Pavement Management Budget Options Report





May, 2019

Hidden Lakes Homeower's Association

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Executive Summary

Capitol Asset & Pavement Services, Inc. was contracted by the Hidden Lakes Homeowners Association Public Works to perform visual inspections of all of the paved streets maintained by the Hidden Lakes Homeowners Association (HOA). All 1.79 centerline miles of paved streets maintained by the HOA were evaluated in accordance with MTC standards and the Streetsaver Online 9.0 database was updated with the inspection data. Inspections were completed in April, 2019.

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

The HOA's street network consists of 1.79 centerline miles of streets. A detailed visual inspection of the HOA's streets resulted in a calculated average PCI of 80. Using a 0-100 PCI scale, with 100 being the most favorable, a rating of 80 places the HOA's street network in the 'Good' condition category.

Four scenarios were analyzed for various street maintenance funding levels. The budgets include preventative maintenance and rehabilitation work for existing paved street surfaces. The recommended strategy of street maintenance, along with current prices for the treatments, is represented in the Streetsaver decision tree matrix. This matrix defines what treatments need to be applied to streets in varying PCI conditions. Utilizing this decision matrix, it was determined that the HOA will need to spend \$123,715 over the next five years to bring the street network into 'optimal' condition, or an overall street network PCI of 85. Comparing this with the current funding level of \$75,000 over the next five years shows that the average network PCI at the current level of 80 through 2023. Scenario #3 determine effects of ceasing all funding for street maintenance for the next five years. Finally, Scenario #4 shows the funding required to maintain the street network in good condition for twenty years. Scenario analyses show that at current funding levels, the overall street condition maintain at the current level. Table 1 summarizes the findings of the Scenarios.

Table 1 – Summary of outcome of different funding levels (Scenarios)									
Average yearly	\$24,743	\$15,000	\$0	\$17,492					
budget	(1-Unconstrained	(2-Current	(3-Do Nothing)	(4-Twenty Year					
	Needs)	Funding)		Needs)					
# of years	5 years	5 years	5 years	20 years					
Total budget	\$123,715	\$75,000	\$0	\$349,834					
Current PCI	80	80	80	80					
Current % in 'Good' condition	87.1%	87.1%	87.1%	87.1%					
PCI in final year	85	80	74	81					
(change)	(+5)	(0)	(-6)	(+1)					
Backlog in final	\$0	\$61,357	\$133,198	\$0					
year	÷	<i><i><i>q</i></i> 0 1,00 <i>f</i></i>	\$100,190	÷ •					
% 'Good'	100.0%	87.6%	81.0%	100.0%					
in final year	100.070	07.070	01.070	100.070					
% 'Fair'	0.0%	12.4%	18.5%	0.0%					
in final year	0.070	12.470	10.570	0.070					
% 'Poor'	0.0%	0.0%	0.5%	0.0%					
in final year	0.070	0.070	0.570	0.070					
% 'Very Poor'	0.0%	0.0%	0.0%	0.0%					
in final year	0.070	0.070	0.070	0.070					

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

Purpose

This report is intended to assist the Hidden Lakes Homeowners Association with identifying street maintenance priorities specific to the HOA.

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

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

Pavement Management Strategy

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

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

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

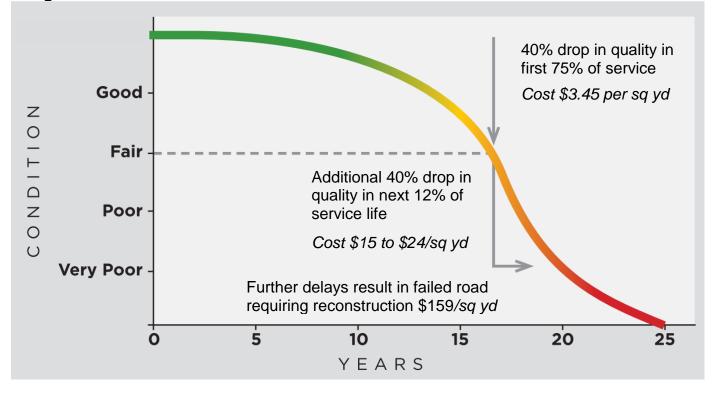


Figure 1 – Street Condition over time

Existing Pavement Condition

The HOA is responsible for the repair and maintenance of 1.79 centerline miles of paved streets. The HOA's street network replacement value is estimated at \$3.7 million.¹ This asset valuation assumes replacement of the entire street network in present day dollars (street base and surface only, not curbs or sidewalk). This represents a significant asset for HOA officials to manage.

The average overall network Pavement Condition Index (PCI) of the HOA's street network is 80, which indicates that the street network is in 'Good' condition. The PCI is a measurement of pavement condition that ranges from 0 to 100. A newly constructed or overlaid street would have a PCI of 100, while a failed street (requiring complete reconstruction) would have a PCI under 25. Appendix B contains a report detailing the PCI information for each street.

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

Table 2 – Street Network Statistics

# of Sections	Centerline Miles	Lane Miles	Average PCI
11	1.79	3.58	80

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

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

Condition Class	PCI Range	Collector	Residential	Total	Poor, 0.5% Fair,
Good I)	70-100	8.6%	56.3%	87.1%	12.4%
Fair (II/III)	50-70	6.1%	17.8%	12.4%	
Poor IV)	25-50	1.9%	9.3%	0.5%	
Very Poor (V)	0-25	0.0%	0.0%	0.0%	
Totals		16.6%	83.4%		

¹ Replacement value is calculated as the current cost to reconstruct each street in the network , based on the values in the Streetsaver decision tree. This does not include sidewalks or curb.

Present Cost to Repair the Street Network

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

The Budget Needs module of the PMP estimates a necessary funding level for the HOA's pavement preservation and rehabilitation program of \$123,715² over the next five-year period (2019–2023) in order to improve and maintain the street network PCI at an optimal level in the lower to mid 80's. The five-year cost of \$123,715 exceeds the HOA's planned five-year funding level of \$75,000 by approximately \$48,715.

As mentioned earlier, the average PCI for the HOA's streets is 80, which is in the 'Good' condition category. Why then, does it cost so much to repair the HOA's streets, and why bother improving them?

The cost to repair and maintain a pavement depends on its current PCI. In the 'Good' category, it costs very little to apply preventive maintenance treatments such as crack and slurry seals, which can extend the life of a pavement by correcting minor faults and reducing further deterioration. Minor treatments are applied before pavement deterioration has become severe and usually costs \$3.45 per square yard³. 87.1% of the HOA's street network would benefit from these relatively inexpensive, life-extending treatments.

12.4% of the HOA's street network falls into the 'Fair' condition category. Pavements in this range show some form of distress caused by traffic load related activity or environmental distress that requires more than a life-extending treatment. At this point, a well-designed pavement will have served at least 75 percent of its life, with the quality of the pavement dropping approximately 40 percent. The street surface may require a slurry seal or 2 inch AC overlay (depending on the extent of load related distresses), at a cost of \$3.45 to \$14.80/sq yd.

0.5% of the HOA's street network falls into the 'Poor' condition category. These pavements are near the end of their service lives, and often exhibit major forms of distress such as potholes, extensive cracking, etc. At this stage, a street usually requires a 3" surface reconstruction, at a cost of \$22.75 /sq yd.

