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Report #: 53817-0

Beginning: January 1, 2025

Expires: December 31, 2025

**RESERVE STUDY** Update "With-Site-Visit"

September 26, 2024

# Welcome to your Reserve Study!

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.

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

In this Report, you will find three key results:

# • Component List

Unique to each property, the Component List serves as the foundation of the Reserve Study and details the scope and schedule of all necessary repairs & replacements.

# • Reserve Fund Strength

A calculation that measures how well the Reserve Fund has kept pace with the property's physical deterioration.

# • Reserve Funding Plan

A multi-year funding plan based on current Reserve Fund strength that allows for component repairs and replacements to be completed in a timely manner, with an emphasis on fairness and avoiding "catch-up" funding.

# Questions?

Please contact your Project Manager directly.



Planning For The Inevitable

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#### **Reserve Study Executive Summary**

With-Site-Visit

#### The Village Green HOA - Alleyways

Orting, WA

Report #: **53817-0** # of Units: 54

Level of Service: Update "With-Site-Visit"

January 1, 2025 through December 31, 2025

#### Findings & Recommendations

as of January 1,	2025
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Starting Reserve Balance	\$57,883
Current Fully Funded Reserve Balance	
Percent Funded	
Average Reserve (Deficit) or Surplus Per Unit	(\$1,035)
Recommended 2025 100% Monthly "Full Funding" Reserve Transfers	\$1,260
2025 "Baseline Funding" minimum to keep Reserves above \$0	\$1,120
Most Recent Budgeted Reserve Transfer Rate	

Risk of Special Assessment:

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

High Medium Low

#### **Economic Assumptions:**

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

- This is a Update "With-Site-Visit", meeting all requirements of the Revised Code of Washington (RCW). This study was prepared by, or under the supervision of a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 50.9 % Funded. This means the association's special assessment & deferred maintenance risk is currently Medium. 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 \$8,098 see Component Significance table.
- Based on this starting point and your anticipated future expenses, our recommendation is to budget Reserve Transfers to the 100% range as noted above. The 100% "Full" 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 transfer 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.



# Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Average Cost
Inventory Appendix			
120 Asphalt Phase 4 - Grind & Overlay	30	8	\$73,150
121 Asphalt Phase 4 - Repair & Seal	5	0	\$8,000
122 Asphalt Phase 6 - Grind & Overlay	30	12	\$73,500
124 Asphalt Phase 6 - Repair & Seal	5	0	\$8,050

### **4 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 funding is not "for the future". Ongoing Reserve transfers are intended to offset the ongoing, daily deterioration of your Reserve assets. Done well, a <u>stable</u>, <u>budgeted</u> 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 <u>Update With-Site-Visit Reserve Study</u>, we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and researched any well-established association

precedents. We performed an on-site inspection to evaluate your common areas, updating and adjusting your Reserve Component List as appropriate.

### Which Physical Assets are Funded by Reserves?

There is a national-standard three-part test to determine which projects should appear in a Reserve Component List. First, it must be a common area maintenance obligation. Second, both the need and schedule of a component's project can be reasonably anticipated. Third, the project's total cost is material to the client, can be reasonably anticipated, and includes all direct and related costs. A project cost is commonly considered *material* if it is more than 0.5% to 1% of the total annual budget. This limits Reserve components to major, predictable expenses. Within this framework, it is inappropriate to include *lifetime* components,



RESERVE COMPONENT "THREE-PART TEST"

unpredictable expenses (such as damage due to natural disasters and/or insurable events), and expenses more appropriately handled from the Operational budget.

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

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

How do we establish Current Repair/Replacement Cost Estimates?

In this order...

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

### How much Reserves are enough?

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

Adequacy is measured in a two-step process:

Each year, the value of deterioration at the

- 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.



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

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

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

#### How much should we transfer to Reserves?



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 <u>sufficient cash</u> to perform your Reserve projects on time. Second, a <u>stable</u> rate of ongoing Reserve transfers is desirable because it keeps these naturally irregular expenses from unsettling the budget.

