ASSOCIATION RESERVES™

Est. 1986

Planning For The Inevitable™

"Full" Reserve Study

The Oaks Condominiums
Arvada, CO

Report #: 40749-0
For Period Beginning: April 1, 2021
Expires: March 31, 2022

Date Prepared: March 5, 2021

BRYAN FARLEY
CAI-RS
00260
DESIGNATION
RESERVE SPECIALIST

Hello, and welcome to your Reserve Study!

This 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.

With 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 or call us at:

303-394-9181

ASSOCIATION RESERVES™

Table of Contents

3-Minute Executive Summary 1

Reserve Study Summary 1

Executive Summary (Component List) 2

Introduction, Objectives, and Methodology 3

Which Physical Assets are Funded by Reserves? 4

How do we establish Useful Life and Remaining Useful Life estimates? 4

How do we establish Current Repair/Replacement Cost Estimates? 4

How much Reserves are enough? 5

How much should we contribute? 6

What is our Recommended Funding Goal? 6

Site Inspection Notes 7

Projected Expenses 8

Annual Reserve Expenses Graph 8

Reserve Fund Status & Recommended Funding Plan 9

Annual Reserve Funding Graph 9

30-Yr Cash Flow Graph 10

Percent Funded Graph 10

Table Descriptions 11

Reserve Component List Detail 12

Fully Funded Balance 13

Component Significance 14

30-Year Reserve Plan Summary 15

30-Year Income/Expense Detail 16

Accuracy, Limitations, and Disclosures 22

Terms and Definitions 23

Component Details 24

Sites & Grounds 25

Building Exteriors 31

Mechanical 39

3- Minute Executive Summary

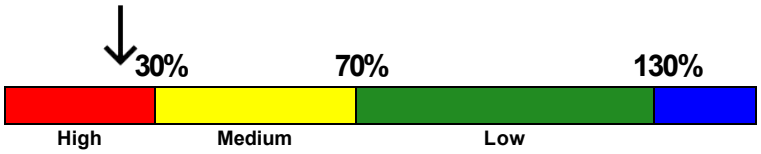
Association:	**The Oaks Condominiums**	**Assoc. #: 40749-0**
Location:	**Arvada, CO**	**# of Units: 25**
Report Period:	**April 1, 2021 through March 31, 2022**	

Findings/Recommendations as-of: April 1, 2021

Starting Reserve Balance	**$54,000**
Fully Funded Reserve Balance	**$227,594**
Percent Funded	**23.7 %**
Recommended 2021 Annual "Fully Funding" Contributions	**$34,960**
Alternate/Baseline Annual Minimum Contributions to Keep Reserves Above $0	**$19,800**
Recommended 2021 Special Assessments for Reserves	**$0**
Most Recent Annual Reserve Contribution Rate	**$7,800**

Reserves % Funded: 23.7%

Special Assessment Risk:



Economic Assumptions:

Net Annual "After Tax" Interest Earnings Accruing to Reserves	**1.00 %**
Annual Inflation Rate	**3.00 %**

• This "Full" Reserve Study, (original, created “from scratch”), is based on our site inspection on 12/17/2020.
• The Reserve Study was reviewed by a credentialed Reserve Specialist (RS).
• Your Reserve Fund is currently 23.7 % Funded. This means the client’s special assessment & deferred maintenance risk is currently High.
• Based on this starting point and your anticipated future expenses, our recommendation is to budget the Annual Reserve contributions at $34,960 with 3% annual increases 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.
• The goal of the Reserve Study is to help the client offset inevitable annual deterioration of the common area components. The Reserve Study will guide the client to establish an appropriate Reserve Contribution rate that offsets the annual deterioration of the components and 'keep pace' with the rate of ongoing deterioration. 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%.

Executive Summary 40749-0

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
	Sites & Grounds			
21090	Concrete Walkways - Repair - 5%	5	2	$3,000
21190	Asphalt - Seal/Repair	4	0	$7,350
21200	Asphalt - Resurface	25	18	$25,650
21340	Site Fencing: Split Rail - Replace	30	8	$16,500
21600	Mailbox Kiosks - Replace	30	5	$2,900
21610	Sign/Monument - Refurbish/Replace	30	28	$3,000
	Building Exteriors			
23180	Composite Decks/EPDM - Replace	25	0	$16,000
23180	Composite Decks/EPDM-Replace(2015)	25	19	$24,000
23310	Wood/Composite Siding – Repaint	7	5	$34,950
23320	Wood/Composite Siding - Replace	60	31	$268,750
23570	Roof: Composition Shingle - Replace	25	20	$138,600
23650	Gutters/Downspouts - Replace	30	25	$16,100
23710	Chimney Covers/Flue Caps - Replace	25	20	$22,500
13	**Total Funded Components**			

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 STUDY RESULTS

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 Full Reserve Study, we started with a review of your Governing Documents, recent Reserve expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Reserves), and research into any well-established association precedents. We performed an on-site inspection to quantify and evaluate your common areas, creating your Reserve Component List *from scratch*.

Which Physical Assets are Funded by Reserves?

RESERVE COMPONENT "FOUR-PART TEST"

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 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?

FUNDING OBJECTIVES

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.*

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 12/17/2020 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-Year Reserve Plan Summary Table, while details of the projects that make up these expenses are shown in the 30-Year Income/Expense Detail.

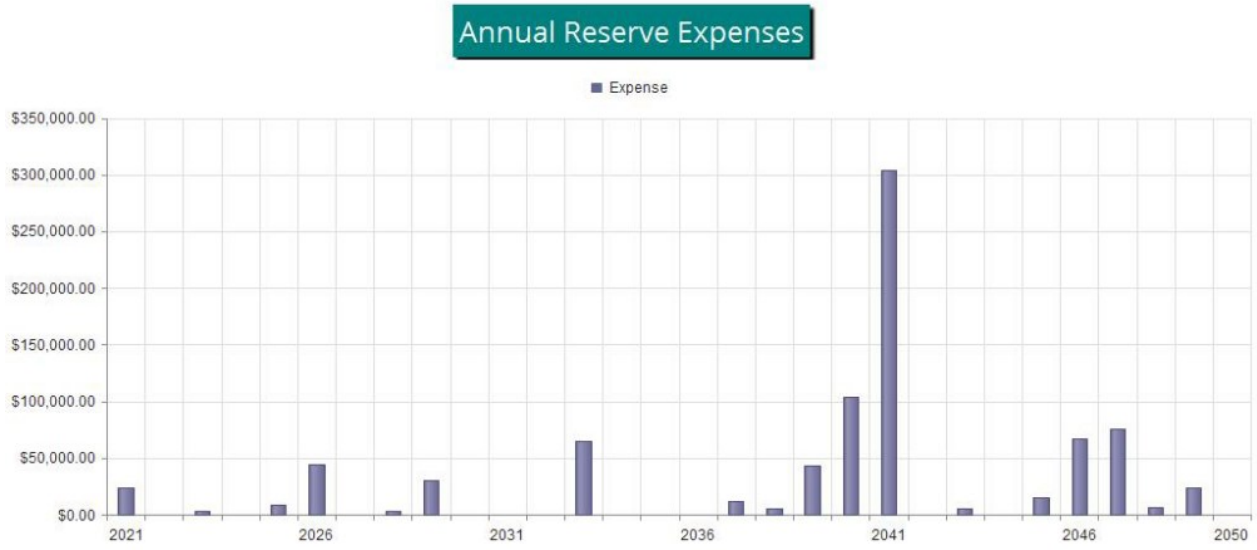


Figure 1

Reserve Fund Status

As of 4/1/2021 your Reserve Fund balance is projected to be $54,000 and your Fully Funded Balance is computed to be $227,594 (see the Fully Funded Balance Table). The Fully Funded Balance represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 23.7 % 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 $34,960. The overall 30-Year Plan, in perspective, is shown below in the Annual Reserve Funding (Fig. 2). This same information is shown numerically in both the 30-Year Reserve Plan Summary Table and the 30-Year Income/Expense Detail.

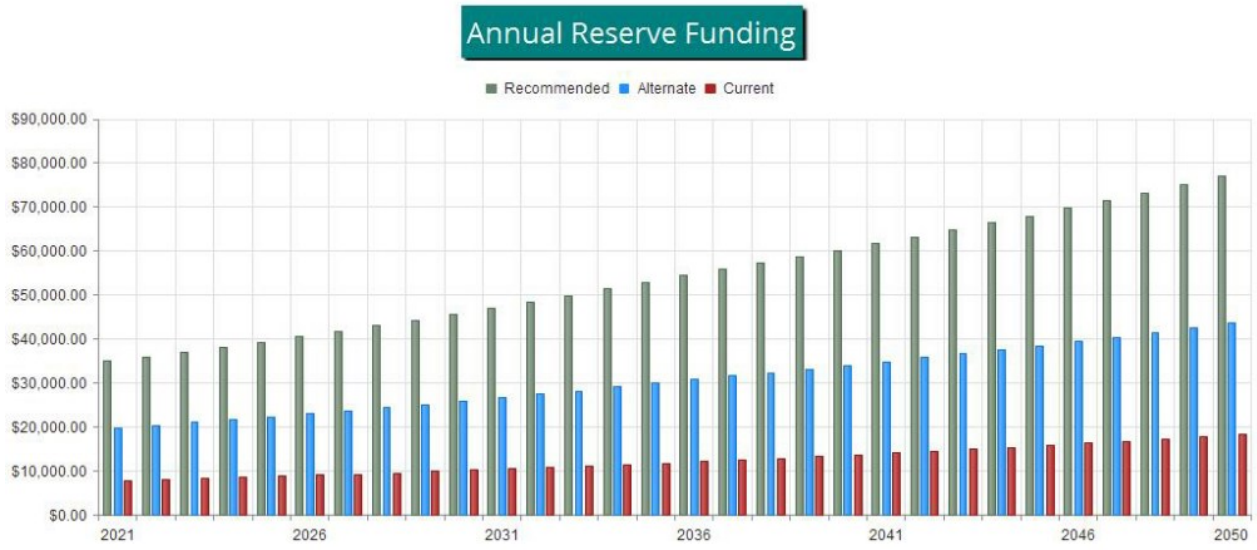


Figure 2

The 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 is shown in the 30-Yr Cash Flow (Fig. 3).

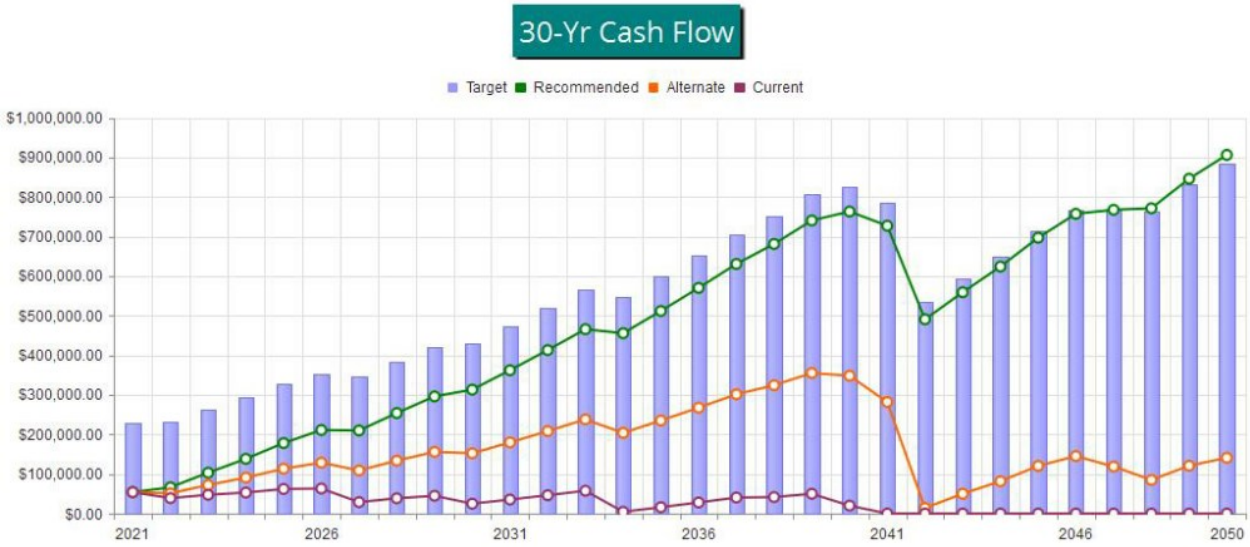


Figure 3

The information from Figure 3 is plotted on a Percent Funded scale in Figure 4. 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.

