



## Update "With-Site-Visit" Reserve Study



### Lowry Community Master Association Alleys Denver, CO

**Report #: 37108-0**  
**For Period Beginning: January 1, 2020**  
**Expires: December 31, 2020**

**Date Prepared: September 25, 2019**



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**Hello, and welcome to your Reserve Study!**

**T**his Report is a valuable budget planning tool, for with it you control the future of your association. It contains all the fundamental information needed to understand your current and future Reserve obligations, the most significant expenditures your association will face.

**W**ith respect to Reserves, this Report will tell you "where you are," and "where to go from here."

**In this Report, you will find...**

- 1) A List of What you're Reserving For**
- 2) An Evaluation of your Reserve Fund Size and Strength**
- 3) A Recommended Multi-Year Reserve Funding Plan**

**More Questions?**

Visit our website at [www.ReserveStudy.com](http://www.ReserveStudy.com) or call us at:

**303-394-9181**



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RESERVES™**

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### 3- Minute Executive Summary

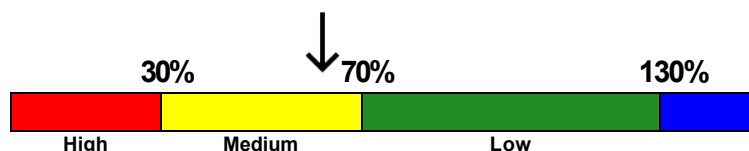
**Association:** Lowry Community Master Association  
**Alleys**  
**Location:** Denver, CO  
**Report Period:** January 1, 2020 through December 31, 2020

**Assoc. #: 37108-0**  
**# of Units: 4,000**

#### Findings/Recommendations as-of: January 1, 2020

Projected Starting Reserve Balance .....	\$457,291
Current Fully Funded Reserve Balance .....	\$718,665
Percent Funded .....	63.6 %
Recommended 2020 Annual "Fully Funding" Contributions .....	\$215,270
Alternate/Baseline Annual Minimum Contributions to Keep Reserves Above \$0 ..	\$195,000
Recommended 2020 Special Assessments for Reserves .....	\$240,000
Most Recent Annual Reserve Contribution Rate .....	\$93,060

Reserves % Funded: 63.6%



Special Assessment Risk:

#### Economic Assumptions:

**Net Annual "After Tax" Interest Earnings Accruing to Reserves .....** 1.25 %  
**Annual Inflation Rate .....** 3.00 %

- This is a Update "With-Site-Visit" Reserve Study, based on a prior Reserve Study for your 2016 Fiscal Year. We performed the site inspection on 7/3/2019.
- The Reserve Study was prepared by a credentialed Reserve Specialist (RS #260).
- Your Reserve Fund is currently 63.6 % Funded. This means the client's special assessment & deferred maintenance risk is currently Medium. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.
- Based on this starting point and your anticipated future expenses, our recommendation is to budget the Annual Reserve contributions at \$215,270 with 3% annual increases and a one-time special assessment of \$240,000 in order to be within the 70% to 130% level as noted above. 100% "Full" contribution rates are designed to achieve these funding objectives by the end of our 30-year report scope.
- No assets appropriate for Reserve designation were excluded. See photo appendix for component details; the basis of our assumptions.
- We recommend that this Reserve Study be updated annually, with a With-Site-Visit Reserve Study every three years. Research has found that clients who update their Reserve Study annually with a No-Site-Visit Reserve Study reduce their risk of special assessment by ~ 35%.
- A sample 'How to Read a Reserve Study' video tutorial can be found by following this link - [tiny.cc/reservestudy](http://tiny.cc/reservestudy)

## Executive Summary

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#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Concrete				
2109	NW Lowry Concrete Drive-Replace-10%	5	4	\$40,000
2111	Concrete Curbs/Gutters-Replace-10%	5	4	\$619,250
2113	E Lowry Concrete - Replace - 10%	5	4	\$9,000
Asphalt - East				
2131	Asphalt (East) - Slurry Seal	8	0	\$17,300
2133	Asphalt (East) - Mill/Overlay	20	8	\$128,250
2135	Asphalt (East) - Seal Coat	4	12	\$4,350
Asphalt - Northwest				
2131	Asphalt (Northwest) - Slurry Seal	8	0	\$72,800
2133	Asphalt (Northwest) - Mill/Overlay	20	6	\$539,200
2135	Asphalt (Northwest) - Seal Coat	4	10	\$48,500
Asphalt - South				
2131	Asphalt (South) - Slurry Seal	8	2	\$8,000
2133	Asphalt (South) - Mill/Overlay	20	10	\$59,600
2135	Asphalt (South) - Seal Coat	4	14	\$5,400
Asphalt - Sunset				
2131	Asphalt (Sunset) - Slurry Seal	8	7	\$7,100
2133	Asphalt (Sunset) - Mill/Overlay	20	19	\$53,000
2135	Asphalt (Sunset) - Seal Coat	4	3	\$4,750
<b>15 Total Funded Components</b>				

Note 1: Yellow highlighted line items are expected to require attention in this initial year.

## Introduction



A Reserve Study is the art and science of anticipating, and preparing for, an association's major common area repair and replacement expenses. Partially art, because in this field we are making projections about the future. Partially science, because our work is a combination of research and well-defined computations, following consistent National Reserve Study Standard principles.

The foundation of this and every Reserve Study is your Reserve Component List (what you are reserving for). This is because the Reserve Component List defines the *scope and schedule* of all your anticipated upcoming Reserve projects. Based on that List and your starting balance, we calculate the association's Reserve Fund Strength (reported in terms of "Percent Funded"). Then we compute a Reserve Funding Plan to provide for the Reserve needs of the association. These form the three results of your Reserve Study.



Reserve contributions are not “for the future”. Reserve contributions are designed to offset the ongoing, daily deterioration of your Reserve assets. Done well, a stable, budgeted Reserve Funding Plan will collect sufficient funds from the owners who enjoyed the use of those assets, so the association is financially prepared for the irregular expenditures scattered through future years when those projects eventually require replacement.

## Methodology



For this [Update With-Site-Visit Reserve Study](#), we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association

precedents. We performed an on-site inspection to evaluate your common areas, updating and adjusting your Reserve Component List as appropriate.

## *Which Physical Assets are Funded by Reserves?*

There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve



RESERVE COMPONENT "FOUR-PART TEST"

Components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

## *How do we establish Useful Life and Remaining Useful Life estimates?*

- 1) Visual Inspection (observed wear and age)
- 2) Association Reserves database of experience
- 3) Client History (install dates & previous life cycle information)
- 4) Vendor Evaluation and Recommendation

## *How do we establish Current Repair/Replacement Cost Estimates?*

In this order...

- 1) Actual client cost history, or current proposals
- 2) Comparison to Association Reserves database of work done at similar associations
- 3) Vendor Recommendations
- 4) Reliable National Industry cost estimating guidebooks



## How much Reserves are enough?

Reserve adequacy is not measured in cash terms. Reserve adequacy is found when the *amount* of current Reserve cash is compared to Reserve component deterioration (the *needs of the association*). Having *enough* means the association can execute its projects in a timely manner with existing Reserve funds. Not having *enough* typically creates deferred maintenance or special assessments.

Adequacy is measured in a two-step process:

- 1) Calculate the *value of deterioration* at the association (called Fully Funded Balance, or FFB).
- 2) Compare that to the Reserve Fund Balance, and express as a percentage.



Each year, the *value of deterioration* at the association changes. When there is more deterioration (as components approach the time they need to be replaced), there should be more cash to offset that deterioration and prepare for the expenditure. Conversely, the *value of deterioration* shrinks after projects are accomplished. The *value of deterioration* (the FFB) changes each year, and is a moving but predictable target.

There is a high risk of special assessments and deferred maintenance when the Percent Funded is *weak*, below 30%. Approximately 30% of all associations are in this high risk range. While the 100% point is Ideal (indicating Reserve cash is equal to the *value of deterioration*), a Reserve Fund in the 70% - 130% range is considered strong (low risk of special assessment).

Measuring your Reserves by Percent Funded tells how well prepared your association is for upcoming Reserve expenses. New buyers should be very aware of this important disclosure!



## How much should we contribute?



RESERVE FUNDING PRINCIPLES

According to National Reserve Study Standards, there are four Funding Principles to balance in developing your Reserve Funding Plan. Our first objective is to design a plan that provides you with sufficient cash to perform your Reserve projects on time. Second, a stable contribution is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve contributions that are evenly distributed over current and future owners enable each owner to pay their fair share of the association's Reserve expenses over the years. And finally, we develop a plan that is fiscally responsible and safe for Boardmembers to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Boardmembers invite liability exposure when Reserve contributions are inadequate to offset ongoing common area deterioration.

## What is our Recommended Funding Goal?

Maintaining the Reserve Fund at a level equal to the *value* of deterioration is called "Full Funding" (100% Funded). As each asset ages and becomes "used up," the Reserve Fund grows proportionally. **This is simple, responsible, and our recommendation.** Evidence shows that associations in the 70 - 130% range *enjoy a low risk of special assessments or deferred maintenance.*



FUNDING OBJECTIVES

Allowing the Reserves to fall close to zero, but not below zero, is called Baseline Funding. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution of all Reserve projects, and only the "margin of safety" is different, Baseline Funding contributions average only 10% - 15% less than Full Funding contributions. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

## Site Inspection Notes

During our site visit on 7/3/2019 we visually inspected the common area assets and were able to see a majority of the common areas.

Please see photo appendix for component details; the basis of our assumptions.



## Projected Expenses

While this Reserve Study looks forward 30 years, we have no expectation that all these expenses will all take place as anticipated. This Reserve Study needs to be updated annually because we expect the timing of these expenses to shift and the size of these expenses to change. We do feel more certain of the timing and cost of near-term expenses than expenses many years away. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses as defined by your Reserve Component List. A summary of these expenses are shown in the 30-yr Summary Table, while details of the projects that make up these expenses are shown in the Cash Flow Detail Table.

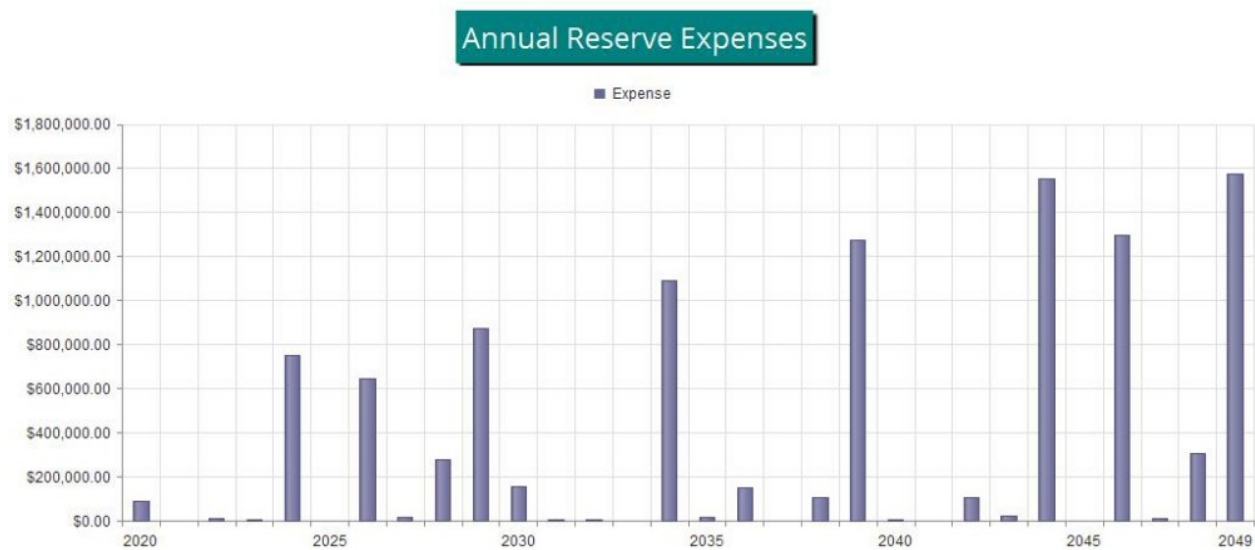


Figure 1

## Reserve Fund Status

As of 1/1/2020 your Reserve Fund balance is projected to be \$457,291 and your Fully Funded Balance is computed to be \$718,665 (see the Fully Funded Balance Table). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 63.6 % Funded.

## Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending Annual budgeted contributions of \$215,270 along with a one-time special assessment of \$240,000. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.

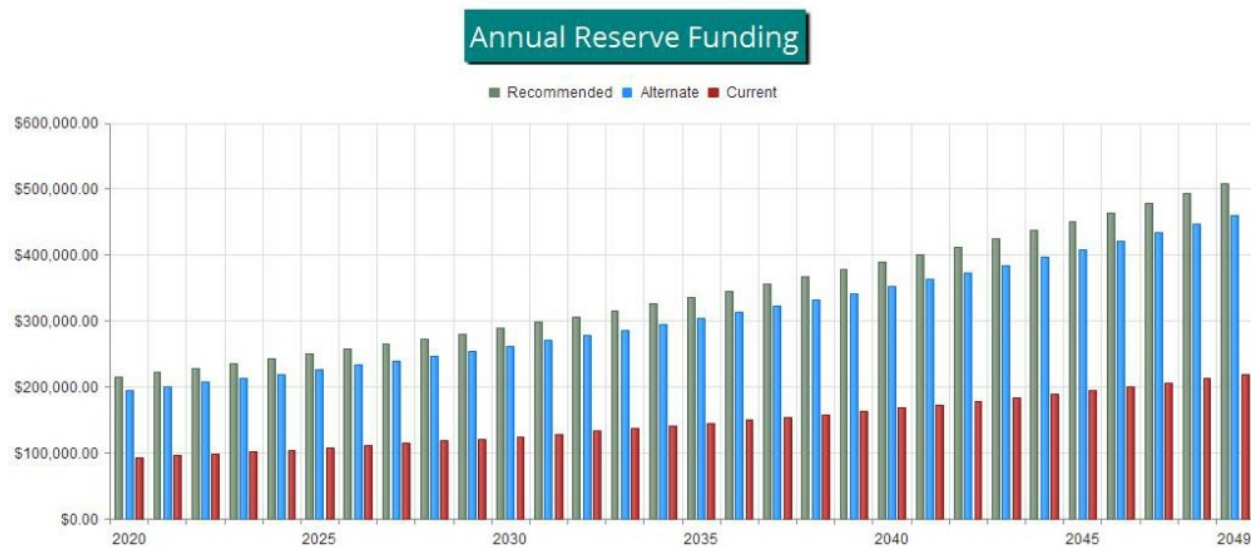


Figure 2

The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted contribution rate, compared to your always-changing Fully Funded Balance target.