Reserve transfers that are <u>evenly distributed</u> 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 <u>fiscally responsible</u> and safe for Board members to recommend to their association. Remember, it is the Board's <u>job</u> to provide for the ongoing care of the common areas. Board members invite liability exposure when Reserve transfers are inadequate to offset ongoing common area deterioration.

#### What is our Recommended Funding Goal?

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



**FUNDING OBJECTIVES** 

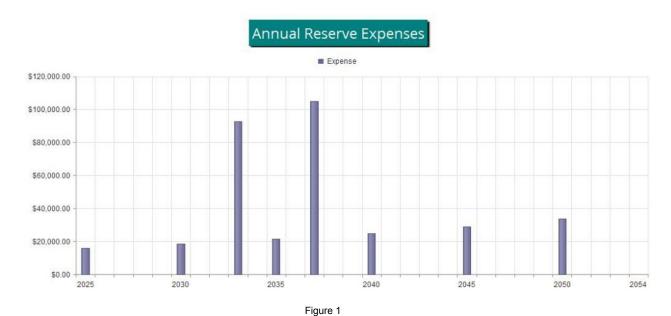
Allowing the Reserves to fall close to zero, but not below zero, is called <u>Baseline Funding</u>. Doing so allows the Reserve Fund to drop into the 0 - 30% range, where there is a high risk of special assessments & deferred maintenance. Since Baseline Funding still provides for the timely execution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

### **Site Inspection Notes**

During our site visit on 9/25/2024, we visually inspected all visible common areas, while compiling a photographic inventory, noting: general exterior observations, 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.

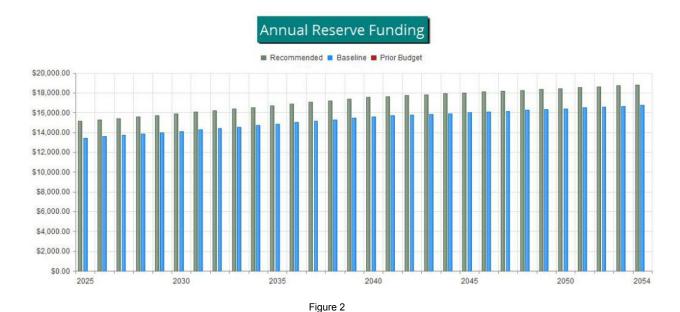


#### **Reserve Fund Status**

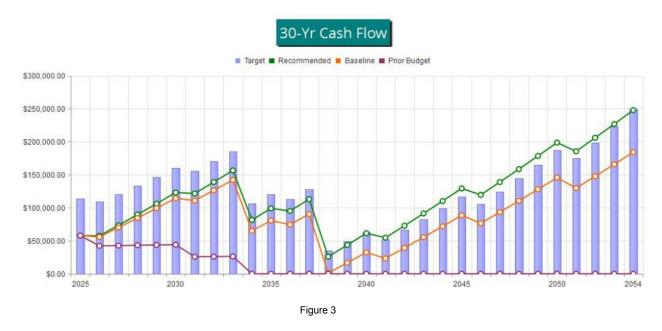
The starting point for our financial analysis is your Reserve Fund balance, projected to be \$57,883 as-of the start of your Fiscal Year on 1/1/2025. As of that date, your Fully Funded Balance is computed to be \$113,793 (see Fully Funded Balance Table). This figure represents the deteriorated value of your common area components.

### Recommended Funding Plan

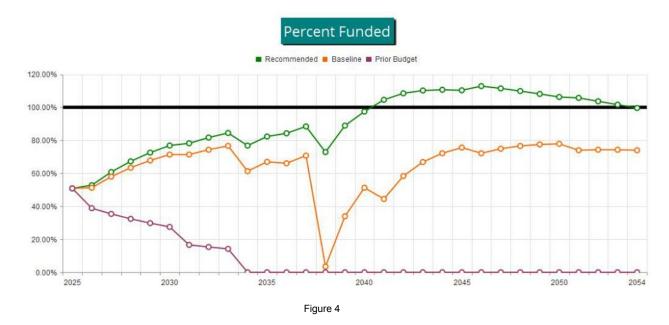
Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted transfers of \$1,260 per month this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both the 30-yr Summary Table and the Cash Flow Detail Table.



The following chart shows your Reserve balance under our recommended Full Funding Plan, an alternate Baseline Funding Plan, and at your current budgeted transfer rate (assumes future increases), compared to your always-changing Fully Funded Balance target.



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.



#### **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.

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

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

<u>30-Yr Reserve Plan Summary</u> 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.

<u>30-Year Income/Expense Detail</u> 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.



					Current Co	ost Estimate
#	Component	Quantity	Useful Life	Rem. Useful Life	Best Case	Worst Case
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	~19500 SF	30	8	\$58,500	\$87,800
121	Asphalt Phase 4 - Repair & Seal	~19500 SF	5	0	\$6,200	\$9,800
122	Asphalt Phase 6 - Grind & Overlay	~19600 SF	30	12	\$58,800	\$88,200
124	Asphalt Phase 6 - Repair & Seal	~19600 SF	5	0	\$6,300	\$9,800

<sup>4</sup> Total Funded Components



#	Component	Current Cost Estimate	X	Effective Age	1	Useful Life	=	Fully Funded Balance
	Inventory Appendix							
120	Asphalt Phase 4 - Grind & Overlay	\$73,150	Х	22	/	30	=	\$53,643
121	Asphalt Phase 4 - Repair & Seal	\$8,000	Х	5	/	5	=	\$8,000
122	Asphalt Phase 6 - Grind & Overlay	\$73,500	Х	18	/	30	=	\$44,100
124	Asphalt Phase 6 - Repair & Seal	\$8,050	Х	5	/	5	=	\$8,050
								\$113,793



# Component		Useful Life (yrs)	Current Cost Estimate	Deterioration Cost/Yr	Deterioration Significance
Inventory Appendix					
120 Asphalt Phase 4 - Grind	& Overlay	30	\$73,150	\$2,438	30.11 %
121 Asphalt Phase 4 - Repa	r & Seal	5	\$8,000	\$1,600	19.76 %
122 Asphalt Phase 6 - Grind	& Overlay	30	\$73,500	\$2,450	30.25 %
124 Asphalt Phase 6 - Repa	r & Seal	5	\$8,050	\$1,610	19.88 %
4 Total Funded Componer	ts			\$8,098	100.00 %



2050

2051

2052

2053

2054

\$198,815

\$185,583

\$206,084

\$226,885

\$247,988

\$187,083

\$175,547

\$198,802

\$223,294

\$249,077

106.3 %

105.7 %

103.7 %

101.6 %

99.6 %

scal Year		rt: 2025		Interest:		1.00 %	Inflation:	3.00 %
ocai i cai		11. 2020		interest.		1.00 /0	ii iiiauori.	3.00 /0
trength: as	Res	Fiscal Year Sta	art Date		Projected F	Reserve Balar	nce Changes	
Fully		Percent	Special Assmt		Reserve	Loan or Special		Reserve
Balance	Year	Funded	Risk		Funding	Assmts		Expenses
\$113,79	2025	50.9 %	Medium	Ū	\$15,120	\$0		\$16,050
\$109,01	2026	52.8 %	Medium		\$15,271	\$0		\$0
\$120,879	2027	60.8 %	Medium	1.00 %	\$15,424	\$0	\$815	\$0
\$133,35	2028	67.3 %	Medium	1.00 %	\$15,578	\$0	\$979	\$0
\$146,470	2029 \$	72.5 %	Low	1.00 %	\$15,734	\$0	\$1,146	\$0
\$160,25	2030 \$	76.8 %	Low	1.00 %	\$15,891	\$0	\$1,223	\$18,606
\$155,56	2031 \$	78.2 %	Low	1.00 %	\$16,050	\$0	\$1,303	\$0
\$170,192	2032 \$	81.7 %	Low	1.00 %	\$16,211	\$0	\$1,478	\$0
\$185,550	2033 \$	84.4 %	Low	1.00 %	\$16,373	\$0	\$1,191	\$92,664
\$106,240	2034	76.8 %	Low	1.00 %	\$16,537	\$0	\$903	\$0
\$120,310	2035	82.3 %	Low	1.00 %	\$16,702	\$0	\$970	\$21,570
\$112,919	2036	84.2 %	Low	1.00 %	\$16,869	\$0	\$1,040	\$0
\$127,85	2037 \$	88.4 %	Low	1.00 %	\$17,038	\$0	\$695	\$104,793
\$35,64	2038	72.9 %	Low	1.00 %	\$17,208	\$0	\$347	\$0
\$48,96	2039	88.9 %	Low	1.00 %	\$17,380	\$0	•	\$0
\$63,048	2040	97.4 %	Low	1.00 %	\$17,554	\$0	•	\$25,005
\$52,18	2041	104.6 %	Low	0.50 %	\$17,642	\$0	\$637	\$0
\$67,130	2042	108.5 %	Low	0.50 %	\$17,730	\$0	\$821	\$0
\$82,93	2043	110.2 %	Low	0.50 %	\$17,818	\$0		\$0
\$99,620	2044 \$	110.6 %	Low	0.50 %	\$17,908	\$0		\$0
\$117,23	2045 \$	110.3 %	Low	0.50 %	\$17,997	\$0	\$1,244	\$28,988
\$105,959	2046 \$	112.8 %	Low	0.50 %	\$18,087	\$0	\$1,292	\$0
\$124,65	2047 \$	111.5 %	Low	0.50 %	\$18,178	\$0		\$0
\$144,37	2048 \$	109.9 %	Low		\$18,268	\$0	. ,	\$0
\$165,17	2049 \$	108.1 %	Low	0.50 %	\$18,360	\$0	\$1,886	\$0
	0050	40000						

Low

Low

Low

Low

Low

0.50 %

0.50 %

0.50 %

0.50 %

0.50 %

\$18,452

\$18,544

\$18,637

\$18,730

\$18,823

\$0

\$0

\$0

\$0

\$0

\$1,921

\$1,958

\$2,164

\$2,373

\$2,586

\$33,605

\$0

\$0

\$0

\$0

# **30-Year Reserve Plan Summary (Alternate Funding Plan)**

Report # 53817-0 With-Site-Visit

Fiscal Year Start: 2025 Interest: 1.00 % Inflation: 3.00 %

Reserve Fund Strength: as-of Fiscal Year Start Date Projected Reserve Balance Changes

					% Increase				
	Starting	Fully		Special	In Annual		Loan or		
	Reserve	Funded	Percent	Assmt	Reserve	Reserve	Special	Interest	Reserve
Year	Balance	Balance	Funded	Risk	Funding	Funding	Assmts	Income	Expenses
2025	\$57,883	\$113,793	50.9 %	Medium	0.00 %	\$13,440	\$0	\$568	\$16,050
2026	\$55,841	\$109,017	51.2 %	Medium	1.00 %	\$13,574	\$0	\$629	\$0
2027	\$70,045	\$120,879	57.9 %	Medium	1.00 %	\$13,710	\$0	\$773	\$0
2028	\$84,527	\$133,355	63.4 %	Medium	1.00 %	\$13,847	\$0	\$919	\$0
2029	\$99,293	\$146,470	67.8 %	Medium	1.00 %	\$13,986	\$0	\$1,068	\$0
2030	\$114,347	\$160,252	71.4 %	Low	1.00 %	\$14,126	\$0	\$1,126	\$18,606
2031	\$110,992	\$155,565	71.3 %	Low	1.00 %	\$14,267	\$0	\$1,187	\$0
2032	\$126,446	\$170,192	74.3 %	Low	1.00 %	\$14,409	\$0	\$1,343	\$0
2033	\$142,198	\$185,556	76.6 %	Low	1.00 %	\$14,554	\$0	\$1,036	\$92,664
2034	\$65,123	\$106,246	61.3 %	Medium	1.00 %	\$14,699	\$0	\$728	\$0
2035	\$80,551	\$120,316	66.9 %	Medium	1.00 %	\$14,846	\$0	\$775	\$21,570
2036	\$74,602	\$112,919	66.1 %	Medium	1.00 %	\$14,995	\$0	\$825	\$0
2037	\$90,422	\$127,853	70.7 %	Low	1.00 %	\$15,145	\$0	\$458	\$104,793
2038	\$1,231	\$35,644	3.5 %	High	1.00 %	\$15,296	\$0	\$89	\$0
2039	\$16,616	\$48,963	33.9 %	Medium	1.00 %	\$15,449	\$0	\$245	\$0
2040	\$32,309	\$63,048	51.2 %	Medium	1.00 %	\$15,603	\$0	\$277	\$25,005
2041	\$23,185	\$52,180	44.4 %	Medium	0.50 %	\$15,681	\$0	\$312	\$0
2042	\$39,178	\$67,130	58.4 %	Medium	0.50 %	\$15,760	\$0	\$473	\$0
2043	\$55,411	\$82,931	66.8 %	Medium	0.50 %	\$15,839	\$0	\$636	\$0
2044	\$71,885	\$99,620	72.2 %	Low	0.50 %	\$15,918	\$0	\$802	\$0
2045	\$88,605	\$117,235	75.6 %	Low	0.50 %	\$15,997	\$0	\$825	\$28,988
2046	\$76,440	\$105,959	72.1 %	Low	0.50 %	\$16,077	\$0	\$849	\$0
2047	\$93,366	\$124,655	74.9 %	Low	0.50 %	\$16,158	\$0	\$1,019	\$0
2048	\$110,543	\$144,378	76.6 %	Low	0.50 %	\$16,239	\$0	\$1,192	\$0
2049	\$127,973	\$165,171	77.5 %	Low	0.50 %	\$16,320	\$0	\$1,368	\$0
2050	\$145,661	\$187,083	77.9 %	Low	0.50 %	\$16,401	\$0	\$1,377	\$33,605
2051	\$129,834	\$175,547	74.0 %	Low	0.50 %	\$16,483	\$0	\$1,387	\$0
2052	\$147,704	\$198,802	74.3 %	Low	0.50 %	\$16,566	\$0	\$1,567	\$0
2053	\$165,837	\$223,294	74.3 %	Low	0.50 %	\$16,649	\$0	\$1,750	\$0
2054	\$184,235	\$249,077	74.0 %	Low	0.50 %	\$16,732	\$0	\$1,935	\$0



# 30-Year Income/Expense Detail

## Report # 53817-0 With-Site-Visit

	Fiscal Year	2025	2026	2027	2028	2029
	Starting Reserve Balance	\$57,883	\$57,530	\$73,455	\$89,695	\$106,252
	Annual Reserve Funding	\$15,120	\$15,271	\$15,424	\$15,578	\$15,734
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$577	\$655	\$815	\$979	\$1,146
	Total Income	\$73,580	\$73,455	\$89,695	\$106,252	\$123,133
#	Component					
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
121	Asphalt Phase 4 - Repair & Seal	\$8,000	\$0	\$0	\$0	\$0
122	Asphalt Phase 6 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
124	Asphalt Phase 6 - Repair & Seal	\$8,050	\$0	\$0	\$0	\$0
	Total Expenses	\$16,050	\$0	\$0	\$0	\$0
	Ending Reserve Balance	\$57,530	\$73,455	\$89,695	\$106,252	\$123,133

	Fiscal Year	2030	2031	2032	2033	2034
	Starting Reserve Balance	\$123,133	\$121,641	\$138,994	\$156,682	\$81,581
	Annual Reserve Funding	\$15,891	\$16,050	\$16,211	\$16,373	\$16,537
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$1,223	\$1,303	\$1,478	\$1,191	\$903
	Total Income	\$140,247	\$138,994	\$156,682	\$174,246	\$99,021
#	Component					
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	\$0	\$0	\$0	\$92,664	\$0
121	Asphalt Phase 4 - Repair & Seal	\$9,274	\$0	\$0	\$0	\$0
122	Asphalt Phase 6 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
124	Asphalt Phase 6 - Repair & Seal	\$9,332	\$0	\$0	\$0	\$0
	Total Expenses	\$18,606	\$0	\$0	\$92,664	\$0
	Ending Reserve Balance	\$121,641	\$138,994	\$156,682	\$81,581	\$99,021

	Fiscal Year	2035	2036	2037	2038	2039
	Starting Reserve Balance	\$99,021	\$95,123	\$113,032	\$25,971	\$43,526
	Annual Reserve Funding	\$16,702	\$16,869	\$17,038	\$17,208	\$17,380
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$970	\$1,040	\$695	\$347	\$525
	Total Income	\$116,693	\$113,032	\$130,764	\$43,526	\$61,431
#	Component					
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
121	Asphalt Phase 4 - Repair & Seal	\$10,751	\$0	\$0	\$0	\$0
122	Asphalt Phase 6 - Grind & Overlay	\$0	\$0	\$104,793	\$0	\$0
124	Asphalt Phase 6 - Repair & Seal	\$10,819	\$0	\$0	\$0	\$0
	Total Expenses	\$21,570	\$0	\$104,793	\$0	\$0
	Ending Reserve Balance	\$95,123	\$113,032	\$25,971	\$43,526	\$61,431

	Fiscal Year	2040	2041	2042	2043	2044
	Starting Reserve Balance	\$61,431	\$54,559	\$72,837	\$91,388	\$110,214
	Annual Reserve Funding	\$17,554	\$17,642	\$17,730	\$17,818	\$17,908
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$580	\$637	\$821	\$1,008	\$1,197
	Total Income	\$79,565	\$72,837	\$91,388	\$110,214	\$129,319
#	Component					
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
121	Asphalt Phase 4 - Repair & Seal	\$12,464	\$0	\$0	\$0	\$0
122	Asphalt Phase 6 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
124	Asphalt Phase 6 - Repair & Seal	\$12,542	\$0	\$0	\$0	\$0
	Total Expenses	\$25,005	\$0	\$0	\$0	\$0
	Ending Reserve Balance	\$54,559	\$72,837	\$91,388	\$110,214	\$129,319

	Fiscal Year	2045	2046	2047	2048	2049
	Starting Reserve Balance	\$129,319	\$119,572	\$138,951	\$158,616	\$178,569
	Annual Reserve Funding	\$17,997	\$18,087	\$18,178	\$18,268	\$18,360
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$1,244	\$1,292	\$1,487	\$1,685	\$1,886
	Total Income	\$148,560	\$138,951	\$158,616	\$178,569	\$198,815
#	Component					
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
121	Asphalt Phase 4 - Repair & Seal	\$14,449	\$0	\$0	\$0	\$0
122	Asphalt Phase 6 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
124	Asphalt Phase 6 - Repair & Seal	\$14,539	\$0	\$0	\$0	\$0
	Total Expenses	\$28,988	\$0	\$0	\$0	\$0
	Ending Reserve Balance	\$119,572	\$138,951	\$158,616	\$178,569	\$198,815

	Fiscal Year	2050	2051	2052	2053	2054
	Starting Reserve Balance	\$198,815	\$185,583	\$206,084	\$226,885	\$247,988
	Annual Reserve Funding	\$18,452	\$18,544	\$18,637	\$18,730	\$18,823
	Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
	Interest Earnings	\$1,921	\$1,958	\$2,164	\$2,373	\$2,586
	Total Income	\$219,188	\$206,084	\$226,885	\$247,988	\$269,397
#	Component					
	Inventory Appendix					
120	Asphalt Phase 4 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
121	Asphalt Phase 4 - Repair & Seal	\$16,750	\$0	\$0	\$0	\$0
122	Asphalt Phase 6 - Grind & Overlay	\$0	\$0	\$0	\$0	\$0
124	Asphalt Phase 6 - Repair & Seal	\$16,855	\$0	\$0	\$0	\$0
	Total Expenses	\$33,605	\$0	\$0	\$0	\$0
	Ending Reserve Balance	\$185,583	\$206,084	\$226,885	\$247,988	\$269,397



#### **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 transfers 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 transfers 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. Christian Colunga, company President, is a credentialed Reserve Specialist (#208). 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 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) The project is the Association's present obligation. 2) The need and schedule of a project can be reasonably anticipated. 3) The total cost of the project is material, can be estimated and includes all direct & related costs. 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.

#### **Inventory Appendix**

Quantity: ~Limited SF

#### Comp #: 100 Concrete - Repair/Replace

Location: The center of the asphalt alleyways

Funded?: No. Annual repair needs are below the reserves funding threshold.

History: None known

Comments: The concrete for this component consists of a narrow strip of concrete in the center of the alleys. No issues were noted with the concrete. The picture below does not represent phasing of this component.

The annual repair needs are below the reserves funding threshold (1% or more of total annual expenses), and should be factored into the operating budget. 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:

https://mrsc.org/explore-topics/public-works/streets,-road-and-sidewalks/sidewalk-construction-maintenance-and-repair https://www.sakrete.com/blog/post/5-key-considerations-for-small-concrete-repairs/http://www.concretenetwork.com/cold-weather-concrete/weather.html

Useful Life:

Remaining Life:



Best Case: Worst Case:

Cost Source:

Comp #: 120 Asphalt Phase 4 - Grind & Overlay

Location: The community alleyways in Division 4

Funded?: Yes.

History: 2003: Installed

Comments: At the time of our site visit, we observed that the asphalt was free of linear cracking, alligator cracks, potholes, and other signs of wear. No issues were observed with the asphalt. The picture below does not represent phasing of this component.

Quantity: ~19500 SF

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: 8 years



Best Case: \$ 58,500 Worst Case: \$ 87,800

Comp #: 121 Asphalt Phase 4 - Repair & Seal

Location: The community alleyways in Division 4

Funded?: Yes.

History: 2017: Sealcoated

Comments: At the time of our site visit, we observed that the asphalt sealcoat was late life. Some sealcoating was present but starting to wear away. The picture below does not represent phasing of this component.

Quantity: ~19500 SF

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: 0 years



Best Case: \$ 6,200 Worst Case: \$ 9,800

Comp #: 122 Asphalt Phase 6 - Grind & Overlay

Location: The community alleyways in Division 6

Funded?: Yes.

History: 2007: Installed

Comments: At the time of our site visit, we observed that the asphalt was free of linear cracking, alligator cracks, potholes, and other signs of wear. No issues were observed with the asphalt. The picture below does not represent phasing of this component.

Quantity: ~19600 SF

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: 12 years



Best Case: \$ 58,800 Worst Case: \$ 88,200

Comp #: 124 Asphalt Phase 6 - Repair & Seal

Location: The community alleyways in Division 6

Funded?: Yes.

History: 2017: Sealcoated

Comments: At the time of our site visit, we observed that the asphalt sealcoat was late life. Some sealcoating was present but starting to wear away. The picture below does not represent phasing of this component.

Quantity: ~19600 SF

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: 0 years



Best Case: \$ 6,300 Worst Case: \$ 9,800

#### Comp #: 999 Reserve Study - Update

Location: The community common and limited common elements.

Funded?: No. Costs are best handled with operating funds.

History: 2025: WSV

Comments: Per Washington State 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 reserves plan. Reserve Study costs are most appropriately factored within the annual operating budget, not as a reserves component.

Useful Life:

Remaining Life:



Quantity: Annual update

Best Case: Worst Case:

Cost Source: