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**University Terrace Berkeley
Building #9
Berkeley, CA**



Report #: 48963-0
Beginning: July 1, 2024
Expires: June 30, 2025

RESERVE STUDY
"Full"

March 15, 2024

Welcome to your Reserve Study!

A Reserve Study is a valuable tool to help you budget responsibly for your property. This report contains all the information you need to avoid surprise expenses, make informed decisions, save money, and protect property values.

Regardless of the property type, it's a fact of life that the very moment construction is completed, every major building component begins a predictable process of physical deterioration. The operative word is "predictable" because planning for the inevitable is what a Reserve Study by **Association Reserves** is all about!

In this Report, you will find three key results:

- **Component List**
Unique to each property, the Component List serves as the foundation of the Reserve Study and details the scope and schedule of all necessary repairs & replacements.
- **Reserve Fund Strength**
A calculation that measures how well the Reserve Fund has kept pace with the property's physical deterioration.
- **Reserve Funding Plan**
A multi-year funding plan based on current Reserve Fund strength that allows for component repairs and replacements to be completed in a timely manner, with an emphasis on fairness and avoiding "catch-up" funding.

Questions?

Please contact your Project Manager directly.



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University Terrace Berkeley - Building #9
Berkeley, CA
Level of Service: "Full"

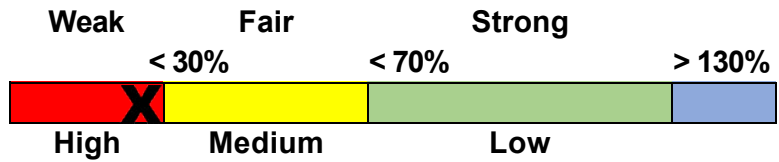
Report #: 48963-0
of Units: 19
July 1, 2024 through June 30, 2025

Findings & Recommendations

as of July 1, 2024

Projected Starting Reserve Balance	\$31,528
Current Fully Funded Reserve Balance	\$125,414
Average Reserve Deficit (Surplus) Per Unit	\$4,941
Percent Funded	25.1 %
Recommended 2024 "Monthly Fully Funding Contributions"	\$1,592
Recommended 2024 Special Assessments for Reserves	\$0
2023 Monthly Contribution Rate	\$1,516

Reserve Fund Strength: 25.1%



Risk of Special Assessment:

Economic Assumptions:

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

- This is a "Full" Reserve Study.
- The information in this Reserve Study is based on our site inspection on 9/4/2023.
- This Reserve Study was prepared by or under the supervision of, a credentialed Reserve Specialist (RS).
- Because your Reserve Fund is at 25.1 % Funded, this means the association’s special assessment & deferred maintenance risk is currently High.
- Your multi-year Funding Plan is designed to gradually bring you to the 100% level, or “Fully Funded”.
- Based on this starting point, your anticipated future expenses, and your historical Reserve contribution rate, our recommendation is for you to increase your Reserve contributions to \$1,592/Monthly.
- We recommend that the Association levy a Special Assessment of \$0 in the 2024-2025 fiscal year to fund upcoming Reserve projects.
- No assets appropriate for Reserve designation were excluded.
- We recommend that this Reserve Study be updated annually, with an on-site inspection update every three years.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Building #9 Interior				
325	Interior Lights (A) - Replace	25	15	\$15,600
325	Interior Lights (B) - Replace	25	15	\$9,280
601	Carpet - Replace	10	9	\$27,500
1110	Interior Surfaces - Repaint	10	9	\$9,280
Building #9 Mechanical, Security & Life Safety				
312	Hot Water Pumps - Replace	10	8	\$26,400
705	Main Entry Door Operator - Replace	15	4	\$13,200
719	Entry Access System - Replace	15	4	\$6,270
801	Boiler - Replace	20	18	\$64,000
803	Hot Water Storage Tank - Replace	13	11	\$11,000
1805	Elevator Cab - Remodel	30	14	\$17,500
1807	Elevator - Minor Repairs	10	1	\$12,700
1808	Elevator - Major Repairs	40	14	\$93,600
1809	Elevator 5-Year Load Test	5	0	\$2,530
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 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

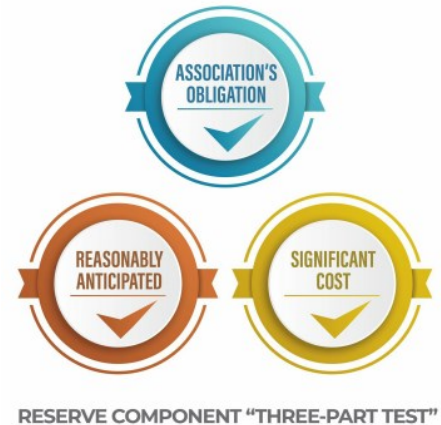


For this [Full Reserve Study](#), we started with a review of your Governing Documents, recent Reserve expenditures, an evaluation of how expenditures are handled (ongoing maintenance vs Reserves), and research into any well-established association precedents. We

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 three-part test to determine which projects should appear in a Reserve Component List. First, it must be a common area maintenance obligation. Second, both the need and schedule of a component's project can be reasonably anticipated. Third, the project's total cost is material to the client, can be reasonably anticipated, and includes all direct and related costs. A project cost is commonly considered *material* if it is more than 0.5% to 1% of the total annual 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 natural disasters and/or insurable events), and expenses more appropriately handled from the Operational budget.



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

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

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

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

How much Reserves are enough?

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

Adequacy is measured in a two-step process:

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



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

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

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

How much should we contribute?



RESERVE FUNDING PRINCIPLES

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

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

What is our Recommended Funding Goal?

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



FUNDING OBJECTIVES

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

Site Inspection Notes

During our site visit on 9/4/2023, we visually inspected the property and were able to see most areas. Please see the Photographic Inventory Appendix at the end of this report for a detailed look at each component.



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 at your property as defined by your Reserve Component List. A summary of these components is shown in the Component Details table, while a summary of the expenses themselves are shown in the 30-yr Expense Summary table.

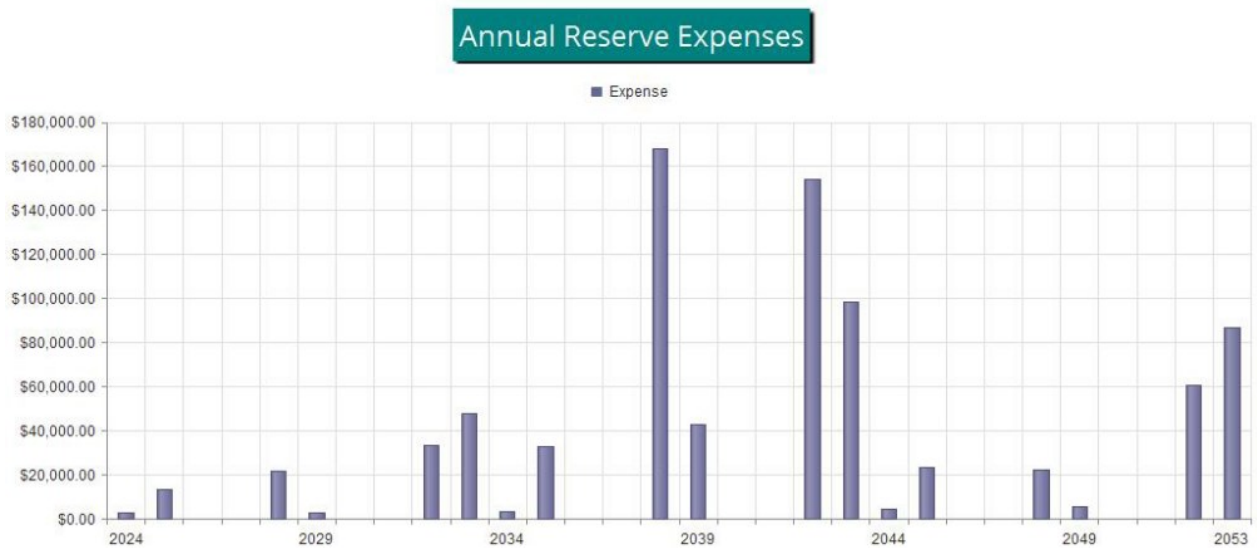


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$31,528 as-of the start of your fiscal year. This is based on your actual balance on 12/31/2023 of \$39,429 and anticipated Reserve contributions and expenses projected through the end of your Fiscal Year. As of 7/1/2024, your Fully Funded Balance is computed to be \$125,414. (see Acct/Tax Summary table). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates you are 25.1 % Funded.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$1,592/Monthly this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary and the Cash Flow Detail tables.

