

Washington Office
505 South 336th St., Ste 620
Federal Way, WA 98003

TEL 253/661-5437
FAX 253/661-5430
arwa@reservestudy.com
www.reservestudy.com

**ASSOCIATION
RESERVES**

Est. 1986

Reserve Studies for Community Associations

Corporate Office
Calabasas, CA

Regional Offices
Phoenix, AZ
San Francisco, CA
Denver, CO
Honolulu, HI
Las Vegas, NV
Miami, FL

Update “With Site-Visit” Reserve Study



Sunrise Ridge/The Highlands at Somerset Hill

Tumwater, WA

Report #: 23122-1

For Period Beginning: January 1, 2017

Expires: December 31, 2017

Date Prepared: August 16, 2016

Hello, and welcome to your Reserve Study!

We don't want you to be surprised. This Report is designed to help you anticipate, and prepare for, the major common area expenses your association will face. Inside you will find:

- 1) **The Reserve Component List** (the “Scope and Schedule” of your Reserve projects) – telling you what your association is Reserving for, what condition they are in now, and what they'll cost to replace.
- 2) **An Evaluation of your current Reserve Fund Size and Strength** (Percent Funded). This tells you your financial starting point, revealing your risk of deferred maintenance and special assessments.
- 3) **A Recommended Multi-Year Reserve Funding Plan**, answering the question... “What do we do now?”

More Questions?

Visit our website at www.ReserveStudy.com or call us at:

253/661-5437

Relax, it's from



Table of Contents

3- Minute Executive Summary	i
Reserve Study Summary	i
Reserve Component List – Table 1	ii
Introduction, Objectives, and Methodology	1
Which Physical Assets are Funded by Reserves?	2
How do we establish Useful Life and Remaining Useful Life estimates?	2
How do we establish Current Repair/Replacement Cost Estimates?	2
How much Reserves are enough?	3
How much should we contribute?	4
What is our Recommended Funding Goal?	4
Projected Expenses	6
Expense Graph – Figure 1	6
Reserve Fund Status & Recommended Funding Plan	7
Funding Plan Graph – Figure 2	7
Cash Flow Graph – Figure 3	8
% Funded Graph – Figure 4	8
Table Descriptions	9
Reserve Component List Detail – Table 2	10
Contribution & Fund Breakdown – Table 3	11
Component Significance – Table 4	12
30 Year Reserve Plan Summary – Table 5	13
30 Year Reserve Plan Year by Year Detail – Table 6	14
Accuracy, Limitations, and Disclosures	20
Terms and Definitions	21
Component Details	Appendix

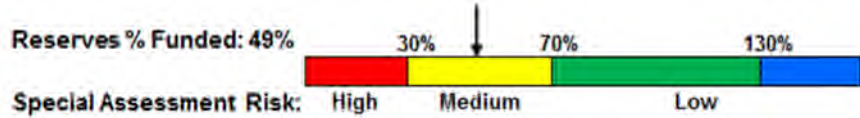
3- Minute Executive Summary

Association: Sunrise Ridge/The Highlands at Somerset Hill #: 23122-1
Location: Tumwater, WA # of Units: 195
Report Period: January 1, 2017 through December 31, 2017

Findings/Recommendations as-of 1/1/2017:

Projected Starting Reserve Balance:	\$94,000
Current Fully Funded Reserve Balance:	\$191,489
Average Reserve Deficit (Surplus) Per Unit:.....	\$500
100% 2017 Monthly “Full Funding” Contributions:.....	\$3,385
Baseline contributions (min to keep Reserves above \$0:	\$2,940
Recommended 2017 Special Assessment:.....	\$0

Most Recent Budgeted Reserve Contribution Rate:\$3,385



Economic Assumptions:

Net Annual “After Tax” Interest Earnings Accruing to Reserves..... 1.00%
Annual Inflation Rate..... 3.00%

- This is an “Update With-Site-Visit” Reserve Study, based on our site inspection on June 3, 2016 and meets or exceeds all requirements of the RCW. This study was prepared by a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 49% 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.
- Based on this starting point and your anticipated future expenses, our recommendation is to maintain your Reserve contributions at the current rate (about \$3,385/month) which is the 100% level as noted above. The 100% “Full” contribution rate is designed to achieve this funding objective *by the end* of our 30-year report scope. No assets appropriate for Reserve designation were excluded. See photo appendix for component details and the basis of our assumptions.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost Estimate
100	Concrete/Curbs - Repair/Replace	5	2	\$7,500
120	Asphalt Roads - Resurface	35	23	\$262,000
121	Asphalt - Clean/Repair/Sealcoat	5	0	\$23,900
140	Double Rail Fence - Replace	20	7	\$10,950
142	Wood/Cyclone Fencing - Replace	20	8	\$12,750
143	Wood Fencing - Rpr/Clean/Stain	4	3	\$7,000
144	Cyclone Fencing - Replace	30	17	\$12,000
160	Street Lights - Replace	20	8	\$15,650
170	Landscape - Refurbish	5	3	\$7,500
175	Storm Drainage Ponds - Cleaning	4	2	\$10,000
176	Stormwater Vault/Filters - Cln/Repl	2	0	\$3,500
178	Road Drains - Inspect/Clean	3	1	\$5,000
185	Irrigation System - Repair/Replace	5	4	\$5,000
200	Entry Monuments - Refurbish	20	8	\$10,000
201	Required Signage - Replace	20	9	\$6,400
205	Mailboxes - Replace	20	8	\$21,000
220	Bus Shelters - Repair/Replace	20	6	\$6,000
17	Total Funded Components			

Note 1: a Useful Life of "N/A" means a one-time expense, not expected to repeat.

Note 2: Yellow highlighted line items are expected to require attention in the initial year, green highlighted items are expected to occur within the first five years.

Cross reference component numbers with photographic inventory appendix.

Introduction



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

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



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

Methodology



For this [Update With-Site-Visit](#) Reserve Study, we started with a review of your prior Reserve Study, then looked into recent Reserve expenditures, evaluated how expenditures are handled (ongoing maintenance vs Reserves), and

researched any well-established association precedents. We 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 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.



SPECIAL ASSESSMENT RISK

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 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 June 3, 2016, 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. We met with a board member during the site visit and had follow-up contact with Association Management. We were provided information on past projects, current concerns and future plans. We were also informed which items are typically being funded from the Operational maintenance budget, not Reserves.

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. Your *first five years* of projected Reserve expenses total \$85,868. Adding the next five years, your *first ten years* of projected Reserve expenses are \$278,363. Please be aware of your near-term expenses, which we are able to project more accurately than the more distant projections.

The figure below summarizes the projected future expenses at your association as defined by your Reserve Component List. A summary of these expenses are shown in Table 5, while details of the projects that make up these expenses are shown in Table 6.

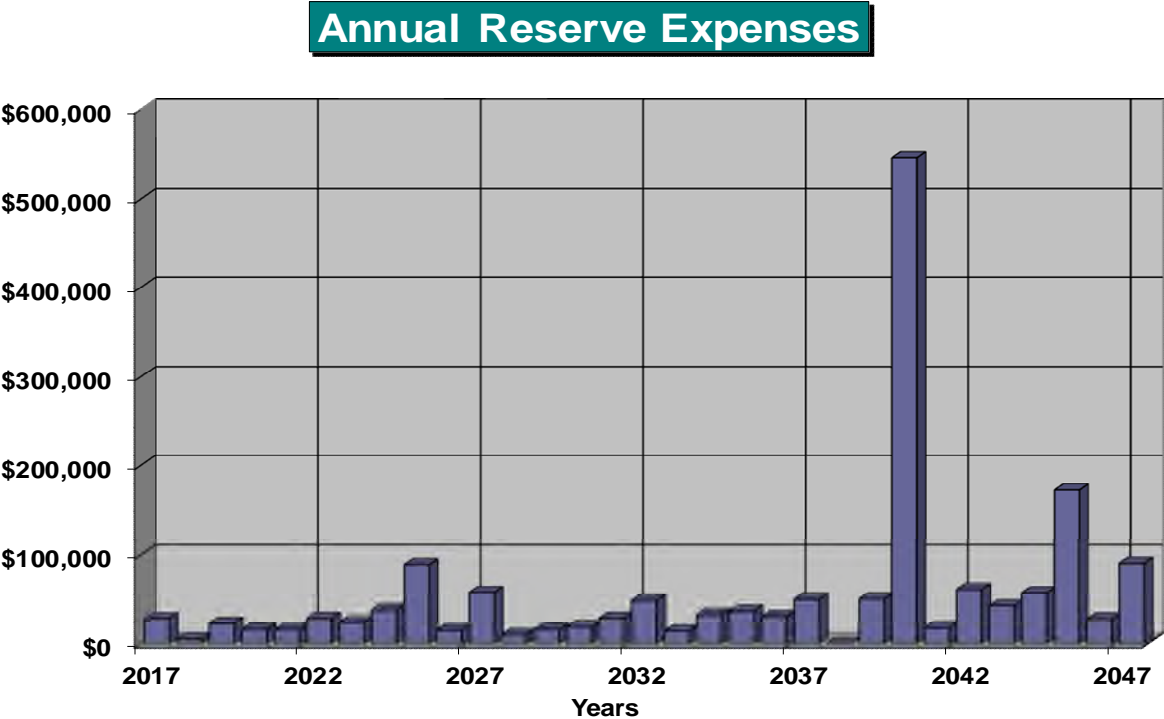


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$94,000 as-of the start of your Fiscal Year on January 1, 2017. As of January 1, 2017, your Fully Funded Balance is computed to be \$191,489 (see Table 3). This figure represents the deteriorated value of your common area components. Comparing your Reserve Balance to your Fully Funded Balance indicates your Reserves are 49% Funded. Across the country approx 13% of associations in this range experience special assessments or deferred maintenance.

Recommended Funding Plan

Based on your current Percent Funded and your near-term and long-term Reserve needs, we are recommending budgeted contributions of \$3,385/month this Fiscal Year. The overall 30-yr plan, in perspective, is shown below. This same information is shown numerically in both Table 5 and Table 6.

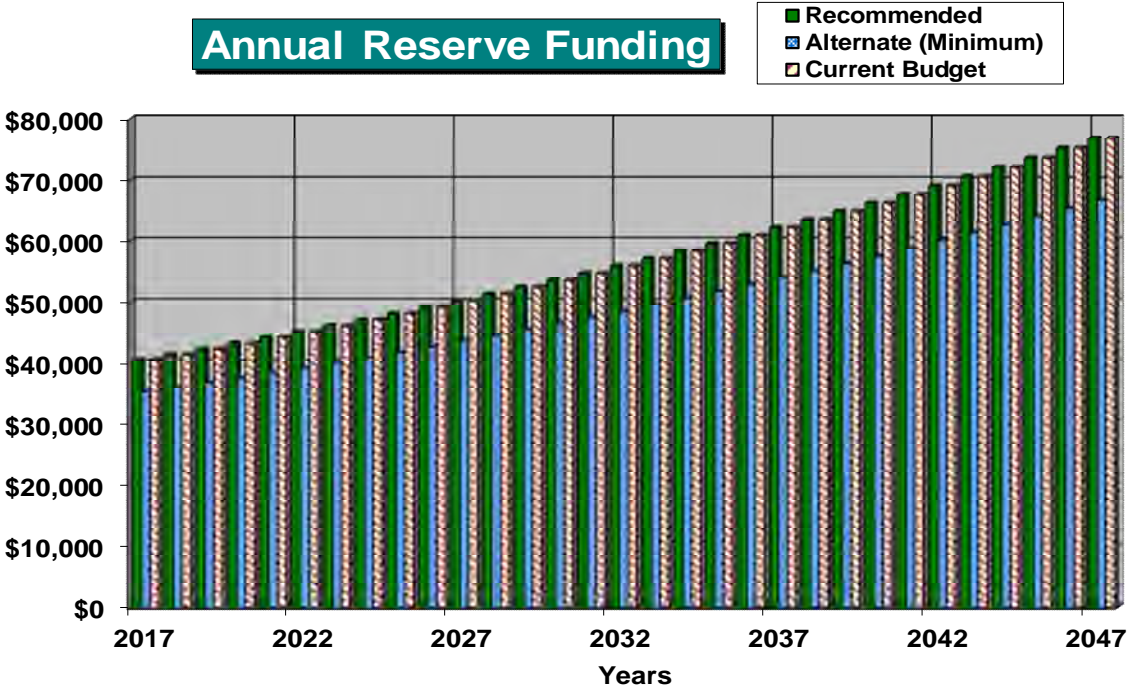


Figure 2

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

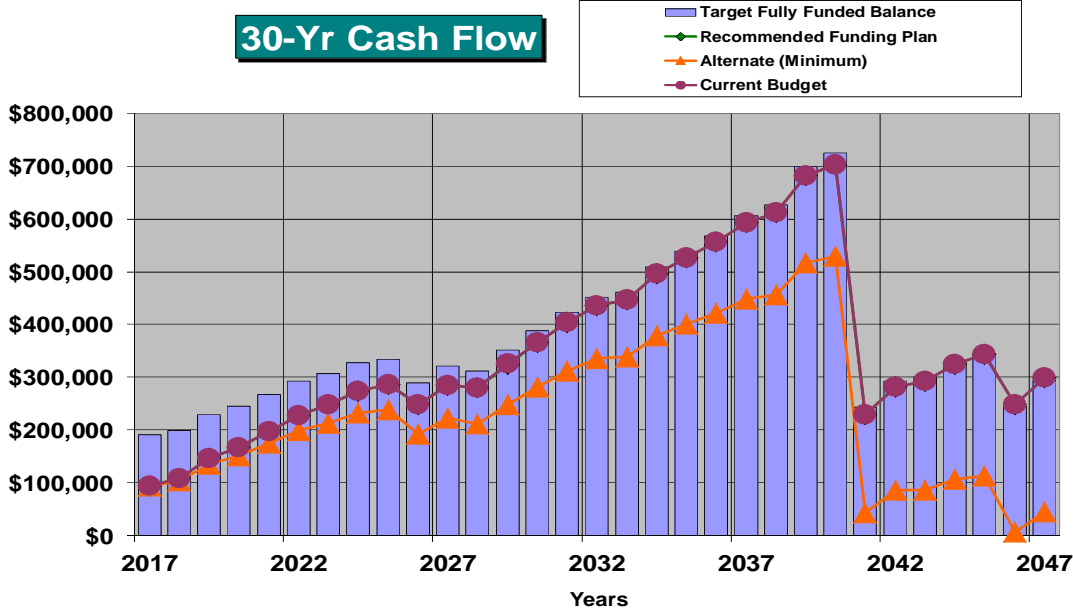


Figure 3

This figure shows this same information, plotted on a [Percent Funded](#) scale.

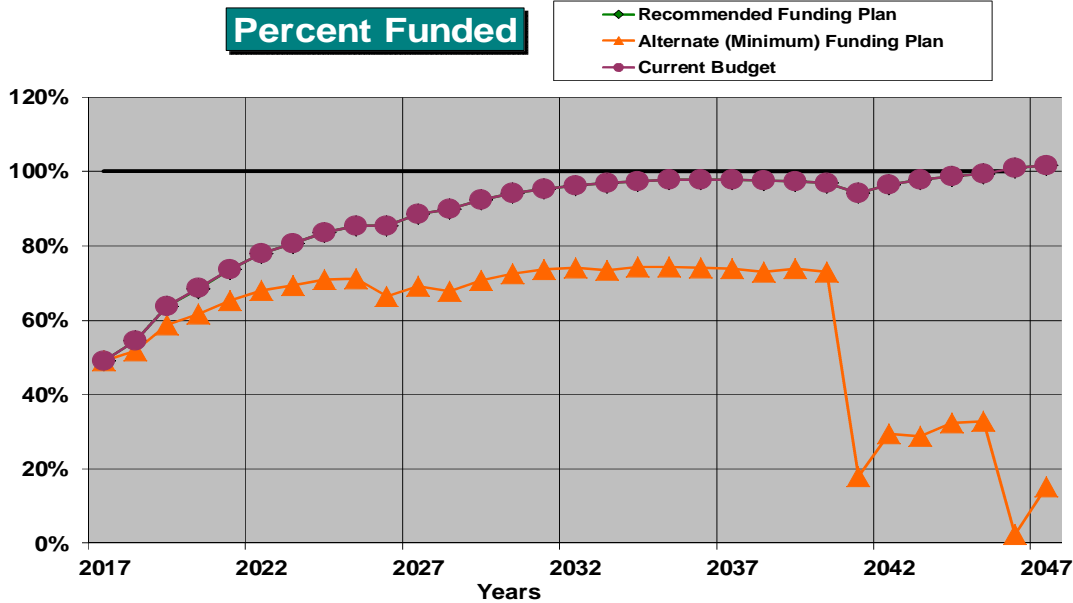


Figure 4

Table Descriptions

The tabular information in this Report is broken down into six tables.

Table 1 is a summary of your Reserve Components (your Reserve Component List), the information found in Table 2.

Table 2 is your Reserve Component List, which forms the foundation of this Reserve Study. This table represents the information from which all other tables are derived.

Table 3 shows the calculation of your Fully Funded Balance, the measure of your current Reserve component deterioration. For each component, the Fully Funded Balance is the fraction of life used up multiplied by its estimated Current Replacement Cost.

Table 4 shows the significance of each component to Reserve needs of the association, helping you see which components have more (or less) influence than others on your total Reserve contribution rate. The deterioration cost/yr of each component is calculated by dividing the estimated Current Replacement Cost by Useful Life, then that component's percentage of the total is displayed.

Table 5: This table 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 for each year.

Table 6: This table shows the cash flow detail for the next 30 years. This table makes it possible to see which components are projected to require repair or replacement each year, and the size of those individual expenses.

Table 2: Reserve Component List Detail**23122-1**

#	Component	Quantity	Useful Life	Rem. Useful Life	[--- Current Cost Estimate ---]	
					Best Case	Worst Case
100	Concrete/Curbs - Repair/Replace	~ 36,000 GSF sdwlks/curbs	5	2	\$5,000	\$10,000
120	Asphalt Roads - Resurface	~ 116,400 GSF	35	23	\$233,000	\$291,000
121	Asphalt - Clean/Repair/Sealcoat	~ 116,400 GSF	5	0	\$21,000	\$26,800
140	Double Rail Fence - Replace	~730 LF, wood board	20	7	\$8,800	\$13,100
142	Wood/Cyclone Fencing - Replace	~850 LF	20	8	\$10,200	\$15,300
143	Wood Fencing - Rpr/Clean/Stain	~1,580 LF	4	3	\$6,000	\$8,000
144	Cyclone Fencing - Replace	~400 Linear Feet	30	17	\$10,000	\$14,000
160	Street Lights - Replace	~ (25) metal assemblies	20	8	\$12,500	\$18,800
170	Landscape - Refurbish	Grass, shrubs, trees, etc	5	3	\$5,000	\$10,000
175	Storm Drainage Ponds - Cleaning	(5) storm ponds	4	2	\$8,000	\$12,000
176	Stormwater Vault/Filters - Cln/Repl	8'X16' vault, (15) fltr	2	0	\$2,500	\$4,500
178	Road Drains - Inspect/Clean	~(40) catchbasins	3	1	\$4,000	\$6,000
185	Irrigation System - Repair/Replace	Controls, pipes, etc.	5	4	\$4,000	\$6,000
200	Entry Monuments - Refurbish	(4), wood/metal/stone	20	8	\$8,000	\$12,000
201	Required Signage - Replace	~ (80) metal signs	20	9	\$5,600	\$7,200
205	Mailboxes - Replace	~(14) metal clusters	20	8	\$18,200	\$23,800
220	Bus Shelters - Repair/Replace	(3) 10' X 6' wood shelter	20	6	\$4,500	\$7,500
17	Total Funded Components					

Table 3: Fully Funded Balance**23122-1**

#	Component	Current Cost Estimate	X	Effective Age	/	Useful Life	=	Fully Funded Balance
100	Concrete/Curbs - Repair/Replace	\$7,500	X	3	/	5	=	\$4,500
120	Asphalt Roads - Resurface	\$262,000	X	12	/	35	=	\$89,829
121	Asphalt - Clean/Repair/Sealcoat	\$23,900	X	5	/	5	=	\$23,900
140	Double Rail Fence - Replace	\$10,950	X	13	/	20	=	\$7,118
142	Wood/Cyclone Fencing - Replace	\$12,750	X	12	/	20	=	\$7,650
143	Wood Fencing - Rpr/Clean/Stain	\$7,000	X	1	/	4	=	\$1,750
144	Cyclone Fencing - Replace	\$12,000	X	13	/	30	=	\$5,200
160	Street Lights - Replace	\$15,650	X	12	/	20	=	\$9,390
170	Landscape - Refurbish	\$7,500	X	2	/	5	=	\$3,000
175	Storm Drainage Ponds - Cleaning	\$10,000	X	2	/	4	=	\$5,000
176	Stormwater Vault/Filters - Cln/Repl	\$3,500	X	2	/	2	=	\$3,500
178	Road Drains - Inspect/Clean	\$5,000	X	2	/	3	=	\$3,333
185	Irrigation System - Repair/Replace	\$5,000	X	1	/	5	=	\$1,000
200	Entry Monuments - Refurbish	\$10,000	X	12	/	20	=	\$6,000
201	Required Signage - Replace	\$6,400	X	11	/	20	=	\$3,520
205	Mailboxes - Replace	\$21,000	X	12	/	20	=	\$12,600
220	Bus Shelters - Repair/Replace	\$6,000	X	14	/	20	=	\$4,200
								\$191,489

Table 4: Component Significance**23122-1**

#	Component	Useful Life	Current Cost Estimate	Deterioration Cost/yr	Deterioration Significance
100	Concrete/Curbs - Repair/Replace	5	\$7,500	\$1,500	5.3%
120	Asphalt Roads - Resurface	35	\$262,000	\$7,486	26.3%
121	Asphalt - Clean/Repair/Sealcoat	5	\$23,900	\$4,780	16.8%
140	Double Rail Fence - Replace	20	\$10,950	\$548	1.9%
142	Wood/Cyclone Fencing - Replace	20	\$12,750	\$638	2.2%
143	Wood Fencing - Rpr/Clean/Stain	4	\$7,000	\$1,750	6.1%
144	Cyclone Fencing - Replace	30	\$12,000	\$400	1.4%
160	Street Lights - Replace	20	\$15,650	\$783	2.7%
170	Landscape - Refurbish	5	\$7,500	\$1,500	5.3%
175	Storm Drainage Ponds - Cleaning	4	\$10,000	\$2,500	8.8%
176	Stormwater Vault/Filters - Cln/Repl	2	\$3,500	\$1,750	6.1%
178	Road Drains - Inspect/Clean	3	\$5,000	\$1,667	5.9%
185	Irrigation System - Repair/Replace	5	\$5,000	\$1,000	3.5%
200	Entry Monuments - Refurbish	20	\$10,000	\$500	1.8%
201	Required Signage - Replace	20	\$6,400	\$320	1.1%
205	Mailboxes - Replace	20	\$21,000	\$1,050	3.7%
220	Bus Shelters - Repair/Replace	20	\$6,000	\$300	1.1%
17	Total Funded Components			\$28,470	100.0%

Table 5: 30-Year Reserve Plan Summary

23122-1

Fiscal Year Start: 01/01/17

Interest: 1.0% Inflation: 3.0%

**Reserve Fund Strength Calculations
(All values as of Fiscal Year Start Date)**

**Projected Reserve Balance
Changes**

Year	Starting Reserve Balance	Fully Funded Balance	Percent Funded	Special Assmt Risk	Reserve Contribs.	Loans or Special Assmts	Interest Income	Reserve Expenses
2017	\$94,000	\$191,489	49.1%	Med	\$40,620	\$0	\$1,011	\$27,400
2018	\$108,231	\$198,336	54.6%	Med	\$41,493	\$0	\$1,270	\$5,150
2019	\$145,844	\$229,185	63.6%	Med	\$42,385	\$0	\$1,566	\$22,279
2020	\$167,517	\$244,223	68.6%	Med	\$43,297	\$0	\$1,821	\$15,845
2021	\$196,789	\$267,273	73.6%	Low	\$44,228	\$0	\$2,123	\$15,194
2022	\$227,946	\$292,646	77.9%	Low	\$45,178	\$0	\$2,378	\$27,707
2023	\$247,795	\$306,882	80.7%	Low	\$46,150	\$0	\$2,604	\$23,284
2024	\$273,265	\$327,120	83.5%	Low	\$47,142	\$0	\$2,794	\$37,450
2025	\$285,751	\$334,425	85.4%	Low	\$48,156	\$0	\$2,665	\$89,181
2026	\$247,391	\$289,749	85.4%	Low	\$49,191	\$0	\$2,658	\$14,874
2027	\$284,365	\$321,382	88.5%	Low	\$50,249	\$0	\$2,823	\$56,982
2028	\$280,455	\$311,741	90.0%	Low	\$51,329	\$0	\$3,027	\$9,690
2029	\$325,120	\$351,704	92.4%	Low	\$52,432	\$0	\$3,451	\$15,683
2030	\$365,320	\$387,910	94.2%	Low	\$53,560	\$0	\$3,847	\$18,357
2031	\$404,370	\$423,703	95.4%	Low	\$54,711	\$0	\$4,197	\$27,983
2032	\$435,295	\$451,947	96.3%	Low	\$55,888	\$0	\$4,412	\$48,141
2033	\$447,453	\$461,606	96.9%	Low	\$57,089	\$0	\$4,713	\$13,640
2034	\$495,616	\$508,461	97.5%	Low	\$58,317	\$0	\$5,110	\$32,231
2035	\$526,812	\$538,986	97.7%	Low	\$59,570	\$0	\$5,412	\$35,751
2036	\$556,043	\$568,254	97.9%	Low	\$60,851	\$0	\$5,742	\$29,810
2037	\$592,827	\$606,017	97.8%	Low	\$62,159	\$0	\$6,019	\$49,487
2038	\$611,518	\$626,188	97.7%	Low	\$63,496	\$0	\$6,462	\$0
2039	\$681,476	\$699,525	97.4%	Low	\$64,861	\$0	\$6,922	\$49,819
2040	\$703,440	\$725,385	97.0%	Low	\$66,256	\$0	\$4,659	\$545,697
2041	\$228,657	\$242,953	94.1%	Low	\$67,680	\$0	\$2,550	\$17,279
2042	\$281,609	\$292,054	96.4%	Low	\$69,135	\$0	\$2,872	\$60,510
2043	\$293,106	\$299,888	97.7%	Low	\$70,622	\$0	\$3,088	\$42,054
2044	\$324,762	\$328,809	98.8%	Low	\$72,140	\$0	\$3,341	\$56,532
2045	\$343,712	\$345,582	99.5%	Low	\$73,691	\$0	\$2,957	\$172,510
2046	\$247,849	\$245,356	101.0%	Low	\$75,275	\$0	\$2,733	\$26,865

Table 6: 30-Year Income/Expense Detail (yrs 0 through 4)**23122-1**

Fiscal Year	2017	2018	2019	2020	2021
Starting Reserve Balance	\$94,000	\$108,231	\$145,844	\$167,517	\$196,789
Annual Reserve Contribution	\$40,620	\$41,493	\$42,385	\$43,297	\$44,228
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,011	\$1,270	\$1,566	\$1,821	\$2,123
Total Income	\$135,631	\$150,994	\$189,795	\$212,634	\$243,140
# Component					
100 Concrete/Curbs - Repair/Replace	\$0	\$0	\$7,957	\$0	\$0
120 Asphalt Roads - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Clean/Repair/Sealcoat	\$23,900	\$0	\$0	\$0	\$0
140 Double Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood/Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
143 Wood Fencing - Rpr/Clean/Stain	\$0	\$0	\$0	\$7,649	\$0
144 Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
160 Street Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$8,195	\$0
175 Storm Drainage Ponds - Cleaning	\$0	\$0	\$10,609	\$0	\$0
176 Stormwater Vault/Filters - Cln/Repl	\$3,500	\$0	\$3,713	\$0	\$3,939
178 Road Drains - Inspect/Clean	\$0	\$5,150	\$0	\$0	\$5,628
185 Irrigation System - Repair/Replace	\$0	\$0	\$0	\$0	\$5,628
200 Entry Monuments - Refurbish	\$0	\$0	\$0	\$0	\$0
201 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
220 Bus Shelters - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$27,400	\$5,150	\$22,279	\$15,845	\$15,194
Ending Reserve Balance:	\$108,231	\$145,844	\$167,517	\$196,789	\$227,946

Table 6: 30-Year Income/Expense Detail (yrs 5 through 9)**23122-1**

Fiscal Year	2022	2023	2024	2025	2026
Starting Reserve Balance	\$227,946	\$247,795	\$273,265	\$285,751	\$247,391
Annual Reserve Contribution	\$45,178	\$46,150	\$47,142	\$48,156	\$49,191
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,378	\$2,604	\$2,794	\$2,665	\$2,658
Total Income	\$275,502	\$296,549	\$323,201	\$336,572	\$299,240
# Component					
100 Concrete/Curbs - Repair/Replace	\$0	\$0	\$9,224	\$0	\$0
120 Asphalt Roads - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Clean/Repair/Sealcoat	\$27,707	\$0	\$0	\$0	\$0
140 Double Rail Fence - Replace	\$0	\$0	\$13,467	\$0	\$0
142 Wood/Cyclone Fencing - Replace	\$0	\$0	\$0	\$16,151	\$0
143 Wood Fencing - Rpr/Clean/Stain	\$0	\$0	\$8,609	\$0	\$0
144 Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
160 Street Lights - Replace	\$0	\$0	\$0	\$19,825	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$9,501	\$0
175 Storm Drainage Ponds - Cleaning	\$0	\$11,941	\$0	\$0	\$0
176 Stormwater Vault/Filters - Cln/Repl	\$0	\$4,179	\$0	\$4,434	\$0
178 Road Drains - Inspect/Clean	\$0	\$0	\$6,149	\$0	\$0
185 Irrigation System - Repair/Replace	\$0	\$0	\$0	\$0	\$6,524
200 Entry Monuments - Refurbish	\$0	\$0	\$0	\$12,668	\$0
201 Required Signage - Replace	\$0	\$0	\$0	\$0	\$8,351
205 Mailboxes - Replace	\$0	\$0	\$0	\$26,602	\$0
220 Bus Shelters - Repair/Replace	\$0	\$7,164	\$0	\$0	\$0
Total Expenses	\$27,707	\$23,284	\$37,450	\$89,181	\$14,874
Ending Reserve Balance:	\$247,795	\$273,265	\$285,751	\$247,391	\$284,365

Table 6: 30-Year Income/Expense Detail (yrs 10 through 14)**23122-1**

Fiscal Year	2027	2028	2029	2030	2031
Starting Reserve Balance	\$284,365	\$280,455	\$325,120	\$365,320	\$404,370
Annual Reserve Contribution	\$50,249	\$51,329	\$52,432	\$53,560	\$54,711
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,823	\$3,027	\$3,451	\$3,847	\$4,197
Total Income	\$337,437	\$334,810	\$381,004	\$422,727	\$463,278
# Component					
100 Concrete/Curbs - Repair/Replace	\$0	\$0	\$10,693	\$0	\$0
120 Asphalt Roads - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Clean/Repair/Sealcoat	\$32,120	\$0	\$0	\$0	\$0
140 Double Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood/Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
143 Wood Fencing - Rpr/Clean/Stain	\$0	\$9,690	\$0	\$0	\$0
144 Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
160 Street Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$11,014	\$0
175 Storm Drainage Ponds - Cleaning	\$13,439	\$0	\$0	\$0	\$15,126
176 Stormwater Vault/Filters - Cln/Repl	\$4,704	\$0	\$4,990	\$0	\$5,294
178 Road Drains - Inspect/Clean	\$6,720	\$0	\$0	\$7,343	\$0
185 Irrigation System - Repair/Replace	\$0	\$0	\$0	\$0	\$7,563
200 Entry Monuments - Refurbish	\$0	\$0	\$0	\$0	\$0
201 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
220 Bus Shelters - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$56,982	\$9,690	\$15,683	\$18,357	\$27,983
Ending Reserve Balance:	\$280,455	\$325,120	\$365,320	\$404,370	\$435,295

Table 6: 30-Year Income/Expense Detail (yrs 15 through 19)**23122-1**

Fiscal Year	2032	2033	2034	2035	2036
Starting Reserve Balance	\$435,295	\$447,453	\$495,616	\$526,812	\$556,043
Annual Reserve Contribution	\$55,888	\$57,089	\$58,317	\$59,570	\$60,851
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,412	\$4,713	\$5,110	\$5,412	\$5,742
Total Income	\$495,595	\$509,256	\$559,042	\$591,794	\$622,636
# Component					
100 Concrete/Curbs - Repair/Replace	\$0	\$0	\$12,396	\$0	\$0
120 Asphalt Roads - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Clean/Repair/Sealcoat	\$37,235	\$0	\$0	\$0	\$0
140 Double Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood/Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
143 Wood Fencing - Rpr/Clean/Stain	\$10,906	\$0	\$0	\$0	\$12,275
144 Cyclone Fencing - Replace	\$0	\$0	\$19,834	\$0	\$0
160 Street Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$12,768	\$0
175 Storm Drainage Ponds - Cleaning	\$0	\$0	\$0	\$17,024	\$0
176 Stormwater Vault/Filters - Cln/Repl	\$0	\$5,616	\$0	\$5,959	\$0
178 Road Drains - Inspect/Clean	\$0	\$8,024	\$0	\$0	\$8,768
185 Irrigation System - Repair/Replace	\$0	\$0	\$0	\$0	\$8,768
200 Entry Monuments - Refurbish	\$0	\$0	\$0	\$0	\$0
201 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
220 Bus Shelters - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$48,141	\$13,640	\$32,231	\$35,751	\$29,810
Ending Reserve Balance:	\$447,453	\$495,616	\$526,812	\$556,043	\$592,827

Table 6: 30-Year Income/Expense Detail (yrs 20 through 24)**23122-1**

Fiscal Year	2037	2038	2039	2040	2041
Starting Reserve Balance	\$592,827	\$611,518	\$681,476	\$703,440	\$228,657
Annual Reserve Contribution	\$62,159	\$63,496	\$64,861	\$66,256	\$67,680
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$6,019	\$6,462	\$6,922	\$4,659	\$2,550
Total Income	\$661,005	\$681,476	\$753,259	\$774,354	\$298,888
# Component					
100 Concrete/Curbs - Repair/Replace	\$0	\$0	\$14,371	\$0	\$0
120 Asphalt Roads - Resurface	\$0	\$0	\$0	\$517,080	\$0
121 Asphalt - Clean/Repair/Sealcoat	\$43,166	\$0	\$0	\$0	\$0
140 Double Rail Fence - Replace	\$0	\$0	\$0	\$0	\$0
142 Wood/Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
143 Wood Fencing - Rpr/Clean/Stain	\$0	\$0	\$0	\$13,815	\$0
144 Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
160 Street Lights - Replace	\$0	\$0	\$0	\$0	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$14,802	\$0
175 Storm Drainage Ponds - Cleaning	\$0	\$0	\$19,161	\$0	\$0
176 Stormwater Vault/Filters - Cln/Repl	\$6,321	\$0	\$6,706	\$0	\$7,115
178 Road Drains - Inspect/Clean	\$0	\$0	\$9,581	\$0	\$0
185 Irrigation System - Repair/Replace	\$0	\$0	\$0	\$0	\$10,164
200 Entry Monuments - Refurbish	\$0	\$0	\$0	\$0	\$0
201 Required Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
220 Bus Shelters - Repair/Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$49,487	\$0	\$49,819	\$545,697	\$17,279
Ending Reserve Balance:	\$611,518	\$681,476	\$703,440	\$228,657	\$281,609

Table 6: 30-Year Income/Expense Detail (yrs 25 through 29)**23122-1**

Fiscal Year	2042	2043	2044	2045	2046
Starting Reserve Balance	\$281,609	\$293,106	\$324,762	\$343,712	\$247,849
Annual Reserve Contribution	\$69,135	\$70,622	\$72,140	\$73,691	\$75,275
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,872	\$3,088	\$3,341	\$2,957	\$2,733
Total Income	\$353,617	\$366,816	\$400,243	\$420,359	\$325,858
# Component					
100 Concrete/Curbs - Repair/Replace	\$0	\$0	\$16,660	\$0	\$0
120 Asphalt Roads - Resurface	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Clean/Repair/Sealcoat	\$50,041	\$0	\$0	\$0	\$0
140 Double Rail Fence - Replace	\$0	\$0	\$24,323	\$0	\$0
142 Wood/Cyclone Fencing - Replace	\$0	\$0	\$0	\$29,171	\$0
143 Wood Fencing - Rpr/Clean/Stain	\$0	\$0	\$15,549	\$0	\$0
144 Cyclone Fencing - Replace	\$0	\$0	\$0	\$0	\$0
160 Street Lights - Replace	\$0	\$0	\$0	\$35,806	\$0
170 Landscape - Refurbish	\$0	\$0	\$0	\$17,159	\$0
175 Storm Drainage Ponds - Cleaning	\$0	\$21,566	\$0	\$0	\$0
176 Stormwater Vault/Filters - Cln/Repl	\$0	\$7,548	\$0	\$8,008	\$0
178 Road Drains - Inspect/Clean	\$10,469	\$0	\$0	\$11,440	\$0
185 Irrigation System - Repair/Replace	\$0	\$0	\$0	\$0	\$11,783
200 Entry Monuments - Refurbish	\$0	\$0	\$0	\$22,879	\$0
201 Required Signage - Replace	\$0	\$0	\$0	\$0	\$15,082
205 Mailboxes - Replace	\$0	\$0	\$0	\$48,046	\$0
220 Bus Shelters - Repair/Replace	\$0	\$12,940	\$0	\$0	\$0
Total Expenses	\$60,510	\$42,054	\$56,532	\$172,510	\$26,865
Ending Reserve Balance:	\$293,106	\$324,762	\$343,712	\$247,849	\$298,993

Accuracy, Limitations, and Disclosures

Washington disclosures, per RCW:

This 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.

Because we have no control over future events, we do not expect that all the events we anticipate will occur as planned. We expect that inflationary trends will continue, and we expect Reserve funds to continue to earn interest, so we believe that reasonable estimates for these figures are much more accurate than ignoring these economic realities. We can control measurements, which we attempt to establish within 5% accuracy through a combination of on-site measurements, drawings, and satellite imagery. The starting Reserve Balance and interest rate earned on deposited Reserve funds that you provided to us were considered reliable and were not confirmed independently. We have considered the association's representation of current and historical Reserve projects reliable, and we have considered the representations made by its vendors and suppliers to also be accurate and reliable. Component Useful Life, Remaining Useful Life, and Current Cost estimates assume a stable economic environment and lack of natural disasters.

Because the physical condition of your components, the association's Reserve balance, the economic environment, and legislative environment change each year, this Reserve Study is by nature a "one-year" document. Because a long-term perspective improves the accuracy of near-term planning, this Report projects expenses for the next 30 years. It is our recommendation and that of the Financial Accounting Standards Board (FASB) that your Reserve Study be updated each year as part of the annual budget process.

Association Reserves and its employees have no ownership, management, or other business relationships with the client other than this Reserve Study engagement. James D. Talaga R.S., company president, is a credentialed Reserve Specialist (#66). All work done by Association Reserves WA, LLC is performed under his Responsible Charge. There are no material issues to our knowledge that have not been disclosed to the client that would cause a distortion of the association's situation.

Component quantities indicated in this Report were found in prior Reserve Studies unless otherwise noted. No destructive or intrusive testing was performed. This Report and this site inspection were accomplished only for Reserve budget purposes (to help identify and address the normal deterioration of properly built and installed components with predictable life expectancies). The Funding Plan in this Report was developed using the cash-flow methodology to achieve the specified Funding Objective.

Association Reserves' 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.

$$\text{FFB} = (\text{Current Cost} \times \text{Effective Age}) / \text{Useful Life}$$

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 Table 6.

Interest: Interest earnings on Reserve Funds are calculated using the average balance for the year (taking into account income and expenses through the year) and compounded monthly using the rate defined in the Executive Summary. Annual interest earning assumption appears in the Executive Summary.

Percent Funded: The ratio, at a particular point in time (the first day of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage.

Remaining Useful Life (RUL): The estimated time, in years, that a common area component can be expected to continue to serve its intended function.

Useful Life (UL): The estimated time, in years, that a common area component can be expected to serve its intended function.

Component Details

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

- 1) Common are maintenance, repair & replacement reasonability
- 2) Components must have a limited life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically ½ to 1% of annual operating expenses).

Some components are recommended for reserve funding, while others are not. The components that meet these criteria in our judgment are shown with corresponding maintenance, repair or replacement cycles to the left of the photo (UL = Useful Life or how often the project is expected to occur, RUL = Remaining Useful Life or how many years from our reporting period) and a representative market cost range termed “Best Cost” and “Worst Cost” below the photo. There are many factors that can result in a wide variety of potential cost; we are attempting to represent a market average for budget purposes. Where there is no UL, the component is expected to be a one-time expense. Where no pricing, the component deemed inappropriate for Reserve Funding.

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Inventory Appendix

Comp #: 100 Concrete/Curbs - Repair/Replace **Quantity:** ~ 36,000 GSF
sdwlks/curbs

Funded?: Yes.

History: None known Skyline Ridge Ln, Sunrise Vista Lane & Rockcreek Lane (Tracts I, J & K)

Location: Sidewalks/curbing/gutters at private roads: Vista Verde Ln SW, Skyline Ridge Ln SW, Serenity Ln SW, Sunrise Vista Lane & Rockcreek Lane

Evaluation: No major cracking/damaged noted of concrete rolled curbs and gutters noted. No trip hazards were observed. Repair any trip and fall hazards (1/2" or larger displacement) immediately to ensure safety.

In our experience, larger repair/replacement expenses emerge as the community ages. Although difficult to predict timing, cost and scope, we suggest a funding allowance to supplement the operating/maintenance budget for periodic larger repairs. Adjust as conditions, actual expense history indicates within future reserve study updates.

As routine maintenance, inspect regularly, pressure wash for appearance and repair promptly as needed to prevent water penetrating into the base and causing further damage. Monitor tree roots nearby; consult with arborist for best practice.

Useful Life:
5 years

Remaining Life:
2 years



Best Case: \$5,000
Lower allowance

Worst Case: \$10,000
Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 120 Asphalt Roads - Resurface **Quantity:** ~ 116,400 GSF
Funded?: Yes.
History: None known
Location: Vista Verde Ln SW, Skyline Ridge Ln SW, Serenity Ln SW, Sunrise Vista Lane and Rockcreek Lane

Evaluation: We noted a couple local cracks and raveling but not widespread or significant at this time. No history of emulsion seal coating in this community, however we are recommending at this time (see next component) and extending useful life of this component to reflect this. Regular cycles of seal coating, along with needed repairs is a best practice for the long term care of lower traffic asphalt areas 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.

Plan for large scale resurface/overlay as shown here. Resurfacing is typically one of the larger expense items in a reserve study. When need to resurface is apparent within a couple of years, consult with geotechnical engineer for recommendations, specifications / scope of work and project oversight.

As routine maintenance, keep surfaces clean and free of debris, ensure that drains are free flowing, repair cracks, and clean oil stains promptly. Assuming proactive maintenance, plan to resurface at roughly the time frame below. Note: paved access pads for storm ponds are minimal with no major resurface anticipated.

Useful Life:
35 years

Remaining Life:
23 years



Best Case: \$233,000 Worst Case: \$291,000
 Lower allowance Higher allowance
 Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 121 Asphalt - Clean/Repair/Sealcoat Quantity: ~ 116,400 GSF

Funded?: Yes.

History: None known

Location: Vista Verde Ln SW, Skyline Ridge Ln SW, Serenity Ln SW, Sunrise Vista Lane and Rockcreek Lane

Evaluation: These surfaces have not had sealcoating in the past. We recommend regular cycles of seal coating, along with needed repairs is a best practice for the long term care of lower traffic asphalt areas to extend the useful life. The total life of the asphalt (see previous component) has been extended assuming cyclical sealcoating as shown is followed.

The State of Washington Department of Transportation (WSDOT) recommends regular cycles of seal coating for the long-term care of asphalt paving with low traffic and low speed. 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.

Useful Life:
5 years

Remaining Life:
0 years



Best Case: \$21,000
Lower allowance

Worst Case: \$26,800
Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 140 Double Rail Fence - Replace **Quantity:** ~730 LF, wood board
Funded?: Yes.
History: None known
Location: Common areas: entry area tracts, street corners, ponds, etc.
Evaluation: Some local wear but no major instability observed. Reported to us in June 2016, this fencing will be repaired/cleaned/stained in 2016 subsequent to our site visit. Sturdy pressure treated 6"x6" posts with 2" X 8" double horizontal boards.

As routine maintenance, inspect regularly for any damage and repair as needed. Avoid contact with ground and surrounding vegetation. Plan to replace at roughly the time frame below. Note: this same type of fencing with cyclone attached is included separately under component #142.

Useful Life:
20 years

Remaining Life:
7 years



Best Case: \$8,800 Worst Case: \$13,100
 Lower allowance Higher allowance
 Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 142 Wood/Cyclone Fencing - Replace Quantity: ~850 LF

Funded?: Yes.

History: Unknown

Location: Perimeter of ponds

Evaluation: Fencing in this component is the same style wood type rail fencing described in component #140, however black (coated) cyclone type fencing is attached to pond side. This fencing is in the wet pond areas. No major damage/deterioration of this fencing noted. As reported to us, wood areas of this fencing anticipated to be repaired/cleaned/stained in 2016 following our June 2016 site visit.

Follow similar maintenance recommendations as other wood fencing and plan to replace at roughly the time frame below.

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$10,200
Lower allowance

Worst Case: \$15,300
Higher allowance

Cost Source: ARI Cost Database/Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 143 Wood Fencing - Rpr/Clean/Stain **Quantity:** ~1,580 LF
Funded?: Yes.
History: Anticipated to be repaired, cleaned and stained in 2016 following our June 2016 site visit
Location: Common areas: entry area tracts, street corners, ponds, etc.
Evaluation: Wood fencing is weathered and grayed as not stained in the past. As reported to us, this fencing will be repaired, cleaned and stained in 2016 following our June 2016 site visit.
 Note: photo here prior to stain project.

Regular sealer applications are recommended for the appearance, protection, and maximum useful life of the wood. Actual timing of staining will vary based on exposure and quality of material and application. In our experience, quality solid-bodied stain typically produces best result. Remove any unnecessary contact with ground and surrounding landscape and sprinkler patterns. Repair as needed and clean prior to sealer application.

There are three general options for finishing wood fences. The first and least expensive option is to leave it unfinished. The second option is regular cycles of penetrating water repellent (typically clear or semi-transparent). The third option is painting or staining. The first option typically has a shorter useful life and perhaps a lower life-cycle cost than staining/painting. Left unfinished, the wood will "gray" from its exposure to weather and often exhibit mildew - the lesser appearance may adversely affect marketability however. The second option to apply a penetrating stain is similar to painting, in that it will extend the life of the wood fence. The costs for applying the penetrating water repellent can be much less than staining, but needs to be done more often (every two to three years). Using a quality stain is often thought to best balance the objectives of the association and is therefore factored below.

If the wood is cedar, the Western Red Cedar Lumber Association (WRCLA) has additional information available on their website at www.wrcla.org.

Useful Life:
4 years

Remaining Life:
3 years



Best Case:	\$6,000	Worst Case:	\$8,000
	Lower allowance		Higher allowance
Cost Source: ARI Cost Database/Similar Project Cost History			

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 144 Cyclone Fencing - Replace

Quantity: ~400 Linear Feet

Funded?: Yes.

History: None known

Location: Common areas: entry areas, street corners, ponds, etc.

Evaluation: Chain link fence appeared in generally stable condition; most vinyl coated.

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

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

Useful Life:
30 years

Remaining Life:
17 years



Best Case: \$10,000
Lower allowance

Worst Case: \$14,000
Higher allowance

Cost Source: ARI Cost Database/Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 156 Rockeries - Maintain

Quantity: Extensive areas

Funded?: No. Useful life not predictable

History: None known

Location: Scattered common area locations

Evaluation: As with our previous reserve study, our limited observation revealed no obvious signs of the retaining walls being extremely out of plumb or having large scale instability. Some work at rip/rap at one pond adding metal net fencing. Analysis of a retaining wall is beyond the scope of a reserve study. If problems, including shifting, leaning, or cracking are observed or suspected, consult with an engineer (structural, civil, and/or geo-technical) for evaluation and repair recommendations. No reported problems at this time.

At this time, no large-scale repairs or replacements are predictable. Funding can be added to future reserve studies if conditions dictate.

No information was provided to us concerning how the retaining walls were designed or constructed. Observation of drainage was not possible. Proper drainage on the uphill side prevents a backlog of water (water, if present, can add substantial weight and pressure to the wall). A backlog of water, if left unchecked, could damage or break the wall. Interior of drainage lines (or pipes) can be viewed by video using a remote miniature camera. Clean out the drain lines as often as needed to prevent decreased drainage.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 160 Street Lights - Replace

Quantity: ~ (25) metal assemblies

Funded?: Yes.

History: Unknown

Location: Street lights at private roads: Vista Verde Ln SW, Skyline Ridge Ln SW, Serenity Ln SW, Sunrise Vista Lane & Rockcreek Lane

Evaluation: No obvious problems observed of commercial steel light poles. Observed during daylight hours; assumed to be in functional operating condition.

Although sturdy component, best to plan for replacement of ballasts/fixtures as shown here due to deterioration that will occur over time. At this time, replacement of entire steel light assembly not anticipated.

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

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$12,500

Worst Case: \$18,800

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 164 Landscape Lights - Replace **Quantity:** Minimal, assorted
Funded?: No. Too small for reserve funding
History: None known
Location: Adjacent to monument/sign at Blue Sky Dr/Vista Verde Ln and off Barnes Rd.
Evaluation: No obvious damage of ground lighting noted and no problems reported to us; observed during daylight hours and assumed to be functional.

Small total quantity and individual replacement costs typically not at reserve funding threshold, therefore not suitable for reserve funding. Anticipate repairs/replacements locally as needed as part of annual operating budget.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 170 Landscape - Refurbish

Quantity: Grass, shrubs, trees, etc

Funded?: Yes.

History: Some refurbishing in 2015

Location: Common area Association landscaped tracts

Evaluation: Landscaping appears visibly healthy with no major issues reported to us. Early on, landscaping was neglected as funds were not available for maintenance. Currently landscaping appears to be maintained routinely.

Although ongoing maintenance needs are typically funded within operating budget; this component may be utilized for setting aside funds for larger expenses that do not occur on an annual basis, such as: large scale plantings, turf renovation, bark/mulch replenishment, drainage improvements, etc. In our experience, landscape components will eventually need to be refurbished (new plantings, drainage, gravel, bark/mulch, etc.). Allowance shown below for partial landscape refurbishment, monitor actual expenses over time and adjust in reserve study updates.

Useful Life:
5 years

Remaining Life:
3 years



Best Case: \$5,000
Lower allowance

Worst Case: \$10,000
Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 175 Storm Drainage Ponds - Cleaning **Quantity:** (5) storm ponds
Funded?: Yes.
History: Major refurbishing at most in 2015
Location: Private storm ponds throughout community (Phase 1 Tracts A, B, G and Phase 2 Tracts T & U)
Evaluation: Due to long history of neglect, a significant amount of work to stormwater ponds was completed in 2015 including vegetation (cat tail)/root removal, rip/rap wall rebuilding, berm repairs, etc.

Ongoing maintenance program and close inspection is essential for performance and forestalling sediment removal. We assume ongoing vegetation and debris control as routine maintenance procedure. Guidelines for maintaining these systems are typically found on governing authority's (i.e. county or city) website.

In addition to annual work, best to plan for larger projects as shown here to avoid larger cost projects typically a result of lack of maintenance. The costs for this type of work can vary greatly due to a number of factors. Note: reported to us that within Tract T is Association named Pond E which is currently in litigation as dispute as to who is responsible to maintain. We are not including this pond in this reserve study.

Useful Life:
4 years

Remaining Life:
2 years



Best Case: \$8,000 **Worst Case:** \$12,000
 Lower allowance Higher allowance
 Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 176 Stormwater Vault/Filters - Cln/Repl **Quantity:** 8'X16' vault, (15) fltr
Funded?: Yes.
History: Last cleaned in 2013, filter replacement
Location: Phase 1, Tract A (community has named this area Pond B)
Evaluation: We contacted Contech representative who reported this system has a 8' X 6' vault with (15) Contech filters. Records reflect the filters were last replaced in 2013 through the cartridge exchange program.

As discussed with Contech, best to plan for cleaning and filter replacement as shown. This assumes annual inspections/local work if needed.

Useful Life:
2 years

Remaining Life:
0 years



Best Case: \$2,500
Lower allowance

Worst Case: \$4,500
Higher allowance

Cost Source: Estimate by Contech

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 178 Road Drains - Inspect/Clean Quantity: ~(40) catchbasins

Funded?: Yes.

History: Ones in Highlands area cleaned in 2015

Location: Private roads throughout community: Vista Verde Ln SW, Skyline Ridge Ln SW, Serenity Ln SW, Sunrise Vista Lane and Rockcreek Lane

Evaluation: There are several catchbasins/underground stormwater drainage system throughout the private roadways. In addition to annual inspections/local cleaning if needed, we recommend periodic allowance for comprehensive cleaning as shown.

Useful Life:
3 years

Remaining Life:
1 years



Best Case: \$4,000

Worst Case: \$6,000

Lower allowance

Higher allowance

Cost Source: Extrapolated cost per drain from cost history

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 185 Irrigation System - Repair/Replace **Quantity:** Controls, pipes, etc.
Funded?: Yes.
History: Varies
Location: Throughout common area landscaping
Evaluation: Some irrigation repairs anticipated in 2016 in The Highlands areas. No other major problems known currently or in the past.

If properly installed and bedded without defect, the lines themselves are expected to be long-lived with no predictable expectation for replacement. In our experience however, as the community ages, large system renovations, repairs, zone reconfiguration, etc. become necessary. Therefore, we suggest a funding allowance within reserves to supplement the operating and maintenance budget. Ongoing items like head replacement, local valves, etc. typically handled as maintenance expense.

As routine maintenance, inspect regularly, test system and repair as needed. Follow proper winterization and spring start up procedures.

Useful Life:
5 years

Remaining Life:
4 years



Best Case: \$4,000 **Worst Case:** \$6,000
 Lower allowance Higher allowance
 Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 188 Tract L - Maintain

Quantity: ~ 5.9 Acres

Funded?: No. City owned property

History: Purchased by the city

Location: Tract "L"

Evaluation: Tract L was reportedly purchased by the city of Tumwater and is not the responsibility of the Association to maintain.

Useful Life:

Remaining Life:

No Photo Available

Best Case:

Worst Case:

Cost Source:

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 200 Entry Monuments - Refurbish Quantity: (4), wood/metal/stone

Funded?: Yes.

History: Unknown

Location: Crosby Blvd/Vista Loop, Blue Sky Dr/Vista Verde Ln and Barnes at both Vista Loop and Ridgeview Loop

Evaluation: Generally signs/monument construction consists of metal signage attached to stone with adjacent wood trellis.

Allowance shown below is for regular cycles of metal sign refurbishment and repair/replacement of wood areas as needed due to typical deterioration caused by constant exposure.

As routine maintenance, inspect regularly, clean/touch up for appearance as needed.

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$8,000

Worst Case: \$12,000

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 201 Required Signage - Replace

Quantity: ~ (80) metal signs

Funded?: Yes.

History: None known

Location: Adjacent to private roadways throughout community

Evaluation: A variety of metal signs affixed to posts at private roads include stop signs, speed limits, dead ends, street names and no parking signs. No major damage/deterioration observed.

Repair/replace locally as needed, however best to include reserve funding as collectively cost merits reserve funding.

Inspect regularly, clean for appearance and repair as needed.

Useful Life:
20 years

Remaining Life:
9 years



Best Case: \$5,600

Worst Case: \$7,200

Lower allowance

Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 205 Mailboxes - Replace

Quantity: ~(14) metal clusters

Funded?: Yes.

History: Unknown

Location: Adjacent to roadways within community

Evaluation: Some local wear, however no major damage/deterioration observed.

Best to plan for total replacement at roughly the time frame below due to constant exposure, usage and wear over time. Note: USPS has a limited budget for replacement and should not be relied upon for purposes of long term planning.

Inspect regularly, clean by wiping down for appearance, change lock cylinders, lubricate hinges and repair as needed from operating budget.

Useful Life:
20 years

Remaining Life:
8 years



Best Case: \$18,200
Lower allowance

Worst Case: \$23,800
Higher allowance

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 220 Bus Shelters - Repair/Replace

Quantity: (3) 10' X 6' wood shelter

Funded?: Yes.

History: None known

Location: Common area tracts C, E and F along Vista Loop SW and Ridgeview Loop SW

Evaluation: These structures are three sided wood structures which are painted, have a single bench and roofed with composition shingle roofing materials. Inspect regularly - overall these structures are smaller with most individual costs for repairs, painting, etc. not meriting reserve funding. However, plan for coinciding refurbishing/replacements to include such as things as replacing the roof, benches, painting, etc. as shown here. Costs can vary depending on scope of work and to be used for general planning purposes.

Useful Life:
20 years

Remaining Life:
6 years



Best Case: \$4,500

Worst Case: \$7,500

Lower allowance

Higher allowance

Cost Source: ARI Cost Database/Similar Project Cost History

Client: 23122 Sunrise Ridge/The Highlands at Somerset Hill

Comp #: 250 Water Tanks - Maintain **Quantity:** (2) Water Tanks
Funded?: No. Association not responsible
History: Unknown
Location: Tract ZZ along Barnes Road just past Vista Loop SW
Evaluation: Tract ZZ (including all improvements at the tract) are dedicated to the city of Tumwater and thus the Association is not responsible for maintenance of the tract and improvements.

Useful Life:

Remaining Life:



Best Case:

Worst Case:

Cost Source:

Comp #: 999 Reserve Study - Update **Quantity:** Annual update
Funded?: No. Best funded as annual operating budget item
History: Last reserve study for Associations 2014 fiscal year
Location: Common areas of association
Evaluation: Per Washington law, 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.

Useful Life:

Remaining Life:

Best Case:

Worst Case:

Cost Source: Does not meet NRSS criteria for reserve funding

