



"Full" Reserve Study



Spring Creek Ranch Harvest Dance Jackson, WY

Report #: 36151-0
For Period Beginning: January 1, 2019
Expires: December 31, 2019

Date Prepared: February 7, 2019

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™**

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3- Minute Executive Summary

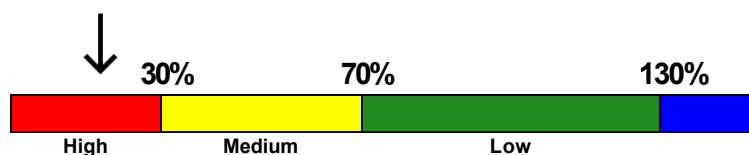
Association: Spring Creek Ranch
Location: Jackson, WY
Report Period: January 1, 2019 through December 31, 2019

Assoc. #: 36151-0
of Units: 38

Findings/Recommendations as-of: January 1, 2019

Projected Starting Reserve Balance	\$800,000
Current Fully Funded Reserve Balance	\$4,383,663
Average Reserve Deficit or (Surplus) Per Unit	\$94,307
Percent Funded	18.2 %
Recommended 2019 Annual "Fully Funding" Contributions	\$273,980
Baseline Annual Minimum Contributions to Keep Reserves Above \$0	\$112,000
Recommended 2019 Special Assessments for Reserves	\$3,500,000
Most Recent Annual Reserve Contribution Rate	\$113,524

Reserves % Funded: 18.2%



Special Assessment Risk:

Economic Assumptions:

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

- This is a "Full" Reserve Study, (original, created "from scratch"), based on our site inspection on 12/21/2018.
- The Reserve Study was prepared by a credentialed Reserve Specialist (RS #260).
- Your Reserve Fund is currently 18.2 % Funded. This means the client's special assessment & deferred maintenance risk is currently High. 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 \$273,980 with 3% annual increases as well as implement a one-time special assessment of \$3,500,000 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

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Harvest Dance Sites & Grounds				
2131	Asphalt Drive - Chip Seal (2018)	10	9	\$7,700
2131	Asphalt Parking - Chip Seal	10	0	\$34,150
2133	Asphalt Drive - Resurface (2018)	20	19	\$55,500
2133	Asphalt Parking - Resurface	20	0	\$217,350
2133	Asphalt Trails - Resurface	20	0	\$274,000
2157	Site Fencing: Split Rail - Replace	25	0	\$17,300
2171	Maintenance Bldg. Roofs - Replace	20	18	\$12,700
2187	Bollard Lights - Replace	20	0	\$81,000
Harvest Dance Building Exteriors				
2303	Exterior Wall Lights - Replace	25	0	\$47,550
2309	Staircase Treads - Replace	40	7	\$2,750
2323	Lower Balcony Rails - Replace	30	0	\$416,450
2323	Upper Balcony Rails - Replace	30	0	\$220,450
2333	Wood Deck - Resurface/Restore	30	0	\$217,800
2333	Wood Entry Deck - Resurface/Restore	30	0	\$129,700
2337	Lower HD Wood Siding - Seal/Oil	5	0	\$40,000
2337	Upper HD Wood Siding - Seal/Oil	5	3	\$40,000
2353	Shed Roof - Replace	30	0	\$25,000
2353	Wood Siding - Replace - 50%	30	0	\$740,000
2361	Windows - Replace	30	0	\$1,308,450
2363	Balcony Deck Doors - Replace	30	0	\$234,850
2367	Unit Front Doors - Replace	40	7	\$228,750
2374	Roof: Wood Shingle - Oil	5	3	\$122,100
2385	Roof: Wood Shingle - Replace	20	18	\$577,200
2395	Chimney Covers/Flue Caps - Replace	30	0	\$61,250

24 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 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?

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?



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.

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.*



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 12/21/2018 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.

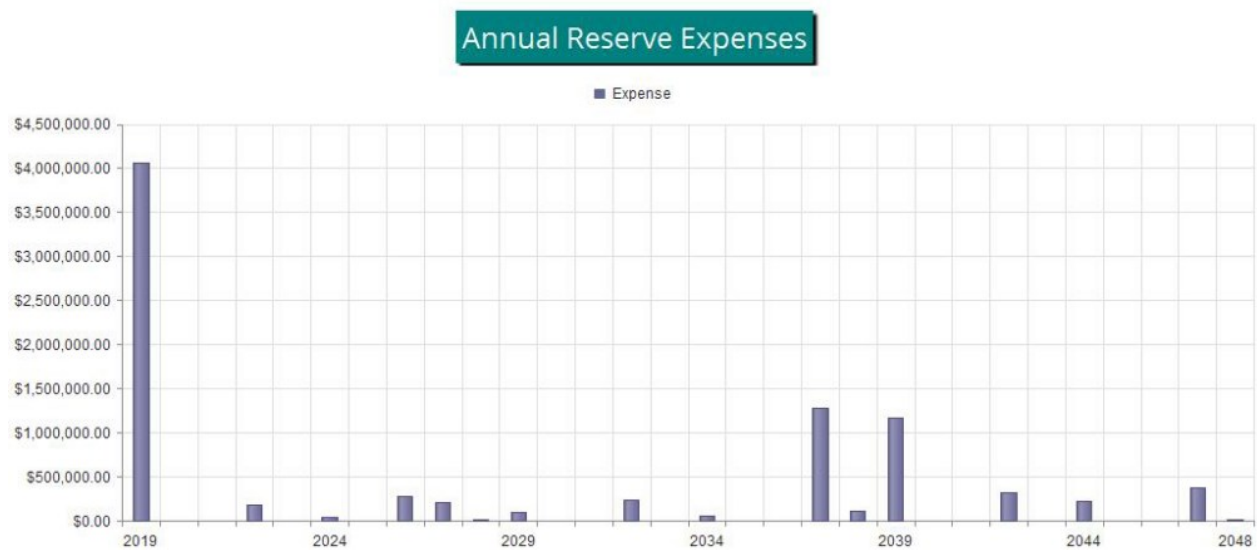


Figure 1

Reserve Fund Status

As of 1/1/2019 your Reserve Fund balance is projected to be \$800,000 and your Fully Funded Balance is computed to be \$4,383,663 (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 18.2 % 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 \$273,980 along with a one-time special assessment of \$3,500,000. 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.

