



# Road Reconstruction Master Plan

## March 2017





**Highland City**

**Road Reconstruction Master Plan**

**Executive Summary**

**March 21, 2017**

**Prepared by**

**PEPG Consulting, LLC**

## Executive Summary

Highland City owns and maintains over 80 miles of roadways, many of which are in dire need of effective, economical maintenance. Previous studies performed for the City classified each road with a visually based Pavement Condition Index (PCI) value and letter grade between A and F, provided recommendations regarding maintaining the good roads, and provided a cost estimate of \$16,246,500 to reconstruct all of the D and F roads. However, the City lacked a comprehensive plan to repair the D and F roads. Therefore, the City advertised for a consultant to provide a prioritized Road Reconstruction Master Plan for these poor roads. The City hired our consultant team, comprised of PEPG Consulting and CME Transportation Group, to complete this plan and expanded the scope to include the lower rated C roads. The City also assembled a Technical Advisory Committee (TAC) to represent the citizens and provide expert advice for this study.

The City later asked our team to also evaluate and provide recommendations for the A, B, and high C roads. We therefore completed our work in two phases. The report for Phase 1 details our coordination, field work, and recommendations for the low C, D, and F roads (PCI 62 and below) and the report for Phase 2 provides similar details for the A, B, and high C roads (PCI above 62). Phase 1 includes about 36 miles of road and Phase 2 includes about 44 miles of road.

The results of our studies represent a snapshot of the ever-changing pavement condition for each road. We expect that City staff will be able to use our observations and recommendations for many years. However, we acknowledge that the road conditions will need to be continually reevaluated and that the master plan will need to be updated accordingly.

To understand the true condition of each road, we performed an in-depth examination of the poor roads and a visual examination of the good roads. We did not examine the roadway drainage or the infrastructure conditions outside of the roadway (ie. curb/gutter and sidewalk). Overall, we found that Highland City's roads were in much better condition than expected. A summary of our field observations and our recommended treatments for the poor roads (Phase 1) and good roads (Phase 2) are shown in Table 1 and Table 2, respectively.

*Table 1: Phase 1 Field Examination Summary*

<b>Total Segments</b>	<b>172</b>		
<b>Require Patching</b>	90 segments	52.3%	45,000 SY
<b>Require Crack Seal</b>	117 segments	68.0%	22 miles
<b>Require Seal Coat</b>	127 segments	73.8%	24 miles
<b>Require Mill/Overlay</b>	32 segments	18.6%	8 miles
<b>Require Remove &amp; Replace</b>	5 segments	2.9%	1 mile
<b>Require Reconstruction</b>	8 segments	4.7%	1 mile

*Table 2: Phase 2 Field Examination Summary*

<b>Total Segments</b>	<b>240</b>		
<b>Require Patching</b>	51 segments	21.3%	10,800 SY
<b>Require Crack Seal</b>	126 segments	52.5%	23 miles
<b>Require Seal Coat</b>	240 segments	100.0%	44 miles

From the results of the field examination, we completed cost estimates to repair and preserve each road segment. The cost estimates include a percent markup to consider project costs outside of the pavement section (ie. mobilization, traffic control, striping, etc.) We also estimated a timeline of when these repairs need to be made, along with the expected added costs if the road segments are allowed to deteriorate further. The TAC selected a prioritization matrix to prioritize each road segment based on its condition, average daily traffic, cost to repair, and life expectancy before further deterioration. Final prioritized lists of the recommended repairs and preservation treatments for each road segment can be found in the Recommendations Chapter of each report. However, we have included a graphical display of our recommended repairs and preservation treatments for every City road in this appendix.

Table 3 summarizes the total estimated costs of each phase. The Repair/Preservation Cost is based on our preferred repair (Phase 1) or preservation treatment (Phase 2). Note that the Phase 1 repair cost is significantly lower than the previous estimate of \$16,246,500, which did not include the low C roads or costs outside of the pavement section. The Revised Cost if Postponed is the expected cost if the roads are allowed to deteriorate further and require more extensive repairs. The Maintenance Cost represents the annual cost to maintain the associated roads after they are repaired or treated. All costs are based on present day values and have not been adjusted for inflation.

*Table 3: Total Costs Summary*

	<b>Phase 1 Roads</b>	<b>Phase 2 Roads</b>
<b>Repair/Preservation Cost</b>	\$5,548,374	\$2,820,147
<b>Revised Cost if Postponed</b>	\$10,274,505	\$6,713,578
<b>Annual Maintenance Cost</b>	\$667,145	\$845,610

The intent of our recommendations is to bring Highland City's roads to a steady condition in which they can be placed on a maintenance plan that uses proper pavement management practices. Proper pavement management is the best way to actively prevent unneeded costs incurred by deterioration of unmaintained roads. However, this does not mean that every road will be maintained at an "A" or even "B" condition. Our estimated maintenance costs are based on the City's roads having a typical range of pavement conditions, while the City's staff uses their expertise and familiarity to efficiently maintain them. We estimate the total annual maintenance cost on all roads to be about \$1.5 million per year.

To illustrate how the costs in Table 3 can be distributed to fit a \$1.5 million annual budget, we created a sample allocation shown in Figure 1. During the first five years, approximately \$1 million would be applied towards repairing the F through Low C roads (Phase 1) and about \$500 thousand would be applied towards preserving the High C through A roads (Phase 2). During this time, much of the maintenance would be covered by performing the recommended repairs and preservations. However, some roads would likely deteriorate further and need more extensive repairs. With a \$1.5 million budget, we would estimate about 8 years to reach a steady-state maintenance program with a typical range of pavement conditions.

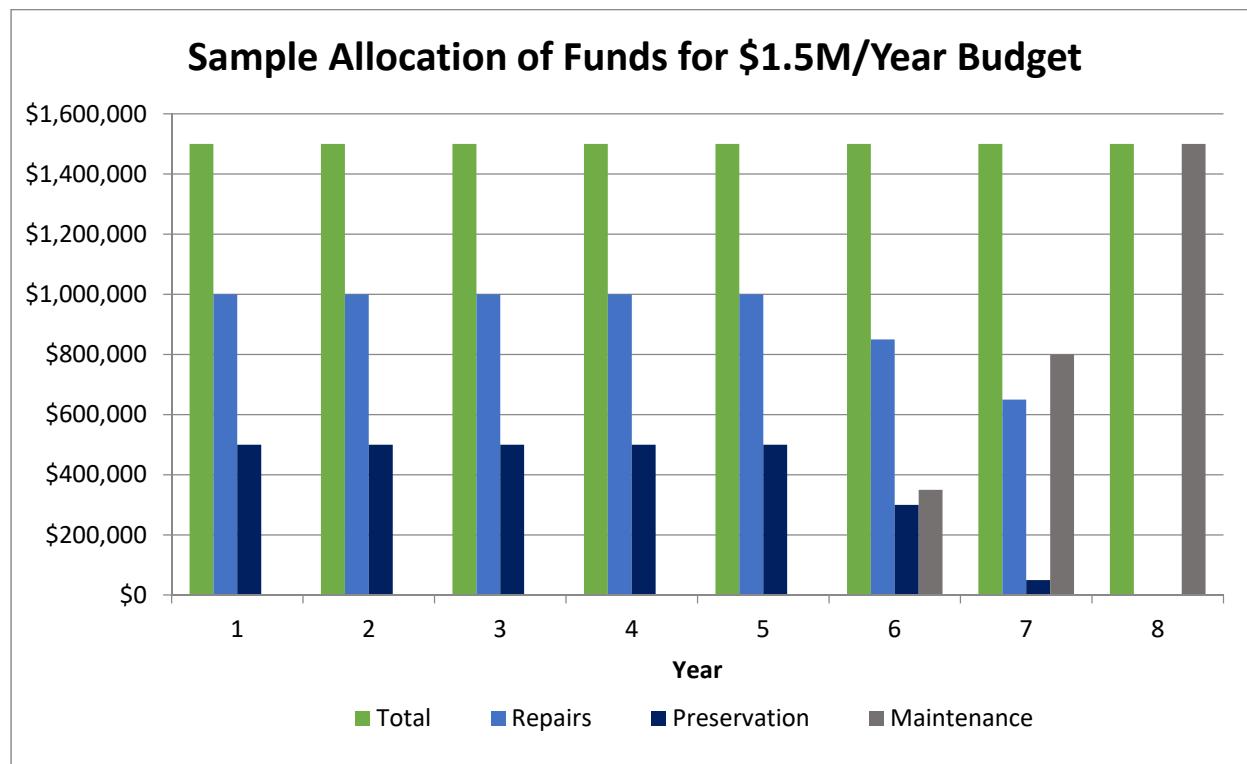


Figure 1: Sample Allocation of Funds for the City of Highland with a \$1.5 Million per Year Budget

After the recommended repairs have been performed, we recommend the city implement a spending plan that focuses on preventing roads from deteriorating to a condition that would require more expensive repair strategies. Figure 2 illustrates a reasonable allocation of funds to maximize the lifecycle of pavements and funds congruently. This allocation would be an appropriate way for the City of Highland to distribute the ongoing maintenance costs illustrated in the 8<sup>th</sup> year of the sample schedule shown in Figure 1.

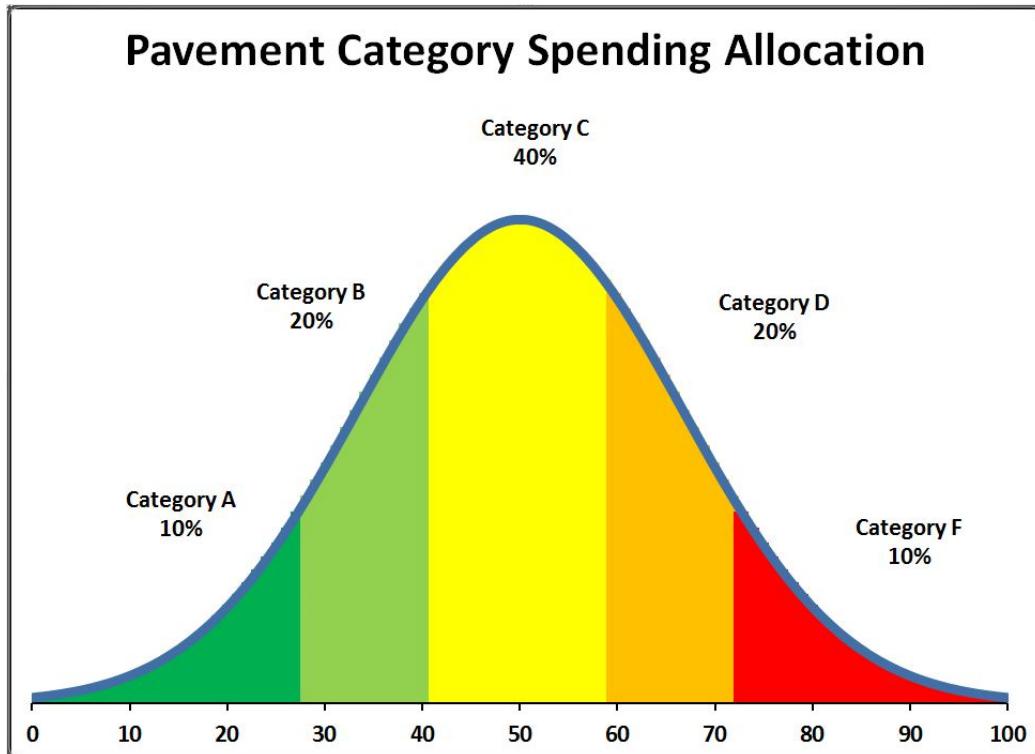
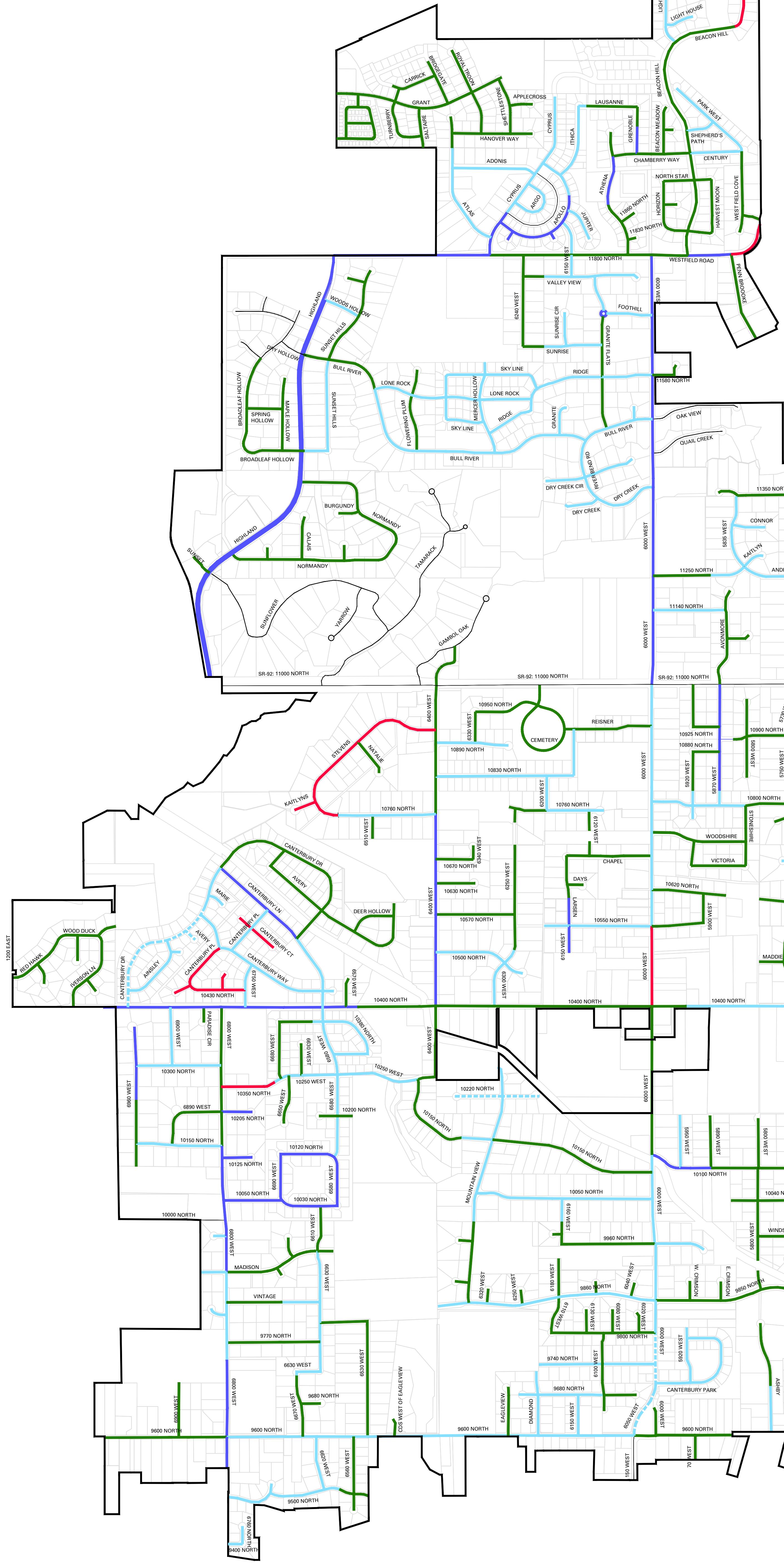


Figure 2: Typical Pavement Category Spending Allocation

The exact deterioration of a road is difficult to predict due to variables such as weather patterns and unforeseen damages. Therefore we highly recommend the city continue to evaluate the roads annually or bi-annually and make any necessary adjustments to the plan if the roads are deteriorating at a different rate than expected at the time of this study. This can be done by in-house personnel or through contracted means. It is likely that the city will need to make modifications to our recommended plan, in which case the typical funding allocations shown in Figure 2 will be helpful in reprioritizing the roads and adjusting the funding schedule.

## **Appendix: Highland City Road Repair Strategy Map**

# Recommended Repairs and Preservations



## Rehab Methods

- Reconstruct/ Remove & Replace Surface
- Mill & Overlay
- Significant (25%+) Patching & Seal Coat
- Minor (1% - 24%) Patching & Seal Coat
- Seal Coat without Patching
- Private/UDOT Road (Not Included in Study)





## **Highland City**

### **Road Reconstruction Master Plan**

#### **Phase 1 – Rehabilitation**

**March 21, 2017**

**Prepared by**

**PEPG Consulting, LLC**

## Table of Contents

Table of Contents.....	1
Executive Summary.....	3
Introduction and Project History .....	5
Field Work and Recommended Road Treatments.....	7
Field Work.....	7
Visual Survey by Senior Pavement Engineer.....	7
Pavement Coring and Subsurface Evaluation .....	8
Findings .....	9
Rehabilitation Concepts and Treatments .....	12
Highland System Treatment Types .....	15
Crack seal .....	15
Seal Coats .....	16
Patching.....	17
Mill/Overlay .....	17
Surface Remove and Replace.....	18
Reconstruction .....	18
Pavement Conditions and Mitigation Summary.....	18
Cost Estimates.....	20
Unit Costs .....	20
Pavement Surface Areas .....	22
Summary of Cost Estimates .....	22
Maintenance Costs.....	23
Maintenance for New Construction / Major Rehabilitation .....	23
Maintenance for Postponed Repairs .....	24
Ongoing Maintenance.....	25
Prioritization of Road Repairs .....	26
Pavement Condition Index.....	26
Average Daily Traffic .....	27
Estimated Repair Cost.....	28
Pavement Life Expectancy .....	28

Recommendations .....	30
Appendix A: Highland City Road Repair Strategy Map .....	A-1
Appendix B: Road Repair Table Sorted by Increased Cost of Alternate Repair .....	B-1
Appendix C: Detailed Road Repair Costs Table .....	C-1
Appendix D: Detailed Road Repair Prioritization Table .....	D-1
Appendix E: Public Surveys .....	E-1
Survey Statistics .....	E-1
Internet Surveys .....	E-3
Open House Surveys .....	E-14
Appendix F: TAC Meeting Minutes .....	F-1

## Executive Summary

Highland City owns and maintains over 80 miles of roadways, many of which are in dire need of effective, economical maintenance. Previous studies performed for the City classified each road with a Pavement Condition Index (PCI) value and letter grade between A and F, provided recommendations regarding maintaining the good roads, and provided a cost estimate of \$16,246,500 to reconstruct the D and F roads. However, the City lacked a comprehensive plan to repair the D and F roads. Therefore, the City advertised for a consultant to provide a prioritized Road Reconstruction Master Plan for these poor roads. The City hired our consultant team, comprised of PEPG Consulting and CME Transportation Group, to complete this plan and expanded the scope to include the low C roads. The City also assembled a Technical Advisory Committee (TAC) to represent the citizens and provide expert advice for this study.

To understand the true condition of each road, we performed an in-depth examination of 216 separate road segments within about 36 miles of road. The examination of the road segments included a visual survey by a senior pavement engineer, pavement coring, and subsurface evaluation. We selected coring locations such that they would provide additional information about the extent of failure of the roadway, which could not be known from a visual survey alone. In instances where structural issues were a concern, we used a Dynamic Cone Penetrometer to evaluate the base layer under the pavement. We did not examine the roadway drainage or the infrastructure conditions outside of the roadway (ie. curb/gutter and sidewalk). Overall, we found that Highland City's roads were in much better condition than expected. Table 1 summarizes our field observations and our recommended treatments for these roads.

Table 1: Field Examination Summary

Total Segments Evaluated					216
Reclassified Roads (up)	A	B	C	Total	(%)
	12	31	7	50 segments	23.1%
Reclassified Roads (down)	C	D	F	Total	(%)
	3	11	5	19 segments	8.8%
Remaining Segments in this Study					172
Require Patching				90 segments	52.3%
Require Crack Seal				117 segments	68.0%
Require Seal Coat				127 segments	73.8%
Require Mill/Overlay				32 segments	18.6%
Require Remove & Replace				5 segments	2.9%
Require Reconstruction				8 segments	4.7%
					1 mile

From the results of the field examination, we completed cost estimates to repair each road segment. The cost estimates include a percent markup to consider project costs outside of the pavement section (ie. mobilization, traffic control, striping, etc.) We also estimated a timeline of when these repairs need to be made with alternate costs if the road segments are allowed to deteriorate further. The TAC selected a prioritization matrix to prioritize each road segment based on its condition, average daily traffic, cost to repair, and life expectancy before further deterioration. Our final prioritized list of recommended repairs for each road segment is included in Table 15 of the Recommendations section.

Based on our findings and recommendations, we estimated the total cost to repair the D, F, and low C roads to be \$5,548,374. This is significantly lower than the previous estimate of \$16,246,500, which did not include the low C roads or costs outside of the pavement section. The bulk of the cost savings can be attributed to finding that most roads do not need to be reconstructed. We also estimated an annual maintenance cost after the roads are repaired to be \$667,145. If the roads further deteriorate and the alternate repairs are selected, then our total cost estimate increases to \$10,274,505.

In October 2016, the scope was revised to also include the A, B, and high C roads. The results of this expanded scope are presented in the Phase 2 – Preservation report. Phase 2 includes about 44 miles of road.

## Introduction and Project History

Highland City owns and maintains over 80 miles of roadways. In 2014, J-U-B Engineers completed a Five Year Road Maintenance Management Plan. This plan assigned a Pavement Condition Index (PCI) and a corresponding letter grade of A, B, C, D, or F for the City's roads. The 2014 PCI values were estimated based on a PCI study that J-U-B performed in 2011, prorated to 2014 by applying a pavement deterioration curve that they derived in-house. The Five Year Road Maintenance Management Plan suggested appropriate surface treatments, maintenance, and rehabilitation for the entire group of pavements rated A through C. It did not specify, however, approaches to reconstruction or costs for the repair of pavements rated D and F. In the spring of 2015, an opinion of probable cost study was completed for all D and F roads. This study estimated a total cost of \$16,246,500 for the roadway construction materials necessary to reconstruct all D and F roads.

In December of 2015, the City advertised for a consultant to provide a prioritized Road Reconstruction Master Plan for the D and F roads. The scope of this project included the following services:

- Attend a kick-off meeting and regular work sessions with the Technical Advisory Committee (TAC), consisting of citizen representatives and experts as shown in Table 2. Also make periodic presentations to the City Council.

*Table 2: TAC Members*

Name	Role
Dennis LeBaron	City Council
Rod Mann	City Council
Nathan Crane	City Administrator
Ty Christensen	City Streets Superintendent
Justin Parduhn	City Operation & Maintenance Director
Joann Scott	City Assistant
Ed (Devirl) Barfuss	Resident Representative
Jeff Clyde	Resident Representative
Lowell Nelson	Resident Representative
Tim Heyrend	Resident – Civil Engineer
Dennis Anderson	Resident – Retired Civil Engineer
Larry Becknell	PEPG Project Manager
Ryan Kitchen	PEPG Project Engineer
Mike Russell	PEPG Project Engineer
Heather Hamilton	PEPG Intern
Tim Biel	CME Senior Pavement Engineer
Mike VanMilligen	CME Field Manager
Charlie Trujillo	Consultant Project Principal

- Examine the D and F road segments and provide recommendations and cost estimates for their repairs. Also approximate the life cycle of each road segment before the recommended repair strategy will no longer suffice.
- Prioritize the repairs of the road segments based the construction cost, PCI value, amount of traffic, and life cycle.
- Conduct a public open house to present the results of this study to the citizens. Also help facilitate and incorporate feedback from the citizens.
- Provide a final Road Reconstruction Master Plan report.

PEPG Consulting (PEPG) was selected and hired to accomplish this study with CME Transportation Group (CME) as a sub-consultant to assist with the field work. Based on our comprehensive approach to examine the condition of the D and F roads, the City chose to expand the scope to also include the low C roads with a PCI of 62 or lower. We (PEPG/CME) present the results and recommendations from this study in this Phase 1 – Rehabilitation report. Phase 1 includes about 36 miles of road.

In October 2016, Highland City expanded the Road Reconstruction Master Plan project scope to include the A, B, and high C roads. These roads were defined as having a PCI value of above 62. The results of this expanded scope are presented in the Phase 2 – Preservation report. Phase 2 includes about 44 miles of road.

The results of our studies represent a snapshot of the ever-changing pavement condition for each road. We expect that City staff will be able to use our observations and recommendations for many years. However, we acknowledge that the road conditions will need to be continually reevaluated and that staff will need to update the master plan accordingly.

## Field Work and Recommended Road Treatments

### Field Work

We performed field investigations on over 200 segments of Highland City's roads having a PCI rating of 62 or lower, as listed in J-U-B's 2014 Five Year Road Maintenance Management Plan. The PCI values were originally derived based on a visual quantitative summary of the cracks in the pavement segments. The visual evaluation can provide a good idea of the systemic conditions and need for funding, but the prioritization of individual segments and annual expenditures needs a more defined understanding of the individual pavement segment needs.

Pavements are typically designed structurally to last a minimum of 20 years, and will likely last much longer with proper materials selection and timely preservation, rehabilitation, and maintenance treatments. The long-term performance of the pavement is defined both by the structural strength of the overall pavement and its individual layers, along with the durability characteristics of the individual materials used in the construction of the pavement. A visual survey that only quantifies cracks does not identify whether the distresses in the pavement are due to structural deficiencies or to durability deficiencies (or deficiencies as a result of environmental deterioration of the materials).

To properly assess the conditions of the roadway segments, we developed an investigation plan that looked more specifically at the type of distress present and the likely sources of the distresses. This investigation plan included coring each D and F road segment to identify the subsurface extent of distresses and the conditions of the materials used in construction. To simplify prioritization, we combined the smaller segments from the visual distress survey into larger segments based on likely logical construction segments and similar road conditions. We did not examine the roadway drainage or the infrastructure conditions outside of the roadway (ie. curb/gutter and sidewalk). Specific details of the field investigation plan included the following tasks:

#### ***Visual Survey by Senior Pavement Engineer***

- Identification of distress type (primarily cracking) based on the *SHRP Distress Identification Manual*.
- Identification and discussion on whether distress is structural or environmental in nature.

- Visual review of Hot Mix Asphalt (HMA) layer mix composition, thickness and compaction (characteristics impacting durability).
- Determination of core locations based on distresses present.
- Visual estimate of area of patching required.

#### ***Pavement Coring and Subsurface Evaluation***

- Thickness of HMA surface layer.
- HMA mix type and condition.
- Thickness and condition of base layer (for areas showing structural concerns).
- Visual condition of base material.

Most distresses can be readily categorized based on type of distress and location within the pavement structure. For example, a crack that is located transversely across the pavement and is not coinciding with traffic patterns is most likely a durability distress, whereas a series of parallel longitudinal cracks located only in the wheel paths is most likely a structural distress. This is an important distinction as the rehabilitation approaches for structural and durability distresses are often very different.

For those locations that had structural issues, not only did we core and review the surface layer of asphalt, but we also evaluated the base layer beneath using a Dynamic Cone Penetrometer (DCP) (see Figure 1). The DCP is a commonly used tool in pavement evaluation where a small cone is driven through the unbound pavement layers using a slide hammer with a constant drop distance. The Army Corps of Engineers developed a correlation equation between the distance of penetration per drop of the hammer and the strength of the base layer. This knowledge was valuable in determining which layer (HMA surface or base) was most contributing to the structural concerns.



*Figure 1. Field Investigation Practices - Coring and Dynamic Cone Penetrometer*

## Findings

Field investigations identified Highland roads in a much better condition than expected. Based on the original distress survey previously performed, a large number of structural failures were anticipated. Visual review of the pavement segments identified that the vast majority of the pavements were not experiencing distresses sufficient to require reconstruction. Typical findings of pavements included transverse cracks with variable spacing, longitudinal cracks along joint lines, dry and oxidized surfaces and some localized areas requiring patching. These are durability type distresses and do not require reconstruction. A typical example of this finding can be found in Figure 2.



Figure 2. Woodland Drive (Segment 75) - Typical Non-Structural Durability Distress

Typical structural distresses found in the Highland system included significantly tighter spaced cracks, located in the wheel path areas, and in some cases, vertical deformation of the pavement surface. An extreme case of this can be seen in Figure 3.



Figure 3. 11200 North between 4930 West and 4800 West (Segment 180) - Typical Structural Distress

Throughout the segments, we observed that the asphalt mixes, layer thicknesses, and base course sections varied from road to road and from development to development. In some cases, we noted that even from segment to segment, pavement characteristics varied significantly. We also noted that the majority of these pavement segments had not been sealed, indicating that a seal coat program did not historically exist. The current Highland administration has addressed this issue and a seal coat program has been in place since 2012.

A summary of the statistics of the field investigation is shown in Table 3. The three most notable findings include: Only 4.7% of the segments we reviewed actually need reconstruction, only an additional 26.2% of the segments need more than basic maintenance (crack sealing, seal coating and localized patching), and we reclassified 23.1% of the roads into the A, B, and high C categories. Roads that we reclassified up may have been repaired since the previous visual survey, deteriorated less than estimated between the previous visual survey and the Five-Year Road Maintenance Management Plan, or originally classified lower than what we would have specified. Roads that we reclassified down may have deteriorated faster than estimated or originally classified higher than what we would have specified. The reclassified segments are listed in Table 4. Segments that were reclassified up to a High C or higher should be added to the City's preservation program. Said segments were excluded from the recommendations of this report and added to the Phase 2 report. For all segments that we reclassified, we assigned an updated PCI value based on our visual observation.

Table 3: Field Examination Summary

Total Segments Evaluated					216
Reclassified Roads (up)	A	B	C	Total	(%)
	12	31	7	50	23.1%
Reclassified Roads (down)	C	D	F	Total	(%)
	3	11	5	19	8.8%
Remaining Segments in this Study					172
Require Patching				90	52.3%
Require Crack Seal				117	68.0%
Require Seal Coat				127	73.8%
Require Mill/Overlay				32	18.6%
Require Remove & Replace				5	2.9%
Require Reconstruction				8	4.7%
					1 mile

Table 4: Reclassified Road Segments

Road	From	To	Previous Classification	New Classification
6150 W	Valley View	11800 N	D	A
Granite Flats	Valley View	Foothill	D	A
Parkway West	Town Center W	5600 W	D	A
10680 N	6000 W	W C-D-S	D	A
5720 W	10740 N	10680 N	D	A
Westwood	10250 N	S C-D-S	D	A
Canyon Links Vista	Country Club Dr.	SEOP	D	A
Parkway East	Town Ctr E	5300 W	D	A
6120 W	10760 N	SEOP	F	A
9680 N	6100 W	East C-D-S	F	A
6100 W	SCDS	9700 N	F	A
10150 N	6300 W	6000 W	F	A
9860 N	6200 W	6000 W	Low C	B
Stoneshire	10800 N	10750 N	Low C	B
Atlas	Cyprus	11995 N	Low C	B
Adonis	Cyprus	Atlas	Low C	B
5470 W	10600 N	10550 N	Low C	B
Lausanne	Ithaca	12040 N	Low C	B
Ithaca	Lausanne	Apollo	D	B
Cyprus	Apollow	NEOP	D	B
Valley View	6190 W	ECDS	D	B
Foothill	Granite Flats	6000 W	D	B
Sunrise	Granite Flats	6190 W	D	B
Skyline Dr. N	Ridge	Mercer Hollow	D	B
Lone Rock	6400 W	Ridge	D	B
Skyline Dr. W	Mercer Hollow	Lone Rock	D	B
Skyline Dr.	Mercer Hollow	Lone Rock	D	B
Bull River Road	Trail Cross	Deer Creek	D	B
Dry Creek Circle	E C-D-S	W C-D-S	D	B
5720W	10680 N	10660 N	D	B
6580 W	9600 N	S C-D-S	D	B
9500 N	6601 W	EEOP	D	B
Cyprus	11890 N	Apollo	F	B
10760 N	6200 W	E C-D-S	F	B

Road	From	To	Previous Classification	New Classification
6200 W	10830 N	10760 N	F	B
10760 N	6400 W	6589 W	F	B
6510 W	10760 N	SEOP	F	B
Canterbury Pl.	Canterbury Lane	Canterbury Way	F	B
Canterbury Drive	Canterbury lane	10550 N	F	B
6680 W	6620 W	10250 N	F	B
10380 N	6620 W	10300 N	F	B
10300 N	6530 W	6580 W	F	B
6670 W	9690 N	9600 N	F	B
5920 W	5870 W	10800 N	F	High C
6960 W	10260 N	NEOP	High C	Low C
9770 N	6630 W	6700 W	High C	Low C
5580 W/5520 W	9800 N	S CDS	High C	Low C
Granite Flats	Ridge	Foothill Dr.	D	Low C
6250 W	10550 N	NEOP	D	Low C
10570 N	6250 W	6400 W	D	Low C
9800 N	6000 W	5675 W	D	Low C
Granite Flats	Bull River	Ridge	D	Low C
5920 W	SR92	5870 N	F	Low C
10400 N	6550 W	7000 W	A	D
Westfield	Penn Brooke	Beacon Hill	High C	D
6580 W	10030 N	10120 N	High C	D
10030 N	6580 W	6690 W	High C	D
10120 N	6580 W	6690 W	High C	D
10050 N	6690 W	6800 W	High C	D
10125 N	6800 W	E CDS	High C	D
10205 N	6800 W	E CDS	High C	D
10300 N	6800 W	6960 W	High C	D
6630 W	9750 N	9880 N	High C	D
Vintage	6630 W	6800 W	High C	D
Cedar Hills	North County	W End Tennis Cts	A	F
Cedar Hills	W End Tennis Cts	W Side Track	A	F
Westfield	N City Limit	Penn Brooke	B	F
6690 W	10030 N	10120 N	High C	F
11200 N	4930 W	4800 W	High C	F

## Rehabilitation Concepts and Treatments

We considered numerous factors to evaluate the repair options, including available funding, desired long-term performance, sophistication of the repair, and construction capabilities of the owner. While the available funding and desired long-term performance issues were relatively straight-forward, the selection of proper concepts based on capabilities of the owner were more of a challenge to follow.

As previously discussed, pavement distresses can be grouped into two main categories: structure and durability. Commonly, a third category based on construction flaws can be included, but even

construction flaws tend to fall into either the structural or durability category. When addressing *structural* concerns, the main questions to ask include how much life is left in the pavement, how much pavement must be added to achieve the new desired performance, and arguably most important, how much 'bad' material must be removed to achieve good performance? These questions are pretty straight forward and can be resolved based on using one of several standard processes (AASHTO 1993, AASHTO MEPDG, Asphalt Institute) to calculate the thickness of pavement required based on the quality of subgrade the pavement is built on, the amount of traffic the pavement is expected to carry, and the length of time the pavement is desired to perform.

The bigger challenge comes from the evaluation of a pavement and selection of a rehabilitation strategy from a *durability* standpoint. This relates to the ability of the pavement, primarily the Hot Mix Asphalt or Portland Cement Concrete surfacing, to withstand the damage inflicted on it by the environment. Ultraviolet degradation, oxidation, freeze-thaw expansion, and water/deicing salt damage can all turn a properly designed structural pavement into a pavement requiring major repairs in a very short time-frame. Durability challenged pavements will eventually degrade into structurally challenged pavements if the durability issues are not addressed early enough.

The best approach to maintaining the durability of a pavement is to prevent it from deteriorating in the first place. This requires the use of quality materials in design and construction, and the application of preservation treatments throughout the life of the pavement to protect it. It is very similar to the preservation of a vehicle. Proper maintenance, including oil changes, rust-proofing, tune-ups, will all extend the performance life and quality of the vehicle. Failure to perform this routine maintenance will result in quicker deterioration.

For asphalt pavements, there are a large number of options and alternatives to select from, including seal coats (chips, slurries, sand, cape, double-chip, and fog) and thin-overlays (micro-surfacing, open-graded friction, hot mix asphalt, and stone matrix asphalt). Many of these alternatives provide the same effect, and selection is based on owner's preference, what is available locally, and which products have performed well historically in the same setting. The selection of the possible alternatives should be based on a series of project specific criteria, including pavement surface condition, level of funding, expected life, anticipated traffic, and pavement characteristics, such as presence of curb and gutter.

For the Highland pavements, the reactive maintenance (crack sealing, surface patching, and full-depth patching) and rehabilitation options we recommended were based on the principle of keeping things simple, such as in ease of product application, local product availability, and relative cost. It should be noted that our primary focus of the repairs was based on preservation and not structural design. Once we identified that the vast majority of the distresses present were durability issues and not structural, we focused the approach to repair specifically on the durability performance of the pavement. As these pavements were not structurally challenged, we could reasonably assume that the original structural designs for the pavements were adequate.

All pavements should be expected to have rehabilitation efforts throughout its performance life. A typical pavement design includes a 20 year structural design and an expectation of 40 to 50 years of performance using proper preservation and rehabilitation strategies. This would include the use of surface seal coats to slow the deterioration of the pavements and removal and replacement of additional asphalt to extend the structural life. Reconstructing a non-structurally challenged pavement prior to the end of its potential performance life would not be a prudent use of resources. Properly patched, crack sealed and seal-coated pavements will perform well, and at a cost much less than that of reconstruction. A good example of this approach can be seen in the Canterbury Drive pavement, which has been recently patched, crack sealed, and seal-coated, and is in excellent condition (see Figure 4).



*Figure 4. Canterbury Drive - Typical Durability Repairs of Crack Sealing and Sealcoating.*

## **Highland System Treatment Types**

We assigned a preferred repair strategy for each road segment based on the visual survey and subsurface evaluation. A map illustrating these recommended repair strategies is included in Appendix A. From the visual survey, we determined an average crack seal spacing of 15 feet in each direction and the approximate percent of patching needed for each segment. We also estimated the current life cycle of each road segment. The life cycle represents how long we estimate the road will endure without needing a more extensive road repair. If the road segments are not repaired before deteriorating further, we identified a more extensive road repair strategy for each segment that will likely be necessary. The repair strategies, prioritized by our recommendations, are summarized later in the Recommendations chapter of this report. Additionally, Appendix B includes a table sorted by the increased cost between the preferred repair strategy and the alternate repair strategy.

The primary set of treatment types for the Highland system were preservation, to extend the life of the current pavements. Good candidates for preservation included oxidized pavements and environmentally cracked pavements. These pavements were typically in a condition such that they could carry expected loads, provided that they do not continue deteriorating. Bad candidates included pavements with rutting or structural damage or pavements with drainage or crown issues. The following is a brief description of the preservation treatments available that will satisfy rehabilitation needs. The City may select specific rehabilitation methods on a case-by-case basis. These options are based on overall cost and simplicity of application and local availability of product.

### ***Crack seal***

Crack sealing is used for repairing transverse and longitudinal cracks. This is typically the use of a rubberized tar material or mixture of sand and asphalt emulsion to fill the crack. Cracks and joints 1/4" or greater should be cleaned of any incompressible material including old sealant, and then sealed and cured prior to applying a surface treatment. Crack seal curing typically takes three to four weeks. Crack sealing actually comes in two basic forms:

- Crack Filling: The placement of sand and/or bituminous materials into non-working cracks to substantially reduce the intrusion of incompressible substances and infiltration of water, while also reinforcing the adjacent pavement. Typical applications include the placement of sand or

other filler into the lower half of a crack to reduce the amount of bituminous sealant necessary and to improve shape factor.

- **Crack Sealing:** The placement of specialized bituminous sealing materials into working cracks using unique configurations to reduce the intrusion of incompressible substances into the crack, and to prevent infiltration of water into the underlying pavement layers.

### ***Seal Coats***

We recommend any of the following types of seal coats for Highland City pavements requiring seal coats:

- **Sand Seal:** A sand seal is an application of asphalt binder, normally an emulsion, covered with a fine aggregate. It may be used to improve the skid resistance of slippery pavements and to seal against air and water intrusion. Currently, there are several commercial versions of sand seals used in Utah under the product names HA-5 and Onyx.
- **Chip Seal:** A chip seal is a surface treatment in which the pavement is sprayed with asphalt and then immediately covered with aggregate and rolled. Chip seals are used primarily to seal a pavement with non-load-associated cracks, and to improve surface friction. They also are common as a wearing course on low volume roads. For higher quality performance, the asphalt binder can be modified with a blend of ground tire or latex rubber, or polymer modifiers, to enhance the elasticity and adhesion characteristics of the binder.
- **Slurry Seal:** A slurry seal is a mixture of slow setting emulsified asphalt, well graded fine aggregate, mineral filler, and water. It is used to fill cracks and seal areas of old pavements, restore a uniform surface texture, seal the surface to prevent moisture and air intrusion into the pavement, and improve skid resistance. Aggregate size, emulsion type, and any additives determine classification of the slurry seal. When a slurry is placed over dry and raveling pavement, a tack coat should be placed before the slurry seal.
- **Microsurfacing:** Microsurfacing is a variant of the slurry surfacing and is a mix of polymer-modified asphalt emulsion, mineral aggregate, mineral filler, water, and other additives, which is

proportioned, mixed, and spread on a paved surface. Microsurfacing differs from a slurry seal in that it is typically applied in slightly thicker applications and can be used on higher volume roadways (arterials and major collectors) to correct wheel path rutting and/or provide a skid-resistant pavement surface.

For those pavements that need more than just preservation or reactive maintenance, the basic structural repair approaches include patching, overlays, and reconstruction. The following is a brief description of the individual approaches included in the recommendations:

### ***Patching***

Patching is a localized repair of a distressed pavement. Patching may be limited to surface-only or may require the removal and replacement of the underlying base course.

- **Surface Patching:** Surface patching is the removal and replacement of the existing pavement surface to repair wheel ruts, edge raveling, and delaminated or pothole areas. Typical patching repairs also include the regrading and compaction of the existing base course under the surface. Common construction practices in placing HMA for patching include use of a spreader box, grader/blade patching, or using a paver.
- **Full-Depth Patching:** Full-depth patching is the removal and replacement of the existing pavement surface and a significant portion of the underlying base course(s) to repair structural failures or potholed areas and re-establish appropriate structural support for the remaining service life of the pavement. Full-depth patching is typically limited to less than 30% of the pavement surface area. Pavements in need of more than 30% repair typically result in reconstruction of the entire pavement.

### ***Mill/Overlay***

Thin HMA overlays are applications of hot mix asphalt to all or a portion of the existing HMA surface to address severely distressed surfaces that are structurally sound beneath. The new HMA can be placed directly over the pavement surface if grades allow, or in cases of pavements with curb and gutter, an equal amount of existing HMA is milled off prior to placement of the new HMA resulting in the reestablishment of proper grades. For pavements that are exhibiting distresses in specific large areas,

such as a single pass of paving or an approach to an intersection, the milling may be limited to the distressed area and does not need to cover the entire pavement. This is similar to a partial depth patching approach, but on a significantly larger scale. Where excessive crowning was found or uneven asphalt compromised a segment's structural integrity, a cost for lane leveling was added.

### ***Surface Remove and Replace***

Surface removal and replacement includes the removal of the full surface of the existing pavement, either through either milling or excavation, and replacement with an equivalent amount of new surfacing. Surface removal and replacement typically includes grading and compaction of existing base materials, but does not include the removal and replacement of any of the existing base materials.

### ***Reconstruction***

Reconstruction of a road includes the full removal and replacement of the pavement section, including base courses. Reconstruction is typically necessary when the roadway has extreme deterioration or the underlying base courses are insufficient to carry the expected pavement load, regardless of thickness of surfacing. Reconstruction may include new and/or recycled materials.

### **Pavement Conditions and Mitigation Summary**

Table 5 illustrates a summary of the different pavement conditions with corresponding distress types and mitigation practices. It also includes target percentages for roads in each category based on our recommended allocation of maintenance budget spending, later discussed in the Ongoing Maintenance section. The PCI ranges are based on J-U-B's 2014 plan. Alligator cracking includes interconnected cracks creating small pieces in the wheel path area, and block/map cracking includes a series of longitudinal and transverse cracks that appear due to expansion and contraction of the pavement. Core drilling is usually necessary to verify the depth of raveling or cracking. Accurate rutting depth is usually determined through long transverse slices of pavement, but tends to be in the top three inches unless caused by soft base.

Table 5: Pavement Conditions and Mitigations Summary

Grade	PCI Limits	Typical Distresses	Typical Mitigation Practices	Target % of System
A	85-100	No alligator cracking, no block cracking, up to 1 or 2 transverse cracks per block or road segment. No rutting, raveling or uneven patching.	Seal coat within 1-2 years of surface placement.	20% to 30%
B	70-85	No alligator cracking, block cracking with 30' spacing, transverse cracks at 50' spacing, no rutting or raveling.	Crack seal, seal coat within 3-5 years.	20% to 30%
C	55-70	Alligator cracking less than 10% of area, block cracking on 20' spacing, rutting or raveling on less than 10% of area.	Patch alligator cracking, crack seal, seal coat on raveling, patch or fill ruts greater than 3/4" deep.	30% to 40%
D	40-55	Alligator cracking 10% to 25% of area, block cracking on 10' spacing, rutting or raveling on 10% to 25% of area.	Patch alligator cracking and short-spaced (<5') block cracking, mill and overlay to depth of raveling or rutting.	5% to 10%
F	0-40	Alligator cracking or rutting over more than 25% of the area, full-depth block cracking with 5' spacing over more than 25% of the area.	Surface reconstruction, possibly base reconstruction if base is poor (field CBR<50). Vertical deformation of alligator surface is typical of poor base.	0% to 5%

## Cost Estimates

Cost is of vital importance to the proper maintenance of pavement. Proper maintenance practices can greatly extend the life of the pavement. An appropriate and adequate budget dollar amount should be allocated for annual maintenance and repair of a City's pavement infrastructure. Given the fact that many of the roads within Highland City have fallen below desirable PCI levels and current funding and budget allocated to pavement maintenance and repair are insufficient to bring PCI levels to desirable levels, a larger expenditure of budget dollars is necessary to bring the PCI values up to a normal operating level. Effectively, much more money will be saved in the long-term if more money is spent in the short-term.

PEPG estimated the repair costs for each road segment based on the recommended repair strategies shown on the map in Appendix A. These costs were calculated by multiplying the unit price of each recommended treatment by the associated pavement area as described below. A detailed summary table of the costs to repair each road segment is included in Appendix C. This table also includes the estimated life cycle expectancy of each road segment with estimated alternate costs if they do not get repaired prior to deteriorating out of their current repair strategy.

### Unit Costs

Unit costs were estimated based on current local market prices using analogous estimating, parametric estimating, and expert judgement. They included the cost of the materials and their placement and a multiplication factor to account for ancillary items such as mobilization, traffic control, environmental protections and permitting, repair of manhole lids and collars, and striping. The multiplication factors used for each type of repair strategy are shown below in Table 6.

*Table 6: Unit Cost Multiplication Factors*

Repair Strategy	Multiplication Factor
Crack Seal	1.025
Seal Coat	1.05
Patching	1.1
Mill/Overlay	1.15
Remove & Replace	1.15
Reconstruction	1.2

Table 7 summarizes the unit costs used for each repair strategy. For the alternate repairs, we had to make some assumptions regarding what depth of future repair would be necessary if they were mill/overlay or reconstruction. Therefore, we assumed a conservative depth of 2.5 inches for mill/overlay and a depth based on the road classification for reconstruction as shown in Table 8. The road classifications are defined and explained in the next chapter.

Table 7: Unit Costs

<b>Crack Seal &amp; Seal Coat</b>		<b>Cost per SY</b>
Crack Seal*		\$0.43
Seal Coat		\$1.84
Premium/Double Seal		\$3.15
*\$0.35/LF on a 15' Grid		
<b>Mill/Overlay</b>		<b>Cost per SY</b>
1.5" Mill/Overlay		\$7.18
2.5" Mill/Overlay		\$11.97
1.5" Mill/2.0" Overlay		\$9.86
1.5" Mill/2.5" Overlay		\$12.26
Lane Level		\$4.34
<b>Patching</b>		<b>Cost per SY</b>
Surface Patch		\$36.64
Full Patch (12" Base)		\$64.75
<b>Surface Remove &amp; Replace</b>		<b>Cost per SY</b>
3" Surface R&R		\$15.68
<b>Reconstruction</b>		<b>Cost per SY</b>
3" HMA/6" Base		\$22.09
3" HMA/8" Base		\$24.22
4" HMA/8" Base		\$29.45
4" HMA/10" Base		\$31.58

Table 8: Reconstruction Cost Assumptions for Alternate Recommendations

<b>Road Classification</b>	<b>Reconstruction</b>	<b>Cost per SY</b>
Minor Local	3" HMA/6" Base	\$22.09
Major Local	3" HMA/8" Base	\$24.22
Minor Collector	4" HMA/8" Base	\$29.45
Major Collector/Arterials	4" HMA/10" Base	\$31.58

For instances in which the alternate repair strategy does not change from the preferred strategy, we assumed that the cost will increase by 5% for reconstruction and 15% for the other repairs. The 5% increase for reconstruction accounted for items such as more extensive damage to manholes, less mobility within the project limits, etc. The 15% increase for the other repairs accounted for additional damage to the road that will require a more extensive implementation of the same repair strategy.

An example of how we applied the unit costs to the road segments is shown in Table 9. This example shows that we recommend that 6000 West from 10550 North to SR-92 be treated with a double or premium seal coat after patching the surface of about 10% of the area. We multiplied the double seal coat unit cost (\$3.15/SY) by the total area and the surface patching unit cost (\$36.64/SY) by 10% of the total area (patching area), and then added the two together. This total cost was \$92,281.

Table 9: Example Application of Unit Costs

Road	From	To	Recommended Repair	Area (SY)	Patching Area (SY)	Seal Coat Unit Cost	Patching Unit Cost	Total Cost
6000 W	10550 N	SR 92	Double Seal Coat, 10% Surface Patching	13,542.7	1,354.3	\$3.15/SY	\$36.64/SY	\$92,281

### Pavement Surface Areas

Surface areas were primarily measured using Google Earth Pro. Several road segments were measured in the field by hand using a survey wheel to verify its accuracy. PEPG found that the measurements acquired from Google Earth Pro were within an acceptable tolerance (less than 3%). Patching areas were calculated by multiplying the segment surface area by the recommended percent patching from the visual survey.

### Summary of Cost Estimates

A summary of the cost estimates by life expectancy and repair strategy are presented in Table 10 below. Table 11 illustrates the higher cost estimates for the alternate repair strategies if the roads are not repaired before further deterioration. The costs will continue to increase the more the repairs are delayed, potentially beyond the alternate repair estimates.

Table 10: Preferred Repair Cost Estimates

Life Expectancy	Crack Seal	Seal Coat	Patching	Mill/Overlay	Remove & Replace	Reconstruct	Total Estimate
1-2 Years	\$17,594	\$216,210	\$232,387	\$24,838	\$0	\$0	\$491,029
2-3 Years	\$5,188	\$27,129	\$144,888	\$324,841	\$35,161	\$0	\$537,207
3-5 Years	\$154,645	\$765,269	\$1,557,076	\$1,092,069	\$215,811	\$735,268	\$4,520,137
<b>Total Estimate</b>	<b>\$177,426</b>	<b>\$1,008,609</b>	<b>\$1,934,351</b>	<b>\$1,441,748</b>	<b>\$250,972</b>	<b>\$735,268</b>	<b>\$5,548,374</b>

Table 11: Alternate Repair Cost Estimates

Delay Time	Crack Seal	Seal Coat	Patching	Mill/Overlay	Remove & Replace	Reconstruct	Lane Level	Total Estimate
After 1-2 Years	\$0	\$0	\$9,828	\$850,265	\$0	\$0	\$0	\$860,093
After 2-3 Years	\$0	\$0	\$52,255	\$176,750	\$40,436	\$1,055,642	\$43,313	\$1,368,395
After 3-5 Years	\$35,839	\$192,664	\$867,605	\$4,670,200	\$248,182	\$1,961,647	\$69,879	\$8,046,017
<b>Total Estimate</b>	<b>\$35,839</b>	<b>\$192,664</b>	<b>\$929,688</b>	<b>\$5,697,215</b>	<b>\$288,618</b>	<b>\$3,017,289</b>	<b>\$113,192</b>	<b>\$10,274,505</b>

## **Maintenance Costs**

The primary focus of our study was to evaluate the condition of the poor roads in Highland and to provide a master plan for repairing these roads. However, for the purpose of budgeting the total cost of each road, it was important to identify the long-term maintenance costs that will be required in addition to the repairs that we have identified.

We based the maintenance costs for the roads on the pavement needs and did not include items such as plowing, street sweeping, etc. that are not associated with the condition of the pavement. We considered two possibilities for estimating the maintenance costs – new construction or significant rehabilitation and postponed repairs of a treatment. If the City completes the recommended road repairs within proper time frames, then it can expect to follow the guidelines for new construction or major rehabilitation. If the City is not able to complete the recommended road repairs, then it can expect to follow the guidelines for postponed repairs.

### ***Maintenance for New Construction / Major Rehabilitation***

The annual costs included in this section were based on typical pavement maintenance strategies for local and collector roads. The efforts include crack sealing, patching and application of seal coats to protect the surfacing. As would be expected, maintenance costs immediately after construction or seal coat application are minimal for several years, followed by increasing applications of crack sealing and patching until the next seal coat cycle. Additionally, the maintenance efforts increase a little as the pavement overall ages.

Table 12 illustrates a sample maintenance plan for a new or rehabilitated road. It shows the full life cycle of the road, including the major rehabilitation (1.5" mill and overlay) to repair it back to a new condition. This plan has an average annual cost of \$0.90/SY for local roads and \$1.08/SY for collector roads.

Table 12: Road Maintenance Example for New Construction / Major Rehabilitation

Year	Local Road		Collector Road	
	Cost/SY	Activity	Cost/SY	Activity
1	\$ -	New Construction - No Work	\$ -	New Construction - No Work
2	\$ -	New Construction - No Work	\$ -	New Construction - No Work
3	\$ -	New Construction - No Work	\$ -	New Construction - No Work
4	\$ -	New Construction - No Work	\$ -	New Construction - No Work
5	\$0.43	Minor Crack Sealing	\$0.43	Minor Crack Sealing
6	\$1.84	Seal Coat	\$1.84	Seal Coat
7	\$ -	No Work	\$ -	No Work
8	\$ -	No Work	\$ -	No Work
9	\$ -	No Work	\$ -	No Work
10	\$ -	No Work	\$ -	No Work
11	\$4.03	Minor Crack Sealing/Patching	\$4.03	Minor Crack Sealing/Patching
12	\$1.84	Seal Coat	\$1.84	Seal Coat
13	\$ -	No Work	\$ -	No Work
14	\$ -	No Work	\$ -	No Work
15	\$ -	No Work	\$0.43	Minor Crack Sealing
16	\$4.03	Minor Crack Sealing/Patching	\$ -	No Work
17	\$ -	No Work	\$3.60	Patching
18	\$1.84	Seal Coat	\$7.18	1.5" Mill/Overlay
19	\$ -	No Work		
20	\$ -	No Work		
21	\$ -	No Work		
22	\$0.43	Minor Crack Sealing		
23	\$ -	No Work		
24	\$7.18	1.5" Mill/Overlay		
<b>Average</b>	<b>\$0.90</b>		<b>\$1.08</b>	

### ***Maintenance for Postponed Repairs***

The annual costs included in the “Postponed” section are based on the expectations of a pavement’s performance if the initial recommended treatment is delayed. The numbers are averages based on a typical system and will be different for each individual pavement. For any postponed treatment, it is expected that the pavement will continue to deteriorate from an environmental standpoint, leading to increased cracking and need for crack sealing. This increase in cracking, along with typical traffic loading will lead to additional localized structural failures that will require patching to repair. The annual costs for this application are based on the time that the maintenance is applied. It is not expected that maintenance would be applied each year, rather it is expected that maintenance would be applied as funding and need applies, with the cost roughly determined by the time frame of the delay.

Table 13 illustrates a sample maintenance plan for a road with postponed repairs. This plan has an average annual cost of \$3.08 per square yard for 10 years. If road repairs are postponed beyond 10

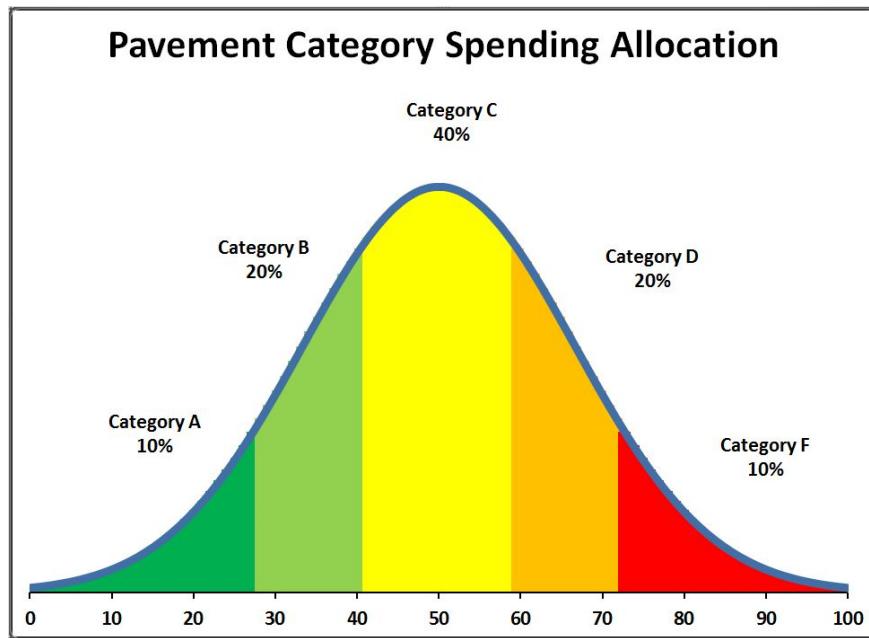
years, then they run the risk of a complete structural breakdown and maintenance activities and costs will continue to increase. This annual maintenance cost is not used in any of our recommendations, but we present it here to illustrate a sample of how expensive it can be to maintain a road in poor condition.

*Table 13: Road Maintenance Example for Postponed Repairs*

Year	Cost/SY	Activity
1	\$0.43	Minor Crack Sealing
2	\$0.43	Minor Crack Sealing
3	\$0.65	Major Crack Sealing
4	\$0.65	Major Crack Sealing
5	\$4.03	Minor Crack Sealing/ Patching
6	\$4.03	Minor Crack Sealing/ Patching
7	\$4.25	Major Crack Sealing/ Patching
8	\$4.25	Major Crack Sealing/ Patching
9	\$6.05	Major Crack Sealing/ Major Patching
10	\$6.05	Major Crack Sealing/ Major Patching
<b>Average</b>	<b>\$3.08</b>	

### ***Ongoing Maintenance***

After the recommended repairs have been performed, we recommend the city implement a spending plan that focuses on preventing roads from deteriorating to a condition that would require more expensive repair strategies. Figure 5 illustrates a reasonable allocation of funds to maximize the lifecycle of pavements and funds congruently.



*Figure 5: Typical Pavement Category Spending Allocation*

## Prioritization of Road Repairs

A prioritization matrix was developed and used to provide an order of priority for each segment of roadway with its associated recommendations and repairs. The prioritization matrix gives a quantifiable and objective means of ordering said recommendations and repairs. A detailed summary table of how each road segment was prioritized is included in Appendix D.

The principal intent of prioritizing the order of repairs was to maximize the benefit of the money spent. As such, the prioritization matrix is to be seen as a guide, while expert opinion, public response, and evolving circumstances may warrant a deviation from the prioritization matrix method (see Appendix E for public surveys). After all, pavement may not fail in a linear fashion over time, but rather can be exponential.

The matrix was developed by PEPG and the Technical Advisory Committee (TAC). Specifically, the prioritization matrix was developed through TAC discussions, meetings, and analysis of results from field investigation, as well as analysis of previous reports generated for Highland City (TAC meeting minutes are included in Appendix F). Each road segment was rated in three ways with the following weighting:

- Pavement Condition Index (PCI) 40%
- Average Daily Traffic (ADT) 30%
- Estimated Repair Cost 30%



To make each category comparable to each other, we assigned normalized scores between 0 and 100. We then multiplied each score by its associated weighting above to acquire a total prioritization score. The higher the prioritization score for a road segment, the higher the priority to complete its repairs.

### Pavement Condition Index

PCI is a quantifiable means by which a pavement or roadway can be graded or indexed on a scale of 0 to 100. A PCI of 100 would theoretically be in perfect condition. The scope of this study included the analysis of road segments with scores of 62 and below. We therefore assigned a "0" score for the highest PCI of 62 and a "100" score for the lowest PCI of 12. We then linearly normalized all the PCIs in

between. This process effectively placed the road segments with lower PCIs at a higher priority and higher PCIs with a lower priority.

The weight of the roadway segment's PCI accounted for 40% of the priority matrix's priority rating.

### Average Daily Traffic

Average Daily Traffic (ADT) provides a quantifiable metric of traffic or how much importance a roadway serves simply based on the number of cars or people that use the road. From a qualitative perspective, different roadways are generally designated in different categories that functionally provide different uses and benefits. Highland City's roads only include Collector and Local/Residential roads (UDOT operates and maintains Timpanogos Highway, Alpine Highway, and North County Boulevard). We further broke down the City's roads into four classifications and estimated the ADT for each (see Table 14).

*Table 14: Estimated Roadway ADTs*

Road Classification	Estimated ADT
Major Collector	3,000
Minor Collector	1,500
Major Local/Residential	500
Minor Local/Residential	50

Major Collectors experience higher ADT volumes than Minor Collectors, Minor Collectors experience higher ADT volumes than local roads, and thru-street Major Local roads experience higher ADT volumes than dead-end or cul-de-sac Minor Local roads. Detailed traffic counts were not available for most road segments. Therefore, we approximated each ADT using traffic generation assumptions based largely on the number of residences, businesses, and roadway network connectivity. We then used published ADTs to calibrate the ADTs for each road classification.

We assigned a "0" prioritization score for the Minor Local/Residential roads and a "100" prioritization score for the Major Collector roads. We then linearly normalized the two classifications of roads in between based on their estimated ADT and classification.

The weight of the roadway segment's ADT accounts for 30% of the priority matrix's priority rating.

### Estimated Repair Cost

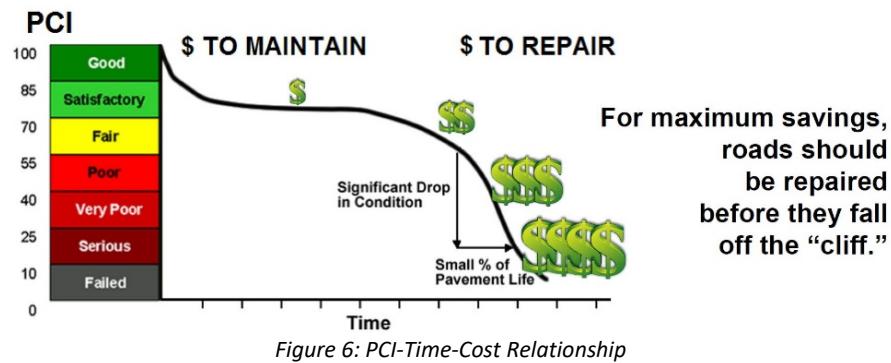
In developing and refining the prioritized list of roadway segments, the time value of money was considered on a theoretical level, but no discount rate or assumed interest rate was applied to the cost estimates. That is to say, all other things being equal between two roadway segments, the roadway segment with a lower cost takes a higher priority than the roadway segment with the higher cost. With that said, in light of the organic nature of pavement with its tendency to deteriorate over time, it will always be a more conservative approach to rehabilitate, repair, or maintain pavement sooner rather than later.

The cost to repair each road segment ranged between \$1,405 and \$224,924. We therefore assigned a “0” prioritization score to the \$224,924 cost and a “100” prioritization score to the \$1,405 cost. We then linearly normalized each road segment in between.

The weight of the roadway segment’s estimated cost to perform the recommended repairs accounts for 30% of the priority matrix’s priority rating.

### Pavement Life Expectancy

Figure 6 illustrates how a pavement may deteriorate from a higher PCI to a lower PCI. In particular, it shows the significant increase in cost to repair roadways with PCIs at 62 or below if allowed to deteriorate further. We therefore placed the highest priority to roads with the shortest life expectancy before falling into the next repair strategy. These estimated life expectancies were estimated from our visual survey and subsurface evaluation. The final prioritization in Appendix D was grouped into life expectancy categories of 1-2 years, 2-3 years, and 3-5 years.



By prioritizing the recommended repairs and maintenance, the City can ensure that each dollar is stretched to repair as many roads as possible to prevent the roads from “falling off the cliff,” thus preventing or minimizing more expensive repairs and maintenance. Similarly, some roads may have already fallen into a deteriorated condition and will incur expensive repair and maintenance costs. Logically, it is prudent to wait to repair said roads as the repairs and maintenance will be expensive, no matter if they are repaired in the first few years of the City’s rehabilitation efforts.

## Recommendations

On the next page, Table 15 lists each road segment in order of priority with its recommended repair and cost. PEPG recommends that Highland City follow the prioritization and repair strategies shown in this table to repair each low C, D, and F road. We also recommend that the City dedicate a minimum annual budget of \$1,000,000 as soon as possible to complete these repairs. This recommended budget amount is the most economical solution and would allow most roads to be repaired prior to their deteriorating into the next repair strategy.

A smaller budget dedicated to repair these roads would also be beneficial, but many roads will likely deteriorate further and require more extensive repairs. In this case of further deterioration or if an increased budget is delayed, we have included in Table 15 alternate repair strategies and their associated estimated costs. We have also included a table in Appendix B with the road segments sorted by the increased cost of the alternate repair. These tables will aid the City Staff and Council in selecting the most prudent repairs with whichever budget and timeline they are able to meet. However, we warn that an excessive delay or small budget could cause the City to “chase their tail”. It is possible that the roads could deteriorate faster than the budget allows them all to be repaired.

We included an estimate of the average annual maintenance cost for each road segment in Table 15. These costs are based on the assumption that the City will be able to repair each road within the recommended time frame. Each number represents the 20-year average cost to maintain that respective road segment. If repairs are delayed beyond the recommended time frame, maintenance costs will continue to increase until repairs can be made. The average annual maintenance cost for road segments whose repairs are postponed depends on how long it takes to make these repairs. The longer the repairs are delayed, the higher the maintenance cost, as explained in the Maintenance Costs section above.

The total estimated cost for the preferred repairs is \$5,548,374, the total estimated cost for the alternate repairs is \$10,274,505, and the total estimated annual cost to maintain these roads after being repaired is \$667,145.

Table 15: Prioritized Road Repair Recommendations with Estimated Costs

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
6000 W	10550 N	SR 92	Double Seal Coat, 10% Surface Patching	1-2 Years	\$92,281	\$14,626	Mill & Overlay (2.5 in)	\$162,126
9960 N	6000	E C-D-S	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$13,664	\$2,281	Mill & Overlay (2.5 in)	\$30,344
Argo	Cyprus	Cyprus	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$14,608	\$2,439	Mill & Overlay (2.5 in)	\$32,439
11350 N	5830 W	5600 W	Double Seal Coat	1-2 Years	\$20,385	\$5,824	Mill & Overlay (2.5 in)	\$77,472
5950 W	10100 N	NEOP	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$27,295	\$2,726	Mill & Overlay (2.5 in)	\$36,258
Canterbury Lane	Cant. Drive	10400 N	Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$19,392	\$2,732	5% Full Depth Patching, Mill & Overlay (2.5 in)	\$46,174
Andrew	5710 W	11350 N	Crack Seal, Double Seal Coat, 20% Surface Patching	1-2 Years	\$88,174	\$7,333	Mill & Overlay (2.5 in)	\$97,534
Mercer Hollow	NEOP	Bull River	Crack Seal, Double Seal Coat, 10% Surface Patching	1-2 Years	\$31,063	\$3,882	Mill & Overlay (2.5 in)	\$51,638
6960 W	10260 N	NEOP	Mill & Overlay (1.5 in)	1-2 Years	\$24,838	\$3,115	Same Repair Strategy - More Extensive	\$28,563
5650 W	9800 N	9700 N	Crack Seal, Double Seal Coat	1-2 Years	\$6,065	\$1,525	Mill & Overlay (2.5 in)	\$20,280
5650 W	9700 N	9600 N	Crack Seal, Double Seal Coat	1-2 Years	\$10,516	\$2,643	Mill & Overlay (2.5 in)	\$35,159
6960 W	SEOP	10260 N	Crack Seal, Double Seal Coat	1-2 Years	\$12,905	\$3,244	Mill & Overlay (2.5 in)	\$43,149
10205 N	6800 W	10150 N	Crack Seal, Double Seal Coat	1-2 Years	\$14,618	\$3,674	Mill & Overlay (2.5 in)	\$48,876
Shepherd's path	Beacon Hill	Park West	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$10,805	\$1,079	Mill & Overlay (2.5 in)	\$14,354
10150 N	6800 W	6960 W	Crack Seal, Double Seal Coat, 20% Surface Patching	1-2 Years	\$40,040	\$3,330	Mill & Overlay (2.5 in)	\$44,291
Ashby	9600 N	9685 N	Crack Seal, Double Seal Coat, 10% Surface Patching	1-2 Years	\$17,716	\$2,214	Mill & Overlay (2.5 in)	\$29,450
Park West	Century Heights	NEOP	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$46,664	\$4,660	Mill & Overlay (2.5 in)	\$61,987

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
6000 W	SR92	Dry Creek	Mill & Overlay (1.5 in)	2-3 Years	\$49,149	\$7,397	Reconstruct (4 in HMA/10 in Base)	\$216,322
6400 W	10400 N	10760 N	Mill & Overlay (2.5 in)	2-3 Years	\$104,828	\$9,457	Reconstruct (4 in HMA/8 in Base)	\$257,860
6000 W	Dry Creek	Ridge	Mill & Overlay (1.5 in)	2-3 Years	\$58,327	\$8,778	Reconstruct (4 in HMA/10 in Base)	\$256,715
6000 W	11580 N	11800 N	Mill & Overlay (2.5 in)	2-3 Years	\$74,727	\$6,741	Reconstruct (4 in HMA/10 in Base)	\$197,151
5870 W	10800 N	SR-92	Mill & Overlay (1.5 in)	2-3 Years	\$37,810	\$4,742	Reconstruct (3 in HMA/8 in Base)	\$127,594
9600 N	6050 W	6510 W	Crack Seal, Seal Coat, 20% Surface Patching	2-3 Years	\$95,009	\$10,790	Lane Level, Mill & Overlay (2.5 in)	\$162,912
10500 N	6250 W	6400 W	Crack Seal, Seal Coat, 15% Surface Patching	2-3 Years	\$36,757	\$4,297	Mill & Overlay (2.5 in)	\$57,151
Cedar Hills	West End Tennis Cts	West Side Track	30% Full Depth Patching, Remove & Replace Surface (3 in)	2-3 Years	\$80,600	\$3,231	Same Repair Strategy - More Extensive	\$92,690
9600 N	Alpine Hwy.	5640 W	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$52,114	\$1,782	Same Repair Strategy - More Extensive	\$54,719
6000 W	9600 N	9900 N	Seal Coat, 30% Surface Patching	3-5 Years	\$73,672	\$6,202	Reconstruct (4 in HMA/10 in Base)	\$181,362
9600 N	5875 W	6050 W	Seal Coat	3-5 Years	\$5,121	\$3,010	Same Repair Strategy - More Extensive	\$5,889
9600 N	5800 W	5630 W	Crack Seal, Seal Coat	3-5 Years	\$7,434	\$3,540	Mill & Overlay (2.5 in)	\$39,241
9600 N	6510 W	6800 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$74,010	\$13,573	Same Repair Strategy - More Extensive	\$85,111
6400 W	10760 N	SR 92	Crack Seal, Seal Coat	3-5 Years	\$14,107	\$6,718	Mill & Overlay (2.5 in)	\$74,463
11800 N	Cyprus	Highland	Mill & Overlay (1.5 in/Add 2.5 in)	3-5 Years	\$43,209	\$3,807	Same Repair Strategy - More Extensive	\$49,690
Highland	Dry Hollow	Normandy	Mill & Overlay (1.5 in)	3-5 Years	\$58,879	\$8,861	Same Repair Strategy - More Extensive	\$67,711
6800 W	9560 N	9750 N	Mill & Overlay (1.5 in)	3-5 Years	\$60,102	\$9,045	Same Repair Strategy - More Extensive	\$69,118

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
6000 W	10400 N	10550 N	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$87,944	\$3,007	Same Repair Strategy - More Extensive	\$92,341
10150 N	6350 W	6300 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$5,025	\$1,109	Same Repair Strategy - More Extensive	\$5,778
Mountain View	10100 N	10190 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$11,036	\$2,435	Same Repair Strategy - More Extensive	\$12,692
Westfield Rd	Penn Brooke	Beacon Hill	20% Full Depth Patching, Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$68,232	\$3,016	20% Full Depth Patching, Mill & Overlay (2.5 in)	\$74,563
6000 W	9900 N	10100 N	Seal Coat, 10% Surface Patching	3-5 Years	\$40,219	\$7,895	Lane Level, Mill & Overlay (2.5 in)	\$119,211
6000 W	9600 N	C-D-S	Crack Seal, Seal Coat	3-5 Years	\$3,520	\$1,397	Mill & Overlay (2.5 in)	\$18,582
Highland	Dry Hollow	11800 N	Mill & Overlay (1.5 in)	3-5 Years	\$55,376	\$8,334	Same Repair Strategy - More Extensive	\$63,682
Apollo	Cyprus	11895 N	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$11,412	\$1,873	Same Repair Strategy - More Extensive	\$13,123
6150 W	11800 N	Apollo	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$11,768	\$1,376	Mill & Overlay (2.5 in)	\$18,298
9800 N	5275 W	5600 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$11,059	\$4,541	Mill & Overlay (2.5 in)	\$50,336
Hidden Pond	10050 N	6350	Crack Seal, Seal Coat	3-5 Years	\$11,435	\$4,538	Mill & Overlay (2.5 in)	\$60,356
CDS W of Eagleview	9600 N	C-D-S	Crack Seal, Seal Coat	3-5 Years	\$2,110	\$837	Mill & Overlay (2.5 in)	\$11,136
Cyprus	11800 N	11890 N	Mill & Overlay (1.5 in)	3-5 Years	\$16,390	\$2,056	Reconstruct (3 in HMA/8 in Base)	\$55,309
6150 W	10830 N	Reisner / 10930 N	Crack Seal, Seal Coat, 1% Full Depth Patching	3-5 Years	\$4,918	\$1,520	1% Full Depth Patching, Mill & Overlay (2.5 in)	\$21,318
Apollo	11895 N	Cyprus	Mill & Overlay (1.5 in)	3-5 Years	\$31,395	\$3,938	Reconstruct (3 in HMA/8 in Base)	\$105,945
Cedar Hills	North County	W End Tennis Cts	Remove & Replace Surface (3 in)	3-5 Years	\$24,103	\$3,371	Same Repair Strategy - More Extensive	\$27,719
10400 N	5980 W	5600 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$39,779	\$7,295	Same Repair Strategy - More Extensive	\$45,746

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
Jupiter	Apollo	S C-D-S	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$11,488	\$1,756	Mill & Overlay (2.5 in)	\$23,354
10400 N	Alpine	Mountain Ridge	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$44,904	\$8,235	Mill & Overlay (2.5 in)	\$91,283
11200 N	4800 W	EEOP	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$15,065	\$3,324	Same Repair Strategy - More Extensive	\$17,324
6800 W	10115 N	Madison	Mill & Overlay (1.5 in)	3-5 Years	\$43,683	\$6,574	Same Repair Strategy - More Extensive	\$50,235
Becon Hill	Wild Flower	Beacon Hill	Remove & Replace Surface (3 in)	3-5 Years	\$41,830	\$2,505	Same Repair Strategy - More Extensive	\$48,104
9720 N	9690 N	9740 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$13,475	\$2,059	Mill & Overlay (2.5 in)	\$27,393
11200 N	ECDS	5900 W	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$23,660	\$2,766	Mill & Overlay (2.5 in)	\$36,787
10250 N	6700 W	6580 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$12,741	\$2,812	Same Repair Strategy - More Extensive	\$14,653
5720W	10770 N	10740 N	Crack Seal, Seal Coat	3-5 Years	\$1,405	\$558	Mill & Overlay (2.5 in)	\$7,418
6150 W	9600	9680	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$6,909	\$1,525	Same Repair Strategy - More Extensive	\$7,945
6750 W	10400 N	Canterbury Way	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$16,598	\$1,571	Mill & Overlay (2.5 in)	\$20,894
Canterbury Way	Canterbury Pl.	Canterbury Dr.	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$15,517	\$1,469	Mill & Overlay (2.5 in)	\$19,533
10830 N	6400 W	6150 W	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$58,988	\$5,582	Mill & Overlay (2.5 in)	\$74,255
9680 N	6184 W	6100 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$9,197	\$2,030	Same Repair Strategy - More Extensive	\$10,577
Vintage	6630 W	6800 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$6,550	\$1,445	Mill & Overlay (2.5 in)	\$19,226
70 W	1400 N AF	9600 N	Crack Seal, Seal Coat	3-5 Years	\$2,553	\$1,013	Lane Level, Mill & Overlay (2.5 in)	\$18,358
Beacon Hill	Angel Gate	Timberline	Crack Seal, Seal Coat	3-5 Years	\$6,237	\$2,475	Same Repair Strategy - More Extensive	\$7,173

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
6580 W	10250 N	10400 N	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$35,170	\$2,657	Same Repair Strategy - More Extensive	\$40,446
6630 W	10250 N	N C-D-S	Crack Seal, Seal Coat	3-5 Years	\$3,983	\$1,581	Mill & Overlay (2.5 in)	\$21,025
Canterbury Lane	Canterbury Dr. N	Canterbury Dr. S	Mill & Overlay (1.5 in)	3-5 Years	\$32,180	\$4,036	Reconstruct (3 in HMA/8 in Base)	\$108,593
6630 W	9750 N	9880 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$19,187	\$4,234	Mill & Overlay (2.5 in)	\$56,318
Country Club Dr.	5300 W	Hampton	Mill & Overlay (4.0 in)	3-5 Years	\$59,998	\$2,820	Reconstruct (3 in HMA/8 in Base)	\$75,879
10300 N	6800 West	6960 West	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$22,834	\$3,490	Mill & Overlay (2.5 in)	\$46,418
10120 N	6580 West	6690 West	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$24,536	\$2,338	Mill & Overlay (2.5 in)	\$29,804
10050 N	6690 West	6800 West	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$25,605	\$1,519	Mill & Overlay (2.5 in)	\$31,103
10030 N	6580 West	6690 West	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$26,174	\$2,297	Mill & Overlay (2.5 in)	\$31,794
10100 N	5890 W	6000 W	Mill & Overlay (1.5 in)	3-5 Years	\$17,458	\$2,190	Same Repair Strategy - More Extensive	\$20,077
6580 W	10030 North	10120 North	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$27,050	\$2,390	Mill & Overlay (2.5 in)	\$32,858
6220 W	9600 N	NEOP	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$33,510	\$2,531	15% Full Depth Patching, Mill & Overlay (2.5 in)	\$60,981
Canterbury way	Canterbury Pl.	Canterbury Ln.	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$43,204	\$4,089	Mill & Overlay (2.5 in)	\$54,387
Woodland	5300 W	SEOP	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$16,954	\$5,801	Mill & Overlay (2.5 in)	\$77,168
6690 W	10030 North	10120 North	Remove & Replace Surface (3 in)	3-5 Years	\$38,358	\$2,241	Same Repair Strategy - More Extensive	\$44,112
Granite Flats	Foothill intersection	Roundabout	Mill & Overlay (1.5 in)	3-5 Years	\$3,827	\$480	Reconstruct (3 in HMA/8 in Base)	\$12,915
9740 N	9775	9700	Crack Seal, Seal Coat	3-5 Years	\$3,742	\$1,485	Mill & Overlay (2.5 in)	\$19,753
9680 N	W C-D-S	6184 W	Seal Coat, 10% Surface Patching	3-5 Years	\$8,636	\$1,413	Same Repair Strategy - More Extensive	\$9,931

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
5300 W	11200 N	5300 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$6,980	\$1,540	Same Repair Strategy - More Extensive	\$8,027
9800 N	6000 W	5675 W	Crack Seal, Seal Coat	3-5 Years	\$27,645	\$13,164	Mill & Overlay (2.5 in)	\$145,921
Canyon View Dr	Country Club Dr.	10752 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$12,848	\$1,964	Mill & Overlay (2.5 in)	\$26,118
5890 W	10100 N	NEOP	Crack Seal, Seal Coat	3-5 Years	\$5,239	\$2,079	Mill & Overlay (2.5 in)	\$27,654
11200 N	4930 W	4800 W	Crack Seal, Seal Coat, 40% Surface Patching	3-5 Years	\$54,724	\$2,940	Same Repair Strategy - More Extensive	\$62,932
10125 N	6800 West	E CDS	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$16,631	\$1,532	Mill & Overlay (2.5 in)	\$20,202
10205 N	6800 West	E CDS	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$16,780	\$2,105	Mill & Overlay (2.5 in)	\$20,383
6150 W	10590 N	SEOP	Mill & Overlay (1.5 in)	3-5 Years	\$15,629	\$1,960	Reconstruct (3 in HMA/6 in Base)	\$48,116
Highland	Normandy N	SR 92	Mill & Overlay (2.5 in)	3-5 Years	\$135,770	\$12,248	Reconstruct (4 in HMA/10 in Base)	\$358,198
Ainsley Way	Canterbury Dr. N	Canterbury Dr. S	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$37,273	\$3,527	Mill & Overlay (2.5 in)	\$46,920
Canyon View	4800 W	4670	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$21,106	\$3,226	Mill & Overlay (2.5 in)	\$42,906
10550 N	6000 W	WEOP	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$56,578	\$4,274	15% Full Depth Patching, Mill & Overlay (2.5 in)	\$102,960
5600 W	11350 N	11200 N	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$102,660	\$4,285	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$149,473
Westfield Road	N City Limit	Penn Brooke	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$118,307	\$2,938	Same Repair Strategy - More Extensive	\$124,222
9800 N	5600 W	Alpine	Reconstruct (4 in HMA/8 in Base)	3-5 Years	\$138,569	\$5,082	Same Repair Strategy - More Extensive	\$145,498
Evergreen, Stone Crk.	EEOP	WEOP	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$9,757	\$3,339	Mill & Overlay (2.5 in)	\$44,412
6800 W	10150 North	10250 North	Crack Seal, Seal Coat	3-5 Years	\$6,335	\$1,443	Mill & Overlay (2.5 in)	\$33,437
Vista	4800 W	Canyon View Dr.	Mill & Overlay (1.5 in)	3-5 Years	\$26,049	\$3,267	Same Repair Strategy - More Extensive	\$29,956

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
5710 W	11200 N	11350 N	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$111,896	\$4,670	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$162,921
6800 W	10400 North	10250 North	Crack Seal, Seal Coat	3-5 Years	\$17,348	\$1,586	Mill & Overlay (2.5 in)	\$91,569
6160 W	10010 N	10050 N	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$6,559	\$1,076	Same Repair Strategy - More Extensive	\$7,542
Panorama Dr.	4800 EW	Wasatch	Crack Seal, Seal Coat	3-5 Years	\$5,164	\$2,049	Mill & Overlay (2.5 in)	\$27,259
Town Ctr Blvd.	SR-92	10890 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$14,687	\$2,245	Mill & Overlay (2.5 in)	\$29,856
Ridge Road	Mercer Hollow	Granite Flats	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$27,365	\$6,039	Mill & Overlay (2.5 in)	\$80,323
Wasatch Dr	WEOP	SR 92	Crack Seal, Seal Coat	3-5 Years	\$8,707	\$3,455	Mill & Overlay (2.5 in)	\$45,961
10250 N	6800 N	6700 NY	Reconstruct (3 in HMA/8 in Base)	3-5 Years	\$45,106	\$1,676	Same Repair Strategy - More Extensive	\$47,362
Mountain View	10020 N	10100 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$10,999	\$2,427	Same Repair Strategy - More Extensive	\$12,649
Stevens lane	Natalie Ct	6400 W	Reconstruct (3 in HMA/6 in Base)	3-5 Years	\$91,940	\$3,746	Same Repair Strategy - More Extensive	\$96,537
9740 N	WEOP	6000	Crack Seal, Seal Coat, 1% Full Depth Patching	3-5 Years	\$15,136	\$4,679	Same Repair Strategy - More Extensive	\$17,406
Canterbury Court	NEOP	SEOP	Reconstruct (3 in HMA/8 in Base)	3-5 Years	\$60,155	\$2,236	Same Repair Strategy - More Extensive	\$63,163
Sunrise Circle	Sunrise Circle	N C-D-S	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$18,848	\$1,784	Mill & Overlay (2.5 in)	\$23,726
Mountain View Circle	Panorama W	Panorama N	Crack Seal, Seal Coat	3-5 Years	\$6,927	\$2,749	Mill & Overlay (2.5 in)	\$36,565
10050 N	6000	Mountain View	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$23,786	\$8,139	Same Repair Strategy - More Extensive	\$27,354
Town Center W	Coventry	Town Center Pkwy	Seal Coat	3-5 Years	\$3,681	\$1,803	Same Repair Strategy - More Extensive	\$4,233
9770 N	6630 West	6700 West	Crack Seal, Seal Coat	3-5 Years	\$3,996	\$2,470	Mill & Overlay (2.5 in)	\$21,091

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
Town Center E	10890 N	10700 N	Seal Coat	3-5 Years	\$4,594	\$2,250	Same Repair Strategy - More Extensive	\$5,283
Granite Flats	Bull river	Ridge	Crack Seal, Seal Coat	3-5 Years	\$5,447	\$2,162	Mill & Overlay (2.5 in)	\$28,752
Town Center W	10890 N	Coventry	Seal Coat	3-5 Years	\$5,694	\$2,789	Same Repair Strategy - More Extensive	\$6,548
Country Club Dr.	WEOP	4800 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$13,198	\$2,912	Mill & Overlay (2.5 in)	\$38,740
Canterbury Pl.	Canterbury Way	6750 W	Remove & Replace Surface (3 in)	3-5 Years	\$111,520	\$6,678	Same Repair Strategy - More Extensive	\$128,248
Granite Flats	Ridge	Foothill Dr.	Crack Seal, Seal Coat	3-5 Years	\$6,353	\$2,521	Mill & Overlay (2.5 in)	\$33,536
W Dry Creek	6000 W	Bull River	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$41,668	\$4,871	Mill & Overlay (2.5 in)	\$64,786
Ridge Road	6000 W	Granite Flats	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$11,898	\$1,818	Mill & Overlay (2.5 in)	\$24,186
10570 N	6250 W	6400 W	Crack Seal, Seal Coat	3-5 Years	\$7,726	\$3,066	Lane Level, Mill & Overlay (2.5 in)	\$55,547
6800 W	9750 W	Madison	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$35,907	\$3,398	Mill & Overlay (2.5 in)	\$45,200
Country Club Dr.	4800 W	Canyon Links Vista	Crack Seal, Seal Coat, 20% Full Depth Patching	3-5 Years	\$63,248	\$3,762	20% Full Depth Patching, Mill & Overlay (2.5 in)	\$104,169
Bull River Road	6000 W	Dry Creek Cir.	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$23,753	\$5,242	Mill & Overlay (2.5 in)	\$69,722
9700 N	5700 W	5650 W	Crack Seal, Seal Coat	3-5 Years	\$1,538	\$611	Mill & Overlay (2.5 in)	\$8,121
5950 W	10100 N	NEOP	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$9,421	\$2,079	Mill & Overlay (2.5 in)	\$27,654
Mountain View	10190 N	North CDS	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$24,993	\$2,365	Same Repair Strategy - More Extensive	\$28,741
Highland Circle	Country Club Dr.	S C-D-S	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$4,287	\$1,467	Mill & Overlay (2.5 in)	\$19,512
Chamberry	Athena	6010 W	Crack Seal, Seal Coat	3-5 Years	\$3,659	\$1,452	Mill & Overlay (2.5 in)	\$19,314

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
10800 N	6000 W	5780 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$33,407	\$5,105	Mill & Overlay (2.5 in)	\$67,910
Panorama Dr.	Country Club Dr.	4800 W	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$41,868	\$4,894	Mill & Overlay (2.5 in)	\$65,097
6620 W	9600 N	9500 N	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,133	\$2,099	Mill & Overlay (2.5 in)	\$27,918
Stevens lane	6589 W	Natalie Ct	Reconstruct (3 in HMA/6 in Base)	3-5 Years	\$141,134	\$5,750	Same Repair Strategy - More Extensive	\$148,190
9860 N	WEOP	6200 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$12,993	\$4,446	Same Repair Strategy - More Extensive	\$14,942
5920 W	SR92	5870 N	Crack Seal, Seal Coat	3-5 Years	\$6,948	\$2,757	Mill & Overlay (2.5 in)	\$36,673
11140 N	6000 W	5900 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$12,390	\$2,734	Mill & Overlay (2.5 in)	\$36,368
6250 W	10550 N	NEOP	Crack Seal, Seal Coat	3-5 Years	\$9,696	\$3,848	Lane Level, Mill & Overlay (2.5 in)	\$69,718
Athena	11895 N	Chamberry	Mill & Overlay (1.5 in)	3-5 Years	\$15,094	\$1,893	Reconstruct (3 in HMA/8 in Base)	\$50,934
Alpine	Country Club E	Country Club W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$10,192	\$2,249	Mill & Overlay (2.5 in)	\$29,917
9500 N	6601 W	6800 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$15,377	\$5,262	Mill & Overlay (2.5 in)	\$69,993
Canterbury Drive	10580 N	10400 N	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$154,396	\$6,444	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$224,801
10610 N	5400 W	5300 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$12,071	\$1,845	Mill & Overlay (2.5 in)	\$24,538
5400 W	10700 N	10600 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$13,728	\$3,029	Mill & Overlay (2.5 in)	\$40,296
10600 N	5600 W	Town Center E	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$15,729	\$5,382	Mill & Overlay (2.5 in)	\$71,592
Country Club	East Jerling	Alpine	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$18,403	\$6,298	Mill & Overlay (2.5 in)	\$83,767
Century Heights	Beacon Hill	Park west	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$16,826	\$1,967	Mill & Overlay (2.5 in)	\$26,162


Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Estimated Annual Maintenance Cost	Alternate Repair if Treatment Postponed	Postponed Cost
J Legrand Adamson	Alpine	Mystic	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$17,899	\$8,261	5% Full Depth Patching, Mill & Overlay (2.5 in)	\$49,642
10400 N	6550 W	7000 W	Mill & Overlay (1.5 in/Add 2.5 in)	3-5 Years	\$224,924	\$19,816	Same Repair Strategy - More Extensive	\$258,663
Jerling	Hampton	End of circle	Crack Seal, Seal Coat	3-5 Years	\$26,228	\$10,408	Mill & Overlay (2.5 in)	\$138,444
10220 N	East CDS	W CDS	Crack Seal, Seal Coat, 30% Surface Patching	3-5 Years	\$56,099	\$3,845	Same Repair Strategy - More Extensive	\$64,514
5580 W / 5520 W	9800 North	S CDS	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$27,614	\$2,522	Mill & Overlay (2.5 in)	\$33,542
5920 W	Can. Pk.	NEOP	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,452	\$2,208	Same Repair Strategy - More Extensive	\$7,419
Ashby	9600 North	N C-D-S	Crack Seal, Seal Coat	3-5 Years	\$5,414	\$2,149	Mill & Overlay (2.5 in)	\$28,579
5470 W	NCDS	10600 N	Crack Seal, Seal Coat	3-5 Years	\$4,243	\$1,684	Mill & Overlay (2.5 in)	\$22,396
5550 W	NEOP	10600 N	Crack Seal, Seal Coat	3-5 Years	\$4,434	\$1,760	Mill & Overlay (2.5 in)	\$23,406
5600 W	Town Center	10400 N	Mill & Overlay (1.5 in)	3-5 Years	\$44,254	\$5,550	Reconstruct (3 in HMA/8 in Base)	\$149,340
Grenoble	Chamberry	12040 N	Mill & Overlay (1.5 in)	3-5 Years	\$13,975	\$1,753	Reconstruct (3 in HMA/6 in Base)	\$43,023
5370 W	NCDS	SCDS	Crack Seal, Seal Coat	3-5 Years	\$7,169	\$2,845	Mill & Overlay (2.5 in)	\$37,839
Canterbury Park	6000 W	5290 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$15,082	\$5,161	Mill & Overlay (2.5 in)	\$68,651
5320 E	9910 N	NCDS	Crack Seal, Seal Coat, 25% Full Depth Patching	3-5 Years	\$47,396	\$2,325	25% Full Depth Patching, Mill & Overlay (2.5 in)	\$72,742
11200 N	WEOP	5300 W	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$83,399	\$9,749	Mill & Overlay (2.5 in)	\$129,671
Knight	10100 N	Parking Lot	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$46,387	\$5,422	Mill & Overlay (2.5 in)	\$72,124
5600 W	SR 92	Town Center	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$99,127	\$9,381	Mill & Overlay (2.5 in)	\$124,783
<b>Totals:</b>					<b>\$5,548,374</b>	<b>\$667,145</b>		<b>\$10,274,505</b>

\*EOP=Edge of Pavement (North, South, East, & West), CDS=Cul-de-Sac (North, South, East, & West)