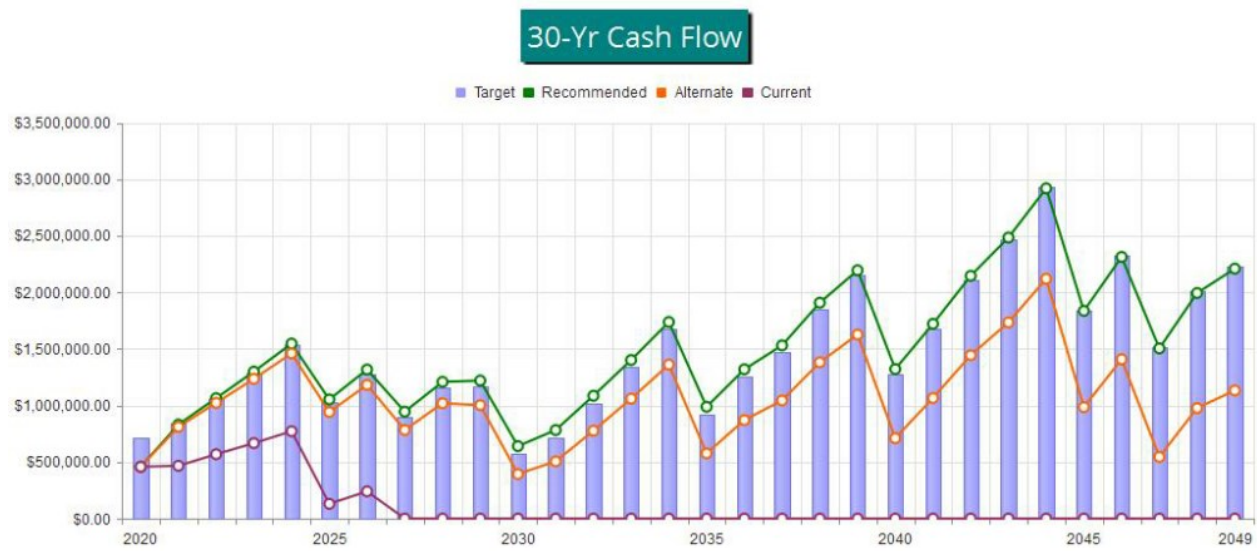


Figure 3

This figure shows the same information plotted on a Percent Funded scale. It is clear here to see how your Reserve Fund strength approaches the 100% Funded level under our recommended multi-yr Funding Plan. A client that has a percent funded level of <30% may experience an ~ 20%-60% chance risk of special assessment. A client that is between 30% and 70% may experience an ~ 20%-5% chance risk of special assessment. A client that has a percent funded of >70% may experience an ~ <1% chance risk of special assessment.

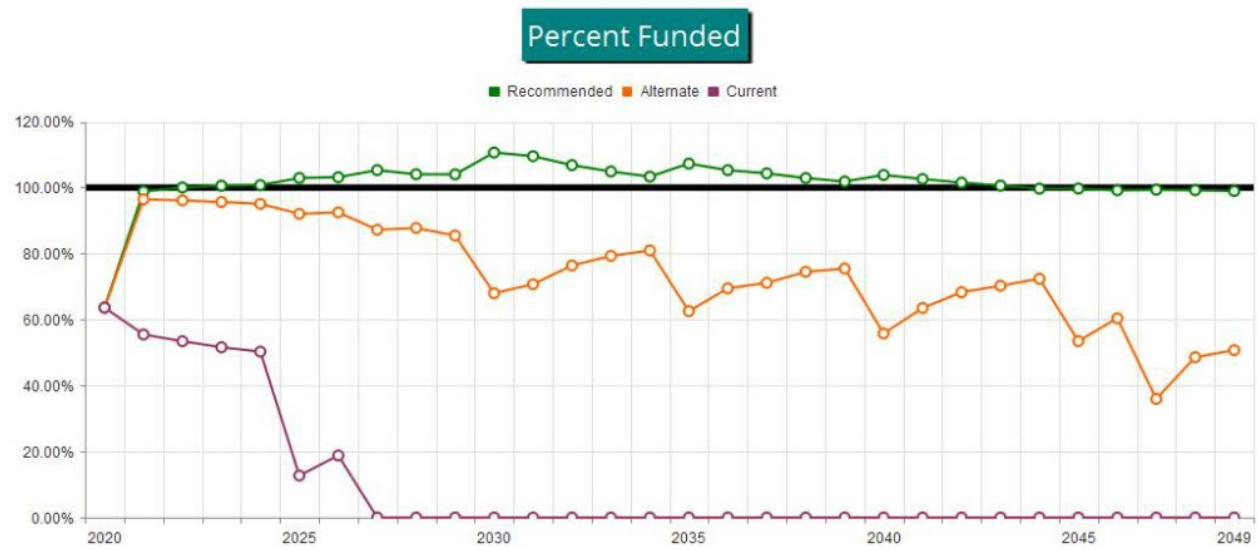


Figure 4

## Table Descriptions

Executive Summary is a summary of your Reserve Components

Reserve Component List Detail discloses key Component information, providing the foundation upon which the financial analysis is performed.

Fully Funded Balance shows the calculation of the Fully Funded Balance for each of your components, and their contributions to the property total. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Component Significance shows the relative significance of each component to Reserve funding needs of the property, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by its Useful Life, then that component's percentage of the total is displayed.

30-Yr Reserve Plan Summary provides a one-page 30-year summary of the cash flowing into and out of the Reserve Fund, with a display of the Fully Funded Balance, Percent Funded, and special assessment risk at the beginning of each year.

30-Year Income/Expense Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.

# Reserve Component List Detail

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#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate	
					Best Case	Worst Case
Concrete						
2109	NW Lowry Concrete Drive-Replace-10%	10% of ~ 25300 GSF	5	4	\$30,000	\$50,000
2111	Concrete Curbs/Gutters-Replace-10%	105% of ~ 154800 LF	5	4	\$541,800	\$696,700
2113	E Lowry Concrete - Replace - 10%	10% of ~ 5000 GSF	5	4	\$8,000	\$10,000
Asphalt - East						
2131	Asphalt (East) - Slurry Seal	~ 64100 GSF	8	0	\$16,000	\$18,600
2133	Asphalt (East) - Mill/Overlay	~ 64100 GSF	20	8	\$96,200	\$160,300
2135	Asphalt (East) - Seal Coat	~ 24100 GSF	4	12	\$3,900	\$4,800
Asphalt - Northwest						
2131	Asphalt (Northwest) - Slurry Seal	~ 269600 GSF	8	0	\$67,400	\$78,200
2133	Asphalt (Northwest) - Mill/Overlay	~ 269600 GSF	20	6	\$404,400	\$674,000
2135	Asphalt (Northwest) - Seal Coat	~ 269600 GSF	4	10	\$43,100	\$53,900
Asphalt - South						
2131	Asphalt (South) - Slurry Seal	~ 29800 GSF	8	2	\$7,400	\$8,600
2133	Asphalt (South) - Mill/Overlay	~ 29800 GSF	20	10	\$44,700	\$74,500
2135	Asphalt (South) - Seal Coat	~ 29800 GSF	4	14	\$4,800	\$6,000
Asphalt - Sunset						
2131	Asphalt (Sunset) - Slurry Seal	~ 26300 GSF	8	7	\$6,600	\$7,600
2133	Asphalt (Sunset) - Mill/Overlay	~ 26300 GSF	20	19	\$40,000	\$66,000
2135	Asphalt (Sunset) - Seal Coat	~ 26300 GSF	4	3	\$4,200	\$5,300
15 Total Funded Components						



#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Concrete								
2109	NW Lowry Concrete Drive-Replace-10%	\$40,000	X	1	/	5	=	\$8,000
2111	Concrete Curbs/Gutters-Replace-10%	\$619,250	X	1	/	5	=	\$123,850
2113	E Lowry Concrete - Replace - 10%	\$9,000	X	1	/	5	=	\$1,800
Asphalt - East								
2131	Asphalt (East) - Slurry Seal	\$17,300	X	8	/	8	=	\$17,300
2133	Asphalt (East) - Mill/Overlay	\$128,250	X	12	/	20	=	\$76,950
2135	Asphalt (East) - Seal Coat	\$4,350	X	0	/	4	=	\$0
Asphalt - Northwest								
2131	Asphalt (Northwest) - Slurry Seal	\$72,800	X	8	/	8	=	\$72,800
2133	Asphalt (Northwest) - Mill/Overlay	\$539,200	X	14	/	20	=	\$377,440
2135	Asphalt (Northwest) - Seal Coat	\$48,500	X	0	/	4	=	\$0
Asphalt - South								
2131	Asphalt (South) - Slurry Seal	\$8,000	X	6	/	8	=	\$6,000
2133	Asphalt (South) - Mill/Overlay	\$59,600	X	10	/	20	=	\$29,800
2135	Asphalt (South) - Seal Coat	\$5,400	X	0	/	4	=	\$0
Asphalt - Sunset								
2131	Asphalt (Sunset) - Slurry Seal	\$7,100	X	1	/	8	=	\$888
2133	Asphalt (Sunset) - Mill/Overlay	\$53,000	X	1	/	20	=	\$2,650
2135	Asphalt (Sunset) - Seal Coat	\$4,750	X	1	/	4	=	\$1,188
								\$718,665