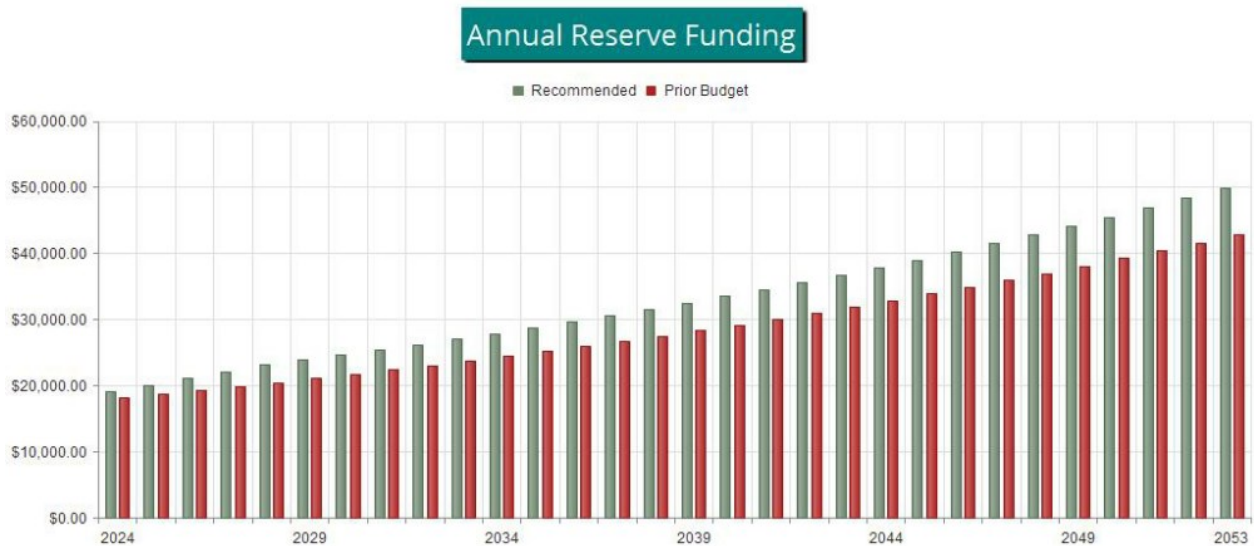


Figure 2

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

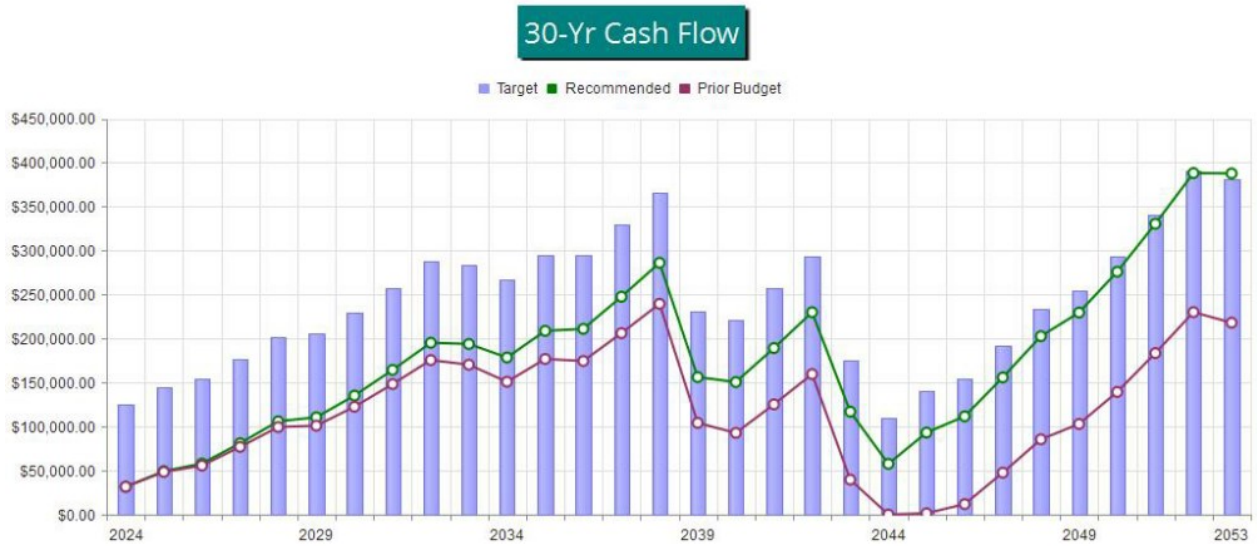


Figure 3

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.



Figure 4

Executive Summary is a summary of your Reserve Components

Budget Summary is a management and accounting tool, summarizing groupings 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.

Accounting & Tax Summary provides information on each Component's proportion of key totals. If shown, the Current Fund Balance is a re-distribution of the current Reserve total to near-term (low RUL) projects first. Any Reserve contribution shown is a portion of the total current contribution rate, assigned proportionally on the basis of that component's deterioration cost/yr. As this is a Cash Flow analysis in which no funds are assigned or restricted to particular components, all values shown are only representative and have no merit outside of tax preparation purposes. They are not useful for Reserve funding calculations.

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.



	Useful Life		2024 Rem. Useful Life		Estimated Replacement Cost in 2024	2024 Expenditures	07/01/2024 Fully Funded Balance	Remaining Bal. to be Funded	2024 Contributions
	Min	Max	Min	Max					
Building #9 Interior	10	25	9	15	\$61,660	\$0	\$13,630	\$61,660	\$5,144
Building #9 Mechanical, Security & Life Safety	5	40	0	18	\$247,200	\$2,530	\$111,784	\$215,672	\$13,962
					\$308,860	\$2,530	\$125,414	\$277,332	\$19,107
Percent Funded:								25.1%	

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate
Building #9 Interior					
325	Interior Lights (A) - Replace	(59) Fixtures	25	15	\$15,600
325	Interior Lights (B) - Replace	(33) Fixtures	25	15	\$9,280
601	Carpet - Replace	Approx 330 GSY	10	9	\$27,500
1110	Interior Surfaces - Repaint	Approx 13,015 GSF	10	9	\$9,280
Building #9 Mechanical, Security & Life Safety					
312	Hot Water Pumps - Replace	(4) Pumps	10	8	\$26,400
705	Main Entry Door Operator - Replace	(1) Operator	15	4	\$13,200
719	Entry Access System - Replace	(1) Entry Systems	15	4	\$6,270
801	Boiler - Replace	(2) Boilers	20	18	\$64,000
803	Hot Water Storage Tank - Replace	(1) Water Storage Tank	13	11	\$11,000
1805	Elevator Cab - Remodel	(1) Interior Cab	30	14	\$17,500
1807	Elevator - Minor Repairs	(1) Elevator	10	1	\$12,700
1808	Elevator - Major Repairs	(1) Elevator	40	14	\$93,600
1809	Elevator 5-Year Load Test	5-Year Load Test	5	0	\$2,530
<hr/>					
13	Total Funded Components				

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
Building #9 Interior								
325	Interior Lights (A) - Replace	\$15,600	X	10	/	25	=	\$6,240
325	Interior Lights (B) - Replace	\$9,280	X	10	/	25	=	\$3,712
601	Carpet - Replace	\$27,500	X	1	/	10	=	\$2,750
1110	Interior Surfaces - Repaint	\$9,280	X	1	/	10	=	\$928
Building #9 Mechanical, Security & Life Safety								
312	Hot Water Pumps - Replace	\$26,400	X	2	/	10	=	\$5,280
705	Main Entry Door Operator - Replace	\$13,200	X	11	/	15	=	\$9,680
719	Entry Access System - Replace	\$6,270	X	11	/	15	=	\$4,598
801	Boiler - Replace	\$64,000	X	2	/	20	=	\$6,400
803	Hot Water Storage Tank - Replace	\$11,000	X	2	/	13	=	\$1,692
1805	Elevator Cab - Remodel	\$17,500	X	16	/	30	=	\$9,333
1807	Elevator - Minor Repairs	\$12,700	X	9	/	10	=	\$11,430
1808	Elevator - Major Repairs	\$93,600	X	26	/	40	=	\$60,840
1809	Elevator 5-Year Load Test	\$2,530	X	5	/	5	=	\$2,530
								\$125,414

# Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Building #9 Interior				
325 Interior Lights (A) - Replace	25	\$15,600	\$624	3.60 %
325 Interior Lights (B) - Replace	25	\$9,280	\$371	2.14 %
601 Carpet - Replace	10	\$27,500	\$2,750	15.84 %
1110 Interior Surfaces - Repaint	10	\$9,280	\$928	5.35 %
Building #9 Mechanical, Security & Life Safety				
312 Hot Water Pumps - Replace	10	\$26,400	\$2,640	15.21 %
705 Main Entry Door Operator - Replace	15	\$13,200	\$880	5.07 %
719 Entry Access System - Replace	15	\$6,270	\$418	2.41 %
801 Boiler - Replace	20	\$64,000	\$3,200	18.44 %
803 Hot Water Storage Tank - Replace	13	\$11,000	\$846	4.88 %
1805 Elevator Cab - Remodel	30	\$17,500	\$583	3.36 %
1807 Elevator - Minor Repairs	10	\$12,700	\$1,270	7.32 %
1808 Elevator - Major Repairs	40	\$93,600	\$2,340	13.48 %
1809 Elevator 5-Year Load Test	5	\$2,530	\$506	2.92 %
13 Total Funded Components			\$17,357	100.00 %

#	Component	UL	RUL	Current Cost Estimate	Fully Funded Balance	Projected Reserve Balance	Proportional Reserve Funding
Building #9 Interior							
325	Interior Lights (A) - Replace	25	15	\$15,600	\$6,240	\$0	\$57.24
325	Interior Lights (B) - Replace	25	15	\$9,280	\$3,712	\$0	\$34.05
601	Carpet - Replace	10	9	\$27,500	\$2,750	\$0	\$252.28
1110	Interior Surfaces - Repaint	10	9	\$9,280	\$928	\$0	\$85.13
Building #9 Mechanical, Security & Life Safety							
312	Hot Water Pumps - Replace	10	8	\$26,400	\$5,280	\$3,290	\$242.18
705	Main Entry Door Operator - Replace	15	4	\$13,200	\$9,680	\$9,680	\$80.73
719	Entry Access System - Replace	15	4	\$6,270	\$4,598	\$4,598	\$38.35
801	Boiler - Replace	20	18	\$64,000	\$6,400	\$0	\$293.56
803	Hot Water Storage Tank - Replace	13	11	\$11,000	\$1,692	\$0	\$77.62
1805	Elevator Cab - Remodel	30	14	\$17,500	\$9,333	\$0	\$53.51
1807	Elevator - Minor Repairs	10	1	\$12,700	\$11,430	\$11,430	\$116.51
1808	Elevator - Major Repairs	40	14	\$93,600	\$60,840	\$0	\$214.66
1809	Elevator 5-Year Load Test	5	0	\$2,530	\$2,530	\$2,530	\$46.42
13 Total Funded Components					\$125,414	\$31,528	\$1,592

30-Year Reserve Plan Summary

Report # 48963-0
Full

Fiscal Year Start: 2024

Interest: 3.00 %

Inflation: 3.00 %

Reserve Fund Strength: as-of Fiscal Year Start Date

Projected Reserve Balance Changes

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	% Increase		Loan or Special Assmts	Interest Income	Reserve Expenses
					In Annual Reserve Funding	Reserve Funding			
2024	\$31,528	\$125,414	25.1 %	High	5.00 %	\$19,107	\$0	\$1,211	\$2,530
2025	\$49,316	\$144,448	34.1 %	Medium	5.00 %	\$20,062	\$0	\$1,606	\$13,081
2026	\$57,903	\$153,721	37.7 %	Medium	5.00 %	\$21,065	\$0	\$2,082	\$0
2027	\$81,050	\$177,299	45.7 %	Medium	5.00 %	\$22,119	\$0	\$2,802	\$0
2028	\$105,970	\$202,153	52.4 %	Medium	5.00 %	\$23,225	\$0	\$3,243	\$21,914
2029	\$110,524	\$205,768	53.7 %	Medium	3.10 %	\$23,944	\$0	\$3,681	\$2,933
2030	\$135,217	\$229,645	58.9 %	Medium	3.10 %	\$24,687	\$0	\$4,488	\$0
2031	\$164,392	\$257,881	63.7 %	Medium	3.10 %	\$25,452	\$0	\$5,387	\$0
2032	\$195,231	\$287,604	67.9 %	Medium	3.10 %	\$26,241	\$0	\$5,829	\$33,443
2033	\$193,858	\$284,433	68.2 %	Medium	3.10 %	\$27,055	\$0	\$5,578	\$47,990
2034	\$178,501	\$266,862	66.9 %	Medium	3.10 %	\$27,893	\$0	\$5,802	\$3,400
2035	\$208,796	\$295,392	70.7 %	Low	3.10 %	\$28,758	\$0	\$6,289	\$32,806
2036	\$211,037	\$295,209	71.5 %	Low	3.10 %	\$29,649	\$0	\$6,870	\$0
2037	\$247,556	\$329,554	75.1 %	Low	3.10 %	\$30,569	\$0	\$7,995	\$0
2038	\$286,119	\$365,695	78.2 %	Low	3.10 %	\$31,516	\$0	\$6,626	\$168,049
2039	\$156,213	\$230,616	67.7 %	Medium	3.10 %	\$32,493	\$0	\$4,596	\$42,704
2040	\$150,598	\$221,402	68.0 %	Medium	3.10 %	\$33,500	\$0	\$5,090	\$0
2041	\$189,189	\$256,732	73.7 %	Low	3.10 %	\$34,539	\$0	\$6,280	\$0
2042	\$230,007	\$293,983	78.2 %	Low	3.10 %	\$35,610	\$0	\$5,197	\$153,900
2043	\$116,914	\$174,721	66.9 %	Medium	3.10 %	\$36,714	\$0	\$2,614	\$98,635
2044	\$57,607	\$109,717	52.5 %	Medium	3.10 %	\$37,852	\$0	\$2,258	\$4,569
2045	\$93,148	\$140,590	66.3 %	Medium	3.10 %	\$39,025	\$0	\$3,067	\$23,626
2046	\$111,614	\$153,730	72.6 %	Low	3.10 %	\$40,235	\$0	\$4,007	\$0
2047	\$155,856	\$192,597	80.9 %	Low	3.10 %	\$41,482	\$0	\$5,371	\$0
2048	\$202,710	\$233,658	86.8 %	Low	3.10 %	\$42,768	\$0	\$6,476	\$22,361
2049	\$229,593	\$253,977	90.4 %	Low	3.10 %	\$44,094	\$0	\$7,573	\$5,297
2050	\$275,963	\$293,571	94.0 %	Low	3.10 %	\$45,461	\$0	\$9,085	\$0
2051	\$330,509	\$340,933	96.9 %	Low	3.10 %	\$46,870	\$0	\$10,766	\$0
2052	\$388,145	\$390,872	99.3 %	Low	3.10 %	\$48,323	\$0	\$11,622	\$60,401
2053	\$387,689	\$381,287	101.7 %	Low	3.10 %	\$49,821	\$0	\$11,231	\$86,674

Fiscal Year	2024	2025	2026	2027	2028
Starting Reserve Balance	\$31,528	\$49,316	\$57,903	\$81,050	\$105,970
Annual Reserve Funding	\$19,107	\$20,062	\$21,065	\$22,119	\$23,225
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,211	\$1,606	\$2,082	\$2,802	\$3,243
Total Income	\$51,846	\$70,984	\$81,050	\$105,970	\$132,438
# Component					
Building #9 Interior					
325 Interior Lights (A) - Replace	\$0	\$0	\$0	\$0	\$0
325 Interior Lights (B) - Replace	\$0	\$0	\$0	\$0	\$0
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$0
Building #9 Mechanical, Security & Life Safety					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$0	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$0	\$14,857
719 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$7,057
801 Boiler - Replace	\$0	\$0	\$0	\$0	\$0
803 Hot Water Storage Tank - Replace	\$0	\$0	\$0	\$0	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
1807 Elevator - Minor Repairs	\$0	\$13,081	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$2,530	\$0	\$0	\$0	\$0
Total Expenses	\$2,530	\$13,081	\$0	\$0	\$21,914
Ending Reserve Balance	\$49,316	\$57,903	\$81,050	\$105,970	\$110,524