## **Appendix A: Highland City Road Repair Strategy Map**

# Recommended Repairs

## F through Low C Roads



## Appendix B: Road Repair Table Sorted by Increased Cost of Alternate Repair

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Highland	Normandy N	SR 92	Mill & Overlay (2.5 in)	3-5 Years	\$135,770	Reconstruct (4 in HMA/10 in Base)	\$358,198	\$222,428	264%
6000 W	Dry Creek	Ridge	Mill & Overlay (1.5 in)	2-3 Years	\$58,327	Reconstruct (4 in HMA/10 in Base)	\$256,715	\$198,388	440%
6000 W	SR92	Dry Creek	Mill & Overlay (1.5 in)	2-3 Years	\$49,149	Reconstruct (4 in HMA/10 in Base)	\$216,322	\$167,173	440%
6400 W	10400 N	10760 N	Mill & Overlay (2.5 in)	2-3 Years	\$104,828	Reconstruct (4 in HMA/8 in Base)	\$257,860	\$153,032	246%
6000 W	11580 N	11800 N	Mill & Overlay (2.5 in)	2-3 Years	\$74,727	Reconstruct (4 in HMA/10 in Base)	\$197,151	\$122,423	264%
9800 N	6000 W	5675 W	Crack Seal, Seal Coat	3-5 Years	\$27,645	Mill & Overlay (2.5 in)	\$145,921	\$118,276	528%
Jerling	Hampton	End of circle	Crack Seal, Seal Coat	3-5 Years	\$26,228	Mill & Overlay (2.5 in)	\$138,444	\$112,216	528%
6000 W	9600 N	9900 N	Seal Coat, 30% Surface Patching	3-5 Years	\$73,672	Reconstruct (4 in HMA/10 in Base)	\$181,362	\$107,691	246%
5600 W	Town Center	10400 N	Mill & Overlay (1.5 in)	3-5 Years	\$44,254	Reconstruct (3 in HMA/8 in Base)	\$149,340	\$105,086	337%
5870 W	10800 N	SR-92	Mill & Overlay (1.5 in)	2-3 Years	\$37,810	Reconstruct (3 in HMA/8 in Base)	\$127,594	\$89,784	337%
6000 W	9900 N	10100 N	Seal Coat, 10% Surface Patching	3-5 Years	\$40,219	Lane Level, Mill & Overlay (2.5 in)	\$119,211	\$78,992	296%
Canterbury Lane	Canterbury Dr. N	Canterbury Dr. S	Mill & Overlay (1.5 in)	3-5 Years	\$32,180	Reconstruct (3 in HMA/8 in Base)	\$108,593	\$76,413	337%
Apollo	11895 N	Cyprus	Mill & Overlay (1.5 in)	3-5 Years	\$31,395	Reconstruct (3 in HMA/8 in Base)	\$105,945	\$74,550	337%
6800 W	10400 North	10250 North	Crack Seal, Seal Coat	3-5 Years	\$17,348	Mill & Overlay (2.5 in)	\$91,569	\$74,222	528%
Canterbury Drive	10580 N	10400 N	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$154,396	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$224,801	\$70,405	146%
6000 W	10550 N	SR 92	Double Seal Coat, 10% Surface Patching	1-2 Years	\$92,281	Mill & Overlay (2.5 in)	\$162,126	\$69,845	176%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
9600 N	6050 W	6510 W	Crack Seal, Seal Coat, 20% Surface Patching	2-3 Years	\$95,009	Lane Level, Mill & Overlay (2.5 in)	\$162,912	\$67,903	171%
Country Club	East Jerling	Alpine	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$18,403	Mill & Overlay (2.5 in)	\$83,767	\$65,364	455%
6400 W	10760 N	SR 92	Crack Seal, Seal Coat	3-5 Years	\$14,107	Mill & Overlay (2.5 in)	\$74,463	\$60,356	528%
Woodland	5300 W	SEOP	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$16,954	Mill & Overlay (2.5 in)	\$77,168	\$60,215	455%
6250 W	10550 N	NEOP	Crack Seal, Seal Coat	3-5 Years	\$9,696	Lane Level, Mill & Overlay (2.5 in)	\$69,718	\$60,021	719%
11350 N	5830 W	5600 W	Double Seal Coat	1-2 Years	\$20,385	Mill & Overlay (2.5 in)	\$77,472	\$57,087	380%
10600 N	5600 W	Town Center E	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$15,729	Mill & Overlay (2.5 in)	\$71,592	\$55,864	455%
9500 N	6601 W	6800 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$15,377	Mill & Overlay (2.5 in)	\$69,993	\$54,616	455%
Canterbury Park	6000 W	5290 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$15,082	Mill & Overlay (2.5 in)	\$68,651	\$53,569	455%
Ridge Road	Mercer Hollow	Granite Flats	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$27,365	Mill & Overlay (2.5 in)	\$80,323	\$52,958	294%
5710 W	11200 N	11350 N	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$111,896	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$162,921	\$51,025	146%
Hidden Pond	10050 N	6350	Crack Seal, Seal Coat	3-5 Years	\$11,435	Mill & Overlay (2.5 in)	\$60,356	\$48,922	528%
10570 N	6250 W	6400 W	Crack Seal, Seal Coat	3-5 Years	\$7,726	Lane Level, Mill & Overlay (2.5 in)	\$55,547	\$47,822	719%
5600 W	11350 N	11200 N	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$102,660	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$149,473	\$46,813	146%
10550 N	6000 W	WEOP	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$56,578	15% Full Depth Patching, Mill & Overlay (2.5 in)	\$102,960	\$46,382	182%
10400 N	Alpine	Mountain Ridge	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$44,904	Mill & Overlay (2.5 in)	\$91,283	\$46,379	203%
11200 N	WEOP	5300 W	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$83,399	Mill & Overlay (2.5 in)	\$129,671	\$46,272	155%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Bull River Road	6000 W	Dry Creek Cir.	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$23,753	Mill & Overlay (2.5 in)	\$69,722	\$45,969	294%
Country Club Dr.	4800 W	Canyon Links Vista	Crack Seal, Seal Coat, 20% Full Depth Patching	3-5 Years	\$63,248	20% Full Depth Patching, Mill & Overlay (2.5 in)	\$104,169	\$40,921	165%
9800 N	5275 W	5600 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$11,059	Mill & Overlay (2.5 in)	\$50,336	\$39,277	455%
Cyprus	11800 N	11890 N	Mill & Overlay (1.5 in)	3-5 Years	\$16,390	Reconstruct (3 in HMA/8 in Base)	\$55,309	\$38,919	337%
Wasatch Dr	WEOP	SR 92	Crack Seal, Seal Coat	3-5 Years	\$8,707	Mill & Overlay (2.5 in)	\$45,961	\$37,254	528%
6630 W	9750 N	9880 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$19,187	Mill & Overlay (2.5 in)	\$56,318	\$37,131	294%
Athena	11895 N	Chamberry	Mill & Overlay (1.5 in)	3-5 Years	\$15,094	Reconstruct (3 in HMA/8 in Base)	\$50,934	\$35,841	337%
Evergreen, Stone Crk.	EEOP	WEOP	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$9,757	Mill & Overlay (2.5 in)	\$44,412	\$34,654	455%
10800 N	6000 W	5780 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$33,407	Mill & Overlay (2.5 in)	\$67,910	\$34,504	203%
10205 N	6800 W	10150 N	Crack Seal, Double Seal Coat	1-2 Years	\$14,618	Mill & Overlay (2.5 in)	\$48,876	\$34,258	334%
10400 N	6550 W	7000 W	Mill & Overlay (1.5 in/Add 2.5 in)	3-5 Years	\$224,924	Same Repair Strategy - More Extensive	\$258,663	\$33,739	115%
6150 W	10590 N	SEOP	Mill & Overlay (1.5 in)	3-5 Years	\$15,629	Reconstruct (3 in HMA/6 in Base)	\$48,116	\$32,487	308%
9600 N	5800 W	5630 W	Crack Seal, Seal Coat	3-5 Years	\$7,434	Mill & Overlay (2.5 in)	\$39,241	\$31,807	528%
J Legrand Adamson	Alpine	Mystic	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$17,899	5% Full Depth Patching, Mill & Overlay (2.5 in)	\$49,642	\$31,742	277%
5370 W	NCDS	SCDS	Crack Seal, Seal Coat	3-5 Years	\$7,169	Mill & Overlay (2.5 in)	\$37,839	\$30,671	528%
6960 W	SEOP	10260 N	Crack Seal, Double Seal Coat	1-2 Years	\$12,905	Mill & Overlay (2.5 in)	\$43,149	\$30,244	334%
5920 W	SR92	5870 N	Crack Seal, Seal Coat	3-5 Years	\$6,948	Mill & Overlay (2.5 in)	\$36,673	\$29,725	528%
Mountain View Circle	Panorama W	Panorama N	Crack Seal, Seal Coat	3-5 Years	\$6,927	Mill & Overlay (2.5 in)	\$36,565	\$29,638	528%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Grenoble	Chamberry	12040 N	Mill & Overlay (1.5 in)	3-5 Years	\$13,975	Reconstruct (3 in HMA/6 in Base)	\$43,023	\$29,048	308%
6220 W	9600 N	NEOP	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$33,510	15% Full Depth Patching, Mill & Overlay (2.5 in)	\$60,981	\$27,471	182%
Granite Flats	Ridge	Foothill Dr.	Crack Seal, Seal Coat	3-5 Years	\$6,353	Mill & Overlay (2.5 in)	\$33,536	\$27,183	528%
6800 W	10150 North	10250 North	Crack Seal, Seal Coat	3-5 Years	\$6,335	Mill & Overlay (2.5 in)	\$33,437	\$27,102	528%
Canterbury Lane	Cant. Drive	10400 N	Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$19,392	5% Full Depth Patching, Mill & Overlay (2.5 in)	\$46,174	\$26,782	238%
5400 W	10700 N	10600 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$13,728	Mill & Overlay (2.5 in)	\$40,296	\$26,568	294%
Knight	10100 N	Parking Lot	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$46,387	Mill & Overlay (2.5 in)	\$72,124	\$25,737	155%
5600 W	SR 92	Town Center	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$99,127	Mill & Overlay (2.5 in)	\$124,783	\$25,656	126%
Country Club Dr.	WEOP	4800 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$13,198	Mill & Overlay (2.5 in)	\$38,740	\$25,542	294%
5320 E	9910 N	NCDS	Crack Seal, Seal Coat, 25% Full Depth Patching	3-5 Years	\$47,396	25% Full Depth Patching, Mill & Overlay (2.5 in)	\$72,742	\$25,345	153%
5650 W	9700 N	9600 N	Crack Seal, Double Seal Coat	1-2 Years	\$10,516	Mill & Overlay (2.5 in)	\$35,159	\$24,643	334%
11140 N	6000 W	5900 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$12,390	Mill & Overlay (2.5 in)	\$36,368	\$23,978	294%
10300 N	6800 West	6960 West	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$22,834	Mill & Overlay (2.5 in)	\$46,418	\$23,584	203%
Granite Flats	Bull river	Ridge	Crack Seal, Seal Coat	3-5 Years	\$5,447	Mill & Overlay (2.5 in)	\$28,752	\$23,305	528%
Panorama Dr.	Country Club Dr.	4800 W	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$41,868	Mill & Overlay (2.5 in)	\$65,097	\$23,229	155%
Ashby	9600 North	N C-D-S	Crack Seal, Seal Coat	3-5 Years	\$5,414	Mill & Overlay (2.5 in)	\$28,579	\$23,164	528%
W Dry Creek	6000 W	Bull River	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$41,668	Mill & Overlay (2.5 in)	\$64,786	\$23,118	155%
5890 W	10100 N	NEOP	Crack Seal, Seal Coat	3-5 Years	\$5,239	Mill & Overlay (2.5 in)	\$27,654	\$22,415	528%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Panorama Dr.	4800 EW	Wasatch	Crack Seal, Seal Coat	3-5 Years	\$5,164	Mill & Overlay (2.5 in)	\$27,259	\$22,095	528%
Canyon View	4800 W	4670	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$21,106	Mill & Overlay (2.5 in)	\$42,906	\$21,800	203%
6620 W	9600 N	9500 N	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,133	Mill & Overlay (2.5 in)	\$27,918	\$21,784	455%
Mercer Hollow	NEOP	Bull River	Crack Seal, Double Seal Coat, 10% Surface Patching	1-2 Years	\$31,063	Mill & Overlay (2.5 in)	\$51,638	\$20,575	166%
10500 N	6250 W	6400 W	Crack Seal, Seal Coat, 15% Surface Patching	2-3 Years	\$36,757	Mill & Overlay (2.5 in)	\$57,151	\$20,394	155%
Alpine	Country Club E	Country Club W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$10,192	Mill & Overlay (2.5 in)	\$29,917	\$19,725	294%
5550 W	NEOP	10600 N	Crack Seal, Seal Coat	3-5 Years	\$4,434	Mill & Overlay (2.5 in)	\$23,406	\$18,971	528%
5950 W	10100 N	NEOP	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$9,421	Mill & Overlay (2.5 in)	\$27,654	\$18,233	294%
5470 W	NCDS	10600 N	Crack Seal, Seal Coat	3-5 Years	\$4,243	Mill & Overlay (2.5 in)	\$22,396	\$18,153	528%
Argo	Cyprus	Cyprus	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$14,608	Mill & Overlay (2.5 in)	\$32,439	\$17,831	222%
9770 N	6630 West	6700 West	Crack Seal, Seal Coat	3-5 Years	\$3,996	Mill & Overlay (2.5 in)	\$21,091	\$17,096	528%
6630 W	10250 N	N C-D-S	Crack Seal, Seal Coat	3-5 Years	\$3,983	Mill & Overlay (2.5 in)	\$21,025	\$17,042	528%
Canterbury Pl.	Canterbury Way	6750 W	Remove & Replace Surface (3 in)	3-5 Years	\$111,520	Same Repair Strategy - More Extensive	\$128,248	\$16,728	115%
9960 N	6000	E C-D-S	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$13,664	Mill & Overlay (2.5 in)	\$30,344	\$16,679	222%
6150 W	10830 N	Reisner / 10930 N	Crack Seal, Seal Coat, 1% Full Depth Patching	3-5 Years	\$4,918	1% Full Depth Patching, Mill & Overlay (2.5 in)	\$21,318	\$16,400	433%
9740 N	9775	9700	Crack Seal, Seal Coat	3-5 Years	\$3,742	Mill & Overlay (2.5 in)	\$19,753	\$16,011	528%
Country Club Dr.	5300 W	Hampton	Mill & Overlay (4.0 in)	3-5 Years	\$59,998	Reconstruct (3 in HMA/8 in Base)	\$75,879	\$15,882	126%
70 W	1400 N AF	9600 N	Crack Seal, Seal Coat	3-5 Years	\$2,553	Lane Level, Mill & Overlay (2.5 in)	\$18,358	\$15,805	719%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Chambery	Athena	6010 W	Crack Seal, Seal Coat	3-5 Years	\$3,659	Mill & Overlay (2.5 in)	\$19,314	\$15,655	528%
Park West	Century Heights	NEOP	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$46,664	Mill & Overlay (2.5 in)	\$61,987	\$15,324	133%
10830 N	6400 W	6150 W	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$58,988	Mill & Overlay (2.5 in)	\$74,255	\$15,267	126%
Highland Circle	Country Club Dr.	S C-D-S	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$4,287	Mill & Overlay (2.5 in)	\$19,512	\$15,225	455%
Town Ctr Blvd.	SR-92	10890 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$14,687	Mill & Overlay (2.5 in)	\$29,856	\$15,169	203%
6000 W	9600 N	C-D-S	Crack Seal, Seal Coat	3-5 Years	\$3,520	Mill & Overlay (2.5 in)	\$18,582	\$15,062	528%
5650 W	9800 N	9700 N	Crack Seal, Double Seal Coat	1-2 Years	\$6,065	Mill & Overlay (2.5 in)	\$20,280	\$14,214	334%
9720 N	9690 N	9740 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$13,475	Mill & Overlay (2.5 in)	\$27,393	\$13,918	203%
Canyon View Dr	Country Club Dr.	10752 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$12,848	Mill & Overlay (2.5 in)	\$26,118	\$13,270	203%
11200 N	ECDS	5900 W	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$23,660	Mill & Overlay (2.5 in)	\$36,787	\$13,127	155%
Vintage	6630 W	6800 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$6,550	Mill & Overlay (2.5 in)	\$19,226	\$12,676	294%
10610 N	5400 W	5300 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$12,071	Mill & Overlay (2.5 in)	\$24,538	\$12,467	203%
Ridge Road	6000 W	Granite Flats	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$11,898	Mill & Overlay (2.5 in)	\$24,186	\$12,289	203%
Cedar Hills	West End Tennis Cts	West Side Track	30% Full Depth Patching, Remove & Replace Surface (3 in)	2-3 Years	\$80,600	Same Repair Strategy - More Extensive	\$92,690	\$12,090	115%
Jupiter	Apollo	S C-D-S	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$11,488	Mill & Overlay (2.5 in)	\$23,354	\$11,866	203%
Ashby	9600 N	9685 N	Crack Seal, Double Seal Coat, 10% Surface Patching	1-2 Years	\$17,716	Mill & Overlay (2.5 in)	\$29,450	\$11,734	166%
Canterbury way	Canterbury Pl.	Canterbury Ln.	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$43,204	Mill & Overlay (2.5 in)	\$54,387	\$11,182	126%
9600 N	6510 W	6800 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$74,010	Same Repair Strategy - More Extensive	\$85,111	\$11,101	115%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Ainsley Way	Canterbury Dr. N	Canterbury Dr. S	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$37,273	Mill & Overlay (2.5 in)	\$46,920	\$9,647	126%
Andrew	5710 W	11350 N	Crack Seal, Double Seal Coat, 20% Surface Patching	1-2 Years	\$88,174	Mill & Overlay (2.5 in)	\$97,534	\$9,360	111%
Century Heights	Beacon Hill	Park west	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$16,826	Mill & Overlay (2.5 in)	\$26,162	\$9,336	155%
6800 W	9750 W	Madison	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$35,907	Mill & Overlay (2.5 in)	\$45,200	\$9,293	126%
Granite Flats	Foothill intersection	Roundabout	Mill & Overlay (1.5 in)	3-5 Years	\$3,827	Reconstruct (3 in HMA/8 in Base)	\$12,915	\$9,088	337%
CDS W of Eagleview	9600 N	C-D-S	Crack Seal, Seal Coat	3-5 Years	\$2,110	Mill & Overlay (2.5 in)	\$11,136	\$9,026	528%
6800 W	9560 N	9750 N	Mill & Overlay (1.5 in)	3-5 Years	\$60,102	Same Repair Strategy - More Extensive	\$69,118	\$9,015	115%
5950 W	10100 N	NEOP	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$27,295	Mill & Overlay (2.5 in)	\$36,258	\$8,963	133%
Highland	Dry Hollow	Normandy	Mill & Overlay (1.5 in)	3-5 Years	\$58,879	Same Repair Strategy - More Extensive	\$67,711	\$8,832	115%
10220 N	East CDS	W CDS	Crack Seal, Seal Coat, 30% Surface Patching	3-5 Years	\$56,099	Same Repair Strategy - More Extensive	\$64,514	\$8,415	115%
Highland	Dry Hollow	11800 N	Mill & Overlay (1.5 in)	3-5 Years	\$55,376	Same Repair Strategy - More Extensive	\$63,682	\$8,306	115%
11200 N	4930 W	4800 W	Crack Seal, Seal Coat, 40% Surface Patching	3-5 Years	\$54,724	Same Repair Strategy - More Extensive	\$62,932	\$8,209	115%
Stevens lane	6589 W	Natalie Ct	Reconstruct (3 in HMA/6 in Base)	3-5 Years	\$141,134	Same Repair Strategy - More Extensive	\$148,190	\$7,057	105%
9800 N	5600 W	Alpine	Reconstruct (4 in HMA/8 in Base)	3-5 Years	\$138,569	Same Repair Strategy - More Extensive	\$145,498	\$6,928	105%
9700 N	5700 W	5650 W	Crack Seal, Seal Coat	3-5 Years	\$1,538	Mill & Overlay (2.5 in)	\$8,121	\$6,582	528%
6800 W	10115 N	Madison	Mill & Overlay (1.5 in)	3-5 Years	\$43,683	Same Repair Strategy - More Extensive	\$50,235	\$6,552	115%
6150 W	11800 N	Apollo	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$11,768	Mill & Overlay (2.5 in)	\$18,298	\$6,529	155%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
11800 N	Cyprus	Highland	Mill & Overlay (1.5 in/Add 2.5 in)	3-5 Years	\$43,209	Same Repair Strategy - More Extensive	\$49,690	\$6,481	115%
Westfield Rd	Penn Brooke	Beacon Hill	20% Full Depth Patching, Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$68,232	20% Full Depth Patching, Mill & Overlay (2.5 in)	\$74,563	\$6,331	109%
Beacon Hill	Wild Flower	Beacon Hill	Remove & Replace Surface (3 in)	3-5 Years	\$41,830	Same Repair Strategy - More Extensive	\$48,104	\$6,274	115%
5720W	10770 N	10740 N	Crack Seal, Seal Coat	3-5 Years	\$1,405	Mill & Overlay (2.5 in)	\$7,418	\$6,013	528%
10400 N	5980 W	5600 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$39,779	Same Repair Strategy - More Extensive	\$45,746	\$5,967	115%
5580 W / 5520 W	9800 North	S CDS	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$27,614	Mill & Overlay (2.5 in)	\$33,542	\$5,929	121%
Westfield Road	N City Limit	Penn Brooke	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$118,307	Same Repair Strategy - More Extensive	\$124,222	\$5,915	105%
6580 W	10030 North	10120 North	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$27,050	Mill & Overlay (2.5 in)	\$32,858	\$5,808	121%
6690 W	10030 North	10120 North	Remove & Replace Surface (3 in)	3-5 Years	\$38,358	Same Repair Strategy - More Extensive	\$44,112	\$5,754	115%
10030 N	6580 West	6690 West	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$26,174	Mill & Overlay (2.5 in)	\$31,794	\$5,620	121%
10050 N	6690 West	6800 West	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$25,605	Mill & Overlay (2.5 in)	\$31,103	\$5,498	121%
6580 W	10250 N	10400 N	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$35,170	Same Repair Strategy - More Extensive	\$40,446	\$5,276	115%
10120 N	6580 West	6690 West	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$24,536	Mill & Overlay (2.5 in)	\$29,804	\$5,268	121%
Sunrise Circle	Sunrise Circle	N C-D-S	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$18,848	Mill & Overlay (2.5 in)	\$23,726	\$4,878	126%
Stevens lane	Natalie Ct	6400 W	Reconstruct (3 in HMA/6 in Base)	3-5 Years	\$91,940	Same Repair Strategy - More Extensive	\$96,537	\$4,597	105%
6000 W	10400 N	10550 N	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$87,944	Same Repair Strategy - More Extensive	\$92,341	\$4,397	105%
6750 W	10400 N	Canterbury Way	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$16,598	Mill & Overlay (2.5 in)	\$20,894	\$4,296	126%
10150 N	6800 W	6960 W	Crack Seal, Double Seal Coat, 20% Surface Patching	1-2 Years	\$40,040	Mill & Overlay (2.5 in)	\$44,291	\$4,251	111%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Canterbury Way	Canterbury Pl.	Canterbury Dr.	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$15,517	Mill & Overlay (2.5 in)	\$19,533	\$4,016	126%
Vista	4800 W	Canyon View Dr.	Mill & Overlay (1.5 in)	3-5 Years	\$26,049	Same Repair Strategy - More Extensive	\$29,956	\$3,907	115%
Mountain View	10190 N	North CDS	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$24,993	Same Repair Strategy - More Extensive	\$28,741	\$3,749	115%
6960 W	10260 N	NEOP	Mill & Overlay (1.5 in)	1-2 Years	\$24,838	Same Repair Strategy - More Extensive	\$28,563	\$3,726	115%
Cedar Hills	North County	W End Tennis Cts	Remove & Replace Surface (3 in)	3-5 Years	\$24,103	Same Repair Strategy - More Extensive	\$27,719	\$3,615	115%
10205 N	6800 West	E CDS	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$16,780	Mill & Overlay (2.5 in)	\$20,383	\$3,603	121%
10125 N	6800 West	E CDS	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$16,631	Mill & Overlay (2.5 in)	\$20,202	\$3,571	121%
10050 N	6000	Mountain View	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$23,786	Same Repair Strategy - More Extensive	\$27,354	\$3,568	115%
Shepherd's path	Beacon Hill	Park West	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$10,805	Mill & Overlay (2.5 in)	\$14,354	\$3,548	133%
Canterbury Court	NEOP	SEOP	Reconstruct (3 in HMA/8 in Base)	3-5 Years	\$60,155	Same Repair Strategy - More Extensive	\$63,163	\$3,008	105%
10100 N	5890 W	6000 W	Mill & Overlay (1.5 in)	3-5 Years	\$17,458	Same Repair Strategy - More Extensive	\$20,077	\$2,619	115%
9600 N	Alpine Hwy.	5640 W	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$52,114	Same Repair Strategy - More Extensive	\$54,719	\$2,606	105%
9740 N	WEOP	6000	Crack Seal, Seal Coat, 1% Full Depth Patching	3-5 Years	\$15,136	Same Repair Strategy - More Extensive	\$17,406	\$2,270	115%
11200 N	4800 W	EEOP	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$15,065	Same Repair Strategy - More Extensive	\$17,324	\$2,260	115%
10250 N	6800 N	6700 NY	Reconstruct (3 in HMA/8 in Base)	3-5 Years	\$45,106	Same Repair Strategy - More Extensive	\$47,362	\$2,255	105%
9860 N	WEOP	6200 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$12,993	Same Repair Strategy - More Extensive	\$14,942	\$1,949	115%
10250 N	6700 W	6580 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$12,741	Same Repair Strategy - More Extensive	\$14,653	\$1,911	115%

Road Name	From*	To*	Recommended Repair	Time to Repair	Estimated Cost	Alternate Repair if Treatment Postponed	Postponed Cost	Cost Increase	% of Original
Apollo	Cyprus	11895 N	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$11,412	Same Repair Strategy - More Extensive	\$13,123	\$1,712	115%
Mountain View	10100 N	10190 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$11,036	Same Repair Strategy - More Extensive	\$12,692	\$1,655	115%
Mountain View	10020 N	10100 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$10,999	Same Repair Strategy - More Extensive	\$12,649	\$1,650	115%
9680 N	6184 W	6100 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$9,197	Same Repair Strategy - More Extensive	\$10,577	\$1,380	115%
9680 N	W C-D-S	6184 W	Seal Coat, 10% Surface Patching	3-5 Years	\$8,636	Same Repair Strategy - More Extensive	\$9,931	\$1,295	115%
5300 W	11200 N	5300 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$6,980	Same Repair Strategy - More Extensive	\$8,027	\$1,047	115%
6150 W	9600	9680	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$6,909	Same Repair Strategy - More Extensive	\$7,945	\$1,036	115%
6160 W	10010 N	10050 N	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$6,559	Same Repair Strategy - More Extensive	\$7,542	\$984	115%
5920 W	Can. Pk.	NEOP	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,452	Same Repair Strategy - More Extensive	\$7,419	\$968	115%
Beacon Hill	Angel Gate	Timberline	Crack Seal, Seal Coat	3-5 Years	\$6,237	Same Repair Strategy - More Extensive	\$7,173	\$936	115%
Town Center W	10890 N	Coventry	Seal Coat	3-5 Years	\$5,694	Same Repair Strategy - More Extensive	\$6,548	\$854	115%
9600 N	5875 W	6050 W	Seal Coat	3-5 Years	\$5,121	Same Repair Strategy - More Extensive	\$5,889	\$768	115%
10150 N	6350 W	6300 W	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$5,025	Same Repair Strategy - More Extensive	\$5,778	\$754	115%
Town Center E	10890 N	10700 N	Seal Coat	3-5 Years	\$4,594	Same Repair Strategy - More Extensive	\$5,283	\$689	115%
Town Center W	Coventry	Town Center Pkwy	Seal Coat	3-5 Years	\$3,681	Same Repair Strategy - More Extensive	\$4,233	\$552	115%
<b>Totals:</b>					<b>\$5,548,374</b>		<b>\$10,274,505</b>	<b>\$4,726,131</b>	<b>185%</b>

## Appendix C: Detailed Road Repair Costs Table

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
6000 W	10550 N	SR 92	13543	1354	Double Seal Coat, 10% Surface Patching	1-2 Years	\$0	\$42,659	\$49,622	\$0	\$0	\$0	<b>\$92,281</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$162,126	\$0	\$162,126
9960 N	6000	E C-D-S	2535	127	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$1,037	\$7,984	\$4,644	\$0	\$0	\$0	<b>\$13,664</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$30,344	\$0	\$30,344
Argo	Cyprus	Cyprus	2710	135	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$1,108	\$8,535	\$4,964	\$0	\$0	\$0	<b>\$14,608</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$32,439	\$0	\$32,439
11350 N	5830 W	5600 W	6471	0	Double Seal Coat	1-2 Years	\$0	\$20,385	\$0	\$0	\$0	\$0	<b>\$20,385</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$77,472	\$156,710	\$77,472
5950 W	10100 N	NEOP	3029	454	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$1,108	\$9,540	\$16,646	\$0	\$0	\$0	<b>\$27,295</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$36,258	\$0	\$36,258
Canterbury Lane	Cant. Drive	10400 N	3036	152	Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$0	\$9,563	\$9,828	\$0	\$0	\$0	<b>\$19,392</b>	5% Full Depth Patching, Mill & Overlay (2.5 in)	\$9,828	\$0	\$36,345	\$0	\$46,174
Andrew	5710 W	11350 N	8147	1629	Crack Seal, Double Seal Coat, 20% Surface Patching	1-2 Years	\$2,806	\$25,664	\$59,704	\$0	\$0	\$0	<b>\$88,174</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$97,534	\$197,293	\$97,534
Mercer Hollow	NEOP	Bull River	4313	431	Crack Seal, Double Seal Coat, 10% Surface Patching	1-2 Years	\$1,671	\$13,587	\$15,805	\$0	\$0	\$0	<b>\$31,063</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$51,638	\$0	\$51,638
6960 W	10260 N	NEOP	3461	0	Mill & Overlay (1.5 in)	1-2 Years	\$0	\$0	\$0	\$24,838	\$0	\$0	<b>\$24,838</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$28,563
5650 W	9800 N	9700 N	1694	0	Crack Seal, Double Seal Coat	1-2 Years	\$729	\$5,336	\$0	\$0	\$0	\$0	<b>\$6,065</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$20,280	\$0	\$20,280
5650 W	9700 N	9600 N	2937	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,264	\$9,251	\$0	\$0	\$0	\$0	<b>\$10,516</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$35,159	\$0	\$35,159
6960 W	SEOP	10260 N	3604	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,552	\$11,354	\$0	\$0	\$0	\$0	<b>\$12,905</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$43,149	\$0	\$43,149
10205 N	6800 W	10150 N	4083	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,758	\$12,860	\$0	\$0	\$0	\$0	<b>\$14,618</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$48,876	\$0	\$48,876
Shepherd's path	Beacon Hill	Park West	1199	180	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$439	\$3,777	\$6,590	\$0	\$0	\$0	<b>\$10,805</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$14,354	\$0	\$14,354
10150 N	6800 W	6960 W	3700	740	Crack Seal, Double Seal Coat, 20% Surface Patching	1-2 Years	\$1,274	\$11,654	\$27,112	\$0	\$0	\$0	<b>\$40,040</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$44,291	\$0	\$44,291
Ashby	9600 N	9685 N	2460	246	Crack Seal, Double Seal Coat, 10% Surface Patching	1-2 Years	\$953	\$7,749	\$9,014	\$0	\$0	\$0	<b>\$17,716</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$29,450	\$0	\$29,450
Park West	Century Heights	NEOP	5178	777	Crack Seal, Double Seal Coat, 15% Surface Patching	1-2 Years	\$1,895	\$16,310	\$28,458	\$0	\$0	\$0	<b>\$46,664</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$61,987	\$0	\$61,987
6000 W	SR92	Dry Creek	6849	0	Mill & Overlay (1.5 in)	2-3 Years	\$0	\$0	\$0	\$49,149	\$0	\$0	<b>\$49,149</b>	Reconstruct (4 in HMA/10 in Base)	\$0	\$0	\$0	\$216,322	\$216,322
6400 W	10400 N	10760 N	8756	1313	Mill & Overlay (2.5 in)	2-3 Years	\$0	\$0	\$0	\$104,828	\$0	\$0	<b>\$104,828</b>	Reconstruct (4 in HMA/8 in Base)	\$0	\$0	\$0	\$257,860	\$257,860
6000 W	Dry Creek	Ridge	8128	0	Mill & Overlay (1.5 in)	2-3 Years	\$0	\$0	\$0	\$58,327	\$0	\$0	<b>\$58,327</b>	Reconstruct (4 in HMA/10 in Base)	\$0	\$0	\$0	\$256,715	\$256,715
6000 W	11580 N	11800 N	6242	1561	Mill & Overlay (2.5 in)	2-3 Years	\$0	\$0	\$0	\$74,727	\$0	\$0	<b>\$74,727</b>	Reconstruct (4 in HMA/10 in Base)	\$0	\$0	\$0	\$197,151	\$197,151
5870 W	10800 N	SR-92	5269	0	Mill & Overlay (1.5 in)	2-3 Years	\$0	\$0	\$0	\$37,810	\$0	\$0	<b>\$37,810</b>	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$127,594	\$127,594

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
9600 N	6050 W	6510 W	9990	1998	Crack Seal, Seal Coat, 20% Surface Patching	2-3 Years	\$3,441	\$18,357	\$73,211	\$0	\$0	\$0	\$95,009	Lane Level, Mill & Overlay (2.5 in)	\$0	\$43,313	\$119,599	\$0	\$162,912
10500 N	6250 W	6400 W	4774	716	Crack Seal, Seal Coat, 15% Surface Patching	2-3 Years	\$1,747	\$8,772	\$26,238	\$0	\$0	\$0	\$36,757	Mill & Overlay (2.5 in)	\$0	\$0	\$57,151	\$115,604	\$57,151
Cedar Hills	West End Tennis Cts	West Side Track	2339	702	30% Full Depth Patching, Remove & Replace Surface (3 in)	2-3 Years	\$0	\$0	\$45,439	\$0	\$35,161	\$0	\$80,600	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$92,690
9600 N	Alpine Hwy.	5640 W	1650	0	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$52,114	\$52,114	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$54,719
6000 W	9600 N	9900 N	5742	1723	Seal Coat, 30% Surface Patching	3-5 Years	\$0	\$10,551	\$63,120	\$0	\$0	\$0	\$73,672	Reconstruct (4 in HMA/10 in Base)	\$0	\$0	\$0	\$181,362	\$181,362
9600 N	5875 W	6050 W	2787	0	Seal Coat	3-5 Years	\$0	\$5,121	\$0	\$0	\$0	\$0	\$5,121	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$5,889
9600 N	5800 W	5630 W	3278	0	Crack Seal, Seal Coat	3-5 Years	\$1,411	\$6,023	\$0	\$0	\$0	\$0	\$7,434	Mill & Overlay (2.5 in)	\$0	\$0	\$39,241	\$0	\$39,241
9600 N	6510 W	6800 W	12567	1257	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$4,869	\$23,092	\$46,048	\$0	\$0	\$0	\$74,010	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$85,111
6400 W	10760 N	SR 92	6220	0	Crack Seal, Seal Coat	3-5 Years	\$2,678	\$11,429	\$0	\$0	\$0	\$0	\$14,107	Mill & Overlay (2.5 in)	\$0	\$0	\$74,463	\$183,167	\$74,463
11800 N	Cyprus	Highland	3525	1057	Mill & Overlay (1.5 in/Add 2.5 in)	3-5 Years	\$0	\$0	\$0	\$43,209	\$0	\$0	\$43,209	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$49,690
Highland	Dry Hollow	Normandy	8205	1231	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$58,879	\$0	\$0	\$58,879	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$67,711
6800 W	9560 N	9750 N	8375	0	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$60,102	\$0	\$0	\$60,102	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$69,118
6000 W	10400 N	10550 N	2784	835	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$87,944	\$87,944	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$92,341
10150 N	6350 W	6300 W	1232	62	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$504	\$2,264	\$2,257	\$0	\$0	\$0	\$5,025	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$5,778
Mountain View	10100 N	10190 N	2706	135	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,107	\$4,972	\$4,958	\$0	\$0	\$0	\$11,036	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$12,692
Westfield Rd	Penn Brooke	Beacon Hill	2992	598	20% Full Depth Patching, Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$38,744	\$29,488	\$0	\$0	\$68,232	20% Full Depth Patching, Mill & Overlay (2.5 in)	\$38,744	\$0	\$35,819	\$0	\$74,563
6000 W	9900 N	10100 N	7310	731	Seal Coat, 10% Surface Patching	3-5 Years	\$0	\$13,433	\$26,786	\$0	\$0	\$0	\$40,219	Lane Level, Mill & Overlay (2.5 in)	\$0	\$31,694	\$87,517	\$0	\$119,211
6000 W	9600 N	C-D-S	1552	0	Crack Seal, Seal Coat	3-5 Years	\$668	\$2,852	\$0	\$0	\$0	\$0	\$3,520	Mill & Overlay (2.5 in)	\$0	\$0	\$18,582	\$0	\$18,582
Highland	Dry Hollow	11800 N	7717	1158	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$55,376	\$0	\$0	\$55,376	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$63,682
Apollo	Cyprus	11895 N	2081	104	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$851	\$3,824	\$6,737	\$0	\$0	\$0	\$11,412	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$13,123
6150 W	11800 N	Apollo	1528	229	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$559	\$2,809	\$8,401	\$0	\$0	\$0	\$11,768	Mill & Overlay (2.5 in)	\$0	\$0	\$18,298	\$0	\$18,298
9800 N	5275 W	5600 W	4205	42	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,792	\$7,726	\$1,541	\$0	\$0	\$0	\$11,059	Mill & Overlay (2.5 in)	\$0	\$0	\$50,336	\$0	\$50,336
Hidden Pond	10050 N	6350	5042	0	Crack Seal, Seal Coat	3-5 Years	\$2,170	\$9,264	\$0	\$0	\$0	\$0	\$11,435	Mill & Overlay (2.5 in)	\$0	\$0	\$60,356	\$0	\$60,356

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
CDS W of Eagleview	9600 N	C-D-S	930	0	Crack Seal, Seal Coat	3-5 Years	\$400	\$1,709	\$0	\$0	\$0	\$0	\$2,110	Mill & Overlay (2.5 in)	\$0	\$0	\$11,136	\$0	\$11,136
Cyprus	11800 N	11890 N	2284	343	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$16,390	\$0	\$0	\$16,390	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$55,309	\$55,309
6150 W	10830 N	Reisner / 10930 N	1689	17	Crack Seal, Seal Coat, 1% Full Depth Patching	3-5 Years	\$720	\$3,104	\$1,094	\$0	\$0	\$0	\$4,918	1% Full Depth Patching, Mill & Overlay (2.5 in)	\$1,094	\$0	\$20,224	\$0	\$21,318
Apollo	11895 N	Cyprus	4375	0	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$31,395	\$0	\$0	\$31,395	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$105,945	\$105,945
Cedar Hills	North County	W End Tennis Cts	1604	0	Remove & Replace Surface (3 in)	3-5 Years	\$0	\$0	\$0	\$0	\$24,103	\$0	\$24,103	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$27,719
10400 N	5980 W	5600 W	6755	675	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$2,617	\$12,412	\$24,750	\$0	\$0	\$0	\$39,779	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$45,746
Jupiter	Apollo	S C-D-S	1951	195	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$756	\$3,585	\$7,148	\$0	\$0	\$0	\$11,488	Mill & Overlay (2.5 in)	\$0	\$0	\$23,354	\$0	\$23,354
10400 N	Alpine	Mountain Ridge	7625	763	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$2,954	\$14,011	\$27,939	\$0	\$0	\$0	\$44,904	Mill & Overlay (2.5 in)	\$0	\$0	\$91,283	\$0	\$91,283
11200 N	4800 W	EEOP	3694	185	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,511	\$6,787	\$6,767	\$0	\$0	\$0	\$15,065	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$17,324
6800 W	10115 N	Madison	6087	0	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$43,683	\$0	\$0	\$43,683	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$50,235
Becon Hill	Wild Flower	Beacon Hill	2783	0	Remove & Replace Surface (3 in)	3-5 Years	\$0	\$0	\$0	\$0	\$41,830	\$0	\$41,830	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$48,104
9720 N	9690 N	9740 N	2288	229	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$887	\$4,205	\$8,384	\$0	\$0	\$0	\$13,475	Mill & Overlay (2.5 in)	\$0	\$0	\$27,393	\$0	\$27,393
11200 N	ECDS	5900 W	3073	461	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$1,124	\$5,646	\$16,889	\$0	\$0	\$0	\$23,660	Mill & Overlay (2.5 in)	\$0	\$0	\$36,787	\$0	\$36,787
10250 N	6700 W	6580 W	3124	156	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,278	\$5,740	\$5,723	\$0	\$0	\$0	\$12,741	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$14,653
5720W	10770 N	10740 N	620	0	Crack Seal, Seal Coat	3-5 Years	\$267	\$1,139	\$0	\$0	\$0	\$0	\$1,405	Mill & Overlay (2.5 in)	\$0	\$0	\$7,418	\$15,006	\$7,418
6150 W	9600	9680	1694	85	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$693	\$3,113	\$3,103	\$0	\$0	\$0	\$6,909	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$7,945
6750 W	10400 N	Canterbury Way	1745	349	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$601	\$3,207	\$12,790	\$0	\$0	\$0	\$16,598	Mill & Overlay (2.5 in)	\$0	\$0	\$20,894	\$0	\$20,894
Canterbury Way	Canterbury Pl.	Canterbury Dr.	1632	326	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$562	\$2,998	\$11,957	\$0	\$0	\$0	\$15,517	Mill & Overlay (2.5 in)	\$0	\$0	\$19,533	\$0	\$19,533
10830 N	6400 W	6150 W	6203	1241	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$2,136	\$11,397	\$45,454	\$0	\$0	\$0	\$58,988	Mill & Overlay (2.5 in)	\$0	\$0	\$74,255	\$0	\$74,255
9680 N	6184 W	6100 W	2255	113	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$922	\$4,144	\$4,131	\$0	\$0	\$0	\$9,197	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$10,577
Vintage	6630 W	6800 W	1606	80	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$657	\$2,951	\$2,942	\$0	\$0	\$0	\$6,550	Mill & Overlay (2.5 in)	\$0	\$0	\$19,226	\$0	\$19,226
70 W	1400 N AF	9600 N	1126	0	Crack Seal, Seal Coat	3-5 Years	\$485	\$2,069	\$0	\$0	\$0	\$0	\$2,553	Lane Level, Mill & Overlay (2.5 in)	\$0	\$4,881	\$13,477	\$0	\$18,358
Beacon Hill	Angel Gate	Timberline	2750	0	Crack Seal, Seal Coat	3-5 Years	\$1,184	\$5,053	\$0	\$0	\$0	\$0	\$6,237	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$7,173

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
6580 W	10250 N	10400 N	2952	443	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$1,080	\$5,424	\$28,666	\$0	\$0	\$0	\$35,170	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$40,446
6630 W	10250 N	N C-D-S	1756	0	Crack Seal, Seal Coat	3-5 Years	\$756	\$3,227	\$0	\$0	\$0	\$0	\$3,983	Mill & Overlay (2.5 in)	\$0	\$0	\$21,025	\$0	\$21,025
Canterbury Lane	Canterbury Dr. N	Canterbury Dr. S	4484	1345	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$32,180	\$0	\$0	\$32,180	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$108,593	\$108,593
6630 W	9750 N	9880 N	4704	235	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,924	\$8,644	\$8,619	\$0	\$0	\$0	\$19,187	Mill & Overlay (2.5 in)	\$0	\$0	\$56,318	\$0	\$56,318
Country Club Dr.	5300 W	Hampton	3133	0	Mill & Overlay (4.0 in)	3-5 Years	\$0	\$0	\$0	\$59,998	\$0	\$0	\$59,998	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$75,879	\$75,879
10300 N	6800 West	6960 West	3877	388	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$1,502	\$7,125	\$14,207	\$0	\$0	\$0	\$22,834	Mill & Overlay (2.5 in)	\$0	\$0	\$46,418	\$0	\$46,418
10120 N	6580 West	6690 West	2490	0	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$24,536	\$0	\$0	\$24,536	Mill & Overlay (2.5 in)	\$0	\$0	\$29,804	\$0	\$29,804
10050 N	6690 West	6800 West	2598	0	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$25,605	\$0	\$0	\$25,605	Mill & Overlay (2.5 in)	\$0	\$0	\$31,103	\$0	\$31,103
10030 N	6580 West	6690 West	2656	0	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$26,174	\$0	\$0	\$26,174	Mill & Overlay (2.5 in)	\$0	\$0	\$31,794	\$0	\$31,794
10100 N	5890 W	6000 W	2433	608	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$17,458	\$0	\$0	\$17,458	Same Repair Strategy - More Extensive	\$0	\$0	\$17,458	\$0	\$20,077
6580 W	10030 North	10120 North	2745	0	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$27,050	\$0	\$0	\$27,050	Mill & Overlay (2.5 in)	\$0	\$0	\$32,858	\$0	\$32,858
6220 W	9600 N	NEOP	2812	422	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$1,029	\$5,168	\$27,313	\$0	\$0	\$0	\$33,510	15% Full Depth Patching, Mill & Overlay (2.5 in)	\$27,313	\$0	\$33,668	\$0	\$60,981
Canterbury way	Canterbury Pl.	Canterbury Ln.	4543	909	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$1,565	\$8,348	\$33,292	\$0	\$0	\$0	\$43,204	Mill & Overlay (2.5 in)	\$0	\$0	\$54,387	\$0	\$54,387
Woodland	5300 W	SEOP	6446	64	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,747	\$11,845	\$2,362	\$0	\$0	\$0	\$16,954	Mill & Overlay (2.5 in)	\$0	\$0	\$77,168	\$0	\$77,168
6690 W	10030 North	10120 North	2552	0	Remove & Replace Surface (3 in)	3-5 Years	\$0	\$0	\$0	\$0	\$38,358	\$0	\$38,358	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$44,112
Granite Flats	Foothill intersection	Roundabout	533	0	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$3,827	\$0	\$0	\$3,827	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$12,915	\$12,915
9740 N	9775	9700	1650	0	Crack Seal, Seal Coat	3-5 Years	\$710	\$3,032	\$0	\$0	\$0	\$0	\$3,742	Mill & Overlay (2.5 in)	\$0	\$0	\$19,753	\$0	\$19,753
9680 N	W C-D-S	6184 W	1570	157	Seal Coat, 10% Surface Patching	3-5 Years	\$0	\$2,884	\$5,751	\$0	\$0	\$0	\$8,636	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$9,931
5300 W	11200 N	5300 W	1711	86	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$700	\$3,145	\$3,135	\$0	\$0	\$0	\$6,980	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$8,027
9800 N	6000 W	5675 W	12189	0	Crack Seal, Seal Coat	3-5 Years	\$5,247	\$22,397	\$0	\$0	\$0	\$0	\$27,645	Mill & Overlay (2.5 in)	\$0	\$0	\$145,921	\$0	\$145,921
Canyon View Dr	Country Club Dr.	10752 N	2182	218	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$845	\$4,009	\$7,994	\$0	\$0	\$0	\$12,848	Mill & Overlay (2.5 in)	\$0	\$0	\$26,118	\$0	\$26,118
5890 W	10100 N	NEOP	2310	0	Crack Seal, Seal Coat	3-5 Years	\$994	\$4,245	\$0	\$0	\$0	\$0	\$5,239	Mill & Overlay (2.5 in)	\$0	\$0	\$27,654	\$0	\$27,654
11200 N	4930 W	4800 W	3267	1307	Crack Seal, Seal Coat, 40% Surface Patching	3-5 Years	\$844	\$6,003	\$47,878	\$0	\$0	\$0	\$54,724	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$62,932

