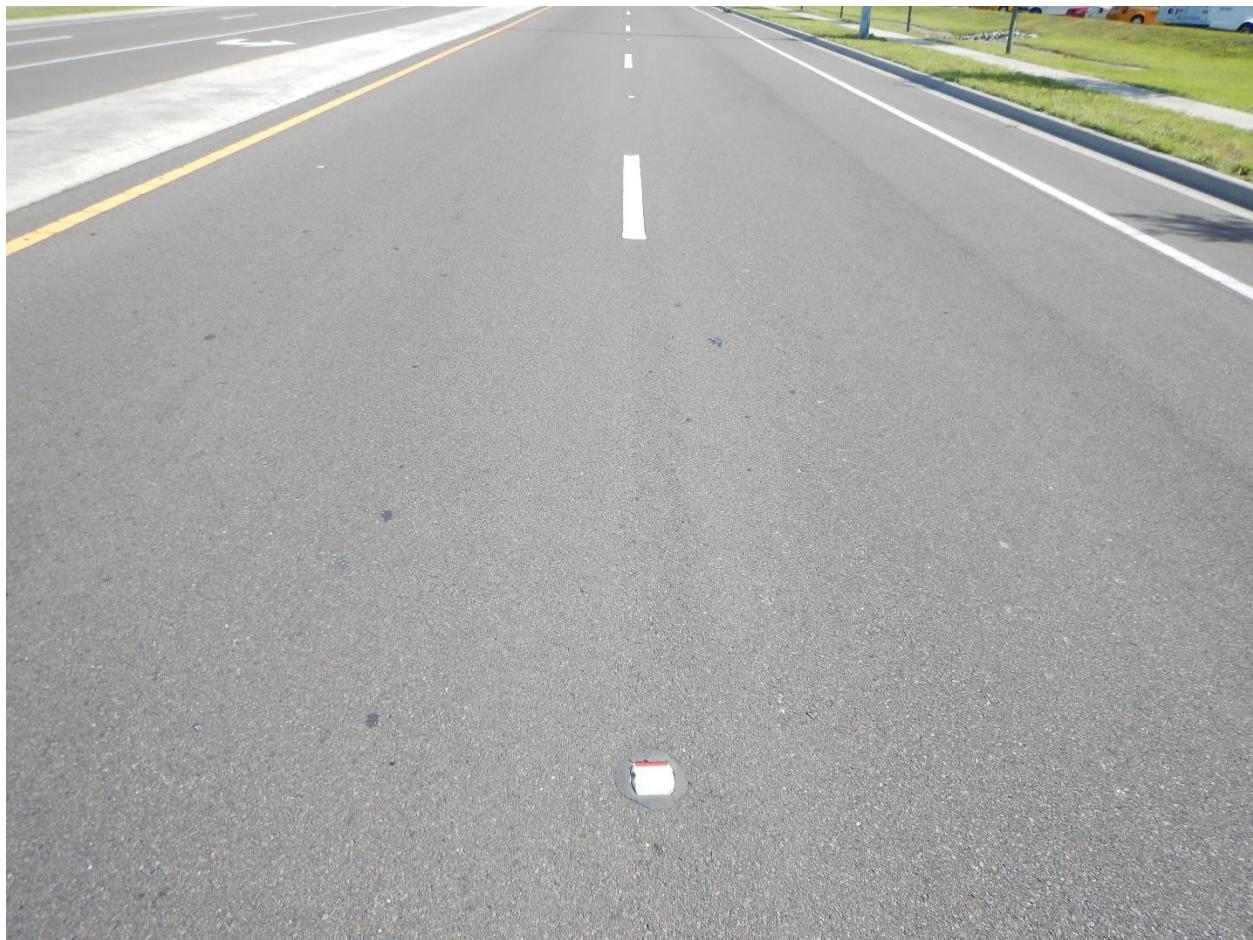


PCI RANGE 80 – 90

PAVEMENT HAS AGED A FEW YEARS

PAVEMENT HAS BEGUN TO WEATHER AT THE LIGHT SEVERITY LEVEL 25%

VERY SMALL QUANTITY OF LIGHT SEVERITY CLIMATE RELATED CRACKING





PCI RANGE 70 – 80

PAVEMENT HAS WEATHERED AT THE LIGHT SEVERITY LEVEL 100%

CLIMATE RELATED CRACKING DISTRESS BEGINNING (LIGHT BLOCK AND/OR LONGITUDINAL/TRANSVERSE)





PCI RANGE 60 – 70

PAVEMENT HAS WEATHERED AT THE LIGHT SEVERITY LEVEL 100%

LIGHT SEVERITY CLIMATE RELATED CRACKING DISTRESS EVOLVED WITH MEDIUM SEVERITY BEGINNING

REFLECTIVE CRACING THROUGH A SURFACE TREATED PAVEMENT WITH SOME MEDIUM SEVERITY
WEATHERING





PCI RANGE 50 – 60

PAVEMENT HAS WEATHERED AT THE LIGHT SEVERITY LEVEL WITH SOME MEDIUM SEVERITY AS WELL OR AT 100% MEDIUM SEERITY

MEDIUM/LIGHT SEVERITY CLIMATE RELATED CRACKING DISTRESS

LIGHT SEVERITY LOAD ASSOCIATED DISTRESS IS BEGINNING





PCI RANGE 40 – 50

PAVEMENT HAS WEATHERED AT THE MEDIUM SEVERITY AT 100%

MEDIUM SEVERITY CLIMATE RELATED CRACKING DISTRESS

LIGHT SEVERITY LOAD ASSOCIATED DISTRESS

MEDIUM SEVERITY LOAD ASSOCIATED DISTRESS HAS BEGUN





PCI RANGE 30 – 40

PAVEMENT HAS WEATHERED AT THE MEDIUM SEVERITY LEVEL AT 100%

MEDIUM/HIGH SEVERITY CLIMATE RELATED CRACKING DISTRESS

MEDIUM SEVERITY LOAD ASSOCIATED DISTRESS HAS EVOLVED





PCI RANGE 20 – 30

PAVEMENT HAS WEATHERED AT THE MEDIUM/HIGH SEVERITY LEVEL AT 100%

MEDIUM/HIGH SEVERITY CLIMATE RELATED CRACKING DISTRESS

MEDIUM SEVERITY LOAD ASSOCIATED DISTRESS HAS EVOLVED

HIGH SEVERITY DISTRESS HAS BEGUN





PCI RANGE 0 – 10

PAVEMENT HAS WEATHERED/RAVELLED AT THE HIGH SEVERITY LEVEL AT 100%

HIGH SEVERITY LOAD ASSOCIATED DISTRESS AT A SIGNIFICANT QUANTITY HAS BEEN ESTABLISHED