Streets in the 'Very Poor' condition category indicate that the street has failed. These pavements are at the end of their service lives and have major distresses, often indicating the failure of the sub base. Streets at this stage require major rehabilitation, usually the complete reconstruction of the street surface or street surface and subgrade structure. Estimated costs to perform an full

 $^{^{2}}$ Treatment costs are based on this year's average costs per square yard, with future years including a 2.5% inflation adjustment per year after 2019.

³ For detailed treatments and costs used in analysis for this report, see appendix C – Decision Tree report -5-

reconstruction is approximately \$159.00 /sq yd. None of the HOA's streets current fall under this condition.

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

Budget Scenarios

Using the PMP budget scenarios module, the impact of various budget scenarios can be evaluated. The program projects the effects of the different scenarios on pavement condition PCI and deferred maintenance (backlog). By examining the effects on these indicators, the advantages and disadvantages of different funding levels and maintenance strategies become clear. Scenarios #1 - 3 were run for five (5)-year periods (2019-2023). The results are summarized in Table 6.

- 1. Unconstrained (zero "deferred maintenance") The annual amounts, as identified in the budget needs analysis totaling \$123,715, were input into the scenarios module. This scenario shows the effects of implementing the ideal investment strategy (as recommended by the MTC PMP Needs module).
- 2. *Current Investment Level* An average annual budget of \$15,000 was evaluated over five years, for a total of \$75,000, to determine the effects of continuing pavement maintenance at the current budget level. The overall network PCI remains the same, at 80, under this funding level.
- 3. *Do Nothing* This scenario analyzes the effects of ceasing all funding for street maintenance over the next five years. If this were to occur, the overall network PCI decreases by six points, to 74 through 2023.
- 4. *Twenty* year Needs This scenario determines the funding amount to carry on the strategy outlined under scenario 1 through 2039. An annual funding level of \$17,492 per year, for a five year total of \$349,834, maintain all streets in 'Good' condition over twenty years. The overall network average PCI will increase slightly, to 81 over the duration of the twenty-year analysis period.

Scenario 1 — Unconstrained Needs (zero deferred maintenance)

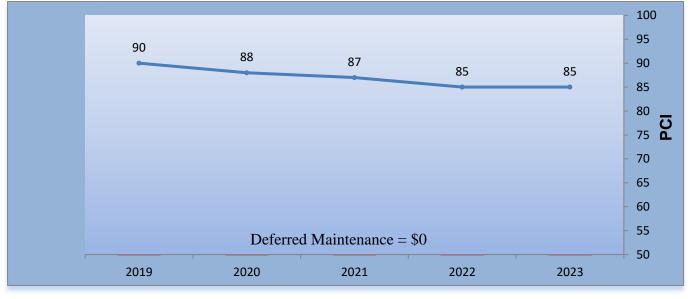
Based on the principle that it costs less to maintain streets in good condition than bad, the MTC PMP strives to develop a maintenance strategy that will first improve the overall condition of the network to an optimal PCI somewhere between the low and mid 80's, and then sustain it at that level. The average PCI for the HOA is 80, which is in the 'Good' condition category. Current funding strategies demonstrate there is a \$115,693 deferred maintenance backlog⁴ in the first year of the scenario. If these issues are not addressed, the quality of the street network will inevitably decline. In order to correct these deficiencies, cost-effective funding and street maintenance strategies must be implemented.

Because it is more cost-effective to eliminate the deferred maintenance backlog as quickly as possible, the bulk of the deferred maintenance needs are addressed in the first year of the five-year program, raising the overall average network PCI to 90. By 2023, 100.0% of the network will be in the 'Good' condition category, a significant increase from the current level of 87.1% in 'Good' condition. These results are shown in both Table 4 and Figure 3.

	1 1 1 1 1 1 1 1 1 1					
	2019	2020	2021	2022	2023	Total
Budget Total	\$115,698	\$0	\$5,282	\$0	\$2,735	\$123,715
Rehabilitation budget	\$49,299	\$0	\$5,230	\$0	\$0	\$54,529
Preventative Maintenance budget	\$66,399	\$0	\$0	\$0	\$2,683	\$69,082
Deferred Maintenance	\$0	\$0	\$0	\$0	\$0	
PCI	90	88	87	85	85	

Table 4. Summary of Results from Scenario 1 — Unconstrained Needs

Figure 3. Summary of Results from Scenario 1 — Unconstrained Needs



⁴ Definition of deferred maintenance backlog can be found in Appendix A

Scenario 2 — Current Investment Level

This scenario shows the effects of the HOA's current budget for street maintenance of \$75,000 over five years. Under this scenario, the overall network PCI remains at the current level of 80 through 2023. Under this investment level, the deferred maintenance backlog decreases from \$115,693 in 2019, to \$61,357 in 2023. The percentage of the street network in 'Good' condition improves, from 87.1% currently, to 87.6% in 2023. Results are illustrated in Table 5 and Figure 4.

	2019	2020	2021	2022	2023	Total
Budget Total	\$0	\$37,500	\$0	\$37,500	\$0	\$75,000
Rehabilitation budget	\$0	\$5,846	\$0	\$5,361	\$0	\$11,207
Preventative Maintenance budget	\$0	\$29,737	\$0	\$27,346	\$0	\$57,083
Deferred Maintenance	\$115,693	,693 \$83,004 \$9		\$59,860	\$61,357	
PCI	80	82	80	82	80	

Table 5. Summary of Results from Scenario 2 — Current Investment Level





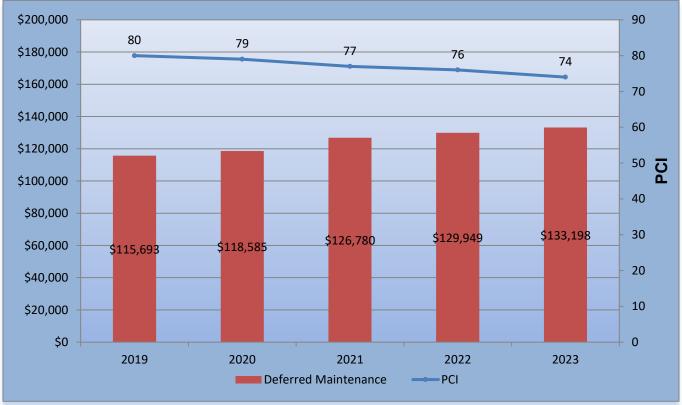
Scenario 3 — Do Nothing

This scenario analyzes effect of ceasing all funding for street maintenance over the next five years. Under this scenario, the PCI decreases by six points, from 80 currently, to 74 in 2023. Even though the PCI remains level, the deferred maintenance backlog increases from \$115,693 in 2019, to \$133,198 by 2023. The percentage of the street network in the 'Good' condition category decreases to 81.0% in 2023, from the current level of 87.1%. This highlights the importance of a well-funded street maintenance program. These results are illustrated in Table 6 and Figure 5.

	2019	2020	2021	2022	2023	Total
Budget Total	\$0	\$0	\$0	\$0	\$0	\$0
Rehabilitation budget	\$0	\$0	\$0	\$0	\$0	\$0
Preventative Maintenance budget	\$0	\$0	\$0	\$0	\$0	\$0
Deferred Maintenance	\$115,693	\$118,585	\$126,780	\$129,949	\$133,198	
PCI	80	79	77	76	74	

Table 6. Summary of Results, Scenario 3 — Do Nothing





Scenario 4 — Twenty year Needs

This scenario shows the 20 year level of expenditure required to raise the HOA's pavement condition to an optimal network PCI, bring all streets into 'Good' condition, and eliminate the current maintenance and rehabilitation backlog. Most of the streets can be maintained over the next 20 years through the use of preventative maintenance (seal coats and crack seals). The HOA should plan to overlay the streets and parking lots after 2-3 cycles of seal coats, at around the 30 year mark. As streets age, the pavement can tend to become brittle, or the sub-base may develop issues. Of the \$364,173 in maintenance and rehabilitation needs shown, \$295,305 or 30.1 percent is earmarked for preventive maintenance or life-extending treatments, while \$1.84 million or 69.9 percent is allocated for the more costly overlay treatments.