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
10125 N	6800 West	E CDS	1687	0	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$16,631	\$0	\$0	<b>\$16,631</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$20,202	\$0	\$20,202
10205 N	6800 West	E CDS	1703	0	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$16,780	\$0	\$0	<b>\$16,780</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$20,383	\$0	\$20,383
6150 W	10590 N	SEOP	2178	0	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$15,629	\$0	\$0	<b>\$15,629</b>	Reconstruct (3 in HMA/6 in Base)	\$0	\$0	\$0	\$48,116	\$48,116
Highland	Normandy N	SR 92	11341	1701	Mill & Overlay (2.5 in)	3-5 Years	\$0	\$0	\$0	\$135,770	\$0	\$0	<b>\$135,770</b>	Reconstruct (4 in HMA/10 in Base)	\$0	\$0	\$0	\$358,198	\$358,198
Ainsley Way	Canterbury Dr. N	Canterbury Dr. S	3919	784	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$1,350	\$7,202	\$28,722	\$0	\$0	\$0	<b>\$37,273</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$46,920	\$0	\$46,920
Canyon View	4800 W	4670	3584	358	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$1,389	\$6,586	\$13,132	\$0	\$0	\$0	<b>\$21,106</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$42,906	\$0	\$42,906
10550 N	6000 W	WEOP	4748	712	Crack Seal, Seal Coat, 15% Full Depth Patching	3-5 Years	\$1,738	\$8,725	\$46,115	\$0	\$0	\$0	<b>\$56,578</b>	15% Full Depth Patching, Mill & Overlay (2.5 in)	\$46,115	\$0	\$56,845	\$0	\$102,960
5600 W	11350 N	11200 N	4761	1428	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$1,435	\$8,748	\$92,477	\$0	\$0	\$0	<b>\$102,660</b>	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$92,477	\$0	\$56,996	\$0	\$149,473
Westfield Road	N City Limit	Penn Brooke	3746	1124	Reconstruct (4 in HMA/10 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$118,307</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$124,222
9800 N	5600 W	Alpine	4706	0	Reconstruct (4 in HMA/8 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$138,569</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$145,498
Evergreen, Stone Crk.	EEOP	WEOP	3710	37	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,581	\$6,817	\$1,359	\$0	\$0	\$0	<b>\$9,757</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$44,412	\$0	\$44,412
6800 W	10150 North	10250 North	2793	0	Crack Seal, Seal Coat	3-5 Years	\$1,202	\$5,132	\$0	\$0	\$0	\$0	<b>\$6,335</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$33,437	\$0	\$33,437
Vista	4800 W	Canyon View Dr.	3630	1089	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$26,049	\$0	\$0	<b>\$26,049</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$26,049	\$0	\$29,956
5710 W	11200 N	11350 N	5189	1557	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$1,564	\$9,535	\$100,797	\$0	\$0	\$0	<b>\$111,896</b>	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$100,797	\$0	\$62,124	\$0	\$162,921
6800 W	10400 North	10250 North	7649	0	Crack Seal, Seal Coat	3-5 Years	\$3,293	\$14,055	\$0	\$0	\$0	\$0	<b>\$17,348</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$91,569	\$0	\$91,569
6160 W	10010 N	10050 N	1196	60	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$489	\$2,198	\$3,872	\$0	\$0	\$0	<b>\$6,559</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$7,542
Panorama Dr.	4800 EW	Wasatch	2277	0	Crack Seal, Seal Coat	3-5 Years	\$980	\$4,184	\$0	\$0	\$0	\$0	<b>\$5,164</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$27,259	\$0	\$27,259
Town Ctr Blvd.	SR-92	10890 N	2494	249	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$966	\$4,583	\$9,138	\$0	\$0	\$0	<b>\$14,687</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$29,856	\$0	\$29,856
Ridge Road	Mercer Hollow	Granite Flats	6710	335	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$2,744	\$12,329	\$12,292	\$0	\$0	\$0	<b>\$27,365</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$80,323	\$0	\$80,323
Wasatch Dr	WEOP	SR 92	3839	0	Crack Seal, Seal Coat	3-5 Years	\$1,653	\$7,055	\$0	\$0	\$0	\$0	<b>\$8,707</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$45,961	\$0	\$45,961
10250 N	6800 N	6700 NY	1863	0	Reconstruct (3 in HMA/8 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$0	<b>\$45,106</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$45,106	\$47,362
Mountain View	10020 N	10100 N	2697	135	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,103	\$4,955	\$4,941	\$0	\$0	\$0	<b>\$10,999</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$12,649

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
Stevens Lane	Natalie Ct	6400 W	4162	416	Reconstruct (3 in HMA/6 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$91,940	<b>\$91,940</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$1	\$91,940	\$96,537
9740 N	WEOP	6000	5199	52	Crack Seal, Seal Coat, 1% Full Depth Patching	3-5 Years	\$2,216	\$9,554	\$3,366	\$0	\$0	\$0	<b>\$15,136</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$17,406
Canterbury Court	NEOP	SEOP	2484	1490	Reconstruct (3 in HMA/8 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$60,155	<b>\$60,155</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$63,163
Sunrise Circle	Sunrise Circle	N C-D-S	1982	396	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$683	\$3,642	\$14,524	\$0	\$0	\$0	<b>\$18,848</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$23,726	\$0	\$23,726
Mountain View Circle	Panorama W	Panorama N	3054	0	Crack Seal, Seal Coat	3-5 Years	\$1,315	\$5,612	\$0	\$0	\$0	\$0	<b>\$6,927</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$36,565	\$0	\$36,565
10050 N	6000	Mountain View	9044	90	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$3,854	\$16,618	\$3,314	\$0	\$0	\$0	<b>\$23,786</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$27,354
Town Center W	Coventry	Town Center Pkwy	2003	0	Seal Coat	3-5 Years	\$0	\$3,681	\$0	\$0	\$0	\$0	<b>\$3,681</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$4,233
9770 N	6630 West	6700 West	1762	0	Crack Seal, Seal Coat	3-5 Years	\$758	\$3,237	\$0	\$0	\$0	\$0	<b>\$3,996</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$21,091	\$0	\$21,091
Town Center E	10890 N	10700 N	2500	0	Seal Coat	3-5 Years	\$0	\$4,594	\$0	\$0	\$0	\$0	<b>\$4,594</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$5,283
Granite Flats	Bull river	Ridge	2402	0	Crack Seal, Seal Coat	3-5 Years	\$1,034	\$4,413	\$0	\$0	\$0	\$0	<b>\$5,447</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$28,752	\$0	\$28,752
Town Center W	10890 N	Coventry	3099	0	Seal Coat	3-5 Years	\$0	\$5,694	\$0	\$0	\$0	\$0	<b>\$5,694</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$6,548
Country Club Dr.	WEOP	4800 W	3236	162	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,323	\$5,946	\$5,929	\$0	\$0	\$0	<b>\$13,198</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$38,740	\$0	\$38,740
Canterbury Pl.	Canterbury Way	6750 W	7420	0	Remove & Replace Surface (3 in)	3-5 Years	\$0	\$0	\$0	\$0	\$111,520	\$0	<b>\$111,520</b>	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$128,248
Granite Flats	Ridge	Foothill Dr.	2801	0	Crack Seal, Seal Coat	3-5 Years	\$1,206	\$5,147	\$0	\$0	\$0	\$0	<b>\$6,353</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$33,536	\$0	\$33,536
W Dry Creek	6000 W	Bull River	5412	812	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$1,980	\$9,944	\$29,743	\$0	\$0	\$0	<b>\$41,668</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$64,786	\$0	\$64,786
Ridge Road	6000 W	Granite Flats	2020	202	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$783	\$3,712	\$7,403	\$0	\$0	\$0	<b>\$11,898</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$24,186	\$0	\$24,186
10570 N	6250 W	6400 W	3406	0	Crack Seal, Seal Coat	3-5 Years	\$1,466	\$6,259	\$0	\$0	\$0	\$0	<b>\$7,726</b>	Lane Level, Mill & Overlay (2.5 in)	\$0	\$14,768	\$40,779	\$0	\$55,547
6800 W	9750 W	Madison	3776	755	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$1,300	\$6,938	\$27,669	\$0	\$0	\$0	<b>\$35,907</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$45,200	\$0	\$45,200
Country Club Dr.	4800 W	Canyon Links Vista	4180	836	Crack Seal, Seal Coat, 20% Full Depth Patching	3-5 Years	\$1,440	\$7,681	\$54,128	\$0	\$0	\$0	<b>\$63,248</b>	20% Full Depth Patching, Mill & Overlay (2.5 in)	\$54,128	\$0	\$50,041	\$0	\$104,169
Bull River Road	6000 W	Dry Creek Cir.	5824	291	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$2,382	\$10,702	\$10,670	\$0	\$0	\$0	<b>\$23,753</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$69,722	\$0	\$69,722
9700 N	5700 W	5650 W	678	0	Crack Seal, Seal Coat	3-5 Years	\$292	\$1,246	\$0	\$0	\$0	\$0	<b>\$1,538</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$8,121	\$0	\$8,121
5950 W	10100 N	NEOP	2310	116	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$945	\$4,245	\$4,232	\$0	\$0	\$0	<b>\$9,421</b>	Mill & Overlay (2.5 in)	\$0	\$0	\$27,654	\$0	\$27,654

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs						
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost
Mountain View	10190 N	North CDS	2628	526	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$905	\$4,829	\$19,259	\$0	\$0	\$0	\$24,993	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$28,741
Highland Circle	Country Club Dr.	S C-D-S	1630	16	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$695	\$2,995	\$597	\$0	\$0	\$0	\$4,287	Mill & Overlay (2.5 in)	\$0	\$0	\$19,512	\$0	\$19,512
Chamberry	Athena	6010 W	1613	0	Crack Seal, Seal Coat	3-5 Years	\$695	\$2,965	\$0	\$0	\$0	\$0	\$3,659	Mill & Overlay (2.5 in)	\$0	\$0	\$19,314	\$0	\$19,314
10800 N	6000 W	5780 W	5673	567	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$2,198	\$10,424	\$20,785	\$0	\$0	\$0	\$33,407	Mill & Overlay (2.5 in)	\$0	\$0	\$67,910	\$0	\$67,910
Panorama Dr.	Country Club Dr.	4800 W	5438	816	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$1,990	\$9,992	\$29,886	\$0	\$0	\$0	\$41,868	Mill & Overlay (2.5 in)	\$0	\$0	\$65,097	\$0	\$65,097
6620 W	9600 N	9500 N	2332	23	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$994	\$4,285	\$854	\$0	\$0	\$0	\$6,133	Mill & Overlay (2.5 in)	\$0	\$0	\$27,918	\$0	\$27,918
Stevens lane	6589 W	Natalie Ct	6388	639	Reconstruct (3 in HMA/6 in Base)	3-5 Years	\$0	\$0	\$0	\$0	\$0	\$141,134	\$141,134	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$141,134	\$148,190
9860 N	WEOP	6200 W	4940	49	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,105	\$9,077	\$1,810	\$0	\$0	\$0	\$12,993	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$14,942
5920 W	SR92	5870 N	3063	0	Crack Seal, Seal Coat	3-5 Years	\$1,319	\$5,629	\$0	\$0	\$0	\$0	\$6,948	Mill & Overlay (2.5 in)	\$0	\$0	\$36,673	\$0	\$36,673
11140 N	6000 W	5900 W	3038	152	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,242	\$5,582	\$5,566	\$0	\$0	\$0	\$12,390	Mill & Overlay (2.5 in)	\$0	\$0	\$36,368	\$0	\$36,368
6250 W	10550 N	NEOP	4275	0	Crack Seal, Seal Coat	3-5 Years	\$1,841	\$7,856	\$0	\$0	\$0	\$0	\$9,696	Lane Level, Mill & Overlay (2.5 in)	\$0	\$18,536	\$51,182	\$0	\$69,718
Athena	11895 N	Chamberry	2103	526	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$15,094	\$0	\$0	\$15,094	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$50,934	\$50,934
Alpine	Country Club E	Country Club W	2499	125	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,022	\$4,592	\$4,578	\$0	\$0	\$0	\$10,192	Mill & Overlay (2.5 in)	\$0	\$0	\$29,917	\$0	\$29,917
9500 N	6601 W	6800 W	5847	58	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,492	\$10,743	\$2,142	\$0	\$0	\$0	\$15,377	Mill & Overlay (2.5 in)	\$0	\$0	\$69,993	\$0	\$69,993
Canterbury Drive	10580 N	10400 N	7160	2148	Crack Seal, Seal Coat, 30% Full Depth Patching	3-5 Years	\$2,158	\$13,157	\$139,081	\$0	\$0	\$0	\$154,396	30% Full Depth Patching, Mill & Overlay (2.5 in)	\$139,081	\$0	\$85,720	\$173,395	\$224,801
10610 N	5400 W	5300 W	2050	205	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$794	\$3,766	\$7,510	\$0	\$0	\$0	\$12,071	Mill & Overlay (2.5 in)	\$0	\$0	\$24,538	\$0	\$24,538
5400 W	10700 N	10600 N	3366	168	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,377	\$6,185	\$6,167	\$0	\$0	\$0	\$13,728	Mill & Overlay (2.5 in)	\$0	\$0	\$40,296	\$0	\$40,296
10600 N	5600 W	Town Center E	5980	60	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,549	\$10,989	\$2,191	\$0	\$0	\$0	\$15,729	Mill & Overlay (2.5 in)	\$0	\$0	\$71,592	\$0	\$71,592
Country Club	East Jerling	Alpine	6997	70	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,982	\$12,857	\$2,564	\$0	\$0	\$0	\$18,403	Mill & Overlay (2.5 in)	\$0	\$0	\$83,767	\$0	\$83,767
Century Heights	Beacon Hill	Park west	2185	328	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$800	\$4,016	\$12,011	\$0	\$0	\$0	\$16,826	Mill & Overlay (2.5 in)	\$0	\$0	\$26,162	\$0	\$26,162
J Legrand Adamson	Alpine	Mystic	3264	163	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$1,335	\$5,998	\$10,567	\$0	\$0	\$0	\$17,899	5% Full Depth Patching, Mill & Overlay (2.5 in)	\$10,567	\$0	\$39,075	\$0	\$49,642
10400 N	6550 W	7000 W	18348	0	Mill & Overlay (1.5 in/Add 2.5 in)	3-5 Years	\$0	\$0	\$0	\$224,924	\$0	\$0	\$224,924	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$258,663
Jerling	Hampton	End of circle	11564	0	Crack Seal, Seal Coat	3-5 Years	\$4,978	\$21,250	\$0	\$0	\$0	\$0	\$26,228	Mill & Overlay (2.5 in)	\$0	\$0	\$138,444	\$0	\$138,444

Segment Data					Recommended Treatment and Estimated Cost								Alternate Recommendation and Estimated Postponed Costs							
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	M/OL	R & R Surface	Reconstruct	Estimated Cost	Alternate Recommendation if treatment postponed	Patching	Lane Level	M/OL	Reconstruction	Estimated Postponed Cost	
10220 N	East CDS	W CDS	4272	1282	Crack Seal, Seal Coat, 30% Surface Patching	3-5 Years	\$1,287	\$7,850	\$46,962	\$0	\$0	\$0	\$56,099	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$64,514	
5580 W / 5520 W	9800 North	S CDS	2802	420	Mill & Overlay (1.5 in/Add 2.0 in)	3-5 Years	\$0	\$0	\$0	\$27,614	\$0	\$0	\$27,614	Mill & Overlay (2.5 in)	\$0	\$0	\$33,542	\$0	\$33,542	
5920 W	Can. Pk.	NEOP	2453	25	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,045	\$4,507	\$899	\$0	\$0	\$0	\$6,452	Same Repair Strategy - More Extensive	\$0	\$0	\$0	\$0	\$7,419	
Ashby	9600 North	N C-D-S	2387	0	Crack Seal, Seal Coat	3-5 Years	\$1,028	\$4,387	\$0	\$0	\$0	\$0	\$5,414	Mill & Overlay (2.5 in)	\$0	\$0	\$28,579	\$0	\$28,579	
5470 W	NCDS	10600 N	1871	0	Crack Seal, Seal Coat	3-5 Years	\$805	\$3,438	\$0	\$0	\$0	\$0	\$4,243	Mill & Overlay (2.5 in)	\$0	\$0	\$22,396	\$0	\$22,396	
5550 W	NEOP	10600 N	1955	0	Crack Seal, Seal Coat	3-5 Years	\$842	\$3,593	\$0	\$0	\$0	\$0	\$4,434	Mill & Overlay (2.5 in)	\$0	\$0	\$23,406	\$0	\$23,406	
5600 W	Town Center	10400 N	6167	617	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$44,254	\$0	\$0	\$44,254	Reconstruct (3 in HMA/8 in Base)	\$0	\$0	\$0	\$0	\$149,340	
Grenoble	Chamber ry	12040 N	1947	389	Mill & Overlay (1.5 in)	3-5 Years	\$0	\$0	\$0	\$13,975	\$0	\$0	\$13,975	Reconstruct (3 in HMA/6 in Base)	\$0	\$0	\$0	\$0	\$43,023	
5370 W	NCDS	SCDS	3161	0	Crack Seal, Seal Coat	3-5 Years	\$1,361	\$5,808	\$0	\$0	\$0	\$0	\$7,169	Mill & Overlay (2.5 in)	\$0	\$0	\$37,839	\$0	\$37,839	
Canterbury Park	6000 W	5290 W	5735	57	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,444	\$10,537	\$2,101	\$0	\$0	\$0	\$15,082	Mill & Overlay (2.5 in)	\$0	\$0	\$68,651	\$0	\$68,651	
5320 E	9910 N	NCDS	2583	646	Crack Seal, Seal Coat, 25% Full Depth Patching	3-5 Years	\$834	\$4,747	\$41,815	\$0	\$0	\$0	\$47,396	25% Full Depth Patching, Mill & Overlay (2.5 in)	\$41,815	\$0	\$30,926	\$0	\$72,742	
11200 N	WEOP	5300 W	10832	1625	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$3,964	\$19,903	\$59,532	\$0	\$0	\$0	\$83,399	Mill & Overlay (2.5 in)	\$0	\$0	\$129,671	\$0	\$129,671	
Knight	10100 N	Parking Lot	6025	904	Crack Seal, Seal Coat, 15% Surface Patching	3-5 Years	\$2,205	\$11,070	\$33,112	\$0	\$0	\$0	\$46,387	Mill & Overlay (2.5 in)	\$0	\$0	\$72,124	\$0	\$72,124	
5600 W	SR 92	Town Center	10423	2085	Crack Seal, Seal Coat, 20% Surface Patching	3-5 Years	\$3,590	\$19,153	\$76,384	\$0	\$0	\$0	\$99,127	Mill & Overlay (2.5 in)	\$0	\$0	\$124,783	\$0	\$124,783	
					<b>Totals:</b>		<b>\$177,426</b>	<b>\$1,008,609</b>	<b>\$1,934,351</b>	<b>\$1,441,748</b>	<b>\$250,972</b>	<b>\$735,268</b>	<b>\$5,548,374</b>			<b>\$561,958</b>	<b>\$113,192</b>	<b>\$5,103,027</b>	<b>\$3,364,611</b>	<b>\$10,274,505</b>

## Appendix D: Detailed Road Repair Prioritization Table

### 1-2 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
6000 W	10550 N	SR 92	Double Seal Coat, 10% Surface Patching	30	64	Maj. Collect.	100	\$92,281	59	74
9960 N	6000	E C-D-S	Crack Seal, Double Seal Coat, 5% Surface Patching	23	78	Minor Local	0	\$13,664	95	59
Argo	Cyprus	Cyprus	Crack Seal, Double Seal Coat, 5% Surface Patching	27	71	Minor Local	0	\$14,608	94	57
11350 N	5830 W	5600 W	Double Seal Coat	33	59	Maj. Local	15	\$20,385	92	56
5950 W	10100 N	NEOP	Crack Seal, Double Seal Coat, 15% Surface Patching	33	59	Maj. Local	15	\$27,295	88	55
Canterbury Lane	Cant. Drive	10400 N	Double Seal Coat, 5% Full Depth Patching	38	48	Maj. Local	15	\$19,392	92	52
Andrew	5710 W	11350 N	Crack Seal, Double Seal Coat, 20% Surface Patching	37	51	Maj. Local	15	\$88,174	61	43
Mercer Hollow	NEOP	Bull River	Crack Seal, Double Seal Coat, 10% Surface Patching	48	27	Maj. Local	15	\$31,063	87	41
6960 W	10260 N	NEOP	Mill & Overlay (1.5 in)	55	14	Maj. Local	15	\$24,838	90	37
5650 W	9800 N	9700 N	Crack Seal, Double Seal Coat	59	6	Maj. Local	15	\$6,065	98	36
5650 W	9700 N	9600 N	Crack Seal, Double Seal Coat	59	6	Maj. Local	15	\$10,516	96	36
6960 W	SEOP	10260 N	Crack Seal, Double Seal Coat	60	3	Maj. Local	15	\$12,905	95	34
10205 N	6800 W	10150 N	Crack Seal, Double Seal Coat	60	3	Maj. Local	15	\$14,618	94	34
Shepherd's path	Beacon Hill	Park West	Crack Seal, Double Seal Coat, 15% Surface Patching	61	1	Maj. Local	15	\$10,805	96	34

**1-2 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
10150 N	6800 W	6960 W	Crack Seal, Double Seal Coat, 20% Surface Patching	60	3	Maj. Local	15	\$40,040	83	31
Ashby	9600 N	9685 N	Crack Seal, Double Seal Coat, 10% Surface Patching	60	3	Minor Local	0	\$17,716	93	29
Park West	Century Heights	NEOP	Crack Seal, Double Seal Coat, 15% Surface Patching	61	1	Minor Local	0	\$46,664	80	24
<b>Total Cost:</b>									<b>\$491,029</b>	

**2-3 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
6000 W	SR92	Dry Creek	Mill & Overlay (1.5 in)	37	49	Maj. Collect.	100	\$49,149	79	73
6400 W	10400 N	10760 N	Mill & Overlay (2.5 in)	16	91	Minor Collect.	49	\$104,828	54	67
6000 W	Dry Creek	Ridge	Mill & Overlay (1.5 in)	44	36	Maj. Collect.	100	\$58,327	75	67
6000 W	11580 N	11800 N	Mill & Overlay (2.5 in)	44	36	Maj. Collect.	100	\$74,727	67	65
5870 W	10800 N	SR-92	Mill & Overlay (1.5 in)	25	75	Maj. Local	15	\$37,810	84	60
9600 N	6050 W	6510 W	Crack Seal, Seal Coat, 20% Surface Patching	53	18	Maj. Collect.	100	\$95,009	58	55
10500 N	6250 W	6400 W	Crack Seal, Seal Coat, 15% Surface Patching	33	59	Maj. Local	15	\$36,757	84	53
Cedar Hills	West End Tennis Cts	West Side Track	30% Full Depth Patching, Remove & Replace Surface (3 in)	30	64	Maj. Local	15	\$80,600	65	49
<b>Total Cost:</b>									<b>\$537,207</b>	

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
6000 W	9600 N	9900 N	Seal Coat, 30% Surface Patching	12	100	Maj. Collect.	100	\$73,672	68	90
9600 N	Alpine Hwy.	5640 W	Reconstruct (4 in HMA/10 in Base)	15	94	Maj. Collect.	100	\$52,114	77	91
9600 N	5875 W	6050 W	Seal Coat	32	60	Maj. Collect.	100	\$5,121	98	83
9600 N	5800 W	5630 W	Crack Seal, Seal Coat	32	60	Maj. Collect.	100	\$7,434	97	83
9600 N	6510 W	6800 W	Crack Seal, Seal Coat, 10% Surface Patching	23	78	Maj. Collect.	100	\$74,010	68	82
6400 W	10760 N	SR 92	Crack Seal, Seal Coat	16	91	Minor Collect.	49	\$14,107	94	80
11800 N	Cyprus	Highland	Mill & Overlay (1.5 in/Add 2.5 in)	31	62	Maj. Collect.	100	\$43,209	81	79
Highland	Dry Hollow	Normandy	Mill & Overlay (1.5 in)	31	62	Maj. Collect.	100	\$58,879	74	77
6800 W	9560 N	9750 N	Mill & Overlay (1.5 in)	13	98	Minor Collect.	49	\$60,102	74	76
6000 W	10400 N	10550 N	Reconstruct (4 in HMA/10 in Base)	32	61	Maj. Collect.	100	\$87,944	61	73
10150 N	6350 W	6300 W	Crack Seal, Seal Coat, 5% Surface Patching	16	91	Maj. Local	15	\$5,025	98	71
Mountain View	10100 N	10190 N	Crack Seal, Seal Coat, 5% Surface Patching	16	91	Maj. Local	15	\$11,036	96	70
Westfield Rd	Penn Brooke	Beacon Hill	20% Full Depth Patching, Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Maj. Collect.	100	\$68,232	70	69
6000 W	9900 N	10100 N	Seal Coat, 10% Surface Patching	49	27	Maj. Collect.	100	\$40,219	83	65
6000 W	9600 N	C-D-S	Crack Seal, Seal Coat	21	82	Minor Local	0	\$3,520	99	63

## 3-5 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Highland	Dry Hollow	11800 N	Mill & Overlay (1.5 in)	50	23	Maj. Collect.	100	\$55,376	76	62
Apollo	Cyprus	11895 N	Crack Seal, Seal Coat, 5% Full Depth Patching	27	71	Maj. Local	15	\$11,412	96	62
6150 W	11800 N	Apollo	Crack Seal, Seal Coat, 15% Surface Patching	27	71	Maj. Local	15	\$11,768	95	62
9800 N	5275 W	5600 W	Crack Seal, Seal Coat, 1% Surface Patching	39	45	Minor Collect.	49	\$11,059	96	62
Hidden Pond	10050 N	6350	Crack Seal, Seal Coat	27	70	Maj. Local	15	\$11,435	96	61
CDS W of Eagleview	9600 N	C-D-S	Crack Seal, Seal Coat	23	78	Minor Local	0	\$2,110	100	61
Cyprus	11800 N	11890 N	Mill & Overlay (1.5 in)	27	71	Maj. Local	15	\$16,390	93	61
6150 W	10830 N	Reisner / 10930 N	Crack Seal, Seal Coat, 1% Full Depth Patching	31	63	Maj. Local	15	\$4,918	98	59
Apollo	11895 N	Cyprus	Mill & Overlay (1.5 in)	27	71	Maj. Local	15	\$31,395	87	59
Cedar Hills	North County	W End Tennis Cts	Remove & Replace Surface (3 in)	30	64	Maj. Local	15	\$24,103	90	57
10400 N	5980 W	5600 W	Crack Seal, Seal Coat, 10% Surface Patching	40	44	Minor Collect.	49	\$39,779	83	57
Jupiter	Apollo	S C-D-S	Crack Seal, Seal Coat, 10% Surface Patching	27	71	Minor Local	0	\$11,488	95	57
10400 N	Alpine	Mountain Ridge	Crack Seal, Seal Coat, 10% Surface Patching	40	44	Minor Collect.	49	\$44,904	81	56
11200 N	4800 W	EEOP	Crack Seal, Seal Coat, 5% Surface Patching	33	58	Maj. Local	15	\$15,065	94	56
6800 W	10115 N	Madison	Mill & Overlay (1.5 in)	41	42	Minor Collect.	49	\$43,683	81	56
Beacon Hill	Wild Flower	Beacon Hill	Remove & Replace Surface (3 in)	29	67	Maj. Local	15	\$41,830	82	56

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
9720 N	9690 N	9740 N	Crack Seal, Seal Coat, 10% Surface Patching	34	56	Maj. Local	15	\$13,475	95	55
11200 N	ECDS	5900 W	Crack Seal, Seal Coat, 15% Surface Patching	34	57	Maj. Local	15	\$23,660	90	54
10250 N	6700 W	6580 W	Crack Seal, Seal Coat, 5% Surface Patching	36	52	Maj. Local	15	\$12,741	95	54
5720W	10770 N	10740 N	Crack Seal, Seal Coat	38	48	Maj. Local	15	\$1,405	100	54
6150 W	9600	9680	Crack Seal, Seal Coat, 5% Surface Patching	39	46	Maj. Local	15	\$6,909	98	52
6750 W	10400 N	Canterbury Way	Crack Seal, Seal Coat, 20% Surface Patching	37	49	Maj. Local	15	\$16,598	93	52
Canterbury Way	Canterbury Pl.	Canterbury Dr.	Crack Seal, Seal Coat, 20% Surface Patching	38	48	Maj. Local	15	\$15,517	94	52
10830 N	6400 W	6150 W	Crack Seal, Seal Coat, 20% Surface Patching	31	63	Maj. Local	15	\$58,988	74	52
9680 N	6184 W	6100 W	Crack Seal, Seal Coat, 5% Surface Patching	39	46	Maj. Local	15	\$9,197	97	52
Vintage	6630 W	6800 W	Crack Seal, Seal Coat, 5% Surface Patching	40	44	Maj. Local	15	\$6,550	98	51
70 W	1400 N AF	9600 N	Crack Seal, Seal Coat	41	42	Maj. Local	15	\$2,553	99	51
Beacon Hill	Angel Gate	Timberline	Crack Seal, Seal Coat	41	43	Maj. Local	15	\$6,237	98	51
6580 W	10250 N	10400 N	Crack Seal, Seal Coat, 15% Full Depth Patching	36	52	Maj. Local	15	\$35,170	85	51
6630 W	10250 N	N C-D-S	Crack Seal, Seal Coat	36	52	Minor Local	0	\$3,983	99	50
Canterbury Lane	Canterbury Dr. N	Canterbury Dr. S	Mill & Overlay (1.5 in)	38	48	Maj. Local	15	\$32,180	86	50
6630 W	9750 N	9880 N	Crack Seal, Seal Coat, 5% Surface Patching	40	44	Maj. Local	15	\$19,187	92	50

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Country Club Dr.	5300 W	Hampton	Mill & Overlay (4.0 in)	33	57	Maj. Local	15	\$59,998	74	50
10300 N	6800 West	6960 West	Crack Seal, Seal Coat, 10% Surface Patching	40	44	Maj. Local	15	\$22,834	90	49
10120 N	6580 West	6690 West	Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Maj. Local	15	\$24,536	90	49
10050 N	6690 West	6800 West	Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Maj. Local	15	\$25,605	89	49
10030 N	6580 West	6690 West	Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Maj. Local	15	\$26,174	89	49
10100 N	5890 W	6000 W	Mill & Overlay (1.5 in)	42	41	Maj. Local	15	\$17,458	93	49
6580 W	10030 North	10120 North	Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Maj. Local	15	\$27,050	89	49
6220 W	9600 N	NEOP	Crack Seal, Seal Coat, 15% Full Depth Patching	39	46	Maj. Local	15	\$33,510	86	49
Canterbury way	Canterbury Pl.	Canterbury Ln.	Crack Seal, Seal Coat, 20% Surface Patching	38	48	Maj. Local	15	\$43,204	81	48
Woodland	5300 W	SEOP	Crack Seal, Seal Coat, 1% Surface Patching	43	39	Maj. Local	15	\$16,954	93	48
6690 W	10030 North	10120 North	Remove & Replace Surface (3 in)	39	46	Maj. Local	15	\$38,358	83	48
Granite Flats	Foothill intersection	Roundabout	Mill & Overlay (1.5 in)	45	34	Maj. Local	15	\$3,827	99	48
9740 N	9775	9700	Crack Seal, Seal Coat	45	34	Maj. Local	15	\$3,742	99	48
9680 N	W C-D-S	6184 W	Seal Coat, 10% Surface Patching	39	46	Minor Local	0	\$8,636	97	47
5300 W	11200 N	5300 W	Crack Seal, Seal Coat, 5% Surface Patching	40	45	Minor Local	0	\$6,980	98	47
9800 N	6000 W	5675 W	Crack Seal, Seal Coat	55	14	Minor Collect.	49	\$27,645	88	47

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Canyon View Dr	Country Club Dr.	10752 N	Crack Seal, Seal Coat, 10% Surface Patching	46	32	Maj. Local	15	\$12,848	95	46
5890 W	10100 N	NEOP	Crack Seal, Seal Coat	42	41	Minor Local	0	\$5,239	98	46
11200 N	4930 W	4800 W	Crack Seal, Seal Coat, 40% Surface Patching	39	46	Maj. Local	15	\$54,724	76	46
10125 N	6800 West	E CDS	Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Minor Local	0	\$16,631	93	45
10205 N	6800 West	E CDS	Mill & Overlay (1.5 in/Add 2.0 in)	40	44	Minor Local	0	\$16,780	93	45
6150 W	10590 N	SEOP	Mill & Overlay (1.5 in)	40	43	Minor Local	0	\$15,629	94	45
Highland	Normandy N	SR 92	Mill & Overlay (2.5 in)	58	8	Maj. Collect.	100	\$135,770	40	45
Ainsley Way	Canterbury Dr. N	Canterbury Dr. S	Crack Seal, Seal Coat, 20% Surface Patching	37	49	Minor Local	0	\$37,273	84	45
Canyon View	4800 W	4670	Crack Seal, Seal Coat, 10% Surface Patching	46	32	Maj. Local	15	\$21,106	91	45
10550 N	6000 W	WEOP	Crack Seal, Seal Coat, 15% Full Depth Patching	40	43	Maj. Local	15	\$56,578	75	45
5600 W	11350 N	11200 N	Crack Seal, Seal Coat, 30% Full Depth Patching	33	59	Maj. Local	15	\$102,660	55	45
Westfield Road	N City Limit	Penn Brooke	Reconstruct (4 in HMA/10 in Base)	30	64	Maj. Local	15	\$118,307	48	44
9800 N	5600 W	Alpine	Reconstruct (4 in HMA/8 in Base)	39	45	Minor Collect.	49	\$138,569	39	44
Evergreen, Stone Crk.	EEOP	WEOP	Crack Seal, Seal Coat, 1% Surface Patching	43	39	Minor Local	0	\$9,757	96	44
6800 W	10150 North	10250 North	Crack Seal, Seal Coat	61.8	0	Minor Collect.	49	\$6,335	98	44
Vista	4800 W	Canyon View Dr.	Mill & Overlay (1.5 in)	46	32	Maj. Local	15	\$26,049	89	44

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
5710 W	11200 N	11350 N	Crack Seal, Seal Coat, 30% Full Depth Patching	33	59	Maj. Local	15	\$111,896	51	43
6800 W	10400 North	10250 North	Crack Seal, Seal Coat	61.8	0	Minor Collect.	49	\$17,348	93	43
6160 W	10010 N	10050 N	Crack Seal, Seal Coat, 5% Full Depth Patching	51	21	Maj. Local	15	\$6,559	98	42
Panorama Dr.	4800 EW	Wasatch	Crack Seal, Seal Coat	46	32	Minor Local	0	\$5,164	98	42
Town Ctr Blvd.	SR-92	10890 N	Crack Seal, Seal Coat, 10% Surface Patching	51	23	Maj. Local	15	\$14,687	94	42
Ridge Road	Mercer Hollow	Granite Flats	Crack Seal, Seal Coat, 5% Surface Patching	48	27	Maj. Local	15	\$27,365	88	42
Wasatch Dr	WEOP	SR 92	Crack Seal, Seal Coat	46	32	Minor Local	0	\$8,707	97	42
10250 N	6800 N	6700 NY	Reconstruct (3 in HMA/8 in Base)	46	33	Maj. Local	15	\$45,106	80	42
Mountain View	10020 N	10100 N	Crack Seal, Seal Coat, 5% Surface Patching	51	21	Maj. Local	15	\$10,999	96	42
Stevens Lane	Natalie Ct	6400 W	Reconstruct (3 in HMA/6 in Base)	38	48	Maj. Local	15	\$91,940	59	42
9740 N	WEOP	6000	Crack Seal, Seal Coat, 1% Full Depth Patching	45	34	Minor Local	0	\$15,136	94	42
Canterbury Court	NEOP	SEOP	Reconstruct (3 in HMA/8 in Base)	38	48	Minor Local	0	\$60,155	74	41
Sunrise Circle	Sunrise Circle	N C-D-S	Crack Seal, Seal Coat, 20% Surface Patching	45	34	Minor Local	0	\$18,848	92	41
Mountain View Circle	Panorama W	Panorama N	Crack Seal, Seal Coat	54	16	Maj. Local	15	\$6,927	98	40
10050 N	6000	Mountain View	Crack Seal, Seal Coat, 1% Surface Patching	51	21	Maj. Local	15	\$23,786	90	40
Town Center W	Coventry	Town Center Pkwy	Seal Coat	55	14	Maj. Local	15	\$3,681	99	40

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
9770 N	6630 West	6700 West	Crack Seal, Seal Coat	55	14	Maj. Local	15	\$3,996	99	40
Town Center E	10890 N	10700 N	Seal Coat	55	14	Maj. Local	15	\$4,594	99	40
Granite Flats	Bull river	Ridge	Crack Seal, Seal Coat	55	14	Maj. Local	15	\$5,447	98	39
Town Center W	10890 N	Coventry	Seal Coat	55	14	Maj. Local	15	\$5,694	98	39
Country Club Dr.	WEOP	4800 W	Crack Seal, Seal Coat, 5% Surface Patching	54	16	Maj. Local	15	\$13,198	95	39
Canterbury Pl.	Canterbury Way	6750 W	Remove & Replace Surface (3 in)	37	49	Maj. Local	15	\$111,520	51	39
Granite Flats	Ridge	Foothill Dr.	Crack Seal, Seal Coat	55	14	Maj. Local	15	\$6,353	98	39
W Dry Creek	6000 W	Bull River	Crack Seal, Seal Coat, 15% Surface Patching	49	25	Maj. Local	15	\$41,668	82	39
Ridge Road	6000 W	Granite Flats	Crack Seal, Seal Coat, 10% Surface Patching	54	15	Maj. Local	15	\$11,898	95	39
10570 N	6250 W	6400 W	Crack Seal, Seal Coat	55	14	Maj. Local	15	\$7,726	97	39
6800 W	9750 W	Madison	Crack Seal, Seal Coat, 20% Surface Patching	50	23	Maj. Local	15	\$35,907	85	39
Country Club Dr.	4800 W	Canyon Links Vista	Crack Seal, Seal Coat, 20% Full Depth Patching	46	32	Maj. Local	15	\$63,248	72	39
Bull River Road	6000 W	Dry Creek Cir.	Crack Seal, Seal Coat, 5% Surface Patching	54	15	Maj. Local	15	\$23,753	90	38
9700 N	5700 W	5650 W	Crack Seal, Seal Coat	59	6	Maj. Local	15	\$1,538	100	37
5950 W	10100 N	NEOP	Crack Seal, Seal Coat, 5% Surface Patching	53	18	Minor Local	0	\$9,421	96	36
Mountain View	10190 N	North CDS	Crack Seal, Seal Coat, 20% Surface Patching	50	23	Minor Local	0	\$24,993	89	36

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Highland Circle	Country Club Dr.	S C-D-S	Crack Seal, Seal Coat, 1% Surface Patching	54	16	Minor Local	0	\$4,287	99	36
Chamberry	Athena	6010 W	Crack Seal, Seal Coat	60	4	Maj. Local	15	\$3,659	99	36
10800 N	6000 W	5780 W	Crack Seal, Seal Coat, 10% Surface Patching	55	14	Maj. Local	15	\$33,407	86	36
Panorama Dr.	Country Club Dr.	4800 W	Crack Seal, Seal Coat, 15% Surface Patching	54	16	Maj. Local	15	\$41,868	82	36
6620 W	9600 N	9500 N	Crack Seal, Seal Coat, 1% Surface Patching	60	3	Maj. Local	15	\$6,133	98	35
Stevens lane	6589 W	Natalie Ct	Reconstruct (3 in HMA/6 in Base)	38	48	Maj. Local	15	\$141,134	37	35
9860 N	WEOP	6200 W	Crack Seal, Seal Coat, 1% Surface Patching	60	4	Maj. Local	15	\$12,993	95	35
5920 W	SR92	5870 N	Crack Seal, Seal Coat	55	14	Minor Local	0	\$6,948	98	35
11140 N	6000 W	5900 W	Crack Seal, Seal Coat, 5% Surface Patching	60	4	Maj. Local	15	\$12,390	95	35
6250 W	10550 N	NEOP	Crack Seal, Seal Coat	55	14	Minor Local	0	\$9,696	96	34
Athena	11895 N	Chamberry	Mill & Overlay (1.5 in)	60	4	Maj. Local	15	\$15,094	94	34
Alpine	Country Club E	Country Club W	Crack Seal, Seal Coat, 5% Surface Patching	61	2	Maj. Local	15	\$10,192	96	34
9500 N	6601 W	6800 W	Crack Seal, Seal Coat, 1% Surface Patching	60	3	Maj. Local	15	\$15,377	94	34
Canterbury Drive	10580 N	10400 N	Crack Seal, Seal Coat, 30% Full Depth Patching	37	49	Maj. Local	15	\$154,396	32	34
10610 N	5400 W	5300 W	Crack Seal, Seal Coat, 10% Surface Patching	61	1	Maj. Local	15	\$12,071	95	34
5400 W	10700 N	10600 N	Crack Seal, Seal Coat, 5% Surface Patching	61	1	Maj. Local	15	\$13,728	94	33

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
10600 N	5600 W	Town Center E	Crack Seal, Seal Coat, 1% Surface Patching	61	1	Maj. Local	15	\$15,729	94	33
Country Club	East Jerling	Alpine	Crack Seal, Seal Coat, 1% Surface Patching	61	2	Maj. Local	15	\$18,403	92	33
Century Heights	Beacon Hill	Park west	Crack Seal, Seal Coat, 15% Surface Patching	61	1	Maj. Local	15	\$16,826	93	33
J Legrand Adamson	Alpine	Mystic	Crack Seal, Seal Coat, 5% Full Depth Patching	55.8	12	Minor Local	0	\$17,899	93	33
10400 N	6550 W	7000 W	Mill & Overlay (1.5 in/Add 2.5 in)	40	44	Minor Collect.	49	\$224,924	0	32
Jerling	Hampton	End of circle	Crack Seal, Seal Coat	61	2	Maj. Local	15	\$26,228	89	32
10220 N	East CDS	W CDS	Crack Seal, Seal Coat, 30% Surface Patching	50	23	Minor Local	0	\$56,099	76	32
5580 W / 5520 W	9800 North	S CDS	Mill & Overlay (1.5 in/Add 2.0 in)	55	14	Minor Local	0	\$27,614	88	32
5920 W	Can. Pk.	NEOP	Crack Seal, Seal Coat, 1% Surface Patching	60	4	Minor Local	0	\$6,452	98	31
Ashby	9600 North	N C-D-S	Crack Seal, Seal Coat	60	3	Minor Local	0	\$5,414	98	31
5470 W	NCDS	10600 N	Crack Seal, Seal Coat	61	1	Minor Local	0	\$4,243	99	30
5550 W	NEOP	10600 N	Crack Seal, Seal Coat	61	1	Minor Local	0	\$4,434	99	30
5600 W	Town Center	10400 N	Mill & Overlay (1.5 in)	60	3	Maj. Local	15	\$44,254	81	30
Grenoble	Chamberry	12040 N	Mill & Overlay (1.5 in)	60	4	Minor Local	0	\$13,975	94	30
5370 W	NCDS	SCDS	Crack Seal, Seal Coat	61	1	Minor Local	0	\$7,169	97	30
Canterbury Park	6000 W	5290 W	Crack Seal, Seal Coat, 1% Surface Patching	60	4	Minor Local	0	\$15,082	94	30

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
5320 E	9910 N	NCDS	Crack Seal, Seal Coat, 25% Full Depth Patching	55	14	Minor Local	0	\$47,396	79	29
11200 N	WEOP	5300 W	Crack Seal, Seal Coat, 15% Surface Patching	58	7	Maj. Local	15	\$83,399	63	26
Knight	10100 N	Parking Lot	Crack Seal, Seal Coat, 15% Surface Patching	61	2	Minor Local	0	\$46,387	80	25
5600 W	SR 92	Town Center	Crack Seal, Seal Coat, 20% Surface Patching	62	1	Maj. Local	15	\$99,127	56	22

**Total Cost: \$4,520,137**

## Appendix E: Public Surveys

### Survey Statistics

In your opinion, what is the current condition of your street?

Condition	Quantity	Percent
Excellent	11	13%
Good	25	29%
Fair	21	24%
Poor	30	34%
Total	87	

In your opinion, what is the overall condition of Highland City streets?

Condition	Quantity	Percent
Excellent	1	1%
Good	22	25%
Fair	39	45%
Poor	27	31%
Total	89	

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Likelihood	Quantity	Percent
Very likely	26	29%
Likely	27	30%
Unsure	24	27%
Unlikely	9	10%
Very unlikely	3	3%
Total	89	

Which method would you prefer for the perpetual funding of pavement maintenance?

Perpetual Funding Method	Quantity	Percent
Road repair fee as a part of the utility bill	38	43%
Restricted use property tax increase for road repair	42	47%
Neither	9	10%
Either	1	1%
Total	89	

## Summary of Comment Sentiments

Comment	Quantity
Suggest another form of funding*	6
Suggest improvement to a specific Street**	28
Maintenance is important for saving money/in support of fees	7
Poor prioritization in past	5
Thank you	3

\*Other forms of funding suggested in surveys

Funding Suggestion	Quantity
better management of funds	5
levy a sales tax surcharge, tolling system; cost billing to residents living on specific street	1

\*\*Specific Streets Suggested for Improvement in Surveys

Street	Quantity
6000 W; improve, widen with curb and gutter	4
Country Club Drive	2
Stevens Lane	15
Kaitlyn Lane	2
6800 W; several open chuckholes	1
9850 N; broken water cover	1
Highland Blvd; all streets should have nicely landscaped islands and sidewalks	1
4800 W - North of 11000 N	1
10550 North	1

**Internet Surveys**

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
1	Hidden Pond Drive	Good	Good	Unsure	Road repair fee as a part of the utility bill	
2	5400 west	Excellent	Excellent	Likely	Restricted use property tax increase for road repair	
3	Woodleaf	Good	Good	Unsure	Road repair fee as a part of the utility bill	Increasing property tax is the most asinine thing ever. Don't even consider it.
4	6620 W	Good	Poor	Likely	Restricted use property tax increase for road repair	
5	6530 w.	Excellent	Good	Unlikely	Road repair fee as a part of the utility bill	I'd rather unnecessary programs were defunded in order to pay for road maintenance. It is already quite expensive to live in Highland due to property tax, open space fee, etc.
6	5730 w	Fair	Poor	Likely	Restricted use property tax increase for road repair	Please level up the man holes! They are half of the problem. Widen and replace 1200 e between Smiths toward AF Lowes. Thanks
7	Athena Drive	Poor	Poor	Very likely	Road repair fee as a part of the utility bill	I don't really care how the funds are raised to repair and maintain the city roads. All I care about is that they are repaired and maintained. It is something I am eager to help pay for
8	VICTORIA Lane	Good	Fair	Unsure	Restricted use property tax increase for road repair	

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
9	Avery	Good	Fair	Unsure	Restricted use property tax increase for road repair	Why only two choices. What about better management of current funds.
10	Venice Drive	Good	Fair	Likely	Restricted use property tax increase for road repair	
11	Riverside Ln.	Excellent	Good	Unsure	Road repair fee as a part of the utility bill	We would love to see additional improvements to 6000 W.
12	Manor Drive	Good	Good	Very likely	Restricted use property tax increase for road repair	
13	5500 W	Good	Fair	Unsure	Restricted use property tax increase for road repair	The last attempt to raise funds was easily defeated when it was put to referendum. What will be different this time?
14	Treasure Cove	Excellent	Fair	Likely	Road repair fee as a part of the utility bill	It would be best to place priority on which roads are repaired using the amount of traffic and condition of the road. The costs to citizens should remain low with road repairs spread out over several years.
15	Bull River Rd	Good	Poor	Very likely	Road repair fee as a part of the utility bill	Our roads are so bad, especially roads like 6000 West, heading south. Feel like i need to get my car aligned more often!
16	Bull River Rd	Good	Good	Unlikely	Restricted use property tax increase for road repair	
17	6830 West	Good	Fair	Very likely	Road repair fee as a part of the utility bill	

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
18	Avonmore	Fair	Fair	Very unlikely	Restricted use property tax increase for road repair	This is a bogus survey. There is no box to check to indicate I don't want tax/fee increase. It appears as though the decision to impose taxes and/or fees is already decided and this survey is just political cover to show the people agree since the only choice is how the increase is instituted.
19	Westfield Cove	Good	Fair	Likely	Road repair fee as a part of the utility bill	
20	Mountain view circle	Poor	Good	Unsure	Road repair fee as a part of the utility bill	
21	6150 W	Good	Good	Unsure	Road repair fee as a part of the utility bill	
22	Avery Ave	Excellent	Poor	Very likely	Road repair fee as a part of the utility bill	
23	Valley View Drive	Fair	Poor	Very likely	Restricted use property tax increase for road repair	
24	5870 West	Good	Poor	Likely	Restricted use property tax increase for road repair	I am not sure why roads cannot be widen without curb, gutter and sidewalk? There needs to be a way to take care of all of this on the major roads. I.e. 6000 west. Thank you for paving the 4 way stop area.
25	W. Burgh Way	Excellent	Fair	Very likely	Restricted use property tax increase for road repair	The longer we defer repairing and maintaining our streets only increases the cost to do so.
26	6670 W	Excellent	Fair	Unlikely	Road repair fee as a part of the utility bill	We are willing to spend a little on road maintenance, but I do not support new road construction. We absolutely do not want the

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
						proposed road connecting the Alpine Highway to Madison Ave. This area is zoned as a residential area and should not be a main artery for people living in Cedar Hills to get to Costco. The plan is foolish considering we already have a constructed road (9600 N) that will be a mere 200 yards away from the proposed new construction. We moved to Highland for the open spaces and quiet neighborhoods and do not want to worry about our children crossing a busy street by our house.
27	10050 N	Fair	Poor	Likely	Road repair fee as a part of the utility bill	Do not waste time or money using chip and seal. The sides of the road that do not get compacted results in many holes, leaving it more dangerous for cycling. Go take a look at Alpine's main road near their city park for an example of this.
28	6084 west	Good	Poor	Unsure	Restricted use property tax increase for road repair	
29	9600 North	Poor	Fair	Unsure		Support depends of planning and priorities. You didn't mention other sources of revenue for road maintenance. Could you levie a sales tax surcharge, a tolling system, and direct cost billing to residents on basically what constitutes a private street, e.g.. non commuter arterials
30	Mountainview Circle	Fair	Good	Unlikely		You raised utilities 13% already, more taxes? Individual incomes are basically flat.

