

Street Maintenance Plan

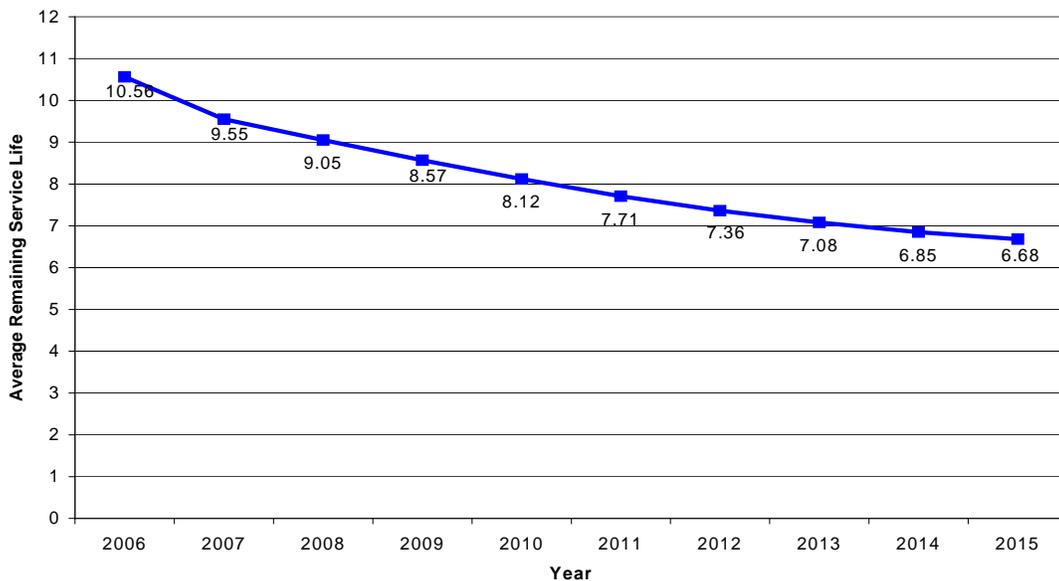
This appendix summarizes the Street Maintenance Plan, prepared by Toothman-Orton.

City of Hailey Road Maintenance Recommendations Summary

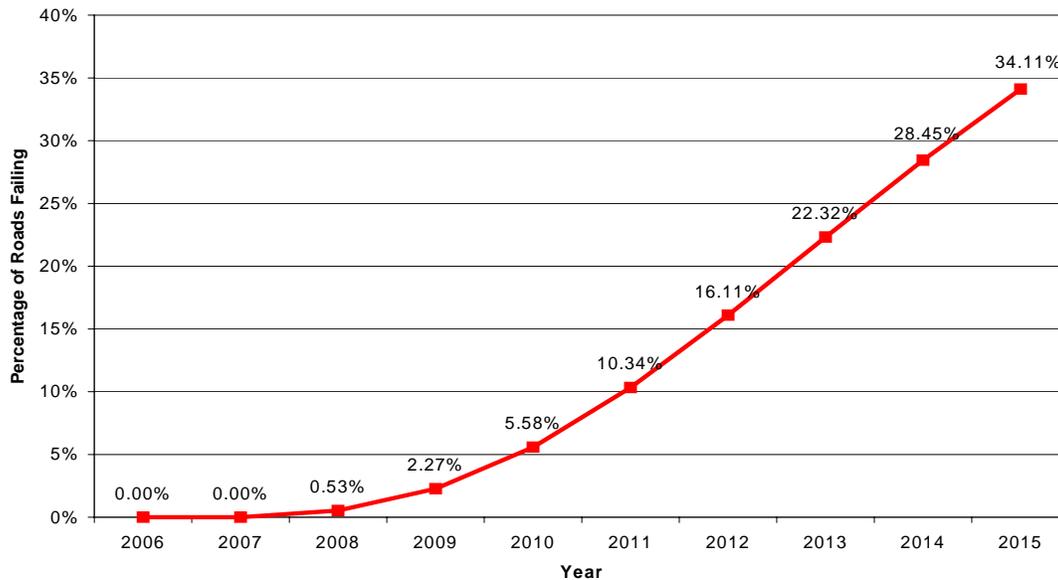
The Analysis conducted in the City of Hailey Road Maintenance Recommendations dated October 2006 was based on information collected by City personnel. This information is detailed in *Appendix A: Inventory Report – Asphalt* and *Appendix B: Condition Report – Asphalt*. *Appendix C: Recommendations – Asphalt* contains the recommendations generated by the Transportation Asset Management System (TAMS) program based on the preset, optimal treatments for each governing distress. The program takes the road surface distress that results in the lowest remaining service life (RSL) and lists the treatment recommended for that specific distress. An example of this would be Segment 4, Airport Way, where the governing distress is Longitudinal cracking and the recommended treatment is a crack seal. Ideally all of these recommendations would be applied, but this is unrealistic with the estimated upfront cost of \$1.67 million. See Appendix C for the summary breakdown of the individual estimates. These estimates are based on the unit costs listed in *Appendix E: Typical Repairs for Asphalt Streets and Costs* and the road surface areas in question, and are based on the best information available at this time.