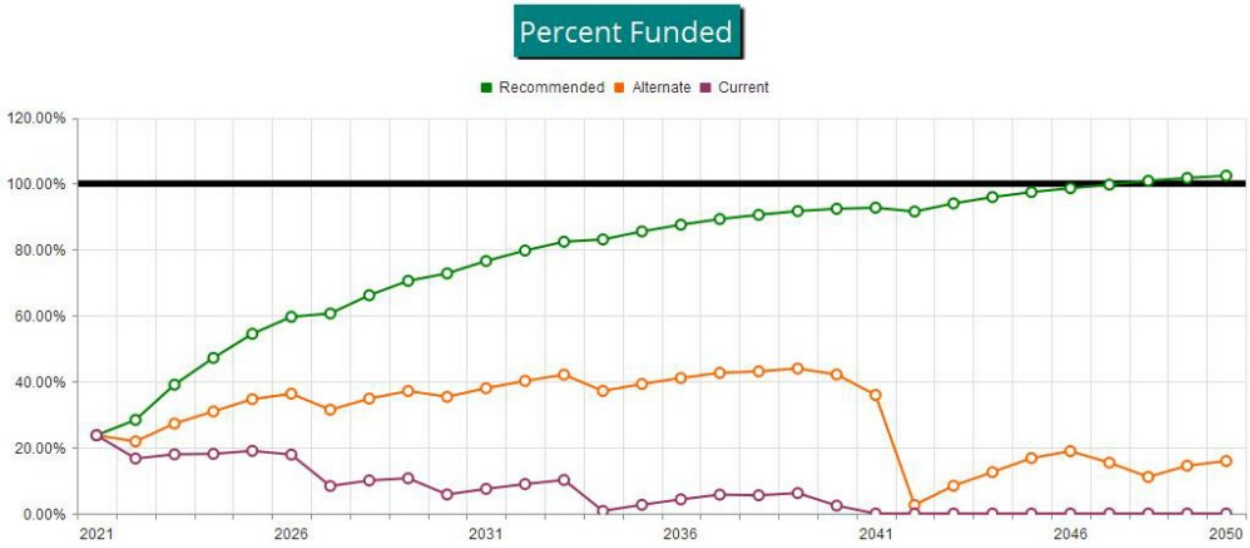


Figure 4

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

40749-0
Full

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate Best Case	Current Cost Estimate Worst Case
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	5% of ~ 4800 GSF	5	2	$2,400	$3,600
21190	Asphalt - Seal/Repair	~ 14700 GSF	4	0	$5,900	$8,800
21200	Asphalt - Resurface	~ 14700 GSF	25	18	$22,000	$29,300
21340	Site Fencing: Split Rail - Replace	~ 640 LF	30	8	$13,000	$20,000
21600	Mailbox Kiosks - Replace	~ (2) CBUs	30	5	$2,600	$3,200
21610	Sign/Monument - Refurbish/Replace	~ (1) Monument	30	28	$2,500	$3,500
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	~ 450 GSF, (2) Decks	25	0	$14,000	$18,000
23180	Composite Decks/EPDM-Replace(2015)	~ 675 GSF, (3) Decks	25	19	$22,000	$26,000
23310	Wood/Composite Siding – Repaint	~ 21500 GSF	7	5	$26,900	$43,000
23320	Wood/Composite Siding - Replace	~ 21500 GSF	60	31	$215,000	$322,500
23570	Roof: Composition Shingle - Replace	~ 30800 GSF	25	20	$123,200	$154,000
23650	Gutters/Downspouts - Replace	~ 2300 LF	30	25	$13,800	$18,400
23710	Chimney Covers/Flue Caps - Replace	~ (50) Caps	25	20	$17,500	$27,500

13 Total Funded Components

Fully Funded Balance

40749-0 Full

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
	Sites & Grounds							
21090	Concrete Walkways - Repair - 5%	$3,000	X	3	/	5	=	$1,800
21190	Asphalt - Seal/Repair	$7,350	X	4	/	4	=	$7,350
21200	Asphalt - Resurface	$25,650	X	7	/	25	=	$7,182
21340	Site Fencing: Split Rail - Replace	$16,500	X	22	/	30	=	$12,100
21600	Mailbox Kiosks - Replace	$2,900	X	25	/	30	=	$2,417
21610	Sign/Monument - Refurbish/Replace	$3,000	X	2	/	30	=	$200
	Building Exteriors							
23180	Composite Decks/EPDM - Replace	$16,000	X	25	/	25	=	$16,000
23180	Composite Decks/EPDM-Replace(2015)	$24,000	X	6	/	25	=	$5,760
23310	Wood/Composite Siding – Repaint	$34,950	X	2	/	7	=	$9,986
23320	Wood/Composite Siding - Replace	$268,750	X	29	/	60	=	$129,896
23570	Roof: Composition Shingle - Replace	$138,600	X	5	/	25	=	$27,720
23650	Gutters/Downspouts - Replace	$16,100	X	5	/	30	=	$2,683
23710	Chimney Covers/Flue Caps - Replace	$22,500	X	5	/	25	=	$4,500
								$227,594

Component Significance

40749-0
Full

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
	Sites & Grounds				
21090	Concrete Walkways - Repair - 5%	5	$3,000	$600	2.70 %
21190	Asphalt - Seal/Repair	4	$7,350	$1,838	8.25 %
21200	Asphalt - Resurface	25	$25,650	$1,026	4.61 %
21340	Site Fencing: Split Rail - Replace	30	$16,500	$550	2.47 %
21600	Mailbox Kiosks - Replace	30	$2,900	$97	0.43 %
21610	Sign/Monument - Refurbish/Replace	30	$3,000	$100	0.45 %
	Building Exteriors				
23180	Composite Decks/EPDM - Replace	25	$16,000	$640	2.87 %
23180	Composite Decks/EPDM-Replace(2015)	25	$24,000	$960	4.31 %
23310	Wood/Composite Siding – Repaint	7	$34,950	$4,993	22.43 %
23320	Wood/Composite Siding - Replace	60	$268,750	$4,479	20.12 %
23570	Roof: Composition Shingle - Replace	25	$138,600	$5,544	24.90 %
23650	Gutters/Downspouts - Replace	30	$16,100	$537	2.41 %
23710	Chimney Covers/Flue Caps - Replace	25	$22,500	$900	4.04 %
13	Total Funded Components			$22,263	100.00 %