# Component Significance

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#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Concrete					
2109	NW Lowry Concrete Drive-Replace-10%	5	\$40,000	\$8,000	3.97 %
2111	Concrete Curbs/Gutters-Replace-10%	5	\$619,250	\$123,850	61.45 %
2113	E Lowry Concrete - Replace - 10%	5	\$9,000	\$1,800	0.89 %
Asphalt - East					
2131	Asphalt (East) - Slurry Seal	8	\$17,300	\$2,163	1.07 %
2133	Asphalt (East) - Mill/Overlay	20	\$128,250	\$6,413	3.18 %
2135	Asphalt (East) - Seal Coat	4	\$4,350	\$1,088	0.54 %
Asphalt - Northwest					
2131	Asphalt (Northwest) - Slurry Seal	8	\$72,800	\$9,100	4.51 %
2133	Asphalt (Northwest) - Mill/Overlay	20	\$539,200	\$26,960	13.38 %
2135	Asphalt (Northwest) - Seal Coat	4	\$48,500	\$12,125	6.02 %
Asphalt - South					
2131	Asphalt (South) - Slurry Seal	8	\$8,000	\$1,000	0.50 %
2133	Asphalt (South) - Mill/Overlay	20	\$59,600	\$2,980	1.48 %
2135	Asphalt (South) - Seal Coat	4	\$5,400	\$1,350	0.67 %
Asphalt - Sunset					
2131	Asphalt (Sunset) - Slurry Seal	8	\$7,100	\$888	0.44 %
2133	Asphalt (Sunset) - Mill/Overlay	20	\$53,000	\$2,650	1.31 %
2135	Asphalt (Sunset) - Seal Coat	4	\$4,750	\$1,188	0.59 %
15	Total Funded Components			\$201,553	100.00 %

# 30-Year Reserve Plan Summary

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Fiscal Year Start: 2020					Interest: 1.25 %		Inflation: 3.00 %			
Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)					Projected Reserve Balance Changes					
					% Increase					
	Starting	Fully			Special	In Annual		Loan or		
Year	Reserve Balance	Funded Balance	Percent Funded		Assmt Risk	Reserve Contribs.	Reserve Contribs.	Special Assmts	Interest Income	Reserve Expenses
2020	\$457,291	\$718,665	63.6 %	<div></div>	Medium	131.32 %	\$215,270	\$240,000	\$8,044	\$90,100
2021	\$830,506	\$840,022	98.9 %	<div></div>	Low	3.00 %	\$221,728	\$0	\$11,835	\$0
2022	\$1,064,069	\$1,063,600	100.0 %	<div></div>	Low	3.00 %	\$228,380	\$0	\$14,760	\$8,487
2023	\$1,298,721	\$1,291,095	100.6 %	<div></div>	Low	3.00 %	\$235,231	\$0	\$17,773	\$5,190
2024	\$1,546,535	\$1,534,941	100.8 %	<div></div>	Low	3.00 %	\$242,288	\$0	\$16,238	\$752,121
2025	\$1,052,940	\$1,023,077	102.9 %	<div></div>	Low	3.00 %	\$249,557	\$0	\$14,806	\$0
2026	\$1,317,303	\$1,277,045	103.2 %	<div></div>	Low	3.00 %	\$257,044	\$0	\$14,130	\$643,833
2027	\$944,644	\$897,095	105.3 %	<div></div>	Low	3.00 %	\$264,755	\$0	\$13,449	\$14,574
2028	\$1,208,273	\$1,161,229	104.1 %	<div></div>	Low	3.00 %	\$272,698	\$0	\$15,166	\$276,599
2029	\$1,219,537	\$1,172,388	104.0 %	<div></div>	Low	3.00 %	\$280,879	\$0	\$11,617	\$871,915
2030	\$640,118	\$578,543	110.6 %	<div></div>	Low	3.00 %	\$289,305	\$0	\$8,885	\$156,029
2031	\$782,279	\$714,185	109.5 %	<div></div>	Low	3.00 %	\$297,984	\$0	\$11,666	\$6,575
2032	\$1,085,355	\$1,016,204	106.8 %	<div></div>	Low	3.00 %	\$306,924	\$0	\$15,535	\$6,202
2033	\$1,401,611	\$1,336,289	104.9 %	<div></div>	Low	3.00 %	\$316,131	\$0	\$19,608	\$0
2034	\$1,737,351	\$1,681,243	103.3 %	<div></div>	Low	3.00 %	\$325,615	\$0	\$17,022	\$1,092,317
2035	\$987,671	\$920,607	107.3 %	<div></div>	Low	3.00 %	\$335,384	\$0	\$14,409	\$18,462
2036	\$1,319,002	\$1,252,642	105.3 %	<div></div>	Low	3.00 %	\$345,445	\$0	\$17,801	\$151,565
2037	\$1,530,684	\$1,467,245	104.3 %	<div></div>	Low	3.00 %	\$355,809	\$0	\$21,480	\$0
2038	\$1,907,972	\$1,854,392	102.9 %	<div></div>	Low	3.00 %	\$366,483	\$0	\$25,628	\$105,381
2039	\$2,194,703	\$2,154,906	101.8 %	<div></div>	Low	3.00 %	\$377,477	\$0	\$21,962	\$1,273,045
2040	\$1,321,097	\$1,272,342	103.8 %	<div></div>	Low	3.00 %	\$388,802	\$0	\$19,003	\$7,857
2041	\$1,721,045	\$1,677,367	102.6 %	<div></div>	Low	3.00 %	\$400,466	\$0	\$24,154	\$0
2042	\$2,145,664	\$2,113,884	101.5 %	<div></div>	Low	3.00 %	\$412,480	\$0	\$28,919	\$103,278
2043	\$2,483,785	\$2,468,705	100.6 %	<div></div>	Low	3.00 %	\$424,854	\$0	\$33,749	\$23,387
2044	\$2,919,001	\$2,928,392	99.7 %	<div></div>	Low	3.00 %	\$437,600	\$0	\$29,702	\$1,550,412
2045	\$1,835,891	\$1,841,326	99.7 %	<div></div>	Low	3.00 %	\$450,728	\$0	\$25,914	\$0
2046	\$2,312,532	\$2,331,232	99.2 %	<div></div>	Low	3.00 %	\$464,249	\$0	\$23,842	\$1,296,327
2047	\$1,504,297	\$1,513,659	99.4 %	<div></div>	Low	3.00 %	\$478,177	\$0	\$21,851	\$10,551
2048	\$1,993,774	\$2,009,338	99.2 %	<div></div>	Low	3.00 %	\$492,522	\$0	\$26,254	\$303,379
2049	\$2,209,171	\$2,232,109	99.0 %	<div></div>	Low	3.00 %	\$507,298	\$0	\$21,063	\$1,574,775

# 30-Year Income/Expense Detail

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Fiscal Year	2020	2021	2022	2023	2024
Starting Reserve Balance	\$457,291	\$830,506	\$1,064,069	\$1,298,721	\$1,546,535
Annual Reserve Contribution	\$215,270	\$221,728	\$228,380	\$235,231	\$242,288
Recommended Special Assessments	\$240,000	\$0	\$0	\$0	\$0
Interest Earnings	\$8,044	\$11,835	\$14,760	\$17,773	\$16,238
Total Income	\$920,606	\$1,064,069	\$1,307,208	\$1,551,726	\$1,805,062
# Component					
<b>Concrete</b>					
2109 NW Lowry Concrete Drive-Replace-10%	\$0	\$0	\$0	\$0	\$45,020
2111 Concrete Curbs/Gutters-Replace-10%	\$0	\$0	\$0	\$0	\$696,971
2113 E Lowry Concrete - Replace - 10%	\$0	\$0	\$0	\$0	\$10,130
<b>Asphalt - East</b>					
2131 Asphalt (East) - Slurry Seal	\$17,300	\$0	\$0	\$0	\$0
2133 Asphalt (East) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (East) - Seal Coat	\$0	\$0	\$0	\$0	\$0
<b>Asphalt - Northwest</b>					
2131 Asphalt (Northwest) - Slurry Seal	\$72,800	\$0	\$0	\$0	\$0
2133 Asphalt (Northwest) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Northwest) - Seal Coat	\$0	\$0	\$0	\$0	\$0
<b>Asphalt - South</b>					
2131 Asphalt (South) - Slurry Seal	\$0	\$0	\$8,487	\$0	\$0
2133 Asphalt (South) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (South) - Seal Coat	\$0	\$0	\$0	\$0	\$0
<b>Asphalt - Sunset</b>					
2131 Asphalt (Sunset) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (Sunset) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Sunset) - Seal Coat	\$0	\$0	\$0	\$5,190	\$0
Total Expenses	\$90,100	\$0	\$8,487	\$5,190	\$752,121
Ending Reserve Balance	\$830,506	\$1,064,069	\$1,298,721	\$1,546,535	\$1,052,940

<b>Fiscal Year</b>	<b>2025</b>	<b>2026</b>	<b>2027</b>	<b>2028</b>	<b>2029</b>
Starting Reserve Balance	\$1,052,940	\$1,317,303	\$944,644	\$1,208,273	\$1,219,537
Annual Reserve Contribution	\$249,557	\$257,044	\$264,755	\$272,698	\$280,879
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$14,806	\$14,130	\$13,449	\$15,166	\$11,617
Total Income	\$1,317,303	\$1,588,477	\$1,222,847	\$1,496,137	\$1,512,032
# Component					
<b>Concrete</b>					
2109 NW Lowry Concrete Drive-Replace-10%	\$0	\$0	\$0	\$0	\$52,191
2111 Concrete Curbs/Gutters-Replace-10%	\$0	\$0	\$0	\$0	\$807,981
2113 E Lowry Concrete - Replace - 10%	\$0	\$0	\$0	\$0	\$11,743
<b>Asphalt - East</b>					
2131 Asphalt (East) - Slurry Seal	\$0	\$0	\$0	\$21,915	\$0
2133 Asphalt (East) - Mill/Overlay	\$0	\$0	\$0	\$162,463	\$0
2135 Asphalt (East) - Seal Coat	\$0	\$0	\$0	\$0	\$0
<b>Asphalt - Northwest</b>					
2131 Asphalt (Northwest) - Slurry Seal	\$0	\$0	\$0	\$92,221	\$0
2133 Asphalt (Northwest) - Mill/Overlay	\$0	\$643,833	\$0	\$0	\$0
2135 Asphalt (Northwest) - Seal Coat	\$0	\$0	\$0	\$0	\$0
<b>Asphalt - South</b>					
2131 Asphalt (South) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (South) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (South) - Seal Coat	\$0	\$0	\$0	\$0	\$0
<b>Asphalt - Sunset</b>					
2131 Asphalt (Sunset) - Slurry Seal	\$0	\$0	\$8,732	\$0	\$0
2133 Asphalt (Sunset) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Sunset) - Seal Coat	\$0	\$0	\$5,842	\$0	\$0
Total Expenses	\$0	\$643,833	\$14,574	\$276,599	\$871,915
Ending Reserve Balance	\$1,317,303	\$944,644	\$1,208,273	\$1,219,537	\$640,118

<b>Fiscal Year</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>
Starting Reserve Balance	\$640,118	\$782,279	\$1,085,355	\$1,401,611	\$1,737,351
Annual Reserve Contribution	\$289,305	\$297,984	\$306,924	\$316,131	\$325,615
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$8,885	\$11,666	\$15,535	\$19,608	\$17,022
Total Income	\$938,308	\$1,091,930	\$1,407,813	\$1,737,351	\$2,079,988
# Component					
<b>Concrete</b>					
2109 NW Lowry Concrete Drive-Replace-10%	\$0	\$0	\$0	\$0	\$60,504
2111 Concrete Curbs/Gutters-Replace-10%	\$0	\$0	\$0	\$0	\$936,671
2113 E Lowry Concrete - Replace - 10%	\$0	\$0	\$0	\$0	\$13,613
<b>Asphalt - East</b>					
2131 Asphalt (East) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (East) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (East) - Seal Coat	\$0	\$0	\$6,202	\$0	\$0
<b>Asphalt - Northwest</b>					
2131 Asphalt (Northwest) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (Northwest) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Northwest) - Seal Coat	\$65,180	\$0	\$0	\$0	\$73,361
<b>Asphalt - South</b>					
2131 Asphalt (South) - Slurry Seal	\$10,751	\$0	\$0	\$0	\$0
2133 Asphalt (South) - Mill/Overlay	\$80,097	\$0	\$0	\$0	\$0
2135 Asphalt (South) - Seal Coat	\$0	\$0	\$0	\$0	\$8,168
<b>Asphalt - Sunset</b>					
2131 Asphalt (Sunset) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (Sunset) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Sunset) - Seal Coat	\$0	\$6,575	\$0	\$0	\$0
Total Expenses	\$156,029	\$6,575	\$6,202	\$0	\$1,092,317
Ending Reserve Balance	\$782,279	\$1,085,355	\$1,401,611	\$1,737,351	\$987,671

<b>Fiscal Year</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>
Starting Reserve Balance	\$987,671	\$1,319,002	\$1,530,684	\$1,907,972	\$2,194,703
Annual Reserve Contribution	\$335,384	\$345,445	\$355,809	\$366,483	\$377,477
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$14,409	\$17,801	\$21,480	\$25,628	\$21,962
Total Income	\$1,337,464	\$1,682,248	\$1,907,972	\$2,300,083	\$2,594,142
# Component					
<b>Concrete</b>					
2109 NW Lowry Concrete Drive-Replace-10%	\$0	\$0	\$0	\$0	\$70,140
2111 Concrete Curbs/Gutters-Replace-10%	\$0	\$0	\$0	\$0	\$1,085,859
2113 E Lowry Concrete - Replace - 10%	\$0	\$0	\$0	\$0	\$15,782
<b>Asphalt - East</b>					
2131 Asphalt (East) - Slurry Seal	\$0	\$27,761	\$0	\$0	\$0
2133 Asphalt (East) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (East) - Seal Coat	\$0	\$6,980	\$0	\$0	\$0
<b>Asphalt - Northwest</b>					
2131 Asphalt (Northwest) - Slurry Seal	\$0	\$116,823	\$0	\$0	\$0
2133 Asphalt (Northwest) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Northwest) - Seal Coat	\$0	\$0	\$0	\$82,568	\$0
<b>Asphalt - South</b>					
2131 Asphalt (South) - Slurry Seal	\$0	\$0	\$0	\$13,619	\$0
2133 Asphalt (South) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (South) - Seal Coat	\$0	\$0	\$0	\$9,193	\$0
<b>Asphalt - Sunset</b>					
2131 Asphalt (Sunset) - Slurry Seal	\$11,062	\$0	\$0	\$0	\$0
2133 Asphalt (Sunset) - Mill/Overlay	\$0	\$0	\$0	\$0	\$92,936
2135 Asphalt (Sunset) - Seal Coat	\$7,400	\$0	\$0	\$0	\$8,329
Total Expenses	\$18,462	\$151,565	\$0	\$105,381	\$1,273,045
Ending Reserve Balance	\$1,319,002	\$1,530,684	\$1,907,972	\$2,194,703	\$1,321,097



<b>Fiscal Year</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>
Starting Reserve Balance	\$1,321,097	\$1,721,045	\$2,145,664	\$2,483,785	\$2,919,001
Annual Reserve Contribution	\$388,802	\$400,466	\$412,480	\$424,854	\$437,600
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$19,003	\$24,154	\$28,919	\$33,749	\$29,702
Total Income	\$1,728,901	\$2,145,664	\$2,587,063	\$2,942,388	\$3,386,303
# Component					
<b>Concrete</b>					
2109 NW Lowry Concrete Drive-Replace-10%	\$0	\$0	\$0	\$0	\$81,312
2111 Concrete Curbs/Gutters-Replace-10%	\$0	\$0	\$0	\$0	\$1,258,808
2113 E Lowry Concrete - Replace - 10%	\$0	\$0	\$0	\$0	\$18,295
<b>Asphalt - East</b>					
2131 Asphalt (East) - Slurry Seal	\$0	\$0	\$0	\$0	\$35,167
2133 Asphalt (East) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (East) - Seal Coat	\$7,857	\$0	\$0	\$0	\$8,843
<b>Asphalt - Northwest</b>					
2131 Asphalt (Northwest) - Slurry Seal	\$0	\$0	\$0	\$0	\$147,987
2133 Asphalt (Northwest) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Northwest) - Seal Coat	\$0	\$0	\$92,931	\$0	\$0
<b>Asphalt - South</b>					
2131 Asphalt (South) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (South) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (South) - Seal Coat	\$0	\$0	\$10,347	\$0	\$0
<b>Asphalt - Sunset</b>					
2131 Asphalt (Sunset) - Slurry Seal	\$0	\$0	\$0	\$14,012	\$0
2133 Asphalt (Sunset) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Sunset) - Seal Coat	\$0	\$0	\$0	\$9,375	\$0
Total Expenses	\$7,857	\$0	\$103,278	\$23,387	\$1,550,412
Ending Reserve Balance	\$1,721,045	\$2,145,664	\$2,483,785	\$2,919,001	\$1,835,891

<b>Fiscal Year</b>	<b>2045</b>	<b>2046</b>	<b>2047</b>	<b>2048</b>	<b>2049</b>
Starting Reserve Balance	\$1,835,891	\$2,312,532	\$1,504,297	\$1,993,774	\$2,209,171
Annual Reserve Contribution	\$450,728	\$464,249	\$478,177	\$492,522	\$507,298
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$25,914	\$23,842	\$21,851	\$26,254	\$21,063
Total Income	\$2,312,532	\$2,800,624	\$2,004,325	\$2,512,551	\$2,737,533
# Component					
<b>Concrete</b>					
2109 NW Lowry Concrete Drive-Replace-10%	\$0	\$0	\$0	\$0	\$94,263
2111 Concrete Curbs/Gutters-Replace-10%	\$0	\$0	\$0	\$0	\$1,459,303
2113 E Lowry Concrete - Replace - 10%	\$0	\$0	\$0	\$0	\$21,209
<b>Asphalt - East</b>					
2131 Asphalt (East) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (East) - Mill/Overlay	\$0	\$0	\$0	\$293,427	\$0
2135 Asphalt (East) - Seal Coat	\$0	\$0	\$0	\$9,952	\$0
<b>Asphalt - Northwest</b>					
2131 Asphalt (Northwest) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (Northwest) - Mill/Overlay	\$0	\$1,162,834	\$0	\$0	\$0
2135 Asphalt (Northwest) - Seal Coat	\$0	\$104,595	\$0	\$0	\$0
<b>Asphalt - South</b>					
2131 Asphalt (South) - Slurry Seal	\$0	\$17,253	\$0	\$0	\$0
2133 Asphalt (South) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (South) - Seal Coat	\$0	\$11,646	\$0	\$0	\$0
<b>Asphalt - Sunset</b>					
2131 Asphalt (Sunset) - Slurry Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt (Sunset) - Mill/Overlay	\$0	\$0	\$0	\$0	\$0
2135 Asphalt (Sunset) - Seal Coat	\$0	\$0	\$10,551	\$0	\$0
Total Expenses	\$0	\$1,296,327	\$10,551	\$303,379	\$1,574,775
Ending Reserve Balance	\$2,312,532	\$1,504,297	\$1,993,774	\$2,209,171	\$1,162,758

## Accuracy, Limitations, and Disclosures

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. Bryan Farley, R.S., president of the Colorado LLC, is a credentialed Reserve Specialist (#260). All work done by Association Reserves is performed under his Responsible Charge and is performed in accordance with National Reserve Study Standards (NRSS). There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the client's situation.

Per NRSS, information provided by official representative(s) of the client, vendors, and suppliers regarding financial details, component physical details and/or quantities, or historical issues/conditions will be deemed reliable, and is not intended to be used for the purpose of any type of audit, quality/forensic analysis, or background checks of historical records. As such, information provided to us has not been audited or independently verified.

Estimates for interest and inflation have been included, because including such estimates are more accurate than ignoring them completely. When we are hired to prepare Update reports, the client is considered to have deemed those previously developed component quantities as accurate and reliable, whether established by our firm or other individuals/firms (unless specifically mentioned in our Site Inspection Notes). During inspections our company standard is to establish measurements within 5% accuracy, and our scope includes visual inspection of accessible areas and components and does not include any destructive or other testing. Our work is done only for budget purposes. Uses or expectations outside our expertise and scope of work include, but are not limited to, project audit, quality inspection, and the identification of construction defects, hazardous materials, or dangerous conditions. Identifying hidden issues such as but not limited to plumbing or electrical problems are also outside our scope of work. Our estimates assume proper original installation & construction, adherence to recommended preventive maintenance, a stable economic environment, and do not consider frequency or severity of natural disasters. Our opinions of component Useful Life, Remaining Useful Life, and current or future cost estimates are not a warranty or guarantee of actual costs or timing.

Because the physical and financial status of the property, legislation, the economy, weather, owner expectations, and usage are all in a continual state of change over which we have no control, we do not expect that the events projected in this document will all occur exactly as planned. This Reserve Study is by nature a "one-year" document in need of being updated annually so that more accurate estimates can be incorporated. It is only because a long-term perspective improves the accuracy of near-term planning that this Report projects expenses into the future. We fully expect a number of adjustments will be necessary through the interim years to the cost and timing of expense projections and the funding necessary to prepare for those estimated expenses.

## Terms and Definitions

<b>BTU</b>	British Thermal Unit (a standard unit of energy)
<b>DIA</b>	Diameter
<b>GSF</b>	Gross Square Feet (area). Equivalent to Square Feet
<b>GSY</b>	Gross Square Yards (area). Equivalent to Square Yards
<b>HP</b>	Horsepower
<b>LF</b>	Linear Feet (length)
<b>Effective Age</b>	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
<b>Fully Funded Balance (FFB)</b>	The value of the deterioration of the Reserve Components. This is the fraction of life "used up" of each component multiplied by its estimated Current Replacement. While calculated for each component, it is summed together for an association total.
<b>Inflation</b>	Cost factors are adjusted for inflation at the rate defined in the Executive Summary and compounded annually. These increasing costs can be seen as you follow the recurring cycles of a component on the "30-yr Income/Expense Detail" table.
<b>Interest</b>	Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.
<b>Percent Funded</b>	The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.
<b>Remaining Useful Life (RUL)</b>	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
<b>Useful Life (UL)</b>	The estimated time, in years, that a common area component can be expected to serve its intended function.

## Component Details

The primary purpose of the photographic appendix is to provide the reader with the basis of our funding assumptions resulting from our physical analysis and subsequent research. The photographs herein represent a wide range of elements that were observed and measured against National Reserve Study Standards to determine if they meet the criteria for reserve funding:

- 1) Common are maintenance, repair & replacement reasonability
- 2) Components must have a limited life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of annual operating expenses).

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles to the left of the photo (UL = Useful Life or how often the project is expected to occur, RUL = Remaining Useful Life or how many years from our reporting period) and a representative market cost range termed “Best Cost” and “Worst Cost” below the photo. There are many factors that can result in a wide variety of potential cost; we are attempting to represent a market average for budget purposes. Where there is no UL, the component is expected to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.

## Concrete

**Comp #: 2109 NW Lowry Concrete Drive-Replace-10%****Quantity: 10% of ~ 25300 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Concrete driveways determined to be in fair condition typically may exhibit small changes in slope and narrow "hair-line" wide cracks. Overall no unusual or extreme signs of age noted. Driveways are reported to be the maintenance and repair responsibility of the client. Although complete replacement of all areas together should not be required conditions observed merit inclusion of an allowance for ongoing repairs and partial replacements. Exposure to sunlight weather and frequent vehicle traffic can lead to larger more frequent repairs especially for older properties. Inspect all areas periodically to identify trip hazards or other safety issues. Timeline and cost ranges shown here should be re-evaluated during future Reserve Study updates.

Useful Life:  
5 years

Remaining Life:  
4 years



Best Case: \$ 30,000

Worst Case: \$ 50,000

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2111 Concrete Curbs/Gutters-Replace-10%****Quantity: 105% of ~ 154800 LF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Concrete curbs and gutters determined to be in fair condition typically may start to exhibit minor hair-line cracks and minimal vehicle damage particularly in high-traffic areas. Although there is no predictable expectation for total replacement within the scope of this study we suggest a rotating funding allowance to supplement the operating budget for periodic larger scale repair/replacement. Best to time larger repairs with asphalt seal coat cycles when possible for cost efficiency paint any curbs and fire lanes at that time as well.

Useful Life:  
5 years

Remaining Life:  
4 years



Best Case: \$ 541,800

Worst Case: \$ 696,700

Cost Source: Research with Local Vendor/Contractor

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**Comp #: 2113 E Lowry Concrete - Replace - 10%****Quantity: 10% of ~ 5000 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: The concrete swales and pans were observed to be in fair condition. Minor cracking was noted at the time of the inspection. No heavy damage was seen. Concrete swales are important elements of the site drainage system. Should be inspected periodically to ensure that drainage is not interrupted and any significant cracks or damaged sections repaired in order to maintain a smooth surface. Plan on replacing the swales at the same time as the asphalt removal.

Useful Life:  
5 years

Remaining Life:  
4 years



Best Case: \$ 8,000

Worst Case: \$ 10,000

Cost Source: Research with Local Vendor/Contractor

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## Asphalt - East

### Comp #: 2131 Asphalt (East) - Slurry Seal

Quantity: ~ 64100 GSF

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt seal was observed to be in fair condition with no major issues noted at the time of the inspection. Regular cycles of seal coating (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed the asphalt oxidizes or hardens which causes the pavement to become more brittle. As a result the pavement will be more likely to crack because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane which not only slows down the oxidation process but also helps the pavement to shed water preventing it from entering the base material. Seal coat also provides uniform appearance concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt postponing the asphalt resurfacing which can be one of the larger cost items in this study (see component #2133 for asphalt resurfacing costs). Repair asphalt before seal coating. Surface preparation and dry weather during and following application is key to lasting performance. The ideal conditions are a warm sunny day with low humidity rain can cause major problems when seal coating and should never be done when showers are threatening. Incorporate any striping and curb repair into this project. Fill cracks and clean oil stains promptly in between cycles as routine maintenance. Prior to a seal coat application the areas will be cleaned with push blowers and wire brooms. Be aware that sealcoat will not adhere to heavily saturated oil spots. Vendors typically recommend infrared patching on areas with saturated oil spots to ensure adherence of sealcoat.

Useful Life:  
8 years

Remaining Life:  
0 years



Best Case: \$ 16,000

Worst Case: \$ 18,600

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2133 Asphalt (East) - Mill/Overlay****Quantity: ~ 64100 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt pavement determined to be in fair condition typically exhibits a mostly uniform surface but with minor to moderate raveling and surface wear. If present crack patterns are normal for the age of the asphalt and not extreme and there are no signs of advanced deterioration such as large block cracking patterns "alligating" or potholes. Overall appears to be aging normally and still up to an appropriate aesthetic standard. Useful life below assumes regular seal coating and repairs. The lack of seal coating and repairs can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years consult with geotechnical engineer for recommendations specifications / scope of work and project oversight. As routine maintenance keep surfaces clean and free of debris ensure that drains are free flowing repair cracks and clean oil stains promptly. Assuming proactive maintenance plan to resurface at roughly the time frame below. If regular maintenance and sealing is deferred client may need more extensive repair and replacement projects. Funding below assumes that asphalt has adequate subgrade as well as asphalt fill depth. If fill depth is less than 2" client may need to consider a remove and replacement project which can increase costs by 50% or more. Further resources: Pavement Surface Condition Field Rating Manual for Asphalt Pavement. <http://co-asphalt.com/resources/maintenance-and-preservation/>

Useful Life:  
20 years

Remaining Life:  
8 years



Best Case: \$ 96,200

Worst Case: \$ 160,300

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2135 Asphalt (East) - Seal Coat**

**Quantity: ~ 24100 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Minor cracking or separation observed at the time of our inspection. This line item allows the client to budget for predictable crack fill and sealing on periodic basis.

Useful Life:  
4 years

Remaining Life:  
12 years



Best Case: \$ 3,900

Worst Case: \$ 4,800

Cost Source: Research with Local Vendor/Contractor

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## Asphalt - Northwest

### Comp #: 2131 Asphalt (Northwest) - Slurry Seal

Quantity: ~ 269600 GSF

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt seal was observed to be in fair condition with no major issues noted at the time of the inspection. Regular cycles of seal coating (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed the asphalt oxidizes or hardens which causes the pavement to become more brittle. As a result the pavement will be more likely to crack because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane which not only slows down the oxidation process but also helps the pavement to shed water preventing it from entering the base material. Seal coat also provides uniform appearance concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt postponing the asphalt resurfacing which can be one of the larger cost items in this study (see component #2133 for asphalt resurfacing costs). Repair asphalt before seal coating. Surface preparation and dry weather during and following application is key to lasting performance. The ideal conditions are a warm sunny day with low humidity rain can cause major problems when seal coating and should never be done when showers are threatening. Incorporate any striping and curb repair into this project. Fill cracks and clean oil stains promptly in between cycles as routine maintenance. Prior to a seal coat application the areas will be cleaned with push blowers and wire brooms. Be aware that sealcoat will not adhere to heavily saturated oil spots. Vendors typically recommend infrared patching on areas with saturated oil spots to ensure adherence of sealcoat.

Useful Life:  
8 years

Remaining Life:  
0 years



Best Case: \$ 67,400

Worst Case: \$ 78,200

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2133 Asphalt (Northwest) - Mill/Overlay****Quantity: ~ 269600 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt pavement determined to be in fair condition typically exhibits a mostly uniform surface but with minor to moderate raveling and surface wear. If present crack patterns are normal for the age of the asphalt and not extreme and there are no signs of advanced deterioration such as large block cracking patterns "alligating" or potholes. Overall appears to be aging normally and still up to an appropriate aesthetic standard. Useful life below assumes regular seal coating and repairs. The lack of seal coating and repairs can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years consult with geotechnical engineer for recommendations specifications / scope of work and project oversight. As routine maintenance keep surfaces clean and free of debris ensure that drains are free flowing repair cracks and clean oil stains promptly. Assuming proactive maintenance plan to resurface at roughly the time frame below. If regular maintenance and sealing is deferred client may need more extensive repair and replacement projects. Funding below assumes that asphalt has adequate subgrade as well as asphalt fill depth. If fill depth is less than 2" client may need to consider a remove and replacement project which can increase costs by 50% or more. Further resources: Pavement Surface Condition Field Rating Manual for Asphalt Pavement. <http://co-asphalt.com/resources/maintenance-and-preservation/>

Useful Life:  
20 years

Remaining Life:  
6 years



Best Case: \$ 404,400

Worst Case: \$ 674,000

Cost Source: Research with Local Vendor/Contractor

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**Comp #: 2135 Asphalt (Northwest) - Seal Coat**

**Quantity: ~ 269600 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Minor cracking or separation observed at the time of our inspection. This line item allows the client to budget for predictable crack fill and sealing on periodic basis.

Useful Life:  
4 years

Remaining Life:  
10 years



Best Case: \$ 43,100

Worst Case: \$ 53,900

Cost Source: Research with Local Vendor/Contractor

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## Asphalt - South

**Comp #: 2131 Asphalt (South) - Slurry Seal****Quantity: ~ 29800 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt seal was observed to be in fair condition with no major issues noted at the time of the inspection. Regular cycles of seal coating (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed the asphalt oxidizes or hardens which causes the pavement to become more brittle. As a result the pavement will be more likely to crack because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane which not only slows down the oxidation process but also helps the pavement to shed water preventing it from entering the base material. Seal coat also provides uniform appearance concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt postponing the asphalt resurfacing which can be one of the larger cost items in this study (see component #2133 for asphalt resurfacing costs). Repair asphalt before seal coating. Surface preparation and dry weather during and following application is key to lasting performance. The ideal conditions are a warm sunny day with low humidity rain can cause major problems when seal coating and should never be done when showers are threatening. Incorporate any striping and curb repair into this project. Fill cracks and clean oil stains promptly in between cycles as routine maintenance. Prior to a seal coat application the areas will be cleaned with push blowers and wire brooms. Be aware that sealcoat will not adhere to heavily saturated oil spots. Vendors typically recommend infrared patching on areas with saturated oil spots to ensure adherence of sealcoat.

Useful Life:  
8 years

Remaining Life:  
2 years



Best Case: \$ 7,400

Worst Case: \$ 8,600

Cost Source: Research with Local Vendor/Contractor



**Comp #: 2133 Asphalt (South) - Mill/Overlay****Quantity: ~ 29800 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt pavement determined to be in fair condition typically exhibits a mostly uniform surface but with minor to moderate raveling and surface wear. If present crack patterns are normal for the age of the asphalt and not extreme and there are no signs of advanced deterioration such as large block cracking patterns "alligating" or potholes. Overall appears to be aging normally and still up to an appropriate aesthetic standard. Useful life below assumes regular seal coating and repairs. The lack of seal coating and repairs can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years consult with geotechnical engineer for recommendations specifications / scope of work and project oversight. As routine maintenance keep surfaces clean and free of debris ensure that drains are free flowing repair cracks and clean oil stains promptly. Assuming proactive maintenance plan to resurface at roughly the time frame below. If regular maintenance and sealing is deferred client may need more extensive repair and replacement projects. Funding below assumes that asphalt has adequate subgrade as well as asphalt fill depth. If fill depth is less than 2" client may need to consider a remove and replacement project which can increase costs by 50% or more. Further resources: Pavement Surface Condition Field Rating Manual for Asphalt Pavement. <http://co-asphalt.com/resources/maintenance-and-preservation/>

Useful Life:  
20 years

Remaining Life:  
10 years



Best Case: \$ 44,700

Worst Case: \$ 74,500

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2135 Asphalt (South) - Seal Coat**

**Quantity: ~ 29800 GSF**

Location: Common Areas

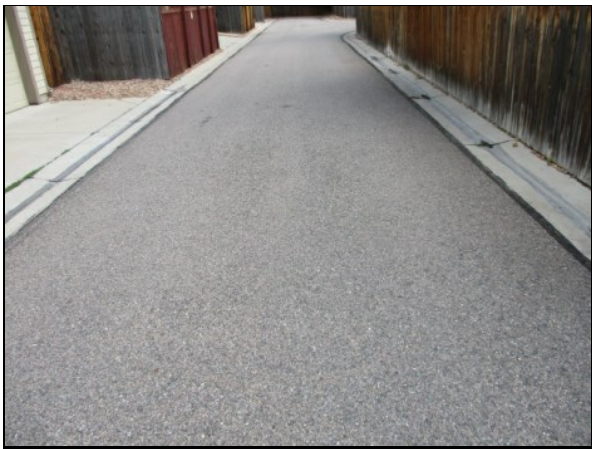
Funded?: Yes.

History:

Comments: Minor cracking or separation observed at the time of our inspection. This line item allows the client to budget for predictable crack fill and sealing on periodic basis.

Useful Life:  
4 years

Remaining Life:  
14 years



Best Case: \$ 4,800

Worst Case: \$ 6,000

Cost Source: Research with Local Vendor/Contractor

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## Asphalt - Sunset

### Comp #: 2131 Asphalt (Sunset) - Slurry Seal

Quantity: ~ 26300 GSF

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt seal was observed to be in fair condition with no major issues noted at the time of the inspection. Regular cycles of seal coating (along with any needed repair) has proven to be the best program in our opinion for the long term care of lower traffic asphalt areas such as these. The primary reason to seal coat asphalt pavement is to protect the pavement from the deteriorating effects of sun and water. When asphalt pavement is exposed the asphalt oxidizes or hardens which causes the pavement to become more brittle. As a result the pavement will be more likely to crack because it is unable to bend and flex when subjected to traffic and temperature changes. A seal coat combats this situation by providing a waterproof membrane which not only slows down the oxidation process but also helps the pavement to shed water preventing it from entering the base material. Seal coat also provides uniform appearance concealing the inevitable patching and repairs which accumulate over time. Seal coat ultimately extends useful life of asphalt postponing the asphalt resurfacing which can be one of the larger cost items in this study (see component #2133 for asphalt resurfacing costs). Repair asphalt before seal coating. Surface preparation and dry weather during and following application is key to lasting performance. The ideal conditions are a warm sunny day with low humidity rain can cause major problems when seal coating and should never be done when showers are threatening. Incorporate any striping and curb repair into this project. Fill cracks and clean oil stains promptly in between cycles as routine maintenance. Prior to a seal coat application the areas will be cleaned with push blowers and wire brooms. Be aware that sealcoat will not adhere to heavily saturated oil spots. Vendors typically recommend infrared patching on areas with saturated oil spots to ensure adherence of sealcoat.

Useful Life:  
8 years

Remaining Life:  
7 years



Best Case: \$ 6,600

Worst Case: \$ 7,600

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2133 Asphalt (Sunset) - Mill/Overlay****Quantity: ~ 26300 GSF**

Location: Common Areas

Funded?: Yes.

History: Will be overlayed in 2019

Comments: Asphalt pavement determined to be in fair condition typically exhibits a mostly uniform surface but with minor to moderate raveling and surface wear. If present crack patterns are normal for the age of the asphalt and not extreme and there are no signs of advanced deterioration such as large block cracking patterns "alligatoring" or potholes. Overall appears to be aging normally and still up to an appropriate aesthetic standard. Useful life below assumes regular seal coating and repairs. The lack of seal coating and repairs can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years consult with geotechnical engineer for recommendations specifications / scope of work and project oversight. As routine maintenance keep surfaces clean and free of debris ensure that drains are free flowing repair cracks and clean oil stains promptly. Assuming proactive maintenance plan to resurface at roughly the time frame below. If regular maintenance and sealing is deferred client may need more extensive repair and replacement projects. Funding below assumes that asphalt has adequate subgrade as well as asphalt fill depth. If fill depth is less than 2" client may need to consider a remove and replacement project which can increase costs by 50% or more. Further resources: Pavement Surface Condition Field Rating Manual for Asphalt Pavement. <http://co-asphalt.com/resources/maintenance-and-preservation/>

Useful Life:  
20 years

Remaining Life:  
19 years



Best Case: \$ 40,000

Worst Case: \$ 66,000

Cost Source: Research with Local Vendor/Contractor

**Comp #: 2135 Asphalt (Sunset) - Seal Coat**

**Quantity: ~ 26300 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Minor cracking or separation observed at the time of our inspection. This line item allows the client to budget for predictable crack fill and sealing on periodic basis.

Useful Life:

4 years

Remaining Life:

3 years



Best Case: \$ 4,200

Worst Case: \$ 5,300

Cost Source: Research with Local Vendor/Contractor

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