	PCI	PCI		Preventative	
Year	Treated	Untreated	Rehabilitation	Maintenance	Total Cost
2019	90	80	\$49,299	\$66,399	\$115,698
2020	88	79	\$0	\$0	\$0
2021	87	77	\$5,230	\$0	\$5,282
2022	85	76	\$0	\$0	\$0
2023	85	74	\$0	\$2,683	\$2,735
2024	84	73	\$0	\$0	\$0
2025	82	71	\$0	\$359	\$369
2026	81	69	\$0	\$0	\$0
2027	87	68	\$0	\$93,400	\$97,107
2028	85	66	\$0	\$0	\$0
2029	84	64	\$0	\$6,373	\$6,690
2030	83	63	\$0	\$0	\$0
2031	83	61	\$0	\$4,104	\$4,349
2032	82	59	\$0	\$0	\$0
2033	80	57	\$0	\$427	\$457
2034	79	55	\$0	\$0	\$0
2035	85	53	\$0	\$113,796	\$123,011
2036	84	51	\$0	\$0	\$0
2037	83	49	\$0	\$7,764	\$8,475
2038	81	47	\$0	\$0	\$0
			\$54,529	\$295,305	\$349,834

Table 7. Summary of Results from 20 Year Needs Analysis

deferred maintenance costs as they relate to PCI for the four scenarios evaluated. Figure 10 depicts

Recommendations

Of the various maintenance and funding options considered, the *ideal* strategy for the HOA is presented in Scenario 1, with a five-year expenditure total of \$123,715. Not only does this surface management plan improve the network to an optimal level of 85, it also eliminates the entire deferred maintenance backlog in the first year. As examined scenarios deviate from this strategy, the cost to the HOA will increase in the long term. However, the amount of funds required may make this strategy unrealistic for the HOA. This scenario can, however, be used as a base line for comparing other scenarios.

Under current five-year funding level (\$75,000 over five years) the current network PCI of 80 remains at that level over the course of five years. The deferred maintenance price tag will decrease, from \$115,693 in 2019, to \$61,357 in 2023. By following this strategy through 2023, 87.6% of the HOA's street will be in the 'Good' condition category, a slight increase from the current level of 87.1% in 'Good' condition. At the HOA's current funding level, the street network condition will decline over the foreseeable future.

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

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

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

- Obtain detailed subsurface information on selected sections before major rehabilitation projects are contracted. Costs for large rehabilitation projects are extremely variable and estimates can sometimes be reduced following project-level engineering analysis. It is possible that only a portion of a street recommended for reconstruction actually requires such heavy-duty repair.
- Evaluate the specific treatments and costs recommended by the PMP, and modify them to reflect the actual repairs and unit costs that are expected to be used.
- Test other budget options with varying revenues and preventive maintenance and rehabilitation splits.

In addition to performing cyclic pavement condition inspections, unit cost information for the applications of various maintenance and rehabilitation treatments should be updated annually in the PMP 'Decision Tree Module'. If this data is not kept current, the HOA runs the risk of understating

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actual funding requirements to adequately maintain the street network. A pavement inspection cycle that would allow for the inspection of arterial and collector streets every two years and residential streets every three to four years is recommended.

The HOA has completed the foundation work necessary to execute a successful pavement management plan. At the current investment level, the overall street condition maintain at the current level, and the deferred maintenance backlog will likely decrease as more streets fall into 'Poor' and 'Very Poor' condition. To reduce the deferred maintenance backlog, additional revenues <u>and</u> support from various decision-making bodies are required.

As more 'Fair' streets deteriorate into the 'Poor' and 'Very Poor' categories, the cost of deferred maintenance will continue to increase. The cost of the deferred maintenance backlog will stop increasing only when enough funds are provided to prevent streets from deteriorating into a worse condition category, or when the whole network falls into the 'Very Poor' category (i.e. cannot deteriorate any further). At that time, the network would have to be replaced at a cost of \$3.7 million.

Appendix A

Definitions

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

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

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

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

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

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

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

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

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

'Good' Condition Category

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

Pavement is stable. New or lightly worn appearance. Minor cracking may be present, but cracks are generally less than 1/4" wide or are well sealed. May have sporadic cracking in the wheel paths with no or only a few interconnecting cracks and no spalling or pumping. Minor patching and possibly some minor deformation evident. Good riding qualities. Rutting may be present but is generally less than 1/2".





'Fair' Condition Category'

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

Pavement structure is generally stable with only minor areas of structural weakness or pavement deterioration evident. Cracks, if present, have widths generally less then 3/4". Wheel paths may have widespread, but not continuous, cracking with no or only a few interconnecting cracks and no spalling or pumping. Interconnected cracks forming complete patterns, or with spalling, are very small localized areas and are not representative of the rest of the section. The pavement may be patched but not excessively. Rutting may be present but is less than 3/4".





'Poor' Condition Category

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

Areas of instability, structural deficiency, or advanced pavement deterioration present in small areas (generally <10% of total pavement area). Continuous, interconnected cracking often present (mostly in wheel paths). Wheel paths may have widespread, and continuous, cracking with some interconnecting cracks and/or spalling (none or isolated areas of pumping). Medium severity patches. Deformation is somewhat noticeable.





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

Areas of instability, structural deficiency, or advanced pavement deterioration are frequent. Large crack patterns

(alligatoring), heavy and numerous patches, potholes, or deformation is very noticeable. Riding qualities range from acceptable to poor. Rutting, if present, is generally greater than ³/₄".





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

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

Appendix B

Network Summary Statistics

Network Replacement Cost

Network Summary Statistics

Printed: 05/14/2019

	Total Sections	Total Center Miles	Total Lane Miles	PCI
Residential/Loca	l 11	1.79	3.58	80
Tota	I 11	1.79	3.58	
	C	verall Network PCI	as of 5/14/2019:	80

Network Replacement Cost

Printed: 05/14/2019

Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area/ Square Feet	Cost To Replace (in thousands)
Residential/Local	AC	3.6	\$17.61	212,701	\$3,746
	PCC	0.0	\$22.46	1,160	\$26
	Grand Total:	3.6		213,861	\$3,772

Appendix C

Decision Tree

Decision Tree

Printed: 05/14/2019

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	\$5.50	4		
			Surface Treatment	SLURRY & CRACK SEAL	\$3.45		8	
			Restoration Treatment	AC OVERLAY (2.0 INCHES)	\$14.80			3
		II - Good, Non-Load Related		SLURRY & CRACK SEAL	\$3.45		8	
		III - Good, Load Related		AC OVERLAY (2.0 INCHES)	\$14.80			
		IV - Poor		RECONSTRUCT SURFACE (3" AC)	\$22.75			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	\$158.50			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	\$5.50	4		
			Surface Treatment	SLURRY & CRACK SEAL	\$3.45		8	
			Restoration Treatment	AC OVERLAY (2.0 INCHES)	\$14.80			3
		II - Good, Non-Load Related		SLURRY & CRACK SEAL	\$3.45			
		III - Good, Load Related		AC OVERLAY (2.0 INCHES)	\$14.80			
		IV - Poor		RECONSTRUCT SURFACE (3" AC)	\$22.75			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	\$158.50			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	\$5.50	4		
			Surface Treatment	SINGLE CHIP SEAL	\$0.74		8	
			Restoration Treatment	MILL AND THIN OVERLAY	\$5.04			3
		II - Good, Non-Load Related		DOUBLE CHIP SEAL	\$1.52			
		III - Good, Load Related		HEATER SCARIFY & OVERLAY	\$5.95			
		IV - Poor		HEATER SCARIFY & OVERLAY	\$6.14			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	\$8.25			
	PCC	I - Very Good	Crack Treatment	SEAL CRACKS	\$5.50	4		
			Surface Treatment	DO NOTHING	\$0.00		99	
			Restoration Treatment	DO NOTHING	\$0.00			100
		II - Good, Non-Load Related		DO NOTHING	\$1.11			
		III - Good, Load Related		DO NOTHING	\$0.00			
		IV - Poor		SLAB REPAIR 2 IN AC OVERLAY CAP	\$44.25			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	\$202.15			

Appendix D

Scenario Analysis Reports

Scenarios - Network Condition Summary

Interest: 3% Inflation: 2.5%

: 2.5% Printed: 05/14/2019

Scenario: Unconstrained Needs (5 year)

Year	Budget	РМ	Year	Budget	РМ	Year	Budget	PM
2019	\$115,698	0%	2021	\$5,282	0%	2023	\$2,735	0%
2020	\$0	0%	2022	\$0	0%			

Projected Network Average PCI by year

201980901.733.462020798800202177870.060.112022768500202374851.733.46	Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
202177870.060.112022768500	2019	80	90	1.73	3.46
2022 76 85 0 0	2020	79	88	0	0
	2021	77	87	0.06	0.11
2023 74 85 1 73 3 46	2022	76	85	0	0
	2023	74	85	1.73	3.46

Percent Network Area by Functional Class and Condition Category

Condition in base year 2019, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
1	0.0%	0.0%	87.1%	0.0%	87.1%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2019 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	100.0%	0.0%	100.0%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2023 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	100.0%	0.0%	100.0%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 2.50% Printed: 05/14/2019

Scenario: Unconstrained Needs (5 year)

Year	PM	Budget	Reh	abilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2019	0%	\$115,698	II	\$0	Non-	\$66,399	\$0	\$0	Funded	\$0
			Ш	\$43,595	Project				Unmet	\$0
			IV	\$5,704	Project	\$0				
			V	\$0						
		т	otal	\$49,299						
		Pro	ject	\$0						
2020	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2021	0%	\$5,282	П	\$5,230	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$5,230						
		Pro	ject	\$0						
2022	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2023	0%	\$2,735	II	\$0	Non-	\$2,683	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
	Summ	ary					Funded		nmet	
	Functiona	-		Rehabi	litation	Prev. Maint.	Funded Stop Gap		o Gap	
	Residentia				54,529	\$69,082	\$0	0.01	\$0	
	Grand Tot	al:			54,529	\$69,082	\$0		\$0	
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Scenarios - Network Condition Summary

Interest: 3% Inflation: 2.5% Printed: 05/14/2019

Scenario: Current Funding

Year	Budget	PM	Year	Budget	PM	Year	Budget	РМ
2019	\$0	0%	2021	\$0	0%	2023	\$0	0%
2020	\$37,500	0%	2022	\$37,500	0%			

Projected	Network Averag	e PCI by year			
Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles	
2019	80	80	0	0	
2020	79	82	0.63	1.27	
2021	77	80	0	0	
2022	76	82	0.66	1.31	
2023	74	80	0	0	

Percent Network Area by Functional Class and Condition Category

Condition in base year 2019, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
1	0.0%	0.0%	87.1%	0.0%	87.1%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2019 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	87.1%	0.0%	87.1%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2023 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	87.6%	0.0%	87.6%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 2.50% Printed: 05/14/2019

Scenario: Current Funding

	PM	Budget	Reh	abilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2019	0%	\$0	II	\$0	Non-	\$0	\$0	\$115,693	Funded	\$0
			III	\$0	Project				Unmet	\$409
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2020	0%	\$37,500	II	\$0	Non-	\$29,737	\$0	\$83,004	Funded	\$0
			ш	\$0	Project				Unmet	\$0
			IV	\$5,846	Project	\$0				
			v	\$0						
		т	otal	\$5,846						
		Pro	ject	\$0						
2021	0%	\$0	II	\$0	Non-	\$0	\$0	\$90,309	Funded	\$0
			III	\$0	Project				Unmet	\$197
			IV	\$0	Project	\$0				
			v	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2022	0%	\$37,500	II	\$5,361	Non-	\$27,346	\$0	\$59,860	Funded	\$0
			III	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			v	\$0						
		т	otal	\$5,361						
		Pro	ject	\$0						
2023	0%	\$0	II	\$0	Non-	\$0	\$0	\$61,357	Funded	\$0
			ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			v	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
	Summ	ary					Funded		nmot	
		Functional Class		Rehabi	litation	Prev. Maint.	Stop Gap	Unmet Stop Gap		
	Residential				11,207	\$57,083		0.01	\$606	
	Grand Tot	al:			11,207	\$57,083			\$606	

Scenarios - Network Condition Summary

Interest: 3% Inflation: 2.5% Printed: 05/14/2019

Scenario: Zero Funding

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2019	\$0	0%	2021	\$0	0%	2023	\$0	0%
2020	\$0	0%	2022	\$0	0%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles	
2019	80	80	0	0	
2020	79	79	0	0	
2021	77	77	0	0	
2022	76	76	0	0	
2023	74	74	0	0	

Percent Network Area by Functional Class and Condition Category

Condition in base year 2019, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	87.1%	0.0%	87.1%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2019 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	87.1%	0.0%	87.1%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2023 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
	0.0%	0.0%	81.0%	0.0%	81.0%
II / III	0.0%	0.0%	18.5%	0.0%	18.5%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 2.50% Printed: 05/14/2019

Scenario: Zero Funding

Year	РМ	Budget	Reh	abilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2019	0%	\$0	II	\$0	Non-	\$0	\$0	\$115,693	Funded	\$0
			Ш	\$0	Project				Unmet	\$40
			IV	\$0	Project	\$0				
			۷	\$0						
			otal	\$0						
		Pro	ject	\$0						
2020	0%	\$0	II	\$0	Non-	\$0	\$0	\$118,585	Funded	\$0
			III	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			V	\$0						
		Т	otal	\$0						
		Pro	ject	\$0						
2021	0%	\$0	II	\$0	Non-	\$0	\$0	\$126,780	Funded	\$0
			ш	\$0	Project				Unmet	\$197
			IV	\$0	Project	\$0				
			V	\$0						
		Т	otal	\$0						
		Pro	ject	\$0						
2022	0%	\$0	II	\$0	Non-	\$0	\$0	\$129,949	Funded	\$0
			III	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			V	\$0						
		Т	otal	\$0						
		Pro	ject	\$0						
2023	0%	\$0	II	\$0	Non-	\$0	\$0	\$133,198	Funded	\$0
			ш	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			v	\$0						
		Т	otal	\$0						
		Pro	ject	\$0						
	Summary	Summary					Funded		nmot	
	-	Functional Class		Rehabilitation		Prev. Maint.	Stop Gap	Unmet Stop Gap		
	Residential/Loca				\$0	\$0	\$0	0.01	\$606	
	Grand Total:				\$0	\$0	\$0		\$606	
					ΨΟ	ψυ	φυ		4000	

Interest: 3% Inflation: 2.5% Printed: 05/14/2019

Scenario: 20 Year Needs

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2019	\$115,698	0%	2026	\$0	0%	2033	\$457	0%
2020	\$0	0%	2027	\$97,107	0%	2034	\$0	0%
2021	\$5,282	0%	2028	\$0	0%	2035	\$123,011	0%
2022	\$0	0%	2029	\$6,690	0%	2036	\$0	0%
2023	\$2,735	0%	2030	\$0	0%	2037	\$8,475	0%
2024	\$0	0%	2031	\$4,349	0%	2038	\$0	0%
2025	\$369	0%	2032	\$0	0%			

Projected Network Average PCI by year

Treated Year Never Treated With Selected Treatment Contentine Miles	Treated
Centerline Miles La	ane Miles
2019 80 90 1.73	3.46
2020 79 88 0	0
2021 77 87 0.06	0.11
2022 76 85 0	0
2023 74 85 1.73	3.46
2024 73 84 0	0
2025 71 82 0.06	0.11
2026 69 81 0	0
2027 68 87 1.73	3.46
2028 66 85 0	0
2029 64 84 0.06	0.11
2030 63 83 0	0
2031 61 83 1.73	3.46
2032 59 82 0	0
2033 57 80 0.06	0.11
2034 55 79 0	0
2035 53 85 1.73	3.46
2036 51 84 0	0
2037 49 83 0.06	0.11
2038 47 81 0	0

Percent Network Area by Functional Class and Condition Category

Condition in base year 2019, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	87.1%	0.0%	87.1%
II / III	0.0%	0.0%	12.4%	0.0%	12.4%
IV	0.0%	0.0%	0.5%	0.0%	0.5%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Condition in year 2019 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	100.0%	0.0%	100.0%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Scenarios - Network Condition Summary

Interest: 3% Inflation: 2.5% Printed: 05/14/2019

Scenario: 20 Year Needs

Condition in year 2038 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	0.0%	0.0%	100.0%	0.0%	100.0%
Total	0.0%	0.0%	100.0%	0.0%	100.0%

Scenarios - Cost Summary

Interest: 3.00% Inflation: 2.50% Printed: 05/14/2019

Scenario: 20 Year Needs

Year	РМ	Budget	Reh	nabilitation		eventative aintenance	Surplus PM	Deferred		Stop Gap
2019	0%	\$115,698	II	\$0	Non-	\$66,399	\$0	\$0	Funded	\$(
			Ш	\$43,595	Project				Unmet	\$0
			IV	\$5,704	Project	\$0				
			v	\$0						
		т	otal	\$49,299						
		Pro	ject	\$0						
2020	0%	\$0	П	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2021	0%	\$5,282	II	\$5,230	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$5,230						
		Pro	ject	\$0						
2022	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			٧	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2023	0%	\$2,735	II	\$0	Non-	\$2,683	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						
2024	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V	\$0						
		т	otal	\$0						
		Pro	ject	\$0						

Year	РМ	Budget	I	Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2025	0%	\$369	II	\$0	Non-	\$359	\$0	\$0	Funded	\$0
			III	\$0	Project				Unmet	\$0
			IV		Project	\$0				
			V							
			otal							
		Pro	ject	\$0						
2026	0%	\$0	II		Non- Project	\$0	\$0	\$0	Funded	\$0
			III						Unmet	\$0
			IV		Project	\$0				
		-	V							
			otal							
		Pro	ject	\$0						
2027	0%	\$97,107	II	\$0	Non-	\$93,400	\$0	\$0	Funded	\$0
	-		III	\$0	Project				Unmet	\$0
			IV		Project	\$0				
			v							
			otal							
		Pro	ject	\$0						
2028	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			111		Project				Unmet	\$0
			IV		Project	\$0				
		_	V							
			otal							
		Pro	ject	\$0						
2029	0%	\$6,690	II	\$0	Non-	\$6,373	\$0	\$0	Funded	\$0
			III	\$0	Project				Unmet	\$0
			IV		Project	\$0				
			v	\$0						
			otal							
		Pro	ject	\$0						
2030	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			III	\$0	Project				Unmet	\$0
			IV		Project	\$0				
			V							
			otal							
		Pro	ject	\$0						
2031	0%	\$4,349	II	\$0	Non-	\$4,104	\$0	\$0	Funded	\$0
-			Ш	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V							
			otal							
		Pro	ject	\$0						

Year	РМ	Budget	Re	ehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2032	0%	\$0	П	\$0	Non-	\$0	\$0	\$0	Funded	\$0
			III	\$0	Project				Unmet	\$0
			IV	\$0	Project	\$0				
			V	\$0						
			tal	\$0						
		Proje	ect	\$0						
2033	0%	\$457	Ш	\$0	Non- Project	\$427	\$0	\$0	Funded	\$C
			III	\$0					Unmet	\$C
			IV	\$0 \$0	Project	\$0				
		-	V	\$0						
			otal	\$0						
		Proje	ect	\$0						
2034	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$C
			III	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			۷	\$0						
			tal	\$0						
		Proje	ect	\$0						
2035	0%	\$123,011	Ш	\$0	Non- Project	\$113,796	\$0	\$0	Funded	\$C
			III	\$0					Unmet	\$C
			IV	\$0	Project	\$0				
		_	V	\$0						
			otal	\$0						
		Proje	ect	\$0						
2036	0%	\$0	II	\$0	Non-	\$0	\$0	\$0	Funded	\$C
			III	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			۷	\$0						
			tal	\$0						
		Proje	ect	\$0						
2037	0%	\$8,475	Ш	\$0	Non-	\$7,764	\$0	\$0	Funded	\$C
			III	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			۷	\$0						
			otal	\$0						
		Proje	ect	\$0						
2038	0%	\$0	Ш	\$0	Non-	\$0	\$0	\$0	Funded	\$C
			III	\$0	Project				Unmet	\$C
			IV	\$0	Project	\$0				
			۷	\$0						
			tal	\$0						
		Proje	ect	\$0						

Year	РМ	Budget	Rehabilitation	Preventative Maintenance	Surplus PM	Deferred	Stop Gap
	Summ	ary			Funded	Unmet	
	Functiona	l Class	Rehabilitation	Prev. Maint.	Stop Gap	Stop Gap	
	Residential	/Local	\$54,529	\$295,305	\$0	\$0	
	Grand Tot	al:	\$54,529	\$295,305	\$0	\$0	

Appendix E

Section PCI/RSL Listing Report

Section PCI/RSL Listing

Printed: 05/14/2019

Street ID	Section ID	Road Name	From	То	Length	Width	Area Functional Class	Surface Type	Current PCI	Remaining Life
HIDLKDR	100	HIDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	1,205	22	26,510 R - Residential/Local	A - AC	66	17.86
HIDLKDR	101	HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	1,258	22	27,676 R - Residential/Local	A - AC	84	28.6
HIDLKDR	102	HIDDEN LAKE DR	302' N. OF BRIDGE	BEG. OF BRIDGE	302	43	12,986 R - Residential/Local	A - AC	73	23.28
HIDLKDR	103	HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	1,146	23	26,358 R - Residential/Local	A - AC	85	29.22
HIDLKDR	104	HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	1,634	23	37,582 R - Residential/Local	A - AC	80	30.37
HIDLKDR	105	HIDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE DRIVEWAY (#17935)	554	23	12,742 R - Residential/Local	A - AC	78	28.03
LKRIDGE	106	LAKE RIDGE WAY	HIDDEN LAKE DR	WEST DEAD END (#15125)	1,422	22	31,284 R - Residential/Local	A - AC	87	30.42
LKSIDE	107	LAKE SIDE CT	HIDDEN LAKE DR	WEST DEAD END	945	22	20,790 R - Residential/Local	A - AC	85	29.22
MAILPCC	109	MAILBOX CONCRETE PAD	MAILBOX KIOSK LP	MAILBOXES	40	29	1,160 R - Residential/Local	P - PCC	46	13.71
MAILBOX	108	MAILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	176	15	4,565 R - Residential/Local	A - AC	79	29.46
SHIDLKE	110	SOUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	763	16	12,208 R - Residential/Local	A - AC	85	29.22

Total Section Length:9,445

Total Section Area: 213,861

Appendix F

Scenarios - Sections Selected for Treatment

Scenario 1 - Unconstrained Needs (5 year) Scenario 2 - Current Budget Scenario Scenario 3 - 20 year Needs Year

2019

2020

Budget

\$115,698

\$0

PM

0%

0%

Scenarios - Sections Selected for Treatment

			Interest: 3.00%	Inflatio	n: 2.50%
					Scenari
Year	Budget	PM	Year	Budget	PM
2021	\$5,282	0%	2023	\$2,735	0%
2022	\$0	0%			
				Treatment	

Year: 2019												Treatm	ent			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI E	PCI Before	PCI After	Cost	Rating	Treatment
MAILBOX CONCRETE PAD	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	45	100	\$5,704	9,602	SLAB REPAIR 2 IN AC OVERLAY CAP
											Treatme	nt Total		\$5,704		
HIDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	HIDLKDR	100	1,205	22	26,510	R	AC		65	65	100	\$43,595	23,311	AC OVERLAY (2.0 INCHES)
										-	Treatme	nt Total		\$43,595		
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	83	90	\$10,610	24,797	SLURRY & CRACK SEA
HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	84	91	\$10,104	23,300	SLURRY & CRACK SEA
HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	HIDLKDR	104	1,634	23	37,582	R	AC		79	79	87	\$14,407	42,574	SLURRY & CRACK SEA
HIDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE DRIVEWAY (#17935)	HIDLKDR	105	554	23	12,742	R	AC		77	77	85	\$4,885	40,268	SLURRY & CRACK SEA
LAKE RIDGE WAY	HIDDEN LAKE DR	WEST DEAD END (#15125)	LKRIDGE	106	1,422	22	31,284	R	AC		86	86	92	\$11,993	19,681	SLURRY & CRACK SEA
LAKE SIDE CT	HIDDEN LAKE DR	WEST DEAD END	LKSIDE	107	945	22	20,790	R	AC		84	84	91	\$7,970	23,305	SLURRY & CRACK SEA
MAILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	MAILBOX	108	176	15	4,565	R	AC		78	78	86	\$1,750	42,696	SLURRY & CRACK SEA
SOUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	84	91	\$4,680	23,300	SLURRY & CRACK SEA

									Treatme	ent Tota		\$66,399	
			Year	2019 Ar	ea Tota	al —	2	200,875	Year 20	19 Tota	I	\$115,698	
Year: 2021										Treatr	nent		
Road Name	Begin Location End Location Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating Treatment
HIDDEN LAKE DR	302' N. OF BRIDGE BEG. OF BRIDGE HIDLKDR	102	302	43	12,986	R	AC		72	69	78	\$5,230	33,457 SLURRY & CRACK SEAL
									Treatme	ent Tota	1	\$5,230	
			Year	2021 Ar	ea Tota	al 🗌		12,986	Year 202	21 Tota	I	\$5,230	

** - Treatment from Project Selection

Interest: 3.00% Inflation: 2.50% Printed: 05/14/2019

Scenario: Unconstrained Needs (5 year)

Year: 2023												Treatn	hent		
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating Treatment
HIDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	HIDLKDR	100	1,205	22	26,510	R	AC		65	87	88	\$110	340,590 SEAL CRACKS
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	83	84	\$418	134,414 SEAL CRACKS
HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	84	85	\$382	133,757 SEAL CRACKS
HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	HIDLKDR	104	1,634	23	37,582	R	AC		79	83	84	\$569	203,551 SEAL CRACKS
HIDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE DRIVEWAY (#17935)	HIDLKDR	105	554	23	12,742	R	AC		77	81	83	\$224	185,734 SEAL CRACKS
LAKE RIDGE WAY	HIDDEN LAKE DR	WEST DEAD END (#15125)	LKRIDGE	106	1,422	22	31,284	R	AC		86	85	86	\$422	130,085 SEAL CRACKS
LAKE SIDE CT	HIDDEN LAKE DR	WEST DEAD END	LKSIDE	107	945	22	20,790	R	AC		84	84	85	\$302	133,759 SEAL CRACKS
MAILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	MAILBOX	108	176	15	4,565	R	AC		78	82	84	\$74	201,771 SEAL CRACKS
MAILBOX CONCRETE PAD	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	87	88	\$5	340,590 SEAL CRACKS
SOUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	84	85	\$177	133,757 SEAL CRACKS
											Treatm	ent Tota		\$2,683	
					Year 2023 Area Total				2	00,875	Year 20)23 Tota		\$2,683	
					Total Section Area:			4	14,736	Gra	nd Tota	\$	5123,611		

										In	terest: 3.00%	Ď	Inflati	ion: 2.50%	Sce	Printed: 05/14/201 nario: Current Fundin
	Year	В	udget	РМ	Year		Budge	et	I	РМ	Year	Bu	dget	PM		
	2019)	\$0	0%	2021		\$	0		0%	2023		\$0	0%		
	2020	\$	37,500	0%	2022		\$37,50	0		0%						
Year: 2020												Treatn	aant			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI	PCI	Cost	Rating	Treatment
MAILBOX CONCRETE	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	44	100	\$5,846	9,511	SLAB REPAIR 2 IN AC OVERLAY CAP
											Treatm	nent Tota		\$5,846		
HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	HIDLKDR	104	1,634	23	37,582	R	AC		79	78	86	\$14,767	41,559	SLURRY & CRACK SEA
HIDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE	HIDLKDR	105	554	23	12,742	R	AC		77	76	84	\$5,007	39,166	SLURRY & CRACK SEA
LAKE SIDE CT	HIDDEN LAKE DR	. ,	ID LKSIDE	107	945	22	20,790	R	AC		84	83	90	\$8,169	25,005	SLURRY & CRACK SEA
MAILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	MAILBOX	108	176	15	4,565	R	AC		78	77	85	\$1,794	41,528	SLURRY & CRACK SEA
											Treatm	nent Tota	I	\$29,737		
					Year 2	2020 Ar	ea Tota	al 🗌		76,839	Year 2	020 Tota	l	\$35,583		
Year: 2022												Treatn	nent			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	78	86	\$11,425	27,308	SLURRY & CRACK SEA
HIDDEN LAKE DR	302' N. OF BRIDGE		e hidlkdr	102	302	43	12,986	R	AC		72	68	77	\$5,361	32,123	SLURRY & CRACK SEA
HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	79	87	\$10,881	26,721	SLURRY & CRACK SEA
OUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	79	87	\$5,040	26,721	SLURRY & CRACK SEA
											Treatm	nent Tota	l	\$32,707		
					Year	2022 Ar	ea Tota	al 🗌		79,228	Year 2	022 Tota		\$32,707		
					Tot	al Sect	ion Are	a:		156,067	Gra	nd Tota		\$68,290		

										Ir	nterest: 3.00%	5	Inflat	ion: 2.50%		Printed: 05/14/201
															Sc	enario: 20 Year Need
	Year	· Bu	udget	PM	Year		Budge	et		PM	Year	Bue	dget	PM		
	2019) \$11	15,698	0%	2026		\$	0		0%	2033		\$457	0%		
	2020)	\$0	0%	2027		\$97,10	7		0%	2034		\$0	0%		
	2021	1 9	\$5,282	0%	2028		\$	0		0%	2035	\$123	8,011	0%		
	2022	2	\$0	0%	2029		\$6,69	0		0%	2036		\$0	0%		
	2023	,	\$2,735	0%	2030		\$	0		0%	2037	\$8	8,475	0%		
	2024	L	\$0	0%	2031		\$4,34	9		0%	2038		\$0	0%		
	2025	5	\$369	0%	2032		\$	0		0%						
Year: 2019												Treatm	ont			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type		Current PCI	PCI Before	PCI	Cost	Rating	Treatment
AILBOX CONCRETE	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	45	100	\$5,704	9,602	SLAB REPAIR 2 IN AC OVERLAY CAP
											Treatm	nent Total		\$5,704		
IDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	HIDLKDR	100	1,205	22	26,510	R	AC		65	65	100	\$43,595	23,311	AC OVERLAY (2.0 INCHES)
											Treatm	nent Total		\$43,595		
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	83	90	\$10,610	24,797	SLURRY & CRACK SEA
IIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	84	91	\$10,104	23,300	SLURRY & CRACK SEA
HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	HIDLKDR	104	1,634	23	37,582	R	AC		79	79	87	\$14,407	42,574	SLURRY & CRACK SEA
HDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE	HIDLKDR	105	554	23	12,742	R	AC		77	77	85	\$4,885	40,268	SLURRY & CRACK SEA
AKE RIDGE WAY	HIDDEN LAKE DR	· /	D LKRIDGE	106	1,422	22	31,284	R	AC		86	86	92	\$11,993	19,681	SLURRY & CRACK SEA
AKE SIDE CT	HIDDEN LAKE DR	WEST DEAD EN	D LKSIDE	107	945	22	20,790	R	AC		84	84	91	\$7,970	23,305	SLURRY & CRACK SEA
AILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	MAILBOX	108	176	15	4,565	R	AC		78	78	86	\$1,750	42,696	SLURRY & CRACK SEA
OUTH HIDDEN LAKE PR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	84	91	\$4,680	23,300	SLURRY & CRACK SEA
											Treatm	ent Total		\$66,399		
					Year	2019 Ar	ea Tota	al 🗌		200,875	Year 20	019 Total		\$115,698		
Year: 2021												Treatm	ent			
Road Name	Begin Location	End Location	Street ID	Section ID	Longth	Width	Aroa	FC	Surf	Area IF) Current		PCI	Cost	Pating	Treatment

									Treatm	ient		
Road Name	Begin Location End Location Street ID	Section ID	Length	Width	Area F	C Surf Type	Area ID	Current PCI E	PCI Before	PCI After	Cost	Rating Treatment
HIDDEN LAKE DR	302' N. OF BRIDGE BEG. OF BRIDGE HIDLKDR	102	302	43	12,986 F	R AC		72	69	78	\$5,230	33,457 SLURRY & CRACK SEAL

** - Treatment from Project Selection

Scenarios Criteria:

										Inte	erest: 3.00%)	Inflatio	on: 2.50%	Sc	Printed: 05/14/201 enario: 20 Year Need:
											Treatm	ent Tota	al	\$5,230		
					Year	2021 Ar	ea Tota	al –		12,986	Year 20)21 Tota	ıl	\$5,230		
Year: 2023												Treat	nent			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI	PCI After	Cost	Rating	Treatment
HIDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	HIDLKDR	100	1,205	22	26,510	R	AC		65	87	88	\$110	340,590	SEAL CRACKS
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	83	84	\$418	134,414	SEAL CRACKS
HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	84	85	\$382	133,757	SEAL CRACKS
HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	HIDLKDR	104	1,634	23	37,582	R	AC		79	83	84	\$569	203,551	SEAL CRACKS
HIDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE DRIVEWAY (#17935)	HIDLKDR	105	554	23	12,742	R	AC		77	81	83	\$224	185,734	SEAL CRACKS
LAKE RIDGE WAY	HIDDEN LAKE DR	. ,	LKRIDGE	106	1,422	22	31,284	R	AC		86	85	86	\$422	130,085	SEAL CRACKS
LAKE SIDE CT	HIDDEN LAKE DR	· /	LKSIDE	107	945	22	20,790	R	AC		84	84	85	\$302	133,759	SEAL CRACKS
MAILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	MAILBOX	108	176	15	4,565	R	AC		78	82	84	\$74	201,771	SEAL CRACKS
MAILBOX CONCRETE PAD	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	87	88	\$5	340,590	SEAL CRACKS
SOUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	84	85	\$177	133,757	SEAL CRACKS
											Treatm	ent Tota	al	\$2,683		
					Year	2023 Ar	ea Tota	al	2	200,875	Year 20	023 Tota	l	\$2,683		
Year: 2025												Treat	nont			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI	Cost	Rating	Treatment
HIDDEN LAKE DR	302' N. OF BRIDGE	BEG. OF BRIDGE	HIDLKDR	102	302	43	12,986	R	AC		72	73	75	\$359	135,541	SEAL CRACKS
											Treatm	ent Tota	al	\$359		
					Year	2025 Ar	ea Tota	al		12,986	Year 20)25 Tota	l	\$359		
Year: 2027												Treat	nent			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI	PCI After	Cost	Rating	Treatment
HIDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	HIDLKDR	100	1,205	22	26,510	R	AC		65	82	89	\$12,382	23,064	SLURRY & CRACK SEA
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	78	86	\$12,927	24,274	SLURRY & CRACK SEA

** - Treatment from Project Selection

MTC StreetSaver

Interest: 3.00% Inflation: 2.50% Printed: 05/14/2019

Scenario: 20 Year Needs

Year: 2027												Treatn	nent			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	79	86	\$12,311	24,054	SLURRY & CRACK SEA
HIDDEN LAKE DR	LAKE RIDGE WAY	END OF PAVEMENT (SLIDE AREA)	HIDLKDR	104	1,634	23	37,582	R	AC		79	80	88	\$17,553	34,741	SLURRY & CRACK SEA
HIDDEN LAKE DR	END OF PAVEMENT (SLIDE AREA)	PRIVATE DRIVEWAY (#17935)	HIDLKDR	105	554	23	12,742	R	AC		77	78	86	\$5,952	33,023	SLURRY & CRACK SEA
LAKE RIDGE WAY	HIDDEN LAKE DR	WEST DEAD END (#15125)	LKRIDGE	106	1,422	22	31,284	R	AC		86	79	87	\$14,612	23,640	SLURRY & CRACK SEA
LAKE SIDE CT	HIDDEN LAKE DR	WEST DEAD END	LKSIDE	107	945	22	20,790	R	AC		84	79	86	\$9,711	24,055	SLURRY & CRACK SEA
MAILBOX KIOSK LP	HIDDEN LAKE DR	HIDDEN LAKE DR	MAILBOX	108	176	15	4,565	R	AC		78	80	87	\$2,133	34,995	SLURRY & CRACK SEA
SOUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	79	86	\$5,702	24,054	SLURRY & CRACK SEA
											Treatm	ent Tota	1	\$93,283		
MAILBOX CONCRETE PAD	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	82	89	\$117	107,528	SINGLE CHIP SEAL
											Treatm	nent Tota	I	\$117		
					Year 2	2027 Ar	ea Tota	al —	2	200,875	Year 2	027 Tota	I	\$93,400		
Year: 2029												Treatn	aant			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI	Cost	Rating	Treatment
HIDDEN LAKE DR	302' N. OF BRIDGE	BEG. OF BRIDGE	HIDLKDR	102	302	43	12,986	R	AC		72	70	79	\$6,373	27,605	SLURRY & CRACK SEA
											Treatm	ent Tota		\$6,373		
					Year 2	2029 Ar	ea Tota	al —		12,986	Year 2	029 Tota		\$6,373		
Year: 2031												Treatn	nent			
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	PCI Before	PCI After	Cost	Rating	Treatment
HIDDEN LAKE DR	REDLAND RD	GARDEN LN EXTENSION	HIDLKDR	100	1,205	22	26,510	R	AC		65	83	84	\$422	138,068	SEAL CRACKS
HIDDEN LAKE DR	GARDEN LN EXTENSION	302' N. OF BRIDGE	HIDLKDR	101	1,258	22	27,676	R	AC		83	80	81	\$643	111,634	SEAL CRACKS
HIDDEN LAKE DR	BEG. OF BRIDGE	LAKE RIDGE WAY	HIDLKDR	103	1,146	23	26,358	R	AC		84	80	82	\$599	111,690	SEAL CRACKS
	LAKE RIDGE WAY	END OF	HIDLKDR	104	1,634	23	37,582	R	AC		79	84	85	\$643	168,296	SEAL CRACKS

** - Treatment from Project Selection

Printed: 05/14/2019 Interest: 3.00% Inflation: 2.50% Scenario: 20 Year Needs Year: 2031 Treatment Road Name Begin Location End Location Street ID Section ID Length Width FC Surf Area ID Current PCI PCI **Rating Treatment** Area Cost PCI Type Before After HIDDEN LAKE DR END OF PRIVATE HIDLKDR 105 554 23 12,742 R AC 77 82 83 \$259 153.982 SEAL CRACKS PAVEMENT (SLIDE DRIVEWAY AREA) (#17935) LAKE RIDGE WAY R HIDDEN LAKE DR WEST DEAD END LKRIDGE 106 1,422 22 31,284 AC 86 81 82 \$685 111,784 SEAL CRACKS (#15125) LAKE SIDE CT HIDDEN LAKE DR WEST DEAD END LKSIDE 107 945 22 20.790 R AC 84 80 82 \$473 111.690 SEAL CRACKS MAILBOX KIOSK LP HIDDEN LAKE DR HIDDEN LAKE MAILBOX 108 176 15 4.565 R AC 78 83 85 \$83 167.786 SEAL CRACKS DR MAILBOX CONCRETE MAILBOX KIOSK MAILBOXES MAILPCC 109 40 29 R PCC 45 84 1,160 83 \$19 138,068 SEAL CRACKS PAD I P SOUTH HIDDEN LAKE HIDDEN LAKE DR PRIVATE SHIDLKE 110 763 16 12,208 R AC 84 80 82 \$278 111,690 SEAL CRACKS DR DRIVEWAY (#17714) Treatment Total \$4,104 Year 2031 Area Total 200.875 Year 2031 Total \$4,104 Year: 2033 Treatment FC Road Name Begin Location End Location Street ID Width Surf PCI PCI Section ID Length Area Area ID Current Cost Rating Treatment Type PCI Before After \$427 HIDDEN LAKE DR 302' N. OF BRIDGE BEG. OF BRIDGE HIDLKDR 102 302 12,986 R 74 76 112,597 SEAL CRACKS 43 AC 72 \$427 Treatment Total Year 2033 Area Total \$427 12,986 Year 2033 Total Year: 2035 Treatment FC Surf PCI Road Name Begin Location End Location Street ID Section ID Length Width Area Area ID Current PCI Cost Rating Treatment Type PCI Before After HIDDEN LAKE DR REDLAND RD GARDEN LN HIDLKDR 100 1,205 22 26,510 R AC 65 79 86 \$15,086 20,876 SLURRY & CRACK SEAL **EXTENSION** HIDDEN LAKE DR GARDEN LN 302' N. OF HIDLKDR 101 1,258 22 27,676 R AC 83 75 83 \$15,750 20,671 SLURRY & CRACK SEAL **EXTENSION** BRIDGE HIDDEN LAKE DR BEG. OF BRIDGE LAKE RIDGE HIDLKDR 103 1.146 23 26.358 R AC 84 75 84 \$15.000 20.613 SLURRY & CRACK SEAL WAY HIDDEN LAKE DR LAKE RIDGE WAY END OF HIDLKDR 104 1,634 37,582 R 79 81 89 28,271 SLURRY & CRACK SEAL 23 AC \$21,387 PAVEMENT (SLIDE AREA) HIDDEN LAKE DR END OF PRIVATE HIDLKDR 105 554 23 12,742 R AC 77 79 87 \$7,251 27,059 SLURRY & CRACK SEAL PAVEMENT (SLIDE DRIVEWAY AREA) (#17935) LAKE RIDGE WAY HIDDEN LAKE DR WEST DEAD END LKRIDGE 106 1,422 22 31.284 R AC 86 76 84 \$17,803 20.530 SLURRY & CRACK SEAL (#15125) LAKE SIDE CT WEST DEAD END LKSIDE HIDDEN LAKE DR 107 945 22 20,790 R AC 84 75 84 \$11,831 20,613 SLURRY & CRACK SEAL MAILBOX KIOSK LP HIDDEN LAKE DR HIDDEN LAKE MAILBOX 176 15 4,565 R AC 78 81 88 \$2,598 28.524 SLURRY & CRACK SEAL 108 DR

** - Treatment from Project Selection

MTC StreetSaver

										Inte	erest: 3.00%	Infla	tion: 2.50%	.50% Printed: 05/14/20			
														Scenario: 20 Year Needs			
Year: 2035											Tre	atment					
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PC PCI Befor	CI PC		Rating Treatment			
SOUTH HIDDEN LAKE DR	HIDDEN LAKE DR	PRIVATE DRIVEWAY (#17714)	SHIDLKE	110	763	16	12,208	R	AC		84	′5 8∠	4 \$6,948	20,613 SLURRY & CRACK SEAI			
		, ,									Treatment T	otal	\$113,654				
MAILBOX CONCRETE PAD	MAILBOX KIOSK LP	MAILBOXES	MAILPCC	109	40	29	1,160	R	PCC		45	'9 86	\$ \$142	97,328 SINGLE CHIP SEAL			
											Treatment Tota		\$142				
					Year 2035 Area Total			al 🗌	200,875		Year 2035 To	otal	\$113,796				
Year: 2037											Tre	atment					
Road Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PO PCI Befor			Rating Treatment			
HIDDEN LAKE DR	302' N. OF BRIDGE	BEG. OF BRIDGE	HIDLKDR	102	302	43	12,986	R	AC		72	70 79	\$7,764	22,805 SLURRY & CRACK SEAL			
											Treatment T	otal	\$7,764				
					Year 2037 Area Total			al 🗌	12,986		Year 2037 Total		\$7,764				
					Total Section Area:			a:	1,069,305		Grand To	tal	\$349,834				