The analysis shows that the road maintenance budget should be increased to at least \$250,000 in order to maintain and improve the overall road system. Under the current budget and as shown in *Appendix F: Model 1*, there is a decrease in the average remaining service life and the increase in the percentage of failing roads. The following charts show these trends.

City of Hailey - Average Remaining Service Life under Current Budget



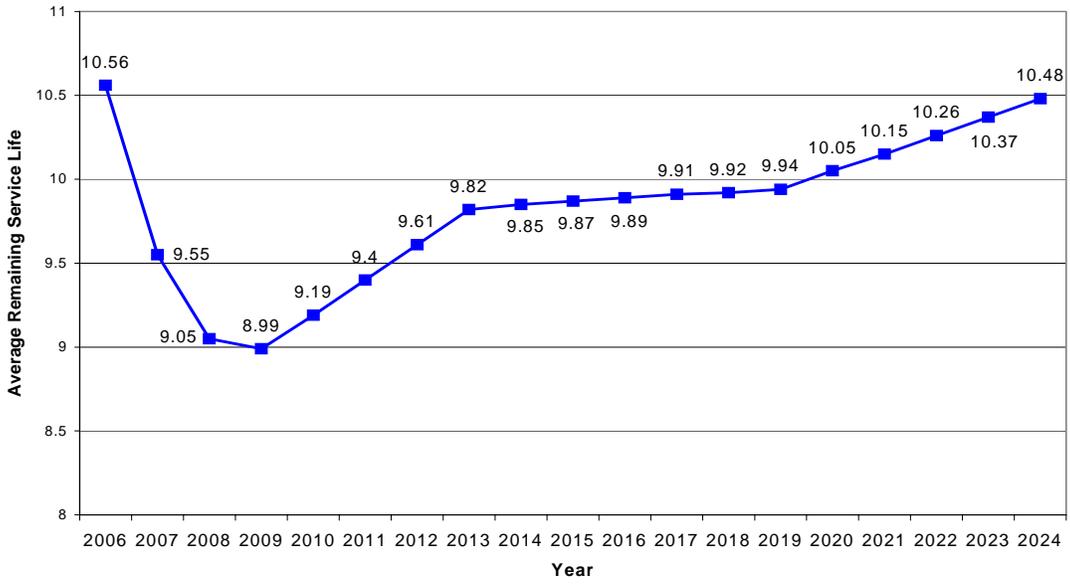
City of Hailey - Percentage of Roads Failing under Current Budget



