2017 Pavement Management Program Update Final Report

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City of Willits

Public Works Department
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270.08.55

City of Willits

2017 Pavement Management Program Update

Final Report

Submitted to:

City of Willits
Public Works Department
111 East Commercial Street
Willits, CA 95490

September 2017

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Background

Nichols Consulting Engineers, Chtd. (NCE) was selected by the Mendocino Council of Governments (MCOG) to update the City of Willits's (City) Pavement Management Program (PMP) using the StreetSaver software. As part of the scope, NCE performed condition surveys on the City's entire pavement network, which included 0.84 centerline miles (3 sections) of arterials, 7.30 centerline miles (32 sections) of collectors, and 11.29 centerline miles (89 sections) of residential/other streets. Once field surveys were completed in April 2017, all survey data was entered into the StreetSaver database.

Maintenance and rehabilitation strategies and recent unit costs were also updated in StreetSaver. Finally, the pavement funding needs were determined, and four budgetary scenarios were analyzed for the City.

Purpose

The purpose of this report is to assist decision makers at the City of Willits in utilizing the results of the StreetSaver Pavement Management Program (PMP). Specifically, this report assesses the adequacy of projected revenues to meet the maintenance needs recommended for the City. It also maximizes the return from expenditures by:

1) Implementing a multi-year street rehabilitation and maintenance program,
2) Developing a preventive maintenance program, and
3) Selecting streets with the most cost effective repairs.

Finally, this report examines the overall condition of the street network and highlights options for improving the current network level pavement condition index (PCI). These options are developed by conducting "what if" analyses. By varying the budget amounts available for pavement maintenance and repair, one can show how different funding strategies affect the City's streets over the next ten years.

Network Description

The City of Willits is responsible for the repair and maintenance of approximately 19.43 centerline miles of pavement, or 124 pavement sections. Table 1 below summarizes the entire network by functional class.

Table 1: Network Summary Statistics for City-Maintained Sections

Functional Class	Sections	Centerline Miles	Lane Miles	% of the Entire Network (by Pavement Area)
Arterials	3	0.84	1.68	5.2
Collectors	32	7.30	14.59	41.3
Residentials/Other	89	11.29	22.25	53.5
Total	**124**	**19.43**	**38.52**	**100**

The network replacement cost of the maintained sections is approximately $23.9 million. This can be viewed as the value of the pavement network and is the amount needed to fund the full reconstruction of the City's streets. It does not include related transportation components such as sidewalks, signals, markings, signs, etc.

A list of all sections in the network and their corresponding PCI at the time of inspection and other attribute data is included in Appendix A. For convenience, there are two listings – one sorted by street name and the other sorted by descending PCI.

Pavement Current Condition

The pavement condition index, or PCI, is a measurement of the pavement condition and ranges from 0 to 100. A newly constructed street will have a PCI of 100, while a failed street will have a PCI of 25 or less. **The average 2017 PCI of the City's street network is 48.** Note that these values are projected and area-weighted calculations from StreetSaver. The average remaining service life (RSL) is estimated to be approximately 13 years for the streets (this is the time required for pavement to reach a "Very Poor/Failed" condition if no maintenance occurs).

Figure 1 below illustrates the definitions of the five pavement condition categories. Note that the StreetSaver "Maintenance and Rehabilitation Decision Tree" in Appendix B assigns different condition category titles from those in Figure 1.

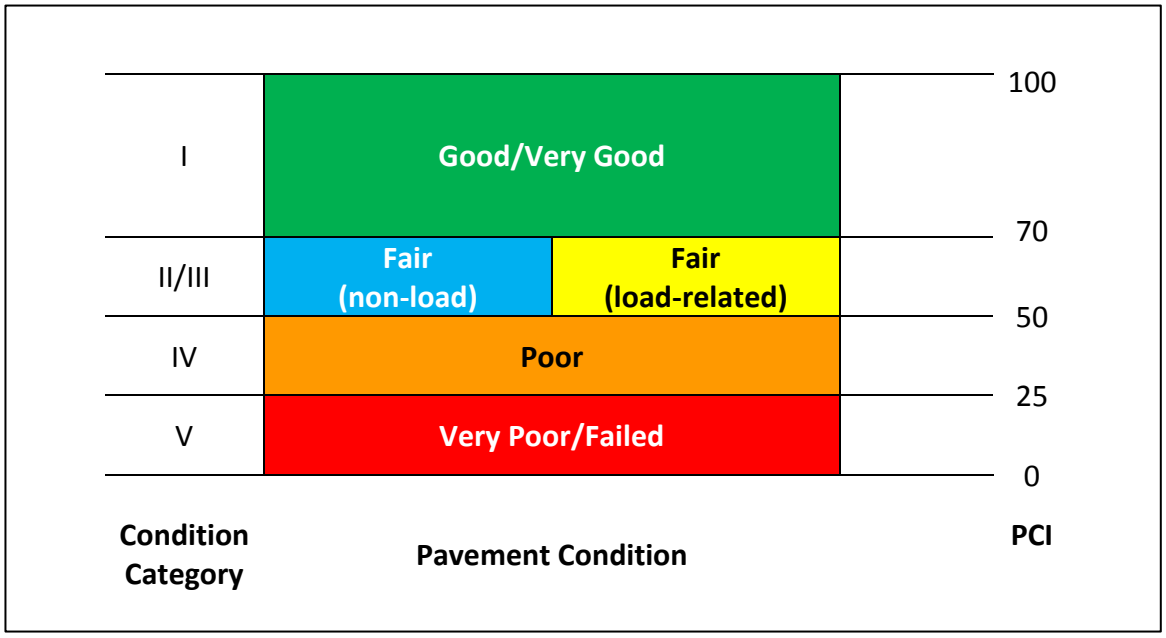


Figure 1: Pavement Condition Categories by PCI

Figure 2 below shows the network PCI trend since 2001. The PCI values are field inspected values from the StreetSaver Program. The average network PCI for the City has fluctuated between the high 40s to the low 50s in the past 13 years.

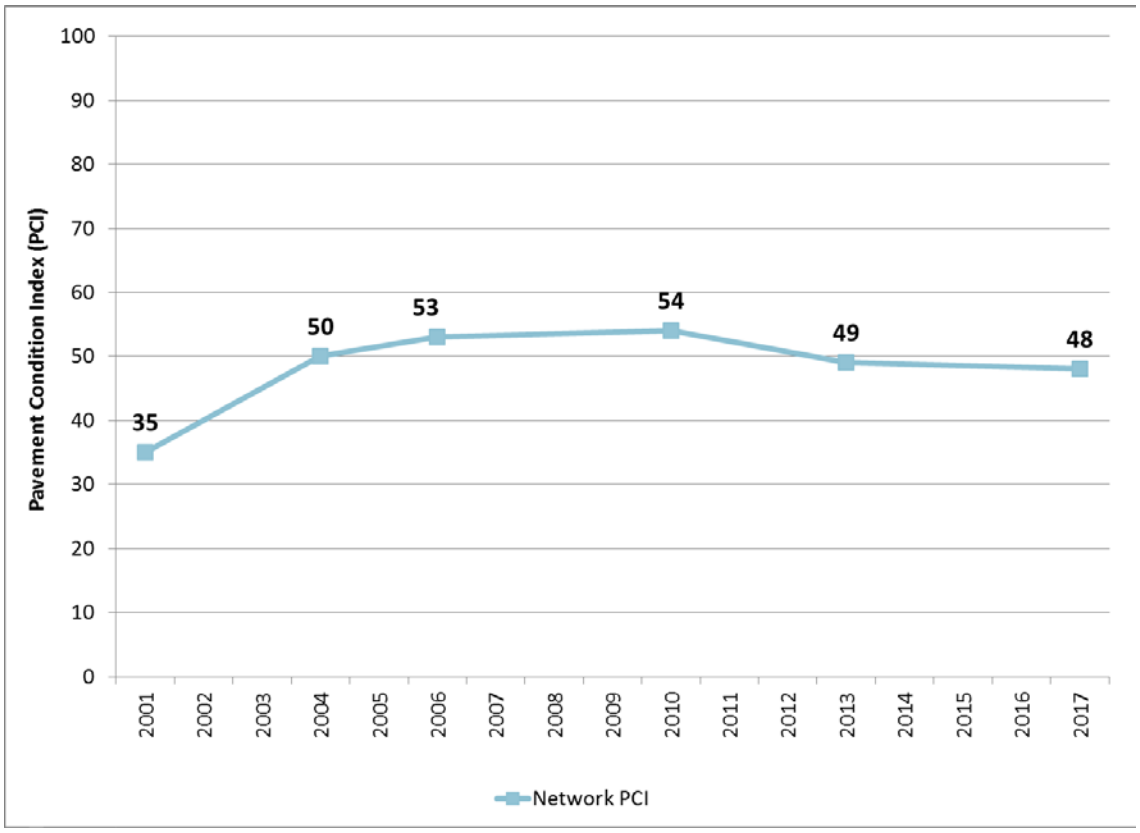


Figure 2: Historical Network PCI from 2001 to 2017

Table 2 and Figures 3 and 4 detail the network by PCI ranges or condition category. Approximately 47.3% of the City's streets are in the "Good/Very Good" or "Fair" condition category, with one third of the network in the "Very Poor/Failed" condition. It is also clear that the City's arterials are in better condition than the other classifications.

Table 2: 2017 Pavement Condition Breakdowns by Area (Entire Network)

Condition Category	PCI Range	Arterials (%)	Collectors (%)	Residentials/Other (%)	Entire Network (%)
Good/Very Good (I)	70-100	1.5	16.7	16.4	34.6
Fair (II/III)	50-69	2.2	3.6	6.9	12.7
Poor (IV)	25-49	1.5	7.1	5.9	14.5
Very Poor/Failed (V)	<25	0	13.9	24.3	38.2
Total		**5.2**	**41.3**	**53.5**	**100**

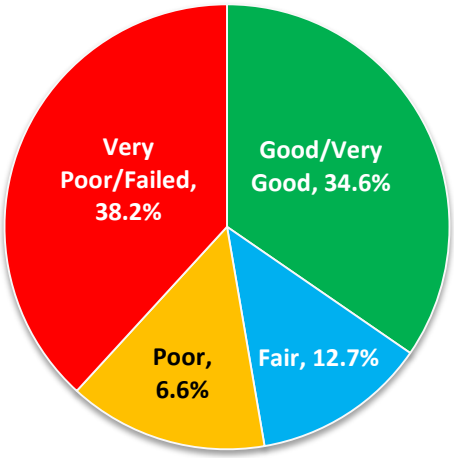


Figure 3: Pavement Condition Summary by Condition Categories (Entire Network by Area, 2017)

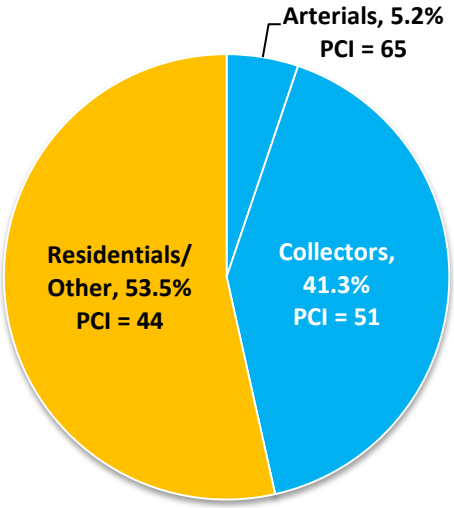


Figure 4: Pavement Condition Summary by Functional Classification (Entire Network by Area, 2017)

Maintenance and Rehabilitation Strategies

Historically, the City has utilized a program of Hot Mix Asphalt (HMA) overlays and chip seals as maintenance and rehabilitation strategies. Chip seals have usually been utilized as a preventive maintenance technique when the pavements are in “Good/Very Good” condition or above. As the pavement condition deteriorates, HMA overlays are applied. Digouts are typically used as preparation prior to overlays and chip seals as necessary. These pavement treatments are formalized in the maintenance and rehabilitation decision tree shown in Appendix B.

Figure 5 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 streets in “Good/Very Good” condition than to repair streets that have failed. By allowing pavements to deteriorate, streets that once cost $3.50 per square yard (SY) to chip seal may soon cost $23.50/SY to overlay and $94.00/SY to reconstruct. In other words, delays in repairs can result in construction costs increasing as much as 27 times. Appendix B shows the detailed decision tree and the unit costs associated with each type of treatment.

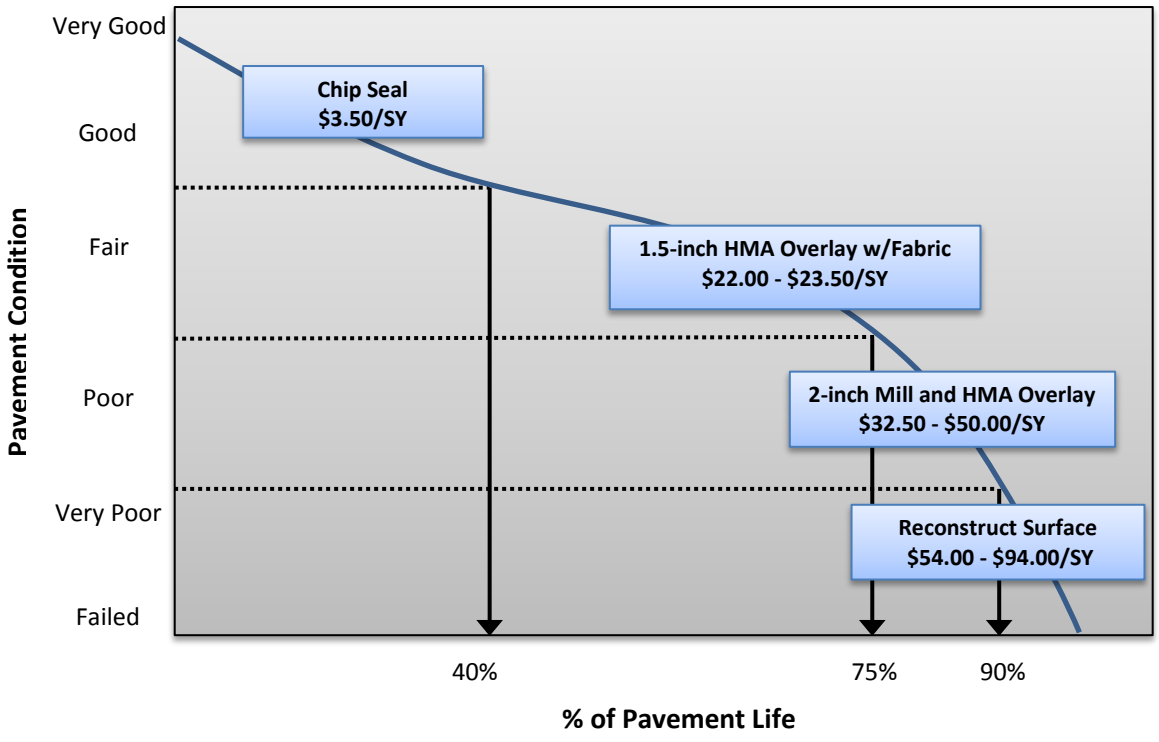


Figure 5: Costs of Maintaining Pavements over Time

Budget Needs

Based on the principle that it costs less to maintain streets in good condition than those in bad condition, the Streetsaver 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. By not addressing the maintenance needs, the quality of the street network will inevitably decline. In order to correct these deficiencies, a cost effective funding and maintenance strategy must be implemented.

The first step in developing a cost effective maintenance and rehabilitation strategy is to determine the maintenance "needs" of the pavement network. Using the StreetSaver budget needs module with an inflation rate of 3%, the maintenance needs over the next ten years were estimated at approximately $13.5 million for the entire network. If the City follows the strategy recommended by the program, the average network PCI will increase to 83 by 2026. If, however, no maintenance is applied over the next ten years, already distressed streets will continue to deteriorate, and the network PCI will drop to 30 by 2026. The results of the budget needs analysis are summarized in Table 3 below.

Table 3: Summary Results from Needs Analysis

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
PCI Treated	92	88	86	85	84	84	83	82	85	83	--
PCI Untreated	48	46	43	41	39	37	35	33	32	30	--
Needs ($Millions)	11.2	0.2	0.2	0.1	0	0.5	0.1	0.1	1.0	0.1	13.5

The results of the budget needs analysis represent the ideal funding strategy recommended by the StreetSaver PMP. Of the total $13.5 million in maintenance needs shown, approximately $1.5 million (11%) is earmarked for preventive maintenance, while the majority, $12.0 million (89%), is allocated for the more costly rehabilitation and reconstruction treatments.

It should be noted that the prediction models in StreetSaver may result in a more conservative PCI because the impacts of newer technologies, will not have been considered. For example, if new or improved materials are utilized, e.g. asphalt-binders with rubber or polymers, the actual performance of these treatments may be under-stated by the models. Routine or stop gap maintenance, such as patching for localized distresses will also have a positive impact on the PCI. Yet these are usually not entered or recorded in StreetSaver. However, as the City continues to assess the pavement conditions regularly, the prediction models will continue to improve.

Budget Scenarios

Having determined the maintenance needs of the street network, the next step in developing a cost effective maintenance and rehabilitation strategy is to conduct several "what-if" analyses using StreetSaver's budget scenario module. The program projects the effects of the different scenarios on pavement condition index (PCI), deferred maintenance (unfunded backlog), and average remaining service life of the network. By examining the effects on these indicators, the advantages and disadvantages of different funding levels and maintenance strategies become clear.

Scenario 1: City's Funding Level – Based on the existing funding level of $0.4 million per year for the next ten years, the deferred maintenance is predicted to increase from the current $11.2 million to $13.9 million by 2026 and the overall PCI will decrease to 46.

Scenario 2: Maintain PCI at 48 – This scenario aims to ensure that overall pavement network PCI does not drop below 48 over the next ten years. A total of $4.4 million is required, of which 95% will be allocated to rehabilitation treatments. In addition, the deferred maintenance will still increase to $13.4 million by 2026.

Scenario 3: Improve PCI to 53 – This scenario seeks to improve the overall pavement network PCI by five points to 53. A total of $5.7 million is required over the next ten years; the deferred maintenance will slightly increase to $11.5 million by 2026.

Scenario 4: Improve PCI to 65 – This scenario seeks to improve the overall pavement network to 65 over the next ten years. With a total of $8.9 million, the deferred maintenance will decrease to $7.2 million by 2026.

Note: The term "deferred maintenance" consists of pavement maintenance that is needed, but cannot be performed due to lack of funding. Shrinking budgets have forced many cities and counties to defer much needed pavement maintenance. By deferring maintenance, not only does the frequency of citizens' complaints about the condition of the network increase, but the cost to repair these streets rises as well. More detailed results of the budget needs and scenarios are included in Appendix C.

Appendix E contains maps which illustrate the results of each scenario. The maps highlight the color-coded condition category of each pavement section in 2026 for Scenarios 1 to 4. A map illustrating the current condition is also provided for comparison.

Scenario 1: City's Funding Level ($0.4 Million Annually)

This scenario determines the impacts of the existing funding level of $0.4 million per year for the next ten years. The network PCI will decrease to 46 by 2026, and approximately half of the network will be in "Good/Very Good" condition category. The deferred maintenance will increase from $11.2 million to $13.9 million by 2026. The projected remaining service life of the overall network will remain at 14 years. Appendix D provides a list of candidate sections for treatment for this scenario.

