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



Report #: 48963-1  
Beginning: July 1, 2025  
Expires: June 30, 2026

**RESERVE STUDY**  
**Update "No-Site-Visit"**

April 9, 2025

# 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.

**R**egardless 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: **Update "No-Site-Visit"**

Report #: **48963-1**

# of Units: 19

**July 1, 2025** through **June 30, 2026**

### Findings & Recommendations

as of **July 1, 2025**

Projected Starting Reserve Balance .....	\$38,807
Current Fully Funded Reserve Balance .....	\$146,469
Average Reserve Deficit (Surplus) Per Unit .....	\$5,666
Percent Funded .....	26.5 %
Recommended 2025/26 "Monthly Fully Funding Contributions" .....	\$1,671.83
2024/25 Monthly Contribution Rate .....	\$1,592

**Reserve Fund Strength: 26.5%**

**Weak**

**Fair**

**Strong**

< 30%

< 70%

> 130%



**Risk of Special Assessment:**

**High**

**Medium**

**Low**

### Economic Assumptions:

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

Annual Inflation Rate ..... **3.00 %**

- This is an Update "No-Site-Visit" Reserve Study.
- This Reserve Study was prepared by or under the supervision of a credentialed Reserve Specialist (RS).
- Because your Reserve Fund is at 26.5 % 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 allocation rate, we recommend increasing your Reserve allocations to \$1,671.83 Monthly.
- The Deterioration rate for your Reserve Components is \$1,489.33 Monthly.
- 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
<b>Building #9 Interior</b>				
325	Interior Lights (A) - Replace	25	14	\$16,050
325	Interior Lights (B) - Replace	25	14	\$9,555
601	Carpet - Replace	10	8	\$28,300
1110	Interior Surfaces - Repaint	10	8	\$9,555
<b>Building #9 Mechanical, Security &amp; Life Safety</b>				
312	Hot Water Pumps - Replace	10	7	\$27,200
705	Main Entry Door Operator - Replace	15	3	\$13,600
719	Entry Access System - Replace	15	3	\$6,460
801	Boiler - Replace	20	17	\$65,900
803	Hot Water Storage Tank - Replace	13	10	\$11,350
1805	Elevator Cab - Remodel	30	13	\$18,050
1807	Elevator - Minor Repairs	10	0	\$13,050
1808	Elevator - Major Repairs	40	13	\$96,350
1809	Elevator 5-Year Load Test	5	0	\$2,605

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

## Methodology

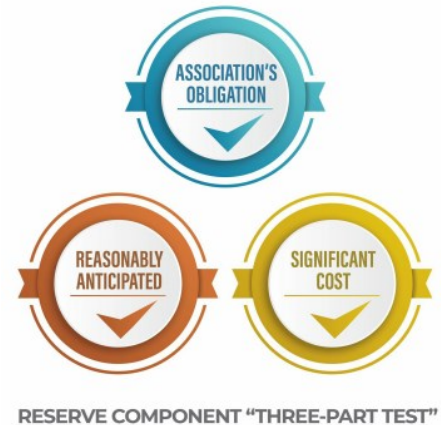


For this [Update No-Site-Visit Reserve Study](#), we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association

precedents. We updated and adjusted your Reserve Component List on the basis of time elapsed since the last Reserve Study and interviews with association representatives.

### *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 transfer to Reserves?



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 rate of ongoing Reserve transfers is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve transfers 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 Board members to recommend to their association. Remember, it is the Board's job to provide for the ongoing care of the common areas. Board members invite liability exposure when Reserve transfers 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.*



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, recommended Reserve transfers for Baseline Funding average only 10% to 15% less than Full Funding recommendations. Threshold Funding is the title of all other Cash or Percent Funded objectives *between* Baseline Funding and Full Funding.

# 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.

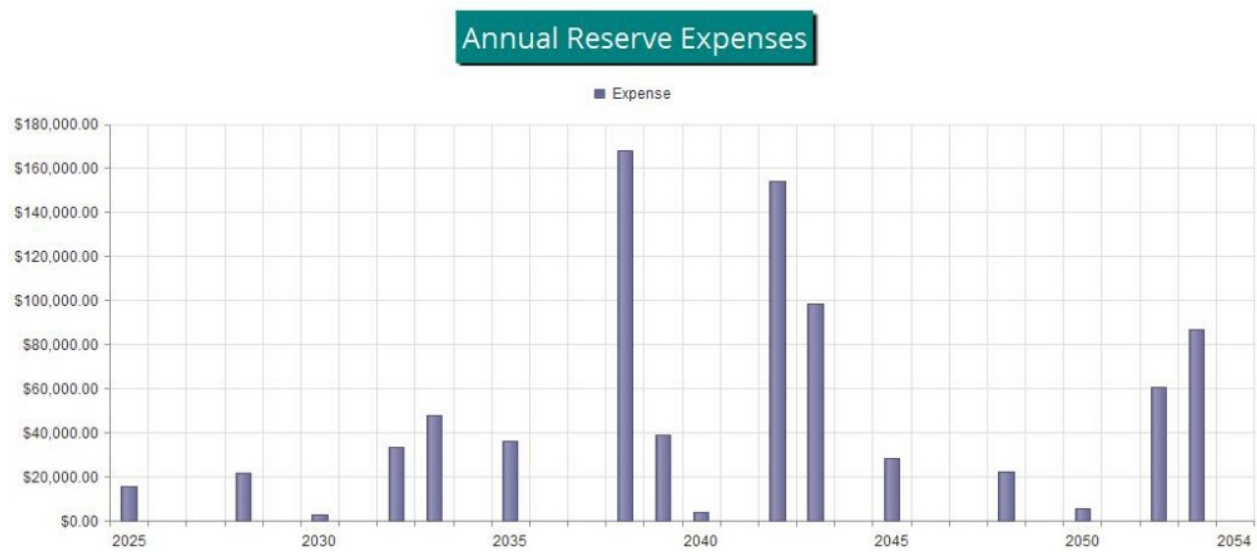


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$38,807 as-of the start of your fiscal year. This is based on your actual balance on 12/31/2024 of \$29,255 and anticipated Reserve contributions and expenses projected through the end of your Fiscal Year. As of 7/1/2025, your Fully Funded Balance is computed to be \$146,469. (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 26.5 % 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 \$1,672/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.

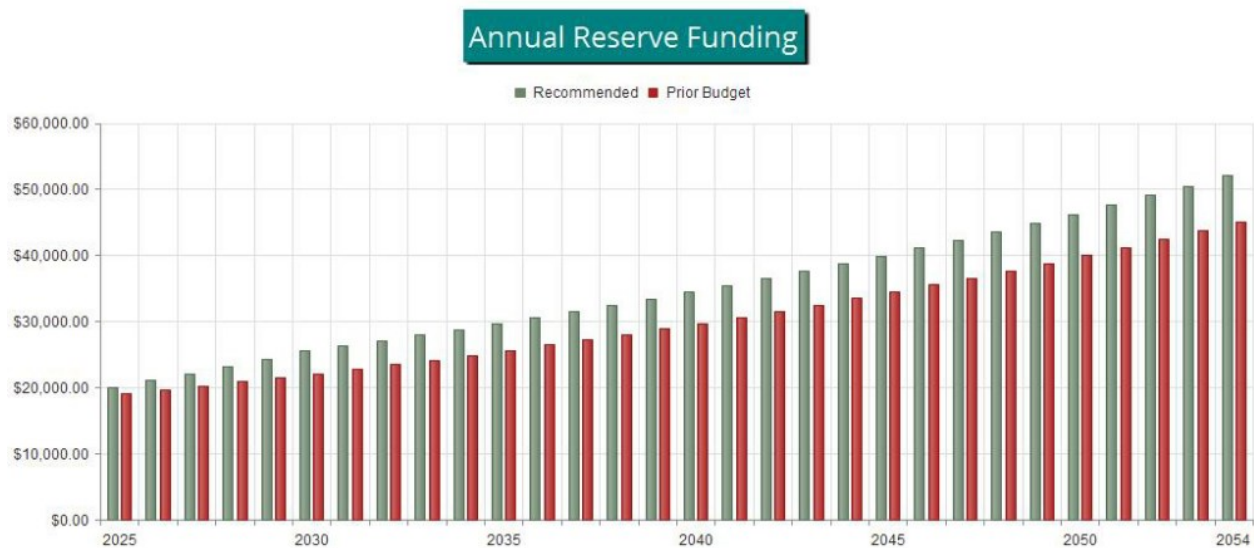


Figure 2

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.

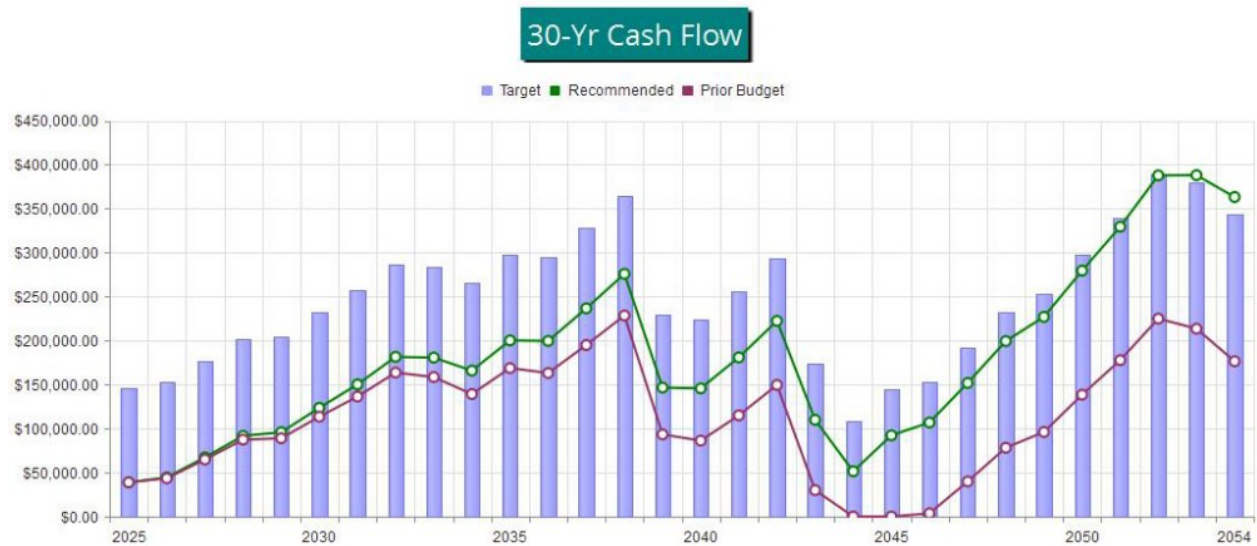


Figure 3

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.

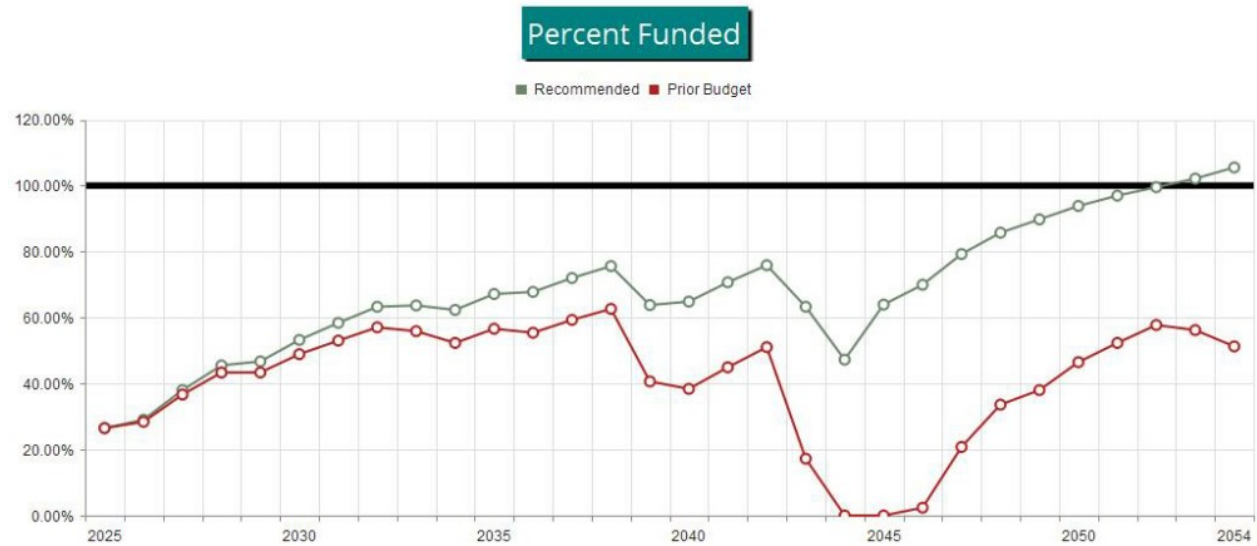


Figure 4



## Table Descriptions

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 specific proportion related 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 funding requirements. 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 transfer shown is a portion of the total current transfer 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.

