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Park Place Condominium
Lynnwood, WA

MIKE WALKER
CAI-RS
00370
DESIGNATION
RESERVE SPECIALIST

Report #: 38175-0
Beginning: January 1, 2023
Expires: December 31, 2023

RESERVE STUDY
"Full"

July 20, 2022

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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Reserve Study Executive Summary — Full

Park Place Condominium -
Lynnwood, WA
Level of Service: **"Full"**

Report #: **38175-0**
# of Units: 16
January 1, 2023 through **December 31, 2023**

Findings & Recommendations — as of January 1, 2023

Starting Reserve Balance	**$30,710**
Current Fully Funded Reserve Balance	**$732,740**
Percent Funded	**4.2 %**
Average Reserve (Deficit) or Surplus Per Unit	**($43,877)**
Recommended 2023 100% Monthly "Full Funding" Contributions	**$4,625**
2023 "Baseline Funding" minimum to keep Reserves above $0	**$4,280**
Recommended 2023 Special Assessment	**$275,000**
Most Recent Budgeted Contribution Rate	**$250**

Reserve Fund Strength: 4.2%

Weak	Fair	Strong
	< 30%	< 70% > 130%
X		

Risk of Special Assessment: High | Medium | Low

Economic Assumptions:

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

• This is a "Full", meeting all requirements of the Revised Code of Washington (RCW). This study was prepared by a a credentialed Reserve Specialist (RS™).

• Your Reserve Fund is currently 4.2 % Funded. This means the Association'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. The current annual deterioration of your reserve components is $45,408 - see Component Significance table.

• Based on this starting point and your anticipated future expenses, our recommendation is to levy a special assessment of $275,000 to cover expenses over the next three years. We also recommend increasing budgeted monthly Reserve Contributions to $4,625 as noted above. The 100% "Full" contribution rate is designed to gradually achieve these funding objectives by the end of our 30-year report scope.

• No assets appropriate for Reserve designation known to be excluded. See appendix for component information and the basis of our assumptions. "Baseline Funding" in this report is as defined within the RCW, "to maintain the reserve account balance above zero throughout the thirty-year study period, without special assessments." Funding plan contribution rates, and reserves deficit or (surplus) are presented as an aggregate total, assuming average percentage of ownership. The actual ownership allocation may vary - refer to your governing documents, and assessment computational tools to adjust for any variation.

Executive Summary Table

Report # 38175-0
Full

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
	Site & Grounds			
119	Asphalt: Parking Area – Resurface	30	6	$52,500
120	Asphalt: 50th Ave W – Resurface	30	6	$69,150
121	Asphalt – Sealcoat/Repair	5	1	$11,200
140	Fence: 6' Wood - Repair/Replace	20	0	$16,900
141	Fence: Wood Rail – Repair/Replace	25	9	$2,200
144	Fence: Chain Link – Repair/Replace	40	17	$6,400
147	Garbage Enclosure - Repair/Replace	15	0	$4,250
185	Stormwater Pond - Maintain	15	0	$10,500
200	Community Sign - Repair/Replace	25	2	$3,850
205	Mailboxes – Repair/Replace	20	0	$1,500
	Building Exteriors			
500	Steep Slope Roof - Replace	25	2	$119,000
516	Gutters & Downspouts - Replace	25	2	$20,000
520	Vinyl Siding - Exterior Renovation	40	17	$490,000
521	Vinyl Siding - Clean & Inspect	4	0	$7,050
533	Exterior Surfaces - Caulk & Paint	8	0	$35,000
535	Windows & Sliders - Replace	40	17	$166,000
553	Stair Landings - Recoat	5	0	$7,550
	Systems & Evaluations			
900	Plumbing - Systems Evaluation	1	0	$6,000
965	Fire Alarm Panel - Repair/Replace	20	0	$24,000
19	**Total Funded Components**			

Note 1: Yellow highlighted line items are expected to require attention in this initial year, light blue highlighted items are expected to occur within the first-five years.

Introduction

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

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

RESERVE STUDY RESULTS

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

Methodology

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

Which Physical Assets are Funded by Reserves?

RESERVE COMPONENT "FOUR-PART TEST"

There is a national-standard four-part test to determine which expenses should appear in your Reserve Component List. First, it must be a common area maintenance responsibility. Second, the component must have a limited life. Third, the remaining life must be predictable (or it by definition is a *surprise* which cannot be accurately anticipated). Fourth, the component must be above a minimum threshold cost (often between .5% and 1% of an association's total budget). This limits Reserve Components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components, unpredictable expenses (such as damage due to fire, flood, or earthquake), and expenses more appropriately handled from the Operational Budget or as an insured loss.

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

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

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

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

How much Reserves are enough?

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

Adequacy is measured in a two-step process:

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

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

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

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

How much should we contribute?

RESERVE FUNDING PRINCIPLES

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

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

What is our Recommended Funding Goal?

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 6/10/2022, we visually inspected all visible common areas, while compiling a photographic inventory, noting: current condition, make & model information where appropriate, apparent levels of care and maintenance, exposure to weather elements and other factors that may affect the components useful life.

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.

The figure below summarizes the projected future expenses at your association 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.

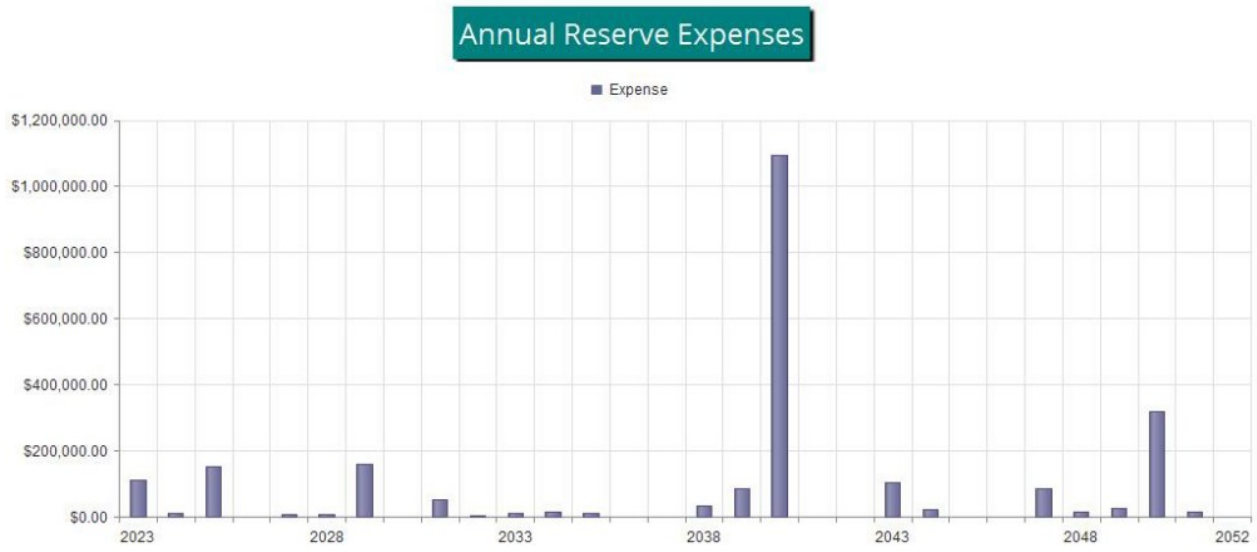


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be $30,710 as-of the start of your Fiscal Year on 1/1/2023. As of that date, your Fully Funded Balance is computed to be $732,740 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending a special assessment of $275,000 and budgeted contributions of $4,625 per month 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 Table and the Cash Flow Detail Table.

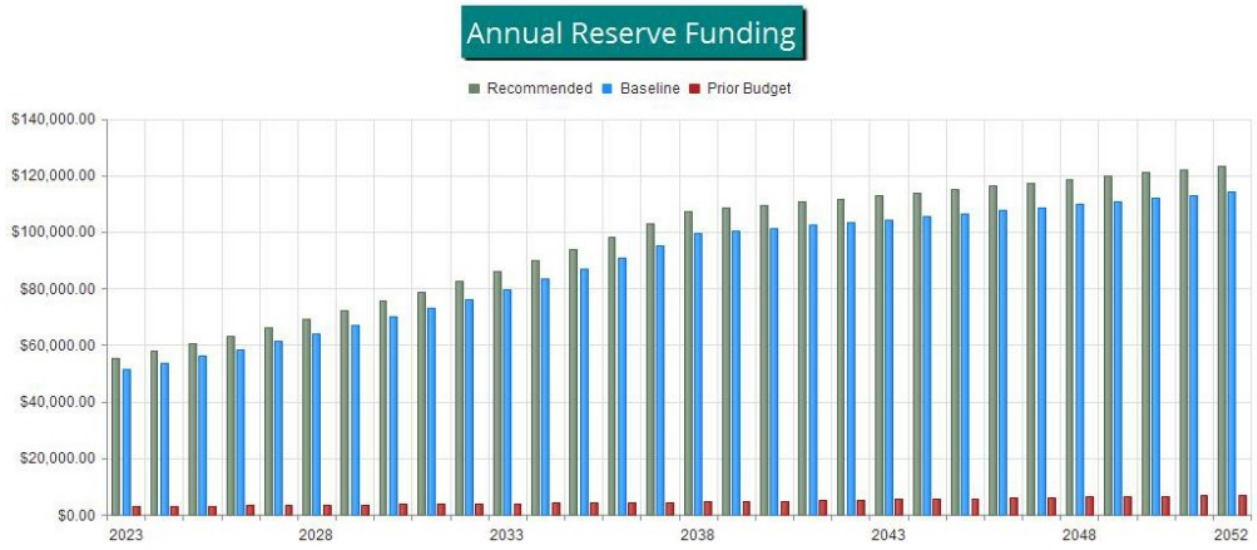


Figure 2

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 (assumes future increases), compared to your always-changing Fully Funded Balance target.

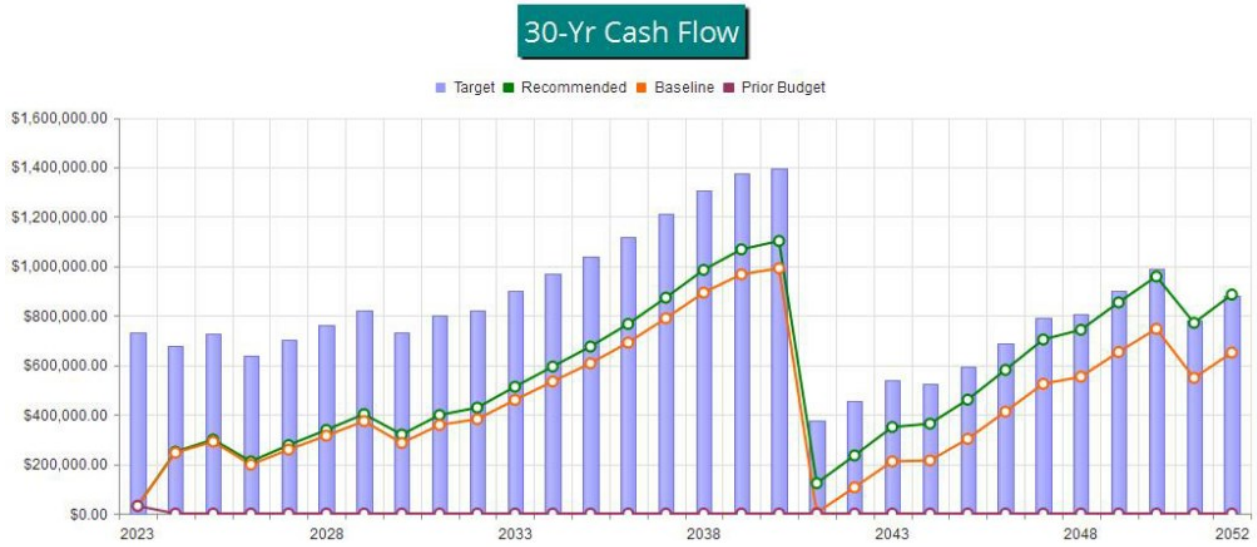


Figure 3

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.

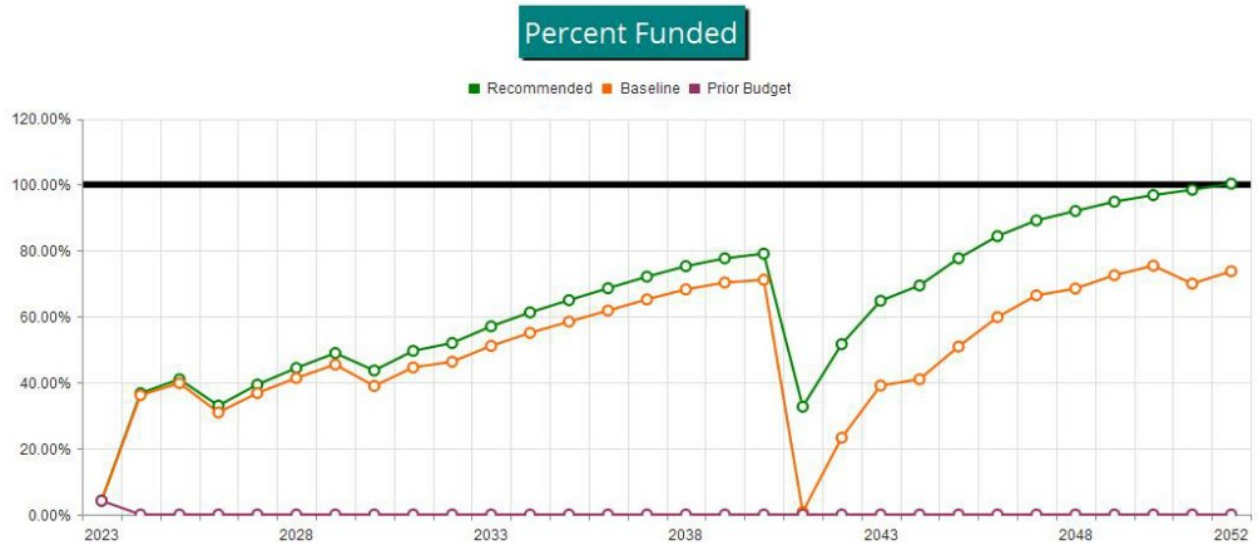


Figure 4

Table Descriptions

Executive Summary is a summary of your Reserve Components

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

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

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

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

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

#	Component	Quantity	Useful Life	Rem. Useful Life	Current Cost Estimate	
					Best Case	Worst Case
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	~ 10,500 SF	30	6	$44,600	$60,400
120	Asphalt: 50th Ave W – Resurface	~ 13,825 SF	30	6	$58,800	$79,500
121	Asphalt – Sealcoat/Repair	~ 24,325 SF	5	1	$7,800	$14,600
140	Fence: 6' Wood - Repair/Replace	~ 250 LF	20	0	$13,800	$20,000
141	Fence: Wood Rail – Repair/Replace	~ 105 LF, treated	25	9	$1,800	$2,600
144	Fence: Chain Link – Repair/Replace	~ 285 LF	40	17	$5,400	$7,400
147	Garbage Enclosure - Repair/Replace	~ 57 LF, wood/chain link	15	0	$3,500	$5,000
185	Stormwater Pond - Maintain	~ 3,965 SF	15	0	$6,300	$14,700
200	Community Sign - Repair/Replace		25	2	$3,200	$4,500
205	Mailboxes – Repair/Replace	(1) cluster/16 boxes	20	0	$1,300	$1,700
	Building Exteriors					
500	Steep Slope Roof - Replace	~ 14,000 SF	25	2	$98,000	$140,000
516	Gutters & Downspouts - Replace	~ 800 LF	25	2	$16,000	$24,000
520	Vinyl Siding - Exterior Renovation	~ 16,550 GSF, vinyl	40	17	$371,000	$609,000
521	Vinyl Siding - Clean & Inspect	~ 16,550 GSF, vinyl	4	0	$5,800	$8,300
533	Exterior Surfaces - Caulk & Paint	Minimal SF, wood	8	0	$30,000	$40,000
535	Windows & Sliders - Replace	(77) windows, (16) SGD	40	17	$136,000	$196,000
553	Stair Landings - Recoat	~ 360 SF, elastomeric	5	0	$6,100	$9,000
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	Supply, drains, etc.	1	0	$5,000	$7,000
965	Fire Alarm Panel - Repair/Replace	(4) Fire Lite, MS-4424B	20	0	$20,000	$28,000
19	Total Funded Components					

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
	Site & Grounds							
119	Asphalt: Parking Area – Resurface	$52,500	X	24	/	30	=	$42,000
120	Asphalt: 50th Ave W – Resurface	$69,150	X	24	/	30	=	$55,320
121	Asphalt – Sealcoat/Repair	$11,200	X	4	/	5	=	$8,960
140	Fence: 6' Wood - Repair/Replace	$16,900	X	20	/	20	=	$16,900
141	Fence: Wood Rail – Repair/Replace	$2,200	X	16	/	25	=	$1,408
144	Fence: Chain Link – Repair/Replace	$6,400	X	23	/	40	=	$3,680
147	Garbage Enclosure - Repair/Replace	$4,250	X	15	/	15	=	$4,250
185	Stormwater Pond - Maintain	$10,500	X	15	/	15	=	$10,500
200	Community Sign - Repair/Replace	$3,850	X	23	/	25	=	$3,542
205	Mailboxes – Repair/Replace	$1,500	X	20	/	20	=	$1,500
	Building Exteriors							
500	Steep Slope Roof - Replace	$119,000	X	23	/	25	=	$109,480
516	Gutters & Downspouts - Replace	$20,000	X	23	/	25	=	$18,400
520	Vinyl Siding - Exterior Renovation	$490,000	X	23	/	40	=	$281,750
521	Vinyl Siding - Clean & Inspect	$7,050	X	4	/	4	=	$7,050
533	Exterior Surfaces - Caulk & Paint	$35,000	X	8	/	8	=	$35,000
535	Windows & Sliders - Replace	$166,000	X	23	/	40	=	$95,450
553	Stair Landings - Recoat	$7,550	X	5	/	5	=	$7,550
	Systems & Evaluations							
900	Plumbing - Systems Evaluation	$6,000	X	1	/	1	=	$6,000
965	Fire Alarm Panel - Repair/Replace	$24,000	X	20	/	20	=	$24,000
								$732,740

#	Component	Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
	Site & Grounds				
119	Asphalt: Parking Area – Resurface	30	$52,500	$1,750	3.85 %
120	Asphalt: 50th Ave W – Resurface	30	$69,150	$2,305	5.08 %
121	Asphalt – Sealcoat/Repair	5	$11,200	$2,240	4.93 %
140	Fence: 6' Wood - Repair/Replace	20	$16,900	$845	1.86 %
141	Fence: Wood Rail – Repair/Replace	25	$2,200	$88	0.19 %
144	Fence: Chain Link – Repair/Replace	40	$6,400	$160	0.35 %
147	Garbage Enclosure - Repair/Replace	15	$4,250	$283	0.62 %
185	Stormwater Pond - Maintain	15	$10,500	$700	1.54 %
200	Community Sign - Repair/Replace	25	$3,850	$154	0.34 %
205	Mailboxes – Repair/Replace	20	$1,500	$75	0.17 %
	Building Exteriors				
500	Steep Slope Roof - Replace	25	$119,000	$4,760	10.48 %
516	Gutters & Downspouts - Replace	25	$20,000	$800	1.76 %
520	Vinyl Siding - Exterior Renovation	40	$490,000	$12,250	26.98 %
521	Vinyl Siding - Clean & Inspect	4	$7,050	$1,763	3.88 %
533	Exterior Surfaces - Caulk & Paint	8	$35,000	$4,375	9.63 %
535	Windows & Sliders - Replace	40	$166,000	$4,150	9.14 %
553	Stair Landings - Recoat	5	$7,550	$1,510	3.33 %
	Systems & Evaluations				
900	Plumbing - Systems Evaluation	1	$6,000	$6,000	13.21 %
965	Fire Alarm Panel - Repair/Replace	20	$24,000	$1,200	2.64 %
19	Total Funded Components			$45,408	100.00 %

30-Year Reserve Plan Summary

Report # 38175-0
Full

Fiscal Year Start: 2023	Interest: 1.00 %	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 In Annual Reserve Funding	Reserve Funding	Loan or Special Assmts	Interest Income	Reserve Expenses
2023	$30,710	$732,740	4.2 %	High	1,750.00 %	$55,500	$275,000	$1,402	$112,750
2024	$249,862	$679,180	36.8 %	Medium	4.50 %	$57,998	$0	$2,743	$11,536
2025	$299,067	$729,481	41.0 %	Medium	4.50 %	$60,607	$0	$2,548	$151,550
2026	$210,673	$638,331	33.0 %	Medium	4.50 %	$63,335	$0	$2,435	$0
2027	$276,442	$701,835	39.4 %	Medium	4.50 %	$66,185	$0	$3,070	$7,935
2028	$337,762	$760,402	44.4 %	Medium	4.50 %	$69,163	$0	$3,697	$8,753
2029	$401,869	$821,254	48.9 %	Medium	4.50 %	$72,275	$0	$3,603	$158,630
2030	$319,118	$730,969	43.7 %	Medium	4.50 %	$75,528	$0	$3,585	$0
2031	$398,231	$802,819	49.6 %	Medium	4.50 %	$78,927	$0	$4,129	$53,268
2032	$428,019	$823,456	52.0 %	Medium	4.50 %	$82,478	$0	$4,700	$2,871
2033	$512,327	$898,164	57.0 %	Medium	4.50 %	$86,190	$0	$5,529	$10,147
2034	$593,899	$969,208	61.3 %	Medium	4.50 %	$90,068	$0	$6,341	$15,503
2035	$674,804	$1,038,501	65.0 %	Medium	4.50 %	$94,121	$0	$7,201	$10,052
2036	$766,076	$1,117,175	68.6 %	Medium	4.50 %	$98,357	$0	$8,190	$0
2037	$872,623	$1,210,298	72.1 %	Low	4.50 %	$102,783	$0	$9,283	$0
2038	$984,688	$1,308,003	75.3 %	Low	4.50 %	$107,408	$0	$10,257	$34,743
2039	$1,067,611	$1,374,696	77.7 %	Low	1.00 %	$108,482	$0	$10,841	$85,451
2040	$1,101,483	$1,393,058	79.1 %	Low	1.00 %	$109,567	$0	$6,116	$1,094,846
2041	$122,320	$374,248	32.7 %	Medium	1.00 %	$110,663	$0	$1,785	$0
2042	$234,768	$454,577	51.6 %	Medium	1.00 %	$111,769	$0	$2,920	$0
2043	$349,457	$539,389	64.8 %	Medium	1.00 %	$112,887	$0	$3,561	$102,948
2044	$362,956	$522,844	69.4 %	Medium	1.00 %	$114,016	$0	$4,114	$20,835
2045	$460,251	$592,579	77.7 %	Low	1.00 %	$115,156	$0	$5,202	$0
2046	$580,610	$688,131	84.4 %	Low	1.00 %	$116,308	$0	$6,417	$0
2047	$703,334	$788,883	89.2 %	Low	1.00 %	$117,471	$0	$7,226	$85,479
2048	$742,552	$807,017	92.0 %	Low	1.00 %	$118,645	$0	$7,976	$15,808
2049	$853,366	$899,932	94.8 %	Low	1.00 %	$119,832	$0	$9,053	$24,154
2050	$958,097	$989,588	96.8 %	Low	1.00 %	$121,030	$0	$8,639	$317,311
2051	$770,456	$782,607	98.4 %	Low	1.00 %	$122,241	$0	$8,273	$16,130
2052	$884,839	$882,339	100.3 %	Low	1.00 %	$123,463	$0	$9,509	$0

30-Year Reserve Plan Summary (Alternate Funding Plan)

Report # 38175-0
Full

Fiscal Year Start: 2023	Interest: 1.00 %	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 In Annual Reserve Funding	Reserve Funding	Loan or Special Assmts	Interest Income	Reserve Expenses
2023	$30,710	$732,740	4.2 %	High	1,612.00 %	$51,360	$275,000	$1,381	$112,750
2024	$245,701	$679,180	36.2 %	Medium	4.50 %	$53,671	$0	$2,680	$11,536
2025	$290,517	$729,481	39.8 %	Medium	4.50 %	$56,086	$0	$2,439	$151,550
2026	$197,492	$638,331	30.9 %	Medium	4.50 %	$58,610	$0	$2,278	$0
2027	$258,381	$701,835	36.8 %	Medium	4.50 %	$61,248	$0	$2,863	$7,935
2028	$314,558	$760,402	41.4 %	Medium	4.50 %	$64,004	$0	$3,438	$8,753
2029	$373,247	$821,254	45.4 %	Medium	4.50 %	$66,884	$0	$3,289	$158,630
2030	$284,790	$730,969	39.0 %	Medium	4.50 %	$69,894	$0	$3,212	$0
2031	$357,895	$802,819	44.6 %	Medium	4.50 %	$73,039	$0	$3,695	$53,268
2032	$381,362	$823,456	46.3 %	Medium	4.50 %	$76,326	$0	$4,200	$2,871
2033	$459,017	$898,164	51.1 %	Medium	4.50 %	$79,761	$0	$4,961	$10,147
2034	$533,592	$969,208	55.1 %	Medium	4.50 %	$83,350	$0	$5,701	$15,503
2035	$607,139	$1,038,501	58.5 %	Medium	4.50 %	$87,100	$0	$6,486	$10,052
2036	$690,675	$1,117,175	61.8 %	Medium	4.50 %	$91,020	$0	$7,396	$0
2037	$789,090	$1,210,298	65.2 %	Medium	4.50 %	$95,116	$0	$8,405	$0
2038	$892,611	$1,308,003	68.2 %	Medium	4.50 %	$99,396	$0	$9,292	$34,743
2039	$966,556	$1,374,696	70.3 %	Low	1.00 %	$100,390	$0	$9,785	$85,451
2040	$991,281	$1,393,058	71.2 %	Low	1.00 %	$101,394	$0	$4,968	$1,094,846
2041	$2,797	$374,248	0.7 %	High	1.00 %	$102,408	$0	$542	$0
2042	$105,747	$454,577	23.3 %	High	1.00 %	$103,432	$0	$1,582	$0
2043	$210,761	$539,389	39.1 %	Medium	1.00 %	$104,466	$0	$2,125	$102,948
2044	$214,404	$522,844	41.0 %	Medium	1.00 %	$105,511	$0	$2,579	$20,835
2045	$301,659	$592,579	50.9 %	Medium	1.00 %	$106,566	$0	$3,566	$0
2046	$411,791	$688,131	59.8 %	Medium	1.00 %	$107,632	$0	$4,677	$0
2047	$524,100	$788,883	66.4 %	Medium	1.00 %	$108,708	$0	$5,382	$85,479
2048	$552,711	$807,017	68.5 %	Medium	1.00 %	$109,795	$0	$6,025	$15,808
2049	$652,722	$899,932	72.5 %	Low	1.00 %	$110,893	$0	$6,993	$24,154
2050	$746,455	$989,588	75.4 %	Low	1.00 %	$112,002	$0	$6,468	$317,311
2051	$547,613	$782,607	70.0 %	Medium	1.00 %	$113,122	$0	$5,988	$16,130
2052	$650,594	$882,339	73.7 %	Low	1.00 %	$114,253	$0	$7,110	$0

	Fiscal Year	2023	2024	2025	2026	2027
	Starting Reserve Balance	$30,710	$249,862	$299,067	$210,673	$276,442
	Annual Reserve Funding	$55,500	$57,998	$60,607	$63,335	$66,185
	Recommended Special Assessments	$275,000	$0	$0	$0	$0
	Interest Earnings	$1,402	$2,743	$2,548	$2,435	$3,070
	Total Income	$362,612	$310,603	$362,222	$276,442	$345,696
#	Component					
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	$0	$0	$0	$0	$0
120	Asphalt: 50th Ave W – Resurface	$0	$0	$0	$0	$0
121	Asphalt – Sealcoat/Repair	$0	$11,536	$0	$0	$0
140	Fence: 6' Wood - Repair/Replace	$16,900	$0	$0	$0	$0
141	Fence: Wood Rail – Repair/Replace	$0	$0	$0	$0	$0
144	Fence: Chain Link – Repair/Replace	$0	$0	$0	$0	$0
147	Garbage Enclosure - Repair/Replace	$4,250	$0	$0	$0	$0
185	Stormwater Pond - Maintain	$10,500	$0	$0	$0	$0
200	Community Sign - Repair/Replace	$0	$0	$4,084	$0	$0
205	Mailboxes – Repair/Replace	$1,500	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roof - Replace	$0	$0	$126,247	$0	$0
516	Gutters & Downspouts - Replace	$0	$0	$21,218	$0	$0
520	Vinyl Siding - Exterior Renovation	$0	$0	$0	$0	$0
521	Vinyl Siding - Clean & Inspect	$7,050	$0	$0	$0	$7,935
533	Exterior Surfaces - Caulk & Paint	$35,000	$0	$0	$0	$0
535	Windows & Sliders - Replace	$0	$0	$0	$0	$0
553	Stair Landings - Recoat	$7,550	$0	$0	$0	$0
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	$6,000	$0	$0	$0	$0
965	Fire Alarm Panel - Repair/Replace	$24,000	$0	$0	$0	$0
	Total Expenses	$112,750	$11,536	$151,550	$0	$7,935
	Ending Reserve Balance	$249,862	$299,067	$210,673	$276,442	$337,762

	Fiscal Year	2028	2029	2030	2031	2032
	Starting Reserve Balance	$337,762	$401,869	$319,118	$398,231	$428,019
	Annual Reserve Funding	$69,163	$72,275	$75,528	$78,927	$82,478
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$3,697	$3,603	$3,585	$4,129	$4,700
	Total Income	$410,621	$477,748	$398,231	$481,287	$515,197
#	Component					
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	$0	$62,688	$0	$0	$0
120	Asphalt: 50th Ave W – Resurface	$0	$82,569	$0	$0	$0
121	Asphalt – Sealcoat/Repair	$0	$13,373	$0	$0	$0
140	Fence: 6' Wood - Repair/Replace	$0	$0	$0	$0	$0
141	Fence: Wood Rail – Repair/Replace	$0	$0	$0	$0	$2,871
144	Fence: Chain Link – Repair/Replace	$0	$0	$0	$0	$0
147	Garbage Enclosure - Repair/Replace	$0	$0	$0	$0	$0
185	Stormwater Pond - Maintain	$0	$0	$0	$0	$0
200	Community Sign - Repair/Replace	$0	$0	$0	$0	$0
205	Mailboxes – Repair/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roof - Replace	$0	$0	$0	$0	$0
516	Gutters & Downspouts - Replace	$0	$0	$0	$0	$0
520	Vinyl Siding - Exterior Renovation	$0	$0	$0	$0	$0
521	Vinyl Siding - Clean & Inspect	$0	$0	$0	$8,931	$0
533	Exterior Surfaces - Caulk & Paint	$0	$0	$0	$44,337	$0
535	Windows & Sliders - Replace	$0	$0	$0	$0	$0
553	Stair Landings - Recoat	$8,753	$0	$0	$0	$0
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	$0	$0	$0	$0	$0
965	Fire Alarm Panel - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$8,753	$158,630	$0	$53,268	$2,871
	Ending Reserve Balance	$401,869	$319,118	$398,231	$428,019	$512,327

	Fiscal Year	2033	2034	2035	2036	2037
	Starting Reserve Balance	$512,327	$593,899	$674,804	$766,076	$872,623
	Annual Reserve Funding	$86,190	$90,068	$94,121	$98,357	$102,783
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$5,529	$6,341	$7,201	$8,190	$9,283
	Total Income	$604,045	$690,308	$776,127	$872,623	$984,688
#	Component					
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	$0	$0	$0	$0	$0
120	Asphalt: 50th Ave W – Resurface	$0	$0	$0	$0	$0
121	Asphalt – Sealcoat/Repair	$0	$15,503	$0	$0	$0
140	Fence: 6' Wood - Repair/Replace	$0	$0	$0	$0	$0
141	Fence: Wood Rail – Repair/Replace	$0	$0	$0	$0	$0
144	Fence: Chain Link – Repair/Replace	$0	$0	$0	$0	$0
147	Garbage Enclosure - Repair/Replace	$0	$0	$0	$0	$0
185	Stormwater Pond - Maintain	$0	$0	$0	$0	$0
200	Community Sign - Repair/Replace	$0	$0	$0	$0	$0
205	Mailboxes – Repair/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roof - Replace	$0	$0	$0	$0	$0
516	Gutters & Downspouts - Replace	$0	$0	$0	$0	$0
520	Vinyl Siding - Exterior Renovation	$0	$0	$0	$0	$0
521	Vinyl Siding - Clean & Inspect	$0	$0	$10,052	$0	$0
533	Exterior Surfaces - Caulk & Paint	$0	$0	$0	$0	$0
535	Windows & Sliders - Replace	$0	$0	$0	$0	$0
553	Stair Landings - Recoat	$10,147	$0	$0	$0	$0
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	$0	$0	$0	$0	$0
965	Fire Alarm Panel - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$10,147	$15,503	$10,052	$0	$0
	Ending Reserve Balance	$593,899	$674,804	$766,076	$872,623	$984,688

	Fiscal Year	2038	2039	2040	2041	2042
	Starting Reserve Balance	$984,688	$1,067,611	$1,101,483	$122,320	$234,768
	Annual Reserve Funding	$107,408	$108,482	$109,567	$110,663	$111,769
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$10,257	$10,841	$6,116	$1,785	$2,920
	Total Income	$1,102,353	$1,186,934	$1,217,167	$234,768	$349,457
#	Component					
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	$0	$0	$0	$0	$0
120	Asphalt: 50th Ave W – Resurface	$0	$0	$0	$0	$0
121	Asphalt – Sealcoat/Repair	$0	$17,973	$0	$0	$0
140	Fence: 6' Wood - Repair/Replace	$0	$0	$0	$0	$0
141	Fence: Wood Rail – Repair/Replace	$0	$0	$0	$0	$0
144	Fence: Chain Link – Repair/Replace	$0	$0	$10,578	$0	$0
147	Garbage Enclosure - Repair/Replace	$6,621	$0	$0	$0	$0
185	Stormwater Pond - Maintain	$16,359	$0	$0	$0	$0
200	Community Sign - Repair/Replace	$0	$0	$0	$0	$0
205	Mailboxes – Repair/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roof - Replace	$0	$0	$0	$0	$0
516	Gutters & Downspouts - Replace	$0	$0	$0	$0	$0
520	Vinyl Siding - Exterior Renovation	$0	$0	$809,895	$0	$0
521	Vinyl Siding - Clean & Inspect	$0	$11,313	$0	$0	$0
533	Exterior Surfaces - Caulk & Paint	$0	$56,165	$0	$0	$0
535	Windows & Sliders - Replace	$0	$0	$274,373	$0	$0
553	Stair Landings - Recoat	$11,763	$0	$0	$0	$0
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	$0	$0	$0	$0	$0
965	Fire Alarm Panel - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$34,743	$85,451	$1,094,846	$0	$0
	Ending Reserve Balance	$1,067,611	$1,101,483	$122,320	$234,768	$349,457

	Fiscal Year	2043	2044	2045	2046	2047
	Starting Reserve Balance	$349,457	$362,956	$460,251	$580,610	$703,334
	Annual Reserve Funding	$112,887	$114,016	$115,156	$116,308	$117,471
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$3,561	$4,114	$5,202	$6,417	$7,226
	Total Income	$465,905	$481,087	$580,610	$703,334	$828,031
#	Component					
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	$0	$0	$0	$0	$0
120	Asphalt: 50th Ave W – Resurface	$0	$0	$0	$0	$0
121	Asphalt – Sealcoat/Repair	$0	$20,835	$0	$0	$0
140	Fence: 6' Wood - Repair/Replace	$30,523	$0	$0	$0	$0
141	Fence: Wood Rail – Repair/Replace	$0	$0	$0	$0	$0
144	Fence: Chain Link – Repair/Replace	$0	$0	$0	$0	$0
147	Garbage Enclosure - Repair/Replace	$0	$0	$0	$0	$0
185	Stormwater Pond - Maintain	$0	$0	$0	$0	$0
200	Community Sign - Repair/Replace	$0	$0	$0	$0	$0
205	Mailboxes – Repair/Replace	$2,709	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roof - Replace	$0	$0	$0	$0	$0
516	Gutters & Downspouts - Replace	$0	$0	$0	$0	$0
520	Vinyl Siding - Exterior Renovation	$0	$0	$0	$0	$0
521	Vinyl Siding - Clean & Inspect	$12,733	$0	$0	$0	$14,331
533	Exterior Surfaces - Caulk & Paint	$0	$0	$0	$0	$71,148
535	Windows & Sliders - Replace	$0	$0	$0	$0	$0
553	Stair Landings - Recoat	$13,636	$0	$0	$0	$0
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	$0	$0	$0	$0	$0
965	Fire Alarm Panel - Repair/Replace	$43,347	$0	$0	$0	$0
	Total Expenses	$102,948	$20,835	$0	$0	$85,479
	Ending Reserve Balance	$362,956	$460,251	$580,610	$703,334	$742,552

	Fiscal Year	2048	2049	2050	2051	2052
	Starting Reserve Balance	$742,552	$853,366	$958,097	$770,456	$884,839
	Annual Reserve Funding	$118,645	$119,832	$121,030	$122,241	$123,463
	Recommended Special Assessments	$0	$0	$0	$0	$0
	Interest Earnings	$7,976	$9,053	$8,639	$8,273	$9,509
	Total Income	$869,174	$982,251	$1,087,767	$900,969	$1,017,811
#	Component					
	Site & Grounds					
119	Asphalt: Parking Area – Resurface	$0	$0	$0	$0	$0
120	Asphalt: 50th Ave W – Resurface	$0	$0	$0	$0	$0
121	Asphalt – Sealcoat/Repair	$0	$24,154	$0	$0	$0
140	Fence: 6' Wood - Repair/Replace	$0	$0	$0	$0	$0
141	Fence: Wood Rail – Repair/Replace	$0	$0	$0	$0	$0
144	Fence: Chain Link – Repair/Replace	$0	$0	$0	$0	$0
147	Garbage Enclosure - Repair/Replace	$0	$0	$0	$0	$0
185	Stormwater Pond - Maintain	$0	$0	$0	$0	$0
200	Community Sign - Repair/Replace	$0	$0	$8,552	$0	$0
205	Mailboxes – Repair/Replace	$0	$0	$0	$0	$0
	Building Exteriors					
500	Steep Slope Roof - Replace	$0	$0	$264,333	$0	$0
516	Gutters & Downspouts - Replace	$0	$0	$44,426	$0	$0
520	Vinyl Siding - Exterior Renovation	$0	$0	$0	$0	$0
521	Vinyl Siding - Clean & Inspect	$0	$0	$0	$16,130	$0
533	Exterior Surfaces - Caulk & Paint	$0	$0	$0	$0	$0
535	Windows & Sliders - Replace	$0	$0	$0	$0	$0
553	Stair Landings - Recoat	$15,808	$0	$0	$0	$0
	Systems & Evaluations					
900	Plumbing - Systems Evaluation	$0	$0	$0	$0	$0
965	Fire Alarm Panel - Repair/Replace	$0	$0	$0	$0	$0
	Total Expenses	$15,808	$24,154	$317,311	$16,130	$0
	Ending Reserve Balance	$853,366	$958,097	$770,456	$884,839	$1,017,811

Accuracy, Limitations, and Disclosures

"The reserve study should be reviewed carefully. It may not include all common and limited common element components that will require major maintenance, repair or replacement in future years, and may not include regular contributions to a reserve account for the cost of such maintenance, repair, or replacement. The failure to include a component in a reserve study, or to provide contributions to a reserve account for a component, may, under some circumstances, require you to pay on demand as a special assessment your share of common expenses for the cost of major maintenance, repair or replacement of a reserve component."

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James Talaga, company President, is a credentialed Reserve Specialist (#066). All work done by Association Reserves WA, LLC 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.

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 research and analysis. The information presented here represents 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 repair & replacement responsibility
2) Component must have a limited useful life
3) Life limit must be predictable
4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of Annual operating expenses).

Not all your components may have been found appropriate for reserve funding. In our judgment, the components meeting the above four criteria are shown with the Useful Life (how often the project is expected to occur), Remaining Useful Life (when the next instance of the expense will be) 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, and we have attempted to present the cost range in which your actual expense will occur.

Where no Useful Life, Remaining Useful Life, or pricing exists, the component was deemed inappropriate for Reserve Funding.

Comp #: 100 Concrete Walkways - Maintain/Repair **Quantity: Extensive SF**
Location: Community walkways
Funded?: No. Useful life is not predictable
History:
Comments: Concrete walks appeared in generally stable condition, with no significant damage or deterioration at this time.

The annual repair needs below the reserve funding threshold (1% or more of total annual expenses), should be factored into the Operating budget as general maintenance. In our experience, as the community ages larger repair/replacement expenses may emerge that cannot be comfortably absorbed into the operating budget. Currently, it is difficult to predict the timing, scope, and costs of larger repairs. Monitor the concrete annually and if conditions deteriorate leading to larger repair needs, funding can be included within a reserve study update.

As routine maintenance, inspect regularly and pressure wash for appearance. Repair any trip hazards (1/2" difference in height) immediately to ensure safety. Repair promptly, as needed, to prevent water penetrating into the base, which can cause further damage. Factors affecting the quality and service life of the concrete include the preparation of the underlying soil and drainage, thickness and strength of the concrete used, steel reinforcement (none likely), amount and weight of vehicle traffic, and tree roots.

Resources:
http://www.mrsc.org/subjects/pubworks/sidew.aspx
http://www.concretenetwork.com/cold-weather-concrete/weather.html

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 102 Concrete Curb - Maintain/Repair **Quantity: ~ 1,000 LF**
Location: Adjacent to 50th Ave W and Parking Areas
Funded?: No. Useful life is not currently predictable
History: No history reported
Comments: We noted some cracking and surface deterioration consistent with age but generally stable condition and appearance with minimal significant damage.

No predictable expectation for total replacement within the scope of this study. Smaller repairs of less than 1% of the total Operating budget should be completed when needed as general maintenance from the Operating budget. When possible it is best to time larger repairs with asphalt sealcoat cycles (component #121) for cost efficiency. Paint curbs and fire lanes at that time as well.

As routine maintenance, inspect regularly, pressure wash for appearance, and repair locally as needed using operating funds.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 112 Site/Stair Rails - Repair/Replace **Quantity: ~ 330 LF, metal**
Location: Entry to basement areas and residential stairs
Funded?: No. Useful life not currently predictable
History:
Comments: These sturdy metal rails appeared in fair, stable condition, with no damage or deterioration noted.

No reserve funding currently suggested

Routinely inspect for stability, security, and appearance. Repair locally, as needed, with operating funds. Paint along with larger exterior building painting projects.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 119 Asphalt: Parking Area – Resurface **Quantity: ~ 10,500 SF**

Location: Carports and parking areas
Funded?: Yes.
History: Unknown
Comments: Asphalt in parking areas appeared slightly better than 50th Avenue over all but still in generally poor condition with cracking, alligatoring, and general wear observed throughout

The useful life below assumes regular repairs and seal coating (see component #121). The lack of repairs and seal coating can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When the need to resurface is becoming apparent, consult with a 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.

Resources:
Pavement Surface Condition Field Rating Manual for Asphalt Pavement:
https://www.wsdot.wa.gov/publications/manuals/fulltext/m0000/AsphaltPavements.pdf
Washington Asphalt Pavement Association: http://www.asphaltwa.com/

Useful Life:
30 years

Remaining Life:
6 years

Best Case: $ 44,600 Worst Case: $ 60,400

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 120 Asphalt: 50th Ave W – Resurface **Quantity: ~ 13,825 SF**

Location: Plat Map "Tract A"
Funded?: Yes.
History: none reported
Comments: Plat Map appears to indicate that entirety of 50th Avenue West is Association responsibility. The asphalt appeared in generally poor condition with potholes, extensive alligatoring and other cracking observed.

The useful life below assumes regular repairs and seal coating (see component #121). The lack of repairs and seal coating can greatly decrease the asphalt's useful life. Resurfacing is typically one of the larger expense items in a reserve study. When the need to resurface is becoming apparent, consult with a 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.

Resources:
Pavement Surface Condition Field Rating Manual for Asphalt Pavement:
https://www.wsdot.wa.gov/publications/manuals/fulltext/m0000/AsphaltPavements.pdf
Washington Asphalt Pavement Association: http://www.asphaltwa.com/

Useful Life:
30 years

Remaining Life:
6 years

Best Case: $ 58,800 Worst Case: $ 79,500

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 121 Asphalt – Sealcoat/Repair **Quantity: ~ 24,325 SF**

Location: 50th Ave E and parking areas
Funded?: Yes.
History:
Comments: We did not observe evidence of prior sealcoat at 50th Ave, and prior sealcoat/striping at parking area was badly worn. Timing here is set to occur one year after recommended major repair or overlay (see Component #119).

The State of Washington Department of Transportation (WSDOT) recommends regular cycles of seal coating, along with needed repairs, for the long-term care of asphalt paving with low traffic and low speed to extend the useful life. 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, and this causes the pavement to become increasingly brittle. As a result, the pavement will become more likely to crack, as it is unable to bend and flex when subjected to traffic (weight) and temperature changes (thermal expansion and contraction). A seal coat combats this situation by providing a waterproof membrane, which not only slows down the oxidation process, but also helps the pavement shed water. Seal coating also provides uniform appearance, and conceals the inevitable patching and repairs which accumulate over time, ultimately extending the useful life of asphalt before more costly resurfacing is needed (see component #120).

Repairing asphalt before seal coating is imperative. Surface preparation and dry weather during and following application is key to lasting performance.

Resources:
Asphalt Pavement Maintenance Best Practices Handbook: http://www.cee.mtu.edu/~balkire/CE5403/AsphaltPaveMaint.pdf
Asphalt Seal Coat Treatments General Overview: https://www.wsdot.wa.gov/research/reports/fullreports/136.1.pdf
Other: http://www.pavementinteractive.org/article/bituminous-surface-treatments/

Useful Life:
5 years

Remaining Life:
1 years

Best Case: $ 7,800 Worst Case: $ 14,600

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 140 Fence: 6' Wood - Repair/Replace **Quantity: ~ 250 LF**
Location: South perimeter of property
Funded?: Yes.
History: None known
Comments: The wood fence appeared in generally poor and damaged condition

Plan to replace the fence at roughly the time frame below. Typical failures occur from deterioration through the end grains, and contact with the ground and surrounding landscape.

As routine maintenance, inspect regularly for any damage, and repair as needed. Avoid unnecessary contact with the ground, sprinkler patterns, and surrounding vegetation. Regular cycles of stain/paint will help to maintain appearance. Painting or staining the fence has a higher overall life cycle cost, but may extend life in addition to an aesthetic benefit.

Useful Life:
20 years

Remaining Life:
0 years

Best Case: $ 13,800 Worst Case: $ 20,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 141 Fence: Wood Rail – Repair/Replace **Quantity: ~ 105 LF, treated**
Location: West perimeter of property
Funded?: Yes.
History: Unknown
Comments: The wood rail fence appeared in generally stable condition. Useful life of fence could benefit from cleaning/stain as general maintenance from the Operating budget.

Plan to replace the fence at roughly the time frame below.

As routine maintenance, inspect regularly for any damage and repair locally, as needed, using operating funds. Avoid unnecessary contact with the ground, sprinkler patterns, and surrounding vegetation. Typically, split rail fences are left to weather naturally, but can be stained for appearance and protection.

Useful Life:
25 years

Remaining Life:
9 years

Best Case: $ 1,800 Worst Case: $ 2,600

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 144 Fence: Chain Link – Repair/Replace **Quantity: ~ 285 LF**

Location: Perimeter of storm pond, and at East perimeter

Funded?: Yes.

History:

Comments: The vinyl coated chain link fence at storm pond and uncoated chain link at East perimeter both appeared in generally stable condition. There were no reports of previous large-scale repairs.

For financial planning purposes, plan on replacing at roughly the time frame shown below. Evaluate the fence as the remaining useful life approaches zero years, and adjust the remaining useful life accordingly.

Chain link fencing is generally a low maintenance item. Inspect periodically, and repair as needed. If corrosion is observed, apply a rust inhibitor to prevent corrosion from decreasing the useful life.

Useful Life:
40 years

Remaining Life:
17 years

Best Case: $ 5,400 Worst Case: $ 7,400

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 147 Garbage Enclosure - Repair/Replace **Quantity: ~ 57 LF, wood/chain link**

Location: At end of 50th Ave W
Funded?: Yes.
History: Unknown
Comments: The wood garbage enclosure, with newer chain link gate, appeared in functional condition, with damage and deterioration noted at bottom end-grains of wood planks.

A general rotating funding allowance is factored below for repairs/replacement. Track history and actual expenses, and adjust accordingly in reserve study updates.

These garbage enclosures are subject to abuse. It is reasonable to expect repairs at relatively small intervals due to misuse, although it is difficult to predict the precise scope and timing of such repairs. We suggest at the next replacement to consider a more durable enclosure material such as steel posts and rails. By utilizing such materials, the enclosure can better withstand regular abuse, reduce repair costs, and increase its useful life. A less expensive option is to install concrete wheel stops (typically used at the front of parking spaces) to prevent the container or vehicles from impacting the enclosure.

Useful Life:
15 years

Remaining Life:
0 years

Best Case: $ 3,500 Worst Case: $ 5,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 170 Landscape - Maintain/Refurbish **Quantity: Turf, shrubs, etc.**
Location: Throughout the community
Funded?: No. Annual cost, best handled from Operating budget
History:
Comments: The landscape is in generally mature, healthy condition with no obvious problems observed.

Landscape maintenance is currently funded through the operating budget. As associations age, many find the need or desire for large-scale refurbishment projects not covered within the maintenance contract, and they allocate funds within reserves. These types of projects can include bed renovations, major replanting, large-scale bark or mulch replacements, turf renovations, drainage improvements, irrigation system extensions/replacement, etc.

Walk the landscaped areas each year with the community's landscape contractor, and perhaps a landscape architect, to assess the overall health, function, and future needs of maintenance and refurbish to determine how much, if any, supplemental reserve funding should be planned.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 172 Native Growth Area - Maintain **Quantity: Trees, wetlands, etc.**
Location: Scattered areas
Funded?: No. Not Association responsibility
History:
Comments: Native growth areas are typically a low maintenance item, as they are designed to be left permanently undisturbed in a substantially natural state. Plat map notes indicate that NGPA at West end of property is the maintenance responsibility of Lynnwood.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 173 Trees - Trim/Remove & Replace **Quantity: Moderate, mature**

Location: Throughout the community

Funded?: No. Annual costs, currently handled from Operating budget

History:

Comments: There were no specific problems observed or reported at this time. The community trees are generally mature. Some evidence that localized trees are too close to buildings.

This component may be utilized for larger tree removal/trimming projects which do not occur on an annual basis. If the community has not already done so, consult with a qualified arborist to assess the current plantings and to prepare a long term plan for the care and management of the community's trees, balancing aesthetics with the protection of the association's assets. Tree roots can be damaging to walkways, irrigation, underground utilities, and building structures. Track actual expenses, and adjust accordingly in reserve study updates.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 175 Irrigation System - Repair/Replace **Quantity: Lines, heads, valves**

Location: Landscaped common areas.

Funded?: No. Annual costs best handled from Operating budget

History:

Comments: Our visual observation of the irrigation system was limited, as the majority of system components are below grade. There were no reports of major repairs or problems. At the time of this study, no plans or specifications were provided to us regarding the extent of the irrigation system.

There are no predictable large-scale costs at this time. Have your landscaper or irrigation specialist periodically unearth sections to check lines for any damage or deterioration. PVC can eventually become brittle and leak but not typically before the 40-year mark of life.

As routine maintenance, inspect, test, and repair the system, as needed, as part of the operating budget. Follow proper winterization and spring startup procedures. If properly installed and bedded without defect, the lines could last for many years. Controls for the system can vary greatly in number, cost, and life expectancy - typically each controller is less than $500. Other elements (i.e. sprinkler heads, valves) within this system are generally lower cost, and have a failure rate that is difficult to predict. These elements are better suited to be handled with operating funds, not reserves.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 182 Stormwater System - Maintain **Quantity: Basins, conveyance**

Location: Throughout the community.

Funded?: No. The useful life is not predictable.

History:

Comments: An analysis of the drainage system is beyond the scope of a reserve study, as the vast majority of the drainage system is located below ground. Our observations were limited to catch basin areas. No problems were observed or reported to us.

There is no predictable large-scale repair/replacement at this time. Local repairs should be performed as part of general maintenance. If problems become known from a professional evaluation, funding can be included in future reserve studies.

As routine maintenance, inspect regularly, and keep drains/grates free of debris to ensure water drains as intended. Maintenance schedules on stormwater systems depend on the condition of the system itself, and the amount of sediment and debris moving around on site. Stormwater inspections usually consist of inspecting the catch basins and manholes, and ensuring vaults and control structures are properly functioning. Evaluation of the drainage system can include the visual review of the interior drain lines with the use of a miniature remote camera. Clean out the drain lines and basins as often as needed in order to prevent decreased drainage capacity. Repair as needed. The responsibility of keeping the stormwater system in good working order falls on the association.

Resource:

Washington State Stormwater Manuals: http://mrsc.org/Home/Explore-Topics/Environment/Water-Topics/Storm-and-Surface-Water-Management/Stormwater-Detention-Facility-Maintenance.aspx

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 185 Stormwater Pond - Maintain **Quantity: ~ 3,965 SF**

Location: "Tract C" at at Western end of property
Funded?: Yes.
History: None known
Comments: The stormwater pond appeared in functional condition during our limited visual review. Excess vegetation was observed above he water line. Expect required mandated by the maintenance by the City of Lynnwood at any time. Maintenance can include simple brush clearing or possibly sediment removal which is much more complicated and costly.

The state Department of Ecology and local (i.e. county or city) stormwater resources have standards for maintaining, and constructing or reconstructing the pond(s) to the engineer's design parameters. Sediment must be removed when the governing authority has determined a maximum reduction in pond volume. The pond may also be tested for any contaminants, and acceptable turbidity level. Timing is difficult to predict, but in our experience and research, it may be in the 15-year range. Regular maintenance and inspection are keys to extending the useful life. Have the pond periodically assessed by a professional engineer, in addition to the overseeing governmental authority.

Costs for large-scale non-routine maintenance such as sediment removal and structural repairs can vary widely depending upon a number of factors, including but not limited to contractor selection and mobilization fees, engineering and oversight, disposal options for excavated material per pond testing, liner type, etc. A general budget allowance range is provided below - work with the governing authority and local contractor(s) to better define.

Resource:
Washington State Stormwater Manuals: http://mrsc.org/Home/Explore-Topics/Environment/Water-Topics/Storm-and-Surface-Water-Management/Stormwater-Detention-Facility-Maintenance.aspx

Useful Life:
15 years

Remaining Life:
0 years

Best Case: $ 6,300 Worst Case: $ 14,700

Lower allowance Higher allowance

Cost Source: Budget Allowance - Adjust as needed

Comp #: 200 Community Sign - Repair/Replace **Quantity:**
Location: Community entrance, adjacent to 50th Ave W.
Funded?: Yes.
History:
Comments: The community sign appeared in faded, worn but legible fair condition. Community sign is likely original to 1999 construction and could benefit for refurbishing/painting, or replacement.

Reserve funding is recommended for regular intervals of replacement to maintain a consistent and quality appearance.

Inspect periodically, repair, clean, and touch up for appearance, as needed, using operating funds.

Useful Life:
25 years

Remaining Life:
2 years

Best Case: $ 3,200 Worst Case: $ 4,500

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 205 Mailboxes – Repair/Replace **Quantity: (1) cluster/16 boxes**
Location: At end of 50th Ave W
Funded?: Yes.
History: Date of Manufacture: 1999
Comments: The mailboxes appeared in fair/poor condition. The mailboxes are not protected from the rain by a structure.

In our experience, it is best to plan for total replacement at roughly the time frame below due to constant usage and wear over time.

As routine maintenance, inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges, and repair as needed with operating funds.

Useful Life:
20 years

Remaining Life:
0 years

Best Case: $ 1,300 Worst Case: $ 1,700

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 210 Carports - Repair/Replace **Quantity: (2) wood structues**
Location: Entrance to community
Funded?: No.
History: none reported
Comments: Structures appear in fair, stable condition with some minor vehicle damage but nothing significant.

Inspect regularly and repair posts, beams, fascia, etc. when needed as general maintenance from the Operating budget. No anticipation for large-scale Reserve project if proactively maintained in this manner. Replace carport roofs under component #500 and include painting with overall exterior building cycles, not as separate project.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 500 Steep Slope Roof - Replace **Quantity: ~ 14,000 SF**
Location: Rooftops of building and carports
Funded?: Yes.
History: Roof consultant 2022 - J2
Comments: The roof was observed in fair condition from ground level during our limited visual review. Ventilation (the lack of which can greatly reduce the roof's useful life) was observed at the eave and ridge. Eave venting consisted of continuous perforated vinyl. Ridge venting appeared to be provided by gable end louvers and roof jacks. Portions of roof flashing were visible at the rake. Diverter (kick-out) flashing was not observed. Gutters blocked the view of the eaves, so eave flashing was not confirmed. Debris and moss were not observed on residential the roof surfaces but some moss was observed on carports.

A reserve study conducts a limited visual review for budget purposes, and many of the critical waterproofing and ventilation items of the roof are not readily viewable. It is our understanding that a full evaluation by J2 Engineering has been approved by the Board of Directors for 2022. Our timing and cost assumptions below should be adjusted as results from this professional evaluation become available.

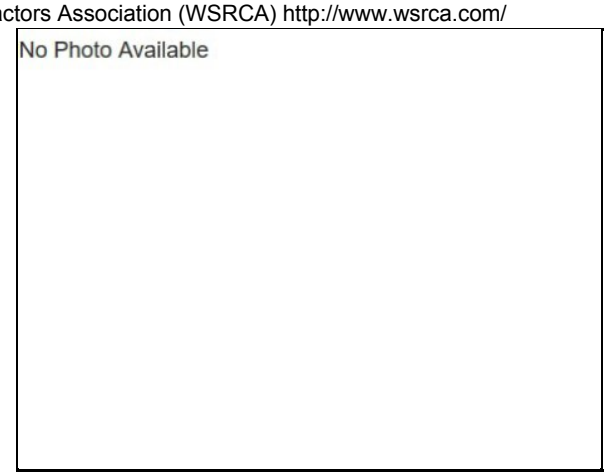
As routine maintenance, many manufacturers recommend inspections at least twice annually (once in the fall before the rainy season, and again in the spring), and after large storm events. Promptly replace any damaged/missing sections and complete any other repairs needed to ensure the waterproof integrity of the roof. Keep the roof surface, gutters, and downspouts clear and free of moss and/or debris.

At the time of re-roofing, we recommend that you hire a professional consultant to evaluate the existing roof, specify the new roof materials/design, and provide installation oversight. We recommend that all associations hire qualified consultants whenever they are considering having work performed on any building envelope (waterproofing) components including the roof, walls, windows, decks, exterior painting, and caulking/sealant.

Resources:
National Roofing Contractors Association (NRCA) http://www.nrca.net/.
Asphalt Roofing Manufacturers Association (ARMA) http://www.asphaltroofing.org/
Roof Consultant Institute (RCI) http://www.rci-online.org/
Western States Roofing Contractors Association (WSRCA) http://www.wsrca.com/

Useful Life:
25 years

Remaining Life:
2 years



Best Case: $ 98,000 Worst Case: $ 140,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 516 Gutters & Downspouts - Replace **Quantity: ~ 800 LF**
Location: Perimeter of buildings/carports
Funded?: Yes.
History:
Comments: Based on our limited visual inspection, the metal gutters and downspouts appeared in functional condition.

We recommend planning for a total replacement of the gutters and downspouts at the same intervals as the roof replacement for cost efficiency. Evaluate these components at the time of the project to determine if replacement or re-use is the better value.

As routine maintenance, inspect regularly, and keep gutters and downspouts free of debris.

Useful Life:
25 years

Remaining Life:
2 years

Best Case: $ 16,000 Worst Case: $ 24,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 520 Vinyl Siding - Exterior Renovation **Quantity: ~ 16,550 GSF, vinyl**

Location: The exterior walls, underlying waterproofing components, and structural components.
Funded?: Yes.
History: Assumed original to 1999 construction
Comments: The vinyl siding was a horizontal clapboard style. The horizontal clapboard had a four inch exposure. Generally, the siding appeared in fair condition, with no missing pieces, damage, or unusual wear. No view of the critical underlying waterproofing was available as part of our limited visual review.

Siding replacement may ultimately be needed due to the failure of the underlying waterproofing due to degradation 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 the remaining useful life as dictated by the evaluation. When practical, align with window replacement for cost efficiencies and building envelope integrity. Inspect annually and repair locally, as needed, using general maintenance funds.

Replacing the underlying waterproofing and flashing is projected to require replacement of the vinyl siding. Vinyl siding will typically fade over the years, and when replacing pieces it may be difficult to match the faded color.

Note: Rehabilitative construction projects with associated costs are equal to or greater than 5% of the assessed value of the units must comply with the requirements of RCW 64.55 http://app.leg.wa.gov/rcw/default.aspx?cite=64.55. These requirements include building enclosure design documents with waterproofing details by an architect or engineer, and independent oversight during construction to verify compliance with those details.

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 the scope, timing, and costs; including a plan for some margin of contingency.

Useful Life:
40 years

Remaining Life:
17 years

Best Case: $ 371,000 Worst Case: $ 609,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 521 Vinyl Siding - Clean & Inspect **Quantity: ~ 16,550 GSF, vinyl**

Location: The building surfaces.

Funded?: Yes.

History:

Comments: The vinyl siding had multiple areas with grime and/or moss growth. Timing here is set to occur at the midway point of an 8-year paint cycle and also during the exterior paint cycle.

It is best practice to clean vinyl siding every few years to remove contaminants that can reduce its service life, and to maintain appearance. This is also a good opportunity to have the exterior sealant inspected. We have projected the higher end of the cost range for cleaning to include sealant inspection at the same time as power washing. When washing, we advise not to use too high of pressure, and ensure spray angles do not allow water beneath the vinyl. Hand washing is also available, but is often more expensive.

Useful Life:
4 years

Remaining Life:
0 years

Best Case: $ 5,800 Worst Case: $ 8,300

Lower allowance Higher allowance

Cost Source: Budget Allowance

Comp #: 533 Exterior Surfaces - Caulk & Paint **Quantity: Minimal SF, wood**

Location: The exterior wood trim, fascia, posts, belly bands, etc.
Funded?: Yes.
History:
Comments: The painted surfaces of the wood trim at rail caps (pictured) and other misc areas appeared in worn, faded condition. No major peeling, blistering or chipping observed.

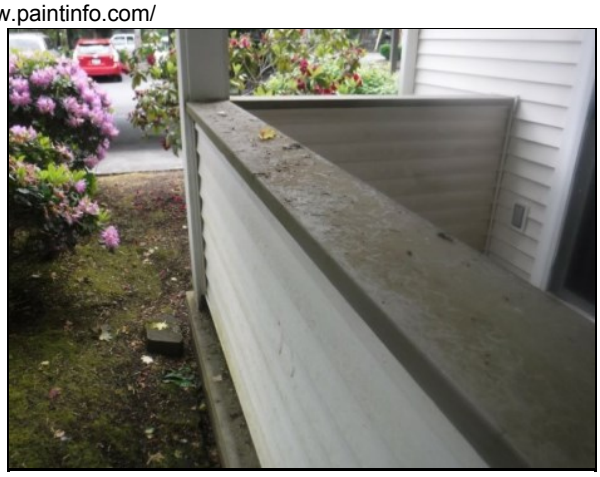
Typical Northwest paint cycles vary greatly depending upon many factors including the type of material painted, surface preparation, quality of the primer/paint/stain, application methods, weather conditions during the application process, moisture beneath the surface, and exposure to weather conditions. Repair areas, as needed, prior to painting/caulking. As routine maintenance, inspect regularly (including sealants), repair locally, and touch-up paint, as needed, using operating funds.

Proper sealant/caulking is critical to keeping water out of the walls, and preventing water damage. Incorrect installation of sealants is very common, and can greatly decrease its useful life. Inspect sealants (more frequently as they age) to determine if failing is occurring. Typical sealant problems include failure of the sealant to adhere to adjacent materials, and tearing/splitting of the sealant itself. As sealants age, and due to exposure to ultraviolet sunlight, they will dry out, harden, and lose their elastic ability. Remove and replace all sealants at the time sealant failure begins to appear. Proper cleaning, prep work, and installation technique (shape, size, tooling of joint) are critical for a long lasting sealant/caulking. Do not install sealant in locations that would block water drainage from behind the siding (e.g. at head flashings).

Resources:
American Coatings Association: http://www.paint.org/
Master Paint Institute: http://www.paintinfo.com/

Useful Life:
8 years

Remaining Life:
0 years



Best Case: $ 30,000 Worst Case: $ 40,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 535 Windows & Sliders - Replace **Quantity: (77) windows, (16) SGD**

Location: The exterior building walls.
Funded?: Yes.
History: Assumed original to 1999 construction
Comments: The windows are mostly horizontal sliders and fixed operation. J-channel was observed. Unable to determine if jambs and sills had sealant joints between the window frame and cladding. The weep holes at exterior lower corners were observed to be clear in the few windows sampled for our study. No condensation was observed between window panes, typically indicative of failed glazing seals. Failed glazing seals are common in windows as they age, especially areas with high UV exposure (may be owners responsibility to replace). No observation of the critical underlying waterproofing details and flashing was part of our limited visual review. The underlying details and flashing are critical to maintaining the waterproofing of the building envelope and preventing structural damage as a result of water infiltration. A reserve study is a budget model, limited to visual exterior observation and research. It is outside the scope of our services, and the purpose of a reserve study, to assess the adequacy of the building envelope performance, as many of the key details are hidden from view. Periodic reviews by an architect, building envelope professional, etc. are prudent.

Many factors affect the useful life, including the quality of window (design pressure rating), waterproofing and flashing details, building movement, and exposure to the elements, including wind driven rain. Those same variables, along with glazing and frame materials, can also greatly affect the appropriate choice and replacement costs. You can learn more about window design here: http://rci-online.org/wp-content/uploads/2010-04-hinjosa.pdf

Inspect regularly, including sealant, if any, and repair as needed. Typical sealant failures include a lack of adhesion to adjacent materials, tearing/splitting of the sealant itself, and loss of elastic ability. Loss of elastic ability can be caused by exposure to ultraviolet light, and general aging. Remove and replace all sealants as signs of failure begin to appear. Proper cleaning, prep work, and installation of specified joint design are critical for lasting performance. Keep weep holes free and clear to allow proper drainage of water that gets into the window frame. Do not block (caulk or seal) the gap at the top of head flashing, as this allows water that gets behind the siding to drain out.

We recommend the board conduct research well in advance of this project to help better define timing and costs (scope of work, material specifications, etc.). Further, we recommend that you hire a professional consultant (architect, engineer, building envelope consultant) to evaluate the existing windows, design and specify new installation requirements, assist with the bid process, and observe the construction to increase the likelihood of proper installation. We recommend all associations hire qualified consultants whenever they are considering having work performed on any high-risk building envelope components (roof, walls, windows, decks, exterior painting and caulking/sealant).

Note: Costs below factor for professional architectural details, specifications, and installation oversight. Any needed repair of the underlying structural framing can add significantly to the project cost. No observation of the critical underlying waterproofing details and flashing was part of our limited visual review.

Resource:
Fenestration & Glazing Industry Alliance (formerly AAMA): https://fgiaonline.org/

Useful Life:
40 years

Remaining Life:
17 years

Best Case: $ 136,000 Worst Case: $ 196,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 540 Exterior Doors - Replace **Quantity: ~ 1,152 SF, ea**

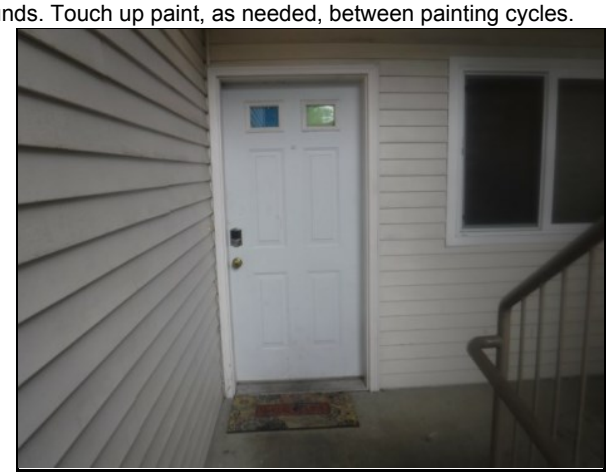
Location: The exterior building walls.
Funded?: No. The useful life is not predictable.
History:
Comments: The exterior doors are metal with metal frames. They appeared in stable condition. No widespread problems were observed or reported.

There is no predictable large-scale repair or replacement of doors.

Door painting is included as part of component #533. Inspect periodically, and repair as needed to maintain appearance, security, and operation with operating funds. Touch up paint, as needed, between painting cycles.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

Comp #: 541 Residential Decks - Repair/Replace **Quantity: ~ 1,152 SF, ela**

Location: The elevated decks.
Funded?: No. Useful life not currently predictable
History: None known.
Comments: The Park Place Declaration 7.1.1 defines decks as Limited Common Elements. Further, the Declaration 11.6 states that needed repairs and maintenance is to be conducted by the Board with costs for said work passed on to individual homeowners.

The surface appearance of the deck was of a urethane/elastomeric coating. The slope on the few decks observed during our limited visual review appeared adequate. The drip edge of the deck was open. A vertical portion of drip edge flashing was observed. We were unable to view if the coating was turned up the wall a few inches beneath the cladding to prevent water from entering behind the siding. The threshold of the door was not raised slightly above the deck surface to allow proper flashing. Venting on the underside of the deck, at the soffit below, was observed. Venting is a good practice as it can reduce problems from condensation. The railing connections did not attach through the deck surface. The fewer penetrations through the waterproof surface, the fewer opportunities there are for water penetration.

Re-application of the topcoat periodically is required to maintain its waterproof integrity - see the next component. If decks are not maintained adequately, significant repair/replacement expenses often occur.

Most deck coatings come with a warranty. A typical warranty is three to five years if properly maintained. Some warranties can be extended if the re-coating, and any other prescribed maintenance, is performed within a certain time frame. Check your warranty paperwork to determine the necessary timing of recoating and maintenance.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 542 Residential Decks - Recoat **Quantity: ~ 1.152 SF, elastomeric**

Location: The surfaces of the elevated decks.
Funded?: No. Work performed by Board, costs passed on to individual homeowners
History: none reported
Comments: The deck surface appearance was of a urethane/elastomeric coating in worn condition. The Park Place Declaration 7.1.1 defines decks as Limited Common Elements. Further, the Declaration 11.6 states that needed repairs and maintenance is to be conducted by the Board with costs for said work passed on to individual homeowners.

Re-application of the topcoat periodically is required to maintain its waterproof integrity. If decks are not maintained adequately, significant repair/replacement expenses often occur. Proactive coating cycles are cost effective. Extending the time between coatings runs the risk of increased costs due to wear on the second coat in addition to the topcoat and potential water penetration, which can damage the underlying components and greatly increase costs. Elastomeric deck surfaces are typically a three-coat system. The top coat loses thickness each year, primarily from exposure to ultraviolet sunlight, and to a lesser extent wear and tear. If more than the topcoat is allowed to wear off, the surface may still appear to be in 'good' condition, but the waterproof integrity may be compromised by nearly imperceptible "pin holes". Evaluate and repair, as needed, before recoating. Check with your specific manufacturer for cleaning instructions to avoid damage to the coating. Many manufacturers allow cleaning with a mild solution, such as soap and water, TSP, etc.

Most deck coatings come with a warranty. A typical warranty is three to five years if properly maintained. Some warranties can be extended if the re-coating is performed within a certain time frame. Check your warranty paperwork to determine the necessary timing of recoating and maintenance.

Resource:
https://deckandfloorcoating.com/how-to-maintain-your-waterproof-deck/

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 553 Stair Landings - Recoat **Quantity: ~ 360 SF, elastomeric**

Location: Stairway landings at each building
Funded?: Yes.
History: none reported
Comments: The surface appearance of stair landings was that of a urethane/elastomeric coating in generally worn condition.

Re-application of the topcoat periodically is required to maintain its waterproof integrity. If decks are not maintained adequately, significant repair/replacement expenses often occur. Proactive coating cycles are cost effective. Extending the time between coatings runs the risk of increased costs due to wear on the second coat in addition to the topcoat and potential water penetration, which can damage the underlying components and greatly increase costs. Elastomeric deck surfaces are typically a three-coat system. The top coat loses thickness each year, primarily from exposure to ultraviolet sunlight, and to a lesser extent wear and tear. If more than the topcoat is allowed to wear off, the surface may still appear to be in 'good' condition, but the waterproof integrity may be compromised by nearly imperceptible "pin holes". Evaluate and repair, as needed, before recoating. Check with your specific manufacturer for cleaning instructions to avoid damage to the coating. Many manufacturers allow cleaning with a mild solution, such as soap and water, TSP, etc.

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Resource:
https://deckandfloorcoating.com/how-to-maintain-your-waterproof-deck/

Useful Life:
5 years

Remaining Life:
0 years

Best Case: $ 6,100 Worst Case: $ 9,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 560 Exterior Lights - Repair/Replace **Quantity: ~ (44) recessed/security**
Location: Mounted to the building exteriors
Funded?: No. Useful life not predictable
History:
Comments: The exterior lights appeared in fair condition with no significant damage or deterioration during our visual observation. The lights were observed during daylight hours and are assumed to be in functional condition.

There is currently no expectation of large-scale or all-at-once replacement. No reserve funding currently recommended.

As routine maintenance, inspect, repair/replace individually and change bulbs, as needed.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 900 Plumbing - Systems Evaluation **Quantity: Supply, drains, etc.**

Location: Common plumbing
Funded?: Yes.
History: Unknown
Comments: Plumbing systems are generally considered by the engineering community to be life limited. The costs for replacement can vary widely depending upon the specifications, site conditions, unit repairs after install, hazardous material handling, etc. The Association has not reported any known condition, significant repair history, or prior forensic analyses.

The vast majority of the plumbing system is hidden, and not visible for review. A reserve study is limited to visual exterior observations and research for budget purposes.

We highly recommend the association engage a qualified firm to conduct a baseline study, evaluating the plumbing systems (supply, waste, any fire system pipe), including forensic wall openings, and test sections of piping. Additional testing may be further recommended. Patterns of significant repair expenses, leaks, poor flow, and sediments in the lines, should accelerate the need to address proactively and seek a detailed analysis to identify hidden conditions, project a remaining useful life, and recommendations for any needed repairs, maintenance, etc. The cost projected below is a budget allowance, and can vary depending on the complexity of systems, the number of wall or ceiling openings, etc. Prior to such an evaluation, there is no predictable basis at this time for large-scale plumbing repair or replacement expenses. Results should be included in the subsequent reserve study update.

Useful Life:
1 years

Remaining Life:
0 years

Best Case: $ 5,000 Worst Case: $ 7,000

Lower allowance Higher allowance

Cost Source: Budget Allowance: Kent Engineering 206-455-5121

Comp #: 901 Plumbing - Repair/Replace **Quantity: Supply & drain lines**

Location: Common plumbing

Funded?: No. Useful life not predictable, prior to systems evaluation

History:

Comments: Plumbing systems are generally considered by the engineering community to be life limited. The costs for systems replacement can vary widely depending upon the specifications, site conditions, unit repairs after install, hazardous material handling, etc. The Association has not reported any known condition, significant repair history, or prior forensic analyses.

See the previous component for a recommended plumbing evaluation. Until a qualified engineering firm has performed an evaluation of your plumbing systems, and provided specific recommendations, there is no predictable basis for system replacement reserve funding at this time.

Manufacturing defects become apparent from time to time, and certain site conditions (e.g. galvanic corrosion, dissimilar metals in contact with piping, chemical reactions, etc.) can contribute to premature deterioration of the plumbing systems.

Treat minor repairs as an ongoing maintenance expense.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 920 Electrical System - Maintain/Repair **Quantity: Main & branch systems**
Location: Common electrical
Funded?: No. Useful life is currently predictable
History: None known
Comments: The majority of the electrical system was not visible for review. Analysis of the electrical system, beyond a limited visual review, is not within the scope of a reserve study. No large issues or problems/defects were reported.

We recommend periodic evaluation by engineer / master electrician to evaluate the system(s) for safety, code-compliance, maintenance, repair & replacement needs. Any predictable expenses identified that meet the criteria for reserve funding can be included in the reserve plan. Some electrical system components are known to be life limited. Manufacturing defects become known from time to time, and certain site conditions can contribute to premature deterioration of electrical components.

Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 965 Fire Alarm Panel - Repair/Replace **Quantity: (4) Fire Lite, MS-4424B**
Location:
Funded?: Yes.
History:
Comments: The fire panels are Fire Lite, model #MS-4424B. Log notes indicated it has been inspected annually. Monitoring is provided by radio. No problems were observed or reported to us at the time of our site visit.

These are older panels. Our experience suggests that an approximate useful life for the panel for budget planning purposes is in the 12-20 year range. Discuss this component with your fire panel vendor or consultant to better determine the timing of the panel's repair or replacement needs, and to assess the overall system in relation to the current codes, and parts and technician availability to determine if upgrades or replacement will be required.

Fire alarm panels are required to be inspected annually, and the company performing the inspection is required to log/note it at the panel so that the fire department can view it. Fire departments can issue a fine if inspections are not performed. Fire panels are a critical life safety item that needs to be well maintained, following all requirements of the National Fire Protection Association (N.F.P.A.) and local codes.

The scope of work at the time of repairs can vary greatly based on the amount of work needed to bring the existing fire system to the level required by the fire/building codes in place at that time. Evaluating the entire fire prevention system is beyond the scope of a reserve study. Replace the panel proactively, and perform additional upgrades as required by code. The costs below are for the repair and/or replacement of the panel only.

Useful Life:
20 years

Remaining Life:
0 years

Best Case: $ 20,000 Worst Case: $ 28,000

Lower allowance Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 990 Ancillary Evaluations **Quantity: Specialty evaluations**

Location: To augment reserve planning.

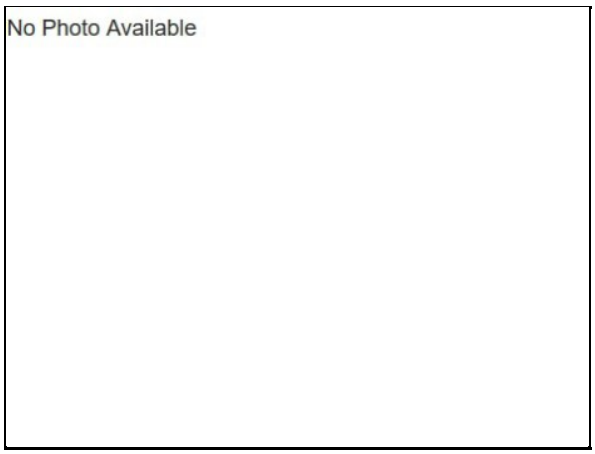
Funded?: No. Operating expense in year of occurrence

History:

Comments: A reserve study is a budget model, limited to visual exterior observations and research. As there are some key details and factors of buildings and grounds hidden from view, it is prudent to conduct additional ancillary evaluations from time to time. The purpose of these evaluations is to aid planning and assess for any basis of predictable funding that may be incorporated into the reserve study. We recommend that you periodically engage specialty evaluations in the following areas/fields as applicable to your property:

- Civil Engineering review: Soils & drainage, pavement specifications, below grade waterproofing
- Arborist: Trees & landscape - plan of care and life cycle forecast
- Legal Responsibility Matrix: Governing document review for clear expense delineation between the association and unit owners
- Legal Governing Document review periodically to incorporate changes in law over time and best practices
- Investment consultant: Maximize return and cash flow management while protecting principal
- Insurance policy & coverage review: Understand what is and is not covered and by whom (association vs. owner policies)
- Masonry consultant: Assess mortar condition and waterproofing, and provide forecast and recommendations
- Energy Audit: Typically conducted by a utility company to assess efficiency, and cost benefit to retrofit existing equipment

Note: There are several other important professional evaluations to augment reserve planning that are of heightened importance such as Life-Safety and/or Building Envelope & Structural issues, and Plumbing. Those components are addressed separately within this report.



Useful Life:

Remaining Life:

Best Case: Worst Case:

Cost Source:

Comp #: 995 Building Envelope & Structure **Quantity: Exterior weatherproofing**

Location: The exterior walls, underlying waterproofing components, and structural components.
Funded?: No. Operating expense: cyclical timing and cost may vary after initial baseline study
History:
Comments: A reserve study is a budget model, limited to visual exterior observations and research. It is outside the scope of our services, and the purpose of a reserve study, to assess the adequacy of the building envelope and structural performance, as many of the key details are hidden from view. Many associations are required to have annual inspections by a qualified engineer or architect to assess the physical condition of the improvements - check your governing documents for any such requirements. Any areas of concern observable from our limited exterior observations, and cycles for repair and replacement, have been stated in the various component field notes throughout this report. We highly recommend regular professional specialty inspections by a qualified engineering, architectural, or building envelope consulting firm to evaluate the performance of the building envelope and structural components.

The building envelope inspection typically covers at minimum the roofs, decks, siding, windows, doors, sealants/caulking, and flashings. As the building ages, and the waterproofing typically deteriorates, provide more frequent inspections. Building envelope inspections can be either visual or intrusive. An intrusive investigation (where finished materials are removed to view and better understand the underlying systems, conditions and performance) should be of greater benefit, since a visual review provides only a limited amount of information derived from surface observations.

In addition, we recommend the association annually survey residents to inquire about conditions only visible from the unit interiors that the association may not be aware of. Survey questions may include, but are not limited to, water intrusion/organic growth (particularly at windows and doors, skylights, water heaters, plumbing fixtures, etc), cracking or any other movement of drywall or structural members, and any other general building concerns. Such surveys can be key in identifying potential concerns early, thus increasing the opportunity to conduct repairs before advanced deterioration/damage and, therefore, larger expenses occur.

Useful Life:

Remaining Life:

Best Case: Worst Case:

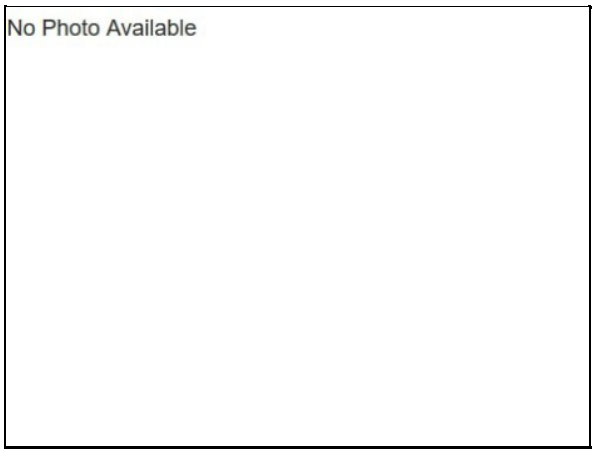
Cost Source:

Comp #: 997 Unit High-Risk Components **Quantity: Inspection & report**
Location: Analysis of in-unit high-risk components.
Funded?: No.
History: None known.
Comments: While this component does not meet the criteria for reserve funding, our experience in preparing over 15,000 reserve studies in the Pacific NW indicates that most communities would benefit from a review of the high-risk components within the individual units. High-risk components are those with a history of failure, often leading to significant damage of unit interiors and surrounding common area structural components. High-risk components include, but are not limited to water heaters, washer and dryer hookups, ice maker lines, plumbing angle stops, electrical panels, window and door waterproofing, etc. The Board of Directors is charged with a duty to set the standard of care in the community. Many governing documents and state law (RCW 64.90.440) governing Common Interest Communities provide guidance for those physical components that pose a heightened risk. Also consult with your insurance carrier and owners to minimize coverage gaps, and establish board level policies.

It is our strong recommendation that you factor the cost for a high-risk component review within an upcoming operating budget. Consult with an experienced firm specializing in such inspections and analysis. The cost for a study may be in the range of $50 - $200 per unit, depending upon the complexity and scope of work. High-risk component review is not within the scope of our services.

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

Comp #: 999 Reserve Study - Update **Quantity: Annual evaluation**
Location: Common elements
Funded?: No. Operating expense
History: FULL: 2023
Comments: Per Washington law (RCW), reserve studies are to be updated annually, with site inspections by an independent reserve study professional to occur no less than every three years to assess changes in condition (i.e., physical, economic, governmental, etc...) and the resulting effect on the community's long-term reserve plan. Most appropriately factored within operating budget, not as reserve component.

Thank you for choosing Association Reserves!
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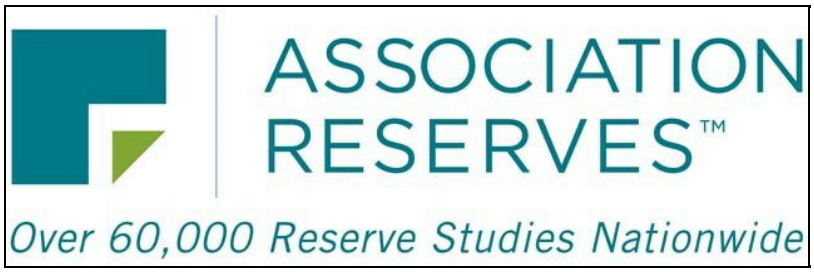
Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:
