

Demystifying a reserve study

November 14, 2022

Sky Crossing Master Association

Projections

Directed Cash Flow Calculation Method

Fiscal Year	Beginning Balance	Member Contribution	Interest Contribution	Expenditures	Ending Balance	Fully Funded Ending Balance	Percent Funded
2022	\$333,445	\$206,250	\$631	\$7,500	\$532,826	\$744,290	72%
2023	\$532,826	\$212,438	\$939	\$4,610	\$741,592	\$952,247	78%
2024	\$741,592	\$218,811	\$1,141	\$81,646	\$879,898	\$1,090,970	81%
2025	\$879,898	\$225,375	\$1,457	\$12,710	\$1,094,020	\$1,308,593	84%
2026	\$1,094,020	\$232,136	\$1,568	\$155,731	\$1,171,993	\$1,387,455	84%
2027	\$1,171,993	\$239,100	\$1,546	\$251,464	\$1,161,176	\$1,375,057	84%
2028	\$1,161,176	\$246,273	\$1,726	\$124,303	\$1,284,873	\$1,499,452	86%
2029	\$1,284,873	\$253,661	\$1,705	\$265,525	\$1,274,713	\$1,486,428	86%
2030	\$1,274,713	\$261,271	\$2,084	\$6,311	\$1,531,757	\$1,744,095	88%
2031	\$1,531,757	\$269,109	\$2,280	\$136,301	\$1,666,846	\$1,880,480	89%
2032	\$1,666,846	\$277,183	\$2,693	\$0	\$1,946,721	\$2,165,562	90%
2033	\$1,946,721	\$285,498	\$3,064	\$36,542	\$2,198,741	\$2,426,047	91%
2034	\$2,198,741	\$294,063	\$2,663	\$559,082	\$1,936,386	\$2,163,561	89%
2035	\$1,936,386	\$302,885	\$2,657	\$305,190	\$1,936,737	\$2,160,903	90%
2036	\$1,936,737	\$311,972	\$2,911	\$140,335	\$2,111,284	\$2,333,370	90%

Astarea at Sky Crossing
Projections
Directed Cash Flow Calculation Method

Fiscal Year	Beginning Balance	Member Contribution	Interest Contribution	Expenditures	Ending Balance	Fully Funded Ending Balance	Percent Funded
2022	\$311,849	\$117,650	\$549	\$0	\$430,048	\$388,440	111%
2023	\$430,048	\$121,474	\$727	\$1,537	\$550,712	\$508,130	108%
2024	\$550,712	\$125,422	\$818	\$62,950	\$614,002	\$570,402	108%
2025	\$614,002	\$129,498	\$1,011	\$0	\$744,510	\$701,493	106%
2026	\$744,510	\$133,706	\$1,022	\$124,691	\$754,548	\$710,275	106%
2027	\$754,548	\$138,052	\$1,097	\$86,793	\$806,904	\$760,956	106%
2028	\$806,904	\$142,539	\$1,309	\$0	\$950,752	\$904,793	105%
2029	\$950,752	\$147,171	\$1,422	\$71,048	\$1,028,296	\$982,432	105%
2030	\$1,028,296	\$151,954	\$1,538	\$73,043	\$1,108,746	\$1,063,072	104%
2031	\$1,108,746	\$156,893	\$1,756	\$11,004	\$1,256,390	\$1,212,465	104%
2032	\$1,256,390	\$161,992	\$1,997	\$0	\$1,420,379	\$1,380,091	103%
2033	\$1,420,379	\$167,256	\$2,206	\$27,406	\$1,562,435	\$1,527,125	102%
2034	\$1,562,435	\$172,692	\$1,925	\$359,308	\$1,377,744	\$1,341,171	103%
2035	\$1,377,744	\$178,305	\$2,033	\$105,337	\$1,452,744	\$1,414,401	103%
2036	\$1,452,744	\$184,100	\$2,307	\$0	\$1,639,151	\$1,600,976	102%

Operating funds vs. Reserve funds

- Operating funds are funds used for day-to-day expenses such as vendor fees, utilities, management fees, insurance, etc.
- Reserve funds are funds that homeowners' associations set aside (from monthly dues) for future expenditures which are significant, but infrequent, making them impractical to be included in an operating budget
- Reserve funds are used to replace physical assets that deteriorate or wear out over time

Reserve study

- A reserve study is a planning document and budgeting model for association expenses
- The purpose of reserve study is to prepare the association for significant expenses it will incur over time, while minimizing or eliminating surprises and special assessments
- Inputs into a reserves study
 - List of components
 - Cost to replace each component
 - Useful life of each component
 - Inflation

Example listing of components

#	Component	Useful Life (yrs)	Rem. Useful Life (yrs)	Current Cost Estimate
201	Asphalt - Resurface	24	7	\$306,000
202	Asphalt - Seal/Repair	4	0	\$17,600
206	Concrete - Repair	4	2	\$3,000
405	Play Equipment - Replace	15	12	\$39,150
501	Block Walls - Repair	20	10	\$24,100
503	Metal Fence - Replace	20	4	\$27,200
703	Entry System - Replace	12	4	\$4,500
704	Card Reader - Replace	10	3	\$5,000
706	Gate Operators - Replace	15	9	\$15,000
1105	Block Walls - Repaint	8	5	\$64,000
1107	Metal Fence - Repaint	4	1	\$4,000

Reserve fund strength

- Reserve funding strength or reserve fund percentage is a measure of an association's ability to meet expected future expenditures
- Example – pool heater with an expected useful life of 5 years and \$10,000 replacement cost
 - At the end of year 5, we will need to have \$10,000 in our reserve fund to replace this asset
 - At the end of year 1, if we have \$2,000 in reserves, we are 100% funded
 - At the end of year 2, if we have \$4,000 in reserves, we are 100% funded
 - At the end of year 2, if we only have \$3,000 in reserves, we are 75% funded

Inflation impact

- An item costing \$10,000 in 2019 costs approximately \$10,772 today
- An item costing \$10,000 today assuming 2.45% inflation over the next five years will cost approximately \$11,287 in 2027
- An item costing \$10,000 today assuming 6% inflation over the next five years will cost approximately \$13,382 in 2027

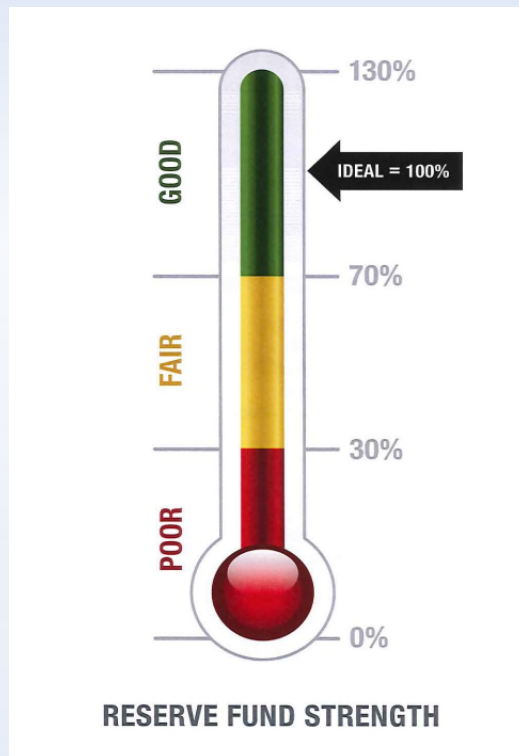
Annual contribution increase parameter

- Rate used to calculate annual funding on a compounding basis
- Rate assumes the association will increase funding every year
- Funding comes from dues increases or decrease in operating spending

Contribution parameter example

	<u>0% Increase</u>	<u>3% Increase</u>	<u>10% Increase</u>
Year 1	\$10,000.00	\$8,723.05	\$6,274.54
Year 2	\$10,000.00	\$8,984.74	\$6,901.99
Year 3	\$10,000.00	\$9,254.28	\$7,592.19
Year 4	\$10,000.00	\$9,531.91	\$8,351.41
Year 5	\$10,000.00	\$9,817.87	\$9,186.55
Year 6	\$10,000.00	\$10,112.41	\$10,105.21
Year 7	\$10,000.00	\$10,415.78	\$11,115.73
Year 8	\$10,000.00	\$10,728.25	\$12,227.30
Year 9	\$10,000.00	\$11,050.10	\$13,450.03
Year 10	\$10,000.00	\$11,381.60	\$14,795.04
TOTAL	<u>\$100,000.00</u>	<u>\$100,000.00</u>	<u>\$100,000.00</u>

What is a good reserve fund strength?



- Does the reserve study include all components?
- Do all components have a replacement cost estimate?
- Are the useful life estimates reasonable?
- When a component is replaced, will it be replaced with a like component or upgraded component?
- Does the reserves study include current inflation?