30-Year Reserve Plan Summary

40749-0 Full

Fiscal Year Start: 2021	Interest: 1.00 %	Inflation: 3.00 %

Reserve Fund Strength Calculations: (All values of Fiscal Year Start Date)	Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase In Annual Reserve Contribs.	Reserve Contribs.	Loan or Special Assmts	Interest Income	Reserve Expenses
2021	$54,000	$227,594	23.7 %	High	348.21 %	$34,960	$0	$601	$23,350
2022	$66,211	$233,302	28.4 %	High	3.00 %	$36,009	$0	$846	$0
2023	$103,066	$263,919	39.1 %	Medium	3.00 %	$37,089	$0	$1,206	$3,183
2024	$138,178	$292,886	47.2 %	Medium	3.00 %	$38,202	$0	$1,580	$0
2025	$177,959	$326,730	54.5 %	Medium	3.00 %	$39,348	$0	$1,944	$8,272
2026	$210,979	$353,820	59.6 %	Medium	3.00 %	$40,528	$0	$2,103	$43,879
2027	$209,731	$345,822	60.6 %	Medium	3.00 %	$41,744	$0	$2,317	$0
2028	$253,792	$383,577	66.2 %	Medium	3.00 %	$42,996	$0	$2,747	$3,690
2029	$295,845	$419,486	70.5 %	Low	3.00 %	$44,286	$0	$3,043	$30,212
2030	$312,962	$430,000	72.8 %	Low	3.00 %	$45,615	$0	$3,373	$0
2031	$361,950	$472,820	76.6 %	Low	3.00 %	$46,983	$0	$3,872	$0
2032	$412,805	$517,821	79.7 %	Low	3.00 %	$48,393	$0	$4,390	$0
2033	$465,588	$565,097	82.4 %	Low	3.00 %	$49,845	$0	$4,603	$64,587
2034	$455,449	$548,219	83.1 %	Low	3.00 %	$51,340	$0	$4,833	$0
2035	$511,622	$598,340	85.5 %	Low	3.00 %	$52,880	$0	$5,405	$0
2036	$569,908	$650,976	87.5 %	Low	3.00 %	$54,467	$0	$5,999	$0
2037	$630,373	$706,230	89.3 %	Low	2.50 %	$55,828	$0	$6,554	$11,795
2038	$680,961	$752,066	90.5 %	Low	2.50 %	$57,224	$0	$7,103	$4,959
2039	$740,330	$807,421	91.7 %	Low	2.50 %	$58,655	$0	$7,513	$43,667
2040	$762,829	$825,705	92.4 %	Low	2.50 %	$60,121	$0	$7,446	$103,369
2041	$727,027	$784,215	92.7 %	Low	2.50 %	$61,624	$0	$6,085	$304,239
2042	$490,497	$535,790	91.5 %	Low	2.50 %	$63,164	$0	$5,245	$0
2043	$558,906	$594,522	94.0 %	Low	2.50 %	$64,744	$0	$5,911	$5,748
2044	$623,812	$650,374	95.9 %	Low	2.50 %	$66,362	$0	$6,600	$0
2045	$696,775	$715,141	97.4 %	Low	2.50 %	$68,021	$0	$7,266	$14,941
2046	$757,121	$767,820	98.6 %	Low	2.50 %	$69,722	$0	$7,619	$67,210
2047	$767,251	$769,640	99.7 %	Low	2.50 %	$71,465	$0	$7,688	$75,373
2048	$771,031	$764,547	100.8 %	Low	2.50 %	$73,251	$0	$8,080	$6,664
2049	$845,699	$831,555	101.7 %	Low	2.50 %	$75,083	$0	$8,754	$23,680
2050	$905,856	$884,576	102.4 %	Low	2.50 %	$76,960	$0	$9,487	$0

30-Year Income/Expense Detail

40749-0
Full

	Fiscal Year	2021	2022	2023	2024	2025
	Starting Reserve Balance	$54,000	$66,211	$103,066	$138,178	$177,959
	Annual Reserve Contribution	$34,960	$36,009	$37,089	$38,202	$39,348
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$601	$846	$1,206	$1,580	$1,944
	Total Income	$89,561	$103,066	$141,360	$177,959	$219,251
#	Component					
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	$0	$0	$3,183	$0	$0
21190	Asphalt - Seal/Repair	$7,350	$0	$0	$0	$8,272
21200	Asphalt - Resurface	$0	$0	$0	$0	$0
21340	Site Fencing: Split Rail - Replace	$0	$0	$0	$0	$0
21600	Mailbox Kiosks - Replace	$0	$0	$0	$0	$0
21610	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	$16,000	$0	$0	$0	$0
23180	Composite Decks/EPDM-Replace(2015)	$0	$0	$0	$0	$0
23310	Wood/Composite Siding – Repaint	$0	$0	$0	$0	$0
23320	Wood/Composite Siding - Replace	$0	$0	$0	$0	$0
23570	Roof: Composition Shingle - Replace	$0	$0	$0	$0	$0
23650	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
23710	Chimney Covers/Flue Caps - Replace	$0	$0	$0	$0	$0
	Total Expenses	$23,350	$0	$3,183	$0	$8,272
	Ending Reserve Balance	$66,211	$103,066	$138,178	$177,959	$210,979

	Fiscal Year	2026	2027	2028	2029	2030
	Starting Reserve Balance	$210,979	$209,731	$253,792	$295,845	$312,962
	Annual Reserve Contribution	$40,528	$41,744	$42,996	$44,286	$45,615
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$2,103	$2,317	$2,747	$3,043	$3,373
	Total Income	$253,609	$253,792	$299,535	$343,174	$361,950
#	Component					
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	$0	$0	$3,690	$0	$0
21190	Asphalt - Seal/Repair	$0	$0	$0	$9,311	$0
21200	Asphalt - Resurface	$0	$0	$0	$0	$0
21340	Site Fencing: Split Rail - Replace	$0	$0	$0	$20,902	$0
21600	Mailbox Kiosks - Replace	$3,362	$0	$0	$0	$0
21610	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	$0	$0	$0	$0	$0
23180	Composite Decks/EPDM-Replace(2015)	$0	$0	$0	$0	$0
23310	Wood/Composite Siding – Repaint	$40,517	$0	$0	$0	$0
23320	Wood/Composite Siding - Replace	$0	$0	$0	$0	$0
23570	Roof: Composition Shingle - Replace	$0	$0	$0	$0	$0
23650	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
23710	Chimney Covers/Flue Caps - Replace	$0	$0	$0	$0	$0
	Total Expenses	$43,879	$0	$3,690	$30,212	$0
	Ending Reserve Balance	$209,731	$253,792	$295,845	$312,962	$361,950

