Reserve Study and Funding Analysis Report

HOA Name: **Mesa View HOA #3**

HOA City and State: **San Diego, CA**

For Fiscal Year: **2020-2021**

Date Prepared: March 19, 2020

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Table of Contents

Table of Contents ..... **i**

Table of Figures ..... **ii**

Table of Tables ..... **ii**

Introduction **1**
HOA Responsibilities 1

Summary **1**
Community Profile and Account Summary 2
Site Map 3
Reserve Study Parameters 3
Physical Analysis 5

Funding Summary **6**
Goals of Funding Analysis 6
Current Reserve Fund Percent Funding 6
Current Income 7
Current Expenses 7
Future Income Sources 7

Reserve Components **9**
Included Components 9
Component Useful Life Estimates 9
Component Remaining Useful Life Estimates 9
Determining the Cost of Replacement 10
Excluded Components 10
Reserve Fund Allocation 10
Component Inventory 12

Income and Expenses **15**

Detailed Financial Analysis **17**
Annual Projected Expenses 17
Special Project Expenditures 17
Reserve Component Expenditures 17

Reserve Fund Expenditures **20**

Income and Expense Summaries **25**
Years 2020 to 2029 266
Years 2030 to 2039 29
Years 2040 to 2050 32

Appendix **33**
Analysis Types 33
Terms and Definitions 34
Funding Methodologies 38

Table of Figures

Figure 1: Current Percent Funding **6**
Figure 2: 30 Year Reserve Fund Allocation **11**
Figure 3: Reserve Fund Expenditures **20**
Figure 4: All Annual Expenses **21**
Figure 5: Start of Year Reserve Balance Percent Funding **21**
Figure 6: Annual Income and Reserve Contribution **22**
Figure 7: Monthly Reserve Contribution Rate **23**
Figure 8: Annual Reserve Balance vs Reserve Expenses **23**
Figure 9: Reserve Account Comparison **24**
Figure 10: Percent Funded Comparison **24**
Figure 11: Risk of Special Assessment or Deferred Maintenance **25**

Table of Tables

Table 1: Community Profile and Account Summary **2**
Table 2: Reserve Study Parameters **3**
Table 3: Current Income Sources **7**
Table 4: Current Expenses **7**
Table 5: Future Income Sources **8**
Table 6: Reserve Component Inventory **12**
Table 7: Projected Income & Expenses Summary **16**

Introduction

HOA Responsibilities

HOAs have a responsibility to establish and maintain a Replacement Reserve Fund to provide the maintenance or replacement of association depreciable components. The objectives of a Reserve Study or Analysis includes the following:

- Provide a current estimate of the costs of repairing and replacing major common area components over the long term.
- All major repair and replacement costs will be covered by funds set aside by the association as reserves, so that funds are available when needed.
- An examination of the association's repair and replacement obligations is conducted.
- The costs and timing of replacement are determined.
- Distribute the contributions of old and new owners.
- Allows for the aesthetic qualities of the community to be maintained.
- Minimizes the need for special assessments.
- Shows owners and potential buyers a more accurate and complete picture of the association's financial strength and market value.
- Disclose to buyers, lenders, and others the manner in which management of the association is making provisions for non-annual maintenance requirements.
- Define explicit association decisions on how to provide for long-term funding.
- Provide or contribute to a maintenance planning tool for the association.

Summary

Our HOA is approaching 50 years of existence. Many of the components that didn't need to be on the Reserve Study since they had a life span of longer than 30 years may now need to be on the study. This will mean we need to start saving even more than we have been. We appreciate your continued help as we collect the assessments and hope you will also think of contributing some of your time to take care of some of the smaller maintenance issues so we don't have to hire someone else to do them.

Community Profile and Account Summary

Table 1: Community Profile and Account Summary

Community Profile and Account Summary	
Community:	Mesa View HOA #3
Number of Units:	349
Start Year for Analysis:	2020
Current Reserve Balance:	$89,000
ecommended 2020 Annual Reserve Contribution:	$10,588
Current Reserve Fully Funded Balance (FFB):	$113,593
Current Reserve Funding Percent of FFB:	78%
Current (Deficit) or Surplus Per Unit:	($70)
Current Reserve Funding Strength:	Strong
Current Risk of Special Assessment:	Low
Current Contingency Fund Balance:	$0
Current Outstanding Loan Balance:	$0

Site Map

Reserve Study Parameters

Table 2: Reserve Study Parameters

Reserve Study Parameters	
Level of Reserve Study:	Class III: Update no Site Visit
Report Period:	Fiscal Year 2020
Interest rate on Reserve Balance:	3.00%
Assumed Inflation Rate for Reserve Expenses:	3.00%
Assumed Inflation Rate for Operational Expenses:	3.00%
Funding Strategy:	Threshold Funding
Funding Methodology:	Cash Flow
Target Percent of FFB:	70% of FFB
Maintain Contingency Fund:	No
Contingency Fund Percent:	N/A

Preparation

- Prior reserve studies, if available, were used as references for this analysis as a baseline for identification of reserve asset components
- The HOA Community Manager and members of the Board conducted an inventory of the reserve assets:
  - If available, prior reserve studies reserve assets inventory
  - Conduct current inventory of reserve assets
  - Verified that no assets were overlooked or if assets should be excluded
  - Condition of assets and useful life was evaluated by community manager, knowledgeable members of the community and outside service providers
  - Review historical records for component maintenance frequency and costs
  - Asses component useful life based on how long past component maintenance endured

Assumptions

- The physical inventory and condition assessment of all physical assets is complete.
- The component replacement cost estimates are reasonably accurate.
- Projected future financial requirements to fund the reserve components are accumulated based on actual costs or current estimated costs. Future expenditures are thereby estimated using the inflation assumptions stated herein.
- Estimates for current and future operational expenses are reasonably accurate. This includes annual expenses such as insurance, administration and maintenance. Future operational expenses are projected to rise at the projected inflation rate.

Funding Goals

- Provide sufficient funds when required
- Achieve and sustain a targeted percent funding of the Fully Funded Balance of the reserve fund
- Enable a stable contribution rate over the years
- Evenly distribute contributions over the years
- Minimize the need for special assessments
- Be fiscally responsible

It is common misconception that an HOA or community should maintain 100% of the fully funded balance. As a performance indicator, percent funding is used as a measure of the health of the reserve fund and a percent funding range of 70% to 100% is commonly adopted as a target percentage as it has been statistically shown that communities that maintain their percent funding in this range are far less likely to experience emergency assessments or deferral of maintenance. They can easily weather unexpected expenses and economic downturns. The actual percent funding target is used as a performance indicator and can vary according to unique circumstances.

The common guidelines for percent funding are:

- **Overfunded: Greater than 100%**
  - Indication that steps should be taken to bring the fund back into balance
  - Continued over funded places an unfair burden on individual members to maintain a fund in excess of what is needed
  - Overfunding does not provide additional safeguards that could be obtained from a strong position
- **Strong: 70% – 100%:**
  - Risk of special assessments or deferred maintenance is low
  - Higher marketability

  - Unexpected expense and economic downturns are easily overcome
- **Fair: 30% – 70%:**
  - Due diligence indicated to assure adequate funding scheduled expenses
  - Unexpected expenses and economic downturns pose a moderate to high risk of special assessments or deferred maintenance
- **Weak: 0% – 30%:**
  - Risk of special assessments is high, especially in the case of unexpected expenses or an economic downturn
  - Deferred maintenance of reserve components is very common
  - High stress and political turmoil are likely
  - Lower marketability

Physical Analysis

The reserve funding plan is most contingent upon an accurate physical analysis. To the extent practical, this reserve study consists of:

- Review of all components to assure proper identification and quantity
- Identify any new components
- Inspect all reserve components to assess their condition
- Examine historical records of component maintenance and evaluate if the Component Useful Life is accurately represented in the inventory listing
- In cases where reserve components were serviced in the last few years, evaluate if the past costs, once adjusted for inflation, represent an accurate estimate of the current service cost
- Consult with knowledgeable vendors and service providers to evaluate current condition, assure correct costs and useful lives are assessed

Funding Summary

Goals of Funding Analysis

The goals of a Funding Analysis are to:

- establish funding goals
- identify annual funding requirements
- disclose limitations and assumptions

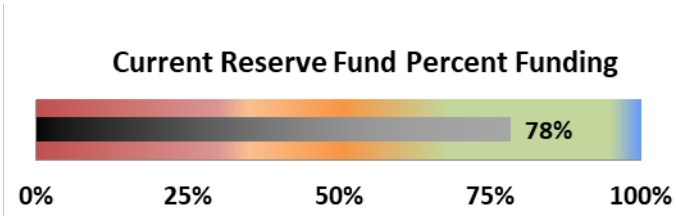
Once the components' estimated useful life, estimated remaining life, and estimated current replacement costs are identified, only then can the association develop a plan for funding the reserve account. This funding plan specifies future reserve cash needs and planned methods to offset the ongoing deterioration of the reserve components.

In preparing the funding plan, the association will have to make decisions about the amount of current assessments and the need for special assessments, balanced against projected liability. The law does not require the funding of projected replacement costs, only an explicit description of the plan for such funding, among other specific disclosures. The financial viability of the association will depend a great deal on the ability of the association to replace components as they wear out and not to defer major maintenance items.

A product of the Funding Analysis process is the development of a funding plan (cash flow forecast or projection) to estimate future reserve cash receipts and disbursements. This Reserve Study documents the funding plan with documented supporting assumptions and methodology.

Current Reserve Fund Percent Funding

Figure 1: Current Percent Funding



Percent Funding Scale	
Weak 0% - 30%	Fair 30% - 70%
Strong 70% - 100%	Overfunded > 100%

Current Income

The primary source of an association's income is from annual dues. Other sources can also include sale of assets and rental of facilities. The following summarizes the sources of income used in this reserve study.

Table 3: Current Income Sources

Current Funding Summary

Income Type	Amount
Current Annual Dues:	$70,498
Current Planned Annual Dues Increases:	3.00%
Interest on Reserve Fund:	3.00%
Other Annual Income:	$0
Est Annual Pct Increase Other Income:	0.00%

Current Special Assessments	
Year	Amount

Current Expenses

Table 4: Current Expenses

Current Expenses

Current Annual Operational Expenses:	$62,580
Current Loan Payments:	$0

Future Income Sources

Income sources used in this reserve study financial analysis include:

- Annual dues and annual dues increase
- New loans
- Annual income from other sources such as facilities rentals
- Interest on reserve fund accounts
- Special assessments
- Other one-time incomes such as a sale of assets

Table 5: Future Income Sources

Future Income Sources

Dues Increase #1	
% Increase:	3.40%
Start Year:	2021
Duration:	15 yrs

Dues Increase #2	
% Increase:	3.00%
Start Year:	2036
Duration:	15 yrs

Dues Increase #3	
% Increase:	
Start Year:	
Duration:	

New Loans	
Year	Amount

Other Annual Income
$0

Other Income Ann Increase
0.00%

Interest on Reserve Fund
3.00%

New Special Assessments	
Year	Amount

Other One-Time Incomes		
Year	Amount	Description

Reserve Components

Reserve expenses for components are major expenses which must be budgeted for in advance in order to provide the necessary funds in time to cover the necessary maintenance or replacement as components deteriorate. Reserve expenses are reasonably predictable both in terms of frequency and cost. They are expenses that, if not reserved in advance, would likely have a significant impact on the budgetary process from one year to the next.

Included Components

A common concern is what components are to be included and funded for in the Reserve Study. Nationally recognized Reserve Study Standards indicates reserve components need to meet **ALL** of the following criteria:

- The component is owned and maintained by the Association
- The component is NOT already covered in a maintenance contract
- The component has a limited life expectancy
- The component has a predictable and reasonably defined remaining useful life
- The component project cost is above a threshold amount imposed by the Association

Component Useful Life Estimates

"Useful life" is defined as the number of years the component is expected to serve its intended purpose if given regular and proper maintenance. Estimating the useful life of each of components includes the following factors:

- Material manufacturer's warranty
- Commercially available published source with estimates of useful life such as the US Department of Housing and Urban Development and Fannie Mae.
- Evaluating the Association's past maintenance records

Component Remaining Useful Life Estimates

The "Remaining Life" is defined as the expected number of years the component will continue to serve its intended purpose prior to repair or replacement. Estimating the remaining useful life of each of components includes the following factors:

- Subtracting the year that the component was installed from the useful life estimate
- Evaluating the apparent physical condition by someone familiar with the component such as a service vendor and adjusting the remaining useful life as necessary
- Evaluating past maintenance records to determine if the useful life is accurately represented

In determining the remaining life of a component, a certain level of continued preventive maintenance is assumed. Any assumptions pertaining to these maintenance assumptions are explicitly stated so that proper maintenance can be continued throughout the component's remaining life.

The remaining life of a component implicitly specifies the year in which maintenance or replacement is required. The analysis timeline shows the year of replacement for each component. The timeline serves as a schedule for expected component replacements and can be updated or changed when the Physical Analysis is updated or as components last for shorter or longer periods than expected.

Determining the Cost of Replacement

Replacement costs are obtaining in various manners. All costs also include the cost of removing the existing component, if appropriate. Factors for estimating replacement costs include:

- Cost estimating manuals and guidelines, if appropriate
- Evaluating historical maintenance records and, where appropriate, adjusting for inflation
- Obtaining current estimates from reliable sources such as contractors, suppliers or subject matter experts

Excluded Components

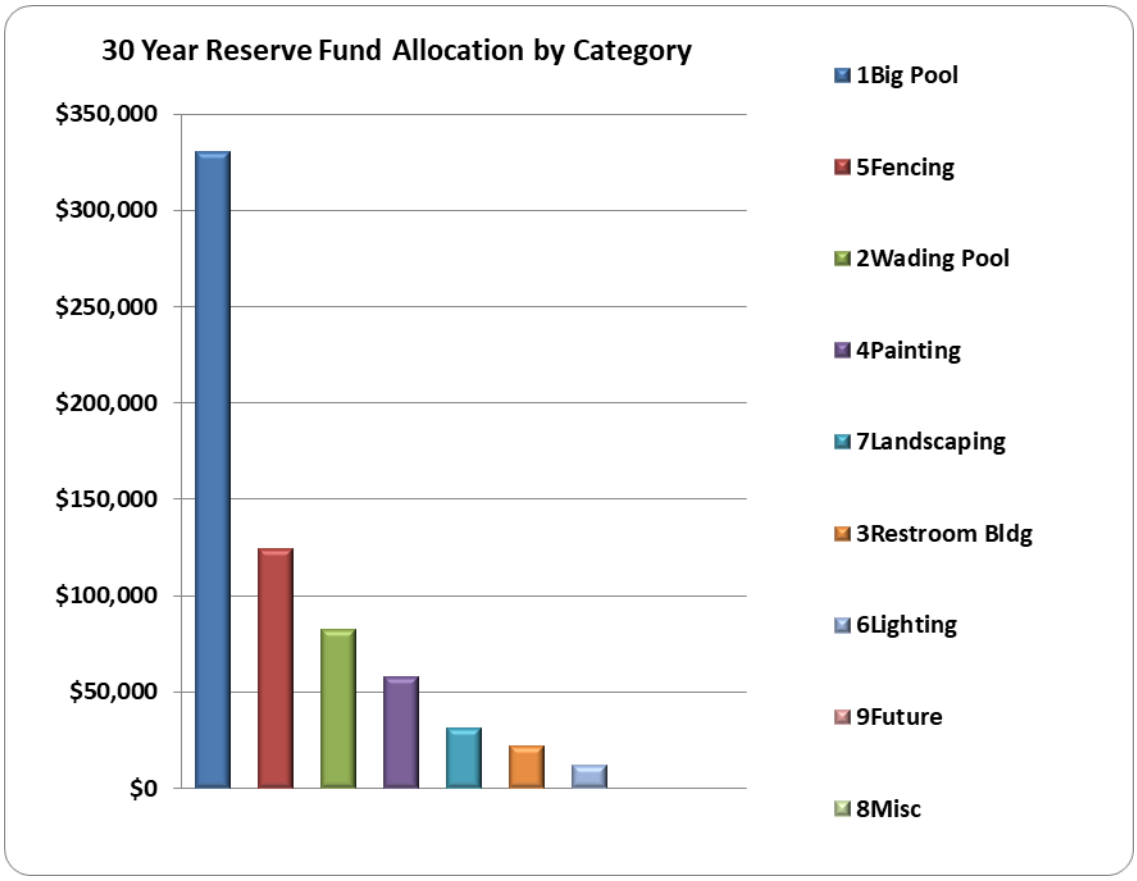
The following categories of components are typically excluded from Reserve Studies:

- Below Threshold Costs: – Component repair and/or replacement costs that are deemed too small to be considered reserve expenses are typically included in the operational or maintenance budget. Expenses that are below this threshold are not included in this study.
- Operational Expenses: – These occur at least annually and can be effectively budgeted for each year. They are characterized as being reasonably predictable both in terms of frequency and cost.
- Very Long or Unpredictable Useful Life Expectancy: – Components which, when properly maintained, have a very long useful life with no predictable replacement cycle. Examples include most plumbing, electrical systems and retaining walls. Although there may be circumstances where an Association may wish to include items in these categories.
- Unit Improvements: – Improvements made to the property that fall within the Governing Documents' unit description summary as the responsibility of the unit's owner.
- Other Non-Association/Organization Owned: – Improvements installed on the property but which are owned by other parties such as governmental agencies, utility companies, the US Postal Service, etc.

Reserve Fund Allocation

The following chart illustrates the reserve fund allocation of the included reserve components. Attention should be given to those component categories which take up a bulk of the % of the allocated costs as these may require significant planning to adequately budget for their replacement. These large expenses may be well into the future during "Peak Year" cycles.

Figure 2: 30 Year Reserve Fund Allocation



Component Inventory

The following components are included in this Reserve Study financial analysis.

Table 6: Reserve Component Inventory

Yellow highlights indicate items with Remaining Useful Life (RUL) = 0 years, requiring attention.

Item	Category Description	Reserve Component Name	Estimated Service Cost	Service Year	Est Useful Life (yrs)	Replacement Cost Basis	Qty	Units	Remaining Useful Life (yrs)	Next Service Year	Est Cost at Next Service
1	1Big Pool	Resurface (fiberglass)	$35,000	2016	15	Current Est	2,250	sq-ft	11	2031	$48,448
2	1Big Pool	Coping & Tile	$18,000	2001	20	Current Est	220	feet	1	2021	$18,540
3	1Big Pool	Skimmers (6)	$8,000	2001	20	Current Est	6	each	1	2021	$8,240
4	1Big Pool	Sika Flex Mastic	$2,000	2015	8	Current Est	230	each	3	2023	$2,185
5	1Big Pool	Pool Light Fixtures (4)	$2,000	2001	20	Current Est	4	each	1	2021	$2,060
6	1Big Pool	Pool Light Bulbs (4) (LED)	$1,000	2016	10	Current Est	4	each	6	2026	$1,194
7	1Big Pool	Water Solar Panels	$15,000	2019	25	Current Est	1	other	24	2044	$30,492
8	1Big Pool	Water Heater 400K btu	$3,500	2016	15	Current Est	1	each	11	2031	$4,845
9	1Big Pool	VSF Circulation Pump #1	$1,800	2009	12	Current Est	1	each	1	2021	$1,854
10	1Big Pool	VSF Circulation Pump #2	$1,800	2019	12	Current Est	1	each	11	2031	$2,492
11	1Big Pool	Filters (2 Steel DE) & piping	$3,500	1986	30	Current Est	1	each	0	2020	$3,500
12	1Big Pool	Filters (2 Fiberglass DE) & piping	$3,500	2020	30	Actual Cost	1	each	30	2050	$8,495
13	1Big Pool	Chem. Pumps (2)	$1,000	2015	15	Current Est	2	each	10	2030	$1,344
14	2Wading Pool	Resurface (fiberglass)	$5,000	2016	15	Current Est	297	sq-ft	11	2031	$6,921
15	2Wading Pool	Coping & Tile	$6,000	2001	20	Current Est	71	feet	1	2021	$6,180
16	2Wading Pool	Skimmers (2)	$2,500	2001	20	Current Est	2	each	1	2021	$2,575

Yellow highlights indicate items with Remaining Useful Life (RUL) = 0 years, requiring attention.

Item	Category Description	Reserve Component Name	Estimated Service Cost	Service Year	Est Useful Life (yrs)	Replacement Cost Basis	Qty	Units	Remaining Useful Life (yrs)	Next Service Year	Est Cost at Next Service
17	2Wading Pool	Sika Flex Mastic	$500	2015	8	Current Est	71	feet	3	2023	$546
18	2Wading Pool	Pool Light Fixtures (1)	$500	2001	20	Current Est	1	each	1	2021	$515
19	2Wading Pool	Pool Light Bulbs (1) (LED)	$250	2016	10	Current Est	1	each	6	2026	$299
20	2Wading Pool	Water Heater 250K btu	$3,200	2002	10	Current Est	1	each	0	2020	$3,200
21	2Wading Pool	VSF Circulation Pump	$1,800	1993	15	Current Est	1	tons	0	2020	$1,800
22	2Wading Pool	Filter, Valves & Piping	$1,500	2017	20	Current Est	1	feet	17	2037	$2,479
23	2Wading Pool	Chem. Pump	$500	2015	15	Current Est	1	feet	10	2030	$672
24	3Restroom Bldg	Roofing	$3,000	2003	20	Current Est	1	each	3	2023	$3,278
25	3Restroom Bldg	Interior Painting	$400	2008	6	Current Est	160	sq-ft	0	2020	$400
26	3Restroom Bldg	Tile-Shower/Restroom	$1,000	1995	30	Current Est		feet	5	2025	$1,159
27	3Restroom Bldg	Plumbing Fixtures	$800	2007	20	Current Est			7	2027	$984
28	3Restroom Bldg	Water Heater 40 g gas	$1,100	2015	15	Current Est	1	each	10	2030	$1,478
29	3Restroom Bldg	Water Fountain	$800	2016	40	Current Est	1	each	36	2056	$2,319
30	4Painting	Stucco Trim Paint	$600	2004	5	Current Est			0	2020	$600
31	4Painting	Wood-All in pool area	$1,000	2014	5	Current Est			0	2020	$1,000
32	4Painting	Steel Fencing	$3,150	2020	5	Actual Cost	314	feet	5	2025	$3,652
33	4Painting	Wood (Bootes, 2 sec)	$600	2015	5	Current Est			0	2020	$600
34	5Fencing	Perimeter steel & gate	$35,000	1998	25	Current Est	314	feet	3	2023	$38,245
35	5Fencing	Wood (Bootes, 2 sec)	$4,000	2007	25	Current Est			12	2032	$5,703

Yellow highlights indicate items with Remaining Useful Life (RUL) = 0 years, requiring attention.

Item	Category Description	Reserve Component Name	Estimated Service Cost	Service Year	Est Useful Life (yrs)	Replacement Cost Basis	Qty	Units	Remaining Useful Life (yrs)	Next Service Year	Est Cost at Next Service
36	6Lighting	Fixtures (3) Overhead deck	$1,000	2012	20	Current Est			12	2032	$1,426
37	6Lighting	Light Poles (2)	$5,000	2012	20	Current Est	2	each	12	2032	$7,129
38	6Lighting	Entrance Light Wiring	$1,000	1972	30	Current Est			0	2020	$1,000
39	7Landscaping	Irrigation Controller	$675	2013	10	Current Est	1	each	3	2023	$738
40	7Landscaping	Irrigation Valves (8)	$3,200	2006	20	Current Est	8	each	6	2026	$3,821
41	7Landscaping	Backflow Preventer/cage	$3,200	2006	20	Current Est	1	each	6	2026	$3,821
42	7Landscaping	Sprinklers-3 sections by gate	$1,300	2017	10	Current Est			7	2027	$1,599

Income and Expenses

The funding plan of this reserve study will help the association's reserve account to be highly funded over the next 30 years. This requires a recommended allocation amount into the reserve account. The following table summarizes incomes and expenses and indicates the recommended contributions to the reserve account. This funding plan considers four basic principles:

1. There are adequate reserves when needed.
2. The budget should remain stable but increasing to offset inflationary factors.
3. The costs are fairly distributed over time.
4. The funding plan must allow the Association to be fiscally responsible.

Table 7: Projected Income & Expenses Summary

Year	Start of Yr Reserve Balance	Fully Funded Balance	Start Of Yr Percent Funded	Special Assessments	Total Income	Operational Expenses	Loan Expenses	Special Projects & Reserve Expenses	Annual Dues	Annual Reserve Contribution	Reserve Contribution Pct of Dues	Contingency Fund Contribution	EOY Contingency Balance	EOY Reserve Balance
2020	$89,000	$113,593	78%	$0	$73,168	$62,580	$0	$12,100	$70,498	$10,588	15%	$0	$0	$87,488
2021	$87,488	$116,160	75%	$0	$75,520	$64,457	$0	$43,054	$72,895	$11,062	15%	$0	$0	$55,496
2022	$55,496	$87,270	64%	$0	$77,038	$66,391	$0	$0	$75,373	$10,647	14%	$0	$0	$66,143
2023	$66,143	$102,217	65%	$0	$79,920	$68,383	$0	$44,992	$77,936	$11,537	15%	$0	$0	$32,689
2024	$32,689	$71,641	46%	$0	$81,567	$70,434	$0	$0	$80,586	$11,132	14%	$0	$0	$43,821
2025	$43,821	$86,870	50%	$0	$84,640	$72,547	$0	$7,362	$83,326	$12,093	15%	$0	$0	$48,552
2026	$48,552	$95,367	51%	$0	$87,615	$74,724	$0	$9,613	$86,159	$12,892	15%	$0	$0	$51,831
2027	$51,831	$102,205	51%	$0	$90,643	$76,966	$0	$2,583	$89,088	$13,678	15%	$0	$0	$62,925
2028	$62,925	$116,904	54%	$0	$94,005	$79,274	$0	$0	$92,117	$14,731	16%	$0	$0	$77,656
2029	$77,656	$135,133	57%	$0	$97,579	$81,653	$0	$0	$95,249	$15,926	17%	$0	$0	$93,582
2030	$93,582	$154,351	61%	$0	$101,295	$84,102	$0	$14,984	$98,488	$17,193	17%	$0	$0	$95,791
2031	$95,791	$159,166	60%	$0	$104,710	$86,625	$0	$73,087	$101,836	$18,085	18%	$0	$0	$40,789
2032	$40,789	$104,748	39%	$0	$106,522	$89,224	$0	$14,828	$105,299	$17,298	16%	$0	$0	$43,259
2033	$43,259	$109,188	40%	$0	$110,177	$91,901	$0	$3,634	$108,879	$18,276	17%	$0	$0	$57,901
2034	$57,901	$125,787	46%	$0	$114,318	$94,658	$0	$0	$112,581	$19,660	17%	$0	$0	$77,561
2035	$77,561	$147,140	53%	$0	$118,735	$97,498	$0	$11,140	$116,409	$21,238	18%	$0	$0	$87,659
2036	$87,659	$158,187	55%	$0	$122,531	$100,423	$0	$3,290	$119,901	$22,108	18%	$0	$0	$106,477
2037	$106,477	$178,194	60%	$0	$126,692	$103,435	$0	$4,628	$123,498	$23,257	19%	$0	$0	$125,106
2038	$125,106	$197,982	63%	$0	$130,956	$106,538	$0	$681	$127,203	$24,418	19%	$0	$0	$148,842
2039	$148,842	$223,005	67%	$0	$135,484	$109,734	$0	$4,384	$131,019	$25,750	20%	$0	$0	$170,208
2040	$170,208	$245,559	69%	$0	$140,056	$113,026	$0	$15,443	$134,949	$27,029	20%	$0	$0	$181,794
2041	$181,794	$258,010	70%	$0	$144,452	$116,417	$0	$74,413	$138,998	$28,034	20%	$0	$0	$135,416
2042	$135,416	$210,727	64%	$0	$147,230	$119,910	$0	$0	$143,168	$27,321	19%	$0	$0	$162,736
2043	$162,736	$239,317	68%	$0	$152,345	$123,507	$0	$10,805	$147,463	$28,838	20%	$0	$0	$180,769
2044	$180,769	$258,304	70%	$0	$157,310	$127,212	$0	$31,305	$151,887	$30,098	20%	$0	$0	$179,562
2045	$179,562	$257,433	70%	$0	$161,830	$131,029	$0	$20,414	$156,443	$30,802	20%	$0	$0	$189,949
2046	$189,949	$268,463	71%	$0	$166,835	$134,959	$0	$121,093	$161,137	$31,876	20%	$0	$0	$100,732
2047	$100,732	$176,855	57%	$0	$168,993	$139,008	$0	$10,219	$165,971	$29,984	18%	$0	$0	$120,498
2048	$120,498	$197,452	61%	$0	$174,565	$143,179	$0	$80,077	$170,950	$31,386	18%	$0	$0	$71,807
2049	$71,807	$147,486	49%	$0	$178,233	$147,474	$0	$0	$176,078	$30,759	17%	$0	$0	$102,566
2050	$102,566	$179,298	57%	$0	$184,438	$151,898	$0	$45,509	$181,361	$32,540	18%	$0	$0	$89,596

Detailed Financial Analysis

Annual Projected Expenses

The annual projected reserve expenses are estimates based on estimated useful life of the components, the current cost estimates, and adjustments for inflation.

Special Project Expenditures

Year	Cost	Special Project or One-Time Expense
		No Special Project Costs

Reserve Component Expenditures

Year	Cost	Component
2020	$3,500	Filters (2 Steel DE) & piping
	$3,200	Water Heater 250K btu
	$1,800	VSF Circulation Pump
	$400	Interior Painting
	$600	Stucco Trim Paint
	$1,000	Wood-All in pool area
	$600	Wood (Bootes, 2 sec)
	$1,000	Entrance Light Wiring
2021	$18,540	Coping & Tile

Year	Cost	Component
2030	$1,344	Chem. Pumps (2)
	$4,301	Water Heater 250K btu
	$672	Chem. Pump
	$1,478	Water Heater 40 g gas
	$806	Stucco Trim Paint
	$1,344	Wood-All in pool area
	$4,233	Steel Fencing
	$806	Wood (Bootes, 2 sec)
2031	$48,448	Resurface (fiberglass)

Year	Cost	Component
2040	$5,780	Water Heater 250K btu
	$1,084	Stucco Trim Paint
	$1,806	Wood-All in pool area
	$5,689	Steel Fencing
	$1,084	Wood (Bootes, 2 sec)
2041	$33,485	Coping & Tile
	$14,882	Skimmers (6)
	$3,721	Pool Light Fixtures (4)
	$11,162	Coping & Tile

Year	Cost	Component
	$8,240	Skimmers (6)
	$2,060	Pool Light Fixtures (4)
	$1,854	VSF Circulation Pump #1
	$6,180	Coping & Tile
	$2,575	Skimmers (2)
	$515	Pool Light Fixtures (1)
2022		
2023	$2,185	Sika Flex Mastic
	$546	Sika Flex Mastic
	$3,278	Roofing
	$38,245	Perimeter steel & gate
	$738	Irrigation Controller
2024		
2025	$1,159	Tile-Shower/Restroom
	$696	Stucco Trim Paint
	$1,159	Wood-All in pool area
	$3,652	Steel Fencing
	$696	Wood (Bootes, 2 sec)
	$2,768	Sika Flex Mastic
	$4,845	Water Heater 400K btu
	$2,492	VSF Circulation Pump #2
	$6,921	Resurface (fiberglass)
	$692	Sika Flex Mastic
2032	$570	Interior Painting
	$5,703	Wood (Bootes, 2 sec)
	$1,426	Fixtures (3) Overhead deck
	$7,129	Light Poles (2)
2033	$2,643	VSF Circulation Pump #1
	$991	Irrigation Controller
2034		
2035	$2,804	VSF Circulation Pump
	$935	Stucco Trim Paint
	$1,558	Wood-All in pool area
	$4,908	Steel Fencing
	$935	Wood (Bootes, 2 sec)
2036	$1,605	Pool Light Bulbs (4) (LED)
	$4,651	Skimmers (2)
	$930	Pool Light Fixtures (1)
2042		
2043	$3,552	VSF Circulation Pump #2
	$5,921	Roofing
	$1,332	Irrigation Controller
2044	$30,492	Water Solar Panels
	$813	Interior Painting
2045	$3,769	VSF Circulation Pump #1
	$2,094	Chem. Pumps (2)
	$1,047	Chem. Pump
	$2,303	Water Heater 40 g gas
	$1,256	Stucco Trim Paint
	$2,094	Wood-All in pool area
	$6,595	Steel Fencing
	$1,256	Wood (Bootes, 2 sec)
2046	$75,481	Resurface (fiberglass)
	$2,157	Pool Light Bulbs (4) (LED)

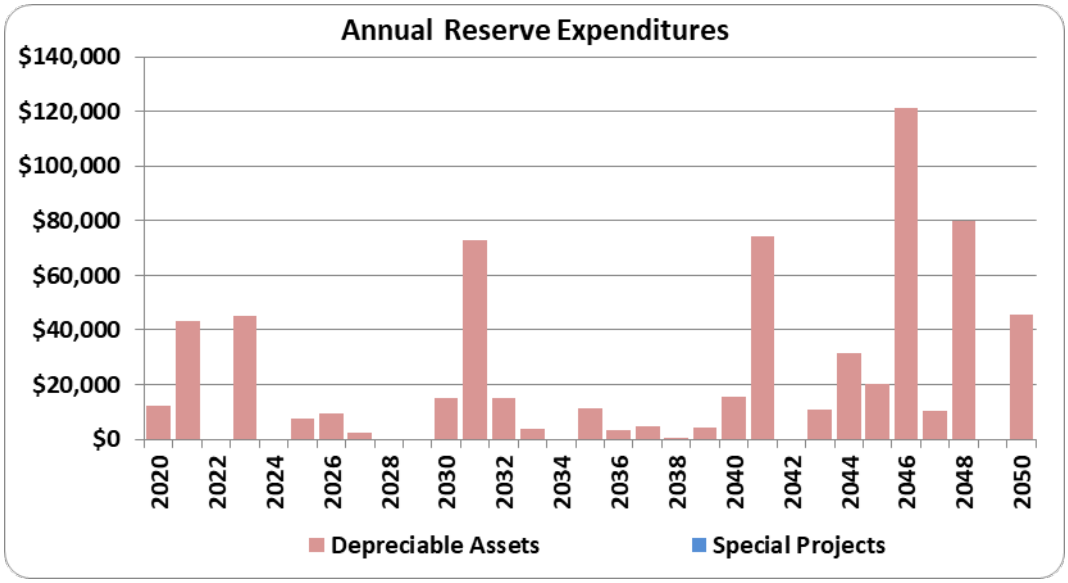
Year	Cost	Component
2026	$1,194	Pool Light Bulbs (4) (LED)
	$299	Pool Light Bulbs (1) (LED)
	$478	Interior Painting
	$3,821	Irrigation Valves (8)
	$3,821	Backflow Preventer/cage
2027	$984	Plumbing Fixtures
	$1,599	Sprinklers-3 sections by gate
2028		
2029		
	$401	Pool Light Bulbs (1) (LED)
2037	$2,479	Filter, Valves & Piping
	$2,149	Sprinklers-3 sections by gate
2038	$681	Interior Painting
2039	$3,507	Sika Flex Mastic
	$877	Sika Flex Mastic
	$7,548	Water Heater 400K btu
	$10,783	Resurface (fiberglass)
	$539	Pool Light Bulbs (1) (LED)
	$6,901	Irrigation Valves (8)
	$6,901	Backflow Preventer/cage
2047	$4,443	Sika Flex Mastic
	$1,111	Sika Flex Mastic
	$1,777	Plumbing Fixtures
	$2,888	Sprinklers-3 sections by gate
2048	$80,077	Perimeter steel & gate
2049		
2050	$8,495	Filters (2 Steel DE) & piping
	$8,495	Filters (2 Fiberglass DE) & piping
	$7,767	Water Heater 250K btu
	$4,369	VSF Circulation Pump
	$971	Interior Painting
	$1,456	Stucco Trim Paint
	$2,427	Wood-All in pool area
	$7,646	Steel Fencing
	$1,456	Wood (Bootes, 2 sec)
	$2,427	Entrance Light Wiring

Reserve Fund Expenditures

The graph below shows the projected future reserve expenses that the association is responsible to fund. As with all computations in this report, the estimates in this figure are based on the estimated expense projections which are combination of historical expenditures and current estimates. Expenses are projected 30 years into the future, using the Inflation rate assumptions stated earlier.

It is important to make note of large expenditure years (peak years) when there will be significant projected expenditures related to one or more component projects that will require repair/replacement. These large but infrequent component expenses during "peak" years are typically the most difficult to budget for as they are often overlooked or ignored due to the perception that the expenses are far in the future and there will be time to budget for them later.

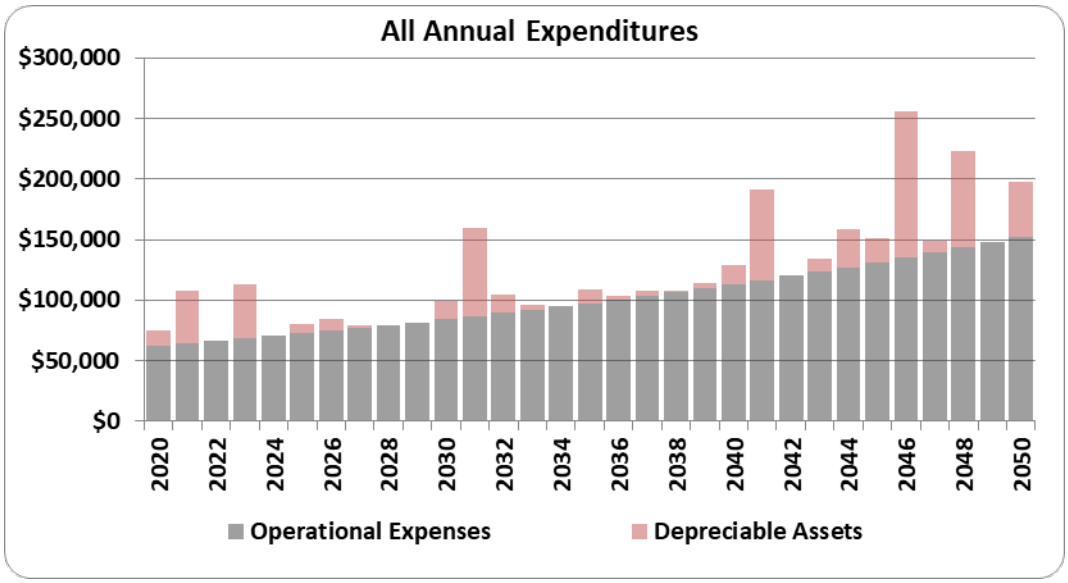
Figure 3: Reserve Fund Expenditures



All Expenses

In addition to reserve expenditures, the association needs to cover operational expenses, costs for special projects and any loan payments. The following graph depicts all annual expenditures that the association can expect over the next 30 years.

Figure 4: All Annual Expenses



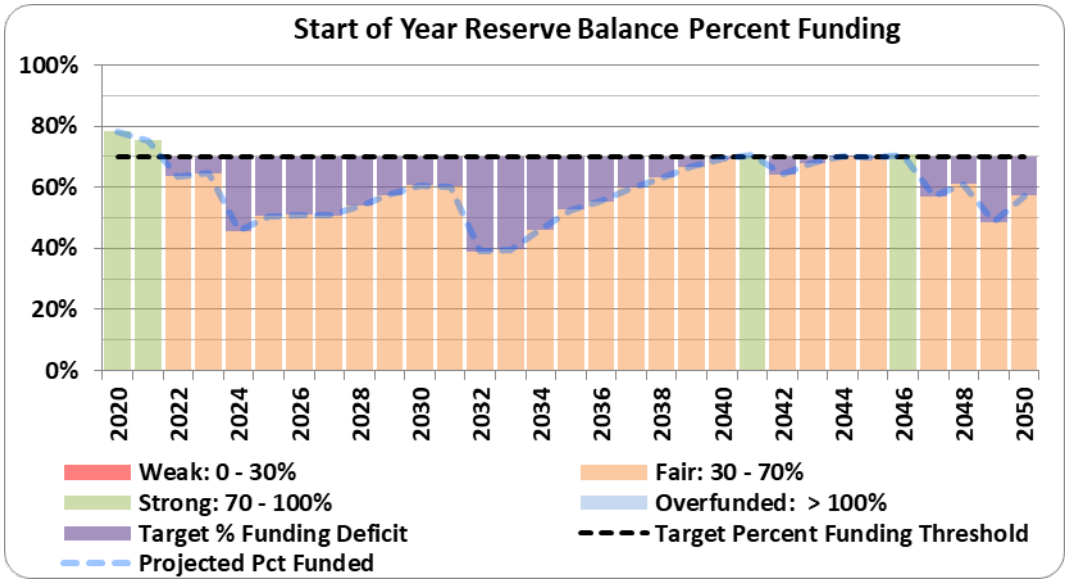
As with any projections of future expenditures, "near-term" projects will generally be more accurate than events in the future, especially events projected many years away.

Reserve Balance

This graph illustrates the key elements of the funding model proposed in this assessment. Over the timeframe of this reserve

study, the allocation rates and the percent funding will fluctuate based on the expenditures projected in any given year.

Figure 5: Start of Year Reserve Balance Percent Funding



Annual Income and Contribution to Reserve Fund

Based on the current percent funded and the projected cash flow requirements, the recommended reserve contributions should be established at $882 per month this fiscal year. This represents the first year of a 30-year Funding Plan. The actual contribution to the reserve fund will vary from year-to-year depending on the anticipated reserve expenses. To most fairly spread out the contribution burden over current and future owners in our inflationary economic environment, nominal annual increases should be expected in future years. Most authorities cite that the annual reserve contribution should be at least 10% of the annual income. Associations with a contribution rate less than 10% can expect future special assessments.

This recommended reserve contribution rate is depicted in the following two graphs.

Figure 6: Annual Income and Reserve Contribution

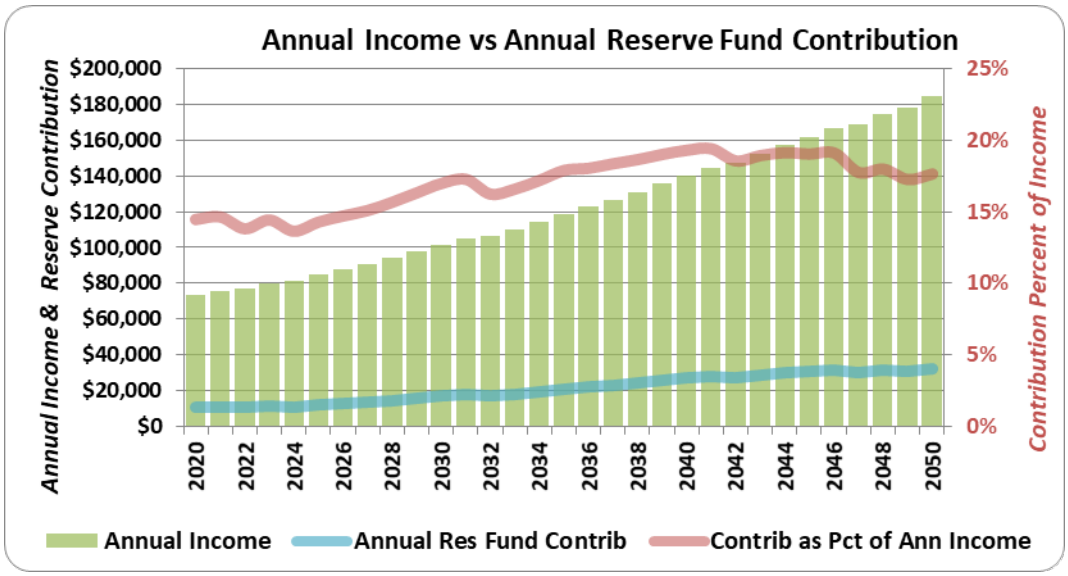
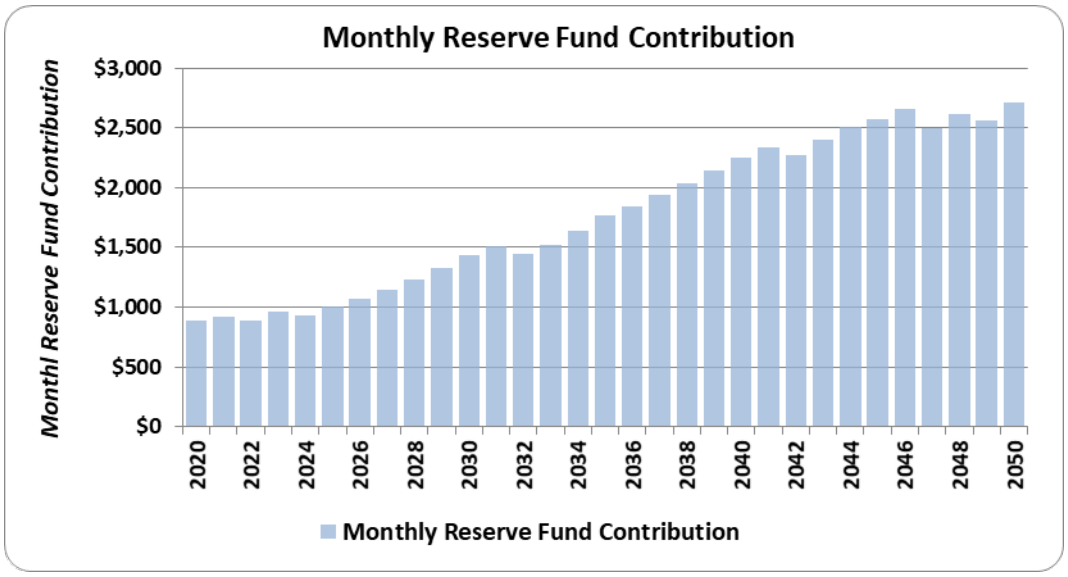


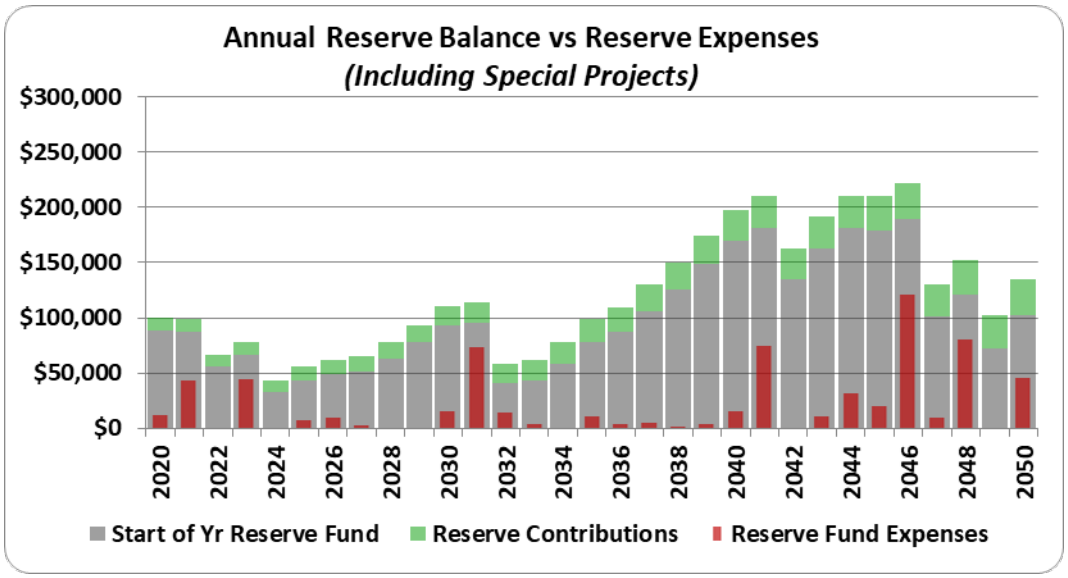
Figure 7: Monthly Reserve Contribution Rate



Annual Reserve Balance and Reserve Expenses

The following graph is often cited as the most important statistic for the Association's financial analysis. This graph depicts the estimated reserve expenses compared to the estimated reserve fund balance in each year of the analysis. The Association's key responsibility is to assure that the Reserve Fund is adequate to provide for the maintenance or replacement of depreciable components. This graph provides a quick and vivid view.

Figure 8: Annual Reserve Balance vs Reserve Expenses



Current Funding verses Recommend Funding Plans

The following two graphs compare the current funding plan to the proposed funding plan of this reserve study. The comparisons shown here illustrate both the Start of Year Reserve Balances and the Percent Funding comparisons. The

term, “current plan”, as used here is simplified in that it accounts for planned dues increases and special assessments that the Association could levy. Refer to each graph’s notes for details.

Figure 9: Reserve Account Comparison

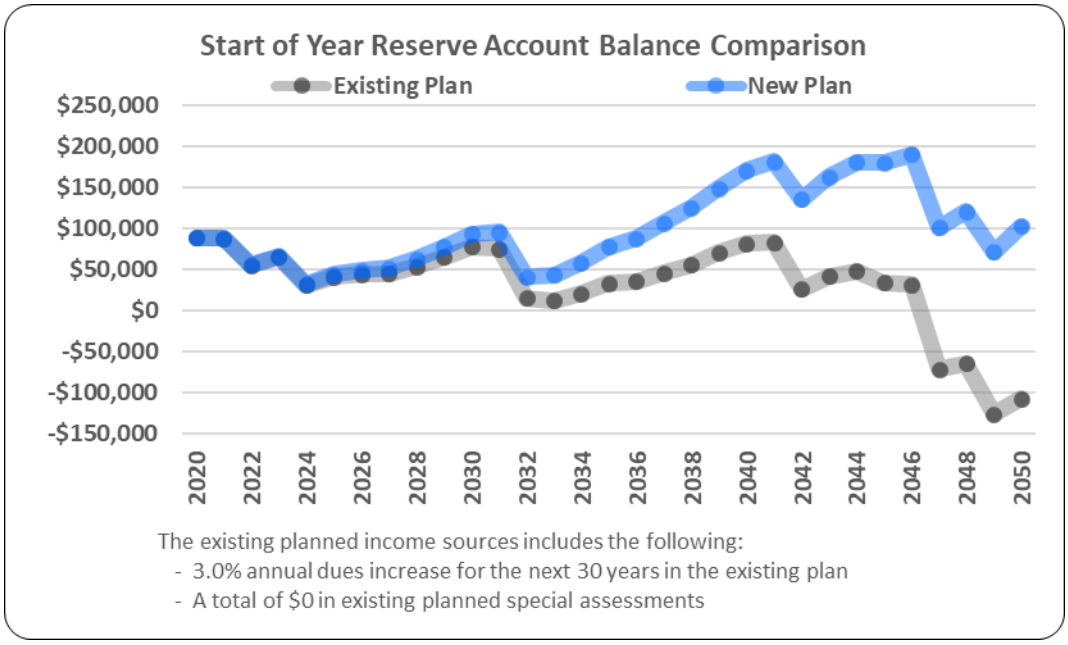
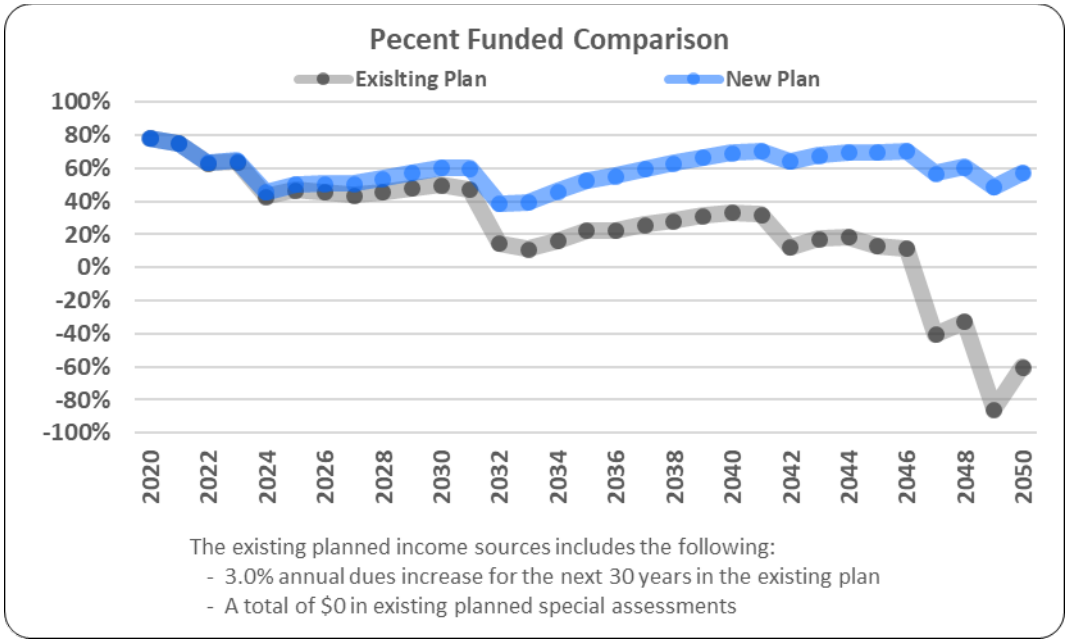


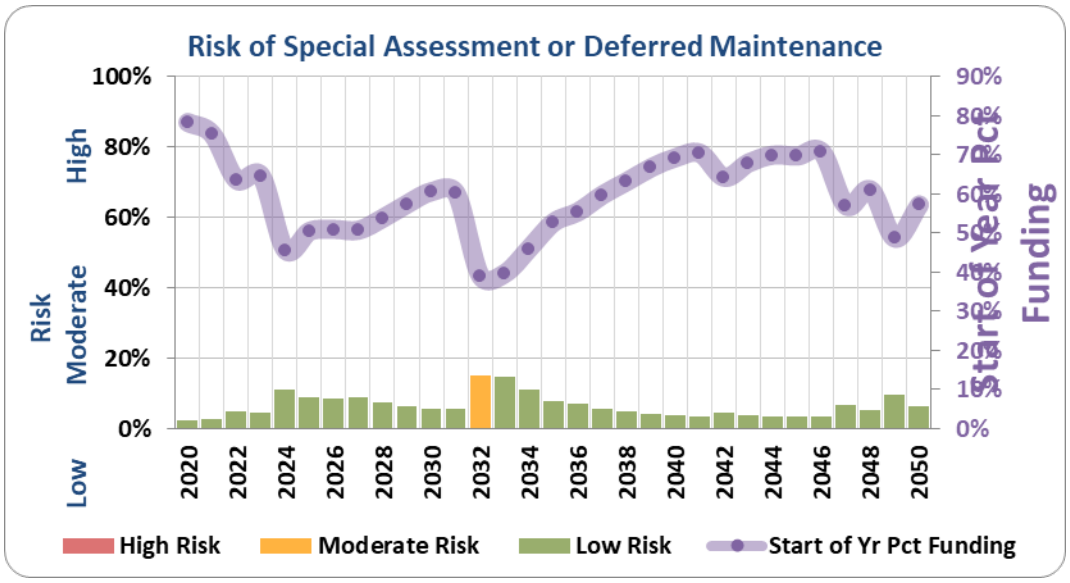
Figure 10: Percent Funded Comparison



Risk of Special Assessment or Deferred Maintenance

Calculating the risk of a special assessment is not an exact science. However, it is well understood that percent funding is a reliable predictor of the likelihood of a special assessment or the deferral of maintenance of reserve components. Associations above 70% funded have less than a 4% chance of ever needing a special assessment, whereas associations less than 30% funded are likely to need a special assessment every 2 to 4 years. The following table represents an estimate of the risk of a special assessment or deferred maintenance.

Figure 11: Risk of Special Assessment or Deferred Maintenance



Income and Expense Summaries

Income and expenses summaries are presented on the following pages.

Years 2020 to 2029

Income Years 2020 to 2029

Estimated Incomes	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Dues Including Sched Increases	$70.5 K	$72.9 K	$75.4 K	$77.9 K	$80.6 K	$83.3 K	$86.2 K	$89.1 K	$92.1 K	$95.2 K	$823.2 K
Interest Income Reserve Balance	$2.7 K	$2.6 K	$1.7 K	$2.0 K	$1.0 K	$1.3 K	$1.5 K	$1.6 K	$1.9 K	$2.3 K	$18.5 K
Other Annual Income											$0.0 K
Special Assessments											$0.0 K
One-time Incomes (incl loans)											$0.0 K
Total Income	$73.2 K	$75.5 K	$77.0 K	$79.9 K	$81.6 K	$84.6 K	$87.6 K	$90.6 K	$94.0 K	$97.6 K	$841.7 K

Expenses Years 2020 to 2029

Operational Expenses	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Estimated Operational Expenses	$62.6 K	$64.5 K	$66.4 K	$68.4 K	$70.4 K	$72.5 K	$74.7 K	$77.0 K	$79.3 K	$81.7 K	$717.4 K
Estimated Annual Loan Payments	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K

Contin Fund & Special Projects:	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Res Withdraw - Contingency Fund											$0.0 K
Total Contin Fund & Special Projects	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K

Reserve Fund Yrs 2020 to 2029

Description	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Start of Year Fully Funded Reserve	$113.6 K	$116.2 K	$87.3 K	$102.2 K	$71.6 K	$86.9 K	$95.4 K	$102.2 K	$116.9 K	$135.1 K
Start of Year Reserve Balance	$89.0 K	$87.5 K	$55.5 K	$66.1 K	$32.7 K	$43.8 K	$48.6 K	$51.8 K	$62.9 K	$77.7 K
Percent Funded at Start of Year	78%	75%	64%	65%	46%	50%	51%	51%	54%	57%
Annual Reserve Fund Contributions	$10.6 K	$11.1 K	$10.6 K	$11.5 K	$11.1 K	$12.1 K	$12.9 K	$13.7 K	$14.7 K	$15.9 K
Net Reserve Withdrawals	-$12.1 K	-$43.1 K	$0.0 K	-$45.0 K	$0.0 K	-$7.4 K	-$9.6 K	-$2.6 K	$0.0 K	$0.0 K
EOY Reserve Fund Balance	$87.5 K	$55.5 K	$66.1 K	$32.7 K	$43.8 K	$48.6 K	$51.8 K	$62.9 K	$77.7 K	$93.6 K

Reserve Expenses2020 to 2029

Estimated Withdrawals	Original Cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Resurface (fiberglass)	$40.0 K											$0.0 K
Coping & Tile	$20.0 K		$20.6 K									$20.6 K
Skimmers (6)	$9.0 K		$9.3 K									$9.3 K
Sika Flex Mastic	$2.0 K				$2.2 K							$2.2 K
Pool Light Fixtures (4)	$2.0 K		$2.1 K									$2.1 K
Pool Light Bulbs (4) (LED)	$1.0 K							$1.2 K				$1.2 K
Water Solar Panels	$15.0 K											$0.0 K
Water Heater 400K btu	$3.5 K											$0.0 K
VSF Circulation Pump #1	$1.8 K		$1.9 K									$1.9 K
VSF Circulation Pump #2	$1.8 K											$0.0 K
Filters (2 Steel DE) & piping	$3.5 K	$3.5 K										$3.5 K
Filters (2 Fiberglass DE) & piping	$3.5 K											$0.0 K
Chem. Pumps (2)	$1.0 K											$0.0 K
Resurface (fiberglass)	$5.0 K											$0.0 K
Coping & Tile	$6.0 K		$6.2 K									$6.2 K
Skimmers (2)	$2.5 K		$2.6 K									$2.6 K
Sika Flex Mastic	$0.5 K				$0.5 K							$0.5 K
Pool Light Fixtures (1)	$0.5 K		$0.5 K									$0.5 K
Pool Light Bulbs (1) (LED)	$0.3 K							$0.3 K				$0.3 K
Water Heater 250K btu	$3.2 K	$3.2 K										$3.2 K
VSF Circulation Pump	$1.8 K	$1.8 K										$1.8 K

Reserve Expenses2020 to 2029

Estimated Withdrawals	Original Cost	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
Filter, Valves & Piping	$1.5 K											$0.0 K
Chem. Pump	$0.5 K											$0.0 K
Roofing	$3.0 K				$3.3 K							$3.3 K
Interior Painting	$0.4 K	$0.4 K						$0.5 K				$0.9 K
Tile-Shower/Restroom	$1.0 K						$1.2 K					$1.2 K
Plumbing Fixtures	$0.8 K								$1.0 K			$1.0 K
Water Heater 40 g gas	$1.1 K											$0.0 K
Stucco Trim Paint	$0.6 K	$0.6 K					$0.7 K					$1.3 K
Wood-All in pool area	$1.0 K	$1.0 K					$1.2 K					$2.2 K
Steel Fencing	$3.2 K						$3.7 K					$3.7 K
Wood (Bootes, 2 sec)	$0.6 K	$0.6 K					$0.7 K					$1.3 K
Perimeter steel & gate	$35.0 K				$38.2 K							$38.2 K
Wood (Bootes, 2 sec)	$4.0 K											$0.0 K
Fixtures (3) Overhead deck	$1.0 K											$0.0 K
Light Poles (2)	$5.0 K											$0.0 K
Entrance Light Wiring	$1.0 K	$1.0 K										$1.0 K
Irrigation Controller	$0.7 K				$0.7 K							$0.7 K
Irrigation Valves (8)	$3.2 K							$3.8 K				$3.8 K
Backflow Preventer/cage	$3.2 K							$3.8 K				$3.8 K
Sprinklers-3 sections by gate	$1.3 K								$1.6 K			$1.6 K
Total Reserve Expenses		$12.1 K	$43.1 K	$0.0 K	$45.0 K	$0.0 K	$7.4 K	$9.6 K	$2.6 K	$0.0 K	$0.0 K	$119.7 K

Years 2030 to 2039

Income Years 2030 to 2039

Estimated Incomes	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Dues Including Sched Increases	$98.5 K	$101.8 K	$105.3 K	$108.9 K	$112.6 K	$116.4 K	$119.9 K	$123.5 K	$127.2 K	$131.0 K	$1145.1 K
Interest Income Reserve Balance	$2.8 K	$2.9 K	$1.2 K	$1.3 K	$1.7 K	$2.3 K	$2.6 K	$3.2 K	$3.8 K	$4.5 K	$26.3 K
Other Annual Income											$0.0 K
Special Assessments											$0.0 K
One-time Incomes (incl loans)											$0.0 K
Total Income	$101.3 K	$104.7 K	$106.5 K	$110.2 K	$114.3 K	$118.7 K	$122.5 K	$126.7 K	$131.0 K	$135.5 K	$1171.4 K

Expenses Years 2030 to 2039

Operational Expenses	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Estimated Operational Expenses	$84.1 K	$86.6 K	$89.2 K	$91.9 K	$94.7 K	$97.5 K	$100.4 K	$103.4 K	$106.5 K	$109.7 K	$964.1 K
Estimated Annual Loan Payments	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K

Contin Fund & Special Projects:	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Res Withdraw - Contingency Fund											$0.0 K
Total Contin Fund & Special Projects	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K

Reserve Fund Yrs 2030 to 2039

Description	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039
Start of Year Fully Funded Reserve	$154.4 K	$159.2 K	$104.7 K	$109.2 K	$125.8 K	$147.1 K	$158.2 K	$178.2 K	$198.0 K	$223.0 K
Start of Year Reserve Balance	$93.6 K	$95.8 K	$40.8 K	$43.3 K	$57.9 K	$77.6 K	$87.7 K	$106.5 K	$125.1 K	$148.8 K
Percent Funded at Start of Year	61%	60%	39%	40%	46%	53%	55%	60%	63%	67%
Annual Reserve Fund Contributions	$17.2 K	$18.1 K	$17.3 K	$18.3 K	$19.7 K	$21.2 K	$22.1 K	$23.3 K	$24.4 K	$25.7 K
Net Reserve Withdrawals	-$15.0 K	-$73.1 K	-$14.8 K	-$3.6 K	$0.0 K	-$11.1 K	-$3.3 K	-$4.6 K	-$0.7 K	-$4.4 K
EOY Reserve Fund Balance	$95.8 K	$40.8 K	$43.3 K	$57.9 K	$77.6 K	$87.7 K	$106.5 K	$125.1 K	$148.8 K	$170.2 K

Reserve Expenses2030 to 2039

Estimated Withdrawals	Original Cost	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Resurface (fiberglass)	$40.0 K		$55.4 K									$55.4 K
Coping & Tile	$20.0 K											$0.0 K
Skimmers (6)	$9.0 K											$0.0 K
Sika Flex Mastic	$2.0 K		$2.8 K								$3.5 K	$6.3 K
Pool Light Fixtures (4)	$2.0 K											$0.0 K
Pool Light Bulbs (4) (LED)	$1.0 K							$1.6 K				$1.6 K
Water Solar Panels	$15.0 K											$0.0 K
Water Heater 400K btu	$3.5 K		$4.8 K									$4.8 K
VSF Circulation Pump #1	$1.8 K				$2.6 K							$2.6 K
VSF Circulation Pump #2	$1.8 K		$2.5 K									$2.5 K
Filters (2 Steel DE) & piping	$3.5 K											$0.0 K
Filters (2 Fiberglass DE) & piping	$3.5 K											$0.0 K
Chem. Pumps (2)	$1.0 K	$1.3 K										$1.3 K
Resurface (fiberglass)	$5.0 K		$6.9 K									$6.9 K
Coping & Tile	$6.0 K											$0.0 K
Skimmers (2)	$2.5 K											$0.0 K
Sika Flex Mastic	$0.5 K		$0.7 K								$0.9 K	$1.6 K
Pool Light Fixtures (1)	$0.5 K											$0.0 K
Pool Light Bulbs (1) (LED)	$0.3 K							$0.4 K				$0.4 K
Water Heater 250K btu	$3.2 K	$4.3 K										$4.3 K
VSF Circulation Pump	$1.8 K						$2.8 K					$2.8 K

Reserve Expenses2030 to 2039

Estimated Withdrawals	Original Cost	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	Total
Filter, Valves & Piping	$1.5 K								$2.5 K			$2.5 K
Chem. Pump	$0.5 K	$0.7 K										$0.7 K
Roofing	$3.0 K											$0.0 K
Interior Painting	$0.4 K			$0.6 K						$0.7 K		$1.3 K
Tile-Shower/Restroom	$1.0 K											$0.0 K
Plumbing Fixtures	$0.8 K											$0.0 K
Water Heater 40 g gas	$1.1 K	$1.5 K										$1.5 K
Stucco Trim Paint	$0.6 K	$0.8 K					$0.9 K					$1.7 K
Wood-All in pool area	$1.0 K	$1.3 K					$1.6 K					$2.9 K
Steel Fencing	$3.2 K	$4.2 K					$4.9 K					$9.1 K
Wood (Bootes, 2 sec)	$0.6 K	$0.8 K					$0.9 K					$1.7 K
Perimeter steel & gate	$35.0 K											$0.0 K
Wood (Bootes, 2 sec)	$4.0 K			$5.7 K								$5.7 K
Fixtures (3) Overhead deck	$1.0 K			$1.4 K								$1.4 K
Light Poles (2)	$5.0 K			$7.1 K								$7.1 K
Entrance Light Wiring	$1.0 K											$0.0 K
Irrigation Controller	$0.7 K				$1.0 K							$1.0 K
Irrigation Valves (8)	$3.2 K											$0.0 K
Backflow Preventer/cage	$3.2 K											$0.0 K
Sprinklers-3 sections by gate	$1.3 K								$2.1 K			$2.1 K
Total Reserve Expenses		$15.0 K	$73.1 K	$14.8 K	$3.6 K	$0.0 K	$11.1 K	$3.3 K	$4.6 K	$0.7 K	$4.4 K	$130.7 K

Years 2040 to 2050

Income Years 2040 to 2050

Estimated Incomes	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	Total
Dues Including Sched Increases	$134.9 K	$139.0 K	$143.2 K	$147.5 K	$151.9 K	$156.4 K	$161.1 K	$166.0 K	$170.9 K	$176.1 K	$181.4 K	$1728.4 K
Interest Income Reserve Balance	$5.1 K	$5.5 K	$4.1 K	$4.9 K	$5.4 K	$5.4 K	$5.7 K	$3.0 K	$3.6 K	$2.2 K	$3.1 K	$47.9 K
Other Annual Income												$0.0 K
Special Assessments												$0.0 K
One-time Incomes (incl loans)												$0.0 K
Total Income	$140.1 K	$144.5 K	$147.2 K	$152.3 K	$157.3 K	$161.8 K	$166.8 K	$169.0 K	$174.6 K	$178.2 K	$184.4 K	$1776.3 K

Expenses Years 2040 to 2050

Operational Expenses	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	Total
Estimated Operational Expenses	$113.0 K	$116.4 K	$119.9 K	$123.5 K	$127.2 K	$131.0 K	$135.0 K	$139.0 K	$143.2 K	$147.5 K	$151.9 K	$1447.6 K
Estimated Annual Loan Payments	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K

Contin Fund & Special Projects:	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	Total
Res Withdraw - Contingency Fund												$0.0 K
	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K	$0.0 K

Reserve Fund Yrs 2040 to 2050

Description	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050
Start of Year Fully Funded Reserve	$245.6 K	$258.0 K	$210.7 K	$239.3 K	$258.3 K	$257.4 K	$268.5 K	$176.9 K	$197.5 K	$147.5 K	$179.3 K
Start of Year Reserve Balance	$170.2 K	$181.8 K	$135.4 K	$162.7 K	$180.8 K	$179.6 K	$189.9 K	$100.7 K	$120.5 K	$71.8 K	$102.6 K
Percent Funded at Start of Year	69%	70%	64%	68%	70%	70%	71%	57%	61%	49%	57%
Annual Reserve Fund Contributions	$27.0 K	$28.0 K	$27.3 K	$28.8 K	$30.1 K	$30.8 K	$31.9 K	$30.0 K	$31.4 K	$30.8 K	$32.5 K
Net Reserve Withdrawals	-$15.4 K	-$74.4 K	$0.0 K	-$10.8 K	-$31.3 K	-$20.4 K	-$121.1 K	-$10.2 K	-$80.1 K	$0.0 K	-$45.5 K
EOY Reserve Fund Balance	$181.8 K	$135.4 K	$162.7 K	$180.8 K	$179.6 K	$189.9 K	$100.7 K	$120.5 K	$71.8 K	$102.6 K	$89.6 K

Appendix

Analysis Types

Three classes of reserve studies are defined:

- **Class I:** A comprehensive study
  - Component Inventory
  - Condition Assessments
  - Life and Valuation Estimates
  - Funding Status Statement
  - Develop a Funding Plan
- **Class II:** An updated study based that includes a site inspection
  - Verifies Component Inventory from Previous Study
  - Condition Assessments
  - Life and Valuation Estimates
  - Funding Status Statement
  - Develops Funding Plan
- **Class III:** An updated study that does not include a site inspection.
  - Life and Valuation Estimates
  - Funding Status Statement
  - Develop a Funding Plan

Terms and Definitions

A reserve study contains a number of industry-related terms and phrases. The following are definitions for the most commonly used terms.

- **Annual Reserve Contribution** — The amount that should be allocated to each component using the recommended funding plan.
- **Annual Reserve Fund Contribution** — Amount that should be saved during current year for future component replacements. Provided for each component and summed for all components.
- **Baseline Funding** — Establishing a reserve funding goal of keeping the reserve cash balance above zero. See Funding Strategies.
- **Cash Flow Method (aka, Component Method)** — A method of developing a reserve funding plan where contributions to the reserve fund are designed to offset the variable annual expenditures from the reserve fund. Different reserve funding plans are tested against the anticipated schedule of reserve expenses until the desired funding goal is achieved.
- **Component** — Also referred to as an "Asset." Individual line items in the Reserve Study developed or updated in the physical analysis. These elements form the building blocks for the Reserve Study. Components typically are:
    1. Association responsibility
    2. Have limited useful life expectancies
    3. Have predictable remaining life expectancies
    4. Are above a minimum threshold cost
    5. Required by local codes.
- **Component Inventory** — The task of selecting and quantifying reserve components. This task can be accomplished through on-site visual observations, review of association design and organizational documents, review of established association precedents and discussion with appropriate association representative(s) of the association or cooperative.
- **Contingency** — An allowance for miscellaneous components, unpredictable expenses and/or costs that were higher than expected.
- **Deficit** — An actual (or projected reserve balance), which is less than the fully funded balance.
- **Full Funded Balance Percent** — The reserve balance expressed as a percentage of the total fully funded balance of all components.
- **Full Funding** — Setting a reserve funding goal of attaining and maintaining reserves at or near 100% funded. See Funding Strategies.

- **Fully Funded Balance** An indicator against which the actual (or projected) reserve balance can be compared. The reserve balance that is in direct proportion to the fraction of life "used up" of the current repair or replacement cost of a reserve component. This number is calculated for each component, and then summed together for an association total and represents the total depreciation over the life of the components. In other words, the amount that should have been saved during the life of the components. Without taking into account the effect of inflation, the calculation for FFB is:

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

- **Fund Status** The status of the reserve fund as compared to an established benchmark, such as percent funded.

- **Funding Methods** Two methods of funding are Cash Flow and Straight Line.
  - Cash Flow: The reserve fund is considered one large pool of money. Expenses for any individual component are withdrawn from the single, shared reserve fund.
  - Straight Line: A simple calculation that calculates a reserve contribution based on each individual component. Expenses for any individual component are withdrawn only from that component's fund. Funds are not shared across multiple components.

- **Funding Models** The four funding models are:
  - Fully Funding Model: Setting a reserve funding goal of keeping the reserves at or near 100% funded. This is same as Threshold Funding if the threshold is set at 100%.
  - Threshold Funding Model: Setting a Reserve funding goal of keeping the Reserve balance above some threshold, generally less than the Fully Funding Strategy.
  - Baseline Funding Model: Setting a reserve funding goal of keeping the reserve cash balance at the end of each year in the overall reserve funding projection at or above $ 0.
  - Statutory Funding Model: Based on local statutes where associations set aside specific cash amounts, or specific thresholds are set, as required by statutes.

- **Funding Plan** An association's plan to provide income to a reserve fund to offset anticipated expenditures from that fund.

- **Percent Funded** — The ratio, at a particular point of time (typically the beginning of the fiscal year), of the actual (or projected) reserve balance to the fully funded balance, expressed as a percentage.

  Percent funding is used a measure of the "health" of the reserve fund. As one of several key performance indicators, it the percent funding must be viewed in light of other indicators, such as available funds to meet expenses.
  The measures of strength for percent funded of the FFB are:
  - 0% – 30% Funded: Generally considered to be a "weak" financial position. Associations that fall into this category are subject to higher frequencies of special assessments and deferred maintenance.
  - 31% – 69% Funded: Considered a "fair" financial position. Compared to the "weak" position, the likelihood of special assessments and deferred maintenance is diminished. Associations that find themselves in this position should be taking measures to strengthen their position.
  - 70% – 99% Funded: This range is considered a "strong" financial position. Associations should strive to maintain their percent funded in this range.
  - 100% Funded: If the association is 100% funded, theoretically they have the exact amount of funds equal to the Fully Funded Balance
  - Greater than 100% Funded: If in this situation, the associate has more than the Fully Funded Balance. The impact to the community is that the members annual payments are more than is required to meet annual expenses.

- **Projected Start-of-Year or End-of-Year Reserve Balance** — Projected reserve balance at the start of the fiscal year or end of the fiscal year. Calculated using the estimated reserve balance, contributions to reserves before year-end, and planned expenses before year-end.

- **Recommended Reserve Contribution** — Recommended amount that the association should allocate into reserves to offset future expenses.

- **Remaining Useful Life** — Expected remaining useable life of component. (0-year remaining life means the component will be serviced in the upcoming fiscal year)

- **Replacement Cost** — 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 that particular year.

- **Replacement Year** — Year that component is projected to be replaced or repaired.

- **Reserve Balance** — Actual or projected funds as of a particular point in time (typically the beginning of the fiscal year) that the association has identified for use to defray the future repair or replacement of those major components that the association is obligated to maintain. Also known as "reserves," "reserve accounts," or "cash reserves." In this report the reserve balance is based upon information provided and is not audited.

- **Reserve Study** — A long-term capital budget planning tool which identifies the current status of the reserve fund and a stable and equitable funding plan to offset ongoing deterioration, resulting in sufficient funds when those anticipated major common area expenditures actually occur. A reserve study is in essence a planning tool designed to help the board anticipate, and prepare for, the property's major repair and replacement projects.

- **Special Assessment** An assessment levied on the members of an association in addition to regular assessments. Special assessments are often regulated by governing documents or local statutes.

- **Statutory Funding** Establishing a reserve funding goal of setting aside the specific minimum amount of reserves required by local statues. See Funding Strategies.

- **Threshold Funding** Establishing a reserve funding goal of keeping the reserve balance above a specified dollar or percent funded amount. See Funding Strategies.

- **Useful Life** Typical useable life for a component.

Funding Methodologies

Cash Flow Methodology

The Cash Flow Reserve Funding methodology was used in the analysis as it allows reserve funds to be used efficiently and evenly spreads costs among the community owners over the years.

- The reserve fund is considered one large pool of money.
- Contributions are established by testing and retesting different contribution rates until the desired funding objective is achieved.
- Encourages the use of threshold levels to test various funding strategies with respect to funding requirements.
- May increases risks of underfunding and special assessments, but this is mitigated by understanding of component costs and useful life, setting reasonable threshold funding levels and careful analysis of annual cash flows
- Typically, results in a lower rate of reserve contributions as the funds can be used more efficiently; and the contributions are more evenly spread over the years.

Threshold Funding Model

The Threshold Funding strategy was employed with a threshold, or goal, of keeping the reserve balance above a specified percent funded amount. Use of this strategy requires examining the estimated annual reserve component costs against the anticipated reserve balance to assure that costs do not exceed available funds. The Threshold Funding Strategy consists of setting a reserve funding goal of keeping the reserve balance above some threshold, generally less than the Fully Funding Model.

The Threshold Funding strategy reduces the annual contribution (compared to Full Funding) for maintaining the reserve. The threshold funding strategy must be used rationally to assure that under funding does not occur in any years. It also requires careful analysis of expenses and funding over all the years. A key benefit is that it reduces the annual contribution to the reserve fund compared to Full Funding strategy.

Performance Indicators

Two key performance indicators used in this analysis are “Fully Funded Balance” and “Percent Funded”.

The Fully Funded Balance of all reserve components are individually determined and summed together. Each component’s FBB is determined for each year using the following formula:

$$FBB = \frac{Current\ Cost\ x\ Effective\ Age}{Useful\ Life}\ x\ (1 + inflation\_rate)^{(Y_n - Y_0)}$$

Where Y_n = Future year and Y_0 = Current year

The Percent Funding of the reserve is computed as follows:

$$\%\ Funded = \frac{Acutal\ Reserve\ Fund\ Balance}{Computed\ Fully\ Funded\ Balance}$$

All future costs estimates are based on the current costs with provision for inflation. The reserve fund and contingency fund balance is assumed to earn interest at the rate provided by the association.