



Canterwood

**2019
RESERVE STUDY
CANTERWOOD DIVISION 12 STEP SYSTEM ASSOCIATION**

Gig Harbor, WA 98332
Financial Year 01.2019—12.2019
Level 3 | Reserve Study Update
10/24/18



A New Strategy for Reserve Funding.

Our reserve study approach is simple. We provide you with the insight needed to make fast, accurate and informed decisions. We focus on understanding your situation and providing funding solutions that are designed with your goals in mind. By focusing on the detail and the big picture we provide the information you need to best manage your reserve fund and annual contributions.

As a long-term capital budget plan, the reserve study identifies the current status of the reserve fund and whether contributions to the fund are adequate to address future needs. The report helps the Association make necessary decisions regarding the development of their reserve fund and establish expectations in relation to the timing and cost of significant repair and replacement projects.

The reserve study recommends funding through smaller monthly contributions rather than risking large, unanticipated special assessments. Regular and ongoing reserve contributions are favored over special assessment as they help distribute expenses equally between current and future owners, and establish a stable contribution rate.

The reserve study contains 'forward looking' concepts which reflect expectations with respect to certain future events and potential financial performance. Although we believe at this time that the expectations reflected within the reserve study are reasonable, no assurances can be given that such expectations will prove correct. We recommend that the reserve study be updated annually to address changing circumstances and conditions.



6 CONTRIBUTION RANGE

Funding programs and strategies that are available to the Association.



14 PERCENT FUNDED

How well funded is the Association's reserve fund.

- 4 EXECUTIVE SUMMARY**
Summary of reserve study outcomes and property related data.
- 5 KEY INSIGHTS**
Snapshot of key data points, highlighting the strength of current funding strategies.
- 7 FULL FUNDING SUMMARY**
Summary of the Full funding strategy and projected outcomes.
- 8 BASELINE FUNDING SUMMARY**
Summary of the Baseline funding strategy and projected outcomes.
- 9 METHODOLOGY**
The what, when, when and how of the reserve study process.
- 14 FINANCIAL ANALYSIS**
Percent funded and the strength of the reserve account.
- 16 RESERVE COMPONENT LIST**
List of reserve components, anticipated cost, remaining, and useful life estimates.
- 17 RESERVE EXPENSES**
Projected expenses over the coming 30 years.
- 20 FULL FUNDING PLAN**
Recommended funding plan and cash flow projection.

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EXECUTIVE SUMMARY

PROPERTY SUMMARY

ASSOCIATION NAME	Canterwood Division 12 Step System Association
LOCATION	Gig Harbor, WA 98332
YEAR CONSTRUCTED	2005
NUMBER OF UNITS	71
FINANCIAL YEAR	2019 (January 1, 2019 - December 31, 2019)
REPORT LEVEL	Level 3 Update without Site Visit

RESERVE FUND

PROJECTED STARTING BALANCE ¹	\$62,855
FULL FUNDED BALANCE, IDEAL	\$73,351
CURRENT PER UNIT DEFICIENCY/(SURPLUS) IN RESERVES	\$148
PERCENT FUNDED ²	86%
INTEREST EARNED	1.00%
INFLATION RATE ³	3.00%

RESERVE CONTRIBUTIONS

FULL FUNDING, MAXIMUM CONTRIBUTION	\$9,240
BASELINE FUNDING, MINIMUM CONTRIBUTION	\$7,706
SPECIAL ASSESSMENT	\$0

¹ Information in relation to the Association's finances were supplied by the Association's representative and is not audited.

² The ratio, at a particular point of time (the beginning of the Fiscal Year), of the actual (or projected) Reserve Balance to the Fully Funded Balance, expressed as a percentage (www.caionline.org). Used to highlight the strength of the Association's reserve fund.

³ Inflation rate is based upon the average annual increase of the Consumer Price Index (CPI) over the last 30-years, as published by the US Bureau of Labor Statistics (www.labor.gov).



KEY INSIGHTS

\$62,855

RESERVE ACCOUNT
BALANCE

\$9,240

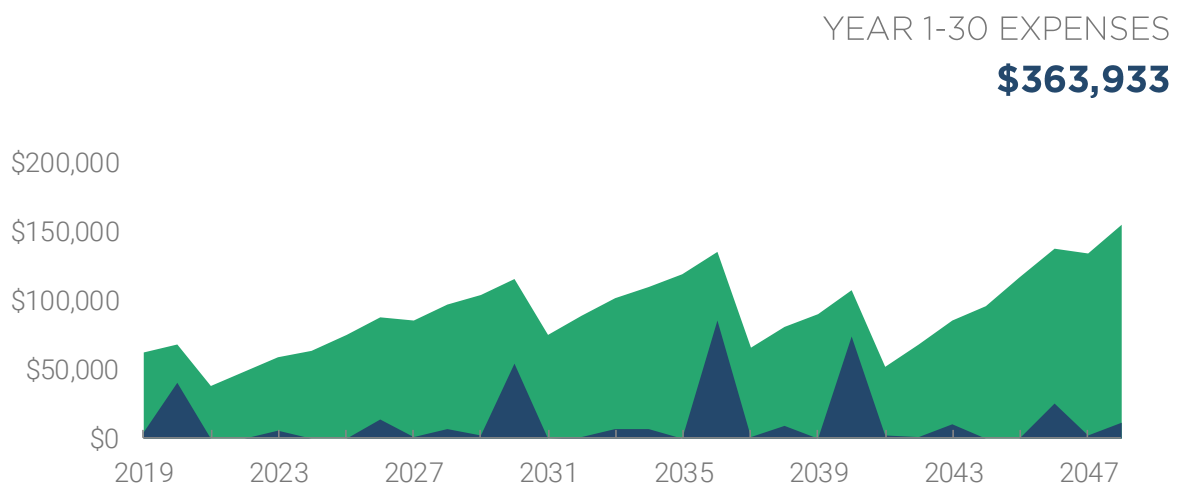
RECOMMENDED ANNUAL
RESERVE CONTRIBUTION

\$363,933

PROJECTED EXPENSES
OVER 30 YEARS

FULL FUNDING STRATEGY

Annual member contributions to the reserve fund are used to address those expenses too large or infrequent to be addressed through annual operating funds. The chart below highlights the outcome of the Full Funding strategy over the mid-to-long term.



STARTING BALANCE

\$62,855

ENDING BALANCE

\$166,186

Note: Figures based upon the expectation that the Association will continue to increase member contributions by an inflationary rate of 3.00% annually. Year-over-year change the result of projected expenses on the Association's reserve account.



CONTRIBUTION RANGE

We recommend that reserve contributions be evenly distributed between members over the life of a community. To achieve this goal, we establish an ideal contribution range within which the Association should establish ongoing payments.

\$7,706

MINIMUM
BASELINE FUNDING

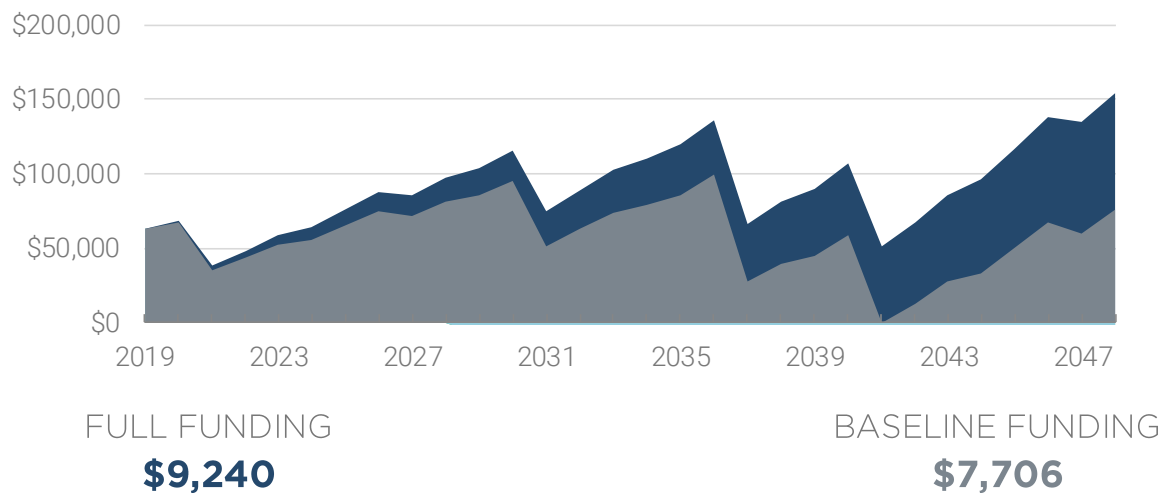
\$9,240

MAXIMUM
FULL FUNDING



FUNDING STRATEGIES

The funding strategy chosen will have a direct impact on the growth of the Association's reserve fund. The chart below highlights the outcomes of the various funding strategies.



Note: Figures based upon the expectation that the Association will continue to increase the contributions highlighted by an inflationary rate of 3.00% annually.



FULL FUNDING PLAN | SUMMARY

Year	Fully Funded Balance	Percentage Funded	Beginning Balance	Reserve Contribution	Special Assessment	Interest Earned	Reserve Expenditures	Ending Balance
2019	\$73,351	86%	\$62,855	\$9,240	\$0	\$655	\$4,000	\$68,750
2020	\$79,387	87%	\$68,750	\$9,518	\$0	\$531	\$40,763	\$38,036
2021	\$47,976	79%	\$38,036	\$9,803	\$0	\$429	\$0	\$48,268
2022	\$57,856	83%	\$48,268	\$10,097	\$0	\$531	\$393	\$58,503
2023	\$67,879	86%	\$58,503	\$10,400	\$0	\$610	\$5,374	\$64,139
2024	\$73,334	87%	\$64,139	\$10,712	\$0	\$695	\$0	\$75,546
2025	\$84,756	89%	\$75,546	\$11,033	\$0	\$811	\$0	\$87,390
2026	\$96,798	90%	\$87,390	\$11,364	\$0	\$862	\$13,836	\$85,780
2027	\$95,234	90%	\$85,780	\$11,705	\$0	\$911	\$1,013	\$97,383
2028	\$107,125	91%	\$97,383	\$12,057	\$0	\$1,001	\$6,524	\$103,918
2029	\$113,999	91%	\$103,918	\$12,418	\$0	\$1,093	\$1,613	\$115,816
2030	\$126,449	92%	\$115,816	\$12,791	\$0	\$948	\$54,782	\$74,773
2031	\$84,829	88%	\$74,773	\$13,175	\$0	\$814	\$0	\$88,761
2032	\$98,716	90%	\$88,761	\$13,570	\$0	\$951	\$969	\$102,312
2033	\$112,362	91%	\$102,312	\$13,977	\$0	\$1,057	\$7,223	\$110,124
2034	\$120,327	92%	\$110,124	\$14,396	\$0	\$1,142	\$6,232	\$119,430
2035	\$129,912	92%	\$119,430	\$14,828	\$0	\$1,268	\$0	\$135,526
2036	\$146,575	92%	\$135,526	\$15,273	\$0	\$1,004	\$85,452	\$66,351
2037	\$76,105	87%	\$66,351	\$15,731	\$0	\$735	\$1,362	\$81,456
2038	\$90,529	90%	\$81,456	\$16,203	\$0	\$852	\$8,768	\$89,743
2039	\$98,164	91%	\$89,743	\$16,689	\$0	\$981	\$0	\$107,413
2040	\$115,477	93%	\$107,413	\$17,190	\$0	\$792	\$73,623	\$51,772
2041	\$57,909	89%	\$51,772	\$17,705	\$0	\$595	\$2,299	\$67,773
2042	\$72,521	93%	\$67,773	\$18,237	\$0	\$765	\$710	\$86,065
2043	\$89,666	96%	\$86,065	\$18,784	\$0	\$906	\$9,707	\$96,048
2044	\$98,529	97%	\$96,048	\$19,347	\$0	\$1,057	\$0	\$116,452
2045	\$118,142	99%	\$116,452	\$19,928	\$0	\$1,264	\$0	\$137,644
2046	\$138,842	99%	\$137,644	\$20,525	\$0	\$1,354	\$24,990	\$134,534
2047	\$134,940	100%	\$134,534	\$21,141	\$0	\$1,438	\$2,517	\$154,597
2048	\$154,597	100%	\$154,597	\$21,775	\$0	\$1,596	\$11,783	\$166,186