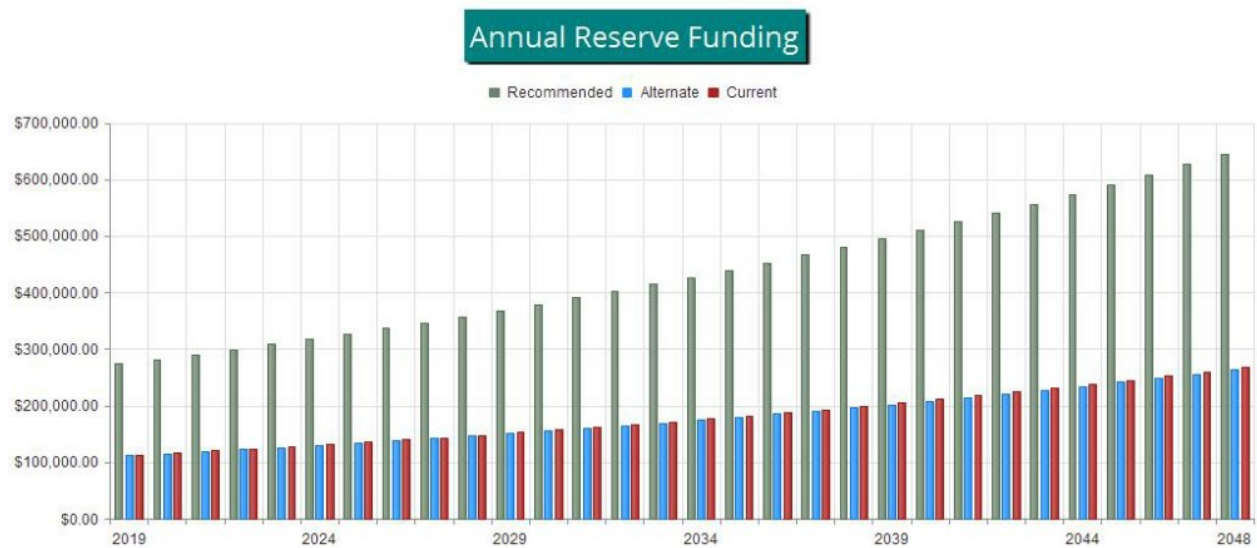


Figure 2

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.

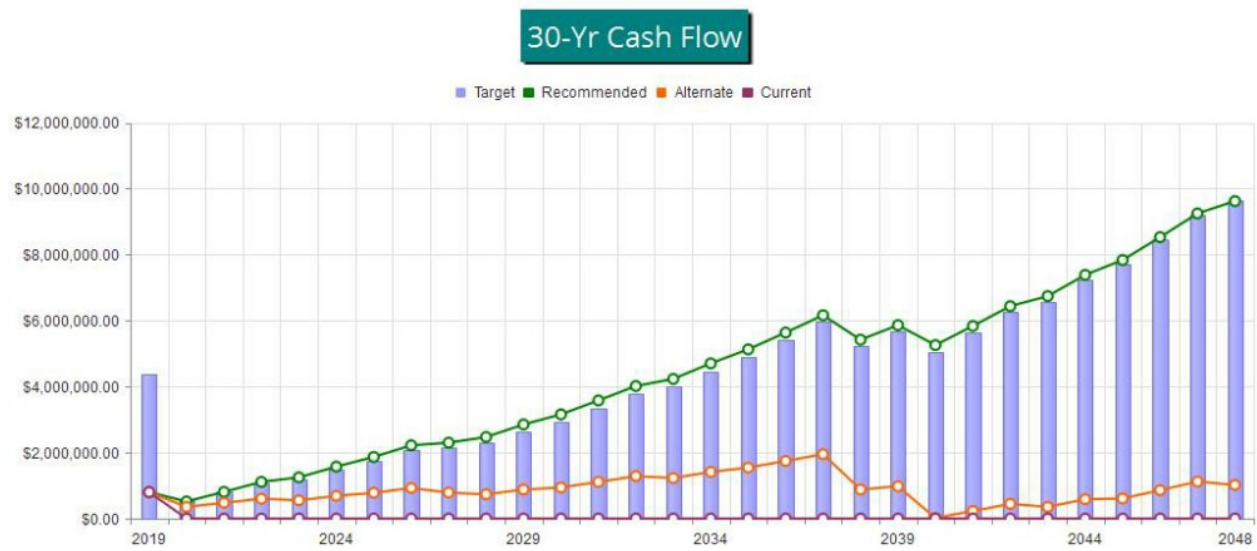


Figure 3

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

The tabular information in this Report is broken down into nine tables, **not all which may have been chosen by your Project Manager to appear in your report.** Tables are listed in the order in which they appear in your Report.

Executive Summary is a summary of your Reserve Components

Budget Summary is a management and accounting tool, summarizing groupings of your Reserve Components.

Analysis Summary provides a summary of the starting financial information and your Project Manager's Financial Analysis decision points.

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 association 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 association, 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.

Accounting-Tax Summary provides information on each Component's proportionate portion of key totals, valuable to accounting professionals primarily during tax preparation time of year.

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.

Budget Summary

36151-0
Full

	Useful Life		2019 Rem. Useful Life		Estimated Replacement Cost in 2019	2019 Expenditures	01/01/2019 Fully Funded Balance	Remaining Bal. to be Funded	2019 Contributions
	Min	Max	Min	Max					
Harvest Dance Sites & Grounds	10	25	0	19	\$699,700	\$623,800	\$628,615	\$71,085	\$44,804
Harvest Dance Building Exteriors	5	40	0	18	\$4,412,300	\$3,441,500	\$3,755,048	\$4,240,915	\$229,176
					<hr/>				
					\$5,112,000	\$4,065,300	\$4,383,663	\$4,312,000	\$273,980
Percent Funded:									18.2%

Reserve Component List Detail

36151-0
Full

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate	
					Best Case	Worst Case
Harvest Dance Sites & Grounds						
2131	Asphalt Drive - Chip Seal (2018)	~ 7000 GSF	10	9	\$7,000	\$8,400
2131	Asphalt Parking - Chip Seal	~ 31000 GSF	10	0	\$31,000	\$37,300
2133	Asphalt Drive - Resurface (2018)	~ 7000 GSF	20	19	\$54,000	\$57,000
2133	Asphalt Parking - Resurface	~ 31000 GSF	20	0	\$186,300	\$248,400
2133	Asphalt Trails - Resurface	~ 27400 GSF	20	0	\$270,000	\$278,000
2157	Site Fencing: Split Rail - Replace	~ 860 LF	25	0	\$15,600	\$19,000
2171	Maintenance Bldg. Roofs - Replace	~ 980 GSF	20	18	\$11,700	\$13,700
2187	Bollard Lights - Replace	~ (45) Fixtures	20	0	\$64,800	\$97,200
Harvest Dance Building Exteriors						
2303	Exterior Wall Lights - Replace	~ (150) Lights	25	0	\$45,300	\$49,800
2309	Staircase Treads - Replace	~ (13) Treads	40	7	\$2,600	\$2,900
2323	Lower Balcony Rails - Replace	~ 1000 LF	30	0	\$364,400	\$468,500
2323	Upper Balcony Rails - Replace	~ 550 LF	30	0	\$192,900	\$248,000
2333	Wood Deck - Resurface/Restore	~ 4400 GSF	30	0	\$174,200	\$261,400
2333	Wood Entry Deck - Resurface/Restore	~ 2600 GSF	30	0	\$103,800	\$155,600
2337	Lower HD Wood Siding - Seal/Oil	50% of ~ 59200 GSF	5	0	\$38,000	\$42,000
2337	Upper HD Wood Siding - Seal/Oil	50% of ~ 59200 GSF	5	3	\$38,000	\$42,000
2353	Shed Roof - Replace	~ 1000 GSF	30	0	\$22,000	\$28,000
2353	Wood Siding - Replace - 50%	50% of ~ 59200 GSF	30	0	\$651,200	\$828,800
2361	Windows - Replace	~ (430) Windows	30	0	\$1,072,500	\$1,544,400
2363	Balcony Deck Doors - Replace	~ (77) Doors	30	0	\$192,500	\$277,200
2367	Unit Front Doors - Replace	~ (75) Doors	40	7	\$187,500	\$270,000
2374	Roof: Wood Shingle - Oil	~ 44400 GSF	5	3	\$88,800	\$155,400
2385	Roof: Wood Shingle - Replace	~ 44400 GSF	20	18	\$532,800	\$621,600
2395	Chimney Covers/Flue Caps - Replace	~ (70) Caps	30	0	\$45,500	\$77,000
24	Total Funded Components					