	Fiscal Year	2031	2032	2033	2034	2035
	Starting Reserve Balance	$361,950	$412,805	$465,588	$455,449	$511,622
	Annual Reserve Contribution	$46,983	$48,393	$49,845	$51,340	$52,880
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$3,872	$4,390	$4,603	$4,833	$5,405
	Total Income	$412,805	$465,588	$520,036	$511,622	$569,908
#	Component					
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	$0	$0	$4,277	$0	$0
21190	Asphalt - Seal/Repair	$0	$0	$10,479	$0	$0
21200	Asphalt - Resurface	$0	$0	$0	$0	$0
21340	Site Fencing: Split Rail - Replace	$0	$0	$0	$0	$0
21600	Mailbox Kiosks - Replace	$0	$0	$0	$0	$0
21610	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	$0	$0	$0	$0	$0
23180	Composite Decks/EPDM-Replace(2015)	$0	$0	$0	$0	$0
23310	Wood/Composite Siding – Repaint	$0	$0	$49,830	$0	$0
23320	Wood/Composite Siding - Replace	$0	$0	$0	$0	$0
23570	Roof: Composition Shingle - Replace	$0	$0	$0	$0	$0
23650	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
23710	Chimney Covers/Flue Caps - Replace	$0	$0	$0	$0	$0
	Total Expenses	$0	$0	$64,587	$0	$0
	Ending Reserve Balance	$412,805	$465,588	$455,449	$511,622	$569,908

	Fiscal Year	2036	2037	2038	2039	2040
	Starting Reserve Balance	$569,908	$630,373	$680,961	$740,330	$762,829
	Annual Reserve Contribution	$54,467	$55,828	$57,224	$58,655	$60,121
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$5,999	$6,554	$7,103	$7,513	$7,446
	Total Income	$630,373	$692,755	$745,288	$806,497	$830,396
#	Component					
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	$0	$0	$4,959	$0	$0
21190	Asphalt - Seal/Repair	$0	$11,795	$0	$0	$0
21200	Asphalt - Resurface	$0	$0	$0	$43,667	$0
21340	Site Fencing: Split Rail - Replace	$0	$0	$0	$0	$0
21600	Mailbox Kiosks - Replace	$0	$0	$0	$0	$0
21610	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	$0	$0	$0	$0	$0
23180	Composite Decks/EPDM-Replace(2015)	$0	$0	$0	$0	$42,084
23310	Wood/Composite Siding – Repaint	$0	$0	$0	$0	$61,285
23320	Wood/Composite Siding - Replace	$0	$0	$0	$0	$0
23570	Roof: Composition Shingle - Replace	$0	$0	$0	$0	$0
23650	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
23710	Chimney Covers/Flue Caps - Replace	$0	$0	$0	$0	$0
	Total Expenses	$0	$11,795	$4,959	$43,667	$103,369
	Ending Reserve Balance	$630,373	$680,961	$740,330	$762,829	$727,027

	Fiscal Year	2041	2042	2043	2044	2045
	Starting Reserve Balance	$727,027	$490,497	$558,906	$623,812	$696,775
	Annual Reserve Contribution	$61,624	$63,164	$64,744	$66,362	$68,021
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$6,085	$5,245	$5,911	$6,600	$7,266
	Total Income	$794,736	$558,906	$629,561	$696,775	$772,062
#	Component					
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	$0	$0	$5,748	$0	$0
21190	Asphalt - Seal/Repair	$13,275	$0	$0	$0	$14,941
21200	Asphalt - Resurface	$0	$0	$0	$0	$0
21340	Site Fencing: Split Rail - Replace	$0	$0	$0	$0	$0
21600	Mailbox Kiosks - Replace	$0	$0	$0	$0	$0
21610	Sign/Monument - Refurbish/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	$0	$0	$0	$0	$0
23180	Composite Decks/EPDM-Replace(2015)	$0	$0	$0	$0	$0
23310	Wood/Composite Siding – Repaint	$0	$0	$0	$0	$0
23320	Wood/Composite Siding - Replace	$0	$0	$0	$0	$0
23570	Roof: Composition Shingle - Replace	$250,327	$0	$0	$0	$0
23650	Gutters/Downspouts - Replace	$0	$0	$0	$0	$0
23710	Chimney Covers/Flue Caps - Replace	$40,638	$0	$0	$0	$0
	Total Expenses	$304,239	$0	$5,748	$0	$14,941
	Ending Reserve Balance	$490,497	$558,906	$623,812	$696,775	$757,121

	Fiscal Year	2046	2047	2048	2049	2050
	Starting Reserve Balance	$757,121	$767,251	$771,031	$845,699	$905,856
	Annual Reserve Contribution	$69,722	$71,465	$73,251	$75,083	$76,960
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$7,619	$7,688	$8,080	$8,754	$9,487
	Total Income	$834,462	$846,404	$852,363	$929,536	$992,303
#	Component					
	Sites & Grounds					
21090	Concrete Walkways - Repair - 5%	$0	$0	$6,664	$0	$0
21190	Asphalt - Seal/Repair	$0	$0	$0	$16,816	$0
21200	Asphalt - Resurface	$0	$0	$0	$0	$0
21340	Site Fencing: Split Rail - Replace	$0	$0	$0	$0	$0
21600	Mailbox Kiosks - Replace	$0	$0	$0	$0	$0
21610	Sign/Monument - Refurbish/Replace	$0	$0	$0	$6,864	$0
	Building Exteriors					
23180	Composite Decks/EPDM - Replace	$33,500	$0	$0	$0	$0
23180	Composite Decks/EPDM-Replace(2015)	$0	$0	$0	$0	$0
23310	Wood/Composite Siding – Repaint	$0	$75,373	$0	$0	$0
23320	Wood/Composite Siding - Replace	$0	$0	$0	$0	$0
23570	Roof: Composition Shingle - Replace	$0	$0	$0	$0	$0
23650	Gutters/Downspouts - Replace	$33,710	$0	$0	$0	$0
23710	Chimney Covers/Flue Caps - Replace	$0	$0	$0	$0	$0
	Total Expenses	$67,210	$75,373	$6,664	$23,680	$0
	Ending Reserve Balance	$767,251	$771,031	$845,699	$905,856	$992,303

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

BTU	British Thermal Unit (a standard unit of energy)
DIA	Diameter
GSF	Gross Square Feet (area). Equivalent to Square Feet
GSY	Gross Square Yards (area). Equivalent to Square Yards
HP	Horsepower
LF	Linear Feet (length)
Effective Age	The difference between Useful Life and Remaining Useful Life. Note that this is not necessarily equivalent to the chronological age of the component.
Fully Funded Balance (FFB)	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.
Inflation	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.
Interest	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.
Percent Funded	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.
Remaining Useful Life (RUL)	The estimated time, in years, that a common area component can be expected to continue to serve its intended function.
Useful Life (UL)	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.

Comp #: 21090 Concrete Walkways - Repair - 5% **Quantity: 5% of ~ 4800 GSF**

Location: Common Areas
Funded?: Yes.
History:
Comments: Concrete sidewalks determined to be in fair condition typically exhibit minor changes in slope and a moderate percentage of cracking and surface wear. Trip hazards may be increasing in frequency and severity and should be closely monitored to prevent further risks. Colorado is home to expansive soils. One of the causes of concrete damage in this type of soil moisture. Expansive soils tend to swell in size when wet and contract as they dry out. As the soil expands and contracts it can create enough force to cause major damage to sidewalks. Repair any trip and fall hazards immediately to ensure safety. As routine maintenance inspect regularly pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. In our experience larger repair/replacement expenses emerge as the community ages. Although difficult to predict timing cost and scope we suggest a rotating funding allowance to supplement the operating/maintenance budget for periodic larger repairs. Adjust as conditions actual expense patterns dictate within future reserve study updates.

Useful Life:
5 years

Remaining Life:
2 years

Best Case: $ 2,400 Worst Case: $ 3,600

Cost Source: Allowance

Comp #: 21190 Asphalt - Seal/Repair **Quantity: ~ 14700 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: Asphalt seal was observed to be in poor condition at the time of the inspection. The seal appeared to be weathered and faded. Exposed aggregate and a gravely texture was noted. Plan to seal the asphalt soon. 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 #21200 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:
4 years

Remaining Life:
0 years

Best Case: $ 5,900 Worst Case: $ 8,800

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 21200 Asphalt - Resurface **Quantity: ~ 14700 GSF**
Location: Common Areas
Funded?: Yes.
History: Resurfaced in 2014
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:
25 years

Remaining Life:
18 years

Best Case: $ 22,000 Worst Case: $ 29,300

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 21330 Patio Fencing: Wood - Replace/Paint **Quantity: ~ 900 LF**
Location: Common Areas
Funded?: No.
History:
Comments: Reported by the conctact to be an owner expense, not HOA. Therefore, no funding provided.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 21340 Site Fencing: Split Rail - Replace **Quantity: ~ 640 LF**

Location: Common Areas

Funded?: Yes.

History: Client repaired (9) posts in 2020

Comments: The remaining useful life extended slightly based on repairs completed in 2020. Wood fencing determined to be in fair condition typically exhibits some minor to moderate amounts of surface wear and other signs of age which may include a small percentage of warped split and/or rotted sections. In general appearance is consistent but declining. As routine maintenance inspect regularly for any damage repair as needed and avoid contact with ground and surrounding vegetation wherever possible. Regular cycles of uniform professional sealing/painting will help to maintain appearance and maximize life. In our experience wood fencing will typically eventually break down due to a combination of sun and weather exposure which is sometimes exacerbated by other factors such as irrigation overspray abuse and lack of preventive maintenance. Recommendation and costs shown here are based on replacement with similar style and material. However the client might want to consider replacing with more sturdy lower-maintenance products like composite vinyl etc. Although installation costs are higher total life cycle cost is lower due to less maintenance and longer design life expectancy.

Useful Life:
30 years

Remaining Life:
8 years

Best Case: $ 13,000 Worst Case: $ 20,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 21600 Mailbox Kiosks - Replace **Quantity: ~ (2) CBUs**

Location: Common Areas

Funded?: Yes.

History:

Comments: Mailbox kiosks determined to be in fair condition typically exhibit minor to moderate surface wear at this stage. All components and hardware appear to function properly but appearance is diminishing. Inspect regularly and clean by wiping down exterior surfaces. If necessary change lock cylinders lubricate hinges and repair as an Operating expense. Best to plan for total replacement at roughly the time frame below due to constant exposure usage and wear over time. Note USPS has a limited budget for replacement and should not be relied upon for purposes of long term planning.

Useful Life:
30 years

Remaining Life:
5 years

Best Case: $ 2,600 Worst Case: $ 3,200

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 21610 Sign/Monument - Refurbish/Replace **Quantity: ~ (1) Monument**

Location: Common Areas

Funded?: Yes.

History: Replaced in 2019

Comments: Monument signage determined to be in fair condition typically exhibits acceptable appearance and aesthetics in keeping with local area but with more weathering and wear showing on surfaces. If present landscaping and lighting are still in serviceable condition. At this stage signage may be becoming more dated and diminishing in appeal. As routine maintenance inspect regularly clean/touch-up and repair as an Operating expense. Plan to refurbish or replace at the interval below. Timing and scope of refurbishing or replacement projects is subjective but should always be scheduled in order to maintain good curb appeal. In our experience most clients choose to refurbish or replace signage periodically in order to maintain good appearance and aesthetics in keeping with local area often before signage is in poor physical condition. If present concrete walls are expected to be painted and repaired as part of refurbishing but not fully replaced unless otherwise noted. Costs can vary significantly depending on style/type desired and may include additional costs for design work landscaping lighting water features etc. Reserve Study updates should incorporate any estimates or information collected regarding potential projects.

Useful Life:
30 years

Remaining Life:
28 years

Best Case: $ 2,500 Worst Case: $ 3,500

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 23030 Ext. Lights (Utility) – Replace **Quantity: ~ (40) Fixtures**
Location: Building Exteriors
Funded?: No.
History:
Comments: Reported to be an owner expense, not HOA.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 23180 Composite Decks/EPDM - Replace **Quantity: ~ 450 GSF, (2) Decks**

Location: Building Exteriors

Funded?: Yes.

History: Reported to be original

Comments: Surface appearance was of that of a composite/plastic/PVC material. Typical warranty period based on a Trex type material is 25 years. However that warranty period is based on proper installation and maintenance. We recommend ongoing evaluations of all elevated decks by a qualified decking or waterproofing contractor to assess overall condition and performance of system components. As part of ongoing maintenance program inspect regularly for any damage/deterioration. Ensure that any rail assemblies are secure. Note project costs can vary significantly professional specifications soliciting several estimates and professional project oversight are recommended. Track actual expenses for inclusion within future Reserve Study updates. If properly installed composite decking systems should experience an extended useful life. Decks should be thoroughly evaluated by a decking or waterproofing contractor prior to re-coating in order to determine scope of any required repairs. If the deck system has a warranty the client should make sure to follow any requirements necessary to maintain said warranty such as re-coating at required intervals and conducting professional inspections. As a general rule potted plants and other items that may trap water should be elevated off the deck or used with a waterproof liner in order to prevent prolonged exposure.
Our inspection is limited to a visual evaluation of accessible areas and is not a substitute for a comprehensive inspection including destructive testing sub-surface moisture evaluation core sampling etc. Typical useful life of a flat (AKA "low-slope") roof is 15-20 years depending on the quality of the roof system installed and the maintenance receives throughout its life. As routine maintenance many manufacturers recommend professional inspections at least twice annually and after storms. Promptly repair any damaged sections or any other repairs needed to ensure waterproof integrity of roof. Keep scuppers drains gutters and downspouts clear and free of debris to allow proper drainage and prevent the ponding of water on the roof surface. We recommend using walk pads or extra roofing material to provide pathways in high-traffic areas such as around HVAC units or other equipment. Take care to minimize any penetrations in the roof system and to properly waterproof and all drains vent pipes conduit penetrations etc. For more information we recommend consulting with independent roofing consultants or with organizations such as the Roof Consultant Institute http://www.rci-online.org/ and the National Roofing Contractors client (NRCA) http://www.nrca.net/. If the roof has a warranty be sure to review terms and conduct proper inspections/repairs as needed to keep warranty in force.

Useful Life:
25 years

Remaining Life:
0 years

Best Case: $ 14,000 Worst Case: $ 18,000

Cost Source: Client Cost History + Inflation

Comp #: 23180 Composite Decks/EPDM-Replace(2015) **Quantity: ~ 675 GSF, (3) Decks**

Location: Building Exteriors

Funded?: Yes.

History: Replaced in 2015 for ~$6800/deck

Comments: Surface appearance was of that of a composite/plastic/PVC material. Typical warranty period based on a Trex type material is 25 years. However that warranty period is based on proper installation and maintenance. We recommend ongoing evaluations of all elevated decks by a qualified decking or waterproofing contractor to assess overall condition and performance of system components. As part of ongoing maintenance program inspect regularly for any damage/deterioration. Ensure that any rail assemblies are secure. Note project costs can vary significantly professional specifications soliciting several estimates and professional project oversight are recommended. Track actual expenses for inclusion within future Reserve Study updates. If properly installed composite decking systems should experience an extended useful life. Decks should be thoroughly evaluated by a decking or waterproofing contractor prior to re-coating in order to determine scope of any required repairs. If the deck system has a warranty the client should make sure to follow any requirements necessary to maintain said warranty such as re-coating at required intervals and conducting professional inspections. As a general rule potted plants and other items that may trap water should be elevated off the deck or used with a waterproof liner in order to prevent prolonged exposure.
Our inspection is limited to a visual evaluation of accessible areas and is not a substitute for a comprehensive inspection including destructive testing sub-surface moisture evaluation core sampling etc. Typical useful life of a flat (AKA "low-slope") roof is 15-20 years depending on the quality of the roof system installed and the maintenance receives throughout its life. As routine maintenance many manufacturers recommend professional inspections at least twice annually and after storms. Promptly repair any damaged sections or any other repairs needed to ensure waterproof integrity of roof. Keep scuppers drains gutters and downspouts clear and free of debris to allow proper drainage and prevent the ponding of water on the roof surface. We recommend using walk pads or extra roofing material to provide pathways in high-traffic areas such as around HVAC units or other equipment. Take care to minimize any penetrations in the roof system and to properly waterproof and all drains vent pipes conduit penetrations etc. For more information we recommend consulting with independent roofing consultants or with organizations such as the Roof Consultant Institute http://www.rci-online.org/ and the National Roofing Contractors client (NRCA) http://www.nrca.net/. If the roof has a warranty be sure to review terms and conduct proper inspections/repairs as needed to keep warranty in force.

Useful Life:
25 years

Remaining Life:
19 years

Best Case: $ 22,000 Worst Case: $ 26,000

Cost Source: Client Cost History + Inflation

Comp #: 23310 Wood/Composite Siding – Repaint **Quantity: ~ 21500 GSF**

Location: Building Exteriors

Funded?: Yes.

History: Replaced in 2019

Comments: Painted exterior surfaces determined to be in fair condition typically exhibit some minor to moderate signs of wear and age such as chalking peeling blistering etc. Problems tend to develop in more exposed areas first. Hairline cracks may be present at this stage. Overall appearance is satisfactory. As routine maintenance inspect regularly (including sealants) repair locally and touch-up paint as needed. Typical paint cycles can vary greatly depending upon many factors including type of material painted surface preparations quality of material application methods weather conditions during application moisture beneath paint and exposure to weather conditions. Proper sealant/caulking is critical to preventing water intrusion and resulting damage to the building structure. Incorrect installations of sealant are common and can greatly decrease its useful life. Inspect sealant more frequently as it ages to determine if it is failing. Typical sealant problems include failure of sealant to adhere to adjacent materials and tearing/splitting of the sealant itself. As sealants age and are exposure to ultra-violet sunlight they will dry out harden and lose their elastic ability. Remove and replace sealant as signs of failure begin to appear. Proper cleaning prep work and proper installation are critical for a long lasting sealant/caulking. Do not install sealant in locations that would block water drainage from behind the siding. Repair areas as needed prior to project. For best results the client may want to consult with a building envelope specialist or waterproofing contractor to specify types of materials to be used and define complete scope of work before bidding. Best practice is to coordinate this type of work with other projects whenever practical such as balcony sealing planter waterproofing etc.

Useful Life:
7 years

Remaining Life:
5 years

Best Case: $ 26,900 Worst Case: $ 43,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 23320 Wood/Composite Siding - Replace **Quantity: ~ 21500 GSF**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Wood siding determined to be in fair condition typically exhibits some color fading and inconsistency with minor isolated locations showing more advanced surface wear cracking splintering etc. Project costs can vary depending upon materials chosen and the condition of the underlying structural framing when exposed. We recommend the Board conduct research well in advance in order to define scope timing and costs including plan for some margin of contingency. Siding is horizontal clapboard. Surface was painted. No view of the critical underlying waterproofing was available as part of our limited visual review. Replacement may ultimately be needed due to the failure of the underlying waterproofing degrading over the decades and/or the end of the useful life of the siding materials from general aging. Many factors influence the useful life including exposure to (or protection from) wind driven rain and the quality of the waterproofing and flashing beneath the siding. Evaluate the siding and the critical underlying waterproofing (typically building paper or house-wrap) more frequently as the remaining useful life approaches zero years. Adjust remaining useful life as dictated by the evaluation. Align with window replacement for cost efficiencies and building envelope integrity when practical. Inspect annually and repair locally as needed using general maintenance funds. Keep the wood siding painted to protect the wood from decay caused by water. Another item that greatly influences useful life is the thoroughness of the original painting. Wood siding will last longer if each piece was painted on all six sides. Typically wood siding is painted on the two sides that are exposed and not on the back ends or top. Since we perform only a visual review we were unable to confirm the extents of the painting. It is reasonable to presume that not all six sides are painted. If the siding is not painted on all sides water can infiltrate and be absorbed into the wood on the unpainted sides which over time will lead to cupping warping and decay limiting its useful life.

Useful Life:
60 years

Remaining Life:
31 years

Best Case: $ 215,000 Worst Case: $ 322,500

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 23570 Roof: Composition Shingle - Replace **Quantity: ~ 30800 GSF**

Location: Building Exteriors

Funded?: Yes.

History: Replaced in 2016

Comments: Kick out flashing noted. Sidewall flashing obseved. A reserve study conducts only a limited visual review and many of the critical waterproofing and ventilation items of the roof are not readily viewable. For a full evaluation have a professional roof consultant/contractor perform a thorough up-close survey of your entire roof system including attic inspection (if any). Costs below factors replacement with an architectural grade laminated shingle. As routine maintenance many manufacturers recommend inspections at least twice annually (once in the fall before the snow season and again in the spring) and after large storm events. Promptly replace any damaged/missing sections or any other repair needed to ensure waterproof integrity of roof. Keep roof surface gutters and downspouts clear and free of debris. At the time of re-roofing we recommend that you hire a professional consultant to evaluate the existing roof and specify the new roof materials/design provide installation oversight. We recommend that all clients hire qualified consultants whenever they are considering having work performed on any building envelope (waterproofing) components including: roof walls windows decks exterior painting and caulking/sealant. There is a wealth of information available through Roofing Organizations such as: National Roofing Contractors client (NRCA) http://www.nrca.net. Asphalt Roofing Manufacturers client (ARMA) http://www.asphaltroofing.org/ Roof Consultant Institute (RCI) http://www.rci-online.org

Useful Life:
25 years

Remaining Life:
20 years

Best Case: $ 123,200 Worst Case: $ 154,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 23650 Gutters/Downspouts - Replace **Quantity: ~ 2300 LF**

Location: Building Exteriors

Funded?: Yes.

History: Replaced in 2016

Comments: Gutters and downspouts determined to be in fair condition typically exhibit some normal wear and tear but drainage away from the roof and building appears to be adequate. Generally believed to be aging normally. Gutters and downspouts are assumed to be functioning properly unless otherwise noted. As routine maintenance inspect regularly keep gutters and downspouts free of debris. If buildings are located near trees keep trees trimmed back to avoid accumulation of leaves on the roof surface which will accumulate in the gutters and increase maintenance requirements while reducing life expectancy. Repair or replace individual sections as needed as an Operating expense. We generally recommend that the gutters and downspouts be replaced when the roof is being resurfaced/replaced. National Roofing Contractor client (NRCA) roofing standard includes installing eave flashings at the gutters. We suggest to plan for total replacement of gutter and downspouts at the same intervals as roof replacement for cost efficiency. Unless otherwise noted costs shown here assume replacement with similar type as are currently in place.

Useful Life:
30 years

Remaining Life:
25 years

Best Case: $ 13,800 Worst Case: $ 18,400

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 23710 Chimney Covers/Flue Caps - Replace **Quantity: ~ (50) Caps**

Location: Building Exteriors

Funded?: Yes.

History: Replaced in 2016

Comments: Generally fair conditions with no widespread damage/wear reported. Chimney components should be scheduled for replacement at the approximate interval shown below. Best practice is often to coordinate replacement with the roof itself. Should be inspected maintained and repaired periodically to ensure good function. Extra attention should be paid to moving parts such as hinges and latches to ensure safety and functionality. Inspect periodically for leaks around frame and repair as needed.

Useful Life:
25 years

Remaining Life:
20 years

Best Case: $ 17,500 Worst Case: $ 27,500

Cost Source: ARI Cost Database: Similar Project Cost History

Mechanical

Comp #: 25570 Irrigation Equipment - Replace **Quantity: Controller/Backflow**
Location: Common areas
Funded?: No.
History:
Comments: In general, costs related to this component are expected to be included in the Association's Operating budget. No recommendation for Reserve funding at this time. However, any repair and maintenance or other related expenditures should be tracked, and this component should be re-evaluated during future Reserve Study updates based on most recent information and data available at that time. If deemed appropriate for Reserve funding, component can be included in the funding plan at that time.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source: