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Reserve Studies for Community Associations

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“Full” Reserve Study



Capitol City Golf Club Estates Olympia, WA

Report #: 30110-0

For Period Beginning: January 1, 2017

Expires: December 31, 2017

Date Prepared: March 4, 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:

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**ASSOCIATION
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Reserve Studies for Community Associations

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	22
Component Details	Appendix

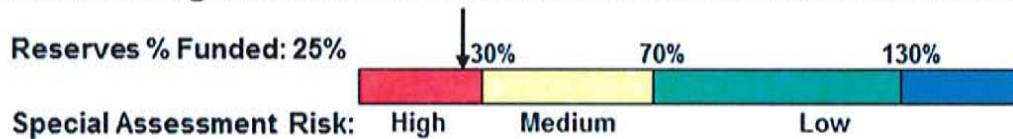
3- Minute Executive Summary

Association: Capitol City Golf Club #: 30110-0
Estates
Location: Olympia, WA # of Units: 413
Report Period: January 1, 2017 through December 31, 2017

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

Projected Starting Reserve Balance:	\$158,288
Current Fully Funded Reserve Balance:	\$641,439
Average Reserve Deficit (Surplus) Per Unit:.....	\$1,170
100% 2017 Monthly "Full Funding" Contributions:	\$3,420
Baseline contributions (min to keep Reserves above \$0):.....	\$3,385
Recommended 2017-2021 Special Assessment, Each Year:.....	\$0

Most Recent Budgeted Reserve Contribution Rate:..... \$1,015



Economic Assumptions:

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

- This is a "Full" Reserve Study, based on our site inspection on January 26, 2016 and meets or exceeds all requirements of the RCW. This study was prepared by, or under the supervision of a credentialed Reserve Specialist (RS™).
- Your Reserve Fund is currently 25% Funded. This means the association's special assessment & deferred maintenance risk is currently high. The objective of your multi-year Funding Plan is to fund your Reserves to a level where you will enjoy a low risk of such Reserve cash flow problems.
- Based on this starting point and your anticipated future expenses, our recommendation is to increase your Reserve contributions to \$3,420 per month in 2017. This 100% "Full" contribution rate is designed to achieve the funding objective *by the end of* our 30-year report scope. See photo appendix for component details; the basis of our assumptions.

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost Estimate
120	Asphalt - Resurface (Overlay)	40	17	\$1,033,025
121	Asphalt - Chip Seal (a)	N/A	7	\$59,000
121	Asphalt - Chip Seal (b)	10	27	\$59,000
200	Signage - Replace	30	0	\$11,200
205	Mailboxes - Replace	20	10	\$57,750
5	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

LEVELS OF SERVICE



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

We performed an on-site inspection to quantify and evaluate your common areas, creating your Reserve Component List *from scratch*.

Which Physical Assets are Funded by Reserves?

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

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

How much should we contribute?



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 FUNDING PRINCIPLES

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 January 26, 2016, we started with a brief meeting with a representative of the Board of Directors and the Management Company, and then started the site inspection beginning with the private road system. We visually inspected all visible common area 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.

During our site inspection we learned that the association had applied a chip seal to the roads in 2014. We observed tree root uplift and cracking in areas, and recommend prompt repair to prevent water from penetrating down to the base of the asphalt.



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 \$11,200. Adding the next five years, your *first ten years* of projected Reserve expenses are \$83,763. 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.

Annual Reserve Expenses

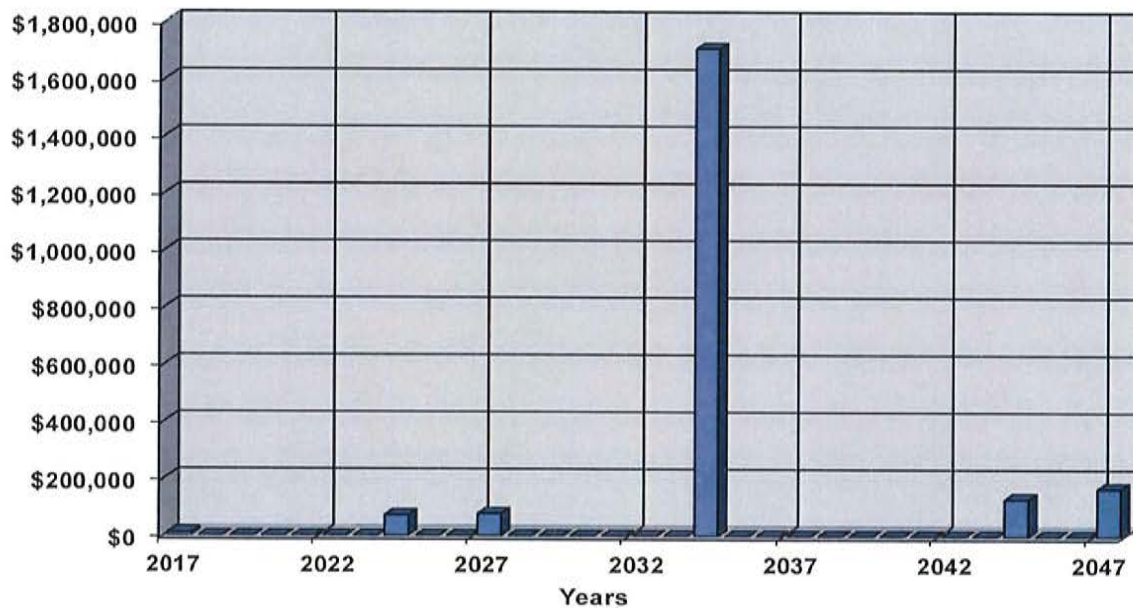


Figure 1

Reserve Fund Status

The starting point for our financial analysis is your Reserve Fund balance, projected to be \$158,288 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 \$641,439 (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 25% Funded. Across the country, approx 35% 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 \$3,420/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.

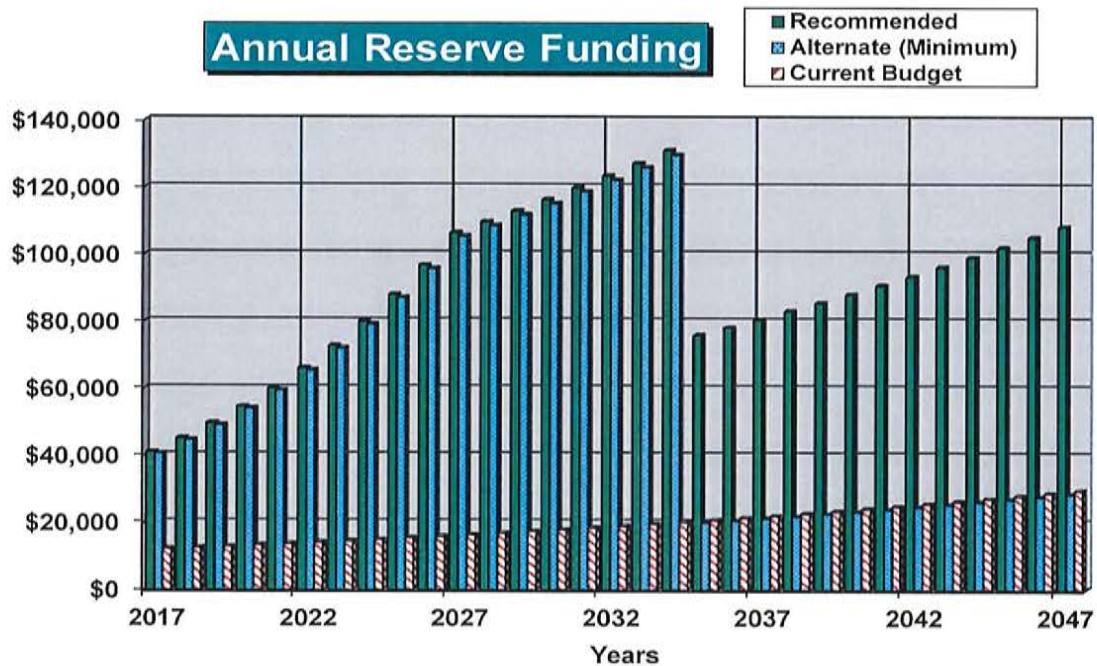


Figure 2

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.

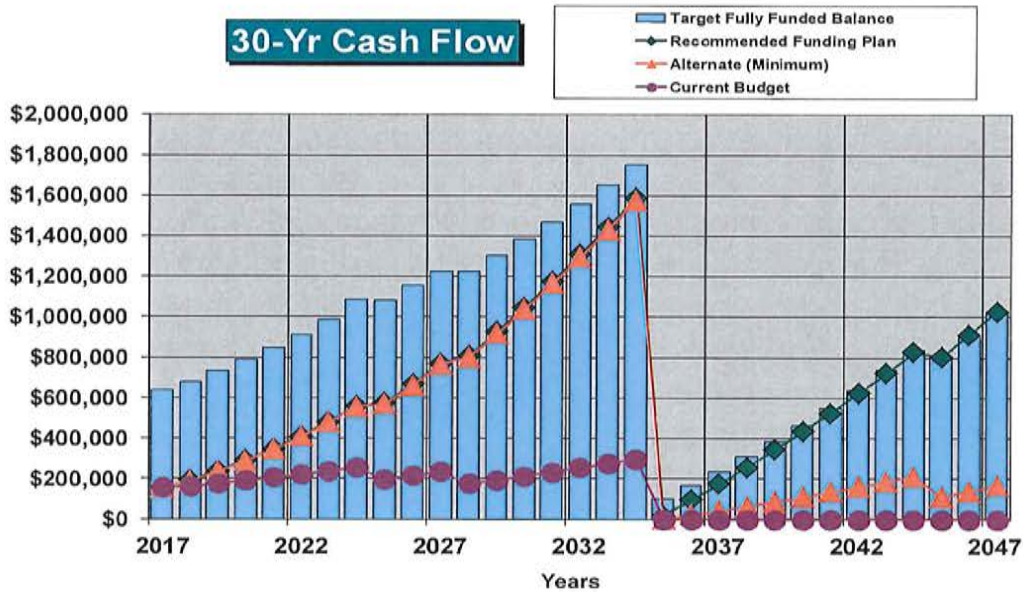


Figure 3

This figure shows this same information, plotted on a Percent Funded scale.

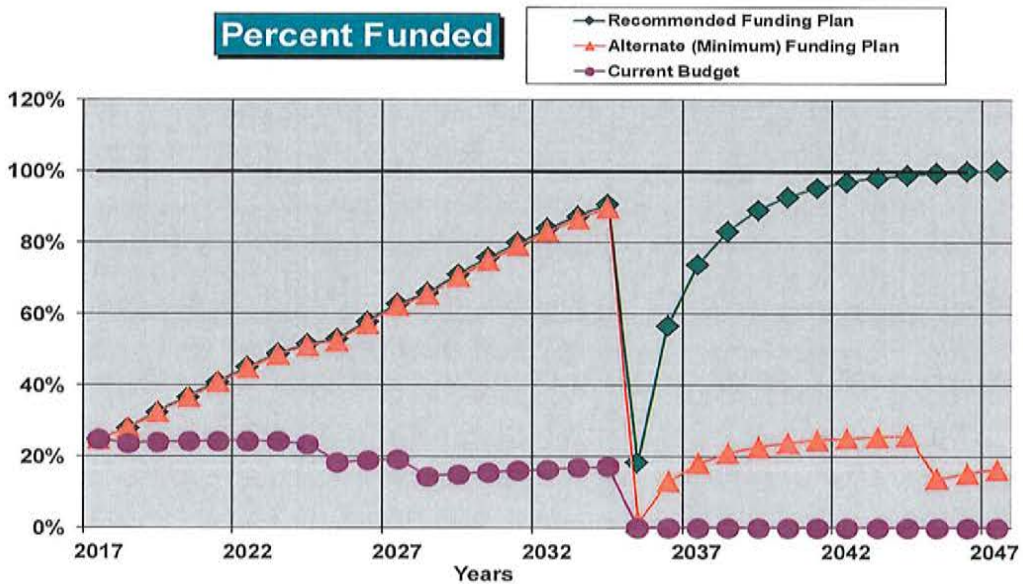


Figure 4

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 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

30110-0

#	Component	Quantity	Useful Life	Rem. Useful Life	[--- Current Cost Estimate ---]	
					Best Case	Worst Case
120	Asphalt - Resurface (Overlay)	~ 590,300 GSF asphalt	40	17	\$885,450	\$1,180,600
121	Asphalt - Chip Seal (a)	~ 590,300 GSF asphalt	N/A	7	\$47,200	\$70,800
121	Asphalt - Chip Seal (b)	~ 590,300 GSF asphalt	10	27	\$47,200	\$70,800
200	Signage - Replace	~ (112) metal signs	30	0	\$8,400	\$14,000
205	Mailboxes - Replace	~ (35) cluster box units	20	10	\$49,000	\$66,500
5	Total Funded Components					

Table 3: Fully Funded Balance**30110-0**

#	Component	Current	X	Effective	/	Useful	=	Fully
		Cost		Age		Life		Funded
		Estimate						Balance
120	Asphalt - Resurface (Overlay)	\$1,033,025	X	23	/	40	=	\$593,989
121	Asphalt - Chip Seal (a)	\$59,000	X	0	/	0	=	\$7,375
121	Asphalt - Chip Seal (b)	\$59,000	X	0	/	10	=	\$0
200	Signage - Replace	\$11,200	X	30	/	30	=	\$11,200
205	Mailboxes - Replace	\$57,750	X	10	/	20	=	\$28,875
								\$641,439

Table 4: Component Significance**30110-0**

#	Component	Useful Life	Current Cost Estimate	Deterioration Cost/yr	Deterioration Significance
120	Asphalt - Resurface (Overlay)	40	\$1,033,025	\$25,826	73.8%
121	Asphalt - Chip Seal (a)	N/A	\$59,000	\$0	0.0%
121	Asphalt - Chip Seal (b)	10	\$59,000	\$5,900	16.9%
200	Signage - Replace	30	\$11,200	\$373	1.1%
205	Mailboxes - Replace	20	\$57,750	\$2,888	8.3%
5	Total Funded Components			\$34,986	100.0%

Table 5: 30-Year Reserve Plan Summary

30110-0

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	\$158,288	\$641,439	24.7%	High	\$41,040	\$0	\$1,740	\$11,200
2018	\$189,868	\$680,191	27.9%	High	\$45,144	\$0	\$2,134	\$0
2019	\$237,146	\$732,945	32.4%	Med	\$49,658	\$0	\$2,632	\$0
2020	\$289,436	\$788,866	36.7%	Med	\$54,624	\$0	\$3,182	\$0
2021	\$347,242	\$848,589	40.9%	Med	\$60,087	\$0	\$3,790	\$0
2022	\$411,119	\$913,465	45.0%	Med	\$66,095	\$0	\$4,462	\$0
2023	\$481,677	\$987,342	48.8%	Med	\$72,705	\$0	\$5,204	\$0
2024	\$559,586	\$1,089,016	51.4%	Med	\$79,975	\$0	\$5,659	\$72,563
2025	\$572,657	\$1,083,793	52.8%	Med	\$87,973	\$0	\$6,195	\$0
2026	\$666,825	\$1,154,258	57.8%	Med	\$96,770	\$0	\$7,185	\$0
2027	\$770,780	\$1,227,975	62.8%	Med	\$106,447	\$0	\$7,888	\$77,611
2028	\$807,504	\$1,225,138	65.9%	Med	\$109,641	\$0	\$8,663	\$0
2029	\$925,808	\$1,303,362	71.0%	Low	\$112,930	\$0	\$9,868	\$0
2030	\$1,048,605	\$1,385,177	75.7%	Low	\$116,318	\$0	\$11,119	\$0
2031	\$1,176,041	\$1,470,728	80.0%	Low	\$119,807	\$0	\$12,416	\$0
2032	\$1,308,265	\$1,560,166	83.9%	Low	\$123,401	\$0	\$13,763	\$0
2033	\$1,445,429	\$1,653,646	87.4%	Low	\$127,104	\$0	\$15,159	\$0
2034	\$1,587,692	\$1,751,331	90.7%	Low	\$130,917	\$0	\$8,031	\$1,707,433
2035	\$19,207	\$104,777	18.3%	High	\$75,900	\$0	\$574	\$0
2036	\$95,681	\$169,270	56.5%	Med	\$78,177	\$0	\$1,354	\$0
2037	\$175,212	\$237,537	73.8%	Low	\$80,522	\$0	\$2,165	\$0
2038	\$257,899	\$309,748	83.3%	Low	\$82,938	\$0	\$3,007	\$0
2039	\$343,844	\$386,078	89.1%	Low	\$85,426	\$0	\$3,883	\$0
2040	\$433,153	\$466,710	92.8%	Low	\$87,989	\$0	\$4,793	\$0
2041	\$525,936	\$551,831	95.3%	Low	\$90,629	\$0	\$5,739	\$0
2042	\$622,303	\$641,640	97.0%	Low	\$93,347	\$0	\$6,721	\$0
2043	\$722,371	\$736,341	98.1%	Low	\$96,148	\$0	\$7,740	\$0
2044	\$826,259	\$836,146	98.8%	Low	\$99,032	\$0	\$8,140	\$131,056
2045	\$802,375	\$806,289	99.5%	Low	\$102,003	\$0	\$8,573	\$0
2046	\$912,951	\$912,926	100.0%	Low	\$105,063	\$0	\$9,699	\$0

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

30110-0

Fiscal Year	2017	2018	2019	2020	2021
Starting Reserve Balance	\$158,288	\$189,868	\$237,146	\$289,436	\$347,242
Annual Reserve Contribution	\$41,040	\$45,144	\$49,658	\$54,624	\$60,087
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$1,740	\$2,134	\$2,632	\$3,182	\$3,790
Total Income	\$201,068	\$237,146	\$289,436	\$347,242	\$411,119
# Component					
120 Asphalt - Resurface (Overlay)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (a)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (b)	\$0	\$0	\$0	\$0	\$0
200 Signage - Replace	\$11,200	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$11,200	\$0	\$0	\$0	\$0
Ending Reserve Balance:	\$189,868	\$237,146	\$289,436	\$347,242	\$411,119

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

30110-0

Fiscal Year	2022	2023	2024	2025	2026
Starting Reserve Balance	\$411,119	\$481,677	\$559,586	\$572,657	\$666,825
Annual Reserve Contribution	\$66,095	\$72,705	\$79,975	\$87,973	\$96,770
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$4,462	\$5,204	\$5,659	\$6,195	\$7,185
Total Income	\$481,677	\$559,586	\$645,220	\$666,825	\$770,780
# Component					
120 Asphalt - Resurface (Overlay)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (a)	\$0	\$0	\$72,563	\$0	\$0
121 Asphalt - Chip Seal (b)	\$0	\$0	\$0	\$0	\$0
200 Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$72,563	\$0	\$0
Ending Reserve Balance:	\$481,677	\$559,586	\$572,657	\$666,825	\$770,780

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

30110-0

Fiscal Year	2027	2028	2029	2030	2031
Starting Reserve Balance	\$770,780	\$807,504	\$925,808	\$1,048,605	\$1,176,041
Annual Reserve Contribution	\$106,447	\$109,641	\$112,930	\$116,318	\$119,807
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$7,888	\$8,663	\$9,868	\$11,119	\$12,416
Total Income	\$885,115	\$925,808	\$1,048,605	\$1,176,041	\$1,308,265
# Component					
120 Asphalt - Resurface (Overlay)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (a)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (b)	\$0	\$0	\$0	\$0	\$0
200 Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$77,611	\$0	\$0	\$0	\$0
Total Expenses	\$77,611	\$0	\$0	\$0	\$0
Ending Reserve Balance:	\$807,504	\$925,808	\$1,048,605	\$1,176,041	\$1,308,265

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

30110-0

Fiscal Year	2032	2033	2034	2035	2036
Starting Reserve Balance	\$1,308,265	\$1,445,429	\$1,587,692	\$19,207	\$95,681
Annual Reserve Contribution	\$123,401	\$127,104	\$130,917	\$75,900	\$78,177
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$13,763	\$15,159	\$8,031	\$574	\$1,354
Total Income	\$1,445,429	\$1,587,692	\$1,726,639	\$95,681	\$175,212
				LOWERED CONTRIBUTION	
# Component					
120 Asphalt - Resurface (Overlay)	\$0	\$0	\$1,707,433	\$0	\$0
121 Asphalt - Chip Seal (a)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (b)	\$0	\$0	\$0	\$0	\$0
200 Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$1,707,433	\$0	\$0
 Ending Reserve Balance:	 \$1,445,429	 \$1,587,692	 \$19,207	 \$95,681	 \$175,212

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

30110-0

Fiscal Year	2037	2038	2039	2040	2041
Starting Reserve Balance	\$175,212	\$257,899	\$343,844	\$433,153	\$525,936
Annual Reserve Contribution	\$80,522	\$82,938	\$85,426	\$87,989	\$90,629
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$2,165	\$3,007	\$3,883	\$4,793	\$5,739
Total Income	\$257,899	\$343,844	\$433,153	\$525,936	\$622,303
# Component					
120 Asphalt - Resurface (Overlay)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (a)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (b)	\$0	\$0	\$0	\$0	\$0
200 Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$0	\$0	\$0
Ending Reserve Balance:	\$257,899	\$343,844	\$433,153	\$525,936	\$622,303

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

30110-0

Fiscal Year	2042	2043	2044	2045	2046
Starting Reserve Balance	\$622,303	\$722,371	\$826,259	\$802,375	\$912,951
Annual Reserve Contribution	\$93,347	\$96,148	\$99,032	\$102,003	\$105,063
Recommended Special Assessments	\$0	\$0	\$0	\$0	\$0
Interest Earnings	\$6,721	\$7,740	\$8,140	\$8,573	\$9,699
Total Income	\$722,371	\$826,259	\$933,431	\$912,951	\$1,027,713
# Component					
120 Asphalt - Resurface (Overlay)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (a)	\$0	\$0	\$0	\$0	\$0
121 Asphalt - Chip Seal (b)	\$0	\$0	\$131,056	\$0	\$0
200 Signage - Replace	\$0	\$0	\$0	\$0	\$0
205 Mailboxes - Replace	\$0	\$0	\$0	\$0	\$0
Total Expenses	\$0	\$0	\$131,056	\$0	\$0
Ending Reserve Balance:	\$722,371	\$826,259	\$802,375	\$912,951	\$1,027,713

Accuracy, Limitations, and Disclosures

Washington disclosure, per RCW:

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

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 WA, LLC 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 developed by Association Reserves unless otherwise noted in our "Site Inspection Notes" comments. 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 area maintenance repair & replacement responsibility
- 2) Components must have a limited life
- 3) Life limit must be predictable
- 4) Above a minimum threshold cost (board's discretion – typically 1/2 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 costs, 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: 30110 Capitol City Golf Estates

Inventory Appendix

Comp #: 120 Asphalt - Resurface (Overlay) **Quantity:** ~ 590,300 GSF asphalt
Funded?: Yes
History: None known
Location: Roadways within community
Evaluation: Asphalt surface was covered by recent chip seal, therefore surface appeared relatively intact. Local cracking, tree root uplift, moss growth, faded paint (primarily on speed bumps) and low spots were observed in areas. Chip seal is a wearing course, not structural; therefore repaving will be necessary at some point.

Useful life below assumes regular surface treatment and repairs (see component #121). The lack of surface treatment and repairs can greatly decrease the asphalt's useful life. 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.

Further resources:
 Pavement Surface Condition Field Rating Manual for Asphalt Pavement.
<http://www.wsdot.wa.gov/NR/rdonlyres/4FE2F96D-BFE0-4484-812E-DD5164EB34F5/0/AsphaltPavementBook.pdf>

Washington Asphalt Pavement Association
<http://www.asphaltwa.com/>

Note: Plat map reflects both private and public roads, however our source reported that all roads within community have been deeded to the association to maintain, repair and replace. As a result, all roads are included within this component.

Useful Life:
40 years

Remaining Life:
17 year(s)



Best Case: \$ 885,450.00 Worst Case: \$ 1,180,600.00
 ~ \$1.50/SF, lower allowance to ~ \$2.00/SF, higher allowance
 resurface (overlay)

Cost Source: ARI Cost Database: Similar Project Cost History

Comp #: 121 Asphalt - Chip Seal (a) **Quantity:** ~ 590,300 GSF asphalt
Funded?: Yes

Client: 30110 Capitol City Golf Estates

History: Chip seal 2014 ~ \$50k
 Location: Roadways within community
 Evaluation: Generally, the surface condition of the asphalt coating appeared to be in stable condition. It was reported that a chip seal was applied in 2014 at a cost of ~ \$50k.

Regular cycles of surface treatment, along with needed repairs is a best practice for the long term care of lower traffic asphalt areas to extend the useful life.

The State of Washington Department of Transportation (WSDOT) recommends regular cycles of surface treatment for the long-term care of asphalt paving with low traffic and low speed. The primary reason to surface treatment of asphalt 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. Surface treatment 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 surface treatment is imperative. Surface preparation and dry weather during and following application, is key to lasting performance. The ideal conditions are when the air and surface temperatures are 50 degrees and rising, with low humidity and calm wind. Project should never be done when showers are threatening. Incorporate any striping and curb repair into this project. Fill cracks and clean oil stains promptly in between cycles as routine maintenance.

For further resources:
 Best Practices Handbook on Asphalt Pavement Maintenance
<http://www.cee.mtu.edu/~balkire/CE5403/AsphaltPaveMaint.pdf>

For a general overview of Asphalt Seal Coat Treatments review this publication:
<http://www.wsdot.wa.gov/NR/rdonlyres/4A21ECE8-114B-434D-B967-0927541CE042/0/AsphaltSealCoats.pdf>

Other references:
<http://www.pavementinteractive.org/article/bituminous-surface-treatments/>

Note: This component is a one time component to represent one more cycle of chip seal before eventual asphalt overlay. See section (b) of this component for future cycles of asphalt chip seal.

Useful Life:
 0 years

Remaining Life:
 7 year(s)



Client: 30110 Capitol City Golf Estates

Best Case: \$ 47,200.00
~ \$0.08/SF, lower allowance to
apply chip seal

Worst Case: \$ 70,800.00
~ \$0.12/SF, higher allowance

Cost Source: Inflated Client Cost History

Comp #: 121 Asphalt - Chip Seal (b) **Quantity:** ~ 590,300 GSF asphalt
Funded?: Yes
History: Chip seal 2014 ~ \$50k
Location: Roadways within community
Evaluation: This component represents future cycles of asphalt chip seal, following eventual overlay of asphalt (timed to occur 10 years after resurface and every 10 years thereafter). See section (a) of this component for cycles prior to asphalt overlay and chip seal details.

Useful Life:
10 years

Remaining Life:
27 year(s)



Best Case: \$ 47,200.00
~ \$0.08/SF, lower allowance to
apply chip seal

Worst Case: \$ 70,800.00
~ \$0.12/SF, higher allowance

Cost Source: Inflated Client Cost History

Client: 30110 Capitol City Golf Estates

Comp #: 157 Retention Wall/Fence - Replace **Quantity:** Extensive LF
Funded?: No Association reported City is responsible to maintain/repair/replace
History: None known
Location: Adjacent to sidewalk along Yelm Highway
Evaluation: It was reported to us that concrete masonry unit (CMU) walls and metal fencing at public sidewalk along Yelm Highway were installed by the City during street improvements and are therefore not the responsibility of Capitol City Golf Estates to maintain, repair or replace. As a result, no reserve funding included.

Useful Life:
0 years

Remaining Life:
0 year(s)



Best Case: \$ 0.00

Worst Case: \$ 0.00

Cost Source:

Comp #: 160 Pole Lights - Replace **Quantity:** Cobra head lights
Funded?: No Utility responsibility to maintain/repair/replace
History: None known
Location: Utility poles adjacent to streets within the community
Evaluation: Community features commercial grade cobra head street lights attached to utility poles throughout the community. Poles are labeled with IntoLight barcodes, indicating that they are the responsibility of Puget Sound Energy to maintain, repair and replace. As a result, no reserve funding is included.

Useful Life:
0 years

Remaining Life:
0 year(s)



Best Case: \$ 0.00

Worst Case: \$ 0.00

Cost Source:

Client: 30110 Capitol City Golf Estates

Comp #: 182 Drainage/Stormwater Sys - **Quantity:** Extensive system
Maintain

Funded?: No Useful life not predictable

History: None known

Location: Throughout private roads within community

Evaluation: Analysis of the drainage system is beyond the scope of a reserve study as the vast majority of the drainage systems are located below ground. Observations were very limited to catch basin areas. No problems were reported to us. Association operating budget appears to include line items for drain cleaning and stormwater system maintenance.

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

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

Useful Life:
0 years

Remaining Life:
0 year(s)



Best Case: \$ 0.00

Worst Case: \$ 0.00

Cost Source:

Client: 30110 Capitol City Golf Estates

Comp #: 200 Signage - Replace **Quantity:** ~ (112) metal signs
Funded?: Yes
History: None known
Location: Adjacent to streets within community
Evaluation: Street signs within the community were primarily constructed of metal. Condition of signs varied, with some signs observed to be severely faded and a handful of signs were delaminating. Several posts were observed to be leaning.

Prudent financial planning suggests setting aside funds for periodic replacement of street signs to maintain appearance and legibility. As routine maintenance, inspect regularly, clean as needed and replace damaged signs out of the general maintenance operating budget in between larger replacement cycles.

Useful Life:
30 years

Remaining Life:
0 year(s)



Best Case: \$ 8,400.00 **Worst Case:** \$ 14,000.00
 ~ \$75/ea (x112), lower allowance to replace, installed **~ \$125/ea (x112), higher allowance**

Cost Source: ARI Cost Database: Similar Project Cost History

Client: 30110 Capitol City Golf Estates

Comp #: 205 Mailboxes - Replace

Quantity: ~ (35) cluster box units

Funded?: Yes

History: Manufacture dates are 2006 & 2008

Location: Adjacent to streets within community

Evaluation: Mailboxes appeared in generally intact condition with some dirt/grime observed in areas. No problems or concerns were reported. Mailboxes are not protected from the rain by a structure. Manufacture dates range between 2006 and 2008, with one cluster box unit on 66th Ave SE dated 2014; we have used 2007 as the average age for financial planning purposes.

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

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

Note: USPS has a limited budget for replacement and should not be relied upon for purposes of long term financial planning.

Useful Life:
20 years

Remaining Life:
10 year(s)



Best Case: \$ 49,000.00
~ \$1,400/ea (x35), lower allowance
to replace, installed

Worst Case: \$ 66,500.00
~ \$1,900/ea (x35), higher
allowance

Cost Source: ARI Cost Database: Similar Project Cost History