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Harvest Dance Sites & Grounds								
2131	Asphalt Drive - Chip Seal (2018)	\$7,700	X	1	/	10	=	\$770
2131	Asphalt Parking - Chip Seal	\$34,150	X	10	/	10	=	\$34,150
2133	Asphalt Drive - Resurface (2018)	\$55,500	X	1	/	20	=	\$2,775
2133	Asphalt Parking - Resurface	\$217,350	X	20	/	20	=	\$217,350
2133	Asphalt Trails - Resurface	\$274,000	X	20	/	20	=	\$274,000
2157	Site Fencing: Split Rail - Replace	\$17,300	X	25	/	25	=	\$17,300
2171	Maintenance Bldg. Roofs - Replace	\$12,700	X	2	/	20	=	\$1,270
2187	Bollard Lights - Replace	\$81,000	X	20	/	20	=	\$81,000
Harvest Dance Building Exteriors								
2303	Exterior Wall Lights - Replace	\$47,550	X	25	/	25	=	\$47,550
2309	Staircase Treads - Replace	\$2,750	X	33	/	40	=	\$2,269
2323	Lower Balcony Rails - Replace	\$416,450	X	30	/	30	=	\$416,450
2323	Upper Balcony Rails - Replace	\$220,450	X	30	/	30	=	\$220,450
2333	Wood Deck - Resurface/Restore	\$217,800	X	30	/	30	=	\$217,800
2333	Wood Entry Deck - Resurface/Restore	\$129,700	X	30	/	30	=	\$129,700
2337	Lower HD Wood Siding - Seal/Oil	\$40,000	X	5	/	5	=	\$40,000
2337	Upper HD Wood Siding - Seal/Oil	\$40,000	X	2	/	5	=	\$16,000
2353	Shed Roof - Replace	\$25,000	X	30	/	30	=	\$25,000
2353	Wood Siding - Replace - 50%	\$740,000	X	30	/	30	=	\$740,000
2361	Windows - Replace	\$1,308,450	X	30	/	30	=	\$1,308,450
2363	Balcony Deck Doors - Replace	\$234,850	X	30	/	30	=	\$234,850
2367	Unit Front Doors - Replace	\$228,750	X	33	/	40	=	\$188,719
2374	Roof: Wood Shingle - Oil	\$122,100	X	2	/	5	=	\$48,840
2385	Roof: Wood Shingle - Replace	\$577,200	X	2	/	20	=	\$57,720
2395	Chimney Covers/Flue Caps - Replace	\$61,250	X	30	/	30	=	\$61,250
								\$4,383,663

Component Significance

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Full

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Harvest Dance Sites & Grounds					
2131	Asphalt Drive - Chip Seal (2018)	10	\$7,700	\$770	0.34 %
2131	Asphalt Parking - Chip Seal	10	\$34,150	\$3,415	1.51 %
2133	Asphalt Drive - Resurface (2018)	20	\$55,500	\$2,775	1.23 %
2133	Asphalt Parking - Resurface	20	\$217,350	\$10,868	4.82 %
2133	Asphalt Trails - Resurface	20	\$274,000	\$13,700	6.07 %
2157	Site Fencing: Split Rail - Replace	25	\$17,300	\$692	0.31 %
2171	Maintenance Bldg. Roofs - Replace	20	\$12,700	\$635	0.28 %
2187	Bollard Lights - Replace	20	\$81,000	\$4,050	1.79 %
Harvest Dance Building Exteriors					
2303	Exterior Wall Lights - Replace	25	\$47,550	\$1,902	0.84 %
2309	Staircase Treads - Replace	40	\$2,750	\$69	0.03 %
2323	Lower Balcony Rails - Replace	30	\$416,450	\$13,882	6.15 %
2323	Upper Balcony Rails - Replace	30	\$220,450	\$7,348	3.26 %
2333	Wood Deck - Resurface/Restore	30	\$217,800	\$7,260	3.22 %
2333	Wood Entry Deck - Resurface/Restore	30	\$129,700	\$4,323	1.92 %
2337	Lower HD Wood Siding - Seal/Oil	5	\$40,000	\$8,000	3.54 %
2337	Upper HD Wood Siding - Seal/Oil	5	\$40,000	\$8,000	3.54 %
2353	Shed Roof - Replace	30	\$25,000	\$833	0.37 %
2353	Wood Siding - Replace - 50%	30	\$740,000	\$24,667	10.93 %
2361	Windows - Replace	30	\$1,308,450	\$43,615	19.33 %
2363	Balcony Deck Doors - Replace	30	\$234,850	\$7,828	3.47 %
2367	Unit Front Doors - Replace	40	\$228,750	\$5,719	2.53 %
2374	Roof: Wood Shingle - Oil	5	\$122,100	\$24,420	10.82 %
2385	Roof: Wood Shingle - Replace	20	\$577,200	\$28,860	12.79 %
2395	Chimney Covers/Flue Caps - Replace	30	\$61,250	\$2,042	0.90 %
24	Total Funded Components			\$225,672	100.00 %

30-Year Reserve Plan Summary

36151-0
Full

Fiscal Year Start: 2019	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	Funded	Percent		Assmt	Reserve	Reserve	Special	Interest	Reserve
	Balance	Balance	Funded		Risk	Contribs.	Contribs.	Assmts	Income	Expenses
2019	\$800,000	\$4,383,663	18.2 %	<div></div>	High	141.34 %	\$273,980	\$3,500,000	\$8,226	\$4,065,300
2020	\$516,906	\$560,356	92.2 %	<div></div>	Low	3.00 %	\$282,199	\$0	\$8,272	\$0
2021	\$807,378	\$816,582	98.9 %	<div></div>	Low	3.00 %	\$290,665	\$0	\$11,977	\$0
2022	\$1,110,021	\$1,087,678	102.1 %	<div></div>	Low	3.00 %	\$299,385	\$0	\$14,724	\$177,131
2023	\$1,246,999	\$1,191,860	104.6 %	<div></div>	Low	3.00 %	\$308,367	\$0	\$17,615	\$0
2024	\$1,572,981	\$1,489,231	105.6 %	<div></div>	Low	3.00 %	\$317,618	\$0	\$21,480	\$46,371
2025	\$1,865,708	\$1,755,611	106.3 %	<div></div>	Low	3.00 %	\$327,146	\$0	\$25,512	\$0
2026	\$2,218,367	\$2,085,828	106.4 %	<div></div>	Low	3.00 %	\$336,961	\$0	\$28,217	\$284,716
2027	\$2,298,829	\$2,141,020	107.4 %	<div></div>	Low	3.00 %	\$347,070	\$0	\$29,791	\$205,343
2028	\$2,470,347	\$2,288,198	108.0 %	<div></div>	Low	3.00 %	\$357,482	\$0	\$33,241	\$10,047
2029	\$2,851,022	\$2,649,781	107.6 %	<div></div>	Low	3.00 %	\$368,206	\$0	\$37,531	\$99,651
2030	\$3,157,108	\$2,939,017	107.4 %	<div></div>	Low	3.00 %	\$379,252	\$0	\$42,075	\$0
2031	\$3,578,435	\$3,348,942	106.9 %	<div></div>	Low	3.00 %	\$390,630	\$0	\$47,443	\$0
2032	\$4,016,508	\$3,780,818	106.2 %	<div></div>	Low	3.00 %	\$402,349	\$0	\$51,528	\$238,049
2033	\$4,232,336	\$3,990,401	106.1 %	<div></div>	Low	3.00 %	\$414,419	\$0	\$55,813	\$0
2034	\$4,702,568	\$4,461,703	105.4 %	<div></div>	Low	3.00 %	\$426,852	\$0	\$61,411	\$62,319
2035	\$5,128,513	\$4,893,504	104.8 %	<div></div>	Low	3.00 %	\$439,657	\$0	\$67,239	\$0
2036	\$5,635,409	\$5,413,311	104.1 %	<div></div>	Low	3.00 %	\$452,847	\$0	\$73,694	\$0
2037	\$6,161,950	\$5,959,902	103.4 %	<div></div>	Low	3.00 %	\$466,433	\$0	\$72,352	\$1,280,230
2038	\$5,420,505	\$5,215,781	103.9 %	<div></div>	Low	3.00 %	\$480,426	\$0	\$70,469	\$110,822
2039	\$5,860,578	\$5,665,697	103.4 %	<div></div>	Low	3.00 %	\$494,838	\$0	\$69,449	\$1,167,651
2040	\$5,257,215	\$5,052,805	104.0 %	<div></div>	Low	3.00 %	\$509,684	\$0	\$69,297	\$0
2041	\$5,836,195	\$5,636,800	103.5 %	<div></div>	Low	3.00 %	\$524,974	\$0	\$76,672	\$0
2042	\$6,437,841	\$6,251,288	103.0 %	<div></div>	Low	3.00 %	\$540,723	\$0	\$82,324	\$319,918
2043	\$6,740,969	\$6,568,056	102.6 %	<div></div>	Low	3.00 %	\$556,945	\$0	\$88,247	\$0
2044	\$7,386,162	\$7,237,606	102.1 %	<div></div>	Low	3.00 %	\$573,653	\$0	\$95,084	\$219,533
2045	\$7,835,366	\$7,715,298	101.6 %	<div></div>	Low	3.00 %	\$590,863	\$0	\$102,219	\$0
2046	\$8,528,448	\$8,448,041	101.0 %	<div></div>	Low	3.00 %	\$608,589	\$0	\$111,044	\$0
2047	\$9,248,081	\$9,217,804	100.3 %	<div></div>	Low	3.00 %	\$626,846	\$0	\$117,875	\$370,873
2048	\$9,621,929	\$9,644,150	99.8 %	<div></div>	Low	3.00 %	\$645,652	\$0	\$124,910	\$18,146

30-Year Income/Expense Detail

36151-0
Full

Fiscal Year	2019	2020	2021	2022	2023
Starting Reserve Balance	\$800,000	\$516,906	\$807,378	\$1,110,021	\$1,246,999
Annual Reserve Contribution	\$273,980	\$282,199	\$290,665	\$299,385	\$308,367
Recommended Special Assessments	\$3,500,000	\$0	\$0	\$0	\$0
Interest Earnings	\$8,226	\$8,272	\$11,977	\$14,724	\$17,615
Total Income	\$4,582,206	\$807,378	\$1,110,021	\$1,424,130	\$1,572,981
# Component					
Harvest Dance Sites & Grounds					
2131 Asphalt Drive - Chip Seal (2018)	\$0	\$0	\$0	\$0	\$0
2131 Asphalt Parking - Chip Seal	\$34,150	\$0	\$0	\$0	\$0
2133 Asphalt Drive - Resurface (2018)	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Parking - Resurface	\$217,350	\$0	\$0	\$0	\$0
2133 Asphalt Trails - Resurface	\$274,000	\$0	\$0	\$0	\$0
2157 Site Fencing: Split Rail - Replace	\$17,300	\$0	\$0	\$0	\$0
2171 Maintenance Bldg. Roofs - Replace	\$0	\$0	\$0	\$0	\$0
2187 Bollard Lights - Replace	\$81,000	\$0	\$0	\$0	\$0
Harvest Dance Building Exteriors					
2303 Exterior Wall Lights - Replace	\$47,550	\$0	\$0	\$0	\$0
2309 Staircase Treads - Replace	\$0	\$0	\$0	\$0	\$0
2323 Lower Balcony Rails - Replace	\$416,450	\$0	\$0	\$0	\$0
2323 Upper Balcony Rails - Replace	\$220,450	\$0	\$0	\$0	\$0
2333 Wood Deck - Resurface/Restore	\$217,800	\$0	\$0	\$0	\$0
2333 Wood Entry Deck - Resurface/Restore	\$129,700	\$0	\$0	\$0	\$0
2337 Lower HD Wood Siding - Seal/Oil	\$40,000	\$0	\$0	\$0	\$0
2337 Upper HD Wood Siding - Seal/Oil	\$0	\$0	\$0	\$43,709	\$0
2353 Shed Roof - Replace	\$25,000	\$0	\$0	\$0	\$0
2353 Wood Siding - Replace - 50%	\$740,000	\$0	\$0	\$0	\$0
2361 Windows - Replace	\$1,308,450	\$0	\$0	\$0	\$0
2363 Balcony Deck Doors - Replace	\$234,850	\$0	\$0	\$0	\$0
2367 Unit Front Doors - Replace	\$0	\$0	\$0	\$0	\$0
2374 Roof: Wood Shingle - Oil	\$0	\$0	\$0	\$133,422	\$0
2385 Roof: Wood Shingle - Replace	\$0	\$0	\$0	\$0	\$0
2395 Chimney Covers/Flue Caps - Replace	\$61,250	\$0	\$0	\$0	\$0
Total Expenses	\$4,065,300	\$0	\$0	\$177,131	\$0
Ending Reserve Balance	\$516,906	\$807,378	\$1,110,021	\$1,246,999	\$1,572,981

Fiscal Year	2024	2025	2026	2027	2028
Starting Reserve Balance	\$1,572,981	\$1,865,708	\$2,218,367	\$2,298,829	\$2,470,347
Annual Reserve Contribution	\$317,618	\$327,146	\$336,961	\$347,070	\$357,482
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$21,480	\$25,512	\$28,217	\$29,791	\$33,241
Total Income	\$1,912,079	\$2,218,367	\$2,583,545	\$2,675,690	\$2,861,069
# Component					
Harvest Dance Sites & Grounds					
2131 Asphalt Drive - Chip Seal (2018)	\$0	\$0	\$0	\$0	\$10,047
2131 Asphalt Parking - Chip Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Drive - Resurface (2018)	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Parking - Resurface	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Trails - Resurface	\$0	\$0	\$0	\$0	\$0
2157 Site Fencing: Split Rail - Replace	\$0	\$0	\$0	\$0	\$0
2171 Maintenance Bldg. Roofs - Replace	\$0	\$0	\$0	\$0	\$0
2187 Bollard Lights - Replace	\$0	\$0	\$0	\$0	\$0
Harvest Dance Building Exteriors					
2303 Exterior Wall Lights - Replace	\$0	\$0	\$0	\$0	\$0
2309 Staircase Treads - Replace	\$0	\$0	\$3,382	\$0	\$0
2323 Lower Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2323 Upper Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2333 Wood Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2333 Wood Entry Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2337 Lower HD Wood Siding - Seal/Oil	\$46,371	\$0	\$0	\$0	\$0
2337 Upper HD Wood Siding - Seal/Oil	\$0	\$0	\$0	\$50,671	\$0
2353 Shed Roof - Replace	\$0	\$0	\$0	\$0	\$0
2353 Wood Siding - Replace - 50%	\$0	\$0	\$0	\$0	\$0
2361 Windows - Replace	\$0	\$0	\$0	\$0	\$0
2363 Balcony Deck Doors - Replace	\$0	\$0	\$0	\$0	\$0
2367 Unit Front Doors - Replace	\$0	\$0	\$281,334	\$0	\$0
2374 Roof: Wood Shingle - Oil	\$0	\$0	\$0	\$154,673	\$0
2385 Roof: Wood Shingle - Replace	\$0	\$0	\$0	\$0	\$0
2395 Chimney Covers/Flue Caps - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$46,371	\$0	\$284,716	\$205,343	\$10,047
Ending Reserve Balance	\$1,865,708	\$2,218,367	\$2,298,829	\$2,470,347	\$2,851,022

Fiscal Year	2029	2030	2031	2032	2033
Starting Reserve Balance	\$2,851,022	\$3,157,108	\$3,578,435	\$4,016,508	\$4,232,336
Annual Reserve Contribution	\$368,206	\$379,252	\$390,630	\$402,349	\$414,419
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$37,531	\$42,075	\$47,443	\$51,528	\$55,813
Total Income	\$3,256,759	\$3,578,435	\$4,016,508	\$4,470,385	\$4,702,568
# Component					
Harvest Dance Sites & Grounds					
2131 Asphalt Drive - Chip Seal (2018)	\$0	\$0	\$0	\$0	\$0
2131 Asphalt Parking - Chip Seal	\$45,895	\$0	\$0	\$0	\$0
2133 Asphalt Drive - Resurface (2018)	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Parking - Resurface	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Trails - Resurface	\$0	\$0	\$0	\$0	\$0
2157 Site Fencing: Split Rail - Replace	\$0	\$0	\$0	\$0	\$0
2171 Maintenance Bldg. Roofs - Replace	\$0	\$0	\$0	\$0	\$0
2187 Bollard Lights - Replace	\$0	\$0	\$0	\$0	\$0
Harvest Dance Building Exteriors					
2303 Exterior Wall Lights - Replace	\$0	\$0	\$0	\$0	\$0
2309 Staircase Treads - Replace	\$0	\$0	\$0	\$0	\$0
2323 Lower Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2323 Upper Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2333 Wood Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2333 Wood Entry Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2337 Lower HD Wood Siding - Seal/Oil	\$53,757	\$0	\$0	\$0	\$0
2337 Upper HD Wood Siding - Seal/Oil	\$0	\$0	\$0	\$58,741	\$0
2353 Shed Roof - Replace	\$0	\$0	\$0	\$0	\$0
2353 Wood Siding - Replace - 50%	\$0	\$0	\$0	\$0	\$0
2361 Windows - Replace	\$0	\$0	\$0	\$0	\$0
2363 Balcony Deck Doors - Replace	\$0	\$0	\$0	\$0	\$0
2367 Unit Front Doors - Replace	\$0	\$0	\$0	\$0	\$0
2374 Roof: Wood Shingle - Oil	\$0	\$0	\$0	\$179,308	\$0
2385 Roof: Wood Shingle - Replace	\$0	\$0	\$0	\$0	\$0
2395 Chimney Covers/Flue Caps - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$99,651	\$0	\$0	\$238,049	\$0
Ending Reserve Balance	\$3,157,108	\$3,578,435	\$4,016,508	\$4,232,336	\$4,702,568

Fiscal Year	2034	2035	2036	2037	2038
Starting Reserve Balance	\$4,702,568	\$5,128,513	\$5,635,409	\$6,161,950	\$5,420,505
Annual Reserve Contribution	\$426,852	\$439,657	\$452,847	\$466,433	\$480,426
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$61,411	\$67,239	\$73,694	\$72,352	\$70,469
Total Income	\$5,190,832	\$5,635,409	\$6,161,950	\$6,700,735	\$5,971,400
# Component					
Harvest Dance Sites & Grounds					
2131 Asphalt Drive - Chip Seal (2018)	\$0	\$0	\$0	\$0	\$13,502
2131 Asphalt Parking - Chip Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Drive - Resurface (2018)	\$0	\$0	\$0	\$0	\$97,320
2133 Asphalt Parking - Resurface	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Trails - Resurface	\$0	\$0	\$0	\$0	\$0
2157 Site Fencing: Split Rail - Replace	\$0	\$0	\$0	\$0	\$0
2171 Maintenance Bldg. Roofs - Replace	\$0	\$0	\$0	\$21,621	\$0
2187 Bollard Lights - Replace	\$0	\$0	\$0	\$0	\$0
Harvest Dance Building Exteriors					
2303 Exterior Wall Lights - Replace	\$0	\$0	\$0	\$0	\$0
2309 Staircase Treads - Replace	\$0	\$0	\$0	\$0	\$0
2323 Lower Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2323 Upper Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2333 Wood Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2333 Wood Entry Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2337 Lower HD Wood Siding - Seal/Oil	\$62,319	\$0	\$0	\$0	\$0
2337 Upper HD Wood Siding - Seal/Oil	\$0	\$0	\$0	\$68,097	\$0
2353 Shed Roof - Replace	\$0	\$0	\$0	\$0	\$0
2353 Wood Siding - Replace - 50%	\$0	\$0	\$0	\$0	\$0
2361 Windows - Replace	\$0	\$0	\$0	\$0	\$0
2363 Balcony Deck Doors - Replace	\$0	\$0	\$0	\$0	\$0
2367 Unit Front Doors - Replace	\$0	\$0	\$0	\$0	\$0
2374 Roof: Wood Shingle - Oil	\$0	\$0	\$0	\$207,867	\$0
2385 Roof: Wood Shingle - Replace	\$0	\$0	\$0	\$982,644	\$0
2395 Chimney Covers/Flue Caps - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$62,319	\$0	\$0	\$1,280,230	\$110,822
Ending Reserve Balance	\$5,128,513	\$5,635,409	\$6,161,950	\$5,420,505	\$5,860,578

Fiscal Year	2039	2040	2041	2042	2043
Starting Reserve Balance	\$5,860,578	\$5,257,215	\$5,836,195	\$6,437,841	\$6,740,969
Annual Reserve Contribution	\$494,838	\$509,684	\$524,974	\$540,723	\$556,945
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$69,449	\$69,297	\$76,672	\$82,324	\$88,247
Total Income	\$6,424,866	\$5,836,195	\$6,437,841	\$7,060,888	\$7,386,162
# Component					
Harvest Dance Sites & Grounds					
2131 Asphalt Drive - Chip Seal (2018)	\$0	\$0	\$0	\$0	\$0
2131 Asphalt Parking - Chip Seal	\$61,679	\$0	\$0	\$0	\$0
2133 Asphalt Drive - Resurface (2018)	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Parking - Resurface	\$392,558	\$0	\$0	\$0	\$0
2133 Asphalt Trails - Resurface	\$494,874	\$0	\$0	\$0	\$0
2157 Site Fencing: Split Rail - Replace	\$0	\$0	\$0	\$0	\$0
2171 Maintenance Bldg. Roofs - Replace	\$0	\$0	\$0	\$0	\$0
2187 Bollard Lights - Replace	\$146,295	\$0	\$0	\$0	\$0
Harvest Dance Building Exteriors					
2303 Exterior Wall Lights - Replace	\$0	\$0	\$0	\$0	\$0
2309 Staircase Treads - Replace	\$0	\$0	\$0	\$0	\$0
2323 Lower Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2323 Upper Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2333 Wood Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2333 Wood Entry Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2337 Lower HD Wood Siding - Seal/Oil	\$72,244	\$0	\$0	\$0	\$0
2337 Upper HD Wood Siding - Seal/Oil	\$0	\$0	\$0	\$78,943	\$0
2353 Shed Roof - Replace	\$0	\$0	\$0	\$0	\$0
2353 Wood Siding - Replace - 50%	\$0	\$0	\$0	\$0	\$0
2361 Windows - Replace	\$0	\$0	\$0	\$0	\$0
2363 Balcony Deck Doors - Replace	\$0	\$0	\$0	\$0	\$0
2367 Unit Front Doors - Replace	\$0	\$0	\$0	\$0	\$0
2374 Roof: Wood Shingle - Oil	\$0	\$0	\$0	\$240,975	\$0
2385 Roof: Wood Shingle - Replace	\$0	\$0	\$0	\$0	\$0
2395 Chimney Covers/Flue Caps - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$1,167,651	\$0	\$0	\$319,918	\$0
Ending Reserve Balance	\$5,257,215	\$5,836,195	\$6,437,841	\$6,740,969	\$7,386,162

Fiscal Year	2044	2045	2046	2047	2048
Starting Reserve Balance	\$7,386,162	\$7,835,366	\$8,528,448	\$9,248,081	\$9,621,929
Annual Reserve Contribution	\$573,653	\$590,863	\$608,589	\$626,846	\$645,652
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$95,084	\$102,219	\$111,044	\$117,875	\$124,910
Total Income	\$8,054,899	\$8,528,448	\$9,248,081	\$9,992,802	\$10,392,491
# Component					
Harvest Dance Sites & Grounds					
2131 Asphalt Drive - Chip Seal (2018)	\$0	\$0	\$0	\$0	\$18,146
2131 Asphalt Parking - Chip Seal	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Drive - Resurface (2018)	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Parking - Resurface	\$0	\$0	\$0	\$0	\$0
2133 Asphalt Trails - Resurface	\$0	\$0	\$0	\$0	\$0
2157 Site Fencing: Split Rail - Replace	\$36,222	\$0	\$0	\$0	\$0
2171 Maintenance Bldg. Roofs - Replace	\$0	\$0	\$0	\$0	\$0
2187 Bollard Lights - Replace	\$0	\$0	\$0	\$0	\$0
Harvest Dance Building Exteriors					
2303 Exterior Wall Lights - Replace	\$99,559	\$0	\$0	\$0	\$0
2309 Staircase Treads - Replace	\$0	\$0	\$0	\$0	\$0
2323 Lower Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2323 Upper Balcony Rails - Replace	\$0	\$0	\$0	\$0	\$0
2333 Wood Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2333 Wood Entry Deck - Resurface/Restore	\$0	\$0	\$0	\$0	\$0
2337 Lower HD Wood Siding - Seal/Oil	\$83,751	\$0	\$0	\$0	\$0
2337 Upper HD Wood Siding - Seal/Oil	\$0	\$0	\$0	\$91,517	\$0
2353 Shed Roof - Replace	\$0	\$0	\$0	\$0	\$0
2353 Wood Siding - Replace - 50%	\$0	\$0	\$0	\$0	\$0
2361 Windows - Replace	\$0	\$0	\$0	\$0	\$0
2363 Balcony Deck Doors - Replace	\$0	\$0	\$0	\$0	\$0
2367 Unit Front Doors - Replace	\$0	\$0	\$0	\$0	\$0
2374 Roof: Wood Shingle - Oil	\$0	\$0	\$0	\$279,356	\$0
2385 Roof: Wood Shingle - Replace	\$0	\$0	\$0	\$0	\$0
2395 Chimney Covers/Flue Caps - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$219,533	\$0	\$0	\$370,873	\$18,146
Ending Reserve Balance	\$7,835,366	\$8,528,448	\$9,248,081	\$9,621,929	\$10,374,346

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.

Harvest Dance Sites & Grounds

Comp #: 2131 Asphalt Drive - Chip Seal (2018)

Quantity: ~ 7000 GSF

Location: Lower Harvest Dance

Funded?: Yes.

History: Resurfaced in 2018

Comments: 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:
10 years

Remaining Life:
9 years



Best Case: \$ 7,000

Worst Case: \$ 8,400

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2131 Asphalt Parking - Chip Seal**Quantity: ~ 31000 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: 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:
10 years

Remaining Life:
0 years



Best Case: \$ 31,000

Worst Case: \$ 37,300

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2133 Asphalt Drive - Resurface (2018)

Quantity: ~ 7000 GSF

Location: Lower Harvest Dance

Funded?: Yes.

History: Resurfaced in 2018

Comments: 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: \$ 54,000

Worst Case: \$ 57,000

Cost Source: Client Cost History

Comp #: 2133 Asphalt Parking - Resurface**Quantity: ~ 31000 GSF**

Location: Common Areas

Funded?: Yes.

History:

Comments: 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:
0 years



Best Case: \$ 186,300

Worst Case: \$ 248,400

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2133 Asphalt Trails - Resurface

Quantity: ~ 27400 GSF

Location: Common Areas

Funded?: Yes.

History:

Comments: 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:
0 years



Best Case: \$ 270,000

Worst Case: \$ 278,000

Cost Source: Estimate Provided by Client

Comp #: 2157 Site Fencing: Split Rail - Replace

Quantity: ~ 860 LF

Location: Common Areas

Funded?: Yes.

History:

Comments: 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:
25 years

Remaining Life:
0 years



Best Case: \$ 15,600

Worst Case: \$ 19,000

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2171 Maintenance Bldg. Roofs - Replace**Quantity: ~ 980 GSF**

Location: Common Areas

Funded?: Yes.

History: Replaced in 2018

Comments: 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 <http://www.asphaltroofing.org/> Roof Consultant Institute (RCI) <http://www.nrca.net>. Asphalt Roofing Manufacturers client (ARMA) <http://www.arma.com> 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.nrcanet.org>

Useful Life:
20 years

Remaining Life:
18 years



Best Case: \$ 11,700

Worst Case: \$ 13,700

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2187 Bollard Lights - Replace**Quantity: ~ (45) Fixtures**

Location: Common Areas

Funded?: Yes.

History:

Comments: Bollard lights determined to be in fair condition typically exhibit somewhat faded/worn appearance but overall assembly is sturdy and aging normally. Serviceable physical condition and still appropriate for aesthetic standards. Inspected during daylight hours assumed to be in functional operating condition. As routine maintenance inspect repair/change bulbs as needed. Best to plan for large scale replacement at roughly the time frame below for cost efficiency and consistent quality/appearance throughout client. Replacement costs can vary greatly estimates shown here are based on replacement with a comparable size and design unless otherwise noted.

Useful Life:
20 years

Remaining Life:
0 years



Best Case: \$ 64,800

Worst Case: \$ 97,200

Cost Source: Estimate Provided by Client

Comp #: 2193 Trees - Trim/Remove**Quantity: Numerous Trees**

Location: Common Areas

Funded?: No.

History:

Comments: Routine tree trimming is expected to be included within the client's landscaping contract or otherwise reflected in the annual Operating budget. No need for Reserve funding at this time. If a pattern of larger expenses develops or if substantial removal or replacement becomes necessary the Reserve Study should be updated to incorporate new information. In this case many clients choose to work with a qualified arborist or other landscaping professional to develop appropriate guidelines and scope of work.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Harvest Dance Building Exteriors

Comp #: 2303 Exterior Wall Lights - Replace

Quantity: ~ (150) Lights

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Exterior lights determined to be in fair condition typically exhibit more moderate signs of wear and age but are generally believed to be aging normally with no unusual conditions noted. Observed during daylight hours but assumed to be in functional operating condition. As routine maintenance clean by wiping down with an appropriate cleaner change bulbs and repair as needed. Best practice is to plan for replacement of all lighting together at roughly the time frame below for cost efficiency and consistent quality/appearance throughout development. Should be coordinated with exterior painting projects whenever possible. Individual replacements should be considered an Operating expense. If available an extra supply of replacement fixtures should be kept on-site to allow for prompt replacement.

Useful Life:
25 years

Remaining Life:
0 years



Best Case: \$ 45,300

Worst Case: \$ 49,800

Cost Source: Estimate Provided by Client

Comp #: 2309 Staircase Treads - Replace**Quantity: ~ (13) Treads**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Staircases determined to be in fair condition typically exhibit routine signs of physical wear and tear but no advanced deterioration is noteworthy. Appearance is typically declining at this stage but staircases are physically aging normally. Staircases should be inspected regularly to ensure safety and stability repair promptly as needed using general Operating funds. Make sure that all steps and landings drain properly to avoid standing water which can lead to slip and fall hazards. Inspect railings regularly for weakness or loose connections. In our experience replacement needs may emerge as the community continues to age. Comprehensive replacement may be required at the approximate interval shown here based on our experience with similar client properties. In most cases regular preventive maintenance can greatly extend the useful life of these types of staircases.

Useful Life:
40 years

Remaining Life:
7 years



Best Case: \$ 2,600

Worst Case: \$ 2,900

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2321 Balcony Rails - Paint Lower**Quantity: ~ 1000 LF**

Location: Building Exteriors

Funded?: No.

History:

Comments: Contact reported that the client will cycle with component #2337. No separate funding required.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 2321 Balcony Rails - Paint Upper

Quantity: ~ 550 LF

Location: Building Exteriors

Funded?: No.

History:

Comments: Contact reported that the client will cycle with component #2337. No separate funding required.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 2323 Lower Balcony Rails - Replace

Quantity: ~ 1000 LF

Location: Building Exteriors

Funded?: Yes.

History:

Comments: The rails are reportedly original, and based upon the age of the rail systems, the client should expect the need to replace the rails soon. Post attachments and hardware should be inspected periodically for corrosion/rust and any waterproofing issues. As routine maintenance inspect regularly to ensure safety and stability repair promptly as needed using general operating/maintenance funds. We suggest Reserve funding for regular intervals of total replacement as indicated below. Unless otherwise noted costs shown are based on replacement with a similar style of railing. However if the client chooses to upgrade or replace with a different style costs may be substantially different. Any new information about changes in style should be incorporated into future Reserve Study updates.

Useful Life:
30 years

Remaining Life:
0 years



Best Case: \$ 364,400

Worst Case: \$ 468,500

Cost Source: Estimate Provided by Client

Comp #: 2323 Upper Balcony Rails - Replace**Quantity: ~ 550 LF**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: The contact reported that the current rails are not to code and will need to be replaced. Post attachments and hardware should be inspected periodically for corrosion/rust and any waterproofing issues. As routine maintenance inspect regularly to ensure safety and stability repair promptly as needed using general operating/maintenance funds. We suggest Reserve funding for regular intervals of total replacement as indicated below. Unless otherwise noted costs shown are based on replacement with a similar style of railing. However if the client chooses to upgrade or replace with a different style costs may be substantially different. Any new information about changes in style should be incorporated into future Reserve Study updates.

Useful Life:
30 years

Remaining Life:
0 years



Best Case: \$ 192,900

Worst Case: \$ 248,000

Cost Source: Estimate Provided by Client

Comp #: 2331 Wood Deck - Seal/Repair**Quantity: ~ 4400 GSF**

Location: Building Exteriors

Funded?: No.

History:

Comments: Contact reported that the client will cycle with component #2337. No separate funding required.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 2331 Wood Entry Deck - Seal/Repair**Quantity: ~ 2580 GSF**

Location: Building Exteriors

Funded?: No.

History:

Comments: Contact reported that the client will cycle with component #2337. No separate funding required.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 2333 Wood Deck - Resurface/Restore**Quantity: ~ 4400 GSF**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Contact reported that the decks are original to the property and have not been replaced. A Reserve Study does not include forensic or structural testing of the decking systems. Based upon the current age of the decking system we recommend that the client expect the need to resurface the decks. Plan for large scale repair / replacement at roughly the interval below. As routine maintenance inspect deck stairs and railings annually and repair as needed. As part of maintenance apply water repellent stain/preservative at least every other year. Options for a longer lasting deck include such things as using a thick wood boards of suitable species or a composite product. Composite materials are available that require less maintenance and lower life cycle costs typically. Funding for replacing existing wood boards with in-kind material is factored below. Costs can increase greatly if decay of the structural framing is found.

Useful Life:
30 yearsRemaining Life:
0 years

Best Case: \$ 174,200

Worst Case: \$ 261,400

Cost Source: Estimate Provided by Client

Comp #: 2333 Wood Entry Deck - Resurface/Restore

Quantity: ~ 2600 GSF

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Contact reported that the decks are original to the property and have not been replaced. A Reserve Study does not include forensic or structural testing of the decking systems. Based upon the current age of the decking system we recommend that the client expect the need to resurface the decks. Plan for large scale repair / replacement at roughly the interval below. As routine maintenance inspect deck stairs and railings annually and repair as needed. As part of maintenance apply water repellant stain/preservative at least every other year. Options for a longer lasting deck include such things as using a thick wood boards of suitable species or a composite product. Composite materials are available that require less maintenance and lower life cycle costs typically. Funding for replacing existing wood boards with in-kind material is factored below. Costs can increase greatly if decay of the structural framing is found.

Useful Life:
30 years

Remaining Life:
0 years



Best Case: \$ 103,800

Worst Case: \$ 155,600

Cost Source: Estimate Provided by Client

Comp #: 2337 Lower HD Wood Siding - Seal/Oil

Quantity: 50% of ~ 59200 GSF

Location: Building Exteriors

Funded?: Yes.

History: Upper HD sealed in 2017, Lower HD sealed in 2014

Comments: Painted exterior surfaces determined to be in poor 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:
5 years

Remaining Life:
0 years



Best Case: \$ 38,000

Worst Case: \$ 42,000

Cost Source: Client Cost History

Comp #: 2337 Upper HD Wood Siding - Seal/Oil

Quantity: 50% of ~ 59200 GSF

Location: Building Exteriors

Funded?: Yes.

History: Upper HD sealed in 2017, Lower HD sealed in 2014

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:
5 years

Remaining Life:
3 years



Best Case: \$ 38,000

Worst Case: \$ 42,000

Cost Source: Client Cost History

Comp #: 2353 Shed Roof - Replace

Quantity: ~ 1000 GSF

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Wood roofing determined to be in good condition typically exhibits vibrant consistent color and little or no signs of damage deterioration 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. Roofing is board and batten. 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 shed roofing painted to protect the wood from decay caused by water. Another item that greatly influences useful life is the thoroughness of the original painting.

Useful Life:
30 years

Remaining Life:
0 years



Best Case: \$ 22,000

Worst Case: \$ 28,000

Cost Source: Estimate Provided by Client

Comp #: 2353 Wood Siding - Replace - 50%

Quantity: 50% of ~ 59200 GSF

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Vendor reported that the south and east facing exposures are in critical condition and may need attention soon. Wood siding is 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:

30 years

Remaining Life:

0 years



Best Case: \$ 651,200

Worst Case: \$ 828,800

Cost Source: Estimate Provided by Client

Comp #: 2361 Windows - Replace**Quantity: ~ (430) Windows**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Contact reported that the windows are older and outdated. Reportedly the windows are original to the property. In the case of dual-pane windows seals may have failed allowing for fogging between the panes. Even if windows and doors are still in serviceable physical condition replacement may be warranted with modern replacements for better storm protection and energy efficiency. At this stage curb appeal may also be suffering and replacement for aesthetic reasons should also be considered. Inspect regularly including sealant if any and repair as needed. Proper sealant/caulking is critical to keeping water out of the walls and preventing water damage. With ordinary care and maintenance useful life is long but difficult to predict. Many factors affect useful life including quality of window installed waterproofing flashing details exposure to wind driven rain. In many cases windows are replaced on an ongoing basis to select areas as-needed rather than to an entire building at one time. This component should be re-evaluated as the building ages and more problems develop and funding recommendations should be adjusted accordingly. An allowance for partial replacements may be warranted if certain windows are more deteriorated than others. Consult with vendors to ensure replacement windows are compliant with all applicable building codes. Note there are many types of windows available in today's market and costs can vary greatly.

Useful Life:
30 years

Remaining Life:
0 years



Best Case: \$ 1,072,500

Worst Case: \$ 1,544,400

Cost Source: Estimate Provided by Client

Comp #: 2363 Balcony Deck Doors - Replace**Quantity: ~ (77) Doors**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Contact reported that the doors are older and outdated. Doors should have a very long useful life expectancy in most cases. However occasional replacements may be required especially for doors located in more exposed areas. Inspect periodically and repair as needed to maintain appearance security and operation with maintenance funds. Should be painted along with building exteriors or other painting/waterproofing projects to preserve appearance and prolong useful life. Based on our experience with comparable properties we recommend planning for ongoing partial replacements at the approximate interval shown here.

Useful Life:
30 years

Remaining Life:
0 years



Best Case: \$ 192,500

Worst Case: \$ 277,200

Cost Source: Estimate Provided by Client

Comp #: 2367 Unit Front Doors - Replace**Quantity: ~ (75) Doors**

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Doors may experience a long useful life expectancy in most cases. However occasional replacements may be required especially for doors located in more exposed areas. Inspect periodically and repair as needed to maintain appearance security and operation with maintenance funds. Should be painted along with building exteriors or other painting/waterproofing projects to preserve appearance and prolong useful life. Based on our experience with comparable properties we recommend planning for ongoing partial replacements at the approximate interval shown here.

Useful Life:
40 years

Remaining Life:
7 years



Best Case: \$ 187,500

Worst Case: \$ 270,000

Cost Source: Estimate Provided by Client

Comp #: 2374 Roof: Wood Shingle - Oil

Quantity: ~ 44400 GSF

Location: Building Exteriors

Funded?: Yes.

History:

Comments: Typical oiling cycles can vary greatly depending upon many factors including type of material surface preparations quality of material application methods weather conditions during application moisture beneath oil and exposure to weather conditions. Proper sealant is critical to preventing water intrusion and resulting damage to the building structure.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$ 88,800

Worst Case: \$ 155,400

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 2385 Roof: Wood Shingle - Replace**Quantity: ~ 44400 GSF**

Location: Building Exteriors

Funded?: Yes.

History: Replaced in 2018

Comments: Overall believed to be aging normally. 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). Useful life of wood roofing varies based on many factors including proper drainage and ventilation on the underside of the wood shingles. The useful life used below is suggested for general financial planning purposes. As routine maintenance many manufacturers recommend inspections at least twice annually (once in the fall before the rainy 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 moss or 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. The Cedar Bureau's roof installation manual is very useful. [Http://www.cedarbureau.org/manuals/imperial/2015/RFI/RoofManual-0407-i.pdf](http://www.cedarbureau.org/manuals/imperial/2015/RFI/RoofManual-0407-i.pdf) The National Roofing Contractors client (NRCA) publishes the NRCA Roofing Manual. It has four volumes: wood roofing is covered in the steep-slope volume. That volume cost about \$200 and provides comprehensive information regarding Steep-slope Roof Systems (wood shake and wood shingle asphalt clay and concrete tile metal synthetic and slate). The current edition is 2009 and they intend to update it every four years. It is fairly user friendly for the layperson with many easy to understand drawings. Older versions are available at the public library or through inter-library loan

Useful Life:

20 years

Remaining Life:

18 years



Best Case: \$ 532,800

Worst Case: \$ 621,600

Cost Source: Estimate Provided by Client

Comp #: 2387 Gutters/Downspouts - Replace**Quantity: ~ 60 LF**

Location: Building Exteriors

Funded?: No. Minimal LF, replace as needed

History:

Comments: 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. In general costs related to this component are expected to be included in the client'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:

Comp #: 2395 Chimney Covers/Flue Caps - Replace**Quantity: ~ (70) Caps**

Location: Building Exteriors

Funded?: Yes.

History: Reportedly not replaced with the 2018 roofing project

Comments: 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:
30 yearsRemaining Life:
0 years

Best Case: \$ 45,500

Worst Case: \$ 77,000

Cost Source: Estimate Provided by Client