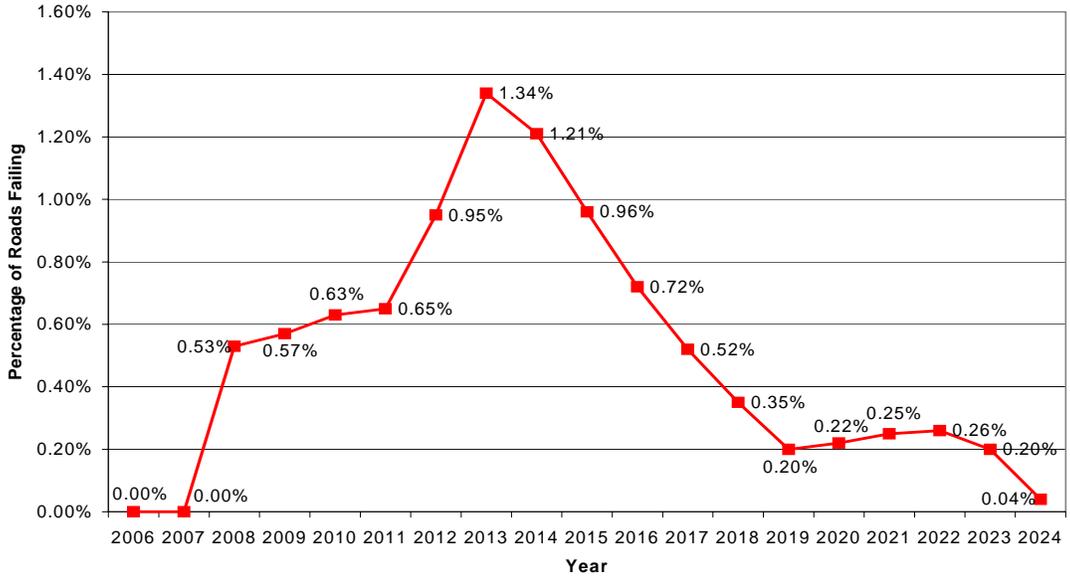
No improvements were undertaken following the condition survey during the summer and fall of 2006 and thus the average RSL dropped 1.01 years from 10.56 years in 2006 to 9.55 years in 2007. Under this scenario the RSL of the majority of the roads are estimated to fall in the 7-9 year or 10-12 year category as can be seen in Appendix F. This makes it much more difficult to maintain or improve the overall road system due to the diminishing returns the less expensive maintenance procedures provide below the 7-9 year category. Additionally, road construction costs have doubled in the last year making an increase necessary just to match historic expenditures.

Using the proposed increase budget of \$250,000, *Appendix G: Model 2*, details the result of an optimized budget that minimizes both road failures and the increase in the budget. Under this proposed model, the average RSL will fall to a low of 8.99 in 2009 and then begin to increase over the following 15 years. This model requires that the budget be distributed differently between maintenance and reconstruction each year in order to maximize the overall improvements to the road system. The maintenance recommendations are the same under both models until 2008 when Model 2 increases the distribution of funds under the assumption the additional funds will be available at that time. Changes to the allocation of funds between maintenance and reconstruction also occur in 2009, 2010, 2013 and 2019. This model projects that a maximum of 1.34% of roads will fall into the failing category (RSL = 0) in 2013 the percentage of failing roads decreases over the next 6 year. There will be a slight increase to this percentage after the 2019 budget change due to the reallocation of funds. This is necessary to maximize the overall benefits to the road system. The following charts show these trends.

City of Hailey - Average Remaining Service Life under Proposed Budget



City of Hailey - Percentage of Roads Failing under Proposed Budget



The table below compares the miles of road within the system, the funds budgeted specifically for road improvements over 3 years, the percentage increase/decrease over the previous year, and the budgeted cost per mile of road based on the 2006-2007 projected budgets for the agencies listed. These agencies were chosen to provide a reasonable comparison to the City of Hailey.

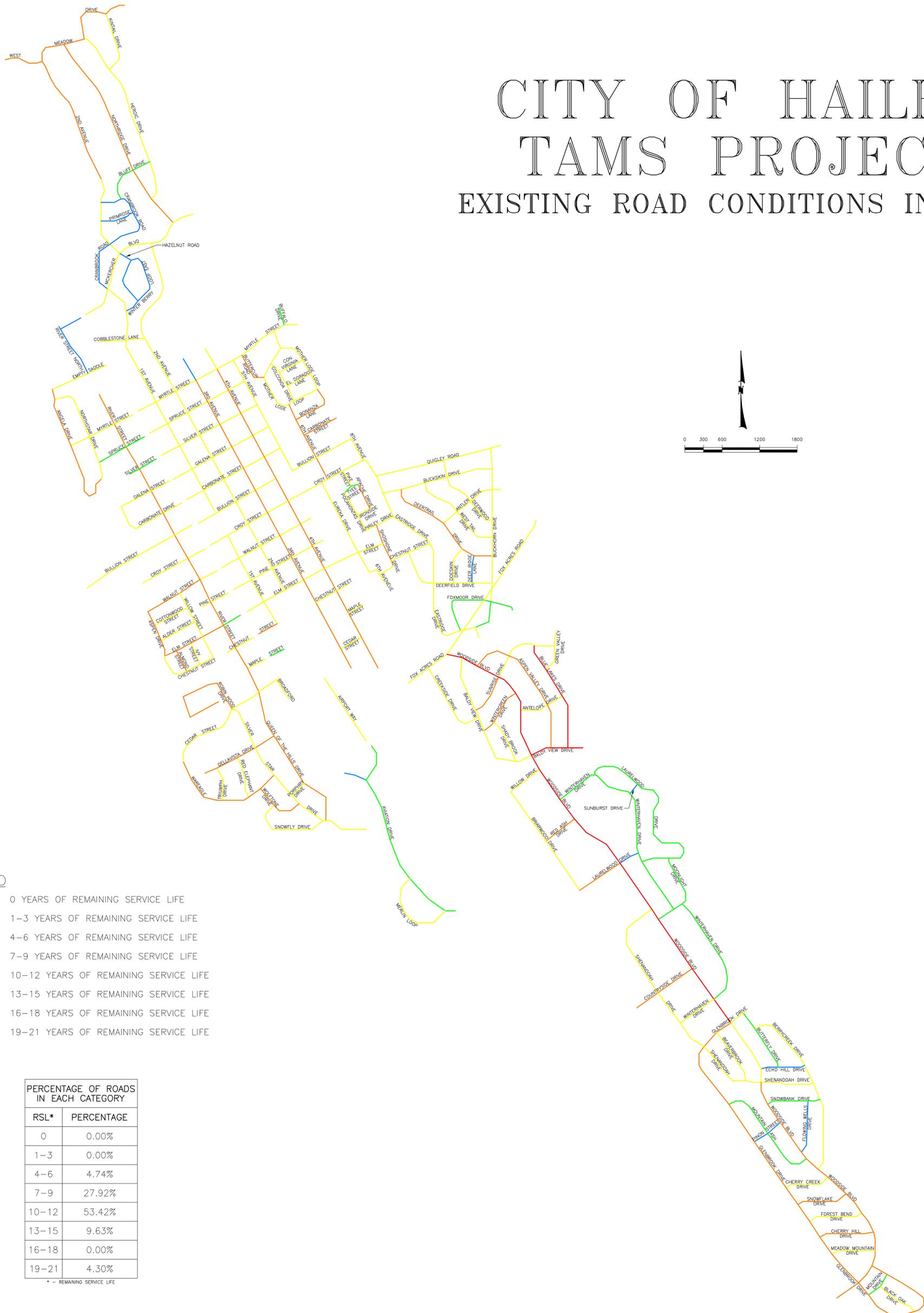
Agency	Miles of Road¹	2004-2005 Budget²	2005-2006 Budget³	% Increase	2006-2007 Budget⁴	% Increase	Budgeted cost/mile
Hailey	43.34	\$87,466.06	\$97,453.78 ⁵	11.42% ⁵	\$81,500	-16.37%	\$1,880.48
Twin Falls	±200	\$1,054,373	\$1,834,546	73.99%	\$2,606,864	42.10%	\$13,034.32
TFHD	751.77	\$2,602,000	\$2,719,616	4.52%	\$2,225,421	-18.17%	\$2,960.25
ACHD	658.79	\$22,727,124	\$17,555,245	-22.76%	\$23,579,000	34.31%	\$35,791.38

1. Based off information collected from agencies and other public information sites.
2. Based off the 2004 Annual Road and Street Financial Report on file with the Idaho Transportation Department.
3. Based off the 2005 Annual Road and Street Financial Report on file with the Idaho Transportation Department.
4. Based off information collected from agencies and other public information sites.
5. No road improvements were constructed in the summer and fall of 2006 based on information provided by the City Engineer.