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
31	10830 N	Fair	Good	Likely	Restricted use property tax increase for road repair	I know we are behind the 8 ball on road maintenance and some catch up efforts are needed. I would like to see a solid plan for long term maintenance/replacement of infrastructure in Highland that is not subject to irresponsible manipulation by each new administration. This includes roads, parks, cemetery, trails, green space, etc.
32	Skyline Drive North	Fair	Poor	Likely	Road repair fee as a part of the utility bill	
33	East Jerling Drive	Poor	Fair	Unsure	Road repair fee as a part of the utility bill	The entrance to our subdivision on Country Club Drive is literally falling apart. There are a lot of pot holes that are not filled properly. The maintenance crew will put loose asphalt in the holes and they will be gone the next day. This is a major road for over 100 homes and has constant traffic to and from the Alpine Country Club
34	Stevens Lane	Poor	Good	Very likely	Restricted use property tax increase for road repair	Steven's Lane and Kaitlyn Lane residents have waited year after year for their turn at receiving allocation for road repair budget. It is as a boiling point with neighbors. Please address Steven's Lane and Kaitlyn Lane this year.
35	Steven's Lane (10900 No)	Poor	Good	Very likely	Restricted use property tax increase for road repair	Our street is really not good. It has been considered year after year for repairs but we some how get missed year after year. I have seen some streets not near as bad as ours get repaved. It feels like I am out 4-wheeling as I

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
						drive down my street trying hard to miss all the bumps but it's near impossible.
36	10770 N	Fair	Poor	Unsure		I have to drive down Stevens Ln which is a train wreck to get to my house. That is one road in dyer need if repair.
37	Stevens Lane	Poor	Fair	Likely	Road repair fee as a part of the utility bill	Our street has been in great need of repairs for years. Please do something at long last.
38	Stevens lane	Poor	Poor	Very unlikely	Road repair fee as a part of the utility bill	Stevens lane has been pushed back year after year, and has never been done. The road is in horrible condition.
39	Steven`s Lane	Poor	Poor	Very unlikely	Restricted use property tax increase for road repair	Poor Prioritization of road projects and your desire to jack our taxes is widely known and discussed here in Highland. Everytime a newsletter comes out now you try and float a tax or ""fee"" idea by us. I have lived here for 12 plus years and my street has never been repaired or paved. It is horseshoe shaped and resembles a roller coaster to drive on...yet down 6400 W you just repaved 3 of the newest culdesacs in the area???? Let's take a look at saving money for a change! Like selling one of your several city buildings, or wasting anymore on the Highland swing days. Lets prioritize our main streets, Instead of city trucks driving around aimlessly put tools in the back and tell them to fix things or pick up trash rather than drive around. Also quit hiring these idiotic consultants to tell you what you want to hear or what common sense could tell you. Government spending has got to stop and it begins locally!

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
40	10930 North	Good	Good	Very likely	Road repair fee as a part of the utility bill	
41	10760 n	Poor	Good	Likely	Road repair fee as a part of the utility bill	I see roads much better off than ours getting replaced all the time and wonder why ours hasn't been addressed
42	5870 W	Fair	Fair	Likely	Restricted use property tax increase for road repair	Several Roads that are sorely in need of repair. However, do not recommend repairing some roads until development is complete on those roads.
43	Stevens Lane	Poor	Poor	Unlikely	Restricted use property tax increase for road repair	Our street is in extremely bad shape. We have been on the list for repair a very long time. I feel we are definitely not a priority. Come drive down our street and you will agree there is a huge need for repair. Anyone who doesn't live on the street but comes to visit is appalled. I feel we need to cut back on other expenditures and put the money towards immediate needs like our road repair.
44	Stevens lane	Poor	Poor	Likely	Restricted use property tax increase for road repair	We need to manage our current funds better so we can manage the repairs more effectively. We mismanage our school funds and I feel if we did that we could use some of that to use for roads.
45	Stevens Lane	Poor	Fair	Unsure	Road repair fee as a part of the utility bill	It is ridiculous that we have had to deal with sunken holes clear across the road for so long! A year or two ago a culdesac off of Stevens Lane was repaired.....why didn't they fix Stevens Lane when all the equipment and men were right here? It would have saved so much time and money. We have been passed over too many

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
						times. Come drive it for yourself and realize how many times we have to go over this sunken road every time we go any where!
46	Stevens	Poor	Good	Likely	Restricted use property tax increase for road repair	
47	Stevens Lane	Poor	Good	Unsure	Road repair fee as a part of the utility bill	The condition of Steven's Lane is subpar. It needs to be repaired/resurfaced and this street has been pushed back year after year on the allocation of road reconstruction funds. Please take into consideration that Steven's Lane does need to be resurfaced as soon as possible.
48	Stevens lane	Poor	Poor	Very likely	Road repair fee as a part of the utility bill	Terrible roads in highland. They have not been kept up
49	10760 North	Poor	Fair	Likely	Road repair fee as a part of the utility bill	
50	Stevens lane (10900 north)	Poor	Poor	Likely	Restricted use property tax increase for road repair	Our street is in terrible condition and has not been repaved in years. It is in desperate need of attention and should be repaved this year v
51	Steven's Lane	Poor	Fair	Unsure	Restricted use property tax increase for road repair	
52	Natalie Court	Good	Poor	Unsure	Restricted use property tax increase for road repair	We have been waiting for years for Stevens Lane to be repaired. Why does this keep getting pushed back?
53	9800 North	Excellent	Poor	Very likely	Road repair fee as a part of the utility bill	If you maintain the roadway - it will last years. If you let them go - Then you have to rebuild which costs 10X dollars.

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
54	Stevens Lane	Poor	Fair	Unlikely	Road repair fee as a part of the utility bill	Stevens Lane haas been pushes back on the schedule too long. The city needs to get the work done as we feel that are road dollars are being wisely and fairly appropriated.
55	6100 West	Fair	Fair	Likely	Road repair fee as a part of the utility bill	I put the overall road condition as ""fair"", but it really varies. There are some roads that are terrible and have been neglected for a long time and thus the maintenance/replacement costs are going to be a lot higher.
56	9850 north	Fair	Poor	Very likely	Restricted use property tax increase for road repair	
57	Kaitlyn lane off of Stevens lane	Poor	Good	Unlikely	Restricted use property tax increase for road repair	Stevens lane is very poor with Huge bumps. I hope this street is looked at to be fixed or repaved
58	Victoria Lane	Good	Fair	Likely	Road repair fee as a part of the utility bill	These issues seem to be bogged down in constant discussion and evaluation. We need to take more aggressive action now. It costs money now, but costs even more money later.
59	6530 W	Good	Poor	Very likely	Restricted use property tax increase for road repair	
60	Kaitlyn	Poor	Fair	Unsure		our road has been in disrepair for the past 18 years with pot holes, dips in the road and cracks everywhere - it really need help. Thank you
61	5223 Hampton Court	Fair	Fair	Likely	Restricted use property tax increase for road repair	Country Club Drive is in dire need of repair

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
62	Cyprus Dr	Fair	Fair	Likely	Restricted use property tax increase for road repair	Thank you for addressing our road maintenance problem.
63	Andrew Drive (5830 West)	Fair	Fair	Very likely	Restricted use property tax increase for road repair	I know that many residents may feel uncomfortable about raised taxes or ""fees"" but I feel such is the price for reliable infrastructure and am happy to consider such methods to help improve the quality of roads in our city.
64	9650 N	Fair	Fair	Very likely	Road repair fee as a part of the utility bill	6800 West has several open chuck holes. 9850 N has a broken water cover in front of Roy Shulburgs house, in the street.
65	Stevens' Lane	Good	Fair	Unsure	Restricted use property tax increase for road repair	
66	Saltaire	Excellent	Fair	Likely	Road repair fee as a part of the utility bill	Highland BLVD needs vast improvement. All streets should have nicely landscaped islands and sidewalk islands as well. Also, street sign post and street light post should all be painted. Not to mention we need more street lights. Neighborhoods and main roads are too dark.
67	11140 north	Fair	Poor	Likely	Restricted use property tax increase for road repair	
68	Coventry Ct	Good	Good	Unsure	Restricted use property tax increase for road repair	As you know, judicious maintenance of roads is similar to judicious maintenance on our homes-- too late is very costly, but so is maintenance applied sooner than is necessary. One of your challenges is to educate on why specific

#	On which street do you live? Please only include the street.	In your opinion, what is the current condition of your street?	In your opinion, what is the overall condition of Highland City streets?	How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?	Which method would you prefer for the perpetual funding of pavement maintenance?	Please give us any additional comments or feedback.
						stretches of city roads need maintenance. Residents will be more inclined to support funding for that stretch than for a large pot of money to cover ""road maintenance"".
69	stevens lane (10900 N)	Poor	Poor	Very likely	Road repair fee as a part of the utility bill	The cause of the poor road conditions on my street appear to be caused by poor or improper workmanship from the contractors that developed the area/subdivision. Road sunken in or settled where sewer laterals cross the road
70	Westfield Cove Dr	Good	Poor	Very likely	Road repair fee as a part of the utility bill	6000 West is awful. It also needs shoulders, bike lanes, sidewalks, etc. Westfield Road (in Highland) is also pretty bad before it turns north into Alpine.
71	Stevens Lane	Poor	Good	Likely	Road repair fee as a part of the utility bill	Please drive on our road so you will see how bad it is.
72	10205 N	Fair	Fair	Unsure	Road repair fee as a part of the utility bill	
73	6000 W.	Good	Good	Unsure		
74	10500 north	Good	Poor	Very likely	Road repair fee as a part of the utility bill	

**Open House Surveys****Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (optional)

On which street do you live? 4800 W.

In your opinion, what is the current condition of your street?

Poor   Fair   Good   Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor   Fair   Good   Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1   2   3   4   5

Which method would you prefer for the perpetual funding of pavement maintenance?

- 1 - Road repair as part of the utility bill.
- 2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

4800 West Needs fixed  
North of 11000 No. Road is still  
sinking

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 6000 West (10900 N)

In your opinion, what is the current condition of your street?

Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor  Fair  Good  Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1    2    3    4     5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

 2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey**

**Thursday June 23<sup>rd</sup>, 2016**

Name:

{Optional}

On which street do you live? Jonathon Rd.

In your opinion, what is the current condition of your street?

Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor  Fair  Good  Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1    2    3     4    5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 4862 TOWNEHOUR RD OR 11300 N.

In your opinion, what is the current condition of your street?

 Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

 Poor  Fair  Good  Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1    2    3    4    5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

 2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 1300 North

In your opinion, what is the current condition of your street?

 Poor    Fair    Good    Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

 Poor    Fair    Good    Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1   2   3   4    5

Which method would you prefer for the perpetual funding of pavement maintenance?

- 1 - Road repair as part of the utility bill.
- 2 - Restricted use property tax for road repair.

No Preference

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey**Thursday June 23<sup>rd</sup>, 2016

Name: \_\_\_\_\_ (Optional)

On which street do you live? N. Canterbury Place

In your opinion, what is the current condition of your street?

 Very Poor   Fair   Good   Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

 Poor   Fair   Good   Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1   2   3   4    5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

 2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

With the decrease in the amount of project costs proposed it appears that a property tax increase would be the way to pay for a bond the next few years and expedite repairs especially reconstruction where it is now desperately needed, and will worse in a

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 6000 West

In your opinion, what is the current condition of your street?

Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor  Fair  Good  Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1    2    3     4    5

Which method would you prefer for the perpetual funding of pavement maintenance?

- 1 – Road repair as part of the utility bill.
- 2 – Restricted use property tax for road repair.

COMMENTS: (Use back of page)

Both the utility bill and property taxes are sufficiently high for a retired person living on a fixed income.

**Highland City Road Reconstruction Master Plan Survey**

**Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 6000 W

In your opinion, what is the current condition of your street?

Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor  Fair  Good  Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1  2  3  4  5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey**

**Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ {Optional}

On which street do you live? Spring Hollow Ln

In your opinion, what is the current condition of your street?

Poor Fair Good Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor Fair Good Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1 2 3 4 5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

Consultant has done a very Good Job.

Need to require permits for landscape contractors  
to use the street to dump their materials

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? \_\_\_\_\_ *6005 W*

In your opinion, what is the current condition of your street?

Poor Fair  Good Excellent*The Northern part, south of us not good  
Before repave*In your opinion, what is the overall condition of Highland City streets: (Please remember  
Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)Poor Fair  Good ExcellentHow likely are you to support the City's effort to raise additional funds for ongoing  
pavement maintenance?

Please indicate with 5 being the most likely to support.

1 2  3 4 5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 6000 West

In your opinion, what is the current condition of your street?

Poor Fair Good **Excellent**

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor **Fair** Good Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1 2 3 4 **5**

Which method would you prefer for the perpetual funding of pavement maintenance?

**1** – Road repair as part of the utility bill.  
2 – Restricted use property tax for road repair.

COMMENTS: (Use back of page)

*Sales tax 1/4 cent that wasn't passed-*

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 10550 North 6719 west

In your opinion, what is the current condition of your street?

 Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

 Poor  Fair  Good  Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1    2    3    4    5

Which method would you prefer for the perpetual funding of pavement maintenance?

- 1 – Road repair as part of the utility bill.
- 2 – Restricted use property tax for road repair.

COMMENTS: (Use back of page)

I do not approve of Highland keep raising the taxes on everything - the road in front of my house ~~has~~ has a problem with the pipe for the irrigation water. Highland City did not repair it right. I stood out & watched they only poured cement & the wheel barrow to fix it. To make a light repair on 10550 North still has the problem. Irrigation water for a long time plus our irrigation water & it is a steady flow down the street. I disapprove of new sub. long page  
Hunting Gameth 801-756-3194

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? 9960 N

In your opinion, what is the current condition of your street?

Poor  Fair  Good  Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor  Fair  Good  Excellent*this is an average - some are poor - some excellent*

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1    2    3    4     5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.  
 2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

I'd rather see the roads be "fixed" sooner than later - even 2021 is not soon.

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016****Name:****(Optional)**

On which street do you live?

RIDGE ROAD

In your opinion, what is the current condition of your street?

Poor Fair Good Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

Poor Fair Good Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1 2 3 4 5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 - Road repair as part of the utility bill.

2 - Restricted use property tax for road repair.

COMMENTS: (Use back of page)

**Highland City Road Reconstruction Master Plan Survey****Thursday June 23<sup>rd</sup>, 2016**

Name: \_\_\_\_\_ (Optional)

On which street do you live? Tamarack Dr.In your opinion, what is the current condition of your street? N/A  
Poor Fair Good ExcellentIn your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)  
Poor Fair Good Excellent

How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?

Please indicate with 5 being the most likely to support.

1 2 3 4 5

Which method would you prefer for the perpetual funding of pavement maintenance?

- 1 -- Road repair as part of the utility bill.
- 2 -- Restricted use property tax for road repair.

COMMENTS: (Use back of page)

I would prefer a temporary increase until the current bond is paid for, then to have an reassessment and assignment so the burden is lessened on the people.

Highland City Road Reconstruction Master Plan Survey

Thursday June 23<sup>rd</sup>, 2016

Name: \_\_\_\_\_ (Optional)

In your opinion, what is the current condition of your street? **N/A**  
Poor Fair Good Excellent

In your opinion, what is the overall condition of Highland City streets: (Please remember Alpine Highway, North County Boulevard, and Timpanogos Highway are not City streets.)

**How likely are you to support the City's effort to raise additional funds for ongoing pavement maintenance?**

Please indicate with 5 being the most likely to support.

1 2 3 4 5

Which method would you prefer for the perpetual funding of pavement maintenance?

1 – Road repair as part of the utility bill. - Separate line item  
2 – Restricted use property tax for road repair.

Once it's paid, what will you do

**COMMENTS: (Use back of page)**

I want our payments to do DOWN

once this City bill. is paid for.

DO NOT earmark that for other things.

Other cities twice our size don't have this -- it's already done, but those funds should come available once the debt is paid.

## **Appendix F: TAC Meeting Minutes**

**TAC Meeting Minutes**  
**Highland City Road Reconstruction Master Plan**  
**January 28, 2016 at 9:00am**

**Attendance:**

Name	Role	Phone	Email
Dennis LeBaron	City Council	801-318-9724	<a href="mailto:dennis.lebaron@gmail.com">dennis.lebaron@gmail.com</a>
Rod Mann	City Council	801-318-7141	<a href="mailto:mannrw@gmail.com">mannrw@gmail.com</a>
Nathan Crane	City Administrator	801-772-4515	<a href="mailto:ncrane@highlandcity.org">ncrane@highlandcity.org</a>
Ty Christensen	City Streets Superintendent	801-420-3449	<a href="mailto:tyc@highlandcity.org">tyc@highlandcity.org</a>
Justin Parduhn	City O&M Director	801-420-0547	<a href="mailto:justin@highlandcity.org">justin@highlandcity.org</a>
Joann Scott	City Assistant	801-772-4515	<a href="mailto:joann@highlandcity.org">joann@highlandcity.org</a>
Ed (Devirl) Barfuss	Resident Representative	801-404-2805	<a href="mailto:edb@panventures.com">edb@panventures.com</a>
Tim Heyrend	Resident – Civil Engineer	801-376-6216	<a href="mailto:theyrend@gmail.com">theyrend@gmail.com</a>
Larry Becknell	PEPG Project Manager	801-712-0715	<a href="mailto:larry@pepg.net">larry@pepg.net</a>
Ryan Kitchen	PEPG Project Engineer	801-870-8814	<a href="mailto:ryan@pepg.net">ryan@pepg.net</a>
Mike Russell	PEPG Project Engineer	801-712-7396	<a href="mailto:mike@pepg.net">mike@pepg.net</a>
Tim Biel	CME Pavement Engineer	801-870-6740	<a href="mailto:tim@cmetg.com">tim@cmetg.com</a>
Mike VanMilligen	CME Field Manager	801-440-2267	<a href="mailto:mike@cmetg.com">mike@cmetg.com</a>
Charlie Trujillo	Consultant Project Principal	801-558-3572	<a href="mailto:charlie@cmtlaboratories.com">charlie@cmtlaboratories.com</a>

**I. Action Items Follow-up**

A. N/A

**II. Discussion Items**

A. TAC introductions, sign-in, and roles (see above).

B. Goals and objectives:

1. Agenda and minutes for each meeting.
2. Maintenance of quality, budget, and schedule. Nathan stressed the importance of doing the master plan right even if it takes longer.
3. Partnering is key to making this project successful (Larry's walnut example). All participants need to be responsive and should feel like they have ownership in the project.
4. Public education and involvement is important to help residents understand the goals, objectives, and implications. The city typically has open houses in May. We may present the master plan at that time if it is ready.
5. PEPG aims to reduce the estimated reconstruction costs by further analyzing the roads and presenting more cost-affordable solutions. Councilman Mann asked about potential cost savings. PEPG hopes to reduce the \$16M estimate by \$2M to \$5M, which is only an educated guess at this point. The core that CME took in 6000 West is a good example of potential cost savings.
6. Tim H. recommended that the city incorporate a PCI goal. Commissioner Mann mentioned that the city would need more information to make an informed decision. PEPG plans to provide estimated costs and time lines within the scope of this study (low C, D, & F roads) to help with this decision. However, total maintenance costs at different PCI goals would require a Pavement Management Plan for all roads, which is not within the scope of this project. Tim B. mentioned that a typical PCI goal is a bell curve (ie. 20%-40% in A and B, about 40% in C and 20%-40% in D and F). He also mentioned that the public generally judges roads based on smoothness. Mike mentioned that bike riders are typically the most critical of cracks in roads. Tim B. believes that Highland City is taking a proactive approach with their road maintenance and planning compared to other cities. Tim H. mentioned that West Jordan City has a PCI goal.

C. Scope:

1. Project communication includes monthly meetings, city council work sessions, and a public open house.
2. PEPG will collect existing information related to the project (studies, right-of-way maps, road classifications, etc.)
3. CME will core the D, F, and lower C roads (4" cores). Road base tests may also be conducted in various locations as needed. The C roads include those with PCI ratings between 55 and 61.9. Tim H. asked CME to include "control" cores in good areas for comparison. Tim B. did not see an appreciable amount of value in this, but consented to do these extra cores. Roads will be categorized within 19 different stress types.

4. PEPG will maintain a digital project manual. This information will likely become a part of the Master Plan Appendix. It will include meeting minutes, notes, and other pertinent information for the project.
5. PEPG will coordinate and provide a list of prioritization strategies for the TAC to discuss/review.
6. PEPG and CME will put together a master list of road segments. Tim B. estimated that the segments would typically be at least 1/8 mile in length except at stub roads and cul-de-sacs. Shorter lengths don't tend to be cost effective for construction.
7. PEPG and CME will prepare a recommended cross section for each road segment. The cross section will detail how the segment is recommended to be rehabilitated or reconstructed.
8. PEPG will provide cost estimates for the recommended repairs for each road segment.
9. PEPG and CME will provide a time line for each road segment that describes the estimated time until it will fall into the next repair category with an associated increased cost.
10. PEPG will coordinate and finalize the prioritization list based on the TAC's prioritization matrix.
11. PEPG will prepare a complete draft of the project manual and master plan.
12. PEPG will conduct a public open house. This will aid us in obtaining public opinions relating to goals and implications. Joann recommended a citizen survey.
13. PEPG will coordinate and finalize the project manual and master plan to be approved and adopted by the city council.
14. As previously mentioned, this scope does not include a Pavement Management Plan. However, the information from this study and its associated Reconstruction Master Plan for the low C, D, & F roads will aid in developing such a plan.

D. Schedule: As mentioned previously, developing a quality and useful master plan is more important than meeting an exact schedule. We estimated 7 to 8 weeks for coring the roads, depending on weather. Our preliminary schedule showed a completion around the end of June.

E. Meeting Minutes: We will plan to record future meetings for reference if needed. PEPG will provide this service.

F. Meeting Time: Tim H. recommended moving the meeting time to 7:30am.

### **III. New Action Items**

- A. Ed asked PEPG to bring an example of a project manual for the next meeting.
- B. Councilman Mann requested electronic copies of all the items from this meeting.
- C. Joann asked Larry to send her the slide about pavement management costs related to PCI rating and time.
- D. PEPG will bring a prioritization matrix for next meeting.
- E. PEPG to bring an audio recorder for future meetings.
- F. CME to begin coring the roads.

### **IV. Next Meeting February 25, 2016 at 7:30am**

**TAC Meeting Agenda**  
**Highland City Road Reconstruction Master Plan**  
**February 25, 2016 at 7:30am**

**Attendance:**

Present?	Name	Role	Phone	Email
X	Dennis LeBaron	City Council	801-318-9724	<a href="mailto:dennis.lebaron@gmail.com">dennis.lebaron@gmail.com</a>
	Rod Mann	City Council	801-318-7141	<a href="mailto:mannrw@gmail.com">mannrw@gmail.com</a>
X	Nathan Crane	City Administrator	801-772-4515	<a href="mailto:ncrane@highlandcity.org">ncrane@highlandcity.org</a>
X	Ty Christensen	City Streets Superintendent	801-420-3449	<a href="mailto:tvc@highlandcity.org">tvc@highlandcity.org</a>
X	Justin Parduhn	City O&M Director	801-420-0547	<a href="mailto:justin@highlandcity.org">justin@highlandcity.org</a>
	Joann Scott	City Assistant	801-772-4515	<a href="mailto:joann@highlandcity.org">joann@highlandcity.org</a>
	Ed (Devirl) Barfuss	Resident Representative	801-404-2805	<a href="mailto:edb@panventures.com">edb@panventures.com</a>
X	Tim Heyrend	Resident – Civil Engineer	801-376-6216	<a href="mailto:theyrend@gmail.com">theyrend@gmail.com</a>
X	Dennis Anderson	Resident – Retired C.E.	702-340-1804	<a href="mailto:dennis@andersonpc.com">dennis@andersonpc.com</a>
X	Jeff Clyde	Resident	801-372-1647	<a href="mailto:jclyde@wwclyde.net">jclyde@wwclyde.net</a>
X	Lowell Nelson	Resident	801-903-9587	<a href="mailto:lowellcallnelson@gmail.com">lowellcallnelson@gmail.com</a>
X	Larry Becknell	PEPG Project Manager	801-712-0715	<a href="mailto:larry@pepg.net">larry@pepg.net</a>
X	Ryan Kitchen	PEPG Project Engineer	801-870-8814	<a href="mailto:ryan@pepg.net">ryan@pepg.net</a>
X	Mike Russell	PEPG Project Engineer	801-712-7396	<a href="mailto:mike@pepg.net">mike@pepg.net</a>
X	Tim Biel	CME Pavement Engineer	801-870-6740	<a href="mailto:tim@cmetg.com">tim@cmetg.com</a>
	Mike VanMilligen	CME Field Manager	801-440-2267	<a href="mailto:mike@cmetg.com">mike@cmetg.com</a>
	Charlie Trujillo	Consultant Project Principal	801-558-3572	<a href="mailto:charlie@cmlaboratories.com">charlie@cmlaboratories.com</a>

**I. Action Items Follow-up**

- A. Ed asked PEPG to bring an example of a project manual for the next meeting. Larry passed around a Transportation Master Plan that he put together in Murray. The appendix was a good representation of a project manual.
- B. Councilman Mann requested electronic copies of all the items from this meeting. These were sent via email. We will continue to email all our files related to each meeting.
- C. Joann asked Larry to send her the slide about pavement management costs related to PCI rating and time. Larry emailed this file to Joann.
- D. PEPG will bring a prioritization matrix for next meeting. See the discussion below.
- E. PEPG to bring an audio recorder for future meetings. Larry found a cell phone app that worked better than individual recorders. It was used in this meeting.
- F. CME to begin coring the roads. See the discussion below.

**II. Discussion Items**

- A. Update on coring
  - 1. CME broke out the C-, D, and F roads into 179 segments and plans 360 cores. They have marked 34 of these segments for coring to date.
  - 2. CME found some segments that were incorrectly classified. Segment 166 and segment 80 were classified as D and should be A, and 11200 North from Sampson to 4800 West was not on the list to core (currently rated as A, B, or C+) but should be a D or F.
  - 3. We discussed road ownership. Nathan said that CME should not core private roads and provided a map indicating ownership.
  - 4. Tim B. found some frost heaving on the south side of segments 162 to 164 where snow was piled from plows.
  - 5. Only one segment had structural failure. All other cracks were environmental in nature.
  - 6. CME will continue coring about 15 to 20 cores per day.
- B. Prioritization strategies
  - 1. Mike introduced three main categories for prioritization – Pavement Condition Index, Cost of Rehabilitation, and ADT/Road Classification. All three are measurable and can be considered on an objective basis.
  - 2. We participated in an exercise to get each person's opinion regarding how they would prioritize the roads. There was some discussion regarding the difficulty to place one category higher than another. Tim H. expressed his opinion about the importance of ADT/classification because these roads are used more often.

3. Other considerations include pavement life cycle factor, school zones, complaints, future development/construction, and environmental justice. These items are more subjective and may need to be analyzed after an initial ranking from the objective categories.
- C. Manual outline
  1. Ryan discussed the items that would be included in the Project Manual – TAC meeting minutes, map of functional classifications, prioritization matrix and information, coring data, existing PCI data, recommended rehabilitation and reconstruction strategies with cross sections, open house information gathered, council working session minutes, and final council presentation and adoption minutes.
  2. These items may be included as the appendix to the main report.
- D. We will wait another month before presenting to the city council in their work session.

### **III. New Action Items**

- A. CME to continue coring the roads.
- B. PEPG to adjust the prioritization matrix based on this meeting.

### **IV. Next Meeting March 24, 2016 at 7:30am**

**TAC Meeting Minutes**  
**Highland City Road Reconstruction Master Plan**  
**March 24, 2016 at 7:30am**

**Attendance:**

Present?	Name	Role	Phone	Email
X	Dennis LeBaron	City Council	801-318-9724	<a href="mailto:dennis.lebaron@gmail.com">dennis.lebaron@gmail.com</a>
X	Rod Mann	City Council	801-318-7141	<a href="mailto:mannrw@gmail.com">mannrw@gmail.com</a>
X	Nathan Crane	City Administrator	801-772-4515	<a href="mailto:ncrane@highlandcity.org">ncrane@highlandcity.org</a>
X	Ty Christensen	City Streets Superintendent	801-420-3449	<a href="mailto:tvc@highlandcity.org">tvc@highlandcity.org</a>
	Justin Parduhn	City O&M Director	801-420-0547	<a href="mailto:justin@highlandcity.org">justin@highlandcity.org</a>
X	Joann Scott	City Assistant	801-772-4515	<a href="mailto:joann@highlandcity.org">joann@highlandcity.org</a>
X	Ed (Devirl) Barfuss	Resident Representative	801-404-2805	<a href="mailto:edb@panventures.com">edb@panventures.com</a>
X	Tim Heyrend	Resident – Civil Engineer	801-376-6216	<a href="mailto:theyrend@gmail.com">theyrend@gmail.com</a>
X	Dennis Anderson	Resident – Retired C.E.	702-340-1804	<a href="mailto:dennis@andersonpc.com">dennis@andersonpc.com</a>
	Jeff Clyde	Resident	801-372-1647	<a href="mailto:jclyde@wwclyde.net">jclyde@wwclyde.net</a>
	Lowell Nelson	Resident	801-903-9587	<a href="mailto:lowellcallnelson@gmail.com">lowellcallnelson@gmail.com</a>
X	Larry Becknell	PEPG Project Manager	801-712-0715	<a href="mailto:larry@pepg.net">larry@pepg.net</a>
X	Ryan Kitchen	PEPG Project Engineer	801-870-8814	<a href="mailto:ryan@pepg.net">ryan@pepg.net</a>
	Mike Russell	PEPG Project Engineer	801-712-7396	<a href="mailto:mike@pepg.net">mike@pepg.net</a>
	Tim Biel	CME Pavement Engineer	801-870-6740	<a href="mailto:tim@cmetg.com">tim@cmetg.com</a>
X	Mike VanMilligen	CME Field Manager	801-440-2267	<a href="mailto:mike@cmetg.com">mike@cmetg.com</a>
	Charlie Trujillo	Consultant Project Principal	801-558-3572	<a href="mailto:charlie@cmlaboratories.com">charlie@cmlaboratories.com</a>

**I. Action Items Follow-up**

- A. CME to continue coring the roads (discussion below).
- B. PEPG to adjust the prioritization matrix based on this meeting (discussion below).

**II. Discussion Items**

- A. Update on coring
  - 1. About 140 out of 190 segments marked, about 110 segments cored.
  - 2. About 85% of the roads do not need to be reconstructed. Crack seals, seal coats, and patches are more feasible options. Some pictures of example roads were presented. This will likely save more money than original estimated, which was a cautious estimate. The original estimate was about \$16 M.
  - 3. Only 18 of the 140 roads show significant structural failures. The Canterbury Subdivision appears to have a very soft subgrade (CBR of 3 compared to 10 in other places).
  - 4. Some segments were classified as D and F where only a small portion is really in that category. These can be rehabilitated with some patching and then crack sealing and seal coating.
  - 5. Additionally, 22 roads were reclassified from D or F to A or B. On the flip side, CME has found some segments classified as A or B that should be C-, D, or F. We will include these roads in our analysis and update the PCIs.
  - 6. Some examples of roads that were effectively crack sealed and seal coated were shown.
- B. Prioritization strategies
  - 1. The final prioritization breakdown was 40% for PCI, 30% for Cost and 30% for Classification (PEPG's initial estimation was 45% for PCI, 35% for Cost, and 20% for Classification). This is a good breakdown and considers the input from the TAC. PCI, Cost, and Classification are items that can be prioritized on an objective basis.
  - 2. Dennis asked about how to assign numbers for Road Classification. PEPG will look into this further and present a strategy for the next meeting.
  - 3. PEPG/CME will provide a life cycle analysis for roads that will soon be falling into the next repair category. After the initial prioritization, this will be used to individually adjust the prioritized list to save on long term costs.

**III. New Action Items**

- A. CME to finish coring the roads.
- B. PEPG/CME to provide rehabilitation details and cross sections (11 x 17 sheets). These will be presented graphically on a city map with color coded road segments that relate to which repair strategy is recommended, similar to the PCI map.

- C. PEPG to provide a strategy for assigning numeric values to different road classifications.
- D. PEPG to begin working on cost estimates and a prioritized list.
- E. PEPG to bring a report outline.
- F. Present progress to City Council in a work session. Tentative dates are April 19 and 26. PEPG will coordinate this with Nathan.

**IV. Next Meeting is likely the Work Session on April 19 or 26, 2016 at 6:00pm**

**TAC Meeting Minutes**  
**Highland City Road Reconstruction Master Plan**  
**May 5, 2016 at 7:30am**

**Attendance:**

Present?	Name	Role	Phone	Email
X	Dennis LeBaron	City Council	801-318-9724	<a href="mailto:dennis.lebaron@gmail.com">dennis.lebaron@gmail.com</a>
X	Rod Mann	City Council	801-318-7141	<a href="mailto:mannrw@gmail.com">mannrw@gmail.com</a>
X	Nathan Crane	City Administrator	801-772-4515	<a href="mailto:ncrane@highlandcity.org">ncrane@highlandcity.org</a>
	Ty Christensen	City Streets Superintendent	801-420-3449	<a href="mailto:tvc@highlandcity.org">tvc@highlandcity.org</a>
	Justin Parduhn	City O&M Director	801-420-0547	<a href="mailto:justin@highlandcity.org">justin@highlandcity.org</a>
X	Joann Scott	City Assistant	801-772-4515	<a href="mailto:joann@highlandcity.org">joann@highlandcity.org</a>
X	Ed (Devirl) Barfuss	Resident Representative	801-404-2805	<a href="mailto:edb@panventures.com">edb@panventures.com</a>
X	Tim Heyrend	Resident – Civil Engineer	801-376-6216	<a href="mailto:theyrend@gmail.com">theyrend@gmail.com</a>
X	Dennis Anderson	Resident – Retired C.E.	702-340-1804	<a href="mailto:dennis@andersonpc.com">dennis@andersonpc.com</a>
X	Jeff Clyde	Resident	801-372-1647	<a href="mailto:jclyde@wwclyde.net">jclyde@wwclyde.net</a>
	Lowell Nelson	Resident	801-903-9587	<a href="mailto:lowellcallnelson@gmail.com">lowellcallnelson@gmail.com</a>
X	Larry Becknell	PEPG Project Manager	801-712-0715	<a href="mailto:larry@pepg.net">larry@pepg.net</a>
X	Ryan Kitchen	PEPG Project Engineer	801-870-8814	<a href="mailto:ryan@pepg.net">ryan@pepg.net</a>
	Mike Russell	PEPG Project Engineer	801-712-7396	<a href="mailto:mike@pepg.net">mike@pepg.net</a>
X	Heather Hamilton	PEPG Intern	801-574-7466	<a href="mailto:heatherh@pepg.net">heatherh@pepg.net</a>
X	Tim Biel	CME Pavement Engineer	801-870-6740	<a href="mailto:tim@cmetg.com">tim@cmetg.com</a>
	Mike VanMilligen	CME Field Manager	801-440-2267	<a href="mailto:mike@cmetg.com">mike@cmetg.com</a>
	Charlie Trujillo	Consultant Project Principal	801-558-3572	<a href="mailto:charlie@cmtlaboratories.com">charlie@cmtlaboratories.com</a>

**I. Action Items Follow-up**

- A. CME to finish coring the roads (discussion below).
- B. PEPG/CME to provide rehabilitation details and cross sections (discussion below).
- C. PEPG to provide a strategy for assigning numeric values to different road classifications (discussion below).
- D. PEPG to begin working on cost estimates and a prioritized list.
- E. PEPG to bring a report outline (discussion below).
- F. Present progress to City Council in a work session (April 19).

**II. Discussion Items**

- A. Assigning numeric values to different road classifications. PEPG primarily based this on estimated AADT (Average Annual Daily Traffic), which was calibrated numbers from UDOT and MAG.
- B. Ryan presented the report outline. We need to discuss how many funding level options to include with the Cost Estimates chapter. We also need to coordinate the budget.
- C. Field work report and resulting recommendations (Power Point slides are being sent with these minutes).
  - 1. Field work is complete – 202 segments.
  - 2. 50 segments reclassified higher and 5 segments reclassified lower.
  - 3. Most road segments need patching, seal coats, and crack sealing.
  - 4. 48 segments need mill and overlay and 11 segments need reconstruction.
  - 5. Nearly  $\frac{1}{4}$  of the roads do not have adequate paving thickness.
  - 6. We will continue to coordinate the total costs vs. only the road materials costs. We want the projected timelines to be accurate with the City's budget, so it is important that we estimate the total cost for each project. These costs may include curb, gutter, sidewalk, expansion, and other incidentals like mobilization, traffic control, striping, etc. Pipelines will likely not be included because they can draw from other budgets. We discussed that the previous \$16M estimate only included road materials and could potentially be tripled to include all items associated with reconstruction. Tim presented estimated construction costs for road materials only as shown below:
    - a. Seal Coat - \$1.25 to \$1.75 per square yard.
    - b. Patching - \$35 to \$60 per square yard.
    - c. Mill and Overlay - \$6 to \$12 per square yard.
    - d. Reconstruction - \$16 to \$24 per square yard.

D. Discuss and Schedule the Open House. We are planning for June 23. We plan to provide the following items to present in the Open House. We will have further discussion in the next TAC meeting, including the format for presenting the information (ie. small tours, experts stationed at key boards, etc.).

1. A figure describing the Study Process and where we are at.
2. A color-coded map of the preferred maintenance strategies.
3. A graphic illustrating the cost savings by performing this study.
4. A prioritized list of the road segments with cost estimates and projected year of completion.
5. A display showing the statistics of the coring results.
6. A display that gives definitions of the different maintenance strategies with example pictures.
7. An opportunity to fill out a survey and/or comment cards.
8. Sample cores.

**III. New Action Items**

- A. Work on the Open House items described above.

**IV. Next Meeting May 26, 2016 at 7:30am**

**TAC Meeting Minutes**  
**Highland City Road Reconstruction Master Plan**  
**May 26, 2016 at 7:30am**

**Attendance:**

Present?	Name	Role	Phone	Email
X	Dennis LeBaron	City Council	801-318-9724	<a href="mailto:dennis.lebaron@gmail.com">dennis.lebaron@gmail.com</a>
X	Rod Mann	City Council	801-318-7141	<a href="mailto:mannrw@gmail.com">mannrw@gmail.com</a>
	Nathan Crane	City Administrator	801-772-4515	<a href="mailto:ncrane@highlandcity.org">ncrane@highlandcity.org</a>
X	Ty Christensen	City Streets Superintendent	801-420-3449	<a href="mailto:tvc@highlandcity.org">tvc@highlandcity.org</a>
X	Justin Parduhn	City O&M Director	801-420-0547	<a href="mailto:justin@highlandcity.org">justin@highlandcity.org</a>
X	Joann Scott	City Assistant	801-772-4515	<a href="mailto:joann@highlandcity.org">joann@highlandcity.org</a>
	Ed (Devirl) Barfuss	Resident Representative	801-404-2805	<a href="mailto:edb@panventures.com">edb@panventures.com</a>
	Tim Heyrend	Resident – Civil Engineer	801-376-6216	<a href="mailto:theyrend@gmail.com">theyrend@gmail.com</a>
X	Dennis Anderson	Resident – Retired C.E.	702-340-1804	<a href="mailto:dennis@andersonpc.com">dennis@andersonpc.com</a>
	Jeff Clyde	Resident	801-372-1647	<a href="mailto:jclyde@wwclyde.net">jclyde@wwclyde.net</a>
	Lowell Nelson	Resident	801-903-9587	<a href="mailto:lowellcallnelson@gmail.com">lowellcallnelson@gmail.com</a>
X	Larry Becknell	PEPG Project Manager	801-712-0715	<a href="mailto:larry@pepg.net">larry@pepg.net</a>
X	Ryan Kitchen	PEPG Project Engineer	801-870-8814	<a href="mailto:ryan@pepg.net">ryan@pepg.net</a>
	Mike Russell	PEPG Project Engineer	801-712-7396	<a href="mailto:mike@pepg.net">mike@pepg.net</a>
	Heather Hamilton	PEPG Intern	801-574-7466	<a href="mailto:heatherh@pepg.net">heatherh@pepg.net</a>
X	Tim Biel	CME Pavement Engineer	801-870-6740	<a href="mailto:tim@cmetg.com">tim@cmetg.com</a>
	Mike VanMilligen	CME Field Manager	801-440-2267	<a href="mailto:mike@cmetg.com">mike@cmetg.com</a>
	Charlie Trujillo	Consultant Project Principal	801-558-3572	<a href="mailto:charlie@cmtlaboratories.com">charlie@cmtlaboratories.com</a>

**I. Action Items Follow-up**

A. PEPG working on the Open House items.

**II. Discussion Items**

A. The Open House will be June 23 from 7:00pm to 8:30pm (committee members meet at 6:30pm). It will be an open format with committee members standing by boards and sitting at tables to answer questions and assist the citizens. We plan to provide the following items to present in the Open House. PEPG will provide these items for review as they are completed.

1. A figure describing the Study Process and where we are at.
2. A color-coded map of the preferred maintenance strategies, possibly 2 copies or another map of the more aggressive maintenance strategies option.
3. Two color-coded maps showing the year of completion of the preferred maintenance strategies with different funding levels, one around \$500,000 per year and another around \$1,000,000 per year (currently there is not money allocated for the low C, D, and F roads. It was mentioned that \$1,000,000 per year costs the average household \$15 per month. We will possibly need 2 sets or another set of maps coinciding with the more aggressive maintenance strategies option with the two funding levels.
4. A graphic illustrating the cost savings by performing this study and how it impact the citizens.
5. A prioritized list of the road segments with cost estimates and projected year of completion.
6. A display showing the statistics of the coring results.
7. A display that gives definitions of the different maintenance strategies with example pictures.
8. An opportunity to fill out a survey and/or comment cards. We will take out the third question, reword the fifth question, and add a question about the preferred funding method. We also want to add some information about how much money the city gets now and how much the city needs to adequately fund the roads. This information will be aligned with the maps.
9. Sample cores.
10. A summary tri-fold pamphlet for citizens to take home.

B. We would like to receive the survey results before our next TAC meeting. We have scheduled the TAC meeting for July 28. We plan to start the survey at the time of the open house on June 23 and put a notice about it in the July utility bill.

**III. New Action Items**

- A. PEPG to continue working on the Open House items described above.

**IV. Next Meeting July 28, 2016 at 7:30am, Open House June 23, 2016 from 7:00pm to 8:30pm**

**TAC Meeting Minutes**  
**Highland City Road Reconstruction Master Plan**  
**October 13, 2016 at 7:30am**

**Attendance:**

Present?	Name	Role	Phone	Email
X	Dennis LeBaron	City Council	801-318-9724	<a href="mailto:dennis.lebaron@gmail.com">dennis.lebaron@gmail.com</a>
X	Rod Mann	City Council	801-318-7141	<a href="mailto:mannrw@gmail.com">mannrw@gmail.com</a>
X	Nathan Crane	City Administrator	801-772-4515	<a href="mailto:ncrane@highlandcity.org">ncrane@highlandcity.org</a>
X	Ty Christensen	City Streets Superintendent	801-420-3449	<a href="mailto:tyc@highlandcity.org">tyc@highlandcity.org</a>
X	Justin Parduhn	City O&M Director	801-420-0547	<a href="mailto:justin@highlandcity.org">justin@highlandcity.org</a>
X	Joann Scott	City Assistant	801-772-4515	<a href="mailto:joann@highlandcity.org">joann@highlandcity.org</a>
X	Erin Wells	City Planner	801-772-4566	<a href="mailto:erin@highlandcity.org">erin@highlandcity.org</a>
X	Ed (Devirl) Barfuss	Resident Representative	801-404-2805	<a href="mailto:edb@panventures.com">edb@panventures.com</a>
X	Tim Heyrend	Resident – Civil Engineer	801-376-6216	<a href="mailto:theyrend@gmail.com">theyrend@gmail.com</a>
X	Dennis Anderson	Resident – Retired C.E.	702-340-1804	<a href="mailto:dennis@andersonpc.com">dennis@andersonpc.com</a>
	Jeff Clyde	Resident	801-372-1647	<a href="mailto:jclyde@wwclyde.net">jclyde@wwclyde.net</a>
X	Lowell Nelson	Resident	801-903-9587	<a href="mailto:lowellcallnelson@gmail.com">lowellcallnelson@gmail.com</a>
X	Larry Becknell	PEPG Project Manager	801-712-0715	<a href="mailto:larry@pepg.net">larry@pepg.net</a>
X	Ryan Kitchen	PEPG Project Engineer	801-870-8814	<a href="mailto:ryan@pepg.net">ryan@pepg.net</a>
	Mike Russell	PEPG Project Engineer	801-712-7396	<a href="mailto:mike@pepg.net">mike@pepg.net</a>
X	Tim Biel	CME Pavement Engineer	801-870-6740	<a href="mailto:tim@cmetg.com">tim@cmetg.com</a>
	Mike VanMilligen	CME Field Manager	801-440-2267	<a href="mailto:mike@cmetg.com">mike@cmetg.com</a>
	Charlie Trujillo	Consultant Project Principal	801-558-3572	<a href="mailto:charlie@cmlaboratories.com">charlie@cmlaboratories.com</a>

**I. Action Items Follow-up**

A. PEPG to continue working on the Open House items described above. The open house is complete and went well.

**II. Discussion Items**

A. Discuss the Final Master Plan.

1. Add change in cost to prioritization matrix? We discussed adding another table in the appendix, sorted by the change in cost (primary repair strategy compared to the alternate repair strategy). This table will have a column for the multiplier and cost difference.
2. Do we adjust priorities based on surveys? Ryan mentioned the support from the surveys to repair Stevens Lane, which apparently got pushed off in order to focus on preserving the A, B, and C road. The Mayor said that we should stick to the technical side for this report. The politics will be handled by the City.
3. We discussed the funding for these D, F, and low C road repairs:
  - a. Maintenance is ahead of schedule. Can some money go to the D, F, and low C roads? There is some overlap.
  - b. The PI bond be completed in the next few years.
  - c. Citizens generally were in favor of paying more for better roads from the surveys.
4. Tim Heyrend mentioned the consideration of unsafe roads. In particular, he mentioned the road going to AF by Costco. This road is planned to be repaired with MAG.
5. Nathan requested that PEPG provide a cost to maintain/preserve the D, F, and low C roads.
6. Tim Heyrend mentioned possibly reducing the width of asphalt in some of the roads to reduce maintenance costs. This may be done with standards and possibly replacing asphalt with islands, gravel, etc. The TAC was generally against replacing the asphalt with islands. Standards are now in place to keep the widths minimal. Some roads like Canal Blvd. will be a future collector and that could be why it seems wider than needed right now.

**III. New Action Items**

A. PEPG to update and finish the Master Plan.  
 B. PEPG to provide an estimate for maintaining the D, F, and low C roads.

**IV. Next Meeting will be a Work Session with City Council on November 1 at 6pm**



## **Highland City**

### **Road Reconstruction Master Plan**

#### **Phase 2 – Preservation**

**March 21, 2017**

**Prepared by**

**PEPG Consulting, LLC**

## Table of Contents

Table of Contents.....	1
Executive Summary.....	2
Introduction and Project History .....	3
Field Work and Recommended Road Treatments.....	4
Field Work.....	4
Findings .....	4
Highland System Treatment Types .....	4
High Priority Seal Coat (1-2 years) .....	5
Low Priority Seal Coat (3-5 years) .....	5
Future Seal Coat (4-6 years or 5-7 years).....	5
Cost Estimates.....	6
Unit Costs .....	6
Pavement Surface Areas .....	6
Summary of Cost Estimates .....	7
Maintenance Costs.....	7
Maintenance for New Construction / Major Rehabilitation .....	7
Ongoing Maintenance.....	8
Prioritization of Road Preservation.....	10
Pavement Condition Index.....	10
Average Daily Traffic .....	10
Estimated Preservation Treatment Cost.....	11
Pavement Life Expectancy .....	11
Recommendations .....	12
Appendix A: Highland City Road Preservation Strategy Map .....	A-1
Appendix B: Detailed Road Preservation Costs Table.....	B-1
Appendix C: Detailed Road Preservation Prioritization Table .....	C-1

## Executive Summary

Highland City hired our consultant team, comprised of PEPG Consulting (PEPG) and CME Transportation Group (CME) to evaluate all of the City's 80+ miles of roads. The work was split into two phases. Phase 1 included the poor roads classified as a low C, D, or F road with a PCI value of 62 or below. Phase 2 included the good roads classified as an A, B, or high C road with a PCI value above 62. Phase 1 includes about 36 miles of road and Phase 2 includes about 44 miles of road. This report presents our coordination, field work, and recommendations for the Phase 2 roads. It is a continuation of the Phase 1 report.

To understand the condition of each road, our senior pavement engineer performed a close visual examination of 240 separate road segments. We then recommended a preservation treatment for each segment. Table 1 summarizes our field observations and our recommended treatments for these roads.

*Table 1: Field Examination Summary*

<b>Total Segments</b>	<b>240</b>		
<b>Require Patching</b>	51 segments	21.3%	10,800 SY
<b>Require Crack Seal</b>	126 segments	52.5%	23 miles
<b>Require Seal Coat</b>	240 segments	100.0%	44 miles

From the results of the field examination, we completed cost estimates to preserve and maintain each road segment. The cost estimates include a percent markup to consider project costs outside of the pavement section (ie. mobilization, traffic control, striping, etc.) We also estimated a timeline of when these preservation treatments need to be made with increased costs if the road segments are allowed to deteriorate further. We used the same prioritization matrix as in Phase 1 to prioritize each road segment based on its condition, average daily traffic, cost to preserve, and life expectancy before deterioration. Our final prioritized list of recommended preservations for each road segment is included in Table 8 of the Recommendations section.

Based on our findings and recommendations, we estimated the total cost to preserve the A, B, and high C roads to be \$2,820,147. We also estimated an annual maintenance cost of \$845,610 for these roads. If the roads further deteriorate and repairs are required, then our total cost estimate increases to \$6,713,578. We highly discourage the City from letting the Phase 2 roads deteriorate from preservation to rehabilitation.

## Introduction and Project History

Highland City hired our consultant team, comprised of PEPG Consulting (PEPG) and CME Transportation Group (CME) to evaluate all of the City's 80+ miles of roads. Initially we were asked to evaluate the poor roads with a PCI of 62 and below according to JUB's 2014 Five Year Road Maintenance Management Plan. We were then asked to expand our scope to also include the good roads with a PCI above 62. We therefore completed our work in two phases. The report for Phase 1 details our coordination, field work, and recommendations for the low C, D, and F roads (PCI 62 and below) and the report for Phase 2 provides similar details for the A, B, and high C roads (PCI above 62). Phase 1 includes about 36 miles of road and Phase 2 includes about 44 miles of road. This Phase 2 – Preservation report is a continuation of the Phase 1 – Rehabilitation report.

Highland City expanded the Road Reconstruction Master Plan project scope to include the A, B, and high C roads in October 2016. The objectives for the Phase 2 study are listed below:

- Examine all roads not included in the previous study and provide recommendations and cost estimates for their preservation. Also approximate the life cycle of each road segment before the recommended preservation strategy will no longer suffice.
- Reclassify any poor roads (low C, D, or F) and add them to the Phase 1 study.
- Prioritize the preservation treatments based the construction cost, PCI value, amount of traffic, and life cycle.
- Provide a final Road Reconstruction Master Plan report for Phase 2.

We present a summary of our coordination, field work, and recommendations for Phase 2 in this report. PEPG completed this study with CME as a sub-consultant to assist with the field work. To avoid excessive duplication of information, the Phase 1 report is referenced in numerous locations herein.

## Field Work and Recommended Road Treatments

### Field Work

We performed field investigations on over 200 segments of Highland City's good roads that were not included in the Phase 1 report. Between the two phases, we investigated every city road in Highland. Our evaluations were based on a visual field review by an experienced pavement engineer. The visual review included observations of the distresses present including type, extent, and location of distresses; structural concerns; and past maintenance/rehabilitation efforts. We did not examine the roadway drainage or the infrastructure conditions outside of the roadway (ie. curb/gutter and sidewalk). As with the Phase 1 study, we reviewed the segments based on similar pavement condition and logical construction segments. We also noted the need for reactive maintenance (patching and crack sealing). We performed this field work in early November, 2016.

### Findings

A summary of the statistics of the field investigation is shown in Table 2. We found that all of the road segments will need a seal coat within the next seven years. We also found that just over half of the segments will need crack sealing and just over a fifth of the segments will need patching during this same timeline.

Table 2: Field Examination Summary

Total Segments	240		
Require Patching	51 segments	21.3%	10,800 SY
Require Crack Seal	126 segments	52.5%	23 miles
Require Seal Coat	240 segments	100.0%	44 miles

### Highland System Treatment Types

We identified the necessary preservation treatment needed for each road segment based on our visual survey. A map illustrating these recommendations is included in Appendix A. From the visual survey, we determined an average crack seal spacing of 15 feet in each direction and the approximate percent of patching needed for each segment. We also estimated the current life cycle of each road segment. The life cycle represents how long we estimate the road will endure without needing a more extensive road repair. If the road segments are not preserved before deteriorating, we identified a more extensive road repair strategy for each segment that will likely be necessary. The preservation strategies, prioritized by our recommendations, are summarized later in the Recommendations chapter of this report.

During our review, we classified the road segments into the following basic categories. In addition to applying a seal coat, most roads will also need crack sealing and some roads will need patching as described in the Recommendations Chapter. We assumed a 1.5" mill/overlay, based on City Staff recommendations for minimum depth, if a road segment deteriorates beyond only needing preservation. The definitions for each type of treatment can be found in the Phase 1 report.

***High Priority Seal Coat (1-2 years)***

This category includes pavement sections in good condition, without a current seal. They need to be sealed as soon as possible to mitigate oxidation and cracking of the existing surface.

***Low Priority Seal Coat (3-5 years)***

This category includes pavement sections in fair condition, without a current seal, that need to be sealed as soon as reasonable. They are not as critical as the high priority segments, typically because the surface that has already begun cracking. Delaying the seal coat for a relatively short time will not affect the overall condition and distress propagation significantly.

***Future Seal Coat (4-6 years or 5-7 years)***

This category includes pavement sections that have been recently sealed and should continue in the cyclical seal coat program. Most reapplication recommendations are estimated at 5-7 years, which is a typical life expectancy. Reapplication recommendations for several sections have been reduced to 4-6 years due to the condition of the existing seal coat (appeared a little older or exhibited advanced wearing).

## Cost Estimates

We used the same cost estimating procedures as in Phase 1. We calculated the cost of each road segment by multiplying the unit price of its preservation type by the associated pavement area. A detailed summary table of the costs to preserve each road segment is included in Appendix B. This table also includes the estimated life cycle expectancy of each road segment with estimated repair costs if they do not get maintained prior to deteriorating out of their current preservation strategy.

### Unit Costs

Unit costs were estimated based on current local market prices using analogous estimating, parametric estimating, and expert judgement. They included the cost of the materials and their placement and a multiplication factor to account for ancillary items such as mobilization, traffic control, and striping. The multiplication factors used for each type of preservation strategy are shown below in Table 3. Table 4 summarizes the unit costs used for each preservation strategy. We assumed a 1.5 inch depth mill/overlay if a road segment deteriorates beyond needing only preservation.

*Table 3: Unit Cost Multiplication Factors*

Preservation Strategy	Multiplication Factor
Crack Seal	1.025
Seal Coat	1.05
Patching	1.1
Mill/Overlay	1.15

*Table 4: Unit Costs*

Crack Seal & Seal Coat	Cost per SY	Patching	Cost per SY	
Crack Seal*	\$0.43	Surface Patch	\$36.64	
Seal Coat	\$1.84	Full Patch (12" Base)	\$64.75	
Premium/Double Seal	\$3.15	Mill/Overlay		
*\$0.35/LF on a 15' Grid			\$7.18	

### Pavement Surface Areas

Surface areas were measured using Google Earth Pro. During the Phase 1 study, we measured several road segments by hand using a survey wheel to verify its accuracy. We found that the measurements acquired from Google Earth Pro were within an acceptable tolerance (less than 3%).

Patching areas were calculated by multiplying the segment surface area by the recommended percent patching from the visual survey.

### **Summary of Cost Estimates**

A summary of the cost estimates for the preferred preservation strategy is presented in Table 5 below. The costs will continue to increase the more the maintenance is delayed.

*Table 5: Summary of Cost Estimates*

Maintenance Timeline	Crack Seal	Seal Coat	Patching	Total Estimate
1-2 Years	\$74,102	\$989,511	\$76,315	\$1,139,927
3-5 Years	\$155,526	\$558,180	\$307,116	\$1,020,822
4-6 Years	\$13,864	\$125,567	\$0	\$139,431
5-7 Years	\$7,134	\$427,757	\$85,076	\$519,967
<b>Total Estimate</b>	<b>\$250,626</b>	<b>\$2,101,014</b>	<b>\$468,507</b>	<b>\$2,820,147</b>

### **Maintenance Costs**

The primary focus of our study was to evaluate the condition of the roads in Highland and to provide a master plan for preserving these roads. However, for the purpose of budgeting the total cost of each road, it was important to identify the long-term maintenance costs that will be required in addition to the preservation treatments that we have identified.

We based the maintenance costs for the roads on the pavement needs and did not include items such as plowing, street sweeping, etc. that are not associated with the condition of the pavement. In this phase, all road segments currently fall under the preservation program. We assume that Highland City will continue to maintain these roads rather than allow them to deteriorate into a more extensive repair strategy.

### ***Maintenance for New Construction / Major Rehabilitation***

The annual costs included in this section were based on typical pavement maintenance strategies for local and collector roads. The efforts include crack sealing, patching and application of seal coats to protect the surfacing. As would be expected, maintenance costs immediately after construction or seal coat application are minimal for several years, followed by increasing applications of crack sealing and patching until the next seal coat cycle. Additionally, the maintenance efforts increase a little as the pavement overall ages.

Table 6 illustrates a sample maintenance plan for a new or rehabilitated road. It shows the full life cycle of the road, including the major rehabilitation (1.5" mill and overlay) to repair it back to a new condition. This plan has an average annual cost of \$0.90/SY for local roads and \$1.08/SY for collector roads.

*Table 6: Road Maintenance Example*

Year	Local Road		Collector Road	
	Cost/SY	Activity	Cost/SY	Activity
1	\$ -	New Construction - No Work	\$ -	New Construction - No Work
2	\$ -	New Construction - No Work	\$ -	New Construction - No Work
3	\$ -	New Construction - No Work	\$ -	New Construction - No Work
4	\$ -	New Construction - No Work	\$ -	New Construction - No Work
5	\$0.43	Minor Crack Sealing	\$0.43	Minor Crack Sealing
6	\$1.84	Seal Coat	\$1.84	Seal Coat
7	\$ -	No Work	\$ -	No Work
8	\$ -	No Work	\$ -	No Work
9	\$ -	No Work	\$ -	No Work
10	\$ -	No Work	\$ -	No Work
11	\$4.03	Minor Crack Sealing/Patching	\$4.03	Minor Crack Sealing/Patching
12	\$1.84	Seal Coat	\$1.84	Seal Coat
13	\$ -	No Work	\$ -	No Work
14	\$ -	No Work	\$ -	No Work
15	\$ -	No Work	\$0.43	Minor Crack Sealing
16	\$4.03	Minor Crack Sealing/Patching	\$ -	No Work
17	\$ -	No Work	\$3.60	Patching
18	\$1.84	Seal Coat	\$7.18	1.5" Mill/Overlay
19	\$ -	No Work		
20	\$ -	No Work		
21	\$ -	No Work		
22	\$0.43	Minor Crack Sealing		
23	\$ -	No Work		
24	\$7.18	1.5" Mill/Overlay		
<b>Average</b>	<b>\$0.90</b>		<b>\$1.08</b>	

#### ***Ongoing Maintenance***

After the recommended repairs have been performed, we recommend the city implement a spending plan that focuses on preventing roads from deteriorating to a condition that would require more expensive repair strategies. Figure 1 illustrates a reasonable allocation of funds to maximize the lifecycle of pavements and funds congruently.

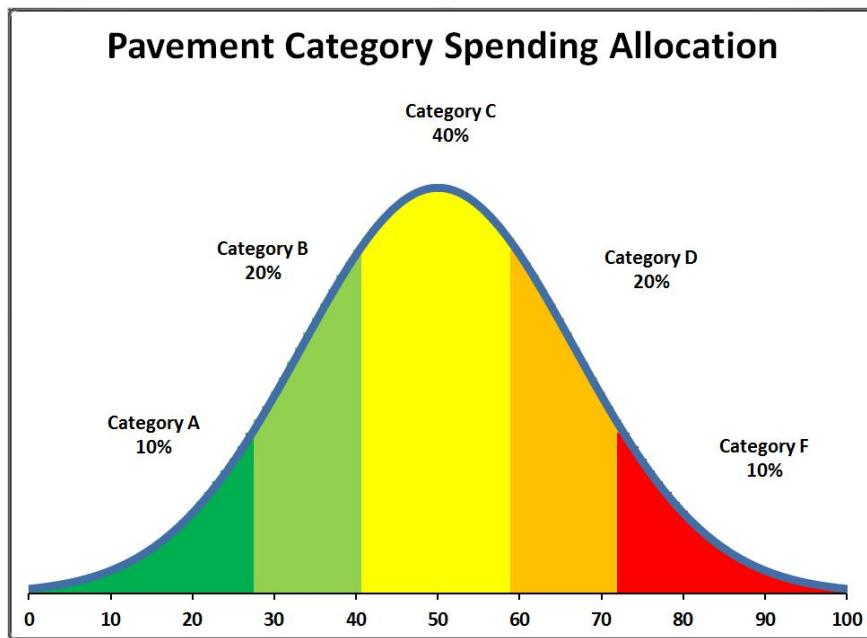


Figure 1: Typical Pavement Category Spending Allocation

## Prioritization of Road Preservation

We used the same prioritization matrix as in Phase 1. This prioritization matrix gave us a quantifiable and objective means to order the preservation treatments for each road segment. However, expert opinion, public response, and evolving circumstances may warrant a deviation from the prioritization matrix method. A detailed summary table of how each road segment was prioritized is included in Appendix C.

Each road segment was rated in three ways with the following weighting:

- Pavement Condition Index (PCI) 40%
- Average Daily Traffic (ADT) 30%
- Estimated Preservation Cost 30%

To make each category comparable to each other, we assigned normalized scores between 0 and 100. We then multiplied each score by its associated weighting above to acquire a total prioritization score. The higher the prioritization score for a road segment, the higher the priority to complete its preservation treatment.



### Pavement Condition Index

PCI is a quantifiable means by which a pavement or roadway can be graded or indexed on a scale of 0 to 100. A PCI of 100 would theoretically be in perfect condition. The scope of this study included the analysis of road segments with scores above 62. We therefore assigned a "0" score for the highest PCI of 100 and a "100" score for the lowest PCI of 62. We then linearly normalized all the PCIs in between. This process effectively placed the road segments with lower PCIs at a higher priority and higher PCIs with a lower priority.

### Average Daily Traffic

Average Daily Traffic (ADT) provides a quantifiable metric of traffic or how much importance a roadway serves simply based on the number of cars or people that use the road. From a qualitative perspective, different roadways are generally designated in different categories that functionally provide different

uses and benefits. Highland City's roads only include Collector and Local/Residential roads (UDOT operates and maintains Timpanogos Highway, Alpine Highway, and North County Boulevard). We assigned a "0" prioritization score for the Minor Local/Residential roads and a "100" prioritization score for the Major Collector roads. We then linearly normalized the two classifications of roads in between based on their estimated ADT and classification (see Table 7).

Table 7: Estimated Roadway ADTs

Road Classification	Estimated ADT
Major Collector	3,000
Minor Collector	1,500
Major Local/Residential	500
Minor Local/Residential	50

### Estimated Preservation Treatment Cost

In light of the organic nature of pavement with its tendency to deteriorate over time, it will always be a more conservative approach to preserve and maintain pavement sooner rather than later. The cost to preserve each road segment ranged between \$1,438 and \$104,000. We therefore assigned a "0" prioritization score to the \$104,000 cost and a "100" prioritization score to the \$1,438 cost. We then linearly normalized each road segment in between.

### Pavement Life Expectancy

As explained in the Phase 1 report, we know that road maintenance costs rise exponentially as the road deteriorates (see Figure 2). We therefore placed the highest priority to roads that need a preservation treatment the soonest, based on our visual observation. The final prioritization in Appendix C was grouped into life expectancy categories of 1-2 years, 3-5 years, 4-6 years, and 5-7 years.

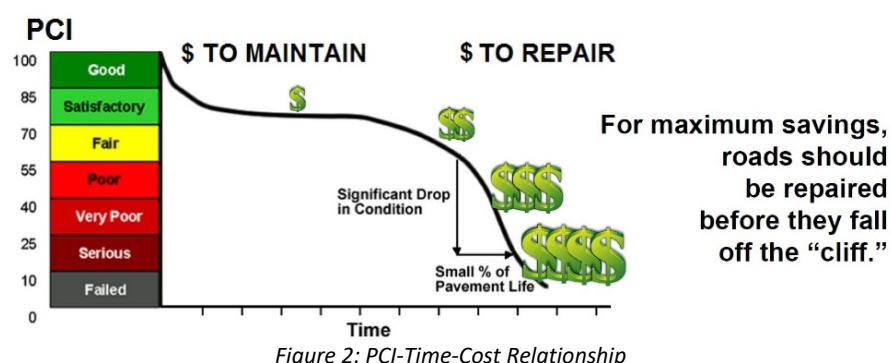


Figure 2: PCI-Time-Cost Relationship

## Recommendations

On the next page, Table 8 lists each road segment in order of priority with its recommended preservation and cost. PEPG recommends that Highland City follow the prioritization and preservation strategies shown in this table to maintain each A, B, and high C road. We also recommend that the City dedicate a minimum annual budget of \$500,000 as soon as possible to preserve and maintain these roads. This amount is in addition to our recommendation in the Phase 1 report. This recommended budget amount is the most economical solution and would allow for the lifetime maintenance of each road.

We included an estimate of the average annual maintenance cost for each road segment in Table 8. Each number represents the 20-year average cost to maintain that respective road segment. In fact, the preservation treatment we have recommended falls in line with some point of the lifetime maintenance of that road segment (see Table 6 in the Cost Estimates Chapter).

With the Phase 2 roads already in good condition and only needing preservation treatments, the total costs for preservation and maintenance should be seen as minimums to allow for their continual use. A smaller budget dedicated to preserve these roads would allow some roads to be preserved, but many roads would likely deteriorate and require more extensive repairs, thus increasing future costs. In this case of further deterioration or if this budget is delayed, we have included in Table 8 repairs that will be required and their associated estimated costs. However, we highly discourage the City from letting the Phase 2 roads deteriorate from preservation to rehabilitation.

The total estimated cost for the preferred preservation is \$2,820,147, the total estimated cost for the repairs if postponed is \$6,713,578, and the total estimated annual cost to continue to maintain these roads is \$845,610.

Table 8: Prioritized Road Preservation Recommendations with Estimated Costs

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Madison	6800 W	E EOP	Crack Seal, Double Seal Coat	1-2 Years	\$19,037	\$4,509	Mill & Overlay (1.5in)	\$35,950
Sunset Hls	Wood Hollow	Dry Hollow	Crack Seal, Double Seal Coat	1-2 Years	\$8,915	\$2,111	Mill & Overlay (1.5in)	\$16,835
11350 N	5600 W	5500 W	Double Seal Coat	1-2 Years	\$7,449	\$2,128	Mill & Overlay (1.5in)	\$16,970
6610 W	Madison	10000 N	Double Seal Coat	1-2 Years	\$6,264	\$1,790	Mill & Overlay (1.5in)	\$14,269
5500 W	11200 N	11350 N	Crack Seal, Double Seal Coat	1-2 Years	\$15,477	\$3,891	Mill & Overlay (1.5in)	\$31,023
Stone Creek	5500 W	5380 W	Crack Seal, Double Seal Coat	1-2 Years	\$15,786	\$3,968	Mill & Overlay (1.5in)	\$31,642
6400 W	11000 North	Gambol Oak	Crack Seal, Double Seal Coat	1-2 Years	\$7,759	\$1,951	Mill & Overlay (1.5in)	\$15,553
Lone Rock Rd	6400 W	Bull River	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$11,470	\$2,640	Mill & Overlay (1.5in)	\$21,047
Sunset Hls	N CDS	Wood Hollow	Crack Seal, Double Seal Coat	1-2 Years	\$15,001	\$3,553	Mill & Overlay (1.5in)	\$28,328
Flowering Plum	Bull River	N CDS	Crack Seal, Double Seal Coat	1-2 Years	\$14,718	\$3,700	Mill & Overlay (1.5in)	\$29,502
9500 N	6601 W	EEOP	Double Seal Coat	1-2 Years	\$3,971	\$1,191	Mill & Overlay (1.5in)	\$9,499
5740 W	9700 N	N CDS	Crack Seal, Double Seal Coat	1-2 Years	\$7,079	\$1,780	Mill & Overlay (1.5in)	\$14,190
Bull River	Highland	Lone Rock Rd	Crack Seal, Double Seal Coat	1-2 Years	\$15,581	\$3,690	Mill & Overlay (1.5in)	\$29,423
5480 W	NCS	10030 N	Crack Seal, Double Seal Coat	1-2 Years	\$15,893	\$3,764	Mill & Overlay (1.5in)	\$30,012
10030 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	1-2 Years	\$16,308	\$3,862	Mill & Overlay (1.5in)	\$30,796
Avonmore	SR-92	N CDS	Double Seal Coat	1-2 Years	\$19,506	\$5,573	Mill & Overlay (1.5in)	\$44,436
10180 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	1-2 Years	\$18,820	\$4,457	Mill & Overlay (1.5in)	\$35,540

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Cherry	Killarney	N CDS	Double Seal Coat	1-2 Years	\$6,688	\$1,911	Mill & Overlay (1.5in)	\$15,236
6560 W	9600 N	S C-D-S	Double Seal Coat	1-2 Years	\$10,982	\$3,295	Mill & Overlay (1.5in)	\$26,269
Canterbury Pl.	Canterbury Ln	Canterbury Way	Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$14,039	\$2,076	Mill & Overlay (1.5in), 5% Full Depth Patching	\$24,017
6680 W	6620 W	10250 N	Crack Seal, Double Seal Coat	1-2 Years	\$14,181	\$3,721	Mill & Overlay (1.5in)	\$29,669
Lone Rock	6400 W	Ridge	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$14,774	\$3,534	Mill & Overlay (1.5in)	\$28,180
Larsen	10600 N	Chapel	Double Seal Coat	1-2 Years	\$11,854	\$3,387	Mill & Overlay (1.5in)	\$27,005
Sunset Hls	Dry Hollow	Highland	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$29,583	\$4,892	Mill & Overlay (1.5in)	\$39,009
Chapel	Larsen	6000 W	Double Seal Coat	1-2 Years	\$13,471	\$3,849	Mill & Overlay (1.5in)	\$30,688
10080 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	1-2 Years	\$16,366	\$3,876	Mill & Overlay (1.5in)	\$30,906
10130 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	1-2 Years	\$16,836	\$3,988	Mill & Overlay (1.5in)	\$31,794
5920 W	5870 W	10800 N	Crack Seal, Double Seal Coat	1-2 Years	\$11,002	\$2,887	Mill & Overlay (1.5in)	\$23,017
Ithaca	Lausanne	Apollo	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$23,914	\$4,228	Mill & Overlay (1.5in)	\$33,710
Skyline Dr. W	Mercer Hollow	Lone Rock	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$9,009	\$2,155	Mill & Overlay (1.5in)	\$17,185
6350 W	9860 N	10000 N	Crack Seal, Double Seal Coat	1-2 Years	\$20,375	\$5,122	Mill & Overlay (1.5in)	\$40,842
Mountain Ridge	10180 N	10030 N	Crack Seal, Double Seal Coat	1-2 Years	\$12,506	\$3,144	Mill & Overlay (1.5in)	\$25,068
Thornton / 6160 W	6000 W	10010 N	Crack Seal, Double Seal Coat	1-2 Years	\$22,013	\$5,534	Mill & Overlay (1.5in)	\$44,125
Cyprus	Apollow	NEOP	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$14,539	\$3,478	Mill & Overlay (1.5in)	\$27,733
Vintage	6800 W	6700 W	Double Seal Coat	1-2 Years	\$8,275	\$2,364	Mill & Overlay (1.5in)	\$18,851

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
9600 N	6800 W	7050 W	Double Seal Coat	1-2 Years	\$18,256	\$6,259	Mill & Overlay (1.5in)	\$41,588
Stoneshire	Victoria	10750 N	Double Seal Coat	1-2 Years	\$7,046	\$2,013	Mill & Overlay (1.5in)	\$16,052
Wellington / Coventry	N CDS	S CDS	Crack Seal, Double Seal Coat	1-2 Years	\$11,542	\$2,902	Mill & Overlay (1.5in)	\$23,135
Westfield Cv	11950	S CDS	Crack Seal, Double Seal Coat	1-2 Years	\$15,731	\$3,955	Mill & Overlay (1.5in)	\$31,532
Hidden Meadow	Angels Gate	6000 W	Crack Seal, Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$12,439	\$1,686	Mill & Overlay (1.5in), 5% Full Depth Patching	\$13,446
Victoria	Woodshire	Stoneshire	Double Seal Coat	1-2 Years	\$11,786	\$3,367	Mill & Overlay (1.5in)	\$26,849
Woodshire	6000 W	Stoneshire	Double Seal Coat	1-2 Years	\$13,860	\$3,960	Mill & Overlay (1.5in)	\$31,575
Sampson Dr	11200 North	S CDS	Crack Seal, Double Seal Coat	1-2 Years	\$4,597	\$1,156	Mill & Overlay (1.5in)	\$9,214
Cambridge	Windsor Park	S CDS	Crack Seal, Double Seal Coat	1-2 Years	\$6,766	\$1,701	Mill & Overlay (1.5in)	\$13,563
Yorkshire Ct	Windsor Park	S CDS	Crack Seal, Double Seal Coat	1-2 Years	\$7,388	\$1,857	Mill & Overlay (1.5in)	\$14,808
New London	Ponce De Leon	E CDS	Double Seal Coat	1-2 Years	\$7,568	\$2,162	Mill & Overlay (1.5in)	\$17,240
Kensington	Windsor Park	N CDS	Crack Seal, Double Seal Coat	1-2 Years	\$9,508	\$2,390	Mill & Overlay (1.5in)	\$19,059
Oxford	Windsor Park	S CDS	Crack Seal, Double Seal Coat	1-2 Years	\$9,919	\$2,494	Mill & Overlay (1.5in)	\$19,883
5700 W	1470 N	9600 N	Crack Seal, Double Seal Coat	1-2 Years	\$2,817	\$708	Mill & Overlay (1.5in)	\$5,647
Ponce De Leon	New London	SEOP	Double Seal Coat	1-2 Years	\$10,040	\$2,869	Mill & Overlay (1.5in)	\$22,872
Granite Flats	Valley View	Foothill	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$5,697	\$1,363	Mill & Overlay (1.5in)	\$10,867
Chamberry Way	Beacon Hill	6000 W	Double Seal Coat	1-2 Years	\$5,700	\$1,629	Mill & Overlay (1.5in)	\$12,985
10400 N	6550 W	5875 W	Double Seal Coat	1-2 Years	\$42,169	\$12,048	Mill & Overlay (1.5in)	\$96,066

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Angels Gate / Light House	Hidden Meadow	Beacon Hill	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$43,753	\$10,069	Mill & Overlay (1.5in)	\$80,286
10680 N	5600 W	W C-D-S	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$15,480	\$3,703	Mill & Overlay (1.5in)	\$29,527
6000 W	10400 N	10100 N	Double Seal Coat	1-2 Years	\$18,440	\$5,268	Mill & Overlay (1.5in)	\$42,007
Highland Fields Dr. / 6240 W	11800 N	Sunrise	Double Seal Coat	1-2 Years	\$20,029	\$5,722	Mill & Overlay (1.5in)	\$45,627
Timp Cv	Alpine	E CDS	Double Seal Coat	1-2 Years	\$4,538	\$1,297	Mill & Overlay (1.5in)	\$10,338
Angels Gate	N EOP	Hidden Meadow	Double Seal Coat, 1% Full Depth Patching	1-2 Years	\$27,698	\$6,619	Mill & Overlay (1.5in), 1% Full Depth Patching	\$52,778
10760 N	6200 West	W EOP / 6250 W	Double Seal Coat	1-2 Years	\$5,587	\$1,596	Mill & Overlay (1.5in)	\$12,727
10150 N	6300 W	6000 W	Double Seal Coat	1-2 Years	\$21,967	\$6,590	Mill & Overlay (1.5in)	\$52,545
Ridge Rd / 11580 N	6000 W	N CDS	Crack Seal, Double Seal Coat	1-2 Years	\$6,878	\$1,729	Mill & Overlay (1.5in)	\$13,786
Westwood	10250 N	S C-D-S	Double Seal Coat	1-2 Years	\$7,405	\$2,222	Mill & Overlay (1.5in)	\$17,714
Beacon Meadow	Highland View	N CDS	Double Seal Coat	1-2 Years	\$10,508	\$3,002	Mill & Overlay (1.5in)	\$23,938
Stirling Pointe Condos	N/A	N/A	Double Seal Coat	1-2 Years	\$14,981	\$4,280	Mill & Overlay (1.5in)	\$34,129
6900 W	9600 N	N EOP	Double Seal Coat	1-2 Years	\$6,287	\$1,796	Mill & Overlay (1.5in)	\$14,322
11300 N	Sampson	W EOP	Double Seal Coat	1-2 Years	\$16,046	\$4,584	Mill & Overlay (1.5in)	\$36,554
Avondale / Emerson	N CDS	S CDS	Double Seal Coat	1-2 Years	\$16,049	\$4,585	Mill & Overlay (1.5in)	\$36,561
Windsor Park	5730 W	Alpine	Crack Seal, Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$58,413	\$7,919	Mill & Overlay (1.5in), 5% Full Depth Patching	\$63,144
Parkway E	Town Center E	5300 W	Crack Seal, Seal Coat	1-2 Years	\$6,441	\$3,802	Mill & Overlay (1.5in)	\$30,313
5750 W	10770 N	10850 N	Double Seal Coat	1-2 Years	\$3,495	\$999	Mill & Overlay (1.5in)	\$7,962

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
10800 N	5750 W	Stoneshire	Double Seal Coat	1-2 Years	\$3,979	\$1,137	Mill & Overlay (1.5in)	\$9,064
10770 N	5600 W	WCS	Double Seal Coat	1-2 Years	\$13,718	\$3,919	Mill & Overlay (1.5in)	\$31,250
Natalie	Stevens	S CDS	Double Seal Coat	1-2 Years	\$7,656	\$2,187	Mill & Overlay (1.5in)	\$17,441
Manor Ln / Manor Ct	SR-92	NEOP / CDS	Double Seal Coat	1-2 Years	\$14,312	\$4,089	Mill & Overlay (1.5in)	\$32,603
Skye Estates	N/A	N/A	Double Seal Coat	1-2 Years	\$104,000	\$29,714	Mill & Overlay (1.5in)	\$236,923
Westfield Rd / 11800 S	Beacon Hill	Cyprus	Crack Seal, Seal Coat	3-5 Years	\$33,939	\$14,736	Mill & Overlay (1.5in)	\$97,909
11200 N	Alpine	5100 W	Crack Seal, Seal Coat	3-5 Years	\$11,943	\$4,740	Mill & Overlay (1.5in)	\$37,795
11100 N	Alpine	5100 W	Crack Seal, Seal Coat	3-5 Years	\$9,906	\$3,932	Mill & Overlay (1.5in)	\$31,348
9810 N	6530 W	6630 W	Crack Seal, Seal Coat	3-5 Years	\$5,576	\$2,017	Mill & Overlay (1.5in)	\$16,086
5100 W	SR-92	11200 N	Crack Seal, Seal Coat	3-5 Years	\$10,799	\$4,286	Mill & Overlay (1.5in)	\$34,177
11200 N	5100 W	Sampson	Crack Seal, Seal Coat	3-5 Years	\$14,700	\$5,835	Mill & Overlay (1.5in)	\$46,522
6580 W	10250 N	10120 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$14,733	\$3,326	Mill & Overlay (1.5in)	\$26,523
11200 N	6000 W	5900 W	Crack Seal, Seal Coat	3-5 Years	\$4,392	\$1,589	Mill & Overlay (1.5in)	\$12,670
North Star	Horizon	Harvest Moon	Crack Seal, Seal Coat	3-5 Years	\$4,332	\$1,567	Mill & Overlay (1.5in)	\$12,497
6530 W	9600 N	9810 N	Crack Seal, Seal Coat	3-5 Years	\$13,366	\$4,836	Mill & Overlay (1.5in)	\$38,559
Harvest Moon	North Star	Horizon	Crack Seal, Seal Coat	3-5 Years	\$6,884	\$2,491	Mill & Overlay (1.5in)	\$19,860
Timberline	Timber Ridge	Wildflower	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$21,771	\$4,671	Mill & Overlay (1.5in)	\$37,241
10620 N	6000 W	E EOP	Crack Seal, Seal Coat	3-5 Years	\$8,752	\$3,167	Mill & Overlay (1.5in)	\$25,249

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
10200 N	W CDS	E EOP	Crack Seal, Seal Coat	3-5 Years	\$3,945	\$1,566	Mill & Overlay (1.5in)	\$12,483
5470 W	10480 N	10550 N	Crack Seal, Seal Coat	3-5 Years	\$3,264	\$1,181	Mill & Overlay (1.5in)	\$9,417
5900 W / 10550 N	10620 N	6000 N	Crack Seal, Seal Coat	3-5 Years	\$9,988	\$3,614	Mill & Overlay (1.5in)	\$28,814
Beacon Hill	Light House	North Star	Crack Seal, Seal Coat	3-5 Years	\$15,607	\$6,195	Mill & Overlay (1.5in)	\$49,393
5650 W / 11030 N	5600 W	11200 N	Crack Seal, Seal Coat	3-5 Years	\$11,436	\$4,539	Mill & Overlay (1.5in)	\$36,191
Woods Hollow	Highland	Sunset Hls	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$9,346	\$1,502	Mill & Overlay (1.5in), 5% Full Depth Patching	\$11,975
10250 N	6580 W	Hidden Pond	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$23,011	\$3,630	Mill & Overlay (1.5in)	\$28,945
Bull River	Lone Rock Rd	6400 W	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$10,044	\$3,462	Mill & Overlay (1.5in)	\$27,601
5720W	10680 N	10660 N	Crack Seal, Seal Coat	3-5 Years	\$1,438	\$571	Mill & Overlay (1.5in)	\$4,552
5470 W	10600 N	10550 N	Seal Coat	3-5 Years	\$1,812	\$888	Mill & Overlay (1.5in)	\$7,078
Stoneshire	10800 N	10750 N	Crack Seal, Seal Coat	3-5 Years	\$2,062	\$818	Mill & Overlay (1.5in)	\$6,525
Horizon	North Star	Harvest Moon	Crack Seal, Seal Coat	3-5 Years	\$15,472	\$5,598	Mill & Overlay (1.5in)	\$44,635
Sampson / Joey	Jonathon	11200 N	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$12,067	\$3,839	Mill & Overlay (1.5in)	\$30,608
Jonathon	4900 W	4800 W	Crack Seal, Seal Coat	3-5 Years	\$12,511	\$4,527	Mill & Overlay (1.5in)	\$36,092
Cyprus	11890 N	Apollo	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,673	\$2,300	Mill & Overlay (1.5in)	\$18,339
10370 N	North County	4730 W	Crack Seal, Seal Coat	3-5 Years	\$4,642	\$1,679	Mill & Overlay (1.5in)	\$13,391
6670 W / 9680 N	9690 N	9600 N	Crack Seal, Seal Coat	3-5 Years	\$7,388	\$2,933	Mill & Overlay (1.5in)	\$23,382
6200 W	10830 N	10760 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$8,032	\$1,267	Mill & Overlay (1.5in)	\$10,104

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Atlas	Cyprus	11995 N	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$8,761	\$3,020	Mill & Overlay (1.5in)	\$24,075
Sunrise	Granite Flats	6190 W	Seal Coat, 5% Surface Patching	3-5 Years	\$8,930	\$2,246	Mill & Overlay (1.5in)	\$17,911
6900 W	10300 N	10400 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$15,450	\$3,315	Mill & Overlay (1.5in)	\$26,428
10900 N	5750 W	5850 W	Crack Seal, Seal Coat	3-5 Years	\$5,936	\$2,148	Mill & Overlay (1.5in)	\$17,124
Skyline Dr. N	Ridge	Mercer Hollow	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$9,966	\$3,435	Mill & Overlay (1.5in)	\$27,388
Wildflower	Timber Ridge	Timberline	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$37,710	\$8,090	Mill & Overlay (1.5in)	\$64,504
Foothill	Granite Flats	6000 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$11,107	\$1,752	Mill & Overlay (1.5in)	\$13,972
4370 W	10370 N	S EOP	Crack Seal, Seal Coat	3-5 Years	\$8,578	\$3,104	Mill & Overlay (1.5in)	\$24,746
Canterbury Dr / Marie	Canterbury Ln	10550 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$11,429	\$2,581	Mill & Overlay (1.5in)	\$20,575
5730 W	Andrew	SR-92	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$19,075	\$4,307	Mill & Overlay (1.5in)	\$34,340
Adonis	Cyprus	Atlas	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$13,414	\$4,623	Mill & Overlay (1.5in)	\$36,863
Beacon Hill	North Star	11800 N	Crack Seal, Seal Coat	3-5 Years	\$8,064	\$3,201	Mill & Overlay (1.5in)	\$25,520
10930 N	5600 W	W CDS	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,993	\$2,225	Mill & Overlay (1.5in)	\$17,739
Timber Ridge	Wildflower	Timberline	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$27,101	\$4,132	Mill & Overlay (1.5in)	\$32,946
1965 N, 9975 N, 9800 N	6400 West	W CDS / City Limit	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$13,164	\$2,824	Mill & Overlay (1.5in)	\$22,517
Sampson / Sampson Ct	Jonathon	E CDS	Crack Seal, Seal Coat	3-5 Years	\$8,350	\$3,021	Mill & Overlay (1.5in)	\$24,088
10480 N	5600 W	Alpine	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$26,558	\$5,697	Mill & Overlay (1.5in)	\$45,428

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
6510 W	10760 N	SEOP	Crack Seal, Seal Coat	3-5 Years	\$2,128	\$845	Mill & Overlay (1.5in)	\$6,736
Mountain Shadows	SR-92	N CDS	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,663	\$2,296	Mill & Overlay (1.5in)	\$18,309
Skyline Dr.	Mercer Hollow	Lone Rock	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$3,391	\$1,169	Mill & Overlay (1.5in)	\$9,318
Cemetery Cir	10950 N	10930 N / Reisner	Crack Seal, Seal Coat	3-5 Years	\$11,418	\$4,532	Mill & Overlay (1.5in)	\$36,135
Lausanne	Ithaca	12040 N	Crack Seal, Seal Coat	3-5 Years	\$6,011	\$2,386	Mill & Overlay (1.5in)	\$19,024
10760 N	6200 W	E C-D-S	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$7,430	\$2,561	Mill & Overlay (1.5in)	\$20,418
10760 N	6400 W	6589 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$24,181	\$3,815	Mill & Overlay (1.5in)	\$30,417
6250 W / 6320 W	9860 N	N CDS	Crack Seal, Seal Coat	3-5 Years	\$4,603	\$1,827	Mill & Overlay (1.5in)	\$14,566
10300 N	6530 W	6580 W	Crack Seal, Seal Coat, 10% Full Depth Patching	3-5 Years	\$16,614	\$1,756	Mill & Overlay (1.5in), 10% Full Depth Patching	\$14,001
9770 N	6700 W	6800 W	Crack Seal, Seal Coat	3-5 Years	\$6,384	\$2,310	Mill & Overlay (1.5in)	\$18,417
10380 N	6620 W	10300 N	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$17,362	\$2,739	Mill & Overlay (1.5in)	\$21,839
6330 W / 10950 N	10890 N	Cemetery	Crack Seal, Seal Coat	3-5 Years	\$12,668	\$4,584	Mill & Overlay (1.5in)	\$36,546
10890 N	6400 W	E CDS	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$16,337	\$3,505	Mill & Overlay (1.5in)	\$27,944
Valley View	6190 W	ECDS	Crack Seal, Seal Coat, 10% Full Depth Patching	3-5 Years	\$40,664	\$4,298	Mill & Overlay (1.5in), 10% Full Depth Patching	\$34,268
Dry Creek Cir	E C-D-S	W C-D-S	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$26,314	\$4,151	Mill & Overlay (1.5in)	\$33,100
10620 N	5600 W	5720 W	Crack Seal, Seal Coat	3-5 Years	\$8,943	\$3,236	Mill & Overlay (1.5in)	\$25,799
5800 W	N CDS	S CDS	Crack Seal, Seal Coat	3-5 Years	\$10,062	\$3,640	Mill & Overlay (1.5in)	\$29,026
Bull River Rd / Granite	6400 W	River Bend Rd.	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$48,681	\$7,680	Mill & Overlay (1.5in)	\$61,234

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Eagleview	9600 N	N CDS	Crack Seal, Seal Coat	3-5 Years	\$6,557	\$2,373	Mill & Overlay (1.5in)	\$18,917
Caddie	North County	E CDS	Crack Seal, Seal Coat	3-5 Years	\$30,570	\$11,061	Mill & Overlay (1.5in)	\$88,190
9860 N	6200 W	6000 W	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$54,680	\$8,626	Mill & Overlay (1.5in)	\$68,781
6150 W	Valley View	11800 N	Seal Coat, 1% Surface Patching	3-5 Years	\$1,747	\$719	Mill & Overlay (1.5in)	\$5,736
5720W	10740 N	10680 N	Seal Coat	3-5 Years	\$2,547	\$1,247	Mill & Overlay (1.5in)	\$9,946
6100 W	SCDS	9700 N	Seal Coat	3-5 Years	\$2,822	\$1,382	Mill & Overlay (1.5in)	\$11,021
10620 N	5720 W	W EOP	Crack Seal, Seal Coat	3-5 Years	\$8,715	\$3,153	Mill & Overlay (1.5in)	\$25,140
Parkway W	Town Center W	5600 W	Seal Coat	3-5 Years	\$6,505	\$3,186	Mill & Overlay (1.5in)	\$25,403
Athena / 11830 CDS / 11860 CDS	11800 North	11895 North	Crack Seal, Seal Coat	3-5 Years	\$10,329	\$4,100	Mill & Overlay (1.5in)	\$32,689
6120 W	10760 N	SEOP	Seal Coat	3-5 Years	\$2,755	\$1,349	Mill & Overlay (1.5in)	\$10,758
9680 N	6100 W	East C-D-S	Seal Coat	3-5 Years	\$3,247	\$1,591	Mill & Overlay (1.5in)	\$12,682
Athena	Chamberry	North CDS	Crack Seal, Seal Coat	3-5 Years	\$3,312	\$1,314	Mill & Overlay (1.5in)	\$10,480
Canyon Links Vista	Country Club Dr.	SEOP	Seal Coat	3-5 Years	\$5,219	\$2,556	Mill & Overlay (1.5in)	\$20,383
6400 W	10400 N	10250 N	Crack Seal, Seal Coat	3-5 Years	\$8,589	\$3,107	Mill & Overlay (1.5in)	\$24,777
11350 N	5835 W	W CDS	Crack Seal, Seal Coat	3-5 Years	\$3,076	\$1,221	Mill & Overlay (1.5in)	\$9,733
5750 W	9700 N	9600 N	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$19,289	\$4,355	Mill & Overlay (1.5in)	\$34,724
Mountain Ridge	10180 N	10400 N	Crack Seal, Seal Coat	3-5 Years	\$14,451	\$5,228	Mill & Overlay (1.5in)	\$41,688
9400 N / 6760 W	6400 W	N CDS	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$6,141	\$1,954	Mill & Overlay (1.5in)	\$15,578

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Towncenter Pkwy	Alpine	Town Center E	Crack Seal, Seal Coat	4-6 Years	\$8,551	\$3,394	Mill & Overlay (1.5in)	\$27,061
Towncenter Pkwy	Town Center E	5600 W	Crack Seal, Seal Coat	4-6 Years	\$15,525	\$6,162	Mill & Overlay (1.5in)	\$49,132
Avery	Canterbury Dr	Canterbury Dr	Seal Coat	4-6 Years	\$7,872	\$3,856	Mill & Overlay (1.5in)	\$30,744
Canterbury Dr	Canterbury Ln	Canterbury Ln	Seal Coat	4-6 Years	\$18,271	\$8,949	Mill & Overlay (1.5in)	\$71,353
Deer Hollow	Avery	Avery	Seal Coat	4-6 Years	\$3,976	\$1,947	Mill & Overlay (1.5in)	\$15,526
Avery	Canterbury Dr	N/E EOP	Seal Coat	4-6 Years	\$10,246	\$5,018	Mill & Overlay (1.5in)	\$40,013
Iverson	10400 N	Wood Duck	Seal Coat	4-6 Years	\$9,271	\$4,541	Mill & Overlay (1.5in)	\$36,206
Wood Duck	Iverson	E EOP	Seal Coat	4-6 Years	\$1,863	\$912	Mill & Overlay (1.5in)	\$7,275
Red Hawk	Wood Duck	7200 W	Seal Coat	4-6 Years	\$14,823	\$7,260	Mill & Overlay (1.5in)	\$57,887
Normandy	Calais	Highland	Crack Seal, Seal Coat	4-6 Years	\$9,734	\$3,864	Mill & Overlay (1.5in)	\$30,805
Normandy	Highland	Burgundy	Crack Seal, Seal Coat	4-6 Years	\$11,872	\$4,712	Mill & Overlay (1.5in)	\$37,571
Normandy	Burgundy	Calais	Crack Seal, Seal Coat	4-6 Years	\$19,028	\$7,552	Mill & Overlay (1.5in)	\$60,217
10930 N / Reisner	6150 W	6000 W	Crack Seal, Seal Coat	4-6 Years	\$8,401	\$3,334	Mill & Overlay (1.5in)	\$26,587
Janie / Ole Bish	10550 N	North County	Seal Coat	5-7 Years	\$3,494	\$1,711	Mill & Overlay (1.5in)	\$13,646
6180 W	9800 N	9860 N	Seal Coat	5-7 Years	\$2,744	\$1,344	Mill & Overlay (1.5in)	\$10,718
5800 W	10100 N	10040 N	Seal Coat	5-7 Years	\$2,777	\$1,360	Mill & Overlay (1.5in)	\$10,844
5550 W	SR-92	11200 N	Seal Coat	5-7 Years	\$8,406	\$4,117	Mill & Overlay (1.5in)	\$32,830
5500 W	SR-92	11200 N	Seal Coat	5-7 Years	\$8,467	\$4,147	Mill & Overlay (1.5in)	\$33,066

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
5800 W	10040 N	S EOP	Seal Coat	5-7 Years	\$5,417	\$2,653	Mill & Overlay (1.5in)	\$21,155
9800 N	6000 W	6180 W	Seal Coat	5-7 Years	\$10,432	\$5,110	Mill & Overlay (1.5in)	\$40,742
10100 N	5750 W	5890 W	Seal Coat	5-7 Years	\$7,511	\$3,679	Mill & Overlay (1.5in)	\$29,332
Windsor Park	5800 W	5730 W	Seal Coat	5-7 Years	\$6,394	\$3,132	Mill & Overlay (1.5in)	\$24,970
5600 W	SR-92	11200 N	Seal Coat	5-7 Years	\$8,745	\$4,283	Mill & Overlay (1.5in)	\$34,150
School Park	Alpine	Park Entrance	Seal Coat	5-7 Years	\$5,811	\$2,846	Mill & Overlay (1.5in)	\$22,695
5750 W	SR-92	10850 N	Seal Coat	5-7 Years	\$8,885	\$4,352	Mill & Overlay (1.5in)	\$34,700
6020 W	9800 N	N CDS	Seal Coat	5-7 Years	\$2,266	\$1,110	Mill & Overlay (1.5in)	\$8,850
6130 W	9800 N	N CDS	Seal Coat	5-7 Years	\$2,601	\$1,274	Mill & Overlay (1.5in)	\$10,159
6080 W	9800 N	N CDS	Seal Coat	5-7 Years	\$2,636	\$1,291	Mill & Overlay (1.5in)	\$10,295
6180 W	9860 N	9900 N	Seal Coat	5-7 Years	\$3,237	\$1,586	Mill & Overlay (1.5in)	\$12,643
11060 N	5500 W	E EOP	Seal Coat	5-7 Years	\$2,452	\$1,201	Mill & Overlay (1.5in)	\$9,578
Earl	Mystic Hollow	Alpine	Seal Coat	5-7 Years	\$6,618	\$3,241	Mill & Overlay (1.5in)	\$25,845
5750 W	10100 N	N CDS	Seal Coat	5-7 Years	\$3,965	\$1,942	Mill & Overlay (1.5in)	\$15,483
Coventry	5600 W	Town Center W	Seal Coat	5-7 Years	\$4,251	\$2,082	Mill & Overlay (1.5in)	\$16,601
5800 W	10100 N	N CDS	Seal Coat	5-7 Years	\$4,946	\$2,423	Mill & Overlay (1.5in)	\$19,317
Paradise Cir / 6570 W	10400 N	N CDS	Seal Coat	5-7 Years	\$2,745	\$1,345	Mill & Overlay (1.5in)	\$10,720
10040 N	E CDS	W EOP	Seal Coat	5-7 Years	\$5,288	\$2,590	Mill & Overlay (1.5in)	\$20,650

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
View Pointe	Park	Park	Seal Coat	5-7 Years	\$4,604	\$2,255	Mill & Overlay (1.5in)	\$17,982
9910 N	Alpine	Pheasant	Seal Coat	5-7 Years	\$5,875	\$2,878	Mill & Overlay (1.5in)	\$22,944
Mystic Hollow	N CDS	S CDS	Seal Coat	5-7 Years	\$8,242	\$4,037	Mill & Overlay (1.5in)	\$32,186
10900 N	Alpine	5360 W	Seal Coat	5-7 Years	\$2,037	\$998	Mill & Overlay (1.5in)	\$7,957
Spring Hollow	Broadleaf Hollow	Maple Hollow	Seal Coat	5-7 Years	\$3,032	\$1,485	Mill & Overlay (1.5in)	\$11,839
10700 N	Alpine	5360 W	Seal Coat	5-7 Years	\$2,321	\$1,137	Mill & Overlay (1.5in)	\$9,064
Julie Ann	Mystic	W CDS	Seal Coat	5-7 Years	\$3,848	\$1,885	Mill & Overlay (1.5in)	\$15,026
Park Cir	Park	Park	Seal Coat	5-7 Years	\$9,485	\$4,646	Mill & Overlay (1.5in)	\$37,043
Mystic	J Legrand Adamson	Earl	Seal Coat, 5% Surface Patching	5-7 Years	\$20,069	\$5,049	Mill & Overlay (1.5in)	\$40,254
Maple Hollow	Broadleaf Hollow	N CDS	Seal Coat	5-7 Years	\$6,941	\$3,400	Mill & Overlay (1.5in)	\$27,107
Wing Pl	Mystic	W CDS	Seal Coat, 5% Surface Patching	5-7 Years	\$6,613	\$1,664	Mill & Overlay (1.5in)	\$13,264
Park	SR-92	Shoreline	Seal Coat	5-7 Years	\$11,979	\$5,867	Mill & Overlay (1.5in)	\$46,780
Castle Pine Way	Country Club	Castle Pine Dr	Seal Coat	5-7 Years	\$7,679	\$3,761	Mill & Overlay (1.5in)	\$29,987
Castle Pine Dr	NCS	Country Club	Seal Coat	5-7 Years	\$8,505	\$4,166	Mill & Overlay (1.5in)	\$33,216
10630 N	6400 W	E CDS	Seal Coat	5-7 Years	\$4,058	\$1,988	Mill & Overlay (1.5in)	\$15,849
10670 N / 6340 W	6400 W	N CDS	Seal Coat	5-7 Years	\$5,373	\$2,632	Mill & Overlay (1.5in)	\$20,983
Broadleaf Hollow	1585 N	Highland	Seal Coat	5-7 Years	\$12,275	\$6,012	Mill & Overlay (1.5in)	\$47,939
5360 W	10900 N	10700 N	Seal Coat	5-7 Years	\$15,142	\$7,416	Mill & Overlay (1.5in)	\$59,133

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Park Dr / Elk Cv	Shoreline	E CDS	Seal Coat	5-7 Years	\$20,232	\$9,910	Mill & Overlay (1.5in)	\$79,014
Hidden Dr	9910 N	Alpine	Seal Coat	5-7 Years	\$6,023	\$3,540	Mill & Overlay (1.5in)	\$23,523
Crestview / Villiage	Towncenter Pkwy	Towncenter Pkwy	Crack Seal, Seal Coat	5-7 Years	\$10,928	\$4,337	Mill & Overlay (1.5in)	\$34,584
Shoreline	Park	Park	Seal Coat	5-7 Years	\$8,431	\$4,130	Mill & Overlay (1.5in)	\$32,927
Maddie	Peyton	W EOP	Seal Coat	5-7 Years	\$2,335	\$1,144	Mill & Overlay (1.5in)	\$9,119
Walker	10400 N	Compton	Seal Coat	5-7 Years	\$2,657	\$1,301	Mill & Overlay (1.5in)	\$10,375
Compton / Haymaker	Peyton	Carson	Seal Coat	5-7 Years	\$5,276	\$2,584	Mill & Overlay (1.5in)	\$20,603
Spruce Ct	Spruce Dr	E CDS	Crack Seal, Seal Coat	5-7 Years	\$4,657	\$1,849	Mill & Overlay (1.5in)	\$14,739
Carson / Peyton	Haymaker	Compton	Seal Coat	5-7 Years	\$6,803	\$3,332	Mill & Overlay (1.5in)	\$26,567
Janie / Sego Lily Ct	Caddie	10550 N	Seal Coat	5-7 Years	\$9,112	\$4,463	Mill & Overlay (1.5in)	\$35,587
9760 N	Alpine	E CDS	Crack Seal, Seal Coat	5-7 Years	\$5,708	\$2,719	Mill & Overlay (1.5in)	\$18,064
Spruce Dr	SR-92	N CDS	Crack Seal, Seal Coat	5-7 Years	\$10,375	\$4,118	Mill & Overlay (1.5in)	\$32,833
Sunset	Highland	W EOP	Seal Coat	5-7 Years	\$2,605	\$1,276	Mill & Overlay (1.5in)	\$10,175
Brookridge	Janie	E CDS	Seal Coat	5-7 Years	\$4,778	\$2,340	Mill & Overlay (1.5in)	\$18,658
10100 N	Yorkshire	5750 W	Seal Coat	5-7 Years	\$2,924	\$1,432	Mill & Overlay (1.5in)	\$11,418
Mystic / Willem	Earl	S CDS	Seal Coat, 15% Full Depth Patching	5-7 Years	\$82,898	\$6,618	Mill & Overlay (1.5in), 15% Full Depth Patching	\$52,766
Calais	Normandy	N CDS	Crack Seal, Seal Coat	5-7 Years	\$5,951	\$2,362	Mill & Overlay (1.5in)	\$18,834
Cedar Hls	West Side Track	Knight Ave	Seal Coat	5-7 Years	\$3,530	\$1,729	Mill & Overlay (1.5in)	\$13,787

Road Name	From*	To*	Recommended Preservation	Time for Treatment	Estimated Cost	Estimated Annual Maintenance Cost	Repair Required if Treatment Postponed	Postponed Cost
Penn Brooke	11800 N	S EOP	Seal Coat	5-7 Years	\$7,604	\$3,724	Mill & Overlay (1.5in)	\$29,695
Braden	Riverside	Yorkshire	Seal Coat	5-7 Years	\$1,775	\$869	Mill & Overlay (1.5in)	\$6,931
Kaden	Riverside	Yorkshire	Seal Coat	5-7 Years	\$1,781	\$872	Mill & Overlay (1.5in)	\$6,955
Knight Ave	10100 N / Cedar Hls	North County	Seal Coat	5-7 Years	\$25,310	\$12,397	Mill & Overlay (1.5in)	\$98,841
Riverside / Natalie	S CDS	N CDS	Seal Coat	5-7 Years	\$10,005	\$4,900	Mill & Overlay (1.5in)	\$39,072
Yorkshire	Windsor Park	N CDS	Seal Coat	5-7 Years	\$10,572	\$5,178	Mill & Overlay (1.5in)	\$41,288
6110 W / CDS to East	9860 N	N CDS	Seal Coat	5-7 Years	\$3,418	\$1,674	Mill & Overlay (1.5in)	\$13,349
5800 W / E & W Crimson	9850 N	N CDS	Seal Coat	5-7 Years	\$6,111	\$2,993	Mill & Overlay (1.5in)	\$23,866
				Totals	\$2,820,147	\$845,610		\$6,713,578

\*EOP=Edge of Pavement (North, South, East, & West), CDS=Cul-de-Sac (North, South, East, & West)


## **Appendix A: Highland City Road Preservation Strategy Map**

# Recommended Preservations

## High C through A Roads

# Rehab Methods

- Minor (1% - 24%) Patching & Seal Coat
- Seal Coat without Patching
- Included in F through Low C Study
- Private/UDOT Road (Not Included in Study)



## Appendix B: Detailed Road Preservation Costs Table

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Madison	6800 W	E EOP	5,010	0	Crack Seal, Double Seal Coat	1-2 Years	\$3,256	\$15,781	\$0	\$19,037	Mill & Overlay (1.5in)	\$0	\$35,950	\$35,950
Sunset Hls	Wood Hollow	Dry Hollow	2,346	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,525	\$7,390	\$0	\$8,915	Mill & Overlay (1.5in)	\$0	\$16,835	\$16,835
11350 N	5600 W	5500 W	2,365	0	Double Seal Coat	1-2 Years	\$0	\$7,449	\$0	\$7,449	Mill & Overlay (1.5in)	\$0	\$16,970	\$16,970
6610 W	Madison	10000 N	1,988	0	Double Seal Coat	1-2 Years	\$0	\$6,264	\$0	\$6,264	Mill & Overlay (1.5in)	\$0	\$14,269	\$14,269
5500 W	11200 N	11350 N	4,323	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,859	\$13,618	\$0	\$15,477	Mill & Overlay (1.5in)	\$0	\$31,023	\$31,023
Stone Creek	5500 W	5380 W	4,409	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,896	\$13,890	\$0	\$15,786	Mill & Overlay (1.5in)	\$0	\$31,642	\$31,642
6400 W	11000 North	Gambol Oak	2,167	0	Crack Seal, Double Seal Coat	1-2 Years	\$932	\$6,827	\$0	\$7,759	Mill & Overlay (1.5in)	\$0	\$15,553	\$15,553
Lone Rock Rd	6400 W	Bull River	2,933	29	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$1,249	\$9,146	\$1,075	\$11,470	Mill & Overlay (1.5in)	\$0	\$21,047	\$21,047
Sunset Hls	N CDS	Wood Hollow	3,948	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,566	\$12,435	\$0	\$15,001	Mill & Overlay (1.5in)	\$0	\$28,328	\$28,328
Flowering Plum	Bull River	N CDS	4,111	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,768	\$12,950	\$0	\$14,718	Mill & Overlay (1.5in)	\$0	\$29,502	\$29,502
9500 N	6601 W	EEOP	1,324	0	Double Seal Coat	1-2 Years	\$0	\$3,971	\$0	\$3,971	Mill & Overlay (1.5in)	\$0	\$9,499	\$9,499
5740 W	9700 N	N CDS	1,977	0	Crack Seal, Double Seal Coat	1-2 Years	\$850	\$6,229	\$0	\$7,079	Mill & Overlay (1.5in)	\$0	\$14,190	\$14,190
Bull River	Highland	Lone Rock Rd	4,100	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,665	\$12,916	\$0	\$15,581	Mill & Overlay (1.5in)	\$0	\$29,423	\$29,423
5480 W	NCS	10030 N	4,182	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,719	\$13,174	\$0	\$15,893	Mill & Overlay (1.5in)	\$0	\$30,012	\$30,012
10030 N	Alpine	Mountain Ridge	4,292	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,790	\$13,518	\$0	\$16,308	Mill & Overlay (1.5in)	\$0	\$30,796	\$30,796
Avonmore	SR-92	N CDS	6,192	0	Double Seal Coat	1-2 Years	\$0	\$19,506	\$0	\$19,506	Mill & Overlay (1.5in)	\$0	\$44,436	\$44,436
10180 N	Alpine	Mountain Ridge	4,953	0	Crack Seal, Double Seal Coat	1-2 Years	\$3,219	\$15,601	\$0	\$18,820	Mill & Overlay (1.5in)	\$0	\$35,540	\$35,540
Cherry	Killarney	N CDS	2,123	0	Double Seal Coat	1-2 Years	\$0	\$6,688	\$0	\$6,688	Mill & Overlay (1.5in)	\$0	\$15,236	\$15,236
6560 W	9600 N	S C-D-S	3,661	0	Double Seal Coat	1-2 Years	\$0	\$10,982	\$0	\$10,982	Mill & Overlay (1.5in)	\$0	\$26,269	\$26,269
Canterbury Pl.	Canterbury Ln	Canterbury Way	2,306	115	Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$0	\$6,573	\$7,466	\$14,039	Mill & Overlay (1.5in), 5% Full Depth Patching	\$7,466	\$16,550	\$24,017
6680 W	6620 W	10250 N	4,134	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,778	\$12,403	\$0	\$14,181	Mill & Overlay (1.5in)	\$0	\$29,669	\$29,669
Lone Rock	6400 W	Ridge	3,927	39	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$1,672	\$11,663	\$1,439	\$14,774	Mill & Overlay (1.5in)	\$0	\$28,180	\$28,180
Larsen	10600 N	Chapel	3,763	0	Double Seal Coat	1-2 Years	\$0	\$11,854	\$0	\$11,854	Mill & Overlay (1.5in)	\$0	\$27,005	\$27,005
Sunset Hls	Dry Hollow	Highland	5,436	272	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$3,357	\$16,267	\$9,959	\$29,583	Mill & Overlay (1.5in)	\$0	\$39,009	\$39,009

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Chapel	Larsen	6000 W	4,276	0	Double Seal Coat	1-2 Years	\$0	\$13,471	\$0	\$13,471	Mill & Overlay (1.5in)	\$0	\$30,688	\$30,688
10080 N	Alpine	Mountain Ridge	4,307	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,799	\$13,567	\$0	\$16,366	Mill & Overlay (1.5in)	\$0	\$30,906	\$30,906
10130 N	Alpine	Mountain Ridge	4,431	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,880	\$13,956	\$0	\$16,836	Mill & Overlay (1.5in)	\$0	\$31,794	\$31,794
5920 W	5870 W	10800 N	3,207	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,379	\$9,622	\$0	\$11,002	Mill & Overlay (1.5in)	\$0	\$23,017	\$23,017
Ithaca	Lausanne	Apollo	4,698	235	Crack Seal, Double Seal Coat, 5% Surface Patching	1-2 Years	\$1,919	\$13,388	\$8,606	\$23,914	Mill & Overlay (1.5in)	\$0	\$33,710	\$33,710
Skyline Dr. W	Mercer Hollow	Lone Rock	2,395	24	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$1,019	\$7,112	\$877	\$9,009	Mill & Overlay (1.5in)	\$0	\$17,185	\$17,185
6350 W	9860 N	10000 N	5,691	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,447	\$17,928	\$0	\$20,375	Mill & Overlay (1.5in)	\$0	\$40,842	\$40,842
Mountain Ridge	10180 N	10030 N	3,493	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,502	\$11,004	\$0	\$12,506	Mill & Overlay (1.5in)	\$0	\$25,068	\$25,068
Thornton / 6160 W	6000 W	10010 N	6,149	0	Crack Seal, Double Seal Coat	1-2 Years	\$2,644	\$19,369	\$0	\$22,013	Mill & Overlay (1.5in)	\$0	\$44,125	\$44,125
Cyprus	Apollow	NEOP	3,865	39	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$1,645	\$11,478	\$1,416	\$14,539	Mill & Overlay (1.5in)	\$0	\$27,733	\$27,733
Vintage	6800 W	6700 W	2,627	0	Double Seal Coat	1-2 Years	\$0	\$8,275	\$0	\$8,275	Mill & Overlay (1.5in)	\$0	\$18,851	\$18,851
9600 N	6800 W	7050 W	5,795	0	Double Seal Coat	1-2 Years	\$0	\$18,256	\$0	\$18,256	Mill & Overlay (1.5in)	\$0	\$41,588	\$41,588
Stoneshire	Victoria	10750 N	2,237	0	Double Seal Coat	1-2 Years	\$0	\$7,046	\$0	\$7,046	Mill & Overlay (1.5in)	\$0	\$16,052	\$16,052
Wellington / Coventry	N CDS	S CDS	3,224	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,386	\$10,155	\$0	\$11,542	Mill & Overlay (1.5in)	\$0	\$23,135	\$23,135
Westfield Cv	11950	S CDS	4,394	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,889	\$13,841	\$0	\$15,731	Mill & Overlay (1.5in)	\$0	\$31,532	\$31,532
Hidden Meadow	Angels Gate	6000 W	1,874	94	Crack Seal, Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$765	\$5,607	\$6,066	\$12,439	Mill & Overlay (1.5in), 5% Full Depth Patching	\$0	\$13,446	\$13,446
Victoria	Woodshire	Stoneshire	3,741	0	Double Seal Coat	1-2 Years	\$0	\$11,786	\$0	\$11,786	Mill & Overlay (1.5in)	\$0	\$26,849	\$26,849
Woodshire	6000 W	Stoneshire	4,400	0	Double Seal Coat	1-2 Years	\$0	\$13,860	\$0	\$13,860	Mill & Overlay (1.5in)	\$0	\$31,575	\$31,575
Sampson Dr	11200 North	S CDS	1,284	0	Crack Seal, Double Seal Coat	1-2 Years	\$552	\$4,045	\$0	\$4,597	Mill & Overlay (1.5in)	\$0	\$9,214	\$9,214
Cambridge	Windsor Park	S CDS	1,890	0	Crack Seal, Double Seal Coat	1-2 Years	\$813	\$5,954	\$0	\$6,766	Mill & Overlay (1.5in)	\$0	\$13,563	\$13,563
Yorkshire Ct	Windsor Park	S CDS	2,064	0	Crack Seal, Double Seal Coat	1-2 Years	\$887	\$6,500	\$0	\$7,388	Mill & Overlay (1.5in)	\$0	\$14,808	\$14,808
New London	Ponce De Leon	E CDS	2,402	0	Double Seal Coat	1-2 Years	\$0	\$7,568	\$0	\$7,568	Mill & Overlay (1.5in)	\$0	\$17,240	\$17,240
Kensington	Windsor Park	N CDS	2,656	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,142	\$8,366	\$0	\$9,508	Mill & Overlay (1.5in)	\$0	\$19,059	\$19,059
Oxford	Windsor Park	S CDS	2,771	0	Crack Seal, Double Seal Coat	1-2 Years	\$1,191	\$8,728	\$0	\$9,919	Mill & Overlay (1.5in)	\$0	\$19,883	\$19,883
5700 W	1470 N	9600 N	787	0	Crack Seal, Double Seal Coat	1-2 Years	\$338	\$2,479	\$0	\$2,817	Mill & Overlay (1.5in)	\$0	\$5,647	\$5,647

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Ponce De Leon	New London	SEOP	3,187	0	Double Seal Coat	1-2 Years	\$0	\$10,040	\$0	\$10,040	Mill & Overlay (1.5in)	\$0	\$22,872	\$22,872
Granite Flats	Valley View	Foothill	1,514	15	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$645	\$4,498	\$555	\$5,697	Mill & Overlay (1.5in)	\$0	\$10,867	\$10,867
Chamberry Way	Beacon Hill	6000 W	1,810	0	Double Seal Coat	1-2 Years	\$0	\$5,700	\$0	\$5,700	Mill & Overlay (1.5in)	\$0	\$12,985	\$12,985
10400 N	6550 W	5875 W	13,387	0	Double Seal Coat	1-2 Years	\$0	\$42,169	\$0	\$42,169	Mill & Overlay (1.5in)	\$0	\$96,066	\$96,066
Angels Gate / Light House	Hidden Meadow	Beacon Hill	11,188	112	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$4,763	\$34,890	\$4,099	\$43,753	Mill & Overlay (1.5in)	\$0	\$80,286	\$80,286
10680 N	5600 W	W C-D-S	4,115	41	Crack Seal, Double Seal Coat, 1% Surface Patching	1-2 Years	\$1,752	\$12,221	\$1,508	\$15,480	Mill & Overlay (1.5in)	\$0	\$29,527	\$29,527
6000 W	10400 N	10100 N	5,854	0	Double Seal Coat	1-2 Years	\$0	\$18,440	\$0	\$18,440	Mill & Overlay (1.5in)	\$0	\$42,007	\$42,007
Highland Fields Dr. / 6240 W	11800 N	Sunrise	6,358	0	Double Seal Coat	1-2 Years	\$0	\$20,029	\$0	\$20,029	Mill & Overlay (1.5in)	\$0	\$45,627	\$45,627
Timp Cv	Alpine	E CDS	1,441	0	Double Seal Coat	1-2 Years	\$0	\$4,538	\$0	\$4,538	Mill & Overlay (1.5in)	\$0	\$10,338	\$10,338
Angels Gate	N EOP	Hidden Meadow	7,355	74	Double Seal Coat, 1% Full Depth Patching	1-2 Years	\$0	\$22,936	\$4,762	\$27,698	Mill & Overlay (1.5in), 1% Full Depth Patching	\$0	\$52,778	\$52,778
10760 N	6200 West	W EOP / 6250 W	1,774	0	Double Seal Coat	1-2 Years	\$0	\$5,587	\$0	\$5,587	Mill & Overlay (1.5in)	\$0	\$12,727	\$12,727
10150 N	6300 W	6000 W	7,322	0	Double Seal Coat	1-2 Years	\$0	\$21,967	\$0	\$21,967	Mill & Overlay (1.5in)	\$0	\$52,545	\$52,545
Ridge Rd / 11580 N	6000 W	N CDS	1,921	0	Crack Seal, Double Seal Coat	1-2 Years	\$826	\$6,052	\$0	\$6,878	Mill & Overlay (1.5in)	\$0	\$13,786	\$13,786
Westwood	10250 N	S C-D-S	2,468	0	Double Seal Coat	1-2 Years	\$0	\$7,405	\$0	\$7,405	Mill & Overlay (1.5in)	\$0	\$17,714	\$17,714
Beacon Meadow	Highland View	N CDS	3,336	0	Double Seal Coat	1-2 Years	\$0	\$10,508	\$0	\$10,508	Mill & Overlay (1.5in)	\$0	\$23,938	\$23,938
Stirling Pointe Condos	N/A	N/A	4,756	0	Double Seal Coat	1-2 Years	\$0	\$14,981	\$0	\$14,981	Mill & Overlay (1.5in)	\$0	\$34,129	\$34,129
6900 W	9600 N	N EOP	1,996	0	Double Seal Coat	1-2 Years	\$0	\$6,287	\$0	\$6,287	Mill & Overlay (1.5in)	\$0	\$14,322	\$14,322
11300 N	Sampson	W EOP	5,094	0	Double Seal Coat	1-2 Years	\$0	\$16,046	\$0	\$16,046	Mill & Overlay (1.5in)	\$0	\$36,554	\$36,554
Avondale / Emerson	N CDS	S CDS	5,095	0	Double Seal Coat	1-2 Years	\$0	\$16,049	\$0	\$16,049	Mill & Overlay (1.5in)	\$0	\$36,561	\$36,561
Windsor Park	5730 W	Alpine	8,799	440	Crack Seal, Double Seal Coat, 5% Full Depth Patching	1-2 Years	\$3,595	\$26,332	\$28,486	\$58,413	Mill & Overlay (1.5in), 5% Full Depth Patching	\$0	\$63,144	\$63,144
Parkway E	Town Center E	5300 W	4,224	0	Crack Seal, Seal Coat	1-2 Years	\$1,221	\$5,219	\$0	\$6,441	Mill & Overlay (1.5in)	\$0	\$30,313	\$30,313
5750 W	10770 N	10850 N	1,110	0	Double Seal Coat	1-2 Years	\$0	\$3,495	\$0	\$3,495	Mill & Overlay (1.5in)	\$0	\$7,962	\$7,962
10800 N	5750 W	Stoneshire	1,263	0	Double Seal Coat	1-2 Years	\$0	\$3,979	\$0	\$3,979	Mill & Overlay (1.5in)	\$0	\$9,064	\$9,064
10770 N	5600 W	WCS	4,355	0	Double Seal Coat	1-2 Years	\$0	\$13,718	\$0	\$13,718	Mill & Overlay (1.5in)	\$0	\$31,250	\$31,250
Natalie	Stevens	S CDS	2,430	0	Double Seal Coat	1-2 Years	\$0	\$7,656	\$0	\$7,656	Mill & Overlay (1.5in)	\$0	\$17,441	\$17,441

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Manor Ln / Manor Ct	SR-92	NEOP / CDS	4,543	0	Double Seal Coat	1-2 Years	\$0	\$14,312	\$0	\$14,312	Mill & Overlay (1.5in)	\$0	\$32,603	\$32,603
Skye Estates	N/A	N/A	33,016	0	Double Seal Coat	1-2 Years	\$0	\$104,000	\$0	\$104,000	Mill & Overlay (1.5in)	\$0	\$236,923	\$236,923
Westfield Rd / 11800 S	Beacon Hill	Cyprus	13,644	0	Crack Seal, Seal Coat	3-5 Years	\$8,869	\$25,071	\$0	\$33,939	Mill & Overlay (1.5in)	\$0	\$97,909	\$97,909
11200 N	Alpine	5100 W	5,267	0	Crack Seal, Seal Coat	3-5 Years	\$2,265	\$9,678	\$0	\$11,943	Mill & Overlay (1.5in)	\$0	\$37,795	\$37,795
11100 N	Alpine	5100 W	4,369	0	Crack Seal, Seal Coat	3-5 Years	\$1,878	\$8,027	\$0	\$9,906	Mill & Overlay (1.5in)	\$0	\$31,348	\$31,348
9810 N	6530 W	6630 W	2,242	0	Crack Seal, Seal Coat	3-5 Years	\$1,457	\$4,119	\$0	\$5,576	Mill & Overlay (1.5in)	\$0	\$16,086	\$16,086
5100 W	SR-92	11200 N	4,763	0	Crack Seal, Seal Coat	3-5 Years	\$2,048	\$8,752	\$0	\$10,799	Mill & Overlay (1.5in)	\$0	\$34,177	\$34,177
11200 N	5100 W	Sampson	6,483	0	Crack Seal, Seal Coat	3-5 Years	\$2,788	\$11,913	\$0	\$14,700	Mill & Overlay (1.5in)	\$0	\$46,522	\$46,522
6580 W	10250 N	10120 N	3,696	185	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,510	\$6,452	\$6,771	\$14,733	Mill & Overlay (1.5in)	\$0	\$26,523	\$26,523
11200 N	6000 W	5900 W	1,766	0	Crack Seal, Seal Coat	3-5 Years	\$1,148	\$3,244	\$0	\$4,392	Mill & Overlay (1.5in)	\$0	\$12,670	\$12,670
North Star	Horizon	Harvest Moon	1,742	0	Crack Seal, Seal Coat	3-5 Years	\$1,132	\$3,200	\$0	\$4,332	Mill & Overlay (1.5in)	\$0	\$12,497	\$12,497
6530 W	9600 N	9810 N	5,373	0	Crack Seal, Seal Coat	3-5 Years	\$3,493	\$9,874	\$0	\$13,366	Mill & Overlay (1.5in)	\$0	\$38,559	\$38,559
Harvest Moon	North Star	Horizon	2,768	0	Crack Seal, Seal Coat	3-5 Years	\$1,799	\$5,085	\$0	\$6,884	Mill & Overlay (1.5in)	\$0	\$19,860	\$19,860
Timberline	Timber Ridge	Wildflower	5,190	259	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$3,205	\$9,059	\$9,508	\$21,771	Mill & Overlay (1.5in)	\$0	\$37,241	\$37,241
10620 N	6000 W	E EOP	3,518	0	Crack Seal, Seal Coat	3-5 Years	\$2,287	\$6,465	\$0	\$8,752	Mill & Overlay (1.5in)	\$0	\$25,249	\$25,249
10200 N	W CDS	E EOP	1,740	0	Crack Seal, Seal Coat	3-5 Years	\$748	\$3,196	\$0	\$3,945	Mill & Overlay (1.5in)	\$0	\$12,483	\$12,483
5470 W	10480 N	10550 N	1,312	0	Crack Seal, Seal Coat	3-5 Years	\$853	\$2,411	\$0	\$3,264	Mill & Overlay (1.5in)	\$0	\$9,417	\$9,417
5900 W / 10550 N	10620 N	6000 N	4,015	0	Crack Seal, Seal Coat	3-5 Years	\$2,610	\$7,378	\$0	\$9,988	Mill & Overlay (1.5in)	\$0	\$28,814	\$28,814
Beacon Hill	Light House	North Star	6,883	0	Crack Seal, Seal Coat	3-5 Years	\$2,960	\$12,648	\$0	\$15,607	Mill & Overlay (1.5in)	\$0	\$49,393	\$49,393
5650 W / 11030 N	5600 W	11200 N	5,043	0	Crack Seal, Seal Coat	3-5 Years	\$2,169	\$9,267	\$0	\$11,436	Mill & Overlay (1.5in)	\$0	\$36,191	\$36,191
Woods Hollow	Highland	Sunset Hls	1,669	83	Crack Seal, Seal Coat, 5% Full Depth Patching	3-5 Years	\$1,030	\$2,913	\$5,402	\$9,346	Mill & Overlay (1.5in), 5% Full Depth Patching	\$0	\$11,975	\$11,975
10250 N	6580 W	Hidden Pond	4,034	403	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$1,561	\$6,671	\$14,780	\$23,011	Mill & Overlay (1.5in)	\$0	\$28,945	\$28,945
Bull River	Lone Rock Rd	6400 W	3,846	38	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,637	\$6,997	\$1,409	\$10,044	Mill & Overlay (1.5in)	\$0	\$27,601	\$27,601
5720W	10680 N	10660 N	634	0	Crack Seal, Seal Coat	3-5 Years	\$273	\$1,166	\$0	\$1,438	Mill & Overlay (1.5in)	\$0	\$4,552	\$4,552
5470 W	10600 N	10550 N	986	0	Seal Coat	3-5 Years	\$0	\$1,812	\$0	\$1,812	Mill & Overlay (1.5in)	\$0	\$7,078	\$7,078

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Stoneshire	10800 N	10750 N	909	0	Crack Seal, Seal Coat	3-5 Years	\$391	\$1,671	\$0	\$2,062	Mill & Overlay (1.5in)	\$0	\$6,525	\$6,525
Horizon	North Star	Harvest Moon	6,220	0	Crack Seal, Seal Coat	3-5 Years	\$4,043	\$11,429	\$0	\$15,472	Mill & Overlay (1.5in)	\$0	\$44,635	\$44,635
Sampson / Joey	Jonathon	11200 N	4,265	43	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,745	\$7,759	\$1,563	\$12,067	Mill & Overlay (1.5in)	\$0	\$30,608	\$30,608
Jonathon	4900 W	4800 W	5,030	0	Crack Seal, Seal Coat	3-5 Years	\$3,269	\$9,242	\$0	\$12,511	Mill & Overlay (1.5in)	\$0	\$36,092	\$36,092
Cyprus	11890 N	Apollo	2,556	26	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,088	\$4,649	\$936	\$6,673	Mill & Overlay (1.5in)	\$0	\$18,339	\$18,339
10370 N	North County	4730 W	1,866	0	Crack Seal, Seal Coat	3-5 Years	\$1,213	\$3,429	\$0	\$4,642	Mill & Overlay (1.5in)	\$0	\$13,391	\$13,391
6670 W / 9680 N	9690 N	9600 N	3,258	0	Crack Seal, Seal Coat	3-5 Years	\$1,401	\$5,987	\$0	\$7,388	Mill & Overlay (1.5in)	\$0	\$23,382	\$23,382
6200 W	10830 N	10760 N	1,408	141	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$545	\$2,328	\$5,159	\$8,032	Mill & Overlay (1.5in)	\$0	\$10,104	\$10,104
Atlas	Cyprus	11995 N	3,355	34	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,428	\$6,103	\$1,229	\$8,761	Mill & Overlay (1.5in)	\$0	\$24,075	\$24,075
Sunrise	Granite Flats	6190 W	2,496	125	Seal Coat, 5% Surface Patching	3-5 Years	\$0	\$4,357	\$4,573	\$8,930	Mill & Overlay (1.5in)	\$0	\$17,911	\$17,911
6900 W	10300 N	10400 N	3,683	184	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$2,274	\$6,429	\$6,747	\$15,450	Mill & Overlay (1.5in)	\$0	\$26,428	\$26,428
10900 N	5750 W	5850 W	2,386	0	Crack Seal, Seal Coat	3-5 Years	\$1,551	\$4,385	\$0	\$5,936	Mill & Overlay (1.5in)	\$0	\$17,124	\$17,124
Skyline Dr. N	Ridge	Mercer Hollow	3,817	38	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,625	\$6,943	\$1,398	\$9,966	Mill & Overlay (1.5in)	\$0	\$27,388	\$27,388
Wildflower	Timber Ridge	Timberline	8,989	449	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$5,551	\$15,691	\$16,468	\$37,710	Mill & Overlay (1.5in)	\$0	\$64,504	\$64,504
Foothill	Granite Flats	6000 W	1,947	195	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$753	\$3,220	\$7,134	\$11,107	Mill & Overlay (1.5in)	\$0	\$13,972	\$13,972
4370 W	10370 N	S EOP	3,448	0	Crack Seal, Seal Coat	3-5 Years	\$2,242	\$6,337	\$0	\$8,578	Mill & Overlay (1.5in)	\$0	\$24,746	\$24,746
Canterbury Dr / Marie	Canterbury Ln	10550 N	2,867	143	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,171	\$5,005	\$5,253	\$11,429	Mill & Overlay (1.5in)	\$0	\$20,575	\$20,575
5730 W	Andrew	SR-92	4,785	239	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,955	\$8,354	\$8,767	\$19,075	Mill & Overlay (1.5in)	\$0	\$34,340	\$34,340
Adonis	Cyprus	Atlas	5,137	51	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$2,187	\$9,345	\$1,882	\$13,414	Mill & Overlay (1.5in)	\$0	\$36,863	\$36,863
Beacon Hill	North Star	11800 N	3,556	0	Crack Seal, Seal Coat	3-5 Years	\$1,529	\$6,535	\$0	\$8,064	Mill & Overlay (1.5in)	\$0	\$25,520	\$25,520
10930 N	5600 W	W CDS	2,472	25	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,591	\$4,497	\$906	\$6,993	Mill & Overlay (1.5in)	\$0	\$17,739	\$17,739
Timber Ridge	Wildflower	Timberline	4,591	459	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$2,686	\$7,593	\$16,822	\$27,101	Mill & Overlay (1.5in)	\$0	\$32,946	\$32,946
1965 N, 9975 N, 9800 N	6400 West	W CDS / City Limit	3,138	157	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,938	\$5,477	\$5,749	\$13,164	Mill & Overlay (1.5in)	\$0	\$22,517	\$22,517
Sampson / Sampson Ct	Jonathon	E CDS	3,357	0	Crack Seal, Seal Coat	3-5 Years	\$2,182	\$6,168	\$0	\$8,350	Mill & Overlay (1.5in)	\$0	\$24,088	\$24,088

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
10480 N	5600 W	Alpine	6,331	317	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$3,909	\$11,051	\$11,598	\$26,558	Mill & Overlay (1.5in)	\$0	\$45,428	\$45,428
6510 W	10760 N	SEOP	939	0	Crack Seal, Seal Coat	3-5 Years	\$404	\$1,725	\$0	\$2,128	Mill & Overlay (1.5in)	\$0	\$6,736	\$6,736
Mountain Shadows	SR-92	N CDS	2,551	26	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,086	\$4,641	\$935	\$6,663	Mill & Overlay (1.5in)	\$0	\$18,309	\$18,309
Skyline Dr.	Mercer Hollow	Lone Rock	1,299	13	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$553	\$2,362	\$476	\$3,391	Mill & Overlay (1.5in)	\$0	\$9,318	\$9,318
Cemetery Cir	10950 N	10930 N / Reisner	5,036	0	Crack Seal, Seal Coat	3-5 Years	\$2,165	\$9,253	\$0	\$11,418	Mill & Overlay (1.5in)	\$0	\$36,135	\$36,135
Lausanne	Ithaca	12040 N	2,651	0	Crack Seal, Seal Coat	3-5 Years	\$1,140	\$4,871	\$0	\$6,011	Mill & Overlay (1.5in)	\$0	\$19,024	\$19,024
10760 N	6200 W	E C-D-S	2,845	28	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,211	\$5,176	\$1,043	\$7,430	Mill & Overlay (1.5in)	\$0	\$20,418	\$20,418
10760 N	6400 W	6589 W	4,239	424	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$1,640	\$7,010	\$15,531	\$24,181	Mill & Overlay (1.5in)	\$0	\$30,417	\$30,417
6250 W / 6320 W	9860 N	N CDS	2,030	0	Crack Seal, Seal Coat	3-5 Years	\$873	\$3,730	\$0	\$4,603	Mill & Overlay (1.5in)	\$0	\$14,566	\$14,566
10300 N	6530 W	6580 W	1,951	195	Crack Seal, Seal Coat, 10% Full Depth Patching	3-5 Years	\$755	\$3,227	\$12,633	\$16,614	Mill & Overlay (1.5in), 10% Full Depth Patching	\$0	\$14,001	\$14,001
9770 N	6700 W	6800 W	2,566	0	Crack Seal, Seal Coat	3-5 Years	\$1,668	\$4,716	\$0	\$6,384	Mill & Overlay (1.5in)	\$0	\$18,417	\$18,417
10380 N	6620 W	10300 N	3,043	304	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$1,178	\$5,033	\$11,151	\$17,362	Mill & Overlay (1.5in)	\$0	\$21,839	\$21,839
6330 W / 10950 N	10890 N	Cemetery	5,093	0	Crack Seal, Seal Coat	3-5 Years	\$3,310	\$9,358	\$0	\$12,668	Mill & Overlay (1.5in)	\$0	\$36,546	\$36,546
10890 N	6400 W	E CDS	3,894	195	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$2,405	\$6,798	\$7,134	\$16,337	Mill & Overlay (1.5in)	\$0	\$27,944	\$27,944
Valley View	6190 W	ECDS	4,775	478	Crack Seal, Seal Coat, 10% Full Depth Patching	3-5 Years	\$1,848	\$7,897	\$30,918	\$40,664	Mill & Overlay (1.5in), 10% Full Depth Patching	\$0	\$34,268	\$34,268
Dry Creek Cir	E C-D-S	W C-D-S	4,613	461	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$1,785	\$7,628	\$16,901	\$26,314	Mill & Overlay (1.5in)	\$0	\$33,100	\$33,100
10620 N	5600 W	5720 W	3,595	0	Crack Seal, Seal Coat	3-5 Years	\$2,337	\$6,606	\$0	\$8,943	Mill & Overlay (1.5in)	\$0	\$25,799	\$25,799
5800 W	N CDS	S CDS	4,045	0	Crack Seal, Seal Coat	3-5 Years	\$2,629	\$7,432	\$0	\$10,062	Mill & Overlay (1.5in)	\$0	\$29,026	\$29,026
Bull River Rd / Granite	6400 W	River Bend Rd.	8,533	853	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$3,302	\$14,112	\$31,267	\$48,681	Mill & Overlay (1.5in)	\$0	\$61,234	\$61,234
Eagleview	9600 N	N CDS	2,636	0	Crack Seal, Seal Coat	3-5 Years	\$1,713	\$4,844	\$0	\$6,557	Mill & Overlay (1.5in)	\$0	\$18,917	\$18,917
Caddie	North County	E CDS	12,290	0	Crack Seal, Seal Coat	3-5 Years	\$7,988	\$22,582	\$0	\$30,570	Mill & Overlay (1.5in)	\$0	\$88,190	\$88,190
9860 N	6200 W	6000 W	9,585	958	Crack Seal, Seal Coat, 10% Surface Patching	3-5 Years	\$3,709	\$15,851	\$35,120	\$54,680	Mill & Overlay (1.5in)	\$0	\$68,781	\$68,781
6150 W	Valley View	11800 N	799	8	Seal Coat, 1% Surface Patching	3-5 Years	\$0	\$1,454	\$293	\$1,747	Mill & Overlay (1.5in)	\$0	\$5,736	\$5,736
5720W	10740 N	10680 N	1,386	0	Seal Coat	3-5 Years	\$0	\$2,547	\$0	\$2,547	Mill & Overlay (1.5in)	\$0	\$9,946	\$9,946

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
6100 W	SCDS	9700 N	1,536	0	Seal Coat	3-5 Years	\$0	\$2,822	\$0	\$2,822	Mill & Overlay (1.5in)	\$0	\$11,021	\$11,021
10620 N	5720 W	W EOP	3,503	0	Crack Seal, Seal Coat	3-5 Years	\$2,277	\$6,437	\$0	\$8,715	Mill & Overlay (1.5in)	\$0	\$25,140	\$25,140
Parkway W	Town Center W	5600 W	3,540	0	Seal Coat	3-5 Years	\$0	\$6,505	\$0	\$6,505	Mill & Overlay (1.5in)	\$0	\$25,403	\$25,403
Athena / 11830 CDS / 11860 CDS	11800 North	11895 North	4,555	0	Crack Seal, Seal Coat	3-5 Years	\$1,959	\$8,370	\$0	\$10,329	Mill & Overlay (1.5in)	\$0	\$32,689	\$32,689
6120 W	10760 N	SEOP	1,499	0	Seal Coat	3-5 Years	\$0	\$2,755	\$0	\$2,755	Mill & Overlay (1.5in)	\$0	\$10,758	\$10,758
9680 N	6100 W	East C-D-S	1,767	0	Seal Coat	3-5 Years	\$0	\$3,247	\$0	\$3,247	Mill & Overlay (1.5in)	\$0	\$12,682	\$12,682
Athena	Chambery	North CDS	1,460	0	Crack Seal, Seal Coat	3-5 Years	\$628	\$2,684	\$0	\$3,312	Mill & Overlay (1.5in)	\$0	\$10,480	\$10,480
Canyon Links Vista	Country Club Dr.	SEOP	2,840	0	Seal Coat	3-5 Years	\$0	\$5,219	\$0	\$5,219	Mill & Overlay (1.5in)	\$0	\$20,383	\$20,383
6400 W	10400 N	10250 N	3,453	0	Crack Seal, Seal Coat	3-5 Years	\$2,244	\$6,344	\$0	\$8,589	Mill & Overlay (1.5in)	\$0	\$24,777	\$24,777
11350 N	5835 W	W CDS	1,356	0	Crack Seal, Seal Coat	3-5 Years	\$583	\$2,492	\$0	\$3,076	Mill & Overlay (1.5in)	\$0	\$9,733	\$9,733
5750 W	9700 N	9600 N	4,839	242	Crack Seal, Seal Coat, 5% Surface Patching	3-5 Years	\$1,977	\$8,447	\$8,865	\$19,289	Mill & Overlay (1.5in)	\$0	\$34,724	\$34,724
Mountain Ridge	10180 N	10400 N	5,809	0	Crack Seal, Seal Coat	3-5 Years	\$3,776	\$10,675	\$0	\$14,451	Mill & Overlay (1.5in)	\$0	\$41,688	\$41,688
9400 N / 6760 W	6400 W	N CDS	2,171	22	Crack Seal, Seal Coat, 1% Surface Patching	3-5 Years	\$1,397	\$3,949	\$795	\$6,141	Mill & Overlay (1.5in)	\$0	\$15,578	\$15,578
Towncenter Pkwy	Alpine	Town Center E	3,771	0	Crack Seal, Seal Coat	4-6 Years	\$1,622	\$6,929	\$0	\$8,551	Mill & Overlay (1.5in)	\$0	\$27,061	\$27,061
Towncenter Pkwy	Town Center E	5600 W	6,847	0	Crack Seal, Seal Coat	4-6 Years	\$2,944	\$12,581	\$0	\$15,525	Mill & Overlay (1.5in)	\$0	\$49,132	\$49,132
Avery	Canterbury Dr	Canterbury Dr	4,284	0	Seal Coat	4-6 Years	\$0	\$7,872	\$0	\$7,872	Mill & Overlay (1.5in)	\$0	\$30,744	\$30,744
Canterbury Dr	Canterbury Ln	Canterbury Ln	9,943	0	Seal Coat	4-6 Years	\$0	\$18,271	\$0	\$18,271	Mill & Overlay (1.5in)	\$0	\$71,353	\$71,353
Deer Hollow	Avery	Avery	2,164	0	Seal Coat	4-6 Years	\$0	\$3,976	\$0	\$3,976	Mill & Overlay (1.5in)	\$0	\$15,526	\$15,526
Avery	Canterbury Dr	N/E EOP	5,576	0	Seal Coat	4-6 Years	\$0	\$10,246	\$0	\$10,246	Mill & Overlay (1.5in)	\$0	\$40,013	\$40,013
Iverson	10400 N	Wood Duck	5,045	0	Seal Coat	4-6 Years	\$0	\$9,271	\$0	\$9,271	Mill & Overlay (1.5in)	\$0	\$36,206	\$36,206
Wood Duck	Iverson	E EOP	1,014	0	Seal Coat	4-6 Years	\$0	\$1,863	\$0	\$1,863	Mill & Overlay (1.5in)	\$0	\$7,275	\$7,275
Red Hawk	Wood Duck	7200 W	8,067	0	Seal Coat	4-6 Years	\$0	\$14,823	\$0	\$14,823	Mill & Overlay (1.5in)	\$0	\$57,887	\$57,887
Normandy	Calais	Highland	4,293	0	Crack Seal, Seal Coat	4-6 Years	\$1,846	\$7,888	\$0	\$9,734	Mill & Overlay (1.5in)	\$0	\$30,805	\$30,805
Normandy	Highland	Burgundy	5,236	0	Crack Seal, Seal Coat	4-6 Years	\$2,251	\$9,621	\$0	\$11,872	Mill & Overlay (1.5in)	\$0	\$37,571	\$37,571
Normandy	Burgundy	Calais	8,391	0	Crack Seal, Seal Coat	4-6 Years	\$3,608	\$15,419	\$0	\$19,028	Mill & Overlay (1.5in)	\$0	\$60,217	\$60,217

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
10930 N / Reisner	6150 W	6000 W	3,705	0	Crack Seal, Seal Coat	4-6 Years	\$1,593	\$6,808	\$0	\$8,401	Mill & Overlay (1.5in)	\$0	\$26,587	\$26,587
Janie / Ole Bish	10550 N	North County	1,902	0	Seal Coat	5-7 Years	\$0	\$3,494	\$0	\$3,494	Mill & Overlay (1.5in)	\$0	\$13,646	\$13,646
6180 W	9800 N	9860 N	1,494	0	Seal Coat	5-7 Years	\$0	\$2,744	\$0	\$2,744	Mill & Overlay (1.5in)	\$0	\$10,718	\$10,718
5800 W	10100 N	10040 N	1,511	0	Seal Coat	5-7 Years	\$0	\$2,777	\$0	\$2,777	Mill & Overlay (1.5in)	\$0	\$10,844	\$10,844
5550 W	SR-92	11200 N	4,575	0	Seal Coat	5-7 Years	\$0	\$8,406	\$0	\$8,406	Mill & Overlay (1.5in)	\$0	\$32,830	\$32,830
5500 W	SR-92	11200 N	4,608	0	Seal Coat	5-7 Years	\$0	\$8,467	\$0	\$8,467	Mill & Overlay (1.5in)	\$0	\$33,066	\$33,066
5800 W	10040 N	S EOP	2,948	0	Seal Coat	5-7 Years	\$0	\$5,417	\$0	\$5,417	Mill & Overlay (1.5in)	\$0	\$21,155	\$21,155
9800 N	6000 W	6180 W	5,678	0	Seal Coat	5-7 Years	\$0	\$10,432	\$0	\$10,432	Mill & Overlay (1.5in)	\$0	\$40,742	\$40,742
10100 N	5750 W	5890 W	4,088	0	Seal Coat	5-7 Years	\$0	\$7,511	\$0	\$7,511	Mill & Overlay (1.5in)	\$0	\$29,332	\$29,332
Windsor Park	5800 W	5730 W	3,480	0	Seal Coat	5-7 Years	\$0	\$6,394	\$0	\$6,394	Mill & Overlay (1.5in)	\$0	\$24,970	\$24,970
5600 W	SR-92	11200 N	4,759	0	Seal Coat	5-7 Years	\$0	\$8,745	\$0	\$8,745	Mill & Overlay (1.5in)	\$0	\$34,150	\$34,150
School Park	Alpine	Park Entrance	3,163	0	Seal Coat	5-7 Years	\$0	\$5,811	\$0	\$5,811	Mill & Overlay (1.5in)	\$0	\$22,695	\$22,695
5750 W	SR-92	10850 N	4,836	0	Seal Coat	5-7 Years	\$0	\$8,885	\$0	\$8,885	Mill & Overlay (1.5in)	\$0	\$34,700	\$34,700
6020 W	9800 N	N CDS	1,233	0	Seal Coat	5-7 Years	\$0	\$2,266	\$0	\$2,266	Mill & Overlay (1.5in)	\$0	\$8,850	\$8,850
6130 W	9800 N	N CDS	1,416	0	Seal Coat	5-7 Years	\$0	\$2,601	\$0	\$2,601	Mill & Overlay (1.5in)	\$0	\$10,159	\$10,159
6080 W	9800 N	N CDS	1,435	0	Seal Coat	5-7 Years	\$0	\$2,636	\$0	\$2,636	Mill & Overlay (1.5in)	\$0	\$10,295	\$10,295
6180 W	9860 N	9900 N	1,762	0	Seal Coat	5-7 Years	\$0	\$3,237	\$0	\$3,237	Mill & Overlay (1.5in)	\$0	\$12,643	\$12,643
11060 N	5500 W	E EOP	1,335	0	Seal Coat	5-7 Years	\$0	\$2,452	\$0	\$2,452	Mill & Overlay (1.5in)	\$0	\$9,578	\$9,578
Earl	Mystic Hollow	Alpine	3,602	0	Seal Coat	5-7 Years	\$0	\$6,618	\$0	\$6,618	Mill & Overlay (1.5in)	\$0	\$25,845	\$25,845
5750 W	10100 N	N CDS	2,158	0	Seal Coat	5-7 Years	\$0	\$3,965	\$0	\$3,965	Mill & Overlay (1.5in)	\$0	\$15,483	\$15,483
Coventry	5600 W	Town Center W	2,313	0	Seal Coat	5-7 Years	\$0	\$4,251	\$0	\$4,251	Mill & Overlay (1.5in)	\$0	\$16,601	\$16,601
5800 W	10100 N	N CDS	2,692	0	Seal Coat	5-7 Years	\$0	\$4,946	\$0	\$4,946	Mill & Overlay (1.5in)	\$0	\$19,317	\$19,317
Paradise Cir / 6570 W	10400 N	N CDS	1,494	0	Seal Coat	5-7 Years	\$0	\$2,745	\$0	\$2,745	Mill & Overlay (1.5in)	\$0	\$10,720	\$10,720
10040 N	E CDS	W EOP	2,878	0	Seal Coat	5-7 Years	\$0	\$5,288	\$0	\$5,288	Mill & Overlay (1.5in)	\$0	\$20,650	\$20,650
View Pointe	Park	Park	2,506	0	Seal Coat	5-7 Years	\$0	\$4,604	\$0	\$4,604	Mill & Overlay (1.5in)	\$0	\$17,982	\$17,982
9910 N	Alpine	Pheasant	3,197	0	Seal Coat	5-7 Years	\$0	\$5,875	\$0	\$5,875	Mill & Overlay (1.5in)	\$0	\$22,944	\$22,944

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Mystic Hollow	N CDS	S CDS	4,485	0	Seal Coat	5-7 Years	\$0	\$8,242	\$0	\$8,242	Mill & Overlay (1.5in)	\$0	\$32,186	\$32,186
10900 N	Alpine	5360 W	1,109	0	Seal Coat	5-7 Years	\$0	\$2,037	\$0	\$2,037	Mill & Overlay (1.5in)	\$0	\$7,957	\$7,957
Spring Hollow	Broadleaf Hollow	Maple Hollow	1,650	0	Seal Coat	5-7 Years	\$0	\$3,032	\$0	\$3,032	Mill & Overlay (1.5in)	\$0	\$11,839	\$11,839
10700 N	Alpine	5360 W	1,263	0	Seal Coat	5-7 Years	\$0	\$2,321	\$0	\$2,321	Mill & Overlay (1.5in)	\$0	\$9,064	\$9,064
Julie Ann	Mystic	W CDS	2,094	0	Seal Coat	5-7 Years	\$0	\$3,848	\$0	\$3,848	Mill & Overlay (1.5in)	\$0	\$15,026	\$15,026
Park Cir	Park	Park	5,162	0	Seal Coat	5-7 Years	\$0	\$9,485	\$0	\$9,485	Mill & Overlay (1.5in)	\$0	\$37,043	\$37,043
Mystic	J Legrand Adamson	Earl	5,610	280	Seal Coat, 5% Surface Patching	5-7 Years	\$0	\$9,792	\$10,277	\$20,069	Mill & Overlay (1.5in)	\$0	\$40,254	\$40,254
Maple Hollow	Broadleaf Hollow	N CDS	3,777	0	Seal Coat	5-7 Years	\$0	\$6,941	\$0	\$6,941	Mill & Overlay (1.5in)	\$0	\$27,107	\$27,107
Wing Pl	Mystic	W CDS	1,848	92	Seal Coat, 5% Surface Patching	5-7 Years	\$0	\$3,226	\$3,386	\$6,613	Mill & Overlay (1.5in)	\$0	\$13,264	\$13,264
Park	SR-92	Shoreline	6,519	0	Seal Coat	5-7 Years	\$0	\$11,979	\$0	\$11,979	Mill & Overlay (1.5in)	\$0	\$46,780	\$46,780
Castle Pine Way	Country Club	Castle Pine Dr	4,179	0	Seal Coat	5-7 Years	\$0	\$7,679	\$0	\$7,679	Mill & Overlay (1.5in)	\$0	\$29,987	\$29,987
Castle Pine Dr	NCS	Country Club	4,629	0	Seal Coat	5-7 Years	\$0	\$8,505	\$0	\$8,505	Mill & Overlay (1.5in)	\$0	\$33,216	\$33,216
10630 N	6400 W	E CDS	2,209	0	Seal Coat	5-7 Years	\$0	\$4,058	\$0	\$4,058	Mill & Overlay (1.5in)	\$0	\$15,849	\$15,849
10670 N / 6340 W	6400 W	N CDS	2,924	0	Seal Coat	5-7 Years	\$0	\$5,373	\$0	\$5,373	Mill & Overlay (1.5in)	\$0	\$20,983	\$20,983
Broadleaf Hollow	1585 N	Highland	6,680	0	Seal Coat	5-7 Years	\$0	\$12,275	\$0	\$12,275	Mill & Overlay (1.5in)	\$0	\$47,939	\$47,939
5360 W	10900 N	10700 N	8,240	0	Seal Coat	5-7 Years	\$0	\$15,142	\$0	\$15,142	Mill & Overlay (1.5in)	\$0	\$59,133	\$59,133
Park Dr / Elk Cv	Shoreline	E CDS	11,011	0	Seal Coat	5-7 Years	\$0	\$20,232	\$0	\$20,232	Mill & Overlay (1.5in)	\$0	\$79,014	\$79,014
Hidden Dr	9910 N	Alpine	3,278	0	Seal Coat	5-7 Years	\$0	\$6,023	\$0	\$6,023	Mill & Overlay (1.5in)	\$0	\$23,523	\$23,523
Crestview / Villiage	Towncenter Pkwy	Towncenter Pkwy	4,819	0	Crack Seal, Seal Coat	5-7 Years	\$2,072	\$8,856	\$0	\$10,928	Mill & Overlay (1.5in)	\$0	\$34,584	\$34,584
Shoreline	Park	Park	4,589	0	Seal Coat	5-7 Years	\$0	\$8,431	\$0	\$8,431	Mill & Overlay (1.5in)	\$0	\$32,927	\$32,927
Maddie	Peyton	W EOP	1,271	0	Seal Coat	5-7 Years	\$0	\$2,335	\$0	\$2,335	Mill & Overlay (1.5in)	\$0	\$9,119	\$9,119
Walker	10400 N	Compton	1,446	0	Seal Coat	5-7 Years	\$0	\$2,657	\$0	\$2,657	Mill & Overlay (1.5in)	\$0	\$10,375	\$10,375
Compton / Haymaker	Peyton	Carson	2,871	0	Seal Coat	5-7 Years	\$0	\$5,276	\$0	\$5,276	Mill & Overlay (1.5in)	\$0	\$20,603	\$20,603
Spruce Ct	Spruce Dr	E CDS	2,054	0	Crack Seal, Seal Coat	5-7 Years	\$883	\$3,774	\$0	\$4,657	Mill & Overlay (1.5in)	\$0	\$14,739	\$14,739
Carson / Peyton	Haymaker	Compton	3,702	0	Seal Coat	5-7 Years	\$0	\$6,803	\$0	\$6,803	Mill & Overlay (1.5in)	\$0	\$26,567	\$26,567

Segment Data					Recommended Treatment and Estimated Cost					Postponed Repairs and Estimated Costs				
Road Name	From	To	Total Area (SY)	Patching Area (SY)	Recommendation	Recommended Year	Crack Seal	Seal Coat	Patching	Estimated Cost	Repair Required if treatment postponed	Patching	M/OL	Estimated Postponed Cost
Janie / Sego Lily Ct	Caddie	10550 N	4,959	0	Seal Coat	5-7 Years	\$0	\$9,112	\$0	\$9,112	Mill & Overlay (1.5in)	\$0	\$35,587	\$35,587
9760 N	Alpine	E CDS	2,517	0	Crack Seal, Seal Coat	5-7 Years	\$1,082	\$4,626	\$0	\$5,708	Mill & Overlay (1.5in)	\$0	\$18,064	\$18,064
Spruce Dr	SR-92	N CDS	4,575	0	Crack Seal, Seal Coat	5-7 Years	\$1,967	\$8,407	\$0	\$10,375	Mill & Overlay (1.5in)	\$0	\$32,833	\$32,833
Sunset	Highland	W EOP	1,418	0	Seal Coat	5-7 Years	\$0	\$2,605	\$0	\$2,605	Mill & Overlay (1.5in)	\$0	\$10,175	\$10,175
Brookridge	Janie	E CDS	2,600	0	Seal Coat	5-7 Years	\$0	\$4,778	\$0	\$4,778	Mill & Overlay (1.5in)	\$0	\$18,658	\$18,658
10100 N	Yorkshire	5750 W	1,591	0	Seal Coat	5-7 Years	\$0	\$2,924	\$0	\$2,924	Mill & Overlay (1.5in)	\$0	\$11,418	\$11,418
Mystic / Willem	Earl	S CDS	7,353	1,103	Seal Coat, 15% Full Depth Patching	5-7 Years	\$0	\$11,485	\$71,413	\$82,898	Mill & Overlay (1.5in), 15% Full Depth Patching	\$0	\$52,766	\$52,766
Calais	Normandy	N CDS	2,625	0	Crack Seal, Seal Coat	5-7 Years	\$1,129	\$4,823	\$0	\$5,951	Mill & Overlay (1.5in)	\$0	\$18,834	\$18,834
Cedar Hls	West Side Track	Knight Ave	1,921	0	Seal Coat	5-7 Years	\$0	\$3,530	\$0	\$3,530	Mill & Overlay (1.5in)	\$0	\$13,787	\$13,787
Penn Brooke	11800 N	S EOP	4,138	0	Seal Coat	5-7 Years	\$0	\$7,604	\$0	\$7,604	Mill & Overlay (1.5in)	\$0	\$29,695	\$29,695
Braden	Riverside	Yorkshire	966	0	Seal Coat	5-7 Years	\$0	\$1,775	\$0	\$1,775	Mill & Overlay (1.5in)	\$0	\$6,931	\$6,931
Kaden	Riverside	Yorkshire	969	0	Seal Coat	5-7 Years	\$0	\$1,781	\$0	\$1,781	Mill & Overlay (1.5in)	\$0	\$6,955	\$6,955
Knight Ave	10100 N / Cedar Hls	North County	13,774	0	Seal Coat	5-7 Years	\$0	\$25,310	\$0	\$25,310	Mill & Overlay (1.5in)	\$0	\$98,841	\$98,841
Riverside / Natalie	S CDS	N CDS	5,445	0	Seal Coat	5-7 Years	\$0	\$10,005	\$0	\$10,005	Mill & Overlay (1.5in)	\$0	\$39,072	\$39,072
Yorkshire	Windsor Park	N CDS	5,754	0	Seal Coat	5-7 Years	\$0	\$10,572	\$0	\$10,572	Mill & Overlay (1.5in)	\$0	\$41,288	\$41,288
6110 W / CDS to East	9860 N	N CDS	1,860	0	Seal Coat	5-7 Years	\$0	\$3,418	\$0	\$3,418	Mill & Overlay (1.5in)	\$0	\$13,349	\$13,349
5800 W / E & W Crimson	9850 N	N CDS	3,326	0	Seal Coat	5-7 Years	\$0	\$6,111	\$0	\$6,111	Mill & Overlay (1.5in)	\$0	\$23,866	\$23,866
					Totals:	\$250,626	\$2,101,014	\$468,507	\$2,820,147			\$7,466	\$6,706,112	\$6,713,578

## Appendix C: Detailed Road Preservation Prioritization Table

### 1-2 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Madison	6800 W	E EOP	Crack Seal, Double Seal Coat	64.3	94	Minor Collect.	49	\$19,037	83	77
Sunset Hls	Wood Hollow	Dry Hollow	Crack Seal, Double Seal Coat	62.3	99	Maj. Local	15	\$8,915	93	72
11350 N	5600 W	5500 W	Double Seal Coat	62.9	98	Maj. Local	15	\$7,449	94	72
6610 W	Madison	10000 N	Double Seal Coat	64.3	94	Maj. Local	15	\$6,264	95	71
5500 W	11200 N	11350 N	Crack Seal, Double Seal Coat	63	97	Maj. Local	15	\$15,477	86	69
Stone Creek	5500 W	5380 W	Crack Seal, Double Seal Coat	63	97	Maj. Local	15	\$15,786	86	69
6400 W	11000 North	Gambol Oak	Crack Seal, Double Seal Coat	63.3	97	Minor Local	0	\$7,759	94	67
Lone Rock Rd	6400 W	Bull River	Crack Seal, Double Seal Coat, 1% Surface Patching	66.9	87	Maj. Local	15	\$11,470	90	66
Sunset Hls	N CDS	Wood Hollow	Crack Seal, Double Seal Coat	62.3	99	Minor Local	0	\$15,001	87	66
Flowering Plum	Bull River	N CDS	Crack Seal, Double Seal Coat	66.9	87	Maj. Local	15	\$14,718	87	66
9500 N	6601 W	E EOP	Double Seal Coat	70	79	Maj. Local	15	\$3,971	98	65
5740 W	9700 N	N CDS	Crack Seal, Double Seal Coat	64.9	92	Minor Local	0	\$7,079	94	65
Bull River	Highland	Lone Rock Rd	Crack Seal, Double Seal Coat	66.9	87	Maj. Local	15	\$15,581	86	65
5480 W	NCS	10030 N	Crack Seal, Double Seal Coat	67.2	86	Maj. Local	15	\$15,893	86	65
10030 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	67.2	86	Maj. Local	15	\$16,308	86	65

## 1-2 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Avonmore	SR-92	N CDS	Double Seal Coat	67	87	Maj. Local	15	\$19,506	82	64
10180 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	67.2	86	Maj. Local	15	\$18,820	83	64
Cherry	Killarney	N CDS	Double Seal Coat	66.4	88	Minor Local	0	\$6,688	95	64
6560 W	9600 N	S C-D-S	Double Seal Coat	70	79	Maj. Local	15	\$10,982	91	63
Canterbury Pl.	Canterbury Ln	Canterbury Way	Double Seal Coat, 5% Full Depth Patching	70	79	Maj. Local	15	\$14,039	88	62
6680 W	6620 W	10250 N	Crack Seal, Double Seal Coat	70	79	Maj. Local	15	\$14,181	88	62
Lone Rock	6400 W	Ridge	Crack Seal, Double Seal Coat, 1% Surface Patching	70	79	Maj. Local	15	\$14,774	87	62
Larsen	10600 N	Chapel	Double Seal Coat	71.8	74	Maj. Local	15	\$11,854	90	61
Sunset Hls	Dry Hollow	Highland	Crack Seal, Double Seal Coat, 5% Surface Patching	66.9	87	Maj. Local	15	\$29,583	73	61
Chapel	Larsen	6000 W	Double Seal Coat	71.8	74	Maj. Local	15	\$13,471	88	61
10080 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	67.2	86	Minor Local	0	\$16,366	85	60
10130 N	Alpine	Mountain Ridge	Crack Seal, Double Seal Coat	67.2	86	Minor Local	0	\$16,836	85	60
5920 W	5870 W	10800 N	Crack Seal, Double Seal Coat	69	82	Minor Local	0	\$11,002	91	60
Ithaca	Lausanne	Apollo	Crack Seal, Double Seal Coat, 5% Surface Patching	70	79	Maj. Local	15	\$23,914	78	60
Skyline Dr. W	Mercer Hollow	Lone Rock	Crack Seal, Double Seal Coat, 1% Surface Patching	70	79	Minor Local	0	\$9,009	93	59
6350 W	9860 N	10000 N	Crack Seal, Double Seal Coat	71.3	76	Maj. Local	15	\$20,375	82	59
Mountain Ridge	10180 N	10030 N	Crack Seal, Double Seal Coat	73.7	69	Maj. Local	15	\$12,506	89	59

## 1-2 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Thornton / 6160 W	6000 W	10010 N	Crack Seal, Double Seal Coat	71.2	76	Maj. Local	15	\$22,013	80	59
Cyprus	Apollow	NEOP	Crack Seal, Double Seal Coat, 1% Surface Patching	70	79	Minor Local	0	\$14,539	87	58
Vintage	6800 W	6700 W	Double Seal Coat	77.2	60	Maj. Local	15	\$8,275	93	57
9600 N	6800 W	7050 W	Double Seal Coat	99.5	1	Maj. Collect.	100	\$18,256	84	56
Stoneshire	Victoria	10750 N	Double Seal Coat	78.9	56	Maj. Local	15	\$7,046	95	55
Wellington / Coventry	N CDS	S CDS	Crack Seal, Double Seal Coat	78.6	56	Maj. Local	15	\$11,542	90	54
Westfield Cv	11950	S CDS	Crack Seal, Double Seal Coat	77.5	59	Maj. Local	15	\$15,731	86	54
Hidden Meadow	Angels Gate	6000 W	Crack Seal, Double Seal Coat, 5% Full Depth Patching	78.7	56	Maj. Local	15	\$12,439	89	54
Victoria	Woodshire	Stoneshire	Double Seal Coat	78.9	56	Maj. Local	15	\$11,786	90	54
Woodshire	6000 W	Stoneshire	Double Seal Coat	78.9	56	Maj. Local	15	\$13,860	88	53
Sampson Dr	11200 North	S CDS	Crack Seal, Double Seal Coat	78.9	56	Minor Local	0	\$4,597	97	51
Cambridge	Windsor Park	S CDS	Crack Seal, Double Seal Coat	78.6	56	Minor Local	0	\$6,766	95	51
Yorkshire Ct	Windsor Park	S CDS	Crack Seal, Double Seal Coat	78.6	56	Minor Local	0	\$7,388	94	51
New London	Ponce De Leon	E CDS	Double Seal Coat	78.7	56	Minor Local	0	\$7,568	94	51
Kensington	Windsor Park	N CDS	Crack Seal, Double Seal Coat	78.6	56	Minor Local	0	\$9,508	92	50
Oxford	Windsor Park	S CDS	Crack Seal, Double Seal Coat	78.6	56	Minor Local	0	\$9,919	92	50

## 1-2 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
5700 W	1470 N	9600 N	Crack Seal, Double Seal Coat	85	39	Maj. Local	15	\$2,817	99	50
Ponce De Leon	New London	SEOP	Double Seal Coat	78.7	56	Minor Local	0	\$10,040	92	50
Granite Flats	Valley View	Foothill	Crack Seal, Double Seal Coat, 1% Surface Patching	85	39	Maj. Local	15	\$5,697	96	49
Chamberry Way	Beacon Hill	6000 W	Double Seal Coat	85	39	Maj. Local	15	\$5,700	96	49
10400 N	6550 W	5875 W	Double Seal Coat	85	39	Minor Collect.	49	\$42,169	60	49
Angels Gate / Light House	Hidden Meadow	Beacon Hill	Crack Seal, Double Seal Coat, 1% Surface Patching	76.3	62	Maj. Local	15	\$43,753	59	47
10680 N	5600 W	W C-D-S	Crack Seal, Double Seal Coat, 1% Surface Patching	85	39	Maj. Local	15	\$15,480	86	46
6000 W	10400 N	10100 N	Double Seal Coat	85	39	Maj. Local	15	\$18,440	83	45
Highland Fields Dr. / 6240 W	11800 N	Sunrise	Double Seal Coat	85	39	Maj. Local	15	\$20,029	82	45
Timp Cv	Alpine	E CDS	Double Seal Coat	85	39	Minor Local	0	\$4,538	97	45
Angels Gate	N EOP	Hidden Meadow	Double Seal Coat, 1% Full Depth Patching	78.7	56	Minor Local	0	\$27,698	74	45
10760 N	6200 West	W EOP / 6250 W	Double Seal Coat	85	39	Minor Local	0	\$5,587	96	45
10150 N	6300 W	6000 W	Double Seal Coat	85	39	Maj. Local	15	\$21,967	80	44
Ridge Rd / 11580 N	6000 W	N CDS	Crack Seal, Double Seal Coat	85	39	Minor Local	0	\$6,878	95	44
Westwood	10250 N	S C-D-S	Double Seal Coat	85	39	Minor Local	0	\$7,405	94	44
Beacon Meadow	Highland View	N CDS	Double Seal Coat	85	39	Minor Local	0	\$10,508	91	43

## 1-2 Years

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Stirling Pointe Condos	N/A	N/A	Double Seal Coat	85	39	Minor Local	0	\$14,981	87	42
6900 W	9600 N	N EOP	Double Seal Coat	87.7	32	Minor Local	0	\$6,287	95	42
11300 N	Sampson	W EOP	Double Seal Coat	85	39	Minor Local	0	\$16,046	86	42
Avondale / Emerson	N CDS	S CDS	Double Seal Coat	85	39	Minor Local	0	\$16,049	86	42
Windsor Park	5730 W	Alpine	Crack Seal, Double Seal Coat, 5% Full Depth Patching	78.6	56	Maj. Local	15	\$58,413	44	40
Parkway E	Town Center E	5300 W	Crack Seal, Seal Coat	95	13	Maj. Local	15	\$6,441	95	38
5750 W	10770 N	10850 N	Double Seal Coat	99.3	2	Maj. Local	15	\$3,495	98	35
10800 N	5750 W	Stoneshire	Double Seal Coat	99.3	2	Maj. Local	15	\$3,979	98	35
10770 N	5600 W	WCS	Double Seal Coat	99.3	2	Maj. Local	15	\$13,718	88	32
Natalie	Stevens	S CDS	Double Seal Coat	99.2	2	Minor Local	0	\$7,656	94	29
Manor Ln / Manor Ct	SR-92	NEOP / CDS	Double Seal Coat	99.7	1	Minor Local	0	\$14,312	87	27
Skye Estates	N/A	N/A	Double Seal Coat	85	39	Maj. Local	15	\$104,000	0	20
<b>Total Cost:</b>								<b>\$1,035,926</b>		

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Westfield Rd / 11800 S	Beacon Hill	Cyprus	Crack Seal, Seal Coat	64.1	94	Maj. Collect.	100	\$33,939	68	88
11200 N	Alpine	5100 W	Crack Seal, Seal Coat	62.1	100	Maj. Local	15	\$11,943	90	71
11100 N	Alpine	5100 W	Crack Seal, Seal Coat	62.8	98	Maj. Local	15	\$9,906	92	71
9810 N	6530 W	6630 W	Crack Seal, Seal Coat	64.1	94	Maj. Local	15	\$5,576	96	71
5100 W	SR-92	11200 N	Crack Seal, Seal Coat	62.8	98	Maj. Local	15	\$10,799	91	71
11200 N	5100 W	Sampson	Crack Seal, Seal Coat	62.1	100	Maj. Local	15	\$14,700	87	71
6580 W	10250 N	10120 N	Crack Seal, Seal Coat, 5% Surface Patching	63.1	97	Maj. Local	15	\$14,733	87	70
11200 N	6000 W	5900 W	Crack Seal, Seal Coat	66.3	89	Maj. Local	15	\$4,392	97	69
North Star	Horizon	Harvest Moon	Crack Seal, Seal Coat	62	100	Minor Local	0	\$4,332	97	69
6530 W	9600 N	9810 N	Crack Seal, Seal Coat	64.1	94	Maj. Local	15	\$13,366	88	69
Harvest Moon	North Star	Horizon	Crack Seal, Seal Coat	62	100	Minor Local	0	\$6,884	95	68
Timberline	Timber Ridge	Wildflower	Crack Seal, Seal Coat, 5% Surface Patching	62.3	99	Maj. Local	15	\$21,771	80	68
10620 N	6000 W	E EOP	Crack Seal, Seal Coat	66.1	89	Maj. Local	15	\$8,752	93	68
10200 N	W CDS	E EOP	Crack Seal, Seal Coat	63.2	97	Minor Local	0	\$3,945	98	68
5470 W	10480 N	10550 N	Crack Seal, Seal Coat	67.8	85	Maj. Local	15	\$3,264	98	68
5900 W / 10550 N	10620 N	6000 N	Crack Seal, Seal Coat	66.1	89	Maj. Local	15	\$9,988	92	68
Beacon Hill	Light House	North Star	Crack Seal, Seal Coat	64.8	93	Maj. Local	15	\$15,607	86	67

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
5650 W / 11030 N	5600 W	11200 N	Crack Seal, Seal Coat	66	89	Maj. Local	15	\$11,436	90	67
Woods Hollow	Highland	Sunset Hls	Crack Seal, Seal Coat, 5% Full Depth Patching	62.3	99	Minor Local	0	\$9,346	92	67
10250 N	6580 W	Hidden Pond	Crack Seal, Seal Coat, 10% Surface Patching	63.2	97	Maj. Local	15	\$23,011	79	67
Bull River	Lone Rock Rd	6400 W	Crack Seal, Seal Coat, 1% Surface Patching	66.9	87	Maj. Local	15	\$10,044	92	67
5720W	10680 N	10660 N	Crack Seal, Seal Coat	70	79	Maj. Local	15	\$1,438	100	66
5470 W	10600 N	10550 N	Seal Coat	70	79	Maj. Local	15	\$1,812	100	66
Stoneshire	10800 N	10750 N	Crack Seal, Seal Coat	70	79	Maj. Local	15	\$2,062	99	66
Horizon	North Star	Harvest Moon	Crack Seal, Seal Coat	62	100	Minor Local	0	\$15,472	86	66
Sampson / Joey	Jonathon	11200 N	Crack Seal, Seal Coat, 1% Surface Patching	67.8	85	Maj. Local	15	\$12,067	90	65
Jonathon	4900 W	4800 W	Crack Seal, Seal Coat	67.8	85	Maj. Local	15	\$12,511	89	65
Cyprus	11890 N	Apollo	Crack Seal, Seal Coat, 1% Surface Patching	70	79	Maj. Local	15	\$6,673	95	65
10370 N	North County	4730 W	Crack Seal, Seal Coat	66.4	88	Minor Local	0	\$4,642	97	64
6670 W / 9680 N	9690 N	9600 N	Crack Seal, Seal Coat	70	79	Maj. Local	15	\$7,388	94	64
6200 W	10830 N	10760 N	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Maj. Local	15	\$8,032	94	64
Atlas	Cyprus	11995 N	Crack Seal, Seal Coat, 1% Surface Patching	70	79	Maj. Local	15	\$8,761	93	64
Sunrise	Granite Flats	6190 W	Seal Coat, 5% Surface Patching	70	79	Maj. Local	15	\$8,930	93	64

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
6900 W	10300 N	10400 N	Crack Seal, Seal Coat, 5% Surface Patching	68.4	83	Maj. Local	15	\$15,450	86	64
10900 N	5750 W	5850 W	Crack Seal, Seal Coat	71.1	76	Maj. Local	15	\$5,936	96	64
Skyline Dr. N	Ridge	Mercer Hollow	Crack Seal, Seal Coat, 1% Surface Patching	70	79	Maj. Local	15	\$9,966	92	64
Wildflower	Timber Ridge	Timberline	Crack Seal, Seal Coat, 5% Surface Patching	62.3	99	Maj. Local	15	\$37,710	65	64
Foothill	Granite Flats	6000 W	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Maj. Local	15	\$11,107	91	63
4370 W	10370 N	S EOP	Crack Seal, Seal Coat	66.4	88	Minor Local	0	\$8,578	93	63
Canterbury Dr / Marie	Canterbury Ln	10550 N	Crack Seal, Seal Coat, 5% Surface Patching	70	79	Maj. Local	15	\$11,429	90	63
5730 W	Andrew	SR-92	Crack Seal, Seal Coat, 5% Surface Patching	68.1	84	Maj. Local	15	\$19,075	83	63
Adonis	Cyprus	Atlas	Crack Seal, Seal Coat, 1% Surface Patching	70	79	Maj. Local	15	\$13,414	88	63
Beacon Hill	North Star	11800 N	Crack Seal, Seal Coat	71.7	74	Maj. Local	15	\$8,064	94	62
10930 N	5600 W	W CDS	Crack Seal, Seal Coat, 1% Surface Patching	67.8	85	Minor Local	0	\$6,993	95	62
Timber Ridge	Wildflower	Timberline	Crack Seal, Seal Coat, 10% Surface Patching	62.3	99	Minor Local	0	\$27,101	75	62
1965 N, 9975 N, 9800 N	6400 West	W CDS / City Limit	Crack Seal, Seal Coat, 5% Surface Patching	66.2	89	Minor Local	0	\$13,164	89	62
Sampson / Sampson Ct	Jonathon	E CDS	Crack Seal, Seal Coat	67.8	85	Minor Local	0	\$8,350	93	62
10480 N	5600 W	Alpine	Crack Seal, Seal Coat, 5% Surface Patching	67.4	86	Maj. Local	15	\$26,558	76	62
6510 W	10760 N	SEOP	Crack Seal, Seal Coat	70	79	Minor Local	0	\$2,128	99	61

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Mountain Shadows	SR-92	N CDS	Crack Seal, Seal Coat, 1% Surface Patching	68.9	82	Minor Local	0	\$6,663	95	61
Skyline Dr.	Mercer Hollow	Lone Rock	Crack Seal, Seal Coat, 1% Surface Patching	70	79	Minor Local	0	\$3,391	98	61
Cemetery Cir	10950 N	10930 N / Reisner	Crack Seal, Seal Coat	72.6	72	Maj. Local	15	\$11,418	90	60
Lausanne	Ithaca	12040 N	Crack Seal, Seal Coat	70	79	Minor Local	0	\$6,011	96	60
10760 N	6200 W	E C-D-S	Crack Seal, Seal Coat, 1% Surface Patching	70	79	Minor Local	0	\$7,430	94	60
10760 N	6400 W	6589 W	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Maj. Local	15	\$24,181	78	60
6250 W / 6320 W	9860 N	N CDS	Crack Seal, Seal Coat	71.3	76	Minor Local	0	\$4,603	97	59
10300 N	6530 W	6580 W	Crack Seal, Seal Coat, 10% Full Depth Patching	70	79	Minor Local	0	\$16,614	85	57
9770 N	6700 W	6800 W	Crack Seal, Seal Coat	77.2	60	Maj. Local	15	\$6,384	95	57
10380 N	6620 W	10300 N	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Minor Local	0	\$17,362	84	57
6330 W / 10950 N	10890 N	Cemetery	Crack Seal, Seal Coat	72.6	72	Minor Local	0	\$12,668	89	56
10890 N	6400 W	E CDS	Crack Seal, Seal Coat, 5% Surface Patching	76.5	62	Maj. Local	15	\$16,337	85	55
Valley View	6190 W	ECDS	Crack Seal, Seal Coat, 10% Full Depth Patching	70	79	Maj. Local	15	\$40,664	62	55
Dry Creek Cir	E C-D-S	W C-D-S	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Minor Local	0	\$26,314	76	54
10620 N	5600 W	5720 W	Crack Seal, Seal Coat	79.6	54	Maj. Local	15	\$8,943	93	54
5800 W	N CDS	S CDS	Crack Seal, Seal Coat	76.2	63	Minor Local	0	\$10,062	92	53

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Bull River Rd / Granite	6400 W	River Bend Rd.	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Maj. Local	15	\$48,681	54	52
Eagleview	9600 N	N CDS	Crack Seal, Seal Coat	77.8	58	Minor Local	0	\$6,557	95	52
Caddie	North County	E CDS	Crack Seal, Seal Coat	76.1	63	Maj. Local	15	\$30,570	72	51
9860 N	6200 W	6000 W	Crack Seal, Seal Coat, 10% Surface Patching	70	79	Maj. Local	15	\$54,680	48	51
6150 W	Valley View	11800 N	Seal Coat, 1% Surface Patching	85	39	Maj. Local	15	\$1,747	100	50
5720W	10740 N	10680 N	Seal Coat	85	39	Maj. Local	15	\$2,547	99	50
6100 W	SCDS	9700 N	Seal Coat	85	39	Maj. Local	15	\$2,822	99	50
10620 N	5720 W	W EOP	Crack Seal, Seal Coat	79.6	54	Minor Local	0	\$8,715	93	49
Parkway W	Town Center W	5600 W	Seal Coat	85	39	Maj. Local	15	\$6,505	95	49
Athena / 11830 CDS / 11860 CDS	11800 North	11895 North	Crack Seal, Seal Coat	85	39	Maj. Local	15	\$10,329	91	48
6120 W	10760 N	SEOP	Seal Coat	85	39	Minor Local	0	\$2,755	99	45
9680 N	6100 W	East C-D-S	Seal Coat	85	39	Minor Local	0	\$3,247	98	45
Athena	Chambery	North CDS	Crack Seal, Seal Coat	85	39	Minor Local	0	\$3,312	98	45
Canyon Links Vista	Country Club Dr.	SEOP	Seal Coat	85	39	Minor Local	0	\$5,219	96	45
6400 W	10400 N	10250 N	Crack Seal, Seal Coat	90	26	Maj. Local	15	\$8,589	93	43
11350 N	5835 W	W CDS	Crack Seal, Seal Coat	90	26	Minor Local	0	\$3,076	98	40
5750 W	9700 N	9600 N	Crack Seal, Seal Coat, 5% Surface Patching	90	26	Maj. Local	15	\$19,289	83	40

**3-5 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Mountain Ridge	10180 N	10400 N	Crack Seal, Seal Coat	91.4	23	Maj. Local	15	\$14,451	87	40
9400 N / 6760 W	6400 W	N CDS	Crack Seal, Seal Coat, 1% Surface Patching	90	26	Minor Local	0	\$6,141	95	39
<b>Total Cost:</b>										<b>\$1,020,822</b>

**4-6 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Towncenter Pkwy	Alpine	Town Center E	Crack Seal, Seal Coat	65.8	90	Maj. Local	15	\$8,551	93	68
Towncenter Pkwy	Town Center E	5600 W	Crack Seal, Seal Coat	65.8	90	Maj. Local	15	\$15,525	86	66
Avery	Canterbury Dr	Canterbury Dr	Seal Coat	69.7	80	Maj. Local	15	\$7,872	94	65
Canterbury Dr	Canterbury Ln	Canterbury Ln	Seal Coat	69.7	80	Maj. Local	15	\$18,271	84	62
Deer Hollow	Avery	Avery	Seal Coat	69.7	80	Minor Local	0	\$3,976	98	61
Avery	Canterbury Dr	N/E EOP	Seal Coat	69.7	80	Minor Local	0	\$10,246	91	59
Iverson	10400 N	Wood Duck	Seal Coat	82.4	46	Maj. Local	15	\$9,271	92	51
Wood Duck	Iverson	E EOP	Seal Coat	82.4	46	Minor Local	0	\$1,863	100	48
Red Hawk	Wood Duck	7200 W	Seal Coat	82.4	46	Minor Local	0	\$14,823	87	45
Normandy	Calais	Highland	Crack Seal, Seal Coat	88.7	30	Minor Local	0	\$9,734	92	39

**4-6 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Normandy	Highland	Burgundy	Crack Seal, Seal Coat	88.7	30	Minor Local	0	\$11,872	90	39
Normandy	Burgundy	Calais	Crack Seal, Seal Coat	88.7	30	Minor Local	0	\$19,028	83	37
10930 N / Reisner	6150 W	6000 W	Crack Seal, Seal Coat	98.2	5	Maj. Local	15	\$8,401	93	34
<b>Total Cost:</b>								<b>\$139,431</b>		

**5-7 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Janie / Ole Bish	10550 N	North County	Seal Coat	66.4	88	Maj. Local	15	\$3,494	98	69
6180 W	9800 N	9860 N	Seal Coat	69.1	81	Maj. Local	15	\$2,744	99	67
5800 W	10100 N	10040 N	Seal Coat	70	79	Maj. Local	15	\$2,777	99	66
5550 W	SR-92	11200 N	Seal Coat	69.4	81	Maj. Local	15	\$8,406	93	65
5500 W	SR-92	11200 N	Seal Coat	69.4	81	Maj. Local	15	\$8,467	93	65
5800 W	10040 N	S EOP	Seal Coat	70.4	78	Maj. Local	15	\$5,417	96	65
9800 N	6000 W	6180 W	Seal Coat	69.1	81	Maj. Local	15	\$10,432	91	64
10100 N	5750 W	5890 W	Seal Coat	70	79	Maj. Local	15	\$7,511	94	64
Windsor Park	5800 W	5730 W	Seal Coat	70.4	78	Maj. Local	15	\$6,394	95	64

**5-7 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
5600 W	SR-92	11200 N	Seal Coat	69.9	79	Maj. Local	15	\$8,745	93	64
School Park	Alpine	Park Entrance	Seal Coat	71	76	Maj. Local	15	\$5,811	96	64
5750 W	SR-92	10850 N	Seal Coat	71.1	76	Maj. Local	15	\$8,885	93	63
6020 W	9800 N	N CDS	Seal Coat	69.1	81	Minor Local	0	\$2,266	99	62
6130 W	9800 N	N CDS	Seal Coat	69.1	81	Minor Local	0	\$2,601	99	62
6080 W	9800 N	N CDS	Seal Coat	69.1	81	Minor Local	0	\$2,636	99	62
6180 W	9860 N	9900 N	Seal Coat	69.1	81	Minor Local	0	\$3,237	98	62
11060 N	5500 W	E EOP	Seal Coat	69.4	81	Minor Local	0	\$2,452	99	62
Earl	Mystic Hollow	Alpine	Seal Coat	73	71	Maj. Local	15	\$6,618	95	61
5750 W	10100 N	N CDS	Seal Coat	70	79	Minor Local	0	\$3,965	98	61
Coventry	5600 W	Town Center W	Seal Coat	74.5	67	Maj. Local	15	\$4,251	97	61
5800 W	10100 N	N CDS	Seal Coat	70	79	Minor Local	0	\$4,946	97	61
Paradise Cir / 6570 W	10400 N	N CDS	Seal Coat	70.9	77	Minor Local	0	\$2,745	99	60
10040 N	E CDS	W EOP	Seal Coat	70.4	78	Minor Local	0	\$5,288	96	60
View Pointe	Park	Park	Seal Coat	75.9	63	Maj. Local	15	\$4,604	97	59
9910 N	Alpine	Pheasant	Seal Coat	75.7	64	Maj. Local	15	\$5,875	96	59
Mystic Hollow	N CDS	S CDS	Seal Coat	71	76	Minor Local	0	\$8,242	93	59

**5-7 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
10900 N	Alpine	5360 W	Seal Coat	72.8	72	Minor Local	0	\$2,037	99	58
Spring Hollow	Broadleaf Hollow	Maple Hollow	Seal Coat	72.6	72	Minor Local	0	\$3,032	98	58
10700 N	Alpine	5360 W	Seal Coat	72.8	72	Minor Local	0	\$2,321	99	58
Julie Ann	Mystic	W CDS	Seal Coat	73	71	Minor Local	0	\$3,848	98	58
Park Cir	Park	Park	Seal Coat	75.9	63	Maj. Local	15	\$9,485	92	58
Mystic	J Legrand Adamson	Earl	Seal Coat, 5% Surface Patching	73	71	Maj. Local	15	\$20,069	82	58
Maple Hollow	Broadleaf Hollow	N CDS	Seal Coat	72.6	72	Minor Local	0	\$6,941	95	57
Wing Pl	Mystic	W CDS	Seal Coat, 5% Surface Patching	73	71	Minor Local	0	\$6,613	95	57
Park	SR-92	Shoreline	Seal Coat	75.9	63	Maj. Local	15	\$11,979	90	57
Castle Pine Way	Country Club	Castle Pine Dr	Seal Coat	72.8	72	Minor Local	0	\$7,679	94	57
Castle Pine Dr	NCS	Country Club	Seal Coat	72.8	72	Minor Local	0	\$8,505	93	57
10630 N	6400 W	E CDS	Seal Coat	74.4	67	Minor Local	0	\$4,058	97	56
10670 N / 6340 W	6400 W	N CDS	Seal Coat	74.4	67	Minor Local	0	\$5,373	96	56
Broadleaf Hollow	1585 N	Highland	Seal Coat	72.6	72	Minor Local	0	\$12,275	89	56
5360 W	10900 N	10700 N	Seal Coat	72.8	72	Minor Local	0	\$15,142	87	55
Park Dr / Elk Cv	Shoreline	E CDS	Seal Coat	75.9	63	Maj. Local	15	\$20,232	82	54
Hidden Dr	9910 N	Alpine	Seal Coat	75.7	64	Minor Local	0	\$6,023	96	54

**5-7 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Crestview / Village	Towncenter Pkwy	Towncenter Pkwy	Crack Seal, Seal Coat	74.5	67	Minor Local	0	\$10,928	91	54
Shoreline	Park	Park	Seal Coat	75.9	63	Minor Local	0	\$8,431	93	53
Maddie	Peyton	W EOP	Seal Coat	80.3	52	Minor Local	0	\$2,335	99	50
Walker	10400 N	Compton	Seal Coat	80.3	52	Minor Local	0	\$2,657	99	50
Compton / Haymaker	Peyton	Carson	Seal Coat	80.3	52	Minor Local	0	\$5,276	96	50
Spruce Ct	Spruce Dr	E CDS	Crack Seal, Seal Coat	80.8	51	Minor Local	0	\$4,657	97	49
Carson / Peyton	Haymaker	Compton	Seal Coat	80.3	52	Minor Local	0	\$6,803	95	49
Janie / Sego Lily Ct	Caddie	10550 N	Seal Coat	84.7	40	Maj. Local	15	\$9,112	93	48
9760 N	Alpine	E CDS	Crack Seal, Seal Coat	81.5	49	Minor Local	0	\$5,708	96	48
Spruce Dr	SR-92	N CDS	Crack Seal, Seal Coat	80.8	51	Minor Local	0	\$10,375	91	48
Sunset	Highland	W EOP	Seal Coat	84.6	41	Minor Local	0	\$2,605	99	46
Brookridge	Janie	E CDS	Seal Coat	84.7	40	Minor Local	0	\$4,778	97	45
10100 N	Yorkshire	5750 W	Seal Coat	91.1	23	Maj. Local	15	\$2,924	99	44
Mystic / Willem	Earl	S CDS	Seal Coat, 15% Full Depth Patching	71	76	Maj. Local	15	\$82,898	21	41
Calais	Normandy	N CDS	Crack Seal, Seal Coat	88.7	30	Minor Local	0	\$5,951	96	41
Cedar Hls	West Side Track	Knight Ave	Seal Coat	96.2	10	Maj. Local	15	\$3,530	98	38
Penn Brooke	11800 N	S EOP	Seal Coat	95.2	13	Minor Local	0	\$7,604	94	33

**5-7 Years**

Road Name	From	To	Recommendation Summary	Estimated PCI	PCI Weight (0-100)	Functional Classification	Functional Classification Weight (0-100)	Estimated Cost	Cost Weight (0-100)	Total Prioritization Score (0-100)
Braden	Riverside	Yorkshire	Seal Coat	97.7	6	Minor Local	0	\$1,775	100	32
Kaden	Riverside	Yorkshire	Seal Coat	97.7	6	Minor Local	0	\$1,781	100	32
Knight Ave	10100 N / Cedar Hls	North County	Seal Coat	96.2	10	Maj. Local	15	\$25,310	77	32
Riverside / Natalie	S CDS	N CDS	Seal Coat	97.7	6	Minor Local	0	\$10,005	92	30
Yorkshire	Windsor Park	N CDS	Seal Coat	97.7	6	Minor Local	0	\$10,572	91	30
6110 W / CDS to East	9860 N	N CDS	Seal Coat	100	0	Minor Local	0	\$3,418	98	29
5800 W / E & W Crimson	9850 N	N CDS	Seal Coat	100	0	Minor Local	0	\$6,111	95	29
								<b>Total Cost:</b>	<b>\$519,967</b>	