Fiscal Year	2029	2030	2031	2032	2033
Starting Reserve Balance	\$110,524	\$135,217	\$164,392	\$195,231	\$193,858
Annual Reserve Funding	\$23,944	\$24,687	\$25,452	\$26,241	\$27,055
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$3,681	\$4,488	\$5,387	\$5,829	\$5,578
Total Income	\$138,150	\$164,392	\$195,231	\$227,301	\$226,491
# Component					
Building #9 Interior					
325 Interior Lights (A) - Replace	\$0	\$0	\$0	\$0	\$0
325 Interior Lights (B) - Replace	\$0	\$0	\$0	\$0	\$0
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$35,881
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$12,108
Building #9 Mechanical, Security & Life Safety					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$33,443	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$0	\$0
719 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
801 Boiler - Replace	\$0	\$0	\$0	\$0	\$0
803 Hot Water Storage Tank - Replace	\$0	\$0	\$0	\$0	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
1807 Elevator - Minor Repairs	\$0	\$0	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$2,933	\$0	\$0	\$0	\$0
Total Expenses	\$2,933	\$0	\$0	\$33,443	\$47,990
Ending Reserve Balance	\$135,217	\$164,392	\$195,231	\$193,858	\$178,501

Fiscal Year	2034	2035	2036	2037	2038
Starting Reserve Balance	\$178,501	\$208,796	\$211,037	\$247,556	\$286,119
Annual Reserve Funding	\$27,893	\$28,758	\$29,649	\$30,569	\$31,516
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$5,802	\$6,289	\$6,870	\$7,995	\$6,626
Total Income	\$212,196	\$243,843	\$247,556	\$286,119	\$324,261
# Component					
Building #9 Interior					
325 Interior Lights (A) - Replace	\$0	\$0	\$0	\$0	\$0
325 Interior Lights (B) - Replace	\$0	\$0	\$0	\$0	\$0
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$0
Building #9 Mechanical, Security & Life Safety					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$0	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$0	\$0
719 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
801 Boiler - Replace	\$0	\$0	\$0	\$0	\$0
803 Hot Water Storage Tank - Replace	\$0	\$15,227	\$0	\$0	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$26,470
1807 Elevator - Minor Repairs	\$0	\$17,580	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$141,578
1809 Elevator 5-Year Load Test	\$3,400	\$0	\$0	\$0	\$0
Total Expenses	\$3,400	\$32,806	\$0	\$0	\$168,049
Ending Reserve Balance	\$208,796	\$211,037	\$247,556	\$286,119	\$156,213

Fiscal Year	2039	2040	2041	2042	2043
Starting Reserve Balance	\$156,213	\$150,598	\$189,189	\$230,007	\$116,914
Annual Reserve Funding	\$32,493	\$33,500	\$34,539	\$35,610	\$36,714
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,596	\$5,090	\$6,280	\$5,197	\$2,614
Total Income	\$193,302	\$189,189	\$230,007	\$270,814	\$156,242
# Component					
Building #9 Interior					
325 Interior Lights (A) - Replace	\$24,304	\$0	\$0	\$0	\$0
325 Interior Lights (B) - Replace	\$14,458	\$0	\$0	\$0	\$0
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$48,221
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$16,273
Building #9 Mechanical, Security & Life Safety					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$44,944	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$0	\$23,146
719 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$10,994
801 Boiler - Replace	\$0	\$0	\$0	\$108,956	\$0
803 Hot Water Storage Tank - Replace	\$0	\$0	\$0	\$0	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
1807 Elevator - Minor Repairs	\$0	\$0	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$3,942	\$0	\$0	\$0	\$0
Total Expenses	\$42,704	\$0	\$0	\$153,900	\$98,635
Ending Reserve Balance	\$150,598	\$189,189	\$230,007	\$116,914	\$57,607

Fiscal Year	2044	2045	2046	2047	2048
Starting Reserve Balance	\$57,607	\$93,148	\$111,614	\$155,856	\$202,710
Annual Reserve Funding	\$37,852	\$39,025	\$40,235	\$41,482	\$42,768
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,258	\$3,067	\$4,007	\$5,371	\$6,476
Total Income	\$97,717	\$135,240	\$155,856	\$202,710	\$251,954
# Component					
Building #9 Interior					
325 Interior Lights (A) - Replace	\$0	\$0	\$0	\$0	\$0
325 Interior Lights (B) - Replace	\$0	\$0	\$0	\$0	\$0
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$0
Building #9 Mechanical, Security & Life Safety					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$0	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$0	\$0
719 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
801 Boiler - Replace	\$0	\$0	\$0	\$0	\$0
803 Hot Water Storage Tank - Replace	\$0	\$0	\$0	\$0	\$22,361
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
1807 Elevator - Minor Repairs	\$0	\$23,626	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$4,569	\$0	\$0	\$0	\$0
Total Expenses	\$4,569	\$23,626	\$0	\$0	\$22,361
Ending Reserve Balance	\$93,148	\$111,614	\$155,856	\$202,710	\$229,593

Fiscal Year	2049	2050	2051	2052	2053
Starting Reserve Balance	\$229,593	\$275,963	\$330,509	\$388,145	\$387,689
Annual Reserve Funding	\$44,094	\$45,461	\$46,870	\$48,323	\$49,821
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$7,573	\$9,085	\$10,766	\$11,622	\$11,231
Total Income	\$281,260	\$330,509	\$388,145	\$448,090	\$448,741
# Component					
Building #9 Interior					
325 Interior Lights (A) - Replace	\$0	\$0	\$0	\$0	\$0
325 Interior Lights (B) - Replace	\$0	\$0	\$0	\$0	\$0
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$64,806
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$21,869
Building #9 Mechanical, Security & Life Safety					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$60,401	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$0	\$0
719 Entry Access System - Replace	\$0	\$0	\$0	\$0	\$0
801 Boiler - Replace	\$0	\$0	\$0	\$0	\$0
803 Hot Water Storage Tank - Replace	\$0	\$0	\$0	\$0	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
1807 Elevator - Minor Repairs	\$0	\$0	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$5,297	\$0	\$0	\$0	\$0
Total Expenses	\$5,297	\$0	\$0	\$60,401	\$86,674
Ending Reserve Balance	\$275,963	\$330,509	\$388,145	\$387,689	\$362,067



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. Derek Eckert, R.S., company president, is a credentialed Reserve Specialist (#114). 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.

In this engagement our compensation is not contingent upon our conclusions, and our liability in any matter involving this Reserve Study is limited to our fee for services rendered.

Where any uncertainties exist, we urge the association to obtain a legal review and written opinion of the legitimacy of the funding policies, as stipulated or permitted under your Declaration and local statutes. As these are legal questions, we highly recommend use of an experienced real property attorney specializing in association law.

Re-use of reserve study, figures or calculations in any other format absolves ARSF of all responsibility.



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

- 1) Common area maintenance repair & replacement responsibility
- 2) The component 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 (UL = Useful Life of how often the project is expected to occur, RUL = Remaining Useful Life pr how many years from our reporting period) and representative market cost range termed “Best Cost” and “Worst Cost”. There are many factors that can result in a wide variety of potential costs, we are attempting to represent a market to be a one-time expense. Where no pricing, the component is deemed inappropriate for Reserve Funding.

Building #9 Interior

Comp #: 325 Interior Lights (A) - Replace

Quantity: (59) Fixtures

Location: Corridors

Funded?: Yes.

History:

Comments: As routine maintenance, inspect, repair and change bulbs as needed. Best practice is to coordinate at the same time as other interior projects such as painting whenever possible to minimize downtime and maintain consistent quality standard.

Useful Life:
25 years

Remaining Life:
15 years



Best Case: \$ 14,000

Worst Case: \$ 17,200

Cost Source: ARSF Cost Database

Comp #: 325 Interior Lights (B) - Replace

Quantity: (33) Fixtures

Location: Community room, restrooms, storage, and lower corridors

Funded?: Yes.

History:

Comments: As routine maintenance, inspect, repair and change bulbs as needed. Best practice is to coordinate at the same time as other interior projects such as painting whenever possible to minimize downtime and maintain consistent quality standard.

Useful Life:
25 years

Remaining Life:
15 years



Best Case: \$ 8,360

Worst Case: \$ 10,200

Cost Source: ARSF Cost Database

Comp #: 601 Carpet - Replace

Quantity: Approx 330 GSY

Location: Corridors

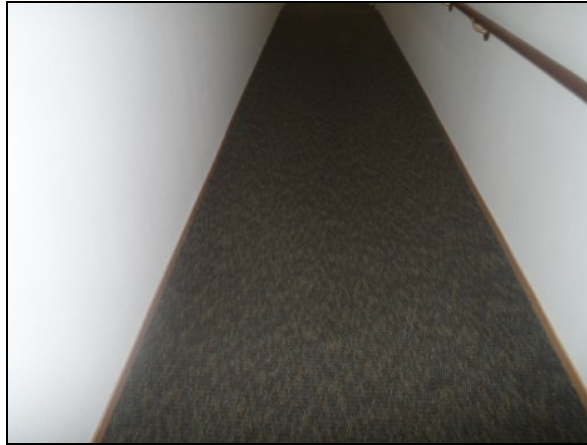
Funded?: Yes.

History: Replaced - 2023

Comments: As part of ongoing maintenance program, vacuum regularly and professionally clean as needed. Best practice is to coordinate at same time as other interior projects whenever possible to minimize downtime and maintain consistent quality standard.

Useful Life:
10 years

Remaining Life:
9 years



Best Case: \$ 17,500

Worst Case: \$ 37,500

Cost Source: Client Cost History

Comp #: 1110 Interior Surfaces - Repaint

Quantity: Approx 13,015 GSF

Location: Corridors

Funded?: Yes.

History:

Comments: Regular cycles of paint are recommended to maintain appearance; best timed prior to carpet replacement. Keep touch-up paint on site for in between cycle projects.

Useful Life:
10 years

Remaining Life:
9 years



Best Case: \$ 8,360

Worst Case: \$ 10,200

Cost Source: ARSF Cost Database

Building #9 Mechanical, Security & Life Safety

Comp #: 312 Hot Water Pumps - Replace

Quantity: (4) Pumps

Location: Mechanical Equipment Area

Funded?: Yes.

History: Replaced - 2023

Comments: Although cost and timing can be difficult to predict, we recommend setting aside funds for eventual repairs and replacement.

Useful Life:
10 years

Remaining Life:
8 years



Best Case: \$ 24,000

Worst Case: \$ 28,800

Cost Source: ARSF Cost Database

Comp #: 705 Main Entry Door Operator - Replace

Quantity: (1) Operator

Location: Main Entry

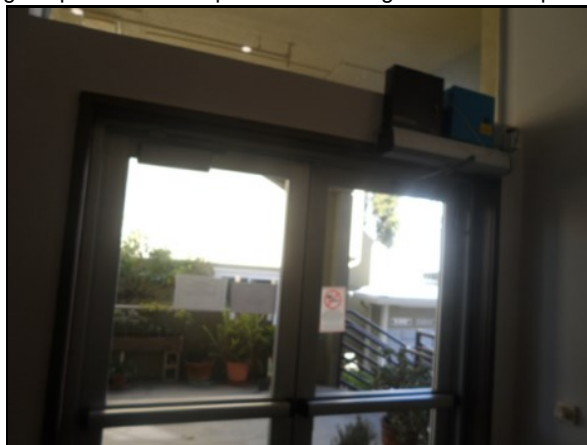
Funded?: Yes.

History:

Comments: Even with ongoing maintenance, plan for replacement at typical life expectancy indicated below. As routine maintenance, we recommend regular professional inspections including service and repair as needed from the operating budget.

Useful Life:
15 years

Remaining Life:
4 years



Best Case: \$ 11,900

Worst Case: \$ 14,500

Cost Source: ARSF Cost Database

Comp #: 719 Entry Access System - Replace

Quantity: (1) Entry Systems

Location: Main Entry

Funded?: Yes.

History:

Comments: Anticipate periodic need to replace system components due to advancing technology and future obsolescence typical of this equipment as well as ordinary wear. Handle periodic local minor repair/replacement as maintenance expense.

Useful Life:
15 years

Remaining Life:
4 years



Best Case: \$ 5,610

Worst Case: \$ 6,930

Cost Source: ARSF Cost Database

Comp #: 801 Boiler - Replace

Quantity: (2) Boilers

Location: Mechanical Equipment Area

Funded?: Yes.

History: Manufacture Date - 2022

Comments: With routine inspection and maintenance, the boiler should have an approximate useful life as shown below before replacement with future technology and efficiencies will be warranted. Life expectancy can vary based on level of use and location on the property.

Useful Life:
20 years

Remaining Life:
18 years



Best Case: \$ 54,000

Worst Case: \$ 74,000

Cost Source: Client Cost History

Comp #: 803 Hot Water Storage Tank - Replace

Quantity: (1) Water Storage Tank

Location: Mechanical Equipment Area

Funded?: Yes.

History: Manufacture Date - 2022

Comments: Best to plan for replacement within the typical life expectancy of ten to fifteen years. However, too small an expense to merit separate reserve funding status; treat as general maintenance expense. Install earthquake strapping and drain pan for added protection. Regular inspections and maintenance are recommended. Flush tanks and inspect pressure relief valve each year.

Useful Life:
13 years

Remaining Life:
11 years



Best Case: \$ 10,000

Worst Case: \$ 12,000

Cost Source: ARSF Cost Database

Comp #: 1805 Elevator Cab - Remodel

Quantity: (1) Interior Cab

Location: Interiors of the cab

Funded?: Yes.

History:

Comments: This component factors periodic remodeling of the elevator cab interiors for best appearance and function. Timing of this type of elective project is at the discretion of the board of directors, but ideally should be coordinated with mechanical modernization to minimize downtime. Cost can vary greatly depending upon chosen design--our estimates assume remodeling to a similar standard as currently in place.

Useful Life:
30 years

Remaining Life:
14 years



Best Case: \$ 15,000

Worst Case: \$ 20,000

Cost Source: ARSF Cost Database

Comp #: 1807 Elevator - Minor Repairs

Quantity: (1) Elevator

Location: Elevator Control Room - Community Room

Funded?: Yes.

History:

Comments: We recommend regular service and maintenance by a licensed elevator professional to help ensure the elevator equipment continues to function properly. This component funds for eventual replacement of the elevator cylinder at the interval below. Funding should be adjusted accordingly per professional elevator vendor recommendations.

Useful Life:
10 years

Remaining Life:
1 years



Best Case: \$ 11,400

Worst Case: \$ 14,000

Cost Source: ARSF Cost Database

Comp #: 1808 Elevator - Major Repairs

Quantity: (1) Elevator

Location: Elevator Control Room - Community Room

Funded?: Yes.

History:

Comments: We recommend regular service and maintenance by a licensed elevator professional to help ensure the elevator equipment continues to function properly. This component funds for eventual replacement of the elevator cylinder at the interval below. Funding should be adjusted accordingly per professional elevator vendor recommendations.

Useful Life:
40 years

Remaining Life:
14 years



Best Case: \$ 84,200

Worst Case: \$ 103,000

Cost Source: ARSF Cost Database

Comp #: 1809 Elevator 5-Year Load Test

Quantity: 5-Year Load Test

Location: Elevator Control Room - Community Room

Funded?: Yes.

History:

Comments: Funding for elevator 5-year load test.

Useful Life:
5 years

Remaining Life:
0 years



Best Case: \$ 2,310

Worst Case: \$ 2,750

Cost Source: ARSF Cost Database