The table shows that the City of Hailey spends significantly less than the other agencies listed on a budgeted cost/mile basis. The proposed budget increase to \$250,000 would give the City of Hailey a cost per mile of \$5,768.34. While this would exceed the cost per mile of the Twin Falls Highway District (TFHD) it would be significantly less than that of either the City of Twin Falls or the Ada County Highway District (ACHD).

This analysis is based on a snapshot of the existing conditions and the probable results of using specific maintenance procedures. The TAMS program is meant to be an ongoing analysis tool and should be used on a regular basis to reevaluate the current road conditions and to refine the use of public funds.

CITY OF HAILEY TAMS PROJECT EXISTING ROAD CONDITIONS IN 2006



LEGEND

- 0 YEARS OF REMAINING SERVICE LIFE
- 1-3 YEARS OF REMAINING SERVICE LIFE
- 4-6 YEARS OF REMAINING SERVICE LIFE
- 7-9 YEARS OF REMAINING SERVICE LIFE
- 10-12 YEARS OF REMAINING SERVICE LIFE
- 13-15 YEARS OF REMAINING SERVICE LIFE
- 16-18 YEARS OF REMAINING SERVICE LIFE
- 19-21 YEARS OF REMAINING SERVICE LIFE

PERCENTAGE OF ROADS
IN EACH CATEGORY

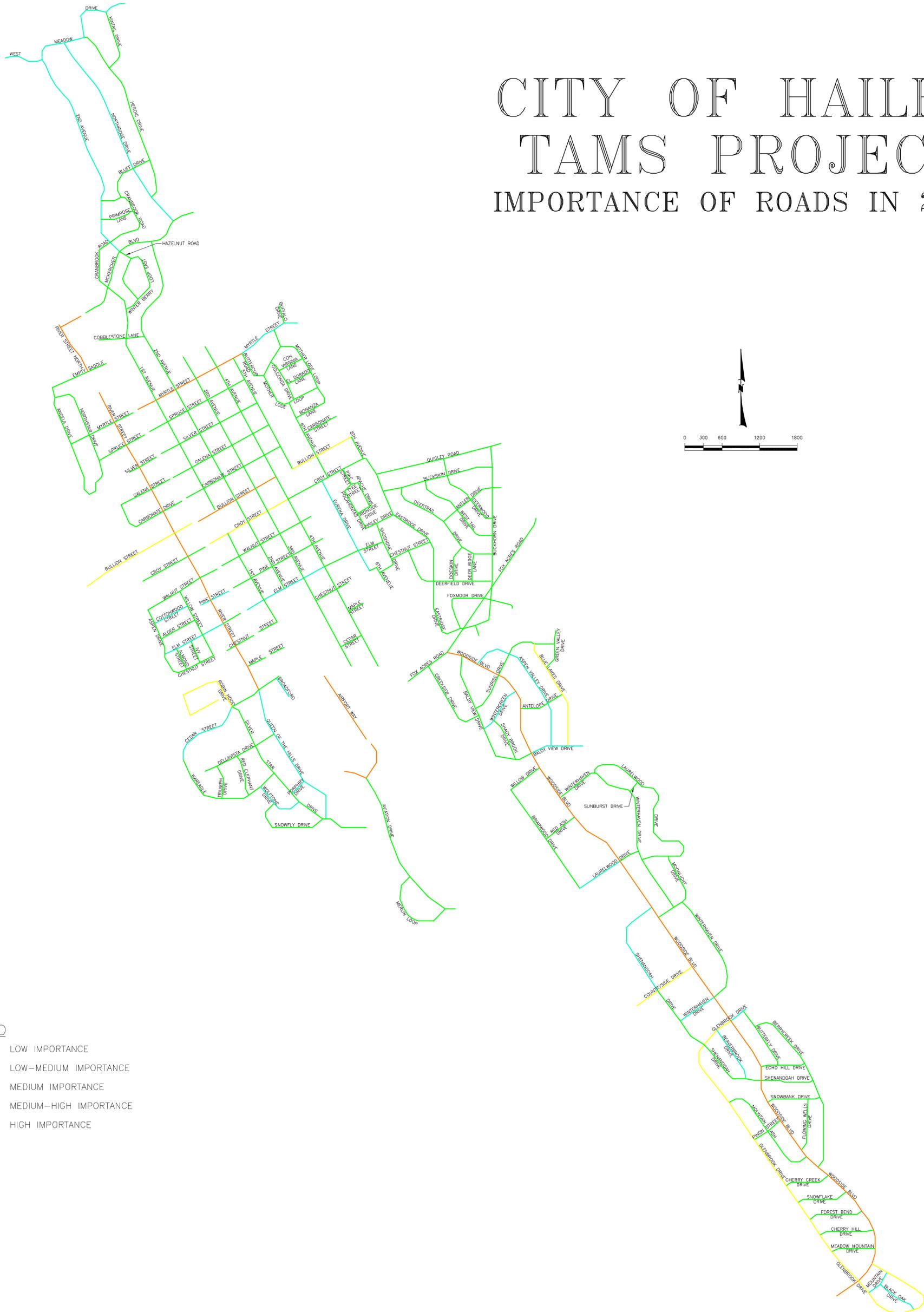
RSL*	PERCENTAGE
0	0.00%
1-3	0.00%
4-6	4.74%
7-9	27.92%
10-12	53.42%
13-15	9.63%
16-18	0.00%
19-21	4.30%

* - REMAINING SERVICE LIFE

CITY OF HAILEY

TAMS PROJECT

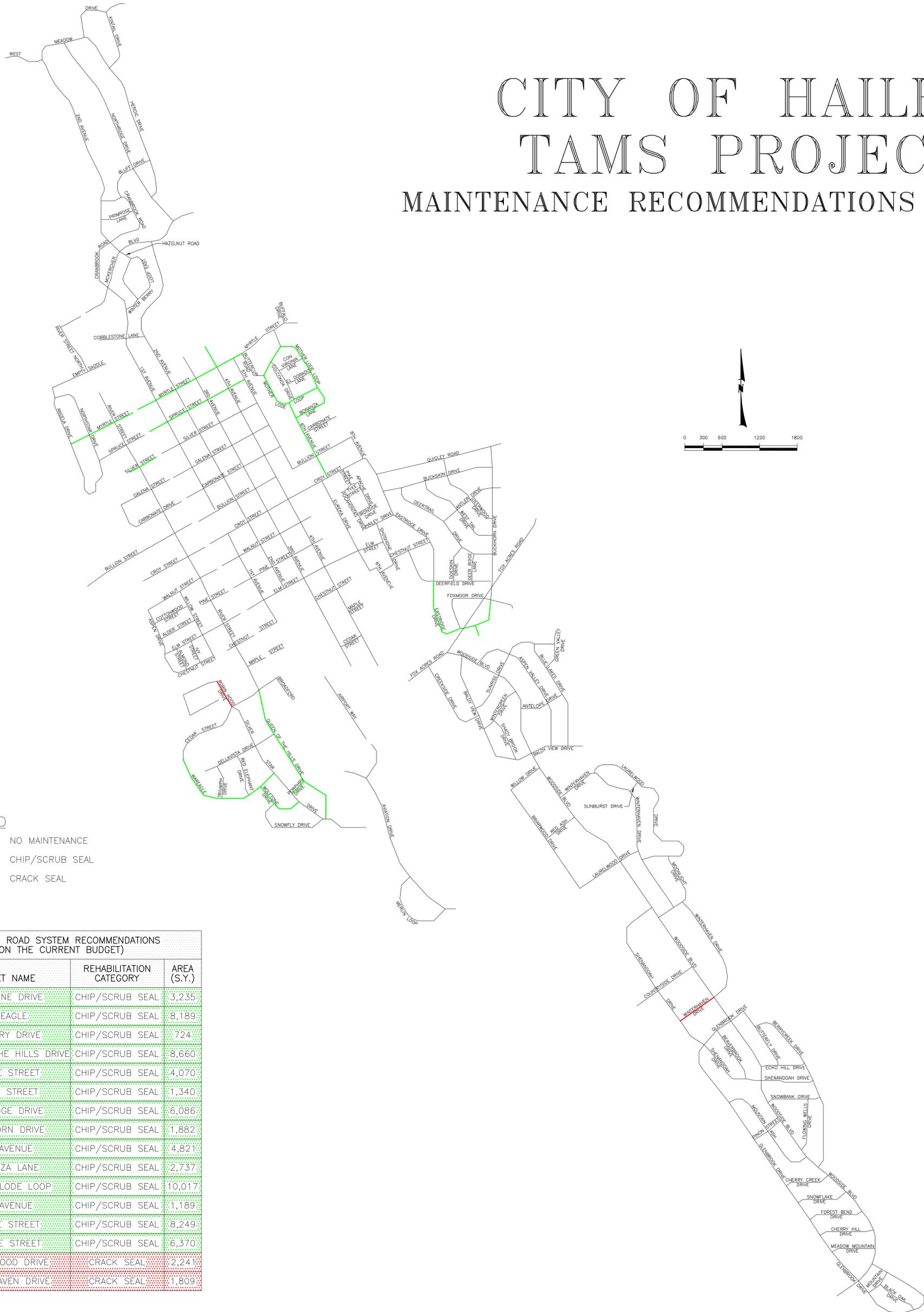
IMPORTANCE OF ROADS IN 2006



LEGEND

- LOW IMPORTANCE
- LOW-MEDIUM IMPORTANCE
- MEDIUM IMPORTANCE
- MEDIUM-HIGH IMPORTANCE
- HIGH IMPORTANCE

CITY OF HAILEY TAMS PROJECT MAINTENANCE RECOMMENDATIONS FOR 2007



LEGEND

- NO MAINTENANCE
- CHIP/SCRUB SEAL
- CRACK SEAL

PROPOSED 2007 ROAD SYSTEM RECOMMENDATIONS (BASED ON THE CURRENT BUDGET)			
SEGMENT ID	STREET NAME	REHABILITATION CATEGORY	AREA (S.Y.)
7	WOLFTONE DRIVE	CHIP/SCRUB SEAL	3,235
11	WAREAGLE	CHIP/SCRUB SEAL	8,189
17	PORPHYRY DRIVE	CHIP/SCRUB SEAL	724
18	QUEEN OF THE HILLS DRIVE	CHIP/SCRUB SEAL	8,660
22	MYRTLE STREET	CHIP/SCRUB SEAL	4,070
35	SILVER STREET	CHIP/SCRUB SEAL	1,340
94	EASTRIDGE DRIVE	CHIP/SCRUB SEAL	6,086
96	BUCKHORN DRIVE	CHIP/SCRUB SEAL	1,882
125	6TH AVENUE	CHIP/SCRUB SEAL	4,821
127	BONANZA LANE	CHIP/SCRUB SEAL	2,737
128	MOTHER LODE LOOP	CHIP/SCRUB SEAL	10,017
136	4TH AVENUE	CHIP/SCRUB SEAL	1,189
155	MYRTLE STREET	CHIP/SCRUB SEAL	8,249
174	SPRUCE STREET	CHIP/SCRUB SEAL	6,370
5	ROBIN HOOD DRIVE	CRACK SEAL	2,241
53	WINTERHAVEN DRIVE	CRACK SEAL	1,809