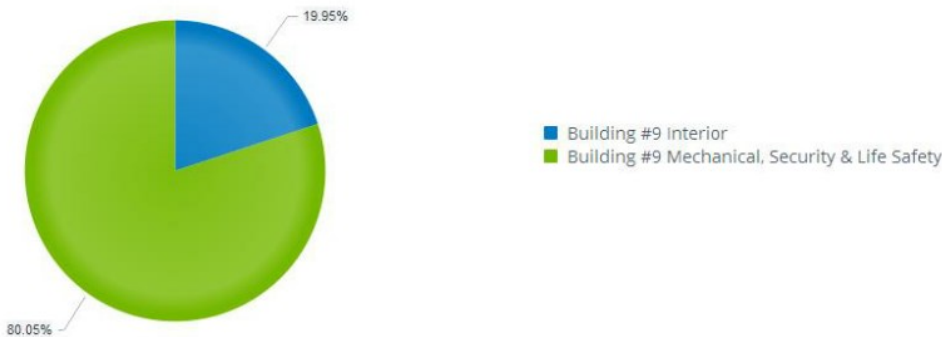
30-Year Income/Expense Detail shows the detailed income and expenses for each of the next 30 years. This table makes it possible to see which components are projected to require repair or replacement in a particular year, and the size of those individual expenses.



	Useful Life		2025 Rem. Useful Life		Estimated Replacement Cost in 2025	2025 Expenditures	07/01/2025 Current Fund Balance	07/01/2025 Fully Funded Balance	Remaining Bal. to be Funded	2025 Funding
	Min	Max	Min	Max						
Building #9 Interior	10	25	8	14	\$63,460	\$0	\$0	\$18,837	\$63,460	\$5,399
Building #9 Mechanical, Security & Life Safety	5	40	0	17	\$254,565	\$15,655	\$38,807	\$127,632	\$215,758	\$14,663
					\$318,025	\$15,655	\$38,807	\$146,469	\$279,218	\$20,062
Percent Funded:									26.5%	

Budget Summary

Percentage of Total Estimated Replacement Costs





#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate
Building #9 Interior					
325	Interior Lights (A) - Replace	(59) Fixtures	25	14	\$16,050
325	Interior Lights (B) - Replace	(33) Fixtures	25	14	\$9,555
601	Carpet - Replace	Approx 330 GSY	10	8	\$28,300
1110	Interior Surfaces - Repaint	Approx 13,015 GSF	10	8	\$9,555
Building #9 Mechanical, Security & Life Safety					
312	Hot Water Pumps - Replace	(4) Pumps	10	7	\$27,200
705	Main Entry Door Operator - Replace	(1) Operator	15	3	\$13,600
719	Entry Access System - Replace	(1) Entry Systems	15	3	\$6,460
801	Boiler - Replace	(2) Boilers	20	17	\$65,900
803	Hot Water Storage Tank - Replace	(1) Water Storage Tank	13	10	\$11,350
1805	Elevator Cab - Remodel	(1) Interior Cab	30	13	\$18,050
1807	Elevator - Minor Repairs	(1) Elevator	10	0	\$13,050
1808	Elevator - Major Repairs	(1) Elevator	40	13	\$96,350
1809	Elevator 5-Year Load Test	5-Year Load Test	5	0	\$2,605
13 Total Funded Components					





#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
<b>Building #9 Interior</b>								
325	Interior Lights (A) - Replace	\$16,050	X	11	/	25	=	\$7,062
325	Interior Lights (B) - Replace	\$9,555	X	11	/	25	=	\$4,204
601	Carpet - Replace	\$28,300	X	2	/	10	=	\$5,660
1110	Interior Surfaces - Repaint	\$9,555	X	2	/	10	=	\$1,911
<b>Building #9 Mechanical, Security &amp; Life Safety</b>								
312	Hot Water Pumps - Replace	\$27,200	X	3	/	10	=	\$8,160
705	Main Entry Door Operator - Replace	\$13,600	X	12	/	15	=	\$10,880
719	Entry Access System - Replace	\$6,460	X	12	/	15	=	\$5,168
801	Boiler - Replace	\$65,900	X	3	/	20	=	\$9,885
803	Hot Water Storage Tank - Replace	\$11,350	X	3	/	13	=	\$2,619
1805	Elevator Cab - Remodel	\$18,050	X	17	/	30	=	\$10,228
1807	Elevator - Minor Repairs	\$13,050	X	10	/	10	=	\$13,050
1808	Elevator - Major Repairs	\$96,350	X	27	/	40	=	\$65,036
1809	Elevator 5-Year Load Test	\$2,605	X	5	/	5	=	\$2,605
								\$146,469



# Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
<b>Building #9 Interior</b>				
325 Interior Lights (A) - Replace	25	\$16,050	\$642	3.59 %
325 Interior Lights (B) - Replace	25	\$9,555	\$382	2.14 %
601 Carpet - Replace	10	\$28,300	\$2,830	15.84 %
1110 Interior Surfaces - Repaint	10	\$9,555	\$956	5.35 %
<b>Building #9 Mechanical, Security &amp; Life Safety</b>				
312 Hot Water Pumps - Replace	10	\$27,200	\$2,720	15.22 %
705 Main Entry Door Operator - Replace	15	\$13,600	\$907	5.07 %
719 Entry Access System - Replace	15	\$6,460	\$431	2.41 %
801 Boiler - Replace	20	\$65,900	\$3,295	18.44 %
803 Hot Water Storage Tank - Replace	13	\$11,350	\$873	4.89 %
1805 Elevator Cab - Remodel	30	\$18,050	\$602	3.37 %
1807 Elevator - Minor Repairs	10	\$13,050	\$1,305	7.30 %
1808 Elevator - Major Repairs	40	\$96,350	\$2,409	13.48 %
1809 Elevator 5-Year Load Test	5	\$2,605	\$521	2.92 %
13 Total Funded Components			\$17,872	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	14	\$16,050	\$7,062	\$0	\$60.06
325	Interior Lights (B) - Replace	25	14	\$9,555	\$4,204	\$0	\$35.75
601	Carpet - Replace	10	8	\$28,300	\$5,660	\$0	\$264.74
1110	Interior Surfaces - Repaint	10	8	\$9,555	\$1,911	\$0	\$89.38
Building #9 Mechanical, Security & Life Safety							
312	Hot Water Pumps - Replace	10	7	\$27,200	\$8,160	\$7,104	\$254.45
705	Main Entry Door Operator - Replace	15	3	\$13,600	\$10,880	\$10,880	\$84.82
719	Entry Access System - Replace	15	3	\$6,460	\$5,168	\$5,168	\$40.29
801	Boiler - Replace	20	17	\$65,900	\$9,885	\$0	\$308.24
803	Hot Water Storage Tank - Replace	13	10	\$11,350	\$2,619	\$0	\$81.67
1805	Elevator Cab - Remodel	30	13	\$18,050	\$10,228	\$0	\$56.28
1807	Elevator - Minor Repairs	10	0	\$13,050	\$13,050	\$13,050	\$122.08
1808	Elevator - Major Repairs	40	13	\$96,350	\$65,036	\$0	\$225.33
1809	Elevator 5-Year Load Test	5	0	\$2,605	\$2,605	\$2,605	\$48.74
13 Total Funded Components					\$146,469	\$38,807	\$1,672



## 30-Year Reserve Plan Summary

Report # 48963-1  
No-Site-Visit

Fiscal Year Start: 2025

Net After Tax Interest:

3.00 %

Avg 30-Yr Inflation:

3.00 %

Reserve Fund Strength: as-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
	Balance	Balance	Funded		Risk	Funding	Funding	Assmts	Income
2025	\$38,807	\$146,469	26.5 %	<div></div>	High	5.01 %	\$20,062	\$0	\$1,247
2026	\$44,461	\$153,146	29.0 %	<div></div>	High	5.00 %	\$21,065	\$0	\$1,673
2027	\$67,199	\$176,700	38.0 %	<div></div>	Medium	5.00 %	\$22,118	\$0	\$2,380
2028	\$91,698	\$201,530	45.5 %	<div></div>	Medium	5.00 %	\$23,224	\$0	\$2,809
2029	\$95,811	\$205,113	46.7 %	<div></div>	Medium	5.00 %	\$24,385	\$0	\$3,285
2030	\$123,481	\$231,984	53.2 %	<div></div>	Medium	5.00 %	\$25,605	\$0	\$4,099
2031	\$150,165	\$257,173	58.4 %	<div></div>	Medium	3.00 %	\$26,373	\$0	\$4,968
2032	\$181,506	\$286,868	63.3 %	<div></div>	Medium	3.00 %	\$27,164	\$0	\$5,425
2033	\$180,643	\$283,657	63.7 %	<div></div>	Medium	3.00 %	\$27,979	\$0	\$5,191
2034	\$165,859	\$266,093	62.3 %	<div></div>	Medium	3.00 %	\$28,818	\$0	\$5,483
2035	\$200,160	\$298,093	67.1 %	<div></div>	Medium	3.00 %	\$29,683	\$0	\$5,988
2036	\$199,538	\$294,393	67.8 %	<div></div>	Medium	3.00 %	\$30,573	\$0	\$6,534
2037	\$236,646	\$328,705	72.0 %	<div></div>	Low	3.00 %	\$31,491	\$0	\$7,677
2038	\$275,813	\$364,811	75.6 %	<div></div>	Low	3.00 %	\$32,435	\$0	\$6,327
2039	\$146,576	\$229,748	63.8 %	<div></div>	Medium	3.00 %	\$33,408	\$0	\$4,377
2040	\$145,631	\$224,592	64.8 %	<div></div>	Medium	3.00 %	\$34,411	\$0	\$4,891
2041	\$180,875	\$255,828	70.7 %	<div></div>	Low	3.00 %	\$35,443	\$0	\$6,040
2042	\$222,358	\$293,042	75.9 %	<div></div>	Low	3.00 %	\$36,506	\$0	\$4,978
2043	\$109,962	\$173,761	63.3 %	<div></div>	Medium	3.00 %	\$37,601	\$0	\$2,417
2044	\$51,384	\$108,758	47.2 %	<div></div>	Medium	3.00 %	\$38,729	\$0	\$2,152
2045	\$92,266	\$144,298	63.9 %	<div></div>	Medium	3.00 %	\$39,891	\$0	\$2,983
2046	\$106,865	\$152,751	70.0 %	<div></div>	Medium	3.00 %	\$41,088	\$0	\$3,875
2047	\$151,829	\$191,577	79.3 %	<div></div>	Low	3.00 %	\$42,321	\$0	\$5,262
2048	\$199,411	\$232,595	85.7 %	<div></div>	Low	3.00 %	\$43,590	\$0	\$6,388
2049	\$226,988	\$252,830	89.8 %	<div></div>	Low	3.00 %	\$44,898	\$0	\$7,587
2050	\$279,473	\$297,834	93.8 %	<div></div>	Low	3.00 %	\$46,245	\$0	\$9,121
2051	\$329,385	\$339,693	97.0 %	<div></div>	Low	3.00 %	\$47,632	\$0	\$10,743
2052	\$387,760	\$389,581	99.5 %	<div></div>	Low	3.00 %	\$49,061	\$0	\$11,621
2053	\$388,024	\$379,926	102.1 %	<div></div>	Low	3.00 %	\$50,533	\$0	\$11,253
2054	\$363,201	\$344,231	105.5 %	<div></div>	Low	3.00 %	\$52,049	\$0	\$11,839



## 30-Year Income/Expense Detail

Report # 48963-1  
No-Site-Visit

Fiscal Year	2025	2026	2027	2028	2029
Starting Reserve Balance	\$38,807	\$44,461	\$67,199	\$91,698	\$95,811
Annual Reserve Funding	\$20,062	\$21,065	\$22,118	\$23,224	\$24,385
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,247	\$1,673	\$2,380	\$2,809	\$3,285
Total Income	\$60,116	\$67,199	\$91,698	\$117,731	\$123,481
# Component					
<b>Building #9 Interior</b>					
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
<b>Building #9 Mechanical, Security &amp; Life Safety</b>					
312 Hot Water Pumps - Replace	\$0	\$0	\$0	\$0	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$14,861	\$0
719 Entry Access System - Replace	\$0	\$0	\$0	\$7,059	\$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	\$13,050	\$0	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$2,605	\$0	\$0	\$0	\$0
Total Expenses	\$15,655	\$0	\$0	\$21,920	\$0
Ending Reserve Balance	\$44,461	\$67,199	\$91,698	\$95,811	\$123,481

<b>Fiscal Year</b>	<b>2030</b>	<b>2031</b>	<b>2032</b>	<b>2033</b>	<b>2034</b>
Starting Reserve Balance	\$123,481	\$150,165	\$181,506	\$180,643	\$165,859
Annual Reserve Funding	\$25,605	\$26,373	\$27,164	\$27,979	\$28,818
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,099	\$4,968	\$5,425	\$5,191	\$5,483
Total Income	\$153,185	\$181,506	\$214,096	\$213,813	\$200,160
# Component					
<b>Building #9 Interior</b>					
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	\$35,850	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$12,104	\$0
<b>Building #9 Mechanical, Security &amp; Life Safety</b>					
312 Hot Water Pumps - Replace	\$0	\$0	\$33,453	\$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	\$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	\$3,020	\$0	\$0	\$0	\$0
Total Expenses	\$3,020	\$0	\$33,453	\$47,954	\$0
Ending Reserve Balance	\$150,165	\$181,506	\$180,643	\$165,859	\$200,160

<b>Fiscal Year</b>	<b>2035</b>	<b>2036</b>	<b>2037</b>	<b>2038</b>	<b>2039</b>
Starting Reserve Balance	\$200,160	\$199,538	\$236,646	\$275,813	\$146,576
Annual Reserve Funding	\$29,683	\$30,573	\$31,491	\$32,435	\$33,408
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$5,988	\$6,534	\$7,677	\$6,327	\$4,377
Total Income	\$235,831	\$236,646	\$275,813	\$314,576	\$184,361
# Component					
<b>Building #9 Interior</b>					
325 Interior Lights (A) - Replace	\$0	\$0	\$0	\$0	\$24,277
325 Interior Lights (B) - Replace	\$0	\$0	\$0	\$0	\$14,453
601 Carpet - Replace	\$0	\$0	\$0	\$0	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$0	\$0
<b>Building #9 Mechanical, Security &amp; Life Safety</b>					
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	\$15,253	\$0	\$0	\$0	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$26,507	\$0
1807 Elevator - Minor Repairs	\$17,538	\$0	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$141,493	\$0
1809 Elevator 5-Year Load Test	\$3,501	\$0	\$0	\$0	\$0
Total Expenses	\$36,292	\$0	\$0	\$168,000	\$38,730
Ending Reserve Balance	\$199,538	\$236,646	\$275,813	\$146,576	\$145,631



<b>Fiscal Year</b>	<b>2040</b>	<b>2041</b>	<b>2042</b>	<b>2043</b>	<b>2044</b>
Starting Reserve Balance	\$145,631	\$180,875	\$222,358	\$109,962	\$51,384
Annual Reserve Funding	\$34,411	\$35,443	\$36,506	\$37,601	\$38,729
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,891	\$6,040	\$4,978	\$2,417	\$2,152
Total Income	\$184,933	\$222,358	\$263,842	\$149,981	\$92,266
# Component					
<b>Building #9 Interior</b>					
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	\$48,179	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$16,267	\$0
<b>Building #9 Mechanical, Security &amp; Life Safety</b>					
312 Hot Water Pumps - Replace	\$0	\$0	\$44,957	\$0	\$0
705 Main Entry Door Operator - Replace	\$0	\$0	\$0	\$23,153	\$0
719 Entry Access System - Replace	\$0	\$0	\$0	\$10,998	\$0
801 Boiler - Replace	\$0	\$0	\$108,923	\$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	\$4,059	\$0	\$0	\$0	\$0
Total Expenses	\$4,059	\$0	\$153,880	\$98,596	\$0
Ending Reserve Balance	\$180,875	\$222,358	\$109,962	\$51,384	\$92,266

<b>Fiscal Year</b>	<b>2045</b>	<b>2046</b>	<b>2047</b>	<b>2048</b>	<b>2049</b>
Starting Reserve Balance	\$92,266	\$106,865	\$151,829	\$199,411	\$226,988
Annual Reserve Funding	\$39,891	\$41,088	\$42,321	\$43,590	\$44,898
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,983	\$3,875	\$5,262	\$6,388	\$7,587
Total Income	\$135,140	\$151,829	\$199,411	\$249,389	\$279,473
# Component					
<b>Building #9 Interior</b>					
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
<b>Building #9 Mechanical, Security &amp; Life Safety</b>					
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	\$22,400	\$0
1805 Elevator Cab - Remodel	\$0	\$0	\$0	\$0	\$0
1807 Elevator - Minor Repairs	\$23,570	\$0	\$0	\$0	\$0
1808 Elevator - Major Repairs	\$0	\$0	\$0	\$0	\$0
1809 Elevator 5-Year Load Test	\$4,705	\$0	\$0	\$0	\$0
Total Expenses	\$28,275	\$0	\$0	\$22,400	\$0
Ending Reserve Balance	\$106,865	\$151,829	\$199,411	\$226,988	\$279,473

<b>Fiscal Year</b>	<b>2050</b>	<b>2051</b>	<b>2052</b>	<b>2053</b>	<b>2054</b>
Starting Reserve Balance	\$279,473	\$329,385	\$387,760	\$388,024	\$363,201
Annual Reserve Funding	\$46,245	\$47,632	\$49,061	\$50,533	\$52,049
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$9,121	\$10,743	\$11,621	\$11,253	\$11,839
Total Income	\$334,839	\$387,760	\$448,443	\$449,810	\$427,088
# Component					
<b>Building #9 Interior</b>					
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	\$64,748	\$0
1110 Interior Surfaces - Repaint	\$0	\$0	\$0	\$21,861	\$0
<b>Building #9 Mechanical, Security &amp; Life Safety</b>					
312 Hot Water Pumps - Replace	\$0	\$0	\$60,419	\$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	\$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	\$5,454	\$0	\$0	\$0	\$0
Total Expenses	\$5,454	\$0	\$60,419	\$86,610	\$0
Ending Reserve Balance	\$329,385	\$387,760	\$388,024	\$363,201	\$427,088



## Accuracy, Limitations, and Disclosures

Association Reserves and its employees have no ownership, management, or other business relationships with the client beyond this Reserve Study engagement. Derek Eckert, R.S., company president, is a credentialed Reserve Specialist (#114). All work performed by Association Reserves adheres to National Reserve Study Standards (NRSS) under his Responsible Charge. To our knowledge, no material issues have been withheld that would distort the client's situation.

This Reserve Study relies on information provided by representatives of the client, vendors, and suppliers regarding financial details, component quantities, maintenance plans, contracts, and historical conditions. This information is deemed reliable but is not audited or independently verified. Our work is for budgeting purposes only and is not intended to be used for the purpose of any type of audit, quality inspections, forensic analysis, background checks of historical records, or the identification of construction defects, hazardous materials, or dangerous conditions.

Estimates for interest and inflation have been included because including such estimates is more accurate than ignoring them completely. Clients who engage us for update reports are considered to have deemed prior component quantities and other prior Reserve Study data accurate unless otherwise noted. During inspections, our company standard is to establish measurements within a 5% margin of error, and our scope includes visual inspection of accessible areas and components and does not include any destructive or other testing. Our opinions on Useful Life, Remaining Useful Life, and cost estimates are not guarantees of actual costs or timing and assume proper installation, maintenance, and a stable economic environment.

We recommend developing a preventive maintenance plan in conjunction with the Reserve Study to minimize costs and maximize life cycles. We can only adjust the Reserve Study as needed if the client provides such plans. Structural inspections are recommended to identify costs for reserve planning, and we recommend consulting subject matter experts for such evaluations. Corrective maintenance costs and timing can only be incorporated per the results of these engagements if the information is provided by the client. No preventive maintenance plan or structural inspection report has been discussed or provided unless otherwise noted.

Identifying hidden issues, such as but not limited to, plumbing, electrical, and structural problems, is outside our scope of work. We recommend engaging subject matter experts to evaluate all issues outside the scope of the Reserve Study and our expertise.

Components included in this study usually have an anticipated remaining useful life within 30 years from the time of field observations. Information provided by the client about ongoing maintenance or repairs is included in component notes for full or site-visit reserve studies.

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 planned. This Reserve Study is a "one-year" document that needs to be updated annually to incorporate more accurate estimates. A long-term perspective improves the accuracy of near-term planning that this report projects expenses for 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.

The re-use of this Reserve Study, figures, or calculations in any other format absolves Association Reserves of all responsibility.



## Terms and Definitions

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



## Component Details

The primary purpose of the 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

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**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.**Useful Life:** 25 years**Remaining** 14 years**Life:****Best Case:** \$ 14,400**Worst Case:** \$17,700**Cost Source:** ARSF Cost Database

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**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.**Useful Life:** 25 years**Remaining** 14 years**Life:****Best Case:** \$ 8,610**Worst Case:** \$10,500**Cost Source:** ARSF Cost Database

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**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** 8 years**Life:****Best Case:** \$ 18,000**Worst Case:** \$38,600**Cost Source:** Client Cost History

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**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** 8 years**Life:****Best Case:** \$ 8,610**Worst Case:** \$10,500**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:** 7 years**Best Case:** \$ 24,700**Worst Case:** \$29,700**Cost Source:** ARSF Cost Database

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**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:** 3 years**Best Case:** \$ 12,300**Worst Case:** \$14,900**Cost Source:** ARSF Cost Database

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**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:** 3 years**Best Case:** \$ 5,780**Worst Case:** \$7,140**Cost Source:** ARSF Cost Database

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**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:** 17 years**Best Case:** \$ 55,600**Worst Case:** \$76,200**Cost Source:** Client Cost History

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**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:** 10 years**Best Case:** \$ 10,300**Worst Case:** \$12,400**Cost Source:** ARSF Cost Database

**Comp #: 1805 Elevator Cab - Remodel****Quantity: (1) Interior Cab****Location:** Interiors of the cab**Funded?:** Yes.**History:****Comments:** We recommend contacting a modernization professional in future years to better anticipate cost and replacement options.**Useful Life:** 30 years**Remaining Life:** 13 years**Best Case:** \$ 15,500**Worst Case:** \$20,600**Cost Source:** ARSF Cost Database

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**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:** 0 years**Best Case:** \$ 11,700**Worst Case:** \$14,400**Cost Source:** ARSF Cost Database

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**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:** 13 years**Best Case:** \$ 86,700**Worst Case:** \$106,000**Cost Source:** ARSF Cost Database

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**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:** \$ 2,380**Worst Case:** \$2,830**Cost Source:** ARSF Cost Database