Table 4: Summary Results for Scenario 1

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Budget ($ Millions)	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	4.0
Deferred Maint. ($ Millions)	10.8	11.0	11.3	11.8	11.9	12.0	12.2	13.1	13.3	13.9	--
PCI	50	49	48	47	47	46	46	47	47	46	--
RSL (Years)	13	13	13	13	13	13	14	14	14	14	--

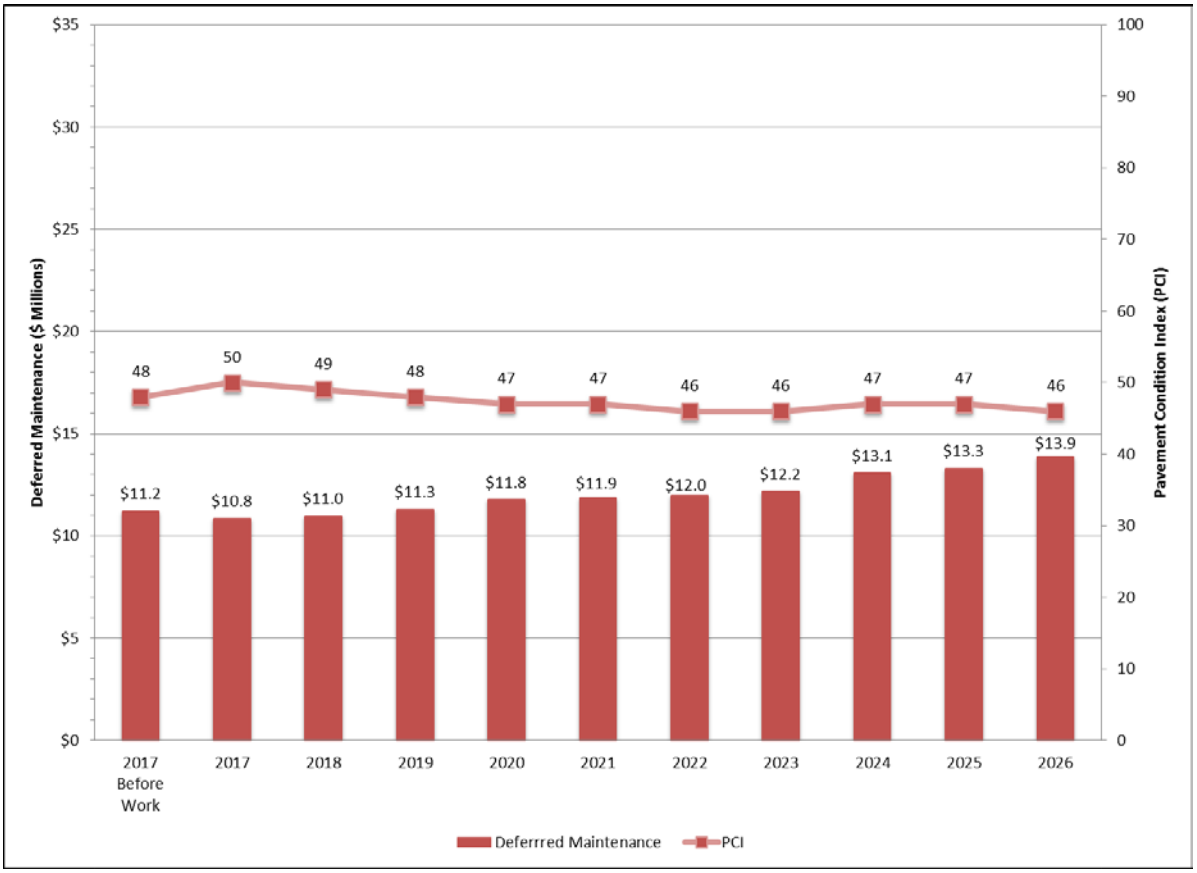


Figure 6: PCI vs Deferred Maintenance for Scenario 1

Scenario 2: Maintain PCI at 48 ($4.4 Million Total)

This scenario aims to ensure that overall pavement network PCI does not drop below 48 over the next ten years. A total of $4.4 million is required (which is very similar to Scenario 1), and the amount allocated to preventive maintenance is approximately 5%. The results of this scenario indicate that half the pavements will be in "Good/Very Good" condition category. The deferred maintenance will increase to $13.4 million by 2026. The remaining service life (RSL) of the overall network is projected to be 14 years.

Table 5: Summary Results for Scenario 2

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Budget ($ Millions)	0.4	0.4	0.4	0.5	0.5	0.6	0.4	0.3	0.3	0.4	4.4
Deferred Maint. ($ Millions)	10.8	11.0	11.3	11.6	11.6	11.5	11.6	12.5	12.8	13.4	--
PCI	50	49	48	48	48	48	48	48	48	48	--
RSL (Years)	13	13	13	14	14	14	14	14	14	14	--

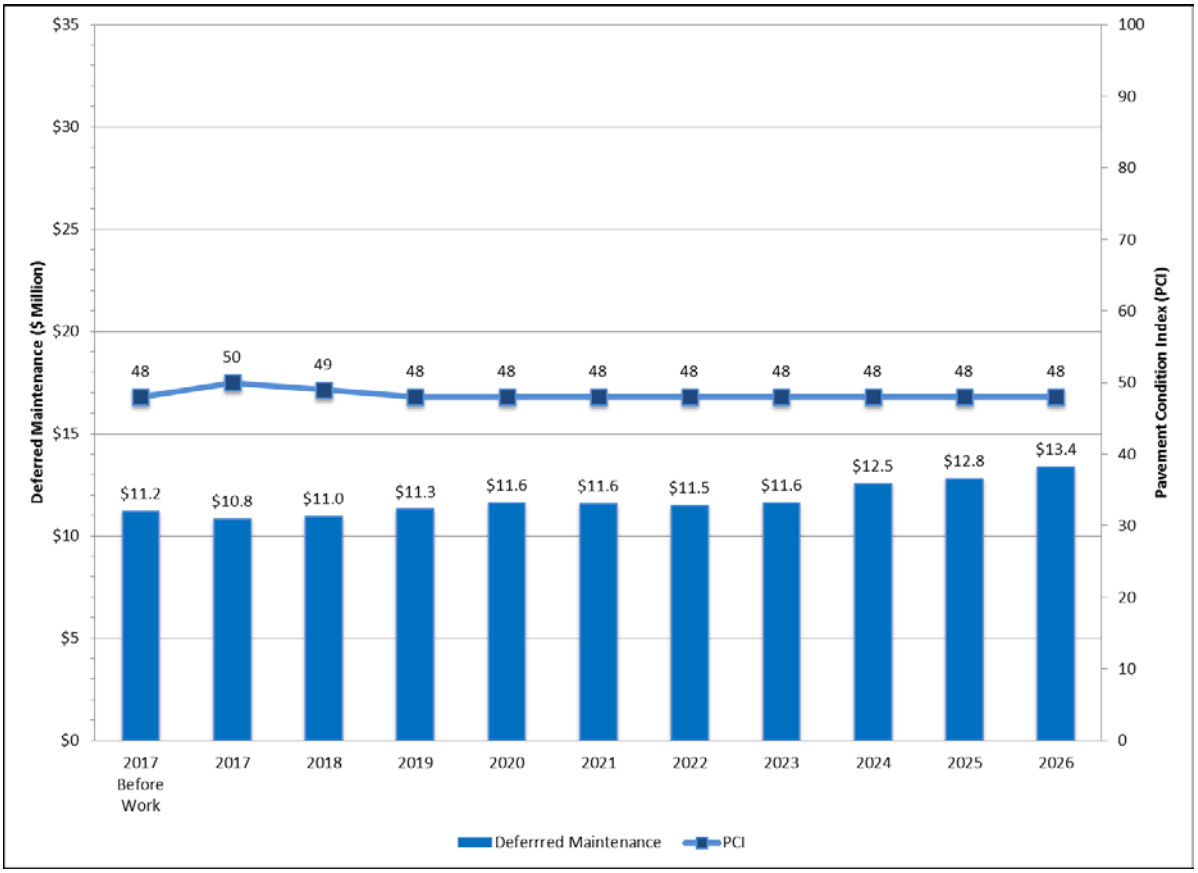


Figure 7: PCI vs Deferred Maintenance for Scenario 2

Scenario 3: Improve PCI to 53 ($5.7 Million Total)

This scenario seeks to improve the overall PCI to 53 over the next five years and maintain it at the same level. A total of $5.7 million is needed; of which 94% will be allocated to rehabilitation treatments. By 2026, approximately two-thirds of the pavement network will be in "Good/Very Good" or "Fair" condition categories. The deferred maintenance will slightly increase to $11.5 million by 2026 and the remaining service life (RSL) is projected to be 16 years.

Table 6: Summary Results for Scenario 3

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Budget ($ Millions)	0.4	0.6	0.9	0.9	0.9	0.3	0.3	0.3	0.4	0.4	5.7
Deferred Maint. ($ Millions)	10.8	10.8	10.5	10.4	10.0	10.1	10.3	11.2	11.3	11.5	--
PCI	50	50	51	52	53	53	53	53	53	53	--
RSL (Years)	13	13	14	15	16	16	16	16	16	16	--

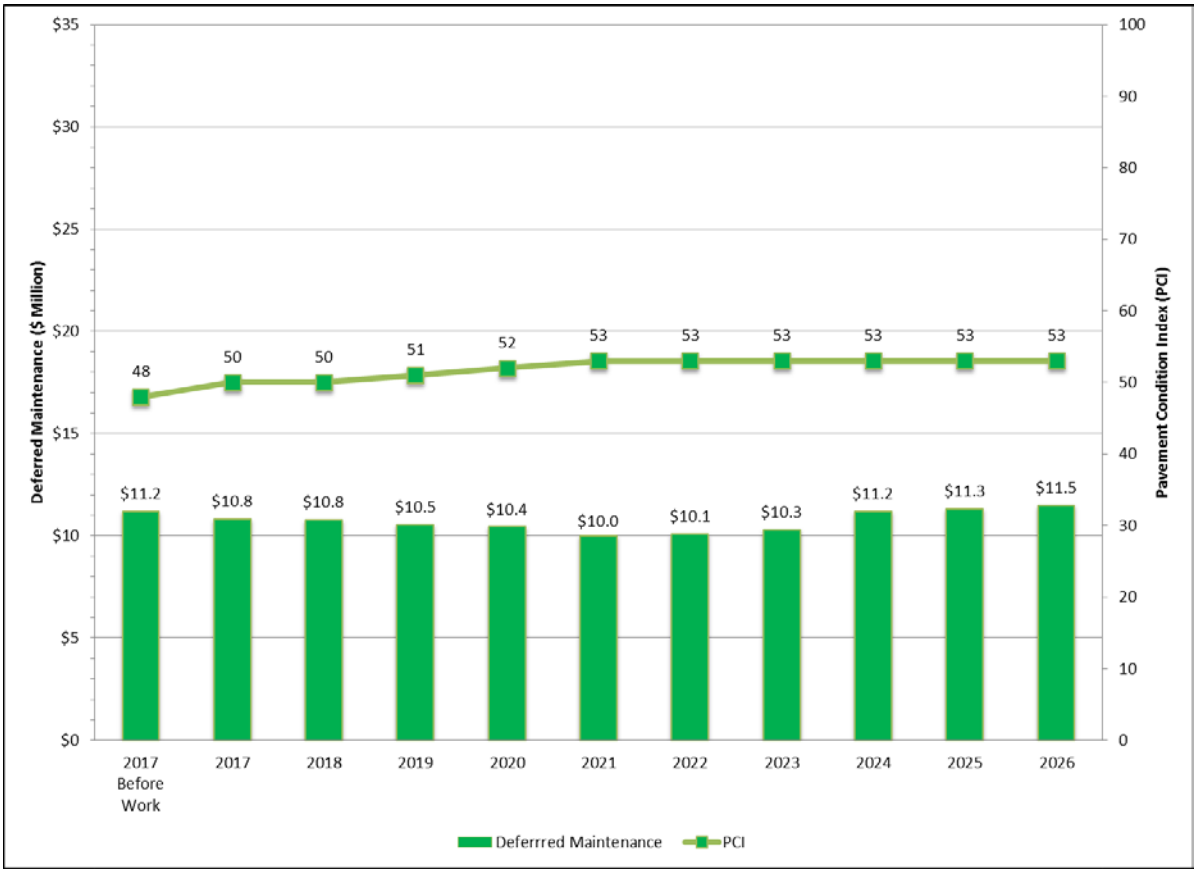


Figure 8: PCI vs Deferred Maintenance for Scenario 3

Scenario 4: Improve PCI to 65 ($8.9 Million Total)

This scenario seeks to improve the overall PCI to 65 over the next ten years. With a total of $8.9 million, three-quarters of the network will be in "Good/Very Good" or "Fair" condition categories. The deferred maintenance will decease to $7.2 million by 2026 and the remaining service life (RSL) is projected to be 21 years.

Table 7: Summary Results for Scenario 4

Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Budget ($ Millions)	0.6	0.9	1.0	0.9	0.9	0.8	0.9	1.0	1.0	0.9	8.9
Deferred Maint. ($ Millions)	10.6	10.3	9.9	9.7	9.3	8.8	8.6	8.0	7.6	7.2	--
PCI	51	52	53	54	55	57	59	61	63	65	--
RSL (Years)	13	14	15	16	17	18	18	19	20	21	--

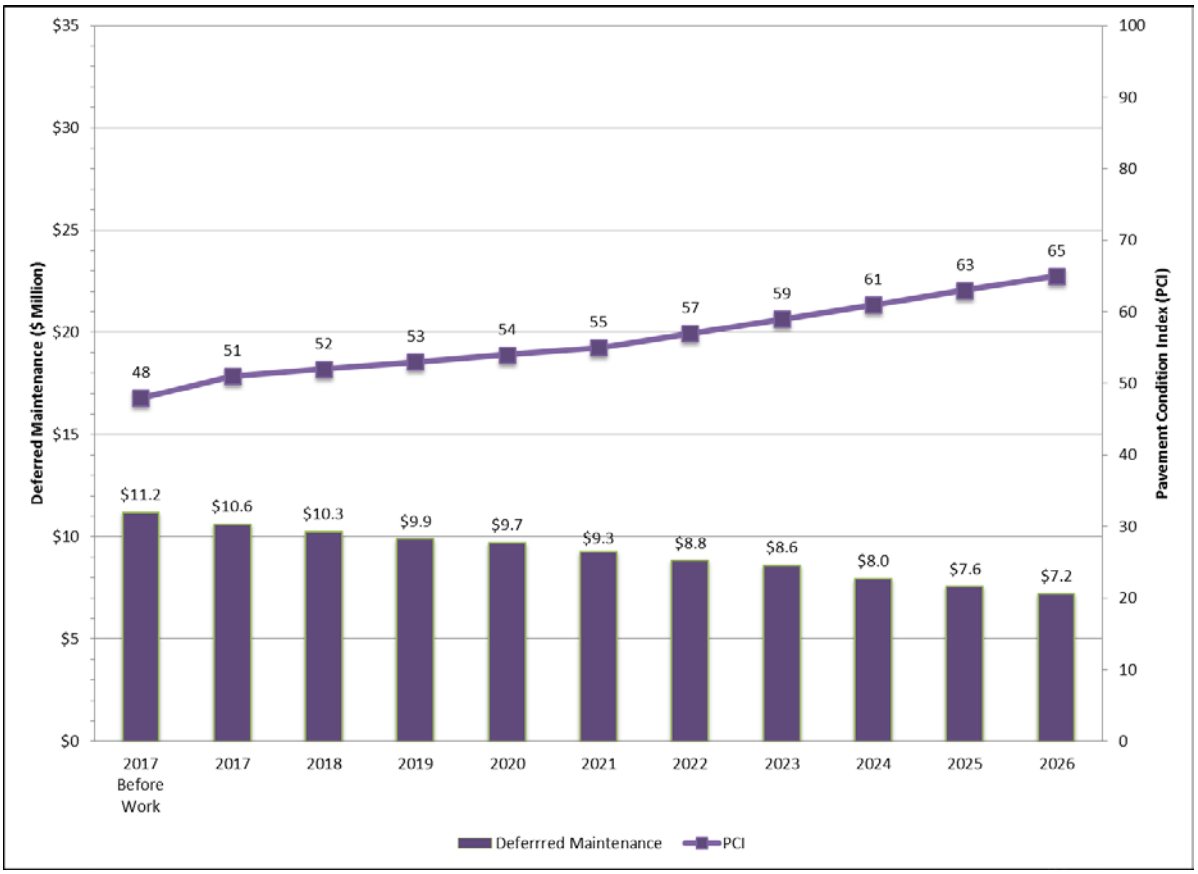


Figure 9: PCI vs Deferred Maintenance for Scenario 4

Scenario Comparisons

The following two figures graphically illustrate the annual changes in PCI and deferred maintenance for each scenario. Figure 10 below illustrates the changes in PCI over time for Scenarios 1 to 4. The PCI will decrease to 46, be maintained at 48 and improve to 53 and 65 for each scenario, respectively.

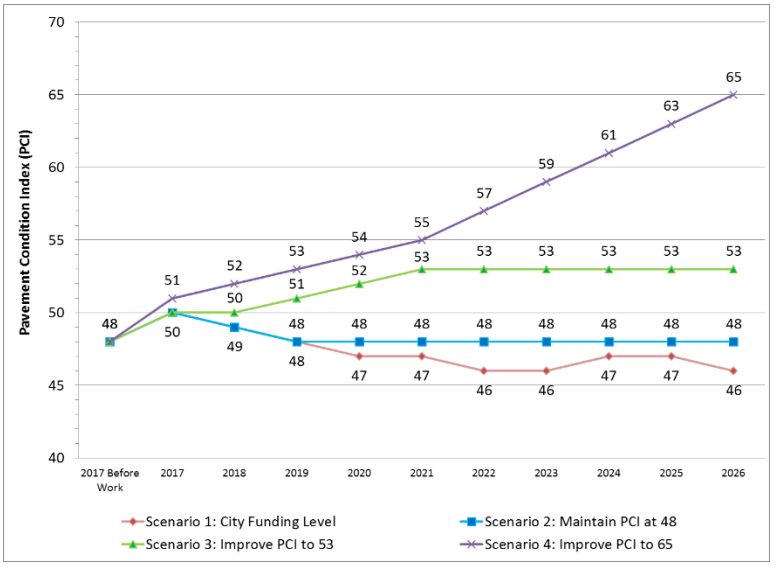


Figure 10: Annual Pavement Condition Index by Scenarios 1 to 4

Figure 11 illustrates the change in deferred maintenance over time for the each budget scenario analyzed. Scenarios 1 to 3 will all see an increase in the deferred maintenance by 2026. In Scenario 4, the deferred maintenance will decrease to $7.2 million by 2026.

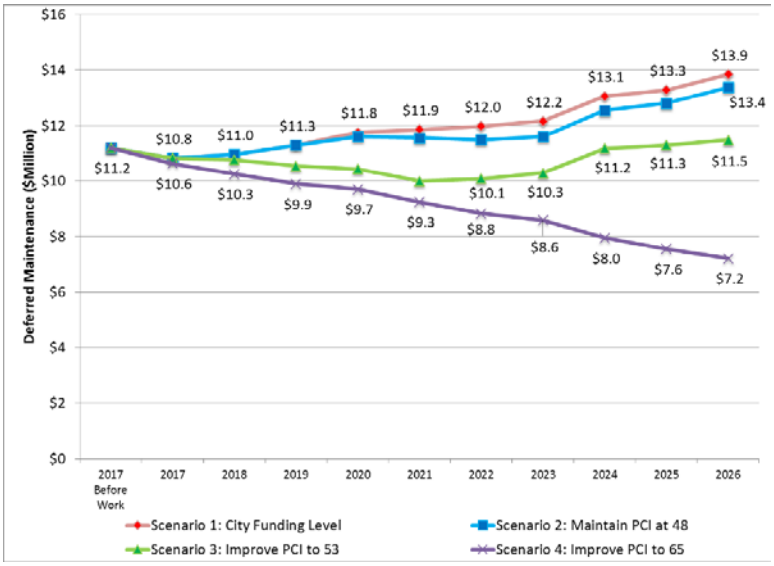


Figure 11: Annual Deferred Maintenance by Scenarios 1 to 4

Figure 12 below illustrates the pavement condition changes under various scenarios. Currently, a third of the network is in "Good/Very Good" condition and slightly over half in "Poor" or "Very Poor/Failed" condition. For all scenarios 1 to 4, the percentage of pavement in "Good/Very Good" condition will increase to 48.1%, 50%, 56%, and 70.2%, respectively.

However, under funding Scenarios 1 to 3, there will still be more than one third of the network in the "Poor/Very Poor" category. Obviously, Scenario 4 will have the most positive impact, but 21.6 percent will still be in this category.

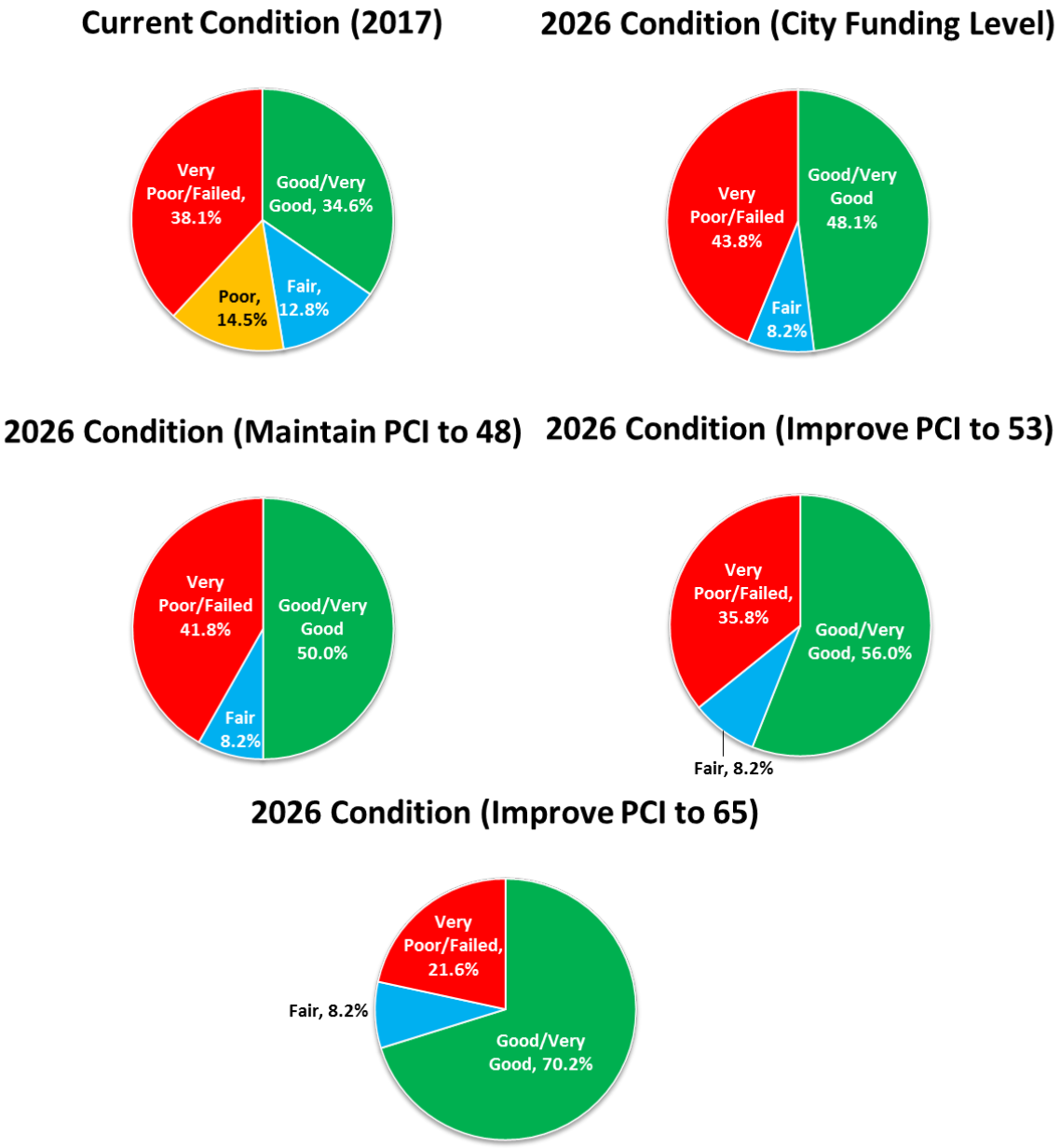


Figure 12: Pavement Condition Changes under Scenarios 1 to 4

Discussion

To summarize, the City Willits has a substantial investment of $23.9 million in the street network. Overall, the City's network is in "Poor" condition with a network PCI of 48. Of the 19.43 centerline miles of City-maintained streets, approximately one third are currently in "Good/Very Good" condition with more than half in "Poor" or "Very Poor/Failed" condition.

The analyses indicate that the City needs to spend approximately $13.5 million in pavement maintenance and rehabilitation over the next ten years to essentially repair all streets. By doing so, streets then can be maintained in good condition with on-going preventive maintenance. This will save money by avoiding reaching the level of major rehabilitation (such as reconstruction).

Recommendations

A. Pavement Budget

The recommended scenario for the City of Willits is Scenario 3 (Improve PCI to 53) with a budget of $5.7 million over the next ten years. This will allow City to increase the percentage of streets in good condition and help slow down the increase in deferred maintenance.

B. Pavement Maintenance Strategies

The City's pavement maintenance strategies are primarily chip seals and overlays. Since approximately half of pavements are in "Good/Very Good" to "Fair" condition, it is important to preserve good pavements. Crack sealing is relatively inexpensive and can keep moisture out of pavements and prevent the underlying aggregate base from premature failures. Life-extending surface seals are also cost-effective for pavements currently in "Fair" to "Good/Very Good" condition.

NCE recommends that the City continue with well-funded preventive maintenance program. This is necessary to at least maintain the portion of the street network that is in "Good/ Very Good" condition and avoid increasing the deferred maintenance even more. In addition, the City should consider strategies such as recycling to achieve more cost savings for the overlay program.

C. Re-inspection Strategies

In order to continue monitoring the street network, and make appropriate decisions, it is recommended that arterial and collector streets be inspected every two years and residential streets every four to five years.

D. Maintenance and Rehabilitation Decision Tree

The maintenance and rehabilitation treatment strategies and associated unit costs should be reviewed and updated annually to reflect new construction techniques/costs so that the budget analysis results can continue to be reliable and accurate.

A significant unknown fact is the future cost of rehabilitation; with the possible volatility in oil prices, we recommend that City carefully monitor future construction costs and be ready to adapt to large increases if necessary.

E. Next Steps

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

- Maintain a preventive maintenance strategy.
- Pursue additional pavement funding sources to ensure that Scenario 3 is feasible.

APPENDIX A

Section Description Inventory

Section Description Inventory Report

This report lists a variety of section description information for each of the City's pavement sections. It lists the street and section identifiers, limits, functional class, surface type, number of lanes, lengths, widths, Inspected 2017 PCI, and area identifier.

All of the City's pavement sections are included in the report. The report is sorted alphabetically by Street Name and Section ID. The field descriptions in this report are listed below:

COLUMN	DESCRIPTION
Street ID	Street Identification - A code up to ten characters/digits to identify the street. Generally, the street name is truncated to six characters. The Street ID should be unique for each street.
Section ID	Section Identification - A code up to ten characters/digits to identify the section number. The Section ID must be unique for each section of one street.
Street Name	Street Name - The name of the street as indicated by street signs in the field.
Begin Location	Beginning limit of the section.
End Location	Ending limit of the section.
Lanes	Number of travel lanes.
Length (ft)	Length of the section in feet.
Width (ft)	Average width of the section in feet.
Area (ft^2)	Area of section in square feet.
Surface Type (ST)	Surface Type (A = AC Pavement, O = AC Overlay of AC Pavement, G = Gravel).
Functional Class (FC)	Functional Classification (A = Arterial, C = Collector, R = Residential, O = Other).
PCI Date	The last inspection date or rehabilitation date.
PCI	Average PCI for the section. The value is projected for 2017 and is based on the last calculated PCI (i.e. from inspection or maintenance data).

Section Description Inventory
Sorted by Street Name

City of Willits
PCI Listing Report By Street Name

Street ID	Section ID	Street Name	Begin Location	End Location	Lanes	FC	Length (ft)	Width (ft)	Area (ft^2)	Surface Type	PCI Date	PCI
Alamed	01	Alameda Avenue	Main Street	Central Street	2	O	630	23	14,490	O	1/31/2017	85
Alderct	01	Alder Court	Alder Lane	Dead End	2	R	530	30	15,900	A	2/1/2017	36
Alder	01	Alder Lane	West End	Main Street	2	O	850	37	31,450	A	2/1/2017	24
Alice	01	Alice Drive	Margie Drive	Nancy Lane	2	O	700	33	23,100	A	2/1/2017	19
Baecht	01	Baechtel Road	Main Street	Main Street	2	C	4,800	34	163,200	O	2/1/2017	51
Bitten	01	Bittenbender Lane	End	Main Street	2	O	500	13	6,500	A	1/31/2017	12
Bloss	05	Blosser Lane	South End (City Limits)	113 FT S/O RR Tracks	2	C	1,107	37	40,959	O	2/1/2017	7
Bloss	10	Blosser Lane	113 FT S/O RR Tracks	Franklin Avenue	2	C	523	39	20,397	A	2/1/2017	73
Bloss	15	Blosser Lane	Franklin Avenue	HWY 20	2	C	730	39	28,470	O	2/1/2017	9
Bonnie	01	Bonnie Lane	Nancy Lane	North End	2	O	1,250	33	41,250	A	2/1/2017	60
Bosca	01	Boscabelle Avenue	East Valley Street	East San Francisco Avenue	2	O	680	27	18,360	O	1/31/2017	8
Brooks	01	Brookside Drive	West Mendocino Avenue	Hawthorne Lane	2	O	450	32	14,400	O	1/31/2017	1
Bush	01	Bush Street	Coast Street	McKinley Street	2	O	250	35	8,750	O	1/31/2017	56
Calif	01	California Street	Main Street	Penn Street	2	O	480	38	18,240	O	1/31/2017	15
Campln	01	Camp Lane	Spruce Street	End	2	O	200	19	3,800	O	1/31/2017	16
Castee	01	Casteel Lane	Main Street	Williams Street	2	O	250	22	5,500	A	1/31/2017	10
Cather	01	Catherine Lane	Pine Avenue	Wood Street	2	O	450	12	5,400	A	1/31/2017	5
Cather	02	Catherine Lane	Wood Street	West Mendocino Avenue	1	O	200	12	2,400	G		
Centra	01	Central Street	South Street	East San Francisco Avenue	2	O	1,170	37	43,290	A	1/31/2017	84
Coast	01	Coast Street	Hwy 20	Pine Avenue	2	C	2,180	30	65,400	O	1/31/2017	15
Creek	01	Creekside Drive	East Valley Street	South Lenore Street	2	O	1,050	35	36,750	O	1/31/2017	8
EBarb	01	East Barbara Lane	Main Street	Central Street	1	O	510	12	6,120	A	1/31/2017	15
EBarb	02	East Barbara Lane	Central Street	Railroad Avenue	2	O	620	20	12,400	A	1/31/2017	95
EComm	01	East Commercial Street	Main Street	1400 feet East	2	A	1,400	54	75,600	O	1/31/2017	62
EComm	02	East Commercial Street	1400 feet East of Main Street	Broaddus Creek Bridge	2	C	500	54	27,000	O	1/31/2017	81
EComm	05	East Commercial Street	Broaddus Creek Bridge	312 ft E/O Broaddus Creek Bridge	2	C	312	66	20,592	O	1/31/2017	40
EComm	07	East Commercial Street	312 ft E/O Broaddus Creek Bridge	City Limits	2	C	1,588	54	85,752	A	1/31/2017	70
EHill	01	East Hill Road	Baechtel Road	Bridge at Haehl Creek	2	C	600	32	19,200	O	2/1/2017	96
EHill	02	East Hill Road	Bridge at Haehl Creek	East End (City Limits)	2	C	1,600	30	48,000	O	2/1/2017	98
EMendo	01	East Mendocino Avenue	Main Street	Madden Lane	2	O	830	25	20,750	A	1/31/2017	18
EOak	01	East Oak Avenue	Main Street	Railroad Avenue	2	O	1,150	37	42,550	O	1/31/2017	33
ESan	01	East San Francisco Ave	Main Street	east end	2	O	1,900	37	70,300	O	1/31/2017	66
EVally	05	East Valley Street	MAIN ST	827 FT W/O City Limit	2	C	2,060	40	82,400	O	1/31/2017	73
EVally	10	East Valley Street	827 FT W/O City Limit	East End (City Limit)	2	C	827	23	19,021	O	1/31/2017	62
EVan	01	East Van Lane	Main Street	Humboldt Street	1	O	290	12	3,480	A	1/31/2017	78
EVan	02	East Van Lane	Marin Street	Madden Lane	2	O	250	16	4,000	A	1/31/2017	19
EasySt	01	Easy Street	Redwood Avenue	West Mendocino Avenue	2	O	310	36	11,160	O	1/31/2017	19
Elm	01	Elm Lane	Muir Canyon Road	Alder Lane	2	O	820	33	27,060	O	2/1/2017	8
EvaClaire	01	Eva Claire Street	Holly Street	Dead End	2	R	560	22	12,320	A	2/1/2017	17
Frank	01	Franklin Avenue	Blosser Lane	Main Street	2	C	2,380	29	69,020	O	2/1/2017	16
Gregor	01	Gregory Lane	West End	Main Street	2	O	280	32	8,960	A	2/1/2017	28
Grove	01	Grove Street	Haehl Creek Drive (loop)	Haehl Creek Drive (loop)	2	R	1,430	32	45,760	A	2/1/2017	75
Haehlct	01	Haehl Creek Court	Haehl Creek Drive	Dead End	2	R	850	32	27,200	A	2/1/2017	80
Haehldr	01	Haehl Creek Drive	East Hill Road	Haehl Creek Court	2	R	1,950	32	62,400	A	2/1/2017	86

FC (Functional Classification): A (Arterial), C (Collector), R (Residential/Local), O (Other)
Surface Type: A (AC), O (AC/AC), G (Gravel)

Street ID	Section ID	Street Name	Begin Location	End Location	Lanes	FC	Length (ft)	Width (ft)	Area (ft^2)	Surface Type	PCI Date	PCI
Harmon	01	Harmon Lane	Franklin Avenue	Hwy 20	2	O	170	11	1,870	O	2/1/2017	23
Harms	01	Harms Lane	North Street	Coast Street	2	O	780	21	16,380	O	1/31/2017	41
HawCt	01	Hawthorne Court	Hawthorne Lane	End	2	O	200	25	5,000	O	1/31/2017	13
Hawln	01	Hawthorne Lane	Exley Lane	Brookside Drive	2	O	400	32	12,800	O	1/31/2017	19
Hazel	05	Hazel Street	Main Street	Poplar Street	2	O	653	32	20,896	O	2/1/2017	22
Hazel	10	Hazel Street	Poplar Street	Locust Street	2	O	817	38	31,046	O	2/1/2017	95
Hellum	01	Hellums Lane	End	Main Street	2	O	400	12	4,800	A	1/31/2017	22
Hillsi	01	Hillside Drive	Mill Creek Drive	End	2	O	450	32	14,400	A	1/31/2017	9
Holly	01	Holly Street	Locust Street	Main Street	2	C	1,480	39	57,720	O	2/1/2017	90
Humbol	02	Humboldt Street	East Valley Street	East Commercial St	2	C	1,124	37	41,588	O	4/3/2017	95
Humbol	03	Humboldt Street	East Commercial Street	North End	2	C	526	36	18,936	O	4/3/2017	7
Laurel	01	Laurel Street	West End	Maple Street	2	O	670	16	10,720	O	1/31/2017	13
Laurel	02	Laurel Street	Maple Street	North Street	2	O	400	30	12,000	O	1/31/2017	10
Laurel	03	Laurel Street	North Street	Mill Street	2	O	410	30	12,300	O	1/31/2017	50
Lincol	01	Lincoln Way	Brookside Drive	End	2	O	150	32	4,800	O	1/31/2017	25
Locust	01	Locust Street	Holly Street	Walnut Street	2	C	1,150	35	40,250	O	2/1/2017	17
Madden	01	Madden Lane	East Van Lane	Pearl Street	2	O	460	31	14,260	A	1/31/2017	92
Madden	02	Madden Lane	Pearl Street	East Valley Street	2	O	400	31	12,400	O	1/31/2017	24
Madron	01	Madrone Street	Magnolia Avenue	Main Street	2	O	800	46	36,800	O	2/1/2017	17
Magnol	01	Magnolia Avenue	Holly Street	Walnut Street	2	O	1,300	36	46,800	O	2/1/2017	95
Manor	01	Manor Way	west end	Main Street	2	O	450	32	14,400	A	2/1/2017	8
Manzan	01	Manzanita Avenue	Holly Street	Hazel Street	2	O	440	18	7,920	G		
Maple	01	Maple Street	Pine Street	Redwood Avenue	2	O	360	36	12,960	O	2/1/2017	34
Maple	011	Maple Street	South End	Pine Street	2	O	400	36	14,400	O	2/1/2017	5
Maple	02	Maple Street	East Mendocino Avenue	North End	2	O	400	40	16,000	O	1/31/2017	21
Margie	01	Margie Drive	Monica Lane	Bonnie Lane	2	O	1,800	34	61,200	A	2/1/2017	38
Marin	01	Marin Street	East Van Lane	State Street	2	O	520	35	18,200	O	1/31/2017	17
McKin	01	McKinley Street	Bush Street	West Valley Street	2	O	920	36	33,120	O	1/31/2017	12
Mcrkct	01	Mill Creek Court	Northbrook Way	End	2	O	200	36	7,200	A	1/31/2017	66
MCreek	05	Mill Creek Drive	Mill Creek Court	Hillside Drive	2	O	1,800	36	64,800	A	1/31/2017	70
MCreek	10	Mill Creek Drive	Hillside Drive	West Commercial Street	2	O	560	36	20,160	O	1/31/2017	73
Mill	01	Mill Street	Coast Street	Pine Avenue	2	C	1,180	37	43,660	O	1/31/2017	83
Monica	01	Monica Lane	Main Street	Margie Drive	2	O	140	34	4,760	A	2/1/2017	25
Monroe	01	Monroe Street	Main Street	Central Street	2	O	570	37	21,090	O	1/31/2017	14
Muir	01	Muir Lane	Wood Street	West Commercial Street	1	O	600	20	12,000	A	2/1/2017	12
Nancy	01	Nancy Lane	Margie Drive	Bonnie Lane	2	O	600	33	19,800	A	2/1/2017	22
NLenor	02	North Lenore Street	1000 FT. N/E. Commercial Street	Sewer Plant Road	2	O	850	21	17,850	O	1/31/2017	0
NLenor	01	North Lenore Street	East Commercial Street	1000 FT. N/E. Commercial Street	2	O	1,000	21	21,000	O	1/31/2017	24
North	01A	North Street	South End	West Mendocino Street	2	C	1,566	37	57,942	O	1/31/2017	18
North	01B	North Street	West Mendocino Street	West Commercial Street	2	C	404	37	14,948	O	1/31/2017	83
Nbrook	01	Northbrook Way	Mill Creek Drive	Mill Creek Drive	2	O	1,300	33	42,900	A	1/31/2017	74
Pearl	01	Pearl Street	Humboldt Street	Madden Lane	2	O	520	19	9,880	A	1/31/2017	17
Penn	01	Penn Street	California Street	East Valley Street	2	O	250	37	9,250	O	1/31/2017	12
Pine	05	Pine Street	Spruce Street	Maple Street	2	C	360	37	13,320	O	1/31/2017	14

FC (Functional Classification): A (Arterial), C (Collector), R (Residential/Local), O (Other)
Surface Type: A (AC), O (AC/AC), G (Gravel)

Street ID	Section ID	Street Name	Begin Location	End Location	Lanes	FC	Length (ft)	Width (ft)	Area (ft^2)	Surface Type	PCI Date	PCI
Pine	10	Pine Street	Maple Street	Coast Street	2	C	1,140	37	42,180	O	1/31/2017	64
Poplar	01	Poplar Avenue	Furlong Road	Walnut Street	2	O	1,700	46	78,200	O	2/1/2017	29
Rail	01	Railroad Avenue	East Valley Street	East San Francisco Avenue	2	C	750	22	16,500	O	1/31/2017	50
Rail	02A	Railroad Avenue	East San Francisco Avenue	E Oak Street	2	C	830	32	26,560	A	1/31/2017	62
Rail	02B	Railroad Avenue	E Oak Street	South End (S/Baechtel Creek)	2	C	1,100	32	35,200	O	1/31/2017	62
Raymnd	01	Raymond Lane	Coast Street	Pine Avenue	2	O	1,250	18	22,500	O	1/31/2017	69
Redwd	05	Redwood Avenue	West End	Easy Street	2	O	697	34	23,698	O	1/31/2017	77
Redwd	10A	Redwood Avenue	North Street	Spruce Street	2	O	696	34	23,664	O	1/31/2017	72
Redwd	10B	Redwood Avenue	Spruce Street	Easy Street	2	O	350	34	11,900	O	1/31/2017	72
Robert	01	Robert Drive	Blosser Lane	End West	2	C	890	41	49,816	A	2/1/2017	83
Sandy	01	Sandy Lane	Baechtel Road	Bonnie Lane	2	O	570	33	18,810	A	2/1/2017	60
Sanhed	01	Sanhedrin Circle	End South	East Hill Road	2	C	762	25	19,050	A	2/1/2017	83
Schnei	01	Schnieder Lane	West Oak Street	State Route 20	2	O	260	11	2,860	O	2/1/2017	12
School	01	School Street	Pine Avenue	West Commercial Street	2	C	1,060	34	36,040	O	1/31/2017	74
Sequrd	10	Sequoia Road	Redwood Avenue	S End	2	R	450	22	9,900	A	1/31/2017	12
SPlant	01	Sewer Plant Road	North Lenore Street	East End (Sewer Plant)	2	O	1,230	16	19,680	A	1/31/2017	80
Shell	01	Shell Lane	Baechtel Road	Railroad Tracks	2	O	1,000	28	28,000	A	2/1/2017	47
Sherwd	01	Sherwood Road	City Limits	Main Street	2	A	2,100	24	50,400	O	1/31/2017	57
SCoast	01	South Coast Street	Coast Street	Bush Street	2	O	200	17	3,400	A	1/31/2017	15
SLenor	05	South Lenore Avenue	East Commercial Street	East Valley Street	2	O	1,080	38	41,040	O	1/31/2017	63
SLenor	10	South Lenore Avenue	East Valley Street	East San Francisco Avenue	2	O	730	27	19,710	O	1/31/2017	3
South	01	South Street	Main Street	Central Street	2	O	450	36	16,200	A	1/31/2017	66
Spruce	01	Spruce Street	Pine Avenue	North End (Brookside School)	2	O	1,000	35	35,000	O	1/31/2017	16
State	01	State Street	Main Street	East End	2	O	900	40	36,000	O	1/31/2017	7
Tuttle	01	Tuttle Lane	Humboldt Street	Madden Lane	2	O	520	15	7,800	A	1/31/2017	4
Walnut	01	Walnut Street	Main Street	Magnolia	2	C	600	35	21,000	O	2/1/2017	95
Walnut	02	Walnut Street	Magnolia	Locust Street	2	C	700	35	24,500	O	2/1/2017	8
WComme	01	West Commercial Street	North Street	Main Street	2	A	930	54	50,220	O	1/31/2017	82
Wfrank	05	West Franklin Avenue	Blosser Lane	End West	2	C	700	44	41,862	O	2/1/2017	53
Wmendo	01	West Mendocino Avenue	Hawthorne Lane	Main Street	2	C	3,000	37	111,000	O	1/31/2017	17
WOak	01	West Oak Street	west end	Main Street	2	O	650	36	23,400	O	1/31/2017	95
WSan	01	West San Francisco Ave	Coast Street	McKinley Street	2	O	250	30	7,500	O	1/31/2017	63
WVally	01	West Valley Street	Coast Street	Main Street	2	O	420	37	15,540	O	1/31/2017	89
WVanLn	02	West Van Lane	School Street	Main Street	1	O	420	11	4,620	A	1/31/2017	2
WVanln	01	West Van Lane	North Street	School Street	1	O	490	12	5,880	G		
Willia	01	Williams Street	Casteel Lane	North End	2	O	500	17	8,500	A	1/31/2017	15
Willow	01	Willow Lane	Baechtel Road	End of street	2	O	450	24	10,800	A	2/1/2017	54
WoodSt	05	Wood Street	North Street	School Street	2	O	600	22	13,200	O	1/31/2017	11
WoodSt	10	Wood Street	School Street	Main Street	2	O	370	22	8,140	O	1/31/2017	73

FC (Functional Classification): A (Arterial), C (Collector), R (Residential/Local), O (Other)
Surface Type: A (AC), O (AC/AC), G (Gravel)

Section Description Inventory
Sorted by Descending PCI

City of Willits
PCI Listing Report By Descending PCI

Street ID	Section ID	Street Name	Begin Location	End Location	Lanes	FC	Length (ft)	Width (ft)	Area (ft^2)	Surface Type	PCI Date	PCI
EHill	02	East Hill Road	Bridge at Haehl Creek	East End (City Limits)	2	C	1,600	30	48,000	O	2/1/2017	98
EHill	01	East Hill Road	Baechtel Road	Bridge at Haehl Creek	2	C	600	32	19,200	O	2/1/2017	96
Humbol	02	Humboldt Street	East Valley Street	East Commercial St	2	C	1,124	37	41,588	O	4/3/2017	95
Hazel	10	Hazel Street	Poplar Street	Locust Street	2	O	817	38	31,046	O	2/1/2017	95
Magnol	01	Magnolia Avenue	Holly Street	Walnut Street	2	O	1,300	36	46,800	O	2/1/2017	95
Walnut	01	Walnut Street	Main Street	Magnolia	2	C	600	35	21,000	O	2/1/2017	95
EBarb	02	East Barbara Lane	Central Street	Railroad Avenue	2	O	620	20	12,400	A	1/31/2017	95
WOak	01	West Oak Street	west end	Main Street	2	O	650	36	23,400	O	1/31/2017	95
Madden	01	Madden Lane	East Van Lane	Pearl Street	2	O	460	31	14,260	A	1/31/2017	92
Holly	01	Holly Street	Locust Street	Main Street	2	C	1,480	39	57,720	O	2/1/2017	90
WVally	01	West Valley Street	Coast Street	Main Street	2	O	420	37	15,540	O	1/31/2017	89
Haehldr	01	Haehl Creek Drive	East Hill Road	Haehl Creek Court	2	R	1,950	32	62,400	A	2/1/2017	86
Alamed	01	Alameda Avenue	Main Street	Central Street	2	O	630	23	14,490	O	1/31/2017	85
Centra	01	Central Street	South Street	East San Francisco Avenue	2	O	1,170	37	43,290	A	1/31/2017	84
Robert	01	Robert Drive	Blosser Lane	End West	2	C	890	41	49,816	A	2/1/2017	83
Sanhed	01	Sanhedrin Circle	End South	East Hill Road	2	C	762	25	19,050	A	2/1/2017	83
Mill	01	Mill Street	Coast Street	Pine Avenue	2	C	1,180	37	43,660	O	1/31/2017	83
North	01B	North Street	West Mendocino Street	West Commercial Street	2	C	404	37	14,948	O	1/31/2017	83
WComme	01	West Commercial Street	North Street	Main Street	2	A	930	54	50,220	O	1/31/2017	82
EComm	02	East Commercial Street	1400 feet East of Main Street	Broaddus Creek Bridge	2	C	500	54	27,000	O	1/31/2017	81
Haehlct	01	Haehl Creek Court	Haehl Creek Drive	Dead End	2	R	850	32	27,200	A	2/1/2017	80
SPlant	01	Sewer Plant Road	North Lenore Street	East End (Sewer Plant)	2	O	1,230	16	19,680	A	1/31/2017	80
EVan	01	East Van Lane	Main Street	Humboldt Street	1	O	290	12	3,480	A	1/31/2017	78
Redwd	05	Redwood Avenue	West End	Easy Street	2	O	697	34	23,698	O	1/31/2017	77
Grove	01	Grove Street	Haehl Creek Drive (loop)	Haehl Creek Drive(loop)	2	R	1,430	32	45,760	A	2/1/2017	75
Nbrook	01	Northbrook Way	Mill Creek Drive	Mill Creek Drive	2	O	1,300	33	42,900	A	1/31/2017	74
School	01	School Street	Pine Avenue	West Commercial Street	2	C	1,060	34	36,040	O	1/31/2017	74
Bloss	10	Blosser Lane	113 FT S/O RR Tracks	Franklin Avenue	2	C	523	39	20,397	A	2/1/2017	73
EVally	05	East Valley Street	MAIN ST	827 FT W/O City Limit	2	C	2,060	40	82,400	O	1/31/2017	73
MCreek	10	Mill Creek Drive	Hillside Drive	West Commercial Street	2	O	560	36	20,160	O	1/31/2017	73
WoodSt	10	Wood Street	School Street	Main Street	2	O	370	22	8,140	O	1/31/2017	73
Redwd	10A	Redwood Avenue	North Street	Spruce Street	2	O	696	34	23,664	O	1/31/2017	72
Redwd	10B	Redwood Avenue	Spruce Street	Easy Street	2	O	350	34	11,900	O	1/31/2017	72
EComm	07	East Commercial Street	312 ft E/O Broaddus Creek Bridge	City Limits	2	C	1,588	54	85,752	A	1/31/2017	70
MCreek	05	Mill Creek Drive	Mill Creek Court	Hillside Drive	2	O	1,800	36	64,800	A	1/31/2017	70
Raymnd	01	Raymond Lane	Coast Street	Pine Avenue	2	O	1,250	18	22,500	O	1/31/2017	69
ESan	01	East San Francisco Ave	Main Street	east end	2	O	1,900	37	70,300	O	1/31/2017	66
Mcrkct	01	Mill Creek Court	Northbrook Way	End	2	O	200	36	7,200	A	1/31/2017	66
South	01	South Street	Main Street	Central Street	2	O	450	36	16,200	A	1/31/2017	66
Pine	10	Pine Street	Maple Street	Coast Street	2	C	1,140	37	42,180	O	1/31/2017	64
SLenor	05	South Lenore Avenue	East Commercial Street	East Valley Street	2	O	1,080	38	41,040	O	1/31/2017	63
WSan	01	West San Francisco Ave	Coast Street	McKinley Street	2	O	250	30	7,500	O	1/31/2017	63
EComm	01	East Commercial Street	Main Street	1400 feet East	2	A	1,400	54	75,600	O	1/31/2017	62

FC (Functional Classification): A (Arterial), C (Collector), R (Residential), O (Other)
Surface Type: A (AC), O (AC/AC), G (Gravel)

Street ID	Section ID	Street Name	Begin Location	End Location	Lanes	FC	Length (ft)	Width (ft)	Area (ft^2)	Surface Type	PCI Date	PCI
EVally	10	East Valley Street	827 FT W/O City Limit	East End (City Limit)	2	C	827	23	19,021	O	1/31/2017	62
Rail	02A	Railroad Avenue	East San Francisco Avenue	E Oak Street	2	C	830	32	26,560	A	1/31/2017	62
Rail	02B	Railroad Avenue	E Oak Street	South End (s/Baechtel Creek)	2	C	1,100	32	35,200	O	1/31/2017	62
Bonnie	01	Bonnie Lane	Nancy Lane	North End	2	O	1,250	33	41,250	A	2/1/2017	60
Sandy	01	Sandy Lane	Baechtel Road	Bonnie Lane	2	O	570	33	18,810	A	2/1/2017	60
Sherwd	01	Sherwood Road	City Limits	Main Street	2	A	2,100	24	50,400	O	1/31/2017	57
Bush	01	Bush Street	Coast Street	McKinley Street	2	O	250	35	8,750	O	1/31/2017	56
Willow	01	Willow Lane	Baechtel Road	End of street	2	O	450	24	10,800	A	2/1/2017	54
Wfrank	05	West Franklin Avenue	Blosser Lane	End West	2	C	700	44	41,862	O	2/1/2017	53
Baecht	01	Baechtel Road	Main Street	Main Street	2	C	4,800	34	163,200	O	2/1/2017	51
Laurel	03	Laurel Street	North Street	Mill Street	2	O	410	30	12,300	O	1/31/2017	50
Rail	01	Railroad Avenue	East Valley Street	East San Francisco Avenue	2	C	750	22	16,500	O	1/31/2017	50
Shell	01	Shell Lane	Baechtel Road	Railroad Tracks	2	O	1,000	28	28,000	A	2/1/2017	47
Harms	01	Harms Lane	North Street	Coast Street	2	O	780	21	16,380	O	1/31/2017	41
EComm	05	East Commercial Street	Broaddus Creek Bridge	312 ft E/O Broaddus Creek Bridge	2	C	312	66	20,592	O	1/31/2017	40
Margie	01	Margie Drive	Monica Lane	Bonnie Lane	2	O	1,800	34	61,200	A	2/1/2017	38
Alderct	01	Alder Court	Alder Lane	Dead End	2	R	530	30	15,900	A	2/1/2017	36
Maple	01	Maple Street	Pine Street	Redwood Avenue	2	O	360	36	12,960	O	2/1/2017	34
EOak	01	East Oak Avenue	Main Street	Railroad Avenue	2	O	1,150	37	42,550	O	1/31/2017	33
Poplar	01	Poplar Avenue	Furlong Road	Walnut Street	2	O	1,700	46	78,200	O	2/1/2017	29
Gregor	01	Gregory Lane	West End	Main Street	2	O	280	32	8,960	A	2/1/2017	28
Monica	01	Monica Lane	Main Street	Margie Drive	2	O	140	34	4,760	A	2/1/2017	25
Lincol	01	Lincoln Way	Brookside Drive	End	2	O	150	32	4,800	O	1/31/2017	25
Alder	01	Alder Lane	West End	Main Street	2	O	850	37	31,450	A	2/1/2017	24
Madden	02	Madden Lane	Pearl Street	East Valley Street	2	O	400	31	12,400	O	1/31/2017	24
NLenor	01	North Lenore Street	East Commercial Street	1000 FT. N/E. Commercial Street	2	O	1,000	21	21,000	O	1/31/2017	24
Harmon	01	Harmon Lane	Franklin Avenue	Hwy 20	2	O	170	11	1,870	O	2/1/2017	23
Hazel	05	Hazel Street	Main Street	Poplar Street	2	O	653	32	20,896	O	2/1/2017	22
Nancy	01	Nancy Lane	Margie Drive	Bonnie Lane	2	O	600	33	19,800	A	2/1/2017	22
Hellum	01	Hellums Lane	End	Main Street	2	O	400	12	4,800	A	1/31/2017	22
Maple	02	Maple Street	East Mendocino Avenue	North End	2	O	400	40	16,000	O	1/31/2017	21
Alice	01	Alice Drive	Margie Drive	Nancy Lane	2	O	700	33	23,100	A	2/1/2017	19
EasySt	01	Easy Street	Redwood Avenue	West Mendocino Avenue	2	O	310	36	11,160	O	1/31/2017	19
EVan	02	East Van Lane	Marin Street	Madden Lane	2	O	250	16	4,000	A	1/31/2017	19
Hawln	01	Hawthorne Lane	Exley Lane	Brookside Drive	2	O	400	32	12,800	O	1/31/2017	19
EMendo	01	East Mendocino Avenue	Main Street	Madden Lane	2	O	830	25	20,750	A	1/31/2017	18
North	01A	North Street	South End	West Mendocino Street	2	C	1,566	37	57,942	O	1/31/2017	18
EvaClaire	01	Eva Claire Street	Holly Street	Dead End	2	R	560	22	12,320	A	2/1/2017	17
Locust	01	Locust Street	Holly Street	Walnut Street	2	C	1,150	35	40,250	O	2/1/2017	17
Madron	01	Madrone Street	Magnolia Avenue	Main Street	2	O	800	46	36,800	O	2/1/2017	17
Marin	01	Marin Street	East Van Lane	State Street	2	O	520	35	18,200	O	1/31/2017	17
Pearl	01	Pearl Street	Humboldt Street	Madden Lane	2	O	520	19	9,880	A	1/31/2017	17
Wmendo	01	West Mendocino Avenue	Hawthorne Lane	Main Street	2	C	3,000	37	111,000	O	1/31/2017	17

FC (Functional Classification): A (Arterial), C (Collector), R (Residential), O (Other)
Surface Type: A (AC), O (AC/AC), G (Gravel)

Street ID	Section ID	Street Name	Begin Location	End Location	Lanes	FC	Length (ft)	Width (ft)	Area (ft^2)	Surface Type	PCI Date	PCI
Frank	01	Franklin Avenue	Blosser Lane	Main Street	2	C	2,380	29	69,020	O	2/1/2017	16
Campln	01	Camp Lane	Spruce Street	End	2	O	200	19	3,800	O	1/31/2017	16
Spruce	01	Spruce Street	Pine Avenue	North End (Brookside School)	2	O	1,000	35	35,000	O	1/31/2017	16
Calif	01	California Street	Main Street	Penn Street	2	O	480	38	18,240	O	1/31/2017	15
Coast	01	Coast Street	Hwy 20	Pine Avenue	2	C	2,180	30	65,400	O	1/31/2017	15
EBarb	01	East Barbara Lane	Main Street	Central Street	1	O	510	12	6,120	A	1/31/2017	15
SCoast	01	South Coast Street	Coast Street	Bush Street	2	O	200	17	3,400	A	1/31/2017	15
Willia	01	Williams Street	Casteel Lane	North End	2	O	500	17	8,500	A	1/31/2017	15
Monroe	01	Monroe Street	Main Street	Central Street	2	O	570	37	21,090	O	1/31/2017	14
Pine	05	Pine Street	Spruce Street	Maple Street	2	C	360	37	13,320	O	1/31/2017	14
HawCt	01	Hawthorne Court	Hawthorne Lane	End	2	O	200	25	5,000	O	1/31/2017	13
Laurel	01	Laurel Street	West End	Maple Street	2	O	670	16	10,720	O	1/31/2017	13
Muir	01	Muir Lane	Wood Street	West Commercial Street	1	O	600	20	12,000	A	2/1/2017	12
Schnei	01	Schnieder Lane	West Oak Street	State Route 20	2	O	260	11	2,860	O	2/1/2017	12
Bitten	01	Bittenbender Lane	End	Main Street	2	O	500	13	6,500	A	1/31/2017	12
McKin	01	McKinley Street	Bush Street	West Valley Street	2	O	920	36	33,120	O	1/31/2017	12
Penn	01	Penn Street	California Street	East Valley Street	2	O	250	37	9,250	O	1/31/2017	12
Sequrd	10	Sequoia Road	Redwood Avenue	S END	2	R	450	22	9,900	A	1/31/2017	12
WoodSt	05	Wood Street	North Street	School Street	2	O	600	22	13,200	O	1/31/2017	11
Castee	01	Casteel Lane	Main Street	Williams Street	2	O	250	22	5,500	A	1/31/2017	10
Laurel	02	Laurel Street	Maple Street	North Street	2	O	400	30	12,000	O	1/31/2017	10
Bloss	15	Blosser Lane	Franklin Avenue	HWY 20	2	C	730	39	28,470	O	2/1/2017	9
Hillsi	01	Hillside Drive	Mill Creek Drive	End	2	O	450	32	14,400	A	1/31/2017	9
Elm	01	Elm Lane	Muir Canyon Road	Alder Lane	2	O	820	33	27,060	O	2/1/2017	8
Manor	01	Manor Way	west end	Main Street	2	O	450	32	14,400	A	2/1/2017	8
Walnut	02	Walnut Street	Magnolia	Locust Street	2	C	700	35	24,500	O	2/1/2017	8
Bosca	01	Boscabelle Avenue	East Valley Street	East San Francisco Avenue	2	O	680	27	18,360	O	1/31/2017	8
Creek	01	Creekside Drive	East Valley Street	South Lenore Street	2	O	1,050	35	36,750	O	1/31/2017	8
Humbol	03	Humboldt Street	East Commercial Street	North End	2	C	526	36	18,936	O	4/3/2017	7
Bloss	05	Blosser Lane	South End (City Limits)	113 FT S/O RR Tracks	2	C	1,107	37	40,959	O	2/1/2017	7
State	01	State Street	Main Street	East End	2	O	900	40	36,000	O	1/31/2017	7
Maple	011	Maple Street	South End	Pine Street	2	O	400	36	14,400	O	2/1/2017	5
Cather	01	Catherine Lane	Pine Avenue	Wood Street	2	O	450	12	5,400	A	1/31/2017	5
Tuttle	01	Tuttle Lane	Humboldt Street	Madden Lane	2	O	520	15	7,800	A	1/31/2017	4
SLenor	10	South Lenore Avenue	East Valley Street	East San Francisco Avenue	2	O	730	27	19,710	O	1/31/2017	3
WVanLn	02	West Van Lane	School Street	Main Street	1	O	420	11	4,620	A	1/31/2017	2
Brooks	01	Brookside Drive	West Mendocino Avenue	Hawthorne Lane	2	O	450	32	14,400	O	1/31/2017	1
NLenor	02	North Lenore Street	1000 FT. N/E. Commercial Street	Sewer Plant Road	2	O	850	21	17,850	O	1/31/2017	0
Cather	02	Catherine Lane	Wood Street	West Mendocino Avenue	1	O	200	12	2,400	G		
Manzan	01	Manzanita Avenue	Holly Street	Hazel Street	2	O	440	18	7,920	G		
WVanln	01	West Van Lane	North Street	School Street	1	O	490	12	5,880	G		

FC (Functional Classification): A (Arterial), C (Collector), R (Residential), O (Other)
Surface Type: A (AC), O (AC/AC), G (Gravel)

APPENDIX B

Maintenance and Rehabilitation Decision Tree

Maintenance and Rehabilitation (M&R) Decision Tree

This report presents the current maintenance and rehabilitation decision tree that exists in the database. The decision tree forms the basis for all of the budgetary computations that are included in this volume. ***Changes to the decision tree will make the results in the budget reports invalid.*** All pavement treatment unit costs relevant to the street types in the database were updated.

The decision tree lists the treatments and costs selected for preventive maintenance and rehabilitation activities. Each line represents a specific combination of functional classification and surface type.

The preventive maintenance portion of the report is identified as Condition Category I – Very Good. All preventive maintenance treatment listings are assigned only to sections in Condition Category I where the PCI $\geq$ 75. Sections with PCI values less than 75 are assigned to treatments listed in Categories II through V.

In the preventive maintenance category (PCI $\geq$ 75), a time sequence is used to identify the appropriate treatment and cost. Each preventive maintenance treatment description consists of three parts: 1) a CRACK treatment, 2) a SURFACE treatment, and 3) a RESTORATION treatment. These three parts allow the user to specify one of three different preventive maintenance treatments depending on the prior maintenance history of the section.

1. The CRACK treatment part can be used to specify the most frequent type of preventive maintenance activity planned (typically crack seals).
2. The SURFACE treatment part can be used to specify more extensive and less frequent preventive maintenance activities, such as chip seals or slurry seals. For example, a crack seal can be specified on a 3-year cycle with a slurry seal specified after 5 years.
3. The RESTORATION part can be used to specify a surface restoration treatment (such as an overlay) to be performed after a specified number of surface treatments. For example, after a certain number of successive slurry seals, an overlay can be specified instead of another slurry seal.

Rehabilitation treatments are assigned to sections in Condition Categories II through V (PCI less than 75). Each line is defined by a specific combination of functional classification, surface type, and condition category.

COLUMN	**DESCRIPTION**
Functional Class	Functional Classification identifying the branch number.
Surface	Surface Type identifying the branch number.
Condition Category	Condition Category (I through V).
Treatment Type	First Row (Crack Treatment) indicates localized treatment (e.g. crack sealing). Second Row (Surface Treatment) indicates surface treatment (e.g. slurry sealing). Third Row (Restoration Treatment) indicates surface restoration (e.g. overlay).
Treatment	Name of treatments from the "Treatment Descriptions" report.

COLUMN	DESCRIPTION
Yrs. Between Crack Seals	First Row - number of years between successive treatment applications specified in the first row (i.e. CRACK treatment).
Yrs. Between Surface Seals	Second Row - number of years between successive treatment applications specified in the second row (i.e. SURFACE treatment).
Number of Sequential Seals	Number of times that the treatment application in the second row (i.e. SURFACE treatment) will be performed prior to performing the treatment application in the third row.

Note that the treatments assigned to each section should not be blindly followed in preparing a street maintenance program. Engineering judgment and project level analysis should be applied to ensure that the treatment is appropriate and cost effective for the section.

Decision Tree

Printed: 07/10/2017

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	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		9	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		AC OVERLAY (1.5")	$19.50		9	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$25.00		99	
		IV - Poor		AC OVERLAY (3") W/ FABRIC	$43.00			
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$94.00			
	AC/AC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		9	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		MILL AND OVERLAY (1.5")	$20.50		99	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$32.50		99	
		IV - Poor		MILL AND OVERLAY (3") W/ FABRIC	$50.00		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$94.00			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	SEAL CRACKS	$0.60		3	
			Restoration Treatment	LC & THICK OL W/ FABRIC	$8.82			1
		II - Good, Non-Load Related		THIN AC OVERLAY(1.5 INCHES)	$5.76			
		III - Good, Load Related		MILL & THIN OL W/ FABRIC	$10.08		99	
		IV - Poor		LC & THICK OL W/ FABRIC	$8.82		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$14.00			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00		99	
		III - Good, Load Related		THIN AC OVERLAY(1.5 INCHES)	$5.76			
		IV - Poor		THIN OVERLAY w/FABRIC	$7.02			
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$14.00			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		SINGLE CHIP SEAL	$1.11			
		III - Good, Load Related		SINGLE CHIP SEAL	$1.51			
		IV - Poor		SINGLE CHIP SEAL	$1.92			
		V - Very Poor		THICK AC OVERLAY(2.5 INCHES)	$7.67			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	$1.00	3		
			Surface Treatment	SINGLE CHIP SEAL	$3.50		5	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		RUBBERIZED CHIP SEAL	$6.50		5	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$23.50		99	
		IV - Poor		AC OVERLAY (2 ") W/ FABRIC	$29.50		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$72.00		99	
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.00	3		
			Surface Treatment	SINGLE CHIP SEAL	$3.50		5	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		RUBBERIZED CHIP SEAL	$6.50		5	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$23.50		99	
		IV - Poor		MILL AND OVERLAY (2") W/ FABRIC	$35.50		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$72.00			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$0.60	3		
			Surface Treatment	SLURRY SEAL	$0.78		4	
			Restoration Treatment	LC & THICK OL W/ FABRIC	$8.82			1
		II - Good, Non-Load Related		THIN AC OVERLAY(1.5 INCHES)	$5.76			
		III - Good, Load Related		MILL & THIN OL W/ FABRIC	$10.08		99	
		IV - Poor		LC & THICK OL W/ FABRIC	$8.82		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$11.38			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00		99	
		III - Good, Load Related		THIN AC OVERLAY(1.5 INCHES)	$5.76			
		IV - Poor		PULVERIZE,RESHAPE,COMPACT	$9.45			
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$11.38			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		SINGLE CHIP SEAL	$1.11			
		III - Good, Load Related		SINGLE CHIP SEAL	$1.51			
		IV - Poor		SINGLE CHIP SEAL	$1.92			
		V - Very Poor		THICK AC OVERLAY(2.5 INCHES)	$7.47			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	$1.00	4		
			Surface Treatment	SINGLE CHIP SEAL	$3.50		8	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		RUBBERIZED CHIP SEAL	$6.00		8	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$22.00		99	
		IV - Poor		AC OVERLAY (2 ") W/ FABRIC	$27.00		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$54.00		99	
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.00	4		
			Surface Treatment	SINGLE CHIP SEAL	$3.50		8	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		RUBBERIZED CHIP SEAL	$6.00		8	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$22.00		99	
		IV - Poor		MILL AND OVERLAY (2") W/ FABRIC	$32.50		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$54.00			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.00	3		
			Surface Treatment	SLURRY SEAL	$1.60		4	
			Restoration Treatment	AC OVERLAY (1.5")	$10.00			1
		II - Good, Non-Load Related		DO NOTHING	$0.00		99	
		III - Good, Load Related		THIN OVERLAY w/FABRIC	$7.02			
		IV - Poor		LC & THICK OL W/ FABRIC	$8.82		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$8.75			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00		99	
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		AC OVERLAY (2 ") W/ FABRIC	$8.12			
		V - Very Poor		PULVERIZE,RESHAPE,COMPACT	$9.45			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		SINGLE CHIP SEAL	$1.11			
		III - Good, Load Related		SINGLE CHIP SEAL	$1.51			
		IV - Poor		SINGLE CHIP SEAL	$1.92			
		V - Very Poor		THICK AC OVERLAY(2.5 INCHES)	$7.27			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	$1.00	4		
			Surface Treatment	SINGLE CHIP SEAL	$3.50		8	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		RUBBERIZED CHIP SEAL	$6.00		8	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$22.00			
		IV - Poor		AC OVERLAY (2 ") W/ FABRIC	$27.00		99	
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$54.00			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.00	4		
			Surface Treatment	SINGLE CHIP SEAL	$3.50		8	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		RUBBERIZED CHIP SEAL	$6.00		8	
		III - Good, Load Related		AC OVERLAY (1.5") W/ FABRIC	$22.00			
		IV - Poor		MILL AND OVERLAY (2") W/ FABRIC	$32.50			
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$54.00			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.60	4		
			Surface Treatment	SINGLE CHIP SEAL	$1.74		8	
			Restoration Treatment	MILL AND THIN OVERLAY	$15.04			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			
		V - Very Poor		RECONSTRUCT SURFACE (AC)	$8.75			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	99		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00		99	
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		THICK AC OVERLAY(2.5 INCHES)	$1.92			
		V - Very Poor		AC OVERLAY (2")	$6.86			

Functional Class and Surface combination not used

Decision Tree

Printed: 07/10/2017

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	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	THICK AC OVERLAY(2.5 INCHES)	$0.00			100
		II - Good, Non-Load Related		SINGLE CHIP SEAL	$1.11			
		III - Good, Load Related		SINGLE CHIP SEAL	$1.51			
		IV - Poor		SINGLE CHIP SEAL	$1.92			
		V - Very Poor		THICK AC OVERLAY(2.5 INCHES)	$7.27			

Functional Class and Surface combination not used

APPENDIX C

Budget Needs

Projected PCI / Cost Summary

Preventative Treatment / Cost Summary

Rehabilitation Treatment / Cost Summary

Budget Needs Reports

The purpose of this module is to answer the question: ***If the City had all the money in the world, what sections should be fixed and how much will it cost?*** Based on the Maintenance & Rehabilitation (M&R) decision tree and the PCIs of the sections, the program will then select a maintenance or rehabilitation action and compute the total costs over a period of ten years. The Budget Needs represents the "ideal world" funding levels, while the Budget Scenarios reports in the next section represent the most "cost effective" prioritization possible for the actual funding levels.

A budget needs analysis has been performed. The summary results from the analysis are shown below. An interest rate of 3% and an inflation factor of 3% were used to project the costs for the next ten years. This report shows the total ten-year budget that would be required to meet the City's standards as exemplified in the M&R decision tree.

As indicated in the report, with a budget of $13.5 million dollars over the next ten years the PCI of the street network will improve from the current level of 48 to 83 by 2026. If no treatments are programmed, the weighted average PCI is projected to deteriorate from 48 to 30 by 2026.

Budget Needs reports included in this volume are listed below:

- Projected PCI/Cost Summary
- Preventative Maintenance Treatment/Cost Summary
- Rehabilitation Treatment/Cost Summary

Needs - Projected PCI/Cost Summary

This report summarizes and projects the City's network PCI values over a ten-year period, both with and without treatments applied. These costs are based on those in the M&R decision tree. It also projects the costs over a ten-year period.

COLUMN	DESCRIPTION
Year	Year in the analysis period.
PCI Treated	Projected network average PCI with all needed treatments applied.
PCI Untreated	Projected network average PCI without any treatments applied.
PM Cost	Total preventive maintenance treatment cost.
Rehab Cost	Total rehabilitation treatment cost.
Cost	The budget required for each year in the analysis period to meet the City's standard as shown on the M&R decision tree.
Total Cost	Total budget required over a ten-year period.

Needs - Projected PCI/Cost Summary

Inflation Rate = 3.00 %

Printed: 07/14/2017

Year	PCI Treated	PCI Untreated	PM Cost	Rehab Cost	Cost
2017	92	49	$159,415	$11,062,706	$11,222,121
2018	88	46	$28,833	$153,422	$182,255
2019	86	43	$18,403	$172,137	$190,540
2020	85	41	$103,546	$0	$103,546
2021	84	39	$3,938	$0	$3,938
2022	84	37	$391,622	$102,952	$494,574
2023	83	35	$36,631	$73,951	$110,582
2024	82	33	$66,996	$0	$66,996
2025	85	32	$704,546	$340,125	$1,044,671
2026	83	30	$13,519	$56,367	$69,886

% PM	PM Total Cost	Rehab Total Cost	Total Cost
11.32%	$1,527,449	$11,961,660	$13,489,109

Needs - Preventive Maintenance Treatment/Cost Summary

This report summarizes each preventive maintenance treatment type, quantity of pavement affected, and total costs over the ten-year period. It also summarizes the total quantities and costs over the next ten years.

COLUMN	DESCRIPTION
Treatment	Type of preventive maintenance treatments needed.
Year	Year in the analysis period (i.e. 2017, 2018, 2019, 2020, 2021, etc.).
Area Treated	Quantities in linear feet (Seal Cracks) or square yard (Slurry Seal).
Cost	Maintenance treatment cost.

Needs - Preventive Maintenance Treatment/Cost Summary

Inflation Rate = 3.00 % Printed: 07/14/2017

Treatment	Year	Area Treated		Cost
SEAL CRACKS	2017	111.69	ft.	$112
	2019	75.57	ft.	$83
	2020	514.55	ft.	$567
	2021	3,462.02	ft.	$3,938
	2022	862.41	ft.	$1,003
	2023	295.38	ft.	$356
	2024	245.29	ft.	$303
	2025	1,446.53	ft.	$1,840
	2026	186.74	ft.	$244
	Total	7,200.18		$8,446
SINGLE CHIP SEAL	2017	45,513.56	sq.yd.	$159,303
	2018	7,997.78	sq.yd.	$28,833
	2019	4,933.33	sq.yd.	$18,320
	2020	26,924.89	sq.yd.	$102,979
	2022	96,269.44	sq.yd.	$390,619
	2023	8,679.67	sq.yd.	$36,275
	2024	15,493.33	sq.yd.	$66,693
	2025	158,484.67	sq.yd.	$702,706
	2026	2,906.67	sq.yd.	$13,275
	Total	367,203.33		$1,519,003
	Total Quantity	374,403.51		$1,527,449

Needs - Rehabilitation Treatment/Cost Summary

This report summarizes each rehabilitation treatment type, quantity of pavement affected, and total costs over the ten-year period. It also summarizes the total quantities and costs over the next ten years.

COLUMN	DESCRIPTION
Treatment	Type of rehabilitation treatments needed.
Year	Year in the analysis period (i.e. 2017, 2018, 2019, 2020, 2021, etc.).
Area Treated	Quantities in square yard.
Cost	Rehabilitation treatment cost.

Needs - Rehabilitation
Treatment/Cost Summary

Inflation Rate = 3.00 % Printed: 07/14/2017

Treatment	Year		Area Treated		Cost
MILL AND OVERLAY (2") W/ FABRIC	2017		36,260.44	sq.yd.	$1,259,185
	2025		972.22	sq.yd.	$40,027
		Total	37,232.67	sq.yd.	$1,299,212
MILL AND OVERLAY (3") W/ FABRIC	2017		5,600	sq.yd.	$280,000
		Total	5,600	sq.yd.	$280,000
AC OVERLAY (2 ") W/ FABRIC	2017		12,877.78	sq.yd.	$347,700
		Total	12,877.78	sq.yd.	$347,700
AC OVERLAY (1.5") W/ FABRIC	2017		4,560	sq.yd.	$100,320
	2018		1,322.22	sq.yd.	$29,962
	2019		2,629.33	sq.yd.	$61,369
		Total	8,511.56	sq.yd.	$191,651
MILL AND OVERLAY (1.5")	2017		8,400	sq.yd.	$172,200
	2025		5,580	sq.yd.	$144,906
		Total	13,980	sq.yd.	$317,106
RUBBERIZED CHIP SEAL	2017		35,052.33	sq.yd.	$217,149
	2018		18,994.33	sq.yd.	$123,460
	2019		16,304.44	sq.yd.	$110,768
	2022		13,662.33	sq.yd.	$102,952
	2023		9,528	sq.yd.	$73,951
	2025		20,417.78	sq.yd.	$155,192
	2026		7,200	sq.yd.	$56,367
		Total	121,159.22	sq.yd.	$839,839
RECONSTRUCT SURFACE (AC)	2017		143,454.78	sq.yd.	$8,686,152
		Total	143,454.78	sq.yd.	$8,686,152

Total Cost $11,961,660

Scenarios 1 - 4

Scenario 1: City's Funding Level

Cost Summary Report

Network Condition Summary Report

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2017	0%	$400,000	II $289,965	Non-Project	$0	$0	$10,831,826	Funded	$9,717
			III $100,320					Unmet	$115,247
			IV $0	Project	$0				
			V $0						
			Total $390,285						
			Project $0						
2018	5%	$400,000	II $171,733	Non-Project	$28,434	$0	$10,965,817	Funded	$0
			III $29,962					Unmet	$0
			IV $146,158	Project	$0				
			V $23,484						
			Total $371,337						
			Project $0						
2019	5%	$400,000	II $110,768	Non-Project	$20,523	$0	$11,299,195	Funded	$363
			III $0					Unmet	$0
			IV $267,539	Project	$0				
			V $0						
			Total $378,307						
			Project $0						
2020	5%	$400,000	II $33,336	Non-Project	$26,517	$0	$11,758,124	Funded	$0
			III $114,591					Unmet	$0
			IV $169,753	Project	$0				
			V $54,878						
			Total $372,558						
			Project $0						
2021	5%	$400,000	II $0	Non-Project	$20,160	$0	$11,864,044	Funded	$0
			III $65,106					Unmet	$0
			IV $0	Project	$0				
			V $309,628						
			Total $374,734						
			Project $0						
2022	0%	$400,000	II $140,738	Non-Project	$0	$0	$11,975,153	Funded	$1,071
			III $0					Unmet	$142,349
			IV $0	Project	$0				
			V $258,195						
			Total $398,933						
			Project $0						

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2023	5%	$400,000	II $73,951	Non-Project	$29,045	$0	$12,159,348	Funded	$0
			III $0					Unmet	$0
			IV $0	Project	$0				
			V $296,174						
			Total $370,125						
			Project $0						
2024	5%	$400,000	II $34,254	Non-Project	$36,603	$0	$13,060,149	Funded	$0
			III $0					Unmet	$0
			IV $0	Project	$0				
			V $328,378						
			Total $362,632						
			Project $0						
2025	5%	$400,000	II $190,005	Non-Project	$24,483	$0	$13,280,654	Funded	$344
			III $0					Unmet	$0
			IV $0	Project	$0				
			V $183,556						
			Total $373,561						
			Project $0						
2026	5%	$400,000	II $171,672	Non-Project	$42,151	$0	$13,850,110	Funded	$1,325
			III $0					Unmet	$0
			IV $73,629	Project	$0				
			V $109,289						
			Total $354,590						
			Project $0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$317,106	$0	$1,120	$1,298
Collector	$866,056	$158,718	$2,259	$97,696
Other	$2,329,056	$30,184	$9,088	$154,443
Residential/Local	$234,844	$39,014	$353	$4,158
Grand Total:	$3,747,062	$227,916	$12,820	$257,596

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	$400,000	0%	2021	$400,000	5%	2025	$400,000	5%
2018	$400,000	5%	2022	$400,000	0%	2026	$400,000	5%
2019	$400,000	5%	2023	$400,000	5%			
2020	$400,000	5%	2024	$400,000	5%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	49	50	1.57	3.13
2018	46	49	2.05	4.10
2019	43	48	2.10	4.21
2020	41	47	1.30	2.59
2021	39	47	1.71	3.37
2022	37	46	1.16	2.32
2023	35	46	2.43	4.87
2024	33	47	2.48	4.87
2025	32	47	1.94	3.82
2026	30	46	2.22	4.43

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	1.5%	16.7%	4.0%	12.4%	34.6%
II / III	2.2%	3.6%	0.0%	6.9%	12.8%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	3.7%	19.6%	4.0%	15.7%	43.0%
II / III	0.0%	0.8%	0.0%	3.6%	4.3%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	3.7%	16.7%	4.8%	22.8%	48.1%
II / III	0.0%	5.4%	0.0%	2.8%	8.2%
V	1.5%	19.3%	0.3%	22.7%	43.8%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Scenario 2: Maintain PCI at 48

Cost Summary Report

Network Condition Summary Report

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S2: Maintain PCI at 48

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2017	0%	$400,000	II $289,965	Non-Project	$0	$0	$10,831,826	Funded	$9,717
			III $100,320					Unmet	$115,247
			IV $0	Project	$0				
			V $0						
			Total $390,285						
			Project $0						
2018	5%	$400,000	II $171,733	Non-Project	$28,434	$0	$10,965,817	Funded	$0
			III $29,962					Unmet	$0
			IV $146,158	Project	$0				
			V $23,484						
			Total $371,337						
			Project $0						
2019	5%	$400,000	II $110,768	Non-Project	$20,523	$0	$11,299,195	Funded	$363
			III $0					Unmet	$0
			IV $267,539	Project	$0				
			V $0						
			Total $378,307						
			Project $0						
2020	5%	$550,000	II $33,336	Non-Project	$27,996	$0	$11,611,285	Funded	$0
			III $177,801					Unmet	$0
			IV $169,753	Project	$0				
			V $137,029						
			Total $517,919						
			Project $0						
2021	5%	$550,000	II $0	Non-Project	$34,098	$0	$11,560,699	Funded	$0
			III $0					Unmet	$0
			IV $0	Project	$0				
			V $512,896						
			Total $512,896						
			Project $0						
2022	5%	$600,000	II $99,029	Non-Project	$0	$0	$11,490,199	Funded	$47,813
			III $0					Unmet	$88,508
			IV $0	Project	$0				
			V $453,163						
			Total $552,192						
			Project $0						

Year	PM	Budget	Rehabilitation			Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2023	5%	$450,000	II	$73,951	Non-Project	$21,383	$1,117	$11,612,128	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$351,554						
			Total	$425,505						
			Project	$0						
2024	5%	$350,000	II	$34,254	Non-Project	$25,236	$0	$12,549,679	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$286,907						
			Total	$321,161						
			Project	$0						
2025	5%	$350,000	II	$190,005	Non-Project	$33,427	$0	$12,804,669	Funded	$344
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$124,499						
			Total	$314,504						
			Project	$0						
2026	5%	$400,000	II	$171,672	Non-Project	$37,976	$0	$13,384,323	Funded	$1,325
			III	$0					Unmet	$0
			IV	$73,629	Project	$0				
			V	$114,300						
			Total	$359,601						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$317,106	$0	$2,418	$0
Collector	$824,347	$181,027	$6,455	$93,499
Other	$2,773,279	$9,034	$49,097	$107,335
Residential/Local	$228,975	$39,012	$1,591	$2,920
Grand Total:	$4,143,707	$229,073	$59,561	$203,755

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 07/14/2017

Scenario: 2017 S2: Maintain PCI at 48

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	$400,000	0%	2021	$550,000	5%	2025	$350,000	5%
2018	$400,000	5%	2022	$600,000	5%	2026	$400,000	5%
2019	$400,000	5%	2023	$450,000	5%			
2020	$550,000	5%	2024	$350,000	5%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	49	50	1.57	3.13
2018	46	49	2.05	4.10
2019	43	48	2.10	4.21
2020	41	48	1.54	3.02
2021	39	48	1.77	3.54
2022	37	48	1.25	2.41
2023	35	48	2.37	4.75
2024	33	48	2.57	5.09
2025	32	48	1.66	3.31
2026	30	48	2.38	4.66

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	1.5%	16.7%	4.0%	12.4%	34.6%
II / III	2.2%	3.6%	0.0%	6.9%	12.8%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	3.7%	19.6%	4.0%	15.7%	43.0%
II / III	0.0%	0.8%	0.0%	3.6%	4.3%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	3.7%	16.7%	4.8%	24.8%	50.0%
II / III	0.0%	5.4%	0.0%	2.8%	8.2%
V	1.5%	19.3%	0.3%	20.8%	41.8%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Scenario 3: Improve PCI to 53

Cost Summary Report

Network Condition Summary Report

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S3: Improve PCI to 53

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2017	0%	$400,000	II $289,965	Non-Project	$0	$0	$10,831,826	Funded	$9,717
			III $100,320					Unmet	$115,247
			IV $0	Project	$0				
			V $0						
			Total $390,285						
			Project $0						
2018	5%	$600,000	II $171,733	Non-Project	$36,053	$0	$10,767,505	Funded	$0
			III $29,962					Unmet	$0
			IV $348,781	Project	$0				
			V $11,557						
			Total $562,033						
			Project $0						
2019	5%	$950,000	II $110,768	Non-Project	$52,549	$0	$10,546,436	Funded	$0
			III $61,369					Unmet	$0
			IV $389,412	Project	$0				
			V $333,230						
			Total $894,779						
			Project $0						
2020	5%	$950,000	II $33,336	Non-Project	$62,645	$0	$10,434,975	Funded	$0
			III $114,591					Unmet	$0
			IV $135,225	Project	$0				
			V $601,090						
			Total $884,242						
			Project $0						
2021	5%	$900,000	II $0	Non-Project	$49,534	$0	$9,997,475	Funded	$0
			III $0					Unmet	$0
			IV $0	Project	$0				
			V $849,132						
			Total $849,132						
			Project $0						
2022	5%	$350,000	II $80,714	Non-Project	$0	$0	$10,092,357	Funded	$17,633
			III $0					Unmet	$103,121
			IV $0	Project	$0				
			V $251,659						
			Total $332,373						
			Project $0						

Year	PM	Budget	Rehabilitation			Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2023	5%	$350,000	II	$73,951	Non-Project	$21,841	$0	$10,290,378	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$252,873						
			Total	$326,824						
			Project	$0						
2024	5%	$350,000	II	$18,118	Non-Project	$14,231	$3,269	$11,176,773	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$313,987						
			Total	$332,105						
			Project	$0						
2025	5%	$450,000	II	$190,005	Non-Project	$42,997	$0	$11,299,226	Funded	$344
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$215,707						
			Total	$405,712						
			Project	$0						
2026	5%	$450,000	II	$134,016	Non-Project	$42,081	$0	$11,483,148	Funded	$1,325
			III	$0					Unmet	$0
			IV	$73,629	Project	$0				
			V	$198,537						
			Total	$406,182						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$614,158	$0	$1,120	$0
Collector	$819,245	$217,500	$6,455	$93,499
Other	$3,726,356	$66,533	$21,090	$121,948
Residential/Local	$223,908	$37,898	$353	$2,920
Grand Total:	$5,383,667	$321,931	$29,019	$218,367

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 07/14/2017

Scenario: 2017 S3: Improve PCI to 53

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	$400,000	0%	2021	$900,000	5%	2025	$450,000	5%
2018	$600,000	5%	2022	$350,000	5%	2026	$450,000	5%
2019	$950,000	5%	2023	$350,000	5%			
2020	$950,000	5%	2024	$350,000	5%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	49	50	1.57	3.13
2018	46	50	2.36	4.66
2019	43	51	3.16	6.31
2020	41	52	2.44	4.79
2021	39	53	2.55	5.09
2022	37	53	0.95	1.89
2023	35	53	3.25	6.45
2024	33	53	3.22	6.34
2025	32	53	2.36	4.71
2026	30	53	1.87	3.74

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	1.5%	16.7%	4.0%	12.4%	34.6%
II / III	2.2%	3.6%	0.0%	6.9%	12.8%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	3.7%	19.6%	4.0%	15.7%	43.0%
II / III	0.0%	0.8%	0.0%	3.6%	4.3%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	5.2%	16.7%	4.8%	29.3%	56.1%
II / III	0.0%	5.4%	0.0%	2.8%	8.2%
V	0.0%	19.3%	0.3%	16.2%	35.8%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Scenario 4: Improve PCI to 65

Cost Summary Report

Network Condition Summary Report

Scenarios - Cost Summary

Interest: 3.00% Inflation: 3.00% Printed: 09/07/2017

Scenario: 2017 S4: Improve PCI to 65

Year	PM	Budget	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2017	0%	$600,000	II $383,515	Non-Project	$0	$0	$10,629,574	Funded	$7,465
			III $100,320					Unmet	$114,735
			IV $97,484	Project	$0				
			V $11,220						
			Total $592,539						
			Project $0						
2018	5%	$900,000	II $123,460	Non-Project	$49,672	$0	$10,258,584	Funded	$0
			III $29,962					Unmet	$0
			IV $695,592	Project	$0				
			V $0						
			Total $849,014						
			Project $0						
2019	5%	$1,000,000	II $110,768	Non-Project	$65,723	$0	$9,898,785	Funded	$0
			III $61,369					Unmet	$0
			IV $519,353	Project	$0				
			V $241,568						
			Total $933,058						
			Project $0						
2020	5%	$900,000	II $33,336	Non-Project	$54,996	$0	$9,711,199	Funded	$0
			III $114,591					Unmet	$0
			IV $0	Project	$0				
			V $695,502						
			Total $843,429						
			Project $0						
2021	5%	$900,000	II $0	Non-Project	$49,064	$0	$9,252,683	Funded	$0
			III $0					Unmet	$0
			IV $0	Project	$0				
			V $849,132						
			Total $849,132						
			Project $0						
2022	5%	$900,000	II $80,714	Non-Project	$0	$0	$8,833,271	Funded	$46,057
			III $0					Unmet	$63,403
			IV $0	Project	$0				
			V $773,236						
			Total $853,950						
			Project $0						

Year	PM	Budget	Rehabilitation			Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2023	5%	$900,000	II	$73,951	Non-Project	$50,940	$0	$8,590,197	Funded	$0
			III	$0					Unmet	$0
			IV	$103,952	Project	$0				
			V	$668,863						
			Total	$846,766						
			Project	$0						
2024	5%	$1,000,000	II	$0	Non-Project	$65,519	$0	$7,952,746	Funded	$0
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$931,116						
			Total	$931,116						
			Project	$0						
2025	5%	$1,000,000	II	$249,375	Non-Project	$58,763	$0	$7,558,052	Funded	$1,099
			III	$0					Unmet	$0
			IV	$0	Project	$0				
			V	$689,911						
			Total	$939,286						
			Project	$0						
2026	5%	$900,000	II	$94,023	Non-Project	$67,757	$0	$7,216,689	Funded	$0
			III	$0					Unmet	$0
			IV	$235,095	Project	$0				
			V	$502,914						
			Total	$832,032						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$614,158	$0	$1,120	$0
Collector	$1,420,449	$362,627	$1,893	$93,551
Other	$6,211,807	$62,257	$50,259	$82,662
Residential/Local	$223,908	$37,550	$1,348	$1,926
Grand Total:	$8,470,322	$462,434	$54,621	$178,138

Scenarios - Network Condition Summary

Interest: 3% Inflation: 3% Printed: 09/07/2017

Scenario: 2017 S4: Improve PCI to 65

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	$600,000	0%	2021	$900,000	5%	2025	$1,000,000	5%
2018	$900,000	5%	2022	$900,000	5%	2026	$900,000	5%
2019	$1,000,000	5%	2023	$900,000	5%			
2020	$900,000	5%	2024	$1,000,000	5%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2017	49	51	2.58	5.16
2018	46	52	2.66	5.26
2019	43	53	3.44	6.88
2020	41	54	2.15	4.21
2021	39	55	3.55	7.11
2022	37	57	1.32	2.65
2023	35	59	4.30	8.54
2024	33	61	3.72	7.34
2025	32	63	2.93	5.75
2026	30	65	3.48	6.91

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	1.5%	16.7%	4.0%	12.4%	34.6%
II / III	2.2%	3.6%	0.0%	6.9%	12.8%
IV	1.5%	7.1%	0.5%	5.4%	14.5%
V	0.0%	13.9%	0.7%	23.6%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2017 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	3.7%	20.8%	4.0%	19.4%	47.9%
II / III	0.0%	0.0%	0.0%	0.3%	0.3%
IV	1.5%	6.7%	0.5%	5.1%	13.7%
V	0.0%	13.9%	0.7%	23.5%	38.1%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

Condition in year 2026 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	5.2%	21.5%	4.8%	38.7%	70.3%
II / III	0.0%	5.4%	0.0%	2.8%	8.2%
V	0.0%	14.5%	0.3%	6.8%	21.6%
Total	5.2%	41.4%	5.1%	48.3%	100.0%

APPENDIX D

Sections Selected for Treatment:
City's Funding Level (Scenario 1)

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2017	$400,000	0%	2021	$400,000	5%	2025	$400,000	5%
2018	$400,000	5%	2022	$400,000	0%	2026	$400,000	5%
2019	$400,000	5%	2023	$400,000	5%			
2020	$400,000	5%	2024	$400,000	5%			

Year: 2017

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
South Lenore Avenue	EAST COMMERCIAL ST	EAST VALLEY ST	SLenor	05	1,080	38	41,040	1/31/2017	63	O	AC/AC	100	$100,320	16,786	AC OVERLAY (1.5") W/ FABRIC
									Treatment Total				$100,320		
East Commercial Street	Main Street	1400 feet East	EComm	01	1,400	54	75,600	1/31/2017	62	A	AC/AC	100	$172,200	29,691	MILL AND OVERLAY (1.5")
									Treatment Total				$172,200		
East Valley Street	827 FT W/O CITY LIMIT	EAST END (CITY LIMIT)	EVally	10	827	23	19,021	1/31/2017	62	C	AC/AC	71	$13,738	17,978	RUBBERIZED CHIP SEAL
Mill Creek Court	Northbrook Way	end	Mcrkct	01	200	36	7,200	1/31/2017	66	O	AC	75	$4,800	17,251	RUBBERIZED CHIP SEAL
Pine Street	MAPLE ST	COAST ST	Pine	10	1,140	37	42,180	1/31/2017	64	C	AC/AC	72	$30,464	19,701	RUBBERIZED CHIP SEAL
Railroad Avenue	E Oak Street	south end (s/Baechtel Creek)	Rail	02B	1,100	32	35,200	1/31/2017	62	C	AC/AC	71	$25,423	19,158	RUBBERIZED CHIP SEAL
Raymond Lane	Coast Street	Pine Avenue	Raymnd	01	1,250	18	22,500	1/31/2017	69	O	AC/AC	78	$15,000	18,751	RUBBERIZED CHIP SEAL
Sandy Lane	Baechtel Road	Bonnie Lane	Sandy	01	570	33	18,810	2/1/2017	60	O	AC	70	$12,540	16,471	RUBBERIZED CHIP SEAL
South Street	Main Street	Central Street	South	01	450	36	16,200	1/31/2017	66	O	AC	74	$10,800	16,998	RUBBERIZED CHIP SEAL
West San Francisco Ave	Coast Street	McKinley Street	WSan	01	250	30	7,500	1/31/2017	63	O	AC/AC	73	$5,000	18,116	RUBBERIZED CHIP SEAL
									Treatment Total				$117,765		
				Year 2017 Area Total			285,251		Year 2017 Total				$390,285		

Year: 2018

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Willow Lane	Baechtel Road	end of street	Willow	01	450	24	10,800	2/1/2017	54	O	AC	100	$33,372	15,143	AC OVERLAY (2 ") W/ FABRIC
									Treatment Total				$33,372		

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2018

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Redwood Avenue	SPRUCE STREET	EASY STREET	Redwd	10B	350	34	11,900	1/31/2017	72	O	AC/AC	100	$29,962	13,009	AC OVERLAY (1.5") W/ FABRIC
									Treatment Total				$29,962		
Laurel Street	North Street	Mill Street	Laurel	03	410	30	12,300	1/31/2017	50	O	AC/AC	100	$45,750	12,947	MILL AND OVERLAY (2") W/ FABRIC
Railroad Avenue	East Valley Street	East San Francisco Avenue	Rail	01	750	22	16,500	1/31/2017	50	C	AC/AC	100	$67,036	13,847	MILL AND OVERLAY (2") W/ FABRIC
									Treatment Total				$112,786		
East Commercial Street	1400 feet East of Main Street	Broaddus Creek Bridge	EComm	02	500	54	27,000	1/31/2017	81	C	AC/AC	87	$10,815	46,395	SINGLE CHIP SEAL
Mill Street	Coast Street	Pine Avenue	Mill	01	1,180	37	43,660	1/31/2017	83	C	AC/AC	88	$17,489	60,299	SINGLE CHIP SEAL
									Treatment Total				$28,304		
Blosser Lane	113 FT S/O RR TRACKS	FRANKLIN AVE	Bloss	10	523	39	20,397	2/1/2017	73	C	AC	78	$15,174	17,750	RUBBERIZED CHIP SEAL
East Commercial Street	312 ft E/O Broaddus Creek Brid	City Limits	EComm	07	1,588	54	85,752	1/31/2017	70	C	AC	76	$63,790	14,927	RUBBERIZED CHIP SEAL
East San Francisco Ave	Main Street	east end	ESan	01	1,900	37	70,300	1/31/2017	66	O	AC/AC	73	$48,273	15,706	RUBBERIZED CHIP SEAL
Mill Creek Drive	MILL CREEK CT	HILLSIDE DR	MCreek	05	1,800	36	64,800	1/31/2017	70	O	AC	77	$44,496	17,021	RUBBERIZED CHIP SEAL
									Treatment Total				$171,733		
Camp Lane	Spruce Street	end	Campln	01	200	19	3,800	1/31/2017	16	O	AC/AC	100	$23,484	7,985	RECONSTRUCT SURFACE (AC)
									Treatment Total				$23,484		
Central Street	South Street	East San Francisco Avenue	Centra	01	1,170	37	43,290	1/31/2017	84	O	AC	82	$130	727,370	SEAL CRACKS
									Treatment Total				$130		
				Year 2018 Area Total			410,499		Year 2018 Total				$399,771		

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2019

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Railroad Avenue	East San Francisco Avenue	E Oak Street	Rail	02A	830	32	26,560	1/31/2017	62	C	AC	100	$92,360	15,699	AC OVERLAY (2 ") W/ FABRIC
									Treatment Total				$92,360		
West Franklin Avenue	BLOSSER LN	END WEST	WFRANK	05	700	44	41,862	2/1/2017	53	C	AC/AC	100	$175,179	13,577	MILL AND OVERLAY (2") W/ FABRIC
									Treatment Total				$175,179		
North Street	West Mendocino Street	West Commercial Street	North	01B	404	37	14,948	1/31/2017	83	C	AC/AC	86	$6,168	36,695	SINGLE CHIP SEAL
SANHEDRIN CIRCLE	END SOUTH	EAST HILL RD	SANHED	01	762	25	19,050	2/1/2017	83	C	AC	85	$7,860	31,415	SINGLE CHIP SEAL
West Valley Street	Coast Street	Main Street	WVally	01	420	37	15,540	1/31/2017	89	O	AC/AC	93	$6,412	38,641	SINGLE CHIP SEAL
									Treatment Total				$20,440		
East Valley Street	MAIN ST	827 FT W/O CITY LIMIT	EVally	05	2,060	40	82,400	1/31/2017	73	C	AC/AC	78	$63,136	21,779	RUBBERIZED CHIP SEAL
Mill Creek Drive	HILLSIDE DR	WEST COMMERCIAL STREET	MCreek	10	560	36	20,160	1/31/2017	73	O	AC/AC	78	$14,259	19,019	RUBBERIZED CHIP SEAL
School Street	Pine Avenue	West Commercial Street	School	01	1,060	34	36,040	1/31/2017	74	C	AC/AC	79	$27,615	23,475	RUBBERIZED CHIP SEAL
Wood Street	SCHOOL ST	MAIN ST	WoodSt	10	370	22	8,140	1/31/2017	73	O	AC/AC	78	$5,758	19,019	RUBBERIZED CHIP SEAL
									Treatment Total				$110,768		
East Barbara Lane	Central Street	Railroad Avenue	EBarb	02	620	20	12,400	1/31/2017	95	O	AC	89	$22	619,153	SEAL CRACKS
East Hill Road	Baechtel Road	bridge at Haehl Creek	EHill	01	600	32	19,200	2/1/2017	96	C	AC/AC	88	$12	2,600,309	SEAL CRACKS
East Hill Road	bridge at Haehl Creek	east end (City Limits)	EHill	02	1,600	30	48,000	2/1/2017	98	C	AC/AC	88	$28	2,681,327	SEAL CRACKS
Humboldt Street	East Valley St	East Commercial St	Humbol	02	1,124	37	41,588	4/3/2017	95	C	AC/AC	88	$21	3,014,694	SEAL CRACKS
									Treatment Total				$83		
				Year 2019 Area Total			385,888		Year 2019 Total				$398,830		

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2020

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Bonnie Lane	Nancy Lane	north end	Bonnie	01	1,250	33	41,250	2/1/2017	60	O	AC	100	$135,225	14,072	AC OVERLAY (2 ") W/ FABRIC
									Treatment Total				$135,225		
Northbrook Way	Mill Creek Drive	Mill Creek Drive	Nbrook	01	1,300	33	42,900	1/31/2017	74	O	AC	100	$114,591	13,316	AC OVERLAY (1.5") W/ FABRIC
									Treatment Total				$114,591		
Bush Street	Coast Street	McKinley Street	Bush	01	250	35	8,750	1/31/2017	56	O	AC/AC	100	$34,528	11,938	MILL AND OVERLAY (2") W/ FABRIC
									Treatment Total				$34,528		
Haehl Creek Drive	East Hill Road	Haehl Creek Court	Haehldr	01	1,950	32	62,400	2/1/2017	86	R	AC	90	$26,517	35,637	SINGLE CHIP SEAL
									Treatment Total				$26,517		
Grove Street	Haehl Creek Drive(loop)	Haehl Creek Drive(loop)	Grove	01	1,430	32	45,760	2/1/2017	75	R	AC	78	$33,336	14,637	RUBBERIZED CHIP SEAL
									Treatment Total				$33,336		
Bittenbender Lane	end	Main Street	Bitten	01	500	13	6,500	1/31/2017	12	O	AC	100	$42,617	7,526	RECONSTRUCT SURFACE (AC)
Harmon Lane	Franklin Avenue	Hwy 20	Harmon	01	170	11	1,870	2/1/2017	23	O	AC/AC	100	$12,261	7,526	RECONSTRUCT SURFACE (AC)
									Treatment Total				$54,878		
				Year 2020 Area Total			209,430		Year 2020 Total				$399,075		

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Redwood Avenue	NORTH STREET	SPRUCE STREET	Redwd	10A	696	34	23,664	1/31/2017	72	O	AC/AC	100	$65,106	11,778	AC OVERLAY (1.5") W/ FABRIC
									Treatment Total				$65,106		
Alameda Avenue	Main Street	Central Street	Alamed	01	630	23	14,490	1/31/2017	85	O	AC/AC	86	$6,343	27,489	SINGLE CHIP SEAL
East Van Lane	Main Street	Humboldt Street	EVan	01	290	12	3,480	1/31/2017	78	O	AC	80	$1,524	27,076	SINGLE CHIP SEAL
Haehl Creek Court	Haehl Creek Drive	Dead End	Haehlct	01	850	32	27,200	2/1/2017	80	R	AC	82	$11,906	28,688	SINGLE CHIP SEAL

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

												Treatment Total		$19,773	
Alder Lane	west end	Main Street	Alder	01	850	37	31,450	2/1/2017	24	O	AC	100	$212,384	7,307	RECONSTRUCT SURFACE (AC)
Brookside Drive	West Mendocino Avenue	Hawthorne Lane	Brooks	01	450	32	14,400	1/31/2017	1	O	AC/AC	100	$97,244	7,307	RECONSTRUCT SURFACE (AC)
												Treatment Total		$309,628	
Blosser Lane	113 FT S/O RR TRACKS	FRANKLIN AVE	Bloss	10	523	39	20,397	2/1/2017	73	C	AC	74	$105	713,866	SEAL CRACKS
East Commercial Street	1400 feet East of Main Street	Broaddus Creek Bridge	EComm	02	500	54	27,000	1/31/2017	81	C	AC/AC	84	$65	1,467,847	SEAL CRACKS
Mill Street	Coast Street	Pine Avenue	Mill	01	1,180	37	43,660	1/31/2017	83	C	AC/AC	87	$55	3,094,652	SEAL CRACKS
Railroad Avenue	East Valley Street	East San Francisco Avenue	Rail	01	750	22	16,500	1/31/2017	50	C	AC/AC	87	$18	1,723,645	SEAL CRACKS
Raymond Lane	Coast Street	Pine Avenue	Raymnd	01	1,250	18	22,500	1/31/2017	69	O	AC/AC	75	$112	710,918	SEAL CRACKS
South Lenore Avenue	EAST COMMERCIAL ST	EAST VALLEY ST	SLenor	05	1,080	38	41,040	1/31/2017	63	O	AC/AC	88	$32	1,837,133	SEAL CRACKS
												Treatment Total		$387	
				Year 2021 Area Total			285,781					Year 2021 Total		$394,894	

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
East Valley Street	827 FT W/O CITY LIMIT	EAST END (CITY LIMIT)	EVally	10	827	23	19,021	1/31/2017	62	C	AC/AC	71	$15,926	15,540	RUBBERIZED CHIP SEAL
Pine Street	MAPLE ST	COAST ST	Pine	10	1,140	37	42,180	1/31/2017	64	C	AC/AC	73	$35,316	17,250	RUBBERIZED CHIP SEAL
Railroad Avenue	E Oak Street	south end (s/Baechtel Creek)	Rail	02B	1,100	32	35,200	1/31/2017	62	C	AC/AC	72	$29,472	16,771	RUBBERIZED CHIP SEAL
Redwood Avenue	WEST END	EASY STREET	Redwd	05	697	34	23,698	1/31/2017	77	O	AC/AC	78	$18,315	15,323	RUBBERIZED CHIP SEAL
ROBERT DR	BLOSSER LN	END WEST	ROBERT	01	890	41	49,816	2/1/2017	83	C	AC	78	$41,709	13,773	RUBBERIZED CHIP SEAL
												Treatment Total		$140,738	
Alder Court	Alder Lane	Dead End	Alderct	01	530	30	15,900	2/1/2017	36	R	AC	100	$110,595	7,094	RECONSTRUCT SURFACE (AC)

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Boscabelle Avenue	East Valley Street	East San Francisco Avenue	Bosca	01	680	27	18,360	1/31/2017	8	O	AC/AC	100	$127,706	7,094	RECONSTRUCT SURFACE (AC)
Schnieder Lane	West Oak Street	State Route 20	SCHNEI	01	260	11	2,860	2/1/2017	12	O	AC/AC	100	$19,894	7,094	RECONSTRUCT SURFACE (AC)
											Treatment Total		$258,195		
				Year 2022 Area Total			207,035				Year 2022 Total		$398,933		

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Mill Street	Coast Street	Pine Avenue	Mill	01	1,180	37	43,660	1/31/2017	83	C	AC/AC	92	$20,274	49,515	SINGLE CHIP SEAL
Railroad Avenue	East Valley Street	East San Francisco Avenue	Rail	01	750	22	16,500	1/31/2017	50	C	AC/AC	90	$7,662	24,468	SINGLE CHIP SEAL
											Treatment Total		$27,936		
East Commercial Street	312 ft E/O Broaddus Creek Brid	City Limits	EComm	07	1,588	54	85,752	1/31/2017	70	C	AC	73	$73,951	11,985	RUBBERIZED CHIP SEAL
											Treatment Total		$73,951		
Alice Drive	Margie Drive	Nancy Lane	Alice	01	700	33	23,100	2/1/2017	19	O	AC	100	$165,496	6,888	RECONSTRUCT SURFACE (AC)
California Street	Main Street	Penn Street	Calif	01	480	38	18,240	1/31/2017	15	O	AC/AC	100	$130,678	6,888	RECONSTRUCT SURFACE (AC)
											Treatment Total		$296,174		
Camp Lane	Spruce Street	end	Campln	01	200	19	3,800	1/31/2017	16	O	AC/AC	85	$11	669,620	SEAL CRACKS
East Valley Street	MAIN ST	827 FT W/O CITY LIMIT	EVally	05	2,060	40	82,400	1/31/2017	73	C	AC/AC	74	$437	894,194	SEAL CRACKS
Laurel Street	North Street	Mill Street	Laurel	03	410	30	12,300	1/31/2017	50	O	AC/AC	86	$20	1,108,685	SEAL CRACKS
Mill Creek Drive	HILLSIDE DR	WEST COMMERCIAL STREET	MCreek	10	560	36	20,160	1/31/2017	73	O	AC/AC	75	$104	731,714	SEAL CRACKS

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
North Street	West Mendocino Street	West Commercial Street	North	01B	404	37	14,948	1/31/2017	83	C	AC/AC	82	$54	958,912	SEAL CRACKS
Railroad Avenue	East San Francisco Avenue	E Oak Street	Rail	02A	830	32	26,560	1/31/2017	62	C	AC	86	$52	1,180,982	SEAL CRACKS
Redwood Avenue	SPRUCE STREET	EASY STREET	Redwd	10B	350	34	11,900	1/31/2017	72	O	AC/AC	86	$19	1,108,685	SEAL CRACKS
SANHEDRIN CIRCLE	END SOUTH	EAST HILL RD	SANHED	01	762	25	19,050	2/1/2017	83	C	AC	78	$87	679,318	SEAL CRACKS
School Street	Pine Avenue	West Commercial Street	School	01	1,060	34	36,040	1/31/2017	74	C	AC/AC	76	$184	981,347	SEAL CRACKS
West Franklin Avenue	BLOSSER LN	END WEST	WFRANK	05	700	44	41,862	2/1/2017	53	C	AC/AC	86	$82	1,180,982	SEAL CRACKS
Willow Lane	Baechtel Road	end of street	Willow	01	450	24	10,800	2/1/2017	54	O	AC	86	$17	1,108,685	SEAL CRACKS
Wood Street	SCHOOL ST	MAIN ST	WoodSt	10	370	22	8,140	1/31/2017	73	O	AC/AC	75	$42	731,714	SEAL CRACKS
											Treatment Total		$1,109		
				Year 2023 Area Total			475,212				Year 2023 Total		$399,170		

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
East Barbara Lane	Central Street	Railroad Avenue	EBarb	02	620	20	12,400	1/31/2017	95	O	AC	88	$5,931	22,302	SINGLE CHIP SEAL
East Commercial Street	1400 feet East of Main Street	Broaddus Creek Bridge	EComm	02	500	54	27,000	1/31/2017	81	C	AC/AC	88	$12,914	37,935	SINGLE CHIP SEAL
School Street	Pine Avenue	West Commercial Street	School	01	1,060	34	36,040	1/31/2017	74	C	AC/AC	83	$17,238	40,399	SINGLE CHIP SEAL
											Treatment Total		$36,083		
Blosser Lane	113 FT S/O RR TRACKS	FRANKLIN AVE	Bloss	10	523	39	20,397	2/1/2017	73	C	AC	77	$18,118	14,397	RUBBERIZED CHIP SEAL
Sewer Plant Road	North Lenore Street	east end (sewer plant)	SPlant	01	1,230	16	19,680	1/31/2017	80	O	AC	78	$16,136	14,263	RUBBERIZED CHIP SEAL
											Treatment Total		$34,254		

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Casteel Lane	Main Street	Williams Street	Castee	01	250	22	5,500	1/31/2017	10	O	AC	100	$40,586	6,687	RECONSTRUCT SURFACE (AC)
Catherine Lane	Pine Avenue	Wood Street	Cather	01	450	12	5,400	1/31/2017	5	O	AC	100	$39,848	6,687	RECONSTRUCT SURFACE (AC)
Easy Street	Redwood Avenue	West Mendocino Avenue	EasySt	01	310	36	11,160	1/31/2017	19	O	AC/AC	100	$82,353	6,687	RECONSTRUCT SURFACE (AC)
East Barbara Lane	Main Street	Central Street	EBarb	01	510	12	6,120	1/31/2017	15	O	AC	100	$45,161	6,687	RECONSTRUCT SURFACE (AC)
Eva Claire Street	Holly Street	Dead End	EvaClaire	01	560	22	12,320	2/1/2017	17	R	AC	100	$90,913	6,687	RECONSTRUCT SURFACE (AC)
East Van Lane	Marin Street	Madden Lane	EVan	02	250	16	4,000	1/31/2017	19	O	AC	100	$29,517	6,687	RECONSTRUCT SURFACE (AC)
									Treatment Total				$328,378		
Bittenbender Lane	end	Main Street	Bitten	01	500	13	6,500	1/31/2017	12	O	AC	87	$16	618,491	SEAL CRACKS
Bonnie Lane	Nancy Lane	north end	Bonnie	01	1,250	33	41,250	2/1/2017	60	O	AC	88	$35	1,681,237	SEAL CRACKS
Bush Street	Coast Street	McKinley Street	Bush	01	250	35	8,750	1/31/2017	56	O	AC/AC	88	$8	1,681,237	SEAL CRACKS
Grove Street	Haehl Creek Drive(loop)	Haehl Creek Drive(loop)	Grove	01	1,430	32	45,760	2/1/2017	75	R	AC	74	$263	529,537	SEAL CRACKS
Haehl Creek Drive	East Hill Road	Haehl Creek Court	Haehldr	01	1,950	32	62,400	2/1/2017	86	R	AC	87	$157	968,227	SEAL CRACKS
Harmon Lane	Franklin Avenue	Hwy 20	Harmon	01	170	11	1,870	2/1/2017	23	O	AC/AC	87	$5	618,491	SEAL CRACKS
Northbrook Way	Mill Creek Drive	Mill Creek Drive	Nbrook	01	1,300	33	42,900	1/31/2017	74	O	AC	88	$36	1,681,237	SEAL CRACKS
									Treatment Total				$520		
				Year 2024 Area Total			369,447		Year 2024 Total				$399,235		

Year: 2025

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
West Commercial Street	North Street	Main Street	WComme	01	930	54	50,220	1/31/2017	82	A	AC/AC	100	$144,906	19,608	MILL AND OVERLAY (1.5")
									Treatment Total				$144,906		

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2025

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
East Hill Road	Baechtel Road	bridge at Haehl Creek	EHill	01	600	32	19,200	2/1/2017	96	C	AC/AC	86	$9,459	30,099	SINGLE CHIP SEAL
Madden Lane	East Van Lane	Pearl Street	Madden	01	460	31	14,260	1/31/2017	92	O	AC	86	$7,025	23,129	SINGLE CHIP SEAL
North Street	West Mendocino Street	West Commercial Street	North	01B	404	37	14,948	1/31/2017	83	C	AC/AC	86	$7,364	30,785	SINGLE CHIP SEAL
											Treatment Total		$23,848		
Mill Creek Court	Northbrook Way	end	Mcrkct	01	200	36	7,200	1/31/2017	66	O	AC	72	$6,081	13,192	RUBBERIZED CHIP SEAL
Raymond Lane	Coast Street	Pine Avenue	Raymnd	01	1,250	18	22,500	1/31/2017	69	O	AC/AC	78	$19,002	14,802	RUBBERIZED CHIP SEAL
South Street	Main Street	Central Street	South	01	450	36	16,200	1/31/2017	66	O	AC	71	$13,682	12,987	RUBBERIZED CHIP SEAL
West San Francisco Ave	Coast Street	McKinley Street	WSan	01	250	30	7,500	1/31/2017	63	O	AC/AC	71	$6,334	14,088	RUBBERIZED CHIP SEAL
											Treatment Total		$45,099		
East Mendocino Avenue	Main Street	Madden Lane	EMendo	01	830	25	20,750	1/31/2017	18	O	AC	100	$157,713	6,492	RECONSTRUCT SURFACE (AC)
South Coast Street	Coast Street	Bush Street	SCoast	01	200	17	3,400	1/31/2017	15	O	AC	100	$25,843	6,492	RECONSTRUCT SURFACE (AC)
											Treatment Total		$183,556		
Alameda Avenue	Main Street	Central Street	Alamed	01	630	23	14,490	1/31/2017	85	O	AC/AC	82	$55	710,194	SEAL CRACKS
Alder Lane	west end	Main Street	Alder	01	850	37	31,450	2/1/2017	24	O	AC	87	$79	600,476	SEAL CRACKS
Brookside Drive	West Mendocino Avenue	Hawthorne Lane	Brooks	01	450	32	14,400	1/31/2017	1	O	AC/AC	87	$37	600,476	SEAL CRACKS
East Van Lane	Main Street	Humboldt Street	EVan	01	290	12	3,480	1/31/2017	78	O	AC	76	$19	597,307	SEAL CRACKS
Haehl Creek Court	Haehl Creek Drive	Dead End	Haehlct	01	850	32	27,200	2/1/2017	80	R	AC	79	$129	669,142	SEAL CRACKS
Redwood Avenue	NORTH STREET	SPRUCE STREET	Redwd	10A	696	34	23,664	1/31/2017	72	O	AC/AC	88	$21	1,632,269	SEAL CRACKS
ROBERT DR	BLOSSER LN	END WEST	ROBERT	01	890	41	49,816	2/1/2017	83	C	AC	74	$295	537,802	SEAL CRACKS
											Treatment Total		$635		
				Year 2025 Area Total			340,678				Year 2025 Total		$398,044		

** - Treatment from Project Selection

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: 3.00% Inflation: 3.00% Printed: 07/14/2017

Scenario: 2017 S1: Existing Funding $400K

Year: 2026

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	Last Insp	Last Insp PCI	FC	Surf Type	PCI	Cost	Rating	Treatment
Sandy Lane	Baechtel Road	Bonnie Lane	Sandy	01	570	33	18,810	2/1/2017	60	O	AC	100	$73,629	11,791	AC OVERLAY (2 ") W/ FABRIC
									Treatment Total				$73,629		
Camp Lane	Spruce Street	end	Campln	01	200	19	3,800	1/31/2017	16	O	AC/AC	88	$1,929	20,948	SINGLE CHIP SEAL
Holly Street	Locust Street	Main Street	Holly	01	1,480	39	57,720	2/1/2017	90	C	AC/AC	82	$29,288	30,306	SINGLE CHIP SEAL
Walnut Street	Main Street	Magnolia	Walnut	01	600	35	21,000	2/1/2017	95	C	AC/AC	84	$10,656	29,871	SINGLE CHIP SEAL
									Treatment Total				$41,873		
Central Street	South Street	East San Francisco Avenue	Centra	01	1,170	37	43,290	1/31/2017	84	O	AC	78	$37,656	12,579	RUBBERIZED CHIP SEAL
East Valley Street	MAIN ST	827 FT W/O CITY LIMIT	EVally	05	2,060	40	82,400	1/31/2017	73	C	AC/AC	78	$77,649	17,980	RUBBERIZED CHIP SEAL
Mill Creek Drive	MILL CREEK CT	HILLSIDE DR	MCreek	05	1,800	36	64,800	1/31/2017	70	O	AC	74	$56,367	13,041	RUBBERIZED CHIP SEAL
									Treatment Total				$171,672		
Gregory Lane	west end	Main Street	Gregor	01	280	32	8,960	2/1/2017	28	O	AC	100	$70,145	6,303	RECONSTRUCT SURFACE (AC)
Hawthorne Court	Hawthorne Lane	end	HawCt	01	200	25	5,000	1/31/2017	13	O	AC/AC	100	$39,144	6,303	RECONSTRUCT SURFACE (AC)
									Treatment Total				$109,289		
Alder Court	Alder Lane	Dead End	Alderct	01	530	30	15,900	2/1/2017	36	R	AC	87	$42	582,987	SEAL CRACKS
Boscabelle Avenue	East Valley Street	East San Francisco Avenue	Bosca	01	680	27	18,360	1/31/2017	8	O	AC/AC	87	$48	582,987	SEAL CRACKS
Railroad Avenue	East Valley Street	East San Francisco Avenue	Rail	01	750	22	16,500	1/31/2017	50	C	AC/AC	86	$36	1,080,172	SEAL CRACKS
Redwood Avenue	WEST END	EASY STREET	Redwd	05	697	34	23,698	1/31/2017	77	O	AC/AC	74	$138	581,394	SEAL CRACKS
Schnieder Lane	West Oak Street	State Route 20	SCHNEI	01	260	11	2,860	2/1/2017	12	O	AC/AC	87	$8	582,987	SEAL CRACKS
West Valley Street	Coast Street	Main Street	WVally	01	420	37	15,540	1/31/2017	89	O	AC/AC	89	$6	6,931,707	SEAL CRACKS
									Treatment Total				$278		
				Year 2026 Area Total			398,638		Year 2026 Total				$396,741		

** - Treatment from Project Selection

Scenarios Criteria:

Total Section Area:	3,367,859	Grand Total	$3,974,978

APPENDIX E

PCI GIS Maps

PCI GIS Map
Current Pavement Conditions
(2017)

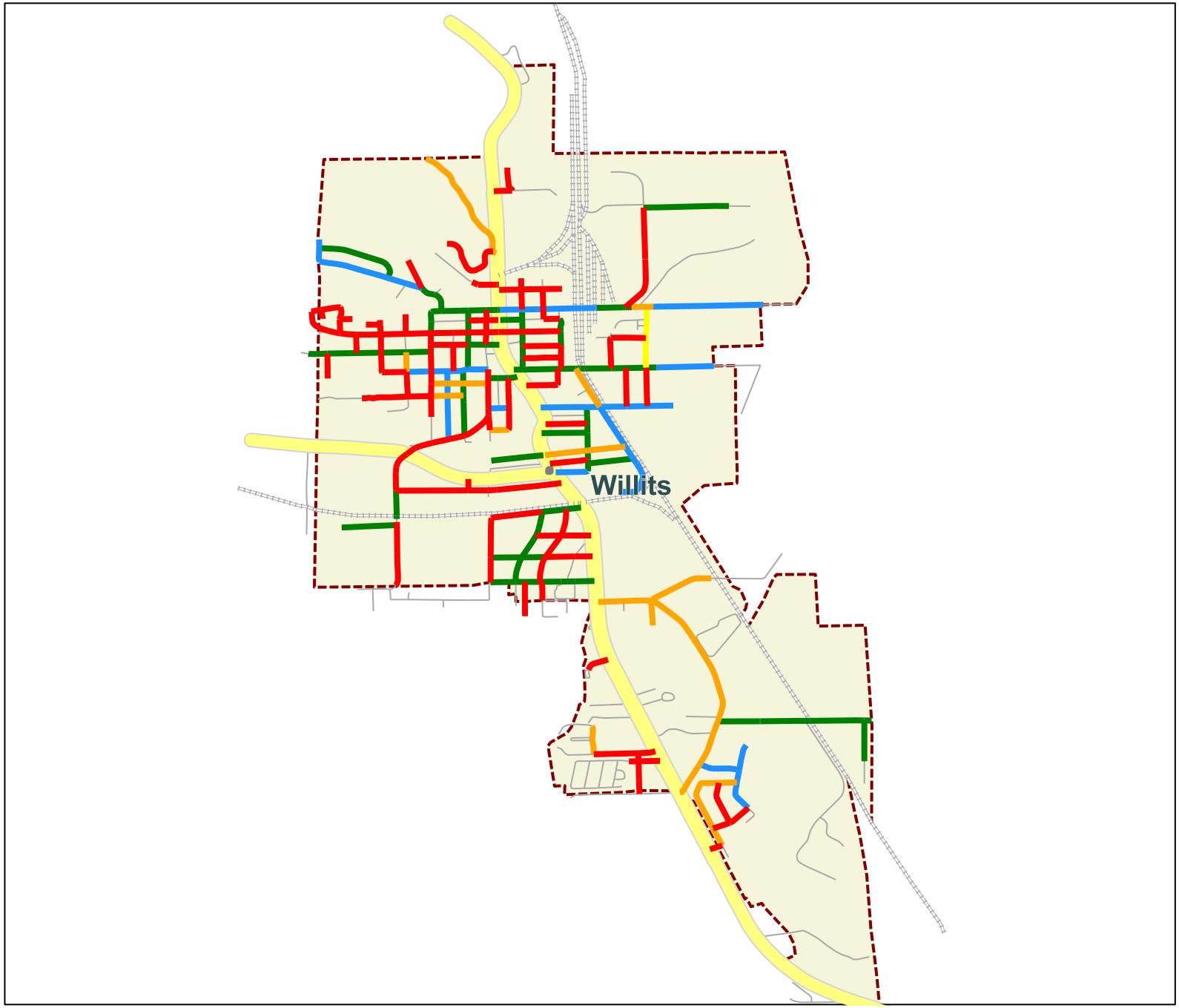
CITY OF WILLITS

Current PCI Condition

Printed: 7/14/2017

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

PCI GIS Map
Scenario 1: City's Funding Level
(2026)

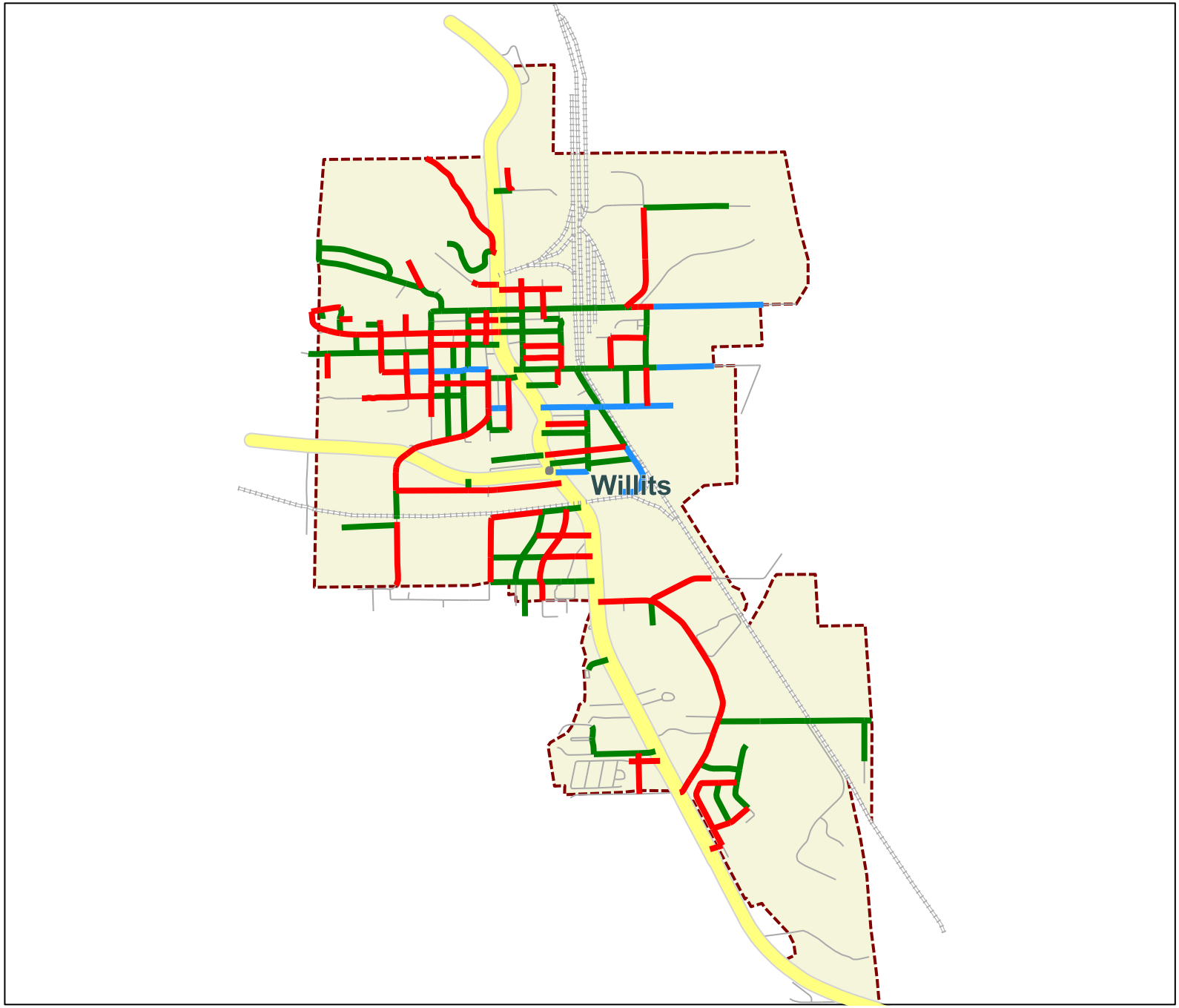
CITY OF WILLITS

Scenario PCI Condition

2017 S1: Existing Funding $400K - 2026 Project Period - Total Rehab: $354,590 - Printed: 7/14/2017

Feature Legend

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



0 0.5 Miles

PCI GIS Map
Scenario 2: Maintain PCI at 48
(2026)

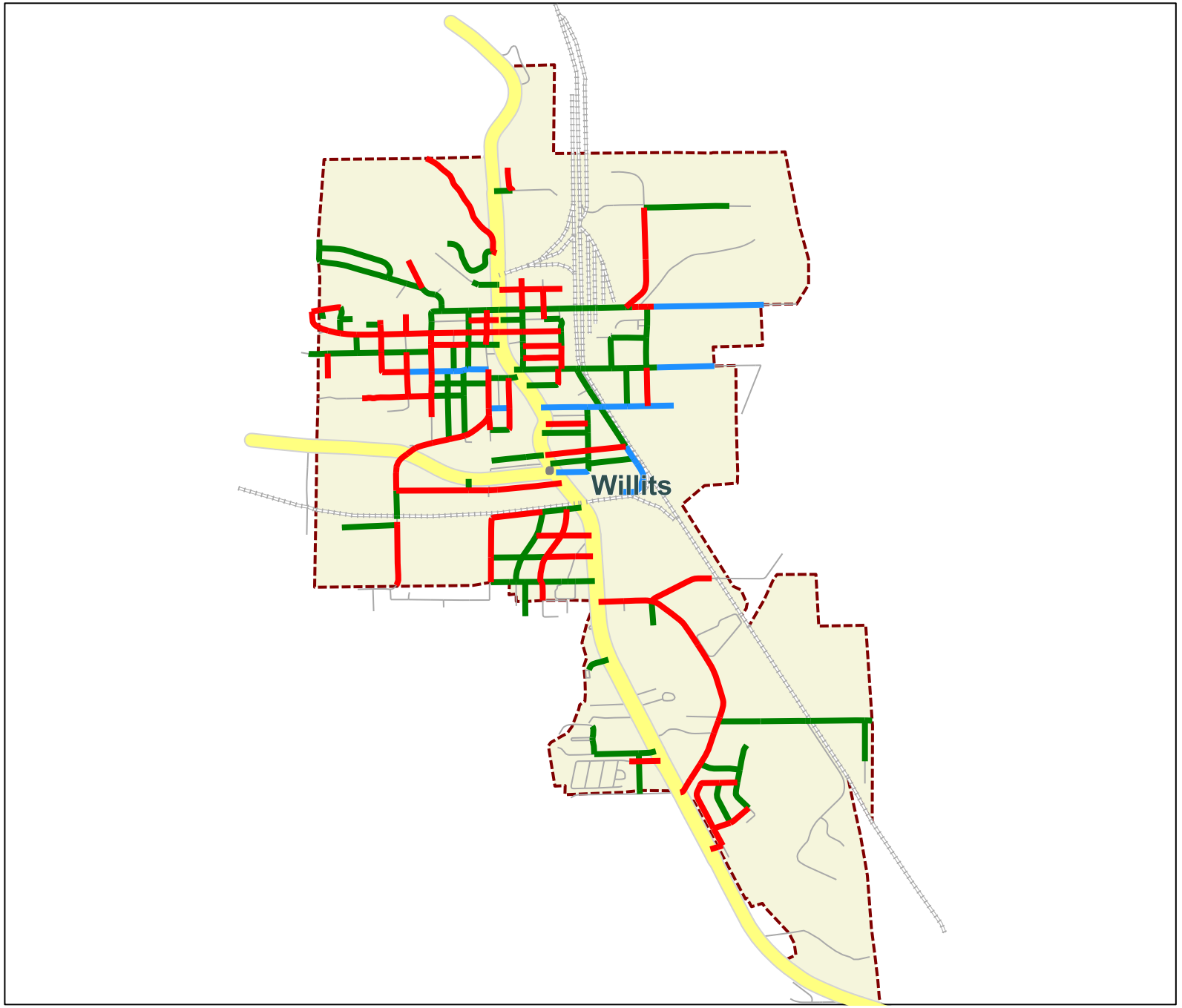
CITY OF WILLITS

Scenario PCI Condition

2017 S2: Maintain PCI at 48 - 2026 Project Period - Total Rehab: $359,601 - Printed: 7/14/2017

Feature Legend

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



0 0.5 Miles

PCI GIS Map
Scenario 3: Improve PCI to 53
(2026)

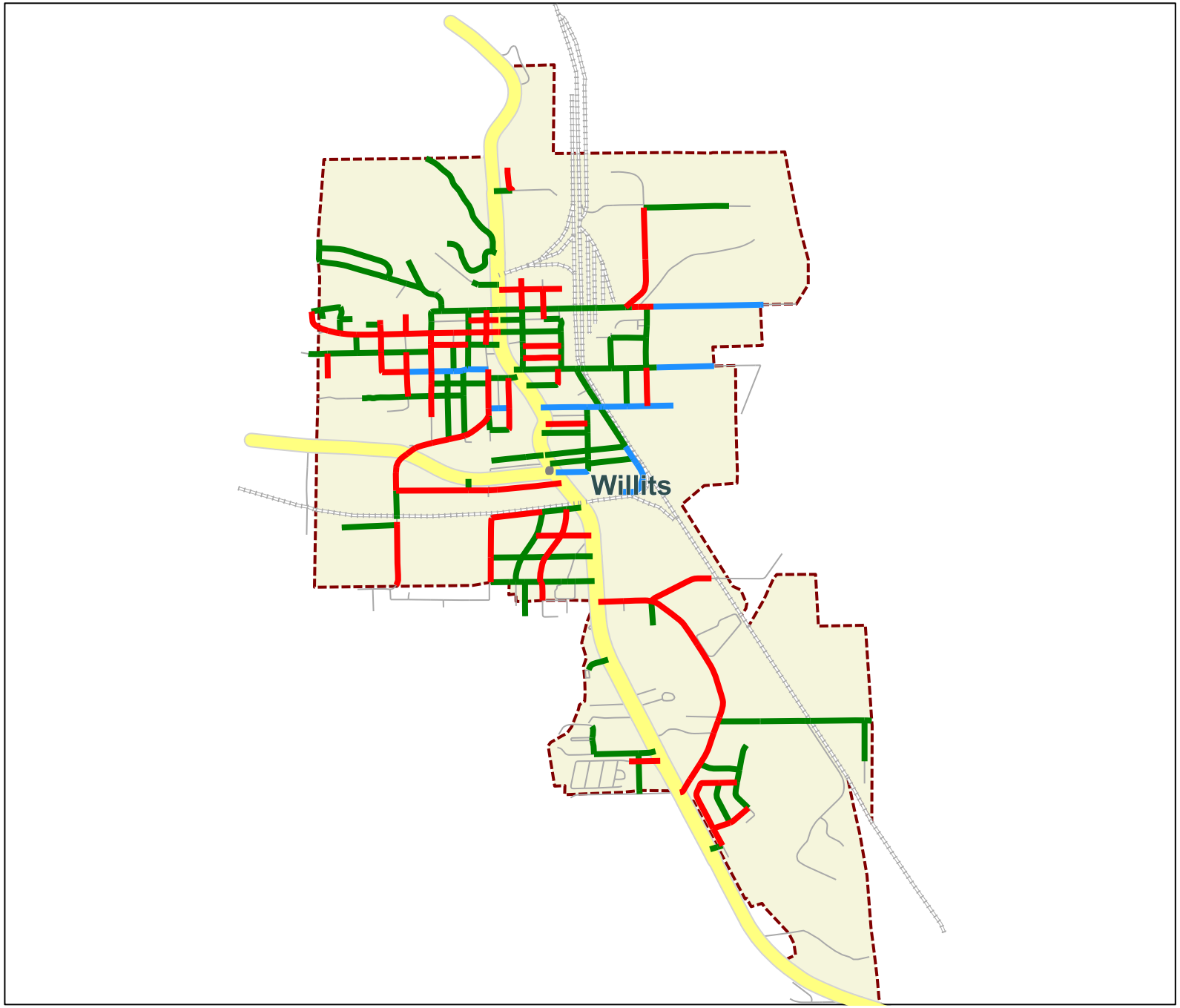
CITY OF WILLITS

Scenario PCI Condition

2017 S3: Improve PCI to 53 - 2026 Project Period - Total Rehab: $406,182 - Printed: 7/14/2017

Feature Legend

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



0 0.5 Miles

PCI GIS Map
Scenario 4: Improve PCI to 65
(2026)

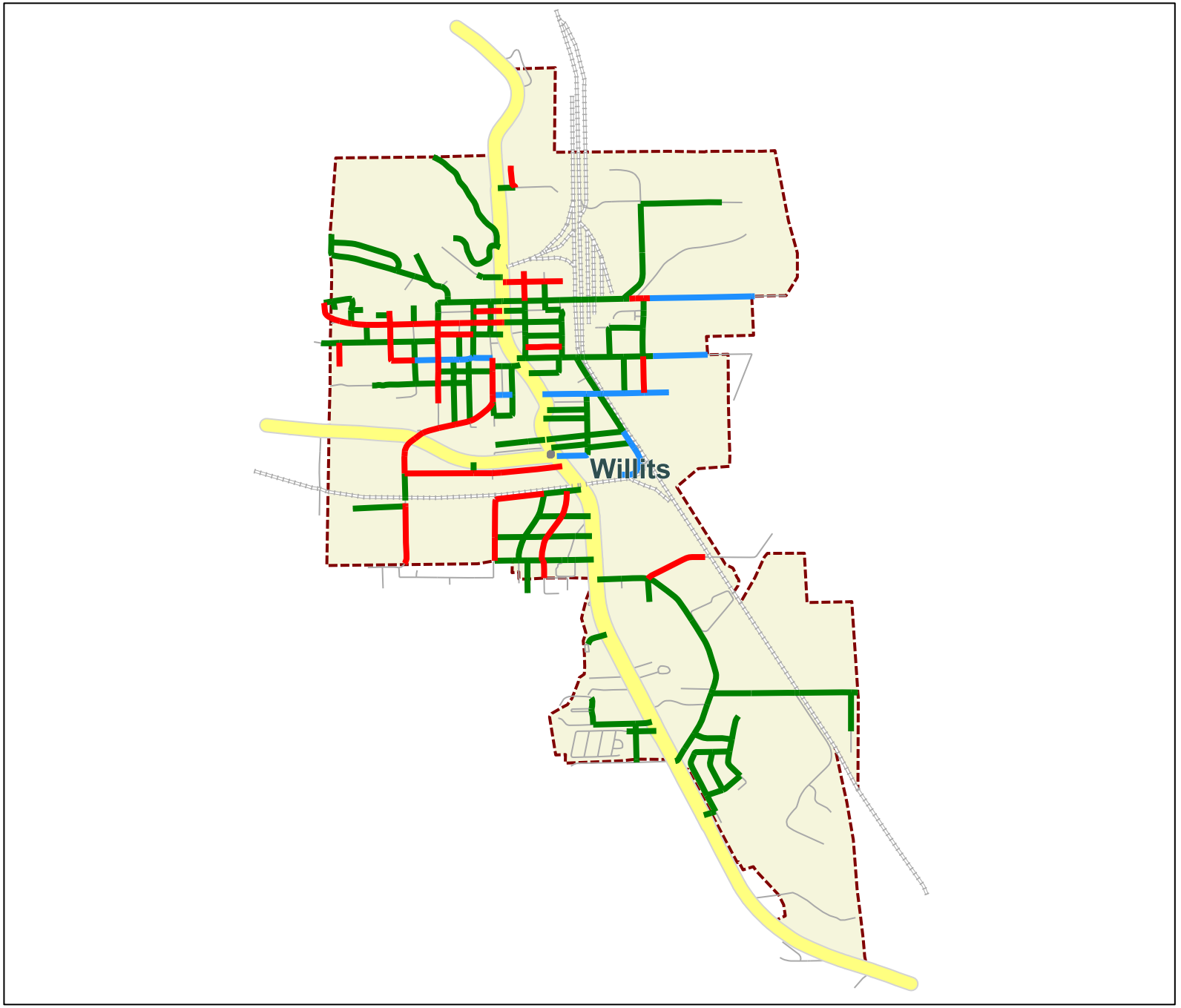
CITY OF WILLITS

Scenario PCI Condition

2017 S4: Improve PCI to 65 - 2026 Project Period - Total Rehab: $832,032 - Printed: 9/7/2017

Feature Legend

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



0 0.5 Miles