BASELINE FUNDING PLAN | SUMMARY

Year	Fully Funded Balance	Percentage Funded	Beginning Balance	Reserve Contribution	Special Assessment	Interest Earned	Reserve Expenditures	Ending Balance
2019	\$73,351	86%	\$62,855	\$7,706	\$0	\$647	\$4,000	\$67,208
2020	\$79,387	85%	\$67,208	\$7,937	\$0	\$508	\$40,763	\$34,890
2021	\$47,976	73%	\$34,890	\$8,175	\$0	\$390	\$0	\$43,454
2022	\$57,856	75%	\$43,454	\$8,420	\$0	\$475	\$393	\$51,956
2023	\$67,879	77%	\$51,956	\$8,673	\$0	\$536	\$5,374	\$55,791
2024	\$73,334	76%	\$55,791	\$8,933	\$0	\$603	\$0	\$65,326
2025	\$84,756	77%	\$65,326	\$9,201	\$0	\$699	\$0	\$75,227
2026	\$96,798	78%	\$75,227	\$9,477	\$0	\$730	\$13,836	\$71,598
2027	\$95,234	75%	\$71,598	\$9,761	\$0	\$760	\$1,013	\$81,106
2028	\$107,125	76%	\$81,106	\$10,054	\$0	\$829	\$6,524	\$85,465
2029	\$113,999	75%	\$85,465	\$10,356	\$0	\$898	\$1,613	\$95,107
2030	\$126,449	75%	\$95,107	\$10,667	\$0	\$730	\$54,782	\$51,722
2031	\$84,829	61%	\$51,722	\$10,987	\$0	\$572	\$0	\$63,280
2032	\$98,716	64%	\$63,280	\$11,316	\$0	\$685	\$969	\$74,312
2033	\$112,362	66%	\$74,312	\$11,656	\$0	\$765	\$7,223	\$79,510
2034	\$120,327	66%	\$79,510	\$12,005	\$0	\$824	\$6,232	\$86,108
2035	\$129,912	66%	\$86,108	\$12,366	\$0	\$923	\$0	\$99,396
2036	\$146,575	68%	\$99,396	\$12,736	\$0	\$630	\$85,452	\$27,311
2037	\$76,105	36%	\$27,311	\$13,119	\$0	\$332	\$1,362	\$39,399
2038	\$90,529	44%	\$39,399	\$13,512	\$0	\$418	\$8,768	\$44,562
2039	\$98,164	45%	\$44,562	\$13,917	\$0	\$515	\$0	\$58,994
2040	\$115,477	51%	\$58,994	\$14,335	\$0	\$294	\$73,623	\$0
2041	\$57,909	0%	\$0	\$14,765	\$0	\$62	\$2,299	\$12,528
2042	\$72,521	17%	\$12,528	\$15,208	\$0	\$198	\$710	\$27,223
2043	\$89,666	30%	\$27,223	\$15,664	\$0	\$302	\$9,707	\$33,483
2044	\$98,529	34%	\$33,483	\$16,134	\$0	\$416	\$0	\$50,033
2045	\$118,142	42%	\$50,033	\$16,618	\$0	\$583	\$0	\$67,234
2046	\$138,842	48%	\$67,234	\$17,117	\$0	\$633	\$24,990	\$59,995
2047	\$134,940	44%	\$59,995	\$17,630	\$0	\$676	\$2,517	\$75,784
2048	\$154,597	49%	\$75,784	\$18,159	\$0	\$790	\$11,783	\$82,950



METHODOLOGY

An important aspect of living in a common area development such as a cooperative, condominium, or homeowner Association is the community's ownership and commitment to maintain its common areas.

Association members have a vested interest in maintaining and preserving their investment. To meet these obligations, the Association should prudently prepare for the future and contribute funds into a reserve account. Periodic contributions provide the freedom to gradually accumulate funds for anticipated expenditures while limiting the need to raise large sums of money through alternative means, such as special assessments.

When implementing a policy to fund major repair or replacement, the Board must educate owners about the benefits of accumulating reserve funds in advance through periodic contributions. Benefits of a systematic accumulation of funds include:

- having assurance that funds for major repairs and replacements will be available when needed;
- development of an equitable method of charging both current and future owners for ongoing use of assets;
- preservation of the market value of individual units; and
- compliance with the governing documents, statutes, mortgages, and other similar requirements.

A reserve study recommends the preferable mode of funding through smaller monthly contributions rather than facing large, unanticipated special assessments. The reserve study provides an Association with access to information and materials that will assist them in making timely and informed decisions about their reserve fund and contributions.

A reserve study is the sum of two parts: the physical and financial analysis. The physical analysis is a result of the on-site collection and review of data specific to the property's reserve components, common areas, and limited common areas. Through an onsite inspection and the use of source materials, the Reserve Specialist quantifies and establishes the reserve component inventory and assesses the physical condition of the Association's reserve components. Data from the physical analysis is used to define the scope and timing of future anticipated expenses.

The financial analysis evaluates the condition of the Association's reserve fund in relation to its income and anticipated expenses. It appraises the adequacy of the reserve fund, and associated



member contributions, against the current and future expenditures of the Association. To adequately forecast these expenditures over the 30-year projection period, current costs, projected inflation, and interest rates must be established. Recommendations are then provided to establish a reserve fund that addresses anticipated expenses, without having to resort to special assessments.

Due to the long-term nature of a reserve study, certain assumptions must be made. Every effort has been made to ensure that the recommendations are based upon reliable and experienced sources in the building industry. However, there can be no guarantee that events will occur at the predicted specific intervals, or that they will occur at all. Any reserve study must be viewed in the light of circumstances existing at the actual time of the study.

PHYSICAL ANALYSIS

As part of this reserve study a comprehensive list of reserve components (major common and limited common elements) has been compiled. Estimates for the useful life, remaining life, plus current repair and replacement costs for each of these reserve components have been calculated. This list is not intended to be exhaustive. However, an inaccurate or incomplete list of components can have an adverse impact upon the Association's long-term funding plan.

Site Inspection

A site inspection is conducted to assess the general condition of the property and its common areas. The on-site inspection is visual in nature, and no destructive or invasive testing is conducted. Observations are recorded using a representative sampling of the Association's common areas and reserve components. The component inventory and associated field measurements are also substantiated as part of the inspection.

Reserve Components

Determination of what constitutes a reserve component is dependent on a number of factors. A four-part test is generally used to distinguish a reserve item from an operational or maintenance expense. A component is included as a reserve item only if it satisfies ALL criteria outlined below:

- It is part of the Association's common and limited common area responsibilities.
- It has a predictable useful service life.
- Its useful life fits within the projection period. This means that components with a life of 30 years or more may not be included as part of the report if it is determined that they will last beyond the projection period.
- Its cost for repair or replacement is too high to include as part of the operating budget.



The components of common property that an Association includes in its reserve funding plan are also dependent on the type of project, the construction properties and the Association's applicable governing documents and state statutes.

Component Useful Life

The useful life of a reserve component relates to the number of years it is expected to last, given reasonable care and maintenance. The prediction of reserve and building component life can be no more than an informed estimate based upon information made available at the time of the report's development. Consideration is given to vendor recommendations, material warranty information provided at the time of the report's development, along with other published sources. The data and service life estimates in this report are based on information gathered from various groups and industry sources as outlined below:

- Historical data and feedback from the Association;
- Management groups and maintenance managers;
- Manufacturer recommendations and industry standards;
- Published sources of service life data;
- Manufacturers' and suppliers' data.

Component Remaining Useful Life

The remaining life of a reserve component refers to the number of years left before an item's expected repair or replacement. A component's remaining life is contingent upon the following factors:

- Age/years in service;
- Physical condition;
- Frequency and quality of inspections and maintenance;
- General use;
- Environment, impact of weather and building location;
- Installation methods that meets or exceed industry standards;
- Design and quality of materials used.

In addition to deterioration or anticipated failure of a component, the longevity may be impacted by obsolescence. The accuracy of the estimate is contingent upon reliable information made available at the time of the report's development. It is important to note that even with the highest degree of diligence and experience, outcomes will vary, and no guarantee can be given as to the timing or service life of the reserve components. All service life assessments in this report are based on the assumption that installation is carried out in accordance with manufacturer's recommendations and installation instructions, together with industry standards of workmanship.



FINANCIAL ANALYSIS

An Association, like any business entity, must prepare financially for the replacement and repair of its assets. Reserve study funding analysis is an important part of the annual budget process. Reserve funding should be reviewed at least once annually to help determine the annual assessment to be charged to members. The following elements are used in the financial analysis.

Recommended Funding Rate

We advocate a program of regular reserve fund contributions and promote a gradual means of reserving for future repair and replacement expenses. Recommended contributions are set at a level where they require only minor annual increases. The rate is designed to distribute the anticipated cost of common property ownership equitably between all members over the entire projection period.

Fully Funded Balance

The Fully Funded balance is equal to the total depreciable cost of all the Association's reserve components. It is determined by dividing each reserve component's cost by its useful life, and multiplying that by the number of years the component has been in service (effectively its age). In essence, the depreciated or 'used up' value of a component is utilized to establish an amount that the Association should have saved by a particular time. The recommendations in this report are based upon a Full Funding plan, which sets the goal of achieving one hundred percent fully funded reserves by the end of the 30-year projection period. We advocate full funding as we feel that this approach provides a solid platform to address future needs, thus dramatically reducing the need for special assessment.

Percent Funded

An Association's reserve fund status is assessed by comparing the ratio of actual or projected funds available verses how much they 'should have saved'. The result is presented as a percentage and is commonly known as "percent funded". In other words, percent funded is calculated by dividing the Association's current reserve fund balance by the fully funded balance. This equation is an industry measure of how well prepared an Association is to meet its current and future repair and replacement obligations. Percent funded highlights the strength of the Association's reserve account in relation to the anticipated costs of repair and replacement.

Reserve Component Cost

Current cost estimates for reserve components are derived from a variety of sources but typically are based on cost data sourced from national construction estimators (R.S. Means) and vendor pricing acquired from regional contractors and suppliers. All cost estimates formulated from national estimators are based upon the latest specific geographical information for the area. Future cost estimates are determined by applying the assumed annual inflation rate to the current cost of each component.



Individual cost estimates are for budgeting purposes only. Actual construction costs can vary significantly due to economies of scale, material availability, labor, seasonal considerations, and other factors beyond our control. We recommend that project costs be substantiated well in advance of the anticipated date of repair and replacement. A detailed evaluation by a qualified professional should also be undertaken to establish the scope and budget of each project.

Cost estimates do not account for permits, architectural, or project management fees that may be required. Allowances and contingencies must also be added to the total as the scope of work is defined.

Inflation Rate

The effect of inflation on the cost of reserve components is a key factor in the financial projections. Historically, the cost of construction materials and labor rise at a higher rate than that experienced by the general economy. RSG has chosen to use an inflationary multiplier that is somewhat higher than the current general consumer index for inflation. The rate used is based upon the historical average of inflation over the last 30 years. This rate reflects a realistic appreciation of future costs for reserve components and assists the Association in adequately budgeting for increasing cost.

Interest Rate

The interest rate used in this report is formulated on a conservative rate of return. Unless otherwise advised by the Association, an assumed net interest rate of 1.00% is used. RSG offers no guarantee or opinion in relation to investment decisions made by the Association or the rate of return achieved.

Current Reserve Fund Balance

The analysis, recommendations, and financial projections made within this report are heavily reliant on information provided by the Association and its representatives. The starting reserve fund balance (current or projected) and member contribution totals are supplied by these sources. This information has not been audited nor have the financial projections or recommendations.

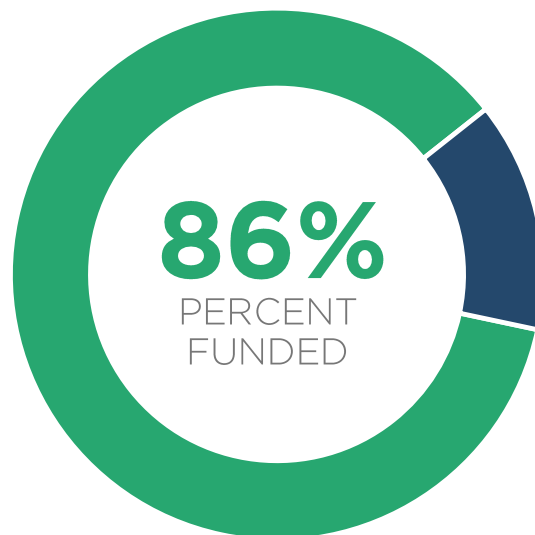


FINANCIAL ANALYSIS

This section of the report is intended to provide the association with the awareness to adequately plan for the ongoing major maintenance, repair and replacement of their common property components. The recommendations included within this report represent one scenario, and are not intended to represent the only means of achieving the association's goals. We recommend that the Board of Directors use the following information as a guide in planning for their future objectives.

Percent Funded

The Percent Funded equation is the industry measure of how well prepared an association is to meet its current and future repair and replacement obligations. Percent funded highlights the strength of the association's reserve account in relation to its anticipated costs of repair and replacement. The higher the funded level, the less exposed an association is to market conditions, unanticipated expenses or events, and fluctuations in the general economy.



RESERVE FUND
BALANCE
\$62,855

IDEAL
BALANCE
\$73,351

An Association at or below a funding level of 30% has an increased risk of requiring special assessments to meet their ongoing obligations, as compared to Associations with higher funding levels. A level of funding at and above 60% is categorized as good or well funded. We recommend that associations look to achieve and maintain funding levels at and above 60%, with a preference to being 100% funded.



Funding Goals

There is a range of funding alternatives available to the association. In our opinion the strategy chosen should not only meet the immediate needs and risk tolerance of current members, but also the longer term needs of the association.

The association needs to establish a reserve contribution rate which, at a minimum, meets their anticipated financial needs without having to resort to special assessment or deferred maintenance. In addition, the funding goal needs to be prudent enough to meet the expectations of current members while not unfairly burdening future owners.

The minimum funding goal needed to meet planned expenditure is Baseline Funding. Baseline Funding maintains the reserve account at or above zero dollars, but leaves the association with no contingency to address unanticipated outcomes. Threshold funding is a strategy designed to provide for this contingency by keeping cash reserves above a specific dollar amount or percent funded level.

FULL FUNDING

Establishes a goal of achieving one hundred percent fully funded reserves by the end of the projection period.

THRESHOLD FUNDING

Sets out to keep the cash reserves above a specified dollar or percent funded amount for the duration of the projection period.

BASELINE FUNDING

Establishes a goal of maintaining a reserve account balance above zero dollars throughout the study period.

The reserve fund plan highlighted in this report is based upon the Full Funding program of reserve contributions. The Full Funding plan highlights an ideal level of contributions which will enable an association to be 100% funded by the end of the projection period. As stated previously, we recommend that the association implement a program that moves them toward and maintains a funding level of 60-100%.



RESERVE COMPONENT LIST

Component	Useful Life	Remaining Useful Life	Quantity	Unit of Measure	Unit Cost	Current Cost	Current Fully Funded Balance
HDPE Pipe - On-Site [10% Repair] ¹	10	1	3,752	LF	\$14.75	\$5,534	\$4,981
HDPE Pipe - Off-Site [10% Repair]	10	1	7,435	LF	\$24.50	\$18,216	\$16,394
HDPE Pipe - Site Restoration, Residences ²	10	1	3,752	LF	\$7.00	\$2,626	\$2,364
HDPE Pipe - Trench Excavation & Backfill ³	10	1	7,435	LF	\$17.00	\$12,640	\$11,376
Residential Lots - Check Valves [x71] ⁴	10	9	1	Allowance	\$5,000.00	\$5,000	\$500
Treatment Building - [8x8] Replace	20	7	1	Lump Sum	\$11,250.00	\$11,250	\$7,313
Treatment Building - Pump	12	10	1	Each	\$1,200.00	\$1,200	\$200
Treatment Building - Heater	10	3	1	Each	\$360.00	\$360	\$252
Treatment Building - Storage Tanks [125 Gal.]	10	8	1	Lump Sum	\$800.00	\$800	\$160
Treatment Building - Exhaust Fan	15	13	1	Each	\$300.00	\$300	\$40
Treatment Building - Flow Meter	15	0	1	Each	\$4,000.00	\$4,000	\$4,000
Treatment Building - Sump Grate	10	1	1	Each	\$560.00	\$560	\$504
General Site - Water Flow Meter [Baker Way NW]	10	4	1	Lump Sum	\$4,775.00	\$4,775	\$2,865
General Site - Discharge Control Vault [Baker Way NW]	30	17	1	Each	\$4,200.00	\$4,200	\$1,820
General Site - Discharge Control Vault [47th Ave Ct NW]	30	17	1	Each	\$4,200.00	\$4,200	\$1,820
General Site - Septic Aerator	30	17	1	Each	\$2,825.00	\$2,825	\$1,224
General Site - Air Vacuum Release Assembly	30	17	2	Each	\$5,050.00	\$10,100	\$4,377
General Site - Low Point Drain	30	17	1	Each	\$3,375.00	\$3,375	\$1,463
General Site - Standard Box & Valve	30	17	8	Each	\$3,375.00	\$27,000	\$11,700
TOTALS						\$118,961	\$73,351

† Homeowner responsible for the operation and maintenance of the STEP system components located on their lot to the outlet valve located near the property line. This includes, but is not limited to, septic tanks, pumps, piping, valving and associated electrical equipment.

¹ Quantities are for ongoing repair to existing pipe line, as complete replacement not anticipated within projection period. Life estimates for HDPE [High-density polyethylene] pipes are in excess of 50 years and beyond the scope of the reserve study.

² Allowance to address repair work to transmission pipe located beneath paved roads and private drives.

³ Allowance to address repair work to pipe buried on the shoulder of roads and through open spaces, located off-site.

⁴ Allowance to address ongoing replacement of the check valves on an as needed basis. Estimate to be adjusted as costs realized.

▪ Readers should be aware that certain property elements are considered 'long life' elements and are not accounted for within the reserve study in conjunction with elements that are or can be managed as part of the Association's operating budget.



RESERVE EXPENSES 1-10 YEARS

Component	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
HDPE Pipe - On-Site [10% Repair]	\$0	\$5,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Off-Site [10% Repair]	\$0	\$18,762	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Site Restoration, Residences	\$0	\$2,705	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Trench Excavation & Backfill	\$0	\$13,019	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential Lots - Check Valves [x71]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,524
Treatment Building - [8'x8'] Replace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,836	\$0	\$0
Treatment Building - Pump	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Heater	\$0	\$0	\$0	\$393	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Storage Tanks [125 Gal.]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,013	\$0
Treatment Building - Exhaust Fan	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Flow Meter	\$4,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Sump Grate	\$0	\$577	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Water Flow Meter [Baker Way NW]	\$0	\$0	\$0	\$0	\$5,374	\$0	\$0	\$0	\$0	\$0
General Site - Discharge Control Vault [Baker Way NW]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Discharge Control Vault [47th Ave Ct NW]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Septic Aerator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Air Vacuum Release Assembly	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Low Point Drain	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Standard Box & Valve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual Expenditure	\$4,000	\$40,763	\$0	\$393	\$5,374	\$0	\$0	\$13,836	\$1,013	\$6,524

YEARS 1 THROUGH 10



RESERVE EXPENSES 11-20 YEARS

Component	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
HDPE Pipe - On-Site [10% Repair]	\$0	\$7,661	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Off-Site [10% Repair]	\$0	\$25,215	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Site Restoration, Residences	\$0	\$3,636	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Trench Excavation & Backfill	\$0	\$17,496	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential Lots - Check Valves [x71]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,768
Treatment Building - [8'x8] Replace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Pump	\$1,613	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Heater	\$0	\$0	\$0	\$529	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Storage Tanks [125 Gal.]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,362	\$0
Treatment Building - Exhaust Fan	\$0	\$0	\$0	\$441	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Flow Meter	\$0	\$0	\$0	\$0	\$0	\$6,232	\$0	\$0	\$0	\$0
Treatment Building - Sump Grate	\$0	\$775	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Water Flow Meter [Baker Way NW]	\$0	\$0	\$0	\$0	\$7,223	\$0	\$0	\$0	\$0	\$0
General Site - Discharge Control Vault [Baker Way NW]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,942	\$0	\$0
General Site - Discharge Control Vault [47th Ave Ct NW]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,942	\$0	\$0
General Site - Septic Aerator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,669	\$0	\$0
General Site - Air Vacuum Release Assembly	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$16,694	\$0	\$0
General Site - Low Point Drain	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,578	\$0	\$0
General Site - Standard Box & Valve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$44,627	\$0	\$0
Annual Expenditure	\$1,613	\$54,782	\$0	\$969	\$7,223	\$6,232	\$0	\$85,452	\$1,362	\$8,768

YEARS 11 THROUGH 20



RESERVE EXPENSES 21-30 YEARS

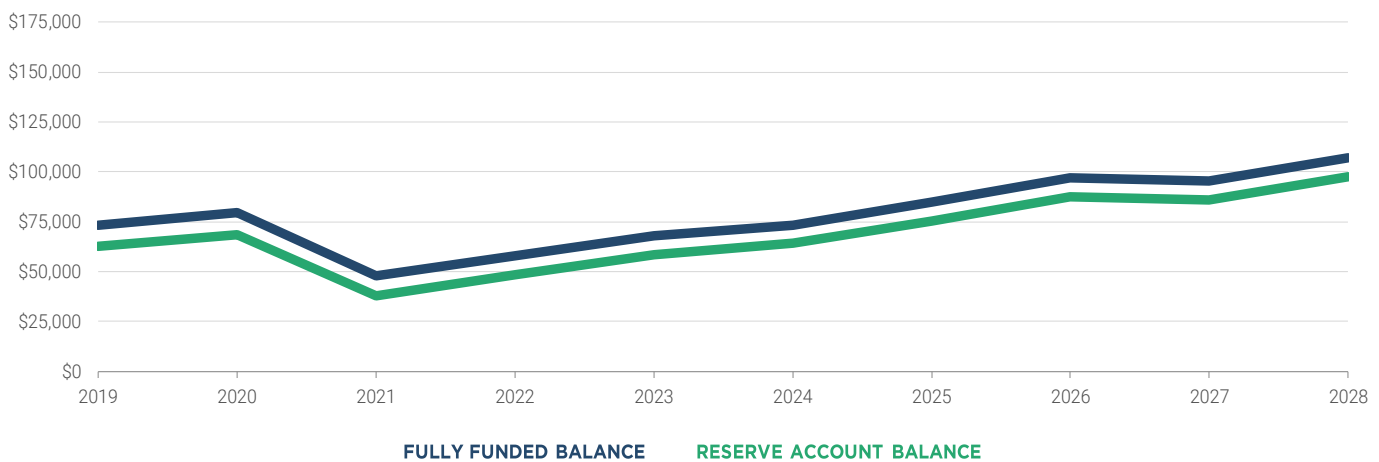
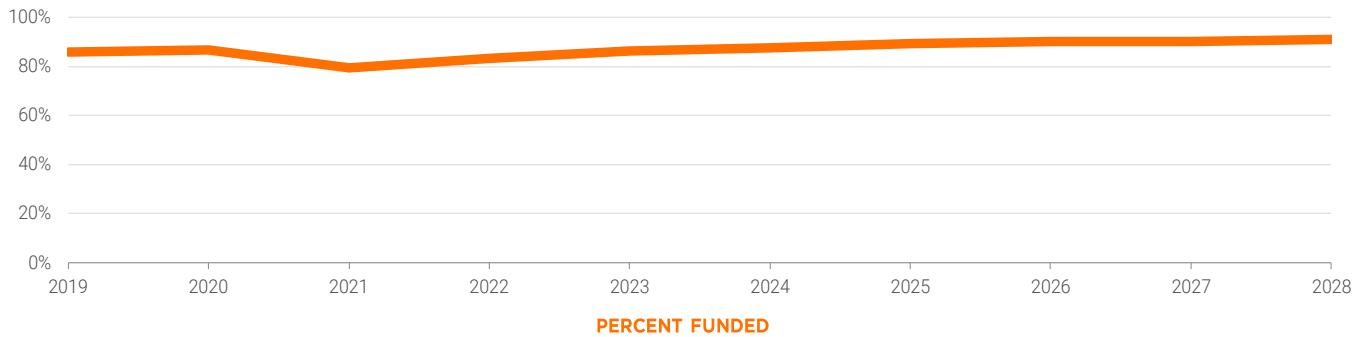
Component	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
HDPE Pipe - On-Site [10% Repair]	\$0	\$10,295	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Off-Site [10% Repair]	\$0	\$33,887	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Site Restoration, Residences	\$0	\$4,886	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
HDPE Pipe - Trench Excavation & Backfill	\$0	\$23,513	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Residential Lots - Check Valves [x71]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,783
Treatment Building - [8'x8'] Replace	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$24,990	\$0	\$0
Treatment Building - Pump	\$0	\$0	\$2,299	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Heater	\$0	\$0	\$0	\$710	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Storage Tanks [125 Gal.]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,830	\$0
Treatment Building - Exhaust Fan	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$686	\$0
Treatment Building - Flow Meter	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Treatment Building - Sump Grate	\$0	\$1,042	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Water Flow Meter [Baker Way NW]	\$0	\$0	\$0	\$0	\$9,707	\$0	\$0	\$0	\$0	\$0
General Site - Discharge Control Vault [Baker Way NW]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Discharge Control Vault [47th Ave Ct NW]	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Septic Aerator	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Air Vacuum Release Assembly	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Low Point Drain	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
General Site - Standard Box & Valve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual Expenditure	\$0	\$73,623	\$2,299	\$710	\$9,707	\$0	\$0	\$24,990	\$2,517	\$11,783

YEARS 21 THROUGH 30



FULL FUNDING PLAN 1-10 YEARS

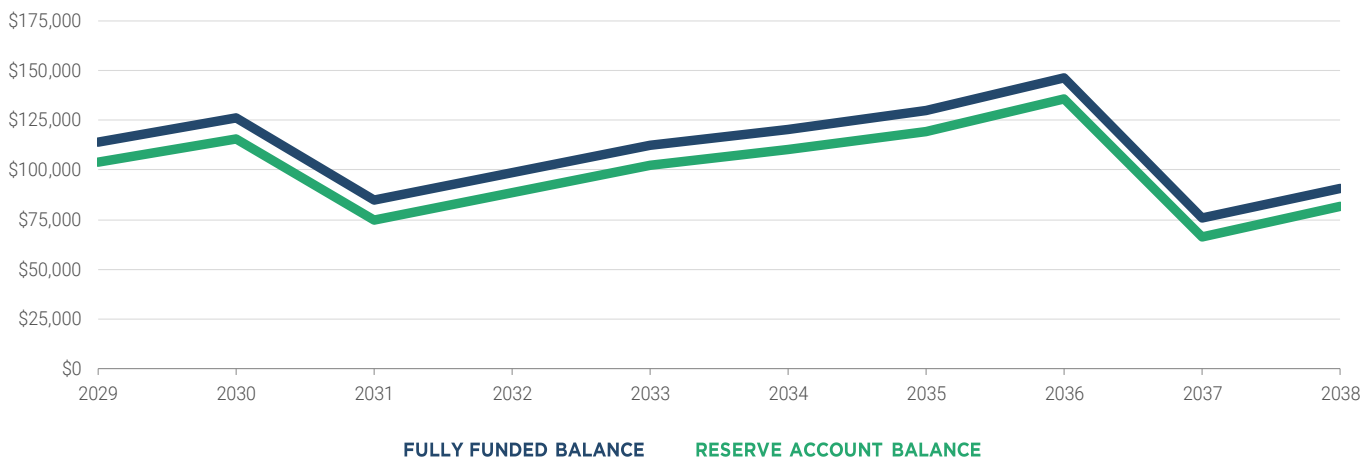
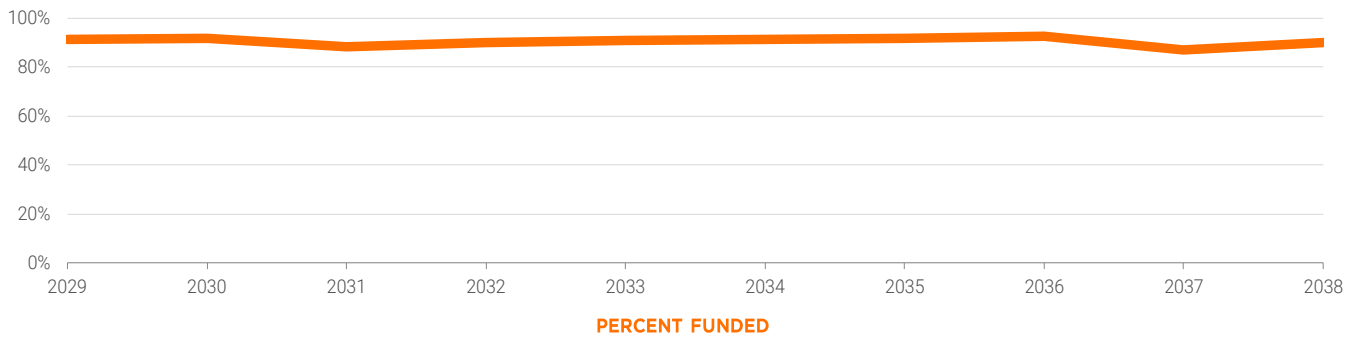
YEAR 1 - 10	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Fully Funded Balance	\$73,351	\$79,387	\$47,976	\$57,856	\$67,879	\$73,334	\$84,756	\$96,798	\$95,234	\$107,125
Percentage Funded (%)	86%	87%	79%	83%	86%	87%	89%	90%	90%	91%
Beginning Balance	\$62,855	\$68,750	\$38,036	\$48,268	\$58,503	\$64,139	\$75,546	\$87,390	\$85,780	\$97,383
Reserve Contribution	\$9,240	\$9,518	\$9,803	\$10,097	\$10,400	\$10,712	\$11,033	\$11,364	\$11,705	\$12,057
Avg Unit Contribution (mth)	\$10.85	\$11.17	\$11.51	\$11.85	\$12.21	\$12.57	\$12.95	\$13.34	\$13.74	\$14.15
Contribution Increase (%)		3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Special Assessment										
Interest Earned	\$655	\$531	\$429	\$531	\$610	\$695	\$811	\$862	\$911	\$1,001
Reserve Expenditures	\$4,000	\$40,763	\$0	\$393	\$5,374	\$0	\$0	\$13,836	\$1,013	\$6,524
ENDING BALANCE	\$68,750	\$38,036	\$48,268	\$58,503	\$64,139	\$75,546	\$87,390	\$85,780	\$97,383	\$103,918





FULL FUNDING PLAN 11-20 YEARS

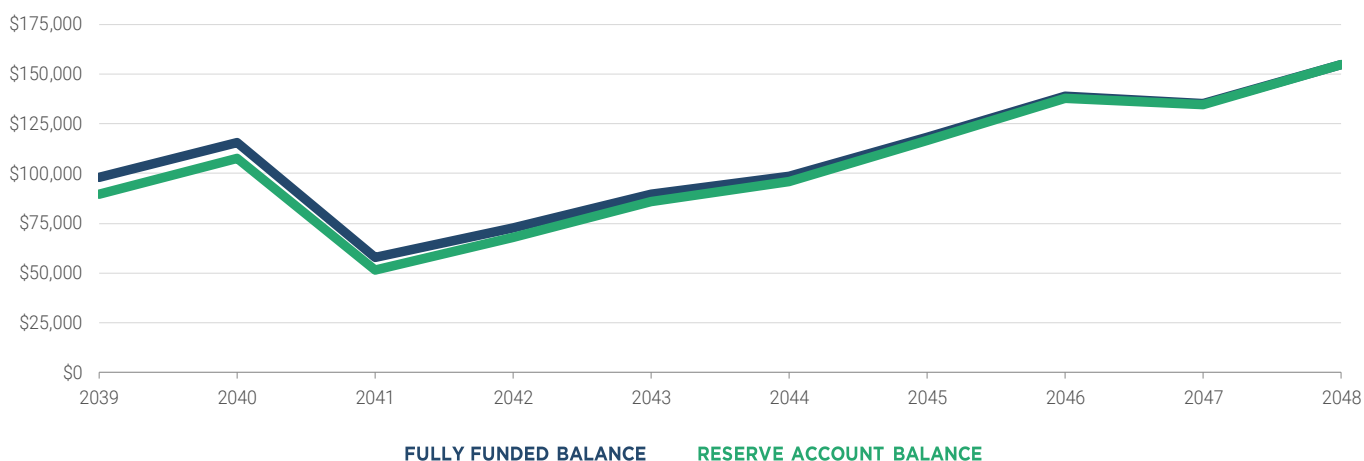
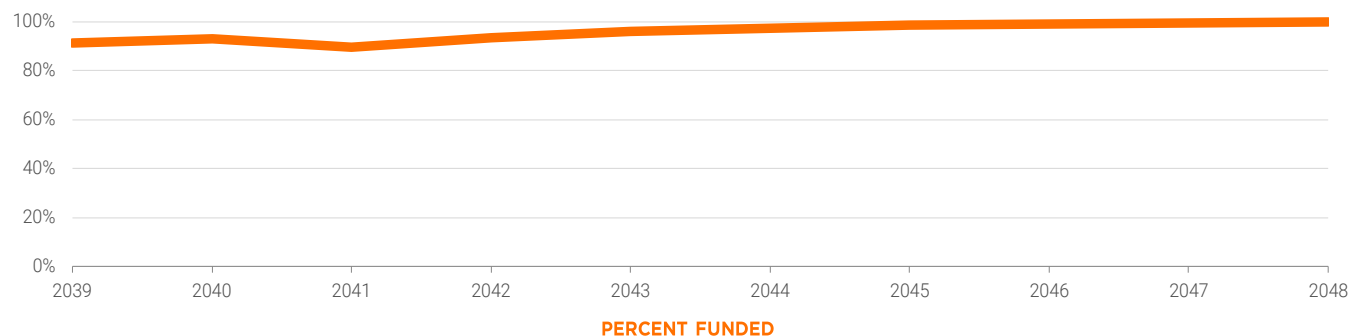
YEAR 11 - 20	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
Fully Funded Balance	\$113,999	\$126,449	\$84,829	\$98,716	\$112,362	\$120,327	\$129,912	\$146,575	\$76,105	\$90,529
Percentage Funded (%)	91%	92%	88%	90%	91%	92%	92%	92%	87%	90%
Beginning Balance	\$103,918	\$115,816	\$74,773	\$88,761	\$102,312	\$110,124	\$119,430	\$135,526	\$66,351	\$81,456
Reserve Contribution	\$12,418	\$12,791	\$13,175	\$13,570	\$13,977	\$14,396	\$14,828	\$15,273	\$15,731	\$16,203
Avg Unit Contribution (mth)	\$14.58	\$15.01	\$15.46	\$15.93	\$16.40	\$16.90	\$17.40	\$17.93	\$18.46	\$19.02
Contribution Increase (%)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Special Assessment										
Interest Earned	\$1,093	\$948	\$814	\$951	\$1,057	\$1,142	\$1,268	\$1,004	\$735	\$852
Reserve Expenditures	\$1,613	\$54,782	\$0	\$969	\$7,223	\$6,232	\$0	\$85,452	\$1,362	\$8,768
ENDING BALANCE	\$115,816	\$74,773	\$88,761	\$102,312	\$110,124	\$119,430	\$135,526	\$66,351	\$81,456	\$89,743





FULL FUNDING PLAN 21-30 YEARS

YEAR 21 - 30	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048
Fully Funded Balance	\$98,164	\$115,477	\$57,909	\$72,521	\$89,666	\$98,529	\$118,142	\$138,842	\$134,940	\$154,597
Percentage Funded (%)	91%	93%	89%	93%	96%	97%	99%	99%	100%	100%
Beginning Balance	\$89,743	\$107,413	\$51,772	\$67,773	\$86,065	\$96,048	\$116,452	\$137,644	\$134,534	\$154,597
Reserve Contribution	\$16,689	\$17,190	\$17,705	\$18,237	\$18,784	\$19,347	\$19,928	\$20,525	\$21,141	\$21,775
Avg Unit Contribution (mth)	\$19.59	\$20.18	\$20.78	\$21.40	\$22.05	\$22.71	\$23.39	\$24.09	\$24.81	\$25.56
Contribution Increase (%)	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%
Special Assessment										
Interest Earned	\$981	\$792	\$595	\$765	\$906	\$1,057	\$1,264	\$1,354	\$1,438	\$1,596
Reserve Expenditures	\$0	\$73,623	\$2,299	\$710	\$9,707	\$0	\$0	\$24,990	\$2,517	\$11,783
ENDING BALANCE	\$107,413	\$51,772	\$67,773	\$86,065	\$96,048	\$116,452	\$137,644	\$134,534	\$154,597	\$166,186





DISCLOSURES

As a guideline for establishing and spending reserves, it is assumed that the reserve study will be regularly updated to address the Association's changing physical and financial circumstances. As such this report is valid at the date shown and Reserve Study Group, LLC (RSG) cannot be held responsible for subsequent changes in physical/chemical environmental conditions and/or legislation over which we have no control.

This reserve study is based on visual inspections of the physical plant's major components. No invasive or destructive testing, or testing of materials was conducted during the inspections, or at any other time during the preparation of this report. It is assumed that all building and ancillary components have been designed and constructed properly and that life cycles will approximate normal industry performance standards. RSG shall not be responsible for accurate determination of remaining life expectancies of components that may have been improperly designed and constructed. Our opinions of the remaining life expectancy of the property's components do not represent a guarantee or warranty of performance in relation to the product, materials or workmanship.

Cost estimates used represent a preliminary opinion only and are neither a quote nor a warranty of actual costs that may be incurred. These estimates are based on typical cost data that may not fully characterize the scope of the underlying property conditions. It should be anticipated that actual cost outcomes will be impacted by varying physical and economic conditions, maintenance practices, changes in technology, and future regulatory actions.

The authors of this report make no representation or warranty, expressed or implied, with respect to the contents of this publication or any part thereof and cannot accept any legal responsibility or liability for any inaccuracies, errors or omissions contained in this publication or any part thereof. Our best professional judgment has been used, however certain facts forming the basis of this report are subject to professional interpretation and differing conclusions could be reached.

RSG nor any of its representatives, agents or employees maintain management roles or vested interest in, or have other business relationships with the Association. There is no perceived or actual conflicts of interest between RSG and the Association. Our reserve studies are prepared by a reserve study professional and also comply with the requirements of the Washington Unified Common Interest Act (WUCIOA).

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 the association to (1) defer major maintenance, repair, or replacement, (2) increase future reserve contributions, (3) borrow funds to pay for major maintenance, repair, or replacement, or (4) impose special assessments for the cost of major maintenance, repair, or replacement.



GLOSSARY OF TERMS

Component

The individual line items in the Reserve Study which are included in the Physical Analysis. These elements form the building blocks for the Reserve Study.

Estimated Useful Life

The estimated time, in years, that a reserve component can be expected to serve its intended function if properly constructed in its present application or installation.

Fully Funded

When the actual (or projected) Reserve balance is equal to the Fully Funded Balance.

Fully Funded Balance (FFB)

The Reserve balance that is in direct proportion to the fraction of life “used up” of the current Repair or Replacement cost. This number is calculated for each component, then summed together for an Association total.

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

Percent Funded

The ratio, at a particular point of time, of the actual Reserve Balance to the Fully Funded Balance (FFB), expressed as a percentage.

Remaining Useful Life

The estimated time, in years, that a Reserve Component can be expected to continue to service its intended function. Projects anticipated to occur in the initial year have a “zero” Remaining Life.

Unit Cost Estimate

The cost of replacing, repairing, or restoring a Reserve Component to its original functional condition. The Current Replacement Cost would be the cost to replace, repair, or restore the component during the current year.

Unit of Measure

Various units of measure have been used to quantify the amounts and costs in relation to each reserve component. Below are the key units used as part of this report.

SF = Square Foot
LF = Linear Foot

SY = Square Yard
SQUARE = 100 Square Feet